

TOWN OF PARKER COUNCIL AGENDA

June 20, 2023

Notes:

Town Council meeting packets are prepared several days prior to the meeting. This information is reviewed and studied by the Councilmembers eliminating lengthy discussions to gain a basic understanding. Timely action and short discussion on agenda items does not reflect lack of thought or analysis on the part of Council.

Ordinances listed for first reading are being approved to introduce them. Public comment will be held upon second reading.

Public comment for items that are not on the agenda may be made in person or electronically at <http://parkeronline.org/CouncilPublicComment>. For those unable to provide comments in person or electronically through the website, please contact the Clerk's Office to make alternative arrangements. The Town Clerk can be reached at 303-805-3198. Public comments submitted electronically through the website that are received by 5:00 p.m. on the day of the regular or special Town Council meeting will be provided to the Town Council and will be included with the approved minutes of the Town Council meeting.

Public Viewing Only - YouTube: Town Council meetings may be viewed live on YouTube at www.youtube.com/townofparkerco.

PLEASE NOTE: Public participation is NOT available through YouTube.

1. TOWN COUNCIL MEETING SCHEDULE

- A. 5:00 P.M. – Call to Order Town Council Meeting and Roll Call
- B. Executive Session – Immediately following Call to Order/Roll Call – (See Attached)
- C. Reconvene Town Council Meeting at 7:00 P.M. or as soon thereafter as the regular public meeting can be conducted.

2. SPECIAL PRESENTATIONS

- Citizens Police Academy Graduation
- Outgoing Youth Commissioners Recognition

3. PUBLIC COMMENTS (No action will be taken on these items.) *Public Comment is an opportunity for Town residents and other interested individuals to speak about items that are NOT on the agenda. This comment period is limited to 30 minutes total time, with each individual allowed a maximum of 3 minutes to speak. You must sign up ahead of time in order to comment, and that sign up begins 30 minutes before the start of the meeting. The Council will accommodate as many speakers as possible during this time—with preference to Town residents—but if public comment extends beyond the allotted 30 minutes, Town Council will continue the comment period at the end of the meeting, prior to adjourning for those who signed up before the meeting.*

4. REPORTS, ITEMS AND COMMENTS FROM MAYOR AND COUNCIL

5. CONSENT AGENDA

Consent Agenda Items are considered to be routine and will be enacted by one motion and vote. There will be no separate discussion of Consent Agenda Items unless Council votes to remove an item for individual discussion. Ordinances on the Consent Agenda are for introduction only and will not be removed for discussion.

- A. *APPROVAL OF MINUTES - June 5, 2023*

- B. *ORDINANCE NO. 3.361 - First Reading*
A Bill for an Ordinance Zoning Certain Property Within the Town of Parker, Colorado, Known as the Coyle/Perkins Property to PD-Planned Development District Pursuant to the Town of Parker Land Development Ordinance and Amending the Zoning Ordinance and Map to Conform Therewith
Department: *Community Development, Julia Duncan*
Trakit No.: *Z22-017*
Second *July 10, 2023*
Reading:
- C. *ORDINANCE NO. 1.582 - First Reading*
A Bill for an Ordinance to Approve the Right-of-Way Purchase and Sale Agreement By and Between Savanna Properties LLC and the Town of Parker for a Portion of Lot 22A, Block 1, Twenty Mile Village Filing No. 2
Department: *Engineering and Public Works, Bob Exstrom*
Second Reading: *July 10, 2023*
- D. *ORDINANCE NO. 4.52.4 - First Reading*
A Bill for an Ordinance to Amend Ordinance Nos. 4.52.1, Series of 2004, 4.52.2, Series of 2006, and 4.52.3, Series of 2008, to Amend the Title to Chapter 10.10, Subsection 10.10.010(a), and Sections 13.06.070, 13.07.080, 13.07.140 and 13.10.110 of the Parker Municipal Code Concerning the Parks, Trails, Open Space & Streetscape Design and Construction Manual
Department: *Community Development, Mary Munekata*
Parks, Recreation, and Open Space, Brett Collins
Second *July 17, 2023*
Reading:
- E. *ORDINANCE NO. 3.36.5 - First Reading*
A Bill for an Ordinance to Amend the Stroh Ranch Planned Development Master Plan 2nd Amendment - PD Development Guide Pursuant to the Parker Land Development Ordinance
Department: *Community Development, Julia Duncan*
Trakit No.: *Z22-016*
Second *July 17, 2023*
Reading:
- F. *RESOLUTION NO. 23-050*
A Resolution to Amend Resolution No. 14-027, Series of 2014, to Adopt the Town of Parker, Colorado, Policy for Access to Public Records
Department: *Town Clerk, Chris Vanderpool*
- G. *RESOLUTION NO. 23-051*
A Resolution to Amend Resolution No. 19-090, Series of 2019, Concerning the Town of Parker, Colorado, Policy for Access to Criminal Justice Records
Department: *Town Attorney, Kelsey Hall*

- H. **RESOLUTION NO. 23-052**
A Resolution to Amend Resolution No. 16-073, Series of 2016, by the Adoption of Supplement 13 of the Town of Parker Records Retention Schedule, and to Amend Supplement 13 with Certain Exceptions
Department: Town Clerk, Chris Vanderpool
- I. **RESOLUTION NO. 23-053**
A Resolution to Appoint a Member to the Investment Advisory Committee
Department: Finance, Mary Lou Brown
- J. **RESOLUTION NO. 23-054**
A Resolution to Determine, Upon Recommendation of the Town Manager, that the Public Interest will be Served by a Single Source Contract Concerning the Hilltop Road and Canterbury Parkway Area Improvements Project
Department: Engineering and Public Works, Michael Grabczyk
- K. **CONTRACTS OVER \$100,000**
1. *Purchase of Recreation Accessible Bus*
Amount: \$110,000
Contractor: Creative Bus Sales
Department: Parks, Recreation and Open Space, Mary Colton
2. *Jordan Road/Parkerhouse Road Traffic Signal (CIP 19-009) and Chambers Road/Red Sky Drive Traffic Signal (CIP 22-040) Contract Modification*
Amount: \$20,000 Addition to Original Contract of \$932,988.20 for a Revised Total of \$952,988.20
Contractor: Interface Communications Co.
Department: Engineering & Public Works, Nathan Klass
3. *Tanterra Development Bridge Inspections - Chambers Road and Tammy Lane (Chargeback to Developer)*
Amount: \$221,745
Contractor: Alfred Benesch & Company
Department: Engineering and Public Works, Alex Mestdagh

6. **RESOLUTIONS**

- A. **RESOLUTION NO. 23-046**
A Resolution to Appoint the Presiding Municipal Court Judge and Approve the Presiding Municipal Court Judge Employment Agreement
Department: Town Council

- B. RESOLUTION NO. 23-055**
A Resolution to Appoint the Chair and to Appoint Members and Alternates to the Town of Parker Planning Commission
Department: Community Development, Bryce Matthews
- C. RESOLUTION NO. 23-057**
A Resolution Approving the Waiver of Bidding Requirements and Ratifying a Contract Related to Emergency Storm Drainage and Roadway Repairs for Bradbury Ranch Drive
Department: Town Manager, Michelle Kivela
Engineering and Public Works, Chris Hudson

7. ORDINANCES

- A. ORDINANCE NO. 5.28.32 – Second Reading**
A Bill for an Ordinance to Amend Chapter 5.02 of the Parker Municipal Code to Conform to Recent Changes to State Law Regarding the Sale of Wine and Allowing for Administrative Approval of Temporary Sales Rooms
Department: Town Attorney, Kristin Hoffmann
Town Clerk, Chris Vanderpool
- B. ORDINANCE NO. 9.260.1 – Second Reading**
A Bill for an Ordinance to Approve the First Amendment to the Intergovernmental Agreement By and Between the E-470 Public Highway Authority and the Town of Parker Regarding the Extension of the Existing E-470 Trail
Department: Parks, Recreation, and Open Space, Brett Collins
- C. ORDINANCE NO. 1.583 – Second Reading**
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 3.1 Titled Town Council
Department: Town Attorney, Kelsey Hall
- D. ORDINANCE NO. 1.584 – Second Reading**
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 4.6 Titled Departments Created
Department: Town Attorney, Kelsey Hall
- E. ORDINANCE NO. 1.585 – Second Reading**
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 8.3, Entitled Department of Police, Subsection c., Concerning the Oath of Office
Department: Town Attorney, Kelsey Hall

F. ORDINANCE NO. 1.586 – Second Reading

A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 15.7 Titled Bequests, Gifts and Donations

Department: Town Attorney, Kelsey Hall

8. PUBLIC COMMENTS CONTINUED IF NECESSARY

9. ADJOURNMENT

Parker Town Council

Executive Session Agenda

June 20, 2023

“To hold a conference with the Town’s attorney to receive legal advice on specific legal questions, pursuant to C.R.S. § 24-6-402(4)(b).”

1. C.R.S. § 32-1-1101.7 concerning the establishment of a special improvement district within the boundaries of a special district

2. C.R.S. § 31-25-1201, *et seq.*, the Business Improvement District Act, concerning the formation of a business improvement district

3. Potential legal claim

“To determine positions relative to matters that may be subject to negotiations, develop a strategy for negotiations, and/or instruct negotiators, pursuant to C.R.S. § 24-6-402(4)(e).”

4. Negotiations related to the proposed Annexation Agreement between the Town and the Denver Pope Family Limited Partnership concerning the real property commonly known as the Pope property, generally located adjacent to and west of the Kohl’s Shopping Center

5. Proposed acquisition of right-of-way and easements for the Lincoln Road Widening Project between Keystone Drive to Parker Road

**TOWN OF PARKER COUNCIL
MINUTES
JUNE 5, 2023**

Mayor Jeff Toborg called the meeting to order at 5:30 p.m. All Councilmembers were present.

Town Attorney Kristin Hoffmann announced there were two topics for discussion in the Executive Session. The item under C.R.S. § 24-6-402(4)(e), was regarding proposed acquisition of easements for the Parker Road sidewalk improvements – Sulphur Gulch to south of Parker Square Drive. Under C.R.S. § 24-6-402(4)(b), the other item was about Colorado Open Meetings Law, C.R.S. § 24-6-402, Colorado Open Records Act, C.R.S. § 24-72-201 through 206, and Code of Ethics, Parker Municipal Code Chapter 2.05.

EXECUTIVE SESSION

Joshua Rivero moved and Brandi Wilks seconded to go into Executive Session at 5:31 p.m. to determine positions relative to matters that may be subject to negotiations, develop a strategy for negotiations, and/or instruct negotiators, pursuant to C.R.S. § 24-6-402(4)(e) and to receive legal advice on specific legal questions, pursuant to C.R.S. § 24-6-402(4)(b).

The motion was approved unanimously.

Laura Hefta moved and Brandi Wilks seconded to come out of Executive Session at 6:25 p.m.

The motion was approved unanimously.

Joshua Rivero moved and Todd Hendreks seconded to recess the meeting until 7:00 p.m.

The motion was approved unanimously.

REGULAR SESSION

Mayor Toborg reconvened the regular Town Council meeting at 7:00 p.m.

Brownie Troop 63604 led the Council and audience in the Pledge of Allegiance.

PUBLIC COMMENTS

None.

REPORTS, ITEMS AND COMMENTS FROM MAYOR AND COUNCIL

Each Councilmember reported on meetings and activities they had attended since the last Town Council meeting.

CONSENT AGENDA

- A. *APPROVAL OF MINUTES - May 15, 2023*
- B. *ORDINANCE NO. 5.28.32 – First Reading*
A Bill for an Ordinance to Amend Chapter 5.02 of the Parker Municipal Code to Conform to Recent Changes to State Law Regarding the Sale of Wine and Allowing for Administrative Approval of Temporary Sales Rooms
Department: Town Attorney, Kristin Hoffmann
Town Clerk, Chris Vanderpool
Second June 20, 2023
Reading:
- C. *ORDINANCE NO. 9.260.1 – First Reading*
A Bill for an Ordinance to Approve the First Amendment to the Intergovernmental Agreement By and Between the E-470 Public Highway Authority and the Town of Parker Regarding the Extension of the Existing E-470 Trail
Department: Parks, Recreation, and Open Space, Brett Collins
Second Reading: June 20, 2023
- D. *ORDINANCE NO. 1.583 – First Reading*
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 3.1 Titled Town Council
Department: Town Attorney, Kelsey Hall
Second June 20, 2023
Reading:
- E. *ORDINANCE NO. 1.584 – First Reading*
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 4.6 Titled Departments Created
Department: Town Attorney, Kelsey Hall
Second June 20, 2023
Reading:
- F. *ORDINANCE NO. 1.585 – First Reading*
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 8.3, Entitled Department of Police, Subsection c., Concerning the Oath of Office
Department: Town Attorney, Kelsey Hall
Second June 20, 2023
Reading:

- G. *ORDINANCE NO. 1.586 – First Reading*
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 15.7 Titled Bequests, Gifts and Donations
Department: Town Attorney, Kelsey Hall
Second June 20, 2023
Reading:
- H. *RESOLUTION NO. 23-048*
A Resolution Accepting the Conveyance of a Drainage Easement from NexGen Westcreek Holdings, LLC, for a Portion of Lot 2, Block 2, Westcreek Filing No. 2 First Amendment
Department: Engineering and Public Works, Michael Walton
- I. *CANCEL THE JULY 3, 2023 TOWN COUNCIL MEETING AND RESCHEDULE THE MEETING FOR JULY 10, 2023*
Department: Town Council
- J. *CONTRACTS OVER \$100,000*
1. *Fleet Replacement Parks Equipment*
Amount: \$120,000
Contractor: Front Range Kubota
Department: Engineering and Public Works, Jim Gilbert
2. *2023 Townwide Roadway Reconstruction Program (CIP23-005-CI) Contract Modification*
Amount: \$412,236.23 Addition for a Revised Contract Amount of \$1,375,498.33
Contractor: RME Ltd., Inc., dba Elite Surface Infrastructure
Department: Engineering and Public Works, Tom Gill
3. *Cherry Creek Improvements – CORE Electric Relocation (Phase 2)*
Amount: \$226,154
Contractor: CORE Electric Cooperative
Department: Engineering and Public Works, Chris Hudson

Joshua Rivero moved to approve Consent Agenda Items 4A through 4J.

Todd Hendreks seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes
 Anne Barrington - yes
 Todd Hendreks - yes
 John Diak - yes
 Brandi Wilks - yes
 Laura Hefta - yes

The motion was approved unanimously.

PUBLIC HEARINGS

A. SALISBURY EQUESTRIAN PARK LOT 1 - REGIONAL FILTRATION ANNEX SITE PLAN AMENDMENT

Applicant: Parker Water and Sanitation District
Location: East side of Salisbury Park
Department: Community Development, Julia Duncan
TRAKiT No.: SP23-001

Mayor Toborg opened the public hearing at 7:11 p.m.

The proposed Parker Water and Sanitation District (PWSD) Regional Filtration Annex is to be located within the Salisbury Equestrian Park to the south of their existing facility. The Annex will be located on land owned by the Town within an easement(s) that PWSD holds allowing them to operate public water and sewer facilities in the Park. The PWSD proposal requires Town Council approval of a site plan amendment because it would be located on Town-owned land within the Park. The PWSD proposal for a Regional Filtration Annex can be summarized as follows:

- The Filtration Annex would improve drinking water quality through water treatment and filtration.
- The Filtration Annex building would be constructed adjacent to the existing Regional Well House.
- The Filtration Annex project includes the Annex building, underground pipes connecting the existing Well House and Annex and an underground sanitary sewer pipeline connecting to the existing Salisbury Equestrian Park sanitary sewer line to the southeast of the existing Well House.
- The Filtration Annex project will relocate existing raw water lines to the Well House to make way for the Annex construction.
- The Filtration Annex does not provide storage for chemicals or hazardous materials.

The Planning Commission held a public hearing for the site plan amendment on May 11, 2023 and voted 7-0 to recommend that the Town Council approve the application.

McKenna Pearson and Adam Rubin from Tetra Tech Engineering and Alex France from PWSD were present to answer questions from Council.

Public Comments: None.

Mayor Toborg closed the public hearing at 7:18 p.m.

Brandi Wilks moved to approve the Salisbury Equestrian Park Lot 1 - Regional Filtration Annex Site Plan Amendment based on staff findings.

Laura Hefta seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes

Anne Barrington - yes

Todd Hendreks - yes

John Diak - yes

Brandi Wilks - yes

Laura Hefta - yes

The motion was approved unanimously.

B. LINCOLN PROFESSIONAL PARK FILING NO. 1 - MINOR DEVELOPMENT PLAT

Applicant: Ryanne Sass, Plaza Street Partners

Location: Southeast corner of Lincoln Avenue and Dransfeldt Road

Department: Community Development, Stacey Nerger

TRAKiT No.: SUB21-005

Mayor Toborg opened the public hearing at 7:19 p.m.

The subject property is located in the C-Commercial zone district that permits a broad range of commercial uses. The proposed Minor Development Plat (MDP) will create six lots for future commercial development and three tracts for access and drainage/stormwater management to support the commercial development. The future commercial development will most likely consist of auto-oriented and convenience commercial businesses given the location and lack of bike/pedestrian infrastructure in the area. The proposed MDP will provide improved access from Lincoln Avenue and Dransfeldt Road to all lots and tracts within the property. Internal access across the property is addressed by a private road that traverses the site and cross/reciprocal access easements to ensure all lots are accessible in the future. The applicant has also addressed the Town request to incorporate an internal road design that allows a future connection to the Walgreen's and NAPA Auto Parts properties to the east and the E.T. Technologies property to the south.

The Planning Commission held a public hearing on the MDP application at its meeting on May 11, 2023 and voted 7-0 to recommend approval.

Public Comments: None.

Mayor Toborg closed the public hearing at 7:27 p.m.

1. Minor Development Plat

Joshua Rivero moved to approve the Lincoln Professional Park Filing No. 1 Minor Development Plat, based on staff findings.

Todd Hendreks seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes

Anne Barrington - yes

Todd Hendreks - yes

John Diak - yes

Brandi Wilks - yes

Laura Hefta - yes

The motion was approved unanimously.

2. Subdivision Agreement

Todd Hendreks moved to approve the Lincoln Professional Park Filing No. 1 Subdivision Agreement, based on staff findings.

Joshua Rivero seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes

Anne Barrington - yes

Todd Hendreks - yes

John Diak - yes

Brandi Wilks - yes

Laura Hefta - yes

The motion was approved unanimously.

C. COYLE/PERKINS PROPERTY ANNEXATION AND ZONING (Continued from November 7, 2022, February 21, 2023, and April 17, 2023 and to be continued to July 10, 2023)

Applicant:	Avalon Bay Communities, Inc.
Location:	Southwest corner of Stroh Ranch and Crowfoot Valley Road
Department:	Community Development, Julia Duncan
TRAKiT No.:	ANX22-006 & Z22-017

**1. ORDINANCE NO. 2.281 - Second Reading (*Continued from November 7, 2022, February 21, 2023 and April 17, 2023 and to be continued to July 10, 2023*)
A Bill for an Ordinance Approving and Accomplishing the Annexation of
Contiguous Unincorporated Territory Known as the Coyle/Perkins Property in
Douglas County**

Joshua Rivero moved to continue the public hearing to consider Ordinance No. 2.281 to a date certain of July 10, 2023.

Brandi Wilks seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes

Anne Barrington - yes

Todd Hendreks - yes

John Diak - yes

Brandi Wilks - yes

Laura Hefta - yes

The motion was approved unanimously.

ORDINANCES

A. ORDINANCE NO. 1.289.7 – Second Reading

A Bill for an Ordinance to Approve the Second Amended and Restated Cooperation Agreement Between the Town of Parker, Colorado, and the Parker Authority for Reinvestment

Department: PAR & Economic Development Director, Weldy Feazell

The proposed Second Amended and Restated Cooperation Agreement (“Agreement”) includes the following:

- Staff Costs: PAR reimburses the Town for the cost of salaries and benefits for staff, and these dollar amounts will be updated to reflect the 2023 expenses.
 - Salary and benefit reimbursement to the Town has been included in PAR's 2023 budget for the following staff:
 - PAR Executive Director - 25% of the Town Manager’s salary and benefits
 - PAR Director – 50% PAR and Economic Development Director’s salary and benefits
 - PAR Redevelopment Coordinator – 100% salary and benefits
- Administrative Fee: For the budget year, PAR reimburses the Town \$46,000 for the cost of support functions from Town Departments: Human Resources, Finance/Accounting, Information Technology, Risk Management and the Clerk.
- In the future, allows the Town to modify the budget numbers annually by means of the Town submitting a budget to PAR annually for budget allocation.
- Office Rent: PAR reimburses the Town \$22,000 for the cost of office space in Town Hall.

- Identifies the PAR funded Capital Projects that are occurring in the Urban Renewal Areas including the funding PAR for the projects. The construction of the projects utilizing the Town's processes and Town staff for constructing the projects.

Public Comments: None

Laura Hefta moved to approve Ordinance No. 1.289.7 on second reading.

Brandi Wilks seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes

Anne Barrington - yes

Todd Hendreks - yes

John Diak - yes

Brandi Wilks - yes

Laura Hefta - yes

The motion was approved unanimously.

B. ORDINANCE NO. 1.576 - Second Reading

A Bill for an Ordinance Stating the Intent of the Town of Parker to Acquire Certain Property Interests for the Purpose of Constructing and Improving Certain Motsenbocker Road Improvements, as Part of the Dransfeldt Road Project, Both Town Roadways, Through the Utilization of the Town's Power of Eminent Domain, and Directing the Town's Staff and Town Attorney to Notify all Persons Affected Thereby of the Above-Stated Intent of the Town, and Thereafter to Comply with all Pertinent Provisions of C.R.S. § 38-1-101, et seq., Relating to Good Faith Negotiations

Department: Engineering and Public Works, Chris Hudson

This item is for an ordinance to provide notice of the Town's intent to acquire right-of-way and easements for proposed improvements on Motsenbocker Road between Todd Drive and Longland Parkway that are part of the Dransfeldt Road extension project. This ordinance is for needed roadway improvements and will affect five property owners along this section of Motsenbocker Road. One of them (the Dominoe property) was annexed into the Town in 2012 and is subject to the annexation agreement requirements to dedicate needed property/easements for the needed roadway improvements. The remaining four properties are currently located in unincorporated Douglas County.

Public Comments: Mike Smith, 11321 Dransfeldt Road, Parker, owns the property at the south end of the project and stated that he was asked to dedicate land to the Town without compensation and did not understand why other property owners were to be compensated.

John Diak moved to approve Ordinance No. 1.576 on second reading.

Todd Hendreks seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes
Anne Barrington - yes
Todd Hendreks - yes
John Diak - yes
Brandi Wilks - yes
Laura Hefta - yes

The motion was approved unanimously.

C. ORDINANCE NO. 1.580 - Second Reading

A Bill for an Ordinance Vacating a Portion of Right-of-Way Adjacent to Kings Point Way to LCP MFII WREN, LLC

Department: Community Development, Stacey Nerger

In 2019-2020, the Town constructed Kings Point Way to connect Cottonwood Drive in the Crown Point Planned Development (PD) to the future Aurora Parkway in the City of Aurora. The Town is proposing to vacate excess right-of-way (ROW) left over from the Kings Point Way project and convey the 0.819 acre parcel to the adjacent property owner LCP MFII WREN, LLC.

Public Comments: None.

Todd Hendreks moved to approve Ordinance No. 1.580 on second reading.

Brandi Wilks seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes
Anne Barrington - yes
Todd Hendreks - yes
John Diak - yes
Brandi Wilks - yes
Laura Hefta - yes

The motion was approved unanimously.

D. ORDINANCE NO. 1.581 - Second Reading

A Bill for an Ordinance Vacating a Portion of Right-of-Way Adjacent to Kings Point Way to KPS Retail, LLC

Department: Community Development, Stacey Nerger

In 2019-2020, the Town constructed Kings Point Way to connect Cottonwood Drive in the Crown Point Planned Development (PD) to the future Aurora Parkway in the City of Aurora. The Town is proposing to vacate excess right-of-way (ROW) left over from the Kings Point Way project and convey the 0.232-acre parcel to the adjacent property owner KPS Retail LLC.

Public Comments: None.

Anne Barrington moved to approve Ordinance No. 1.581 on second reading.

Brandi Wilks seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes

Anne Barrington - yes

Todd Hendreks - yes

John Diak - yes

Brandi Wilks - yes

Laura Hefta - yes

The motion was approved unanimously.

ADJOURNMENT

Todd Hendreks moved to adjourn the meeting at 8:13 p.m.

Anne Barrington seconded the motion.

A roll call vote was taken:

Joshua Rivero - yes

Anne Barrington - yes

Todd Hendreks - yes

John Diak - yes

Brandi Wilks - yes

Laura Hefta - yes

The motion was approved unanimously.

Susan L. Irvine, Deputy Town Clerk

Jeff Toborg, Mayor



Request for Town Council Action

Date: June 20, 2023

Submitted By: Julia Duncan, Associate Planner
Bryce Matthews, Assistant Director - Planning
John Fussa, Community Development Director

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 3.361 - First Reading**
A Bill for an Ordinance Zoning Certain Property Within the Town of Parker, Colorado, Known as the Coyle/Perkins Property to PD-Planned Development District Pursuant to the Town of Parker Land Development Ordinance and Amending the Zoning Ordinance and Map to Conform Therewith
Department: Community Development, Julia Duncan
Trakit No.: Z22-017
Second July 10, 2023
Reading:

EXECUTIVE SUMMARY

The Town Charter and Land Development Ordinance (LDO) require property owners who wish to annex land into the Town to concurrently zone their properties for future use. AvalonBay Communities is proposing to annex and zone a 33.4 acre parcel of land known as the Coyle/Perkins property for mixed-use with future commercial and multi-family residential uses. The subject property is located at the southeast corner of the intersection of Crowfoot Valley Road and Stroh Road. This action, Ordinance No. 3.361, is for the first reading of the proposed zoning only. The Town Council will consider the proposed annexation and zoning at a public hearing on July 10, 2023.

LDO Criteria for Review and Decision

The LDO requires that the Town Council shall consider the following factors in making its decision on the proposed zoning:

1. A need exists for the proposal;
2. The particular parcel of ground is indeed the correct site for the proposed development;
3. There has been an error in the original zoning; or
4. There have been significant changes in the area to warrant a zone change;
5. Adequate circulation exists and traffic movement would not be impeded by development;
6. Additional municipal service costs will not be incurred which the Town is not prepared to meet;

7. There are minimal environmental impacts or impacts can be mitigated;
8. The proposal is consistent with the Town Master Plan maps, goals and policies;
9. There is adequate waste and sewage disposal, water, schools, parks and recreation, and other services to the proportional degree necessary due to the impacts created by the proposed land uses.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Coyle/Perkins property consists of 33.4 acres located in unincorporated Douglas County at the southeast corner of the intersection of Stroh Road and Crowfoot Valley Road. The applicant proposes to annex the subject property into the Town as referenced in the Executive Summary above. The property is located at a major gateway into the Town from the south along the Crowfoot Valley Road corridor and is zoned A1 - Agricultural One by Douglas County for agricultural use.

The subject property is contiguous to the Town's current boundary and is located within the municipal planning area identified in the Parker 2035 Master Plan, which establishes the future geographic boundaries of the Town. The property is largely undeveloped except for a small single-family house and several accessory structures that are remnants of previous agricultural use. It is bordered to the east by a vacant parcel of land owned by Parker Water and Sanitation District; to the south by the Meadowlark residential development and a private residence; to the west by the Looking Glass Planned Development (PD); and to the north by the Hunter's Chase multi-family residential development and Stroh Soccer Park.

The applicant has submitted an Annexation Petition in accordance with the Colorado Municipal Annexation Act of 1965 (the Act), Title 31, Article 12, Part 1, C.R.S., for annexation of the subject land into the Town as described in the Petition. The Town Clerk, as provided by C.R.S. § 31-12-107(1)(f), referred the Annexation Petition to the Town Council as a communication. The Town Council, as provided by C.R.S. § 31-12-107(1)(f), is required, without undue delay, to take appropriate steps to determine if the submitted Annexation Petition is in substantial compliance with the Act. Under Section 13.04.250(c) of the Town Code, the Town Council may determine the following:

1. The Annexation Petition substantially complies with the requirements of C.R.S. § 31-12-107(1)(a), which will require that the Town Council establish by resolution the date, time and place that the Town Council will hold the public hearing not less than thirty (30) days nor more than sixty (60) days after the resolution setting the public hearing, unless otherwise required by state law; or
2. The Annexation Petition does not substantially comply with the requirements of C.R.S. § 31-12-107(1)(a), which will require no further action; or
3. Table any action on the Annexation Petition for a period of time not to exceed one hundred eighty (180) days.

On July 18, 2022, the Town Council approved Resolution 22-042 which determined that the

Annexation Petition substantially complies with the Act, C.R.S. § 31-12-107(1) and set the public hearing date of September 6, 2022 to determine eligibility for annexation into the Town. On September 6, 2022, the Town Council approved Resolution No. 22-045 and determined that the subject property was eligible for annexation into the Town as provided by the Act.

On November 7, 2022, the Town Council continued the public hearing to consider the proposed annexation and zoning until February 21, 2023 to allow the applicant and staff sufficient time to negotiate the annexation agreement and process the proposed zoning for the property. On February 21, 2023, the Council again continued the public hearing until April 17, 2023 to allow the applicant and staff additional time to negotiate the annexation agreement and process the proposed zoning for the property. On April 17, 2023, the Council again continued the public hearing until June 5, 2023 to allow the applicant and staff additional time to finalize the annexation agreement and process the proposed zoning for the property. On June 5, 2023, the Council again continued the public hearing until July 10, 2023 to allow the applicant and staff additional time to finalize the annexation agreement and comply with public notice requirements for the hearing.

The applicant proposes PD zoning for the subject property that may be summarized as follows:

- **Planning Areas:** A total of five (5) Planning Areas with use and bulk standards to guide future development
- **Uses:** Mixed-use with commercial, residential, park and open space uses
- **Commercial:** 8.76 acres of commercial use
- **Residential:** Multi-family residential use with maximum 343 dwelling units and density of 12 units per acre. The proposed residential density is lower than the permitted residential density in the Stroh Ranch PD and Hunter's Chase multi-family residential development to the north.
- **Park:** 4.77 acres of park subject to a future site plan application
- **Open Space:** 6.68 acres subject to a future site plan application
- **Trails:** On-site trails and a contribution to the future Lemon Gulch Regional Trail
- **Building Height:** Two (2) to four (4) stories

Staff has reviewed the proposed PD zoning for consistency with the Parker 2035 Master Plan and has the following comments:

- **Land Use:** Consistent with Master Plan guidance that Neighborhood Centers and parcels within them incorporate a mixed-use zoning and development approach (Master Plan p. 6.15)
- **Residential Yield/Density:** Consistent with Master Plan guidance for Neighborhood Centers that “Higher density residential is appropriate... as a transition between less intense residential areas and non-residential areas when developed as part of a mixed-use development... (Master Plan p. 6.15).” The proposed density of 12 d.u. per acre is less than the Stroh Ranch PD zoning permitted density of 22 d.u. per acre in the Hunter’s Chase multi-family residential development to the north.

- **Bulk/Mass:** Consistent with Master Plan guidance for Neighborhood Centers that “Massing and scale of higher density residential development shall respect the scale and massing of adjoining land uses... (Master Plan p. 6.15).” The proposed building height of two (2) to four (4) stories is generally compatible with the Hunter’s Chase multi-family residential development to the north in the Stroh Ranch PD that has buildings of 3.5 stories in height. The proposed building heights would terrace downward from north to south with a two (2) story building(s) at the southern property line adjacent to the existing 1.5 story house on the adjacent Wilson property.
- **Future Planning Area (Urban Growth Boundary):** The Town has identified the Coyle/Perkins property as a candidate for future annexation through the annual Three-Mile Plan and the Parker 2035 Master Plan. The proposed annexation is therefore consistent with the Town's land use policy as expressed in both plans.
- **Future Growth and Development:** The proposed Coyle/Perkins property annexation and zoning is consistent with the Town's land use policy of actively pursuing annexations to accommodate future growth and development while permitting the continuity of services within the designated Planning Area (Urban Growth Boundary).

On May 11, 2023, the Planning Commission held a public hearing on the proposed PD zoning and voted 5-2 to recommend that the Town Council approve the zoning. The two (2) Planning Commissioners who voted against the proposed zoning expressed concern about the residential uses, buffers/setbacks along the southern property line, and potential impacts to the existing residential property located in unincorporated Douglas County to the south.

FINANCIAL IMPACT

None

STRATEGIC GOAL(S)



ENHANCE ECONOMIC
VITALITY



DEVELOP A VISIONARY
COMMUNITY THROUGH
BALANCED GROWTH

ATTACHMENTS

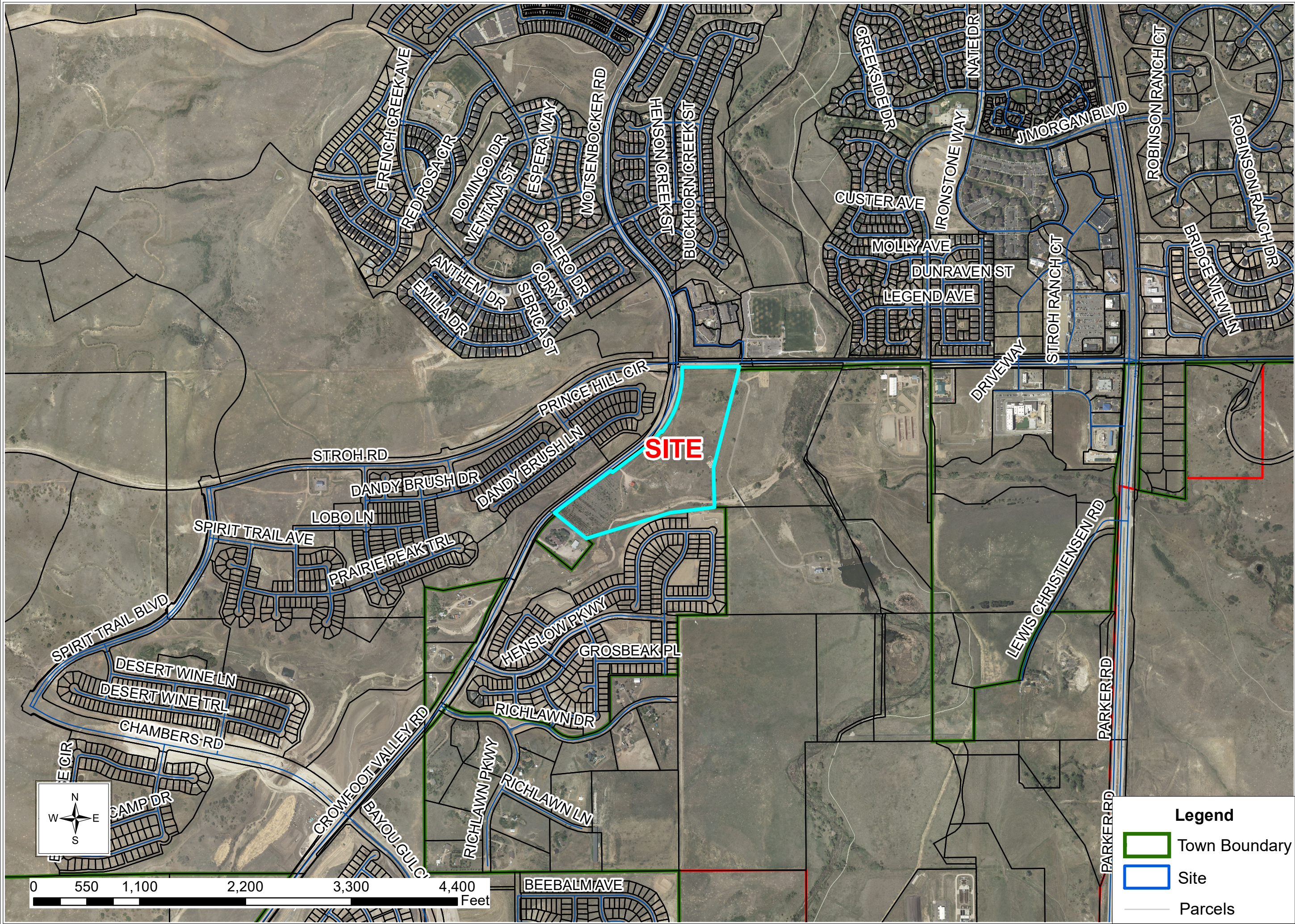
1. Vicinity Map
2. Planning Commission Staff Report Z22-017
3. Neighborhood Outreach Summary
4. Comments from Wanda Wilson 4600 Crowfoot Valley Road
5. Ordinance No. 3.361

RECOMMENDED MOTION

I move to approve Ordinance No. 3.361 on first reading and to schedule second reading for July 10, 2023, as part of the consent agenda.

AvalonBay-Parker PD Vicinity Map

Zoning





Planning Commission Staff Report

Planning Commission Date: 5/11/2023

Town Council Date: 6/5/2023

Hearing Type: Public Hearing
Avalon Bay Parker – Zoning
TRAKiT No: Z22-017

Location: The site is located at the southeast corner of Crowfoot Valley Road and Stroh Road

Project Planner: Julia Duncan, Associate Planner

Applicant: Avalon Bay Communities, Inc, Applicant

Executive Summary: The applicant is proposing to zone 33.4 acres for commercial and multifamily residential uses.

Staff Recommendation: Approval

RECOMMENDED MOTION

“I move the Planning Commission recommend Town Council approve the zoning.”

ALTERNATIVE MOTIONS

“I move the Planning Commission recommend Town Council approve the zoning request, subject to the following conditions:”

-List proposed conditions

“I move the Planning Commission recommend Town Council deny the zoning as the request does not meet the following approval criteria:”

-List criteria not met (either by staff or Planning Commission)

“I move the Planning Commission vote to continue the zoning to a future date.”

I. BACKGROUND/DISCUSSION

The subject property consists of 33.40 acres in unincorporated Douglas County and is located at the southeast corner of the intersection of Stroh Road and Crowfoot Valley Road. The applicant is proposing to annex the parcel into the Town. It is largely undeveloped except for a small single-family house and several accessory structures that are remnants of previous agricultural uses. The subject property is zoned A1 - Agricultural One within Douglas County. The property is adjacent to the current Town Boundary and wholly in the Town’s planning area set forth in the General

Land Use Plan map in the Parker 2035 Master Plan. The General Land Use Plan map establishes the future geographic boundaries of the Town. The Site is bounded to the east by a vacant parcel of land owned by Parker Water & Sanitation District and to the south by the Meadowlark residential neighborhood and a private residence. To the west, across Crowfoot Valley Road is the Looking Glass residential neighborhood, and to the north of the Site, across Stroh Road are Hunter's Chase Condominiums.

The applicant has submitted a Rezoning application that is running concurrently with the Annexation Petition. The parcel is proposed to be zoned to AvalonBay-Parker Planned Development (PD), which would permit a maximum of 343 residential dwelling units, commercial development, and associated parks and open space. The proposal will have a maximum density of 12 dwelling units per acre.

The Parker 2035 Master Plan designates the intersection of Stroh Road and Crowfoot Valley Road as a Neighborhood Center overlaying the Medium Density Residential Character Area.

The Annexation Petition was submitted in accordance with the Colorado Municipal Annexation act of 1965, Title 31, Article 12, Part 1, C.R.S., for annexation of the subject land into the Town as described in the Petition.

The Town has identified the Coyle/Perkins property as a candidate for future annexation through the annual Three-Mile Plan and the Parker 2035 Master Plan. Therefore, the proposed annexation is consistent with the Town's land use policy as expressed in both plans. Further, the subject property is eligible for annexation because it is located within the Town's Planning Area (urban growth boundary) and satisfies the contiguity requirements of the Act, C.R.S. § 31-12-104(a). A need exists for zoning of the subject property because the Town of Parker Home Rule Charter and Section 13.04.250 of the Parker Municipal Code require that zoning occurs concurrently with annexation requests.

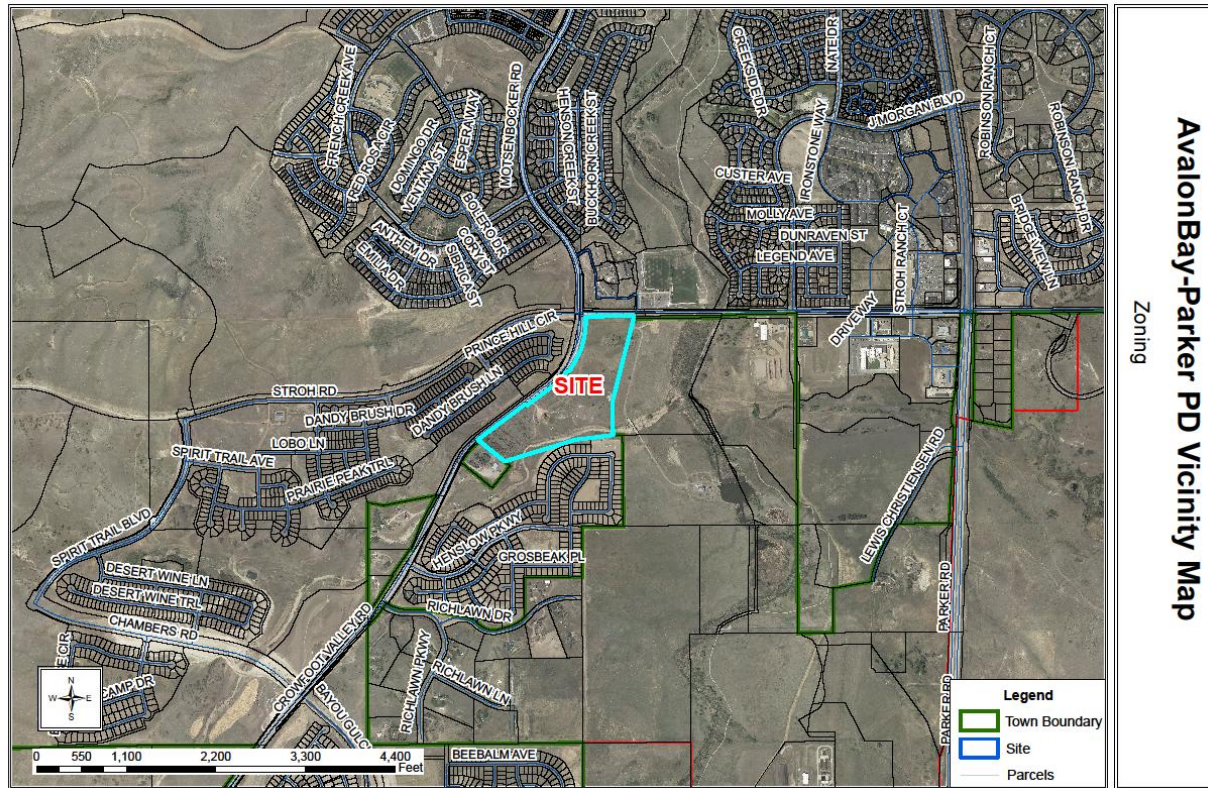
The project proposes to rezone from agriculture to AvalonBay-Parker PD and would allow:

- Residential - a maximum of 343 dwelling units (12 dwelling units per acre),
- Commercial -8.76 acres,
- Open Space -, a minimum of 6.68 acres, and\
- Parkland 4.77 acres.

Housing types, minimum lot areas, building heights, lot widths, required setbacks, and residential and commercial uses are delineated amongst the five (5) proposed Planning Areas and are consistent with straight zoning proposed in the Land Development Ordinance Modernization.

The annexation and zoning fulfill the Town of Parker goal of actively pursuing annexations to allow for continuity of services within the Parker 2035 Master Plan's Planning Area.

Vicinity Map



II. PRIOR ACTIONS

N/A

III. CURRENT SITE DATA

Existing Zoning	A - Agricultural One		
Overlay District	N/A		
PD & Plan Area	N/A		
Master Plan Area	Neighborhood Center - Medium Density Residential		
Site Acreage	33.40 acres		
Subdivision	N/A		
Existing Use	It is largely undeveloped except for a small single-family house and several accessory structures that are remnants of a previous agricultural uses.		
Surrounding Uses			
	Master Plan Land Use	Zoning	Existing Use
North	Neighborhood Center	PD – Planned Development	Stroh Road and Hunter’s Chase Condominiums
South	Medium Density Residential	PD - Planned Development	Meadowlark w/ Single Family Homes. Private residence.

East	Medium Density Residential	Douglas County Zoning	Vacant Parcel owned by PWSD
West	Low Density Residential	PD - Planned Development	Crowfoot Valley Road and Looking Glass development

IV. PARKER 2035 MASTER PLAN
Parker 2035 Master Plan | Town of Parker - Official Website

MASTER PLAN CONSISTENCY	
Master Plan Designation	Choose an item. ☒ Consistent ☐ Inconsistent
Master Plan Character Discussion	<u>Medium Density Residential</u> The Medium Density Residential Character Area will consist of an overall gross density of 3.5 dwelling units per acre. Higher densities for housing for older adults may be considered as long as impacts are comparable to other uses permitted within this Character Area. In addition, the intersection of Stroh Road and Crowfoot Valley Road is also designated as a Neighborhood Center <u>Neighborhood Centers</u> Neighborhood Centers should be planned to serve the basic needs of the surrounding residents. Typical uses within Neighborhood Centers include convenient retail and personal/business services, generally anchored by a grocery store. Other compatible uses such as small offices, recreational uses and restaurants are also permitted. Generally, the total Gross Leasable Area (GLA) for the commercial/office components within an entire Neighborhood Center should range from 50,000 to 250,000 square feet combined. In general, a Neighborhood Center shall have no less than 33 percent or eight (8) acres, whichever is greater of its total land area zoned and developed for commercial use with corner located parcels zoned and developed principally for commercial, retail, service and restaurant use. Residential use shall be a secondary element unless part of a vertical mixed-use. Higher density residential is appropriate in these Centers as a transition between less intense residential areas and nonresidential areas when developed as part of a mixed-use development and when the design encourages residents to walk or bicycle to obtain goods

	and services. Massing and scale of higher density residential development shall respect the scale and massing of adjoining land uses and shall reflect an integrated neighborhood feel. Typical garden style apartment designs are not appropriate.
Consistent Goals/Strategies	<u>Land Use 1. A</u> <u>Land Use 1. B</u> <u>Land Use 1. C</u> <u>Land Use 1. D</u> <u>Land Use 1. E</u> <u>Land Use 1.H</u> <u>Land Use 1. I</u> <u>Community Appearance and Design 1.C</u> <u>Community Appearance and Design 2</u> <u>Community Appearance and Design 2. B</u> <u>Housing and Neighborhoods 1</u> <u>Housing and Neighborhoods 1. A</u> <u>Housing and Neighborhoods 3. A</u>
Staff Analysis	The project proposes to rezone from agriculture AvalonBay-Parker PD to allow for 12 dwelling units per acre, 8.76acres of commercial development, in addition to parks and open space. The site is located at the southeast corner of Crowfoot Valley Road and Stroh Road. The property is within Neighborhood Center as designated by the Parker 2035 Master Plan. Planning Area 1 adjacent to the intersection of Crowfoot Valley Road and Stroh Road is designated within the PD as “Mixed-Use Neighborhood and is intended to accommodate a mix of housing types at varied densities and supporting neighborhood-centric commercial activities serving the needs of surrounding residents at a less-intense, more walkable scale. The Mixed-Use district is intended to include both vertical and horizontal mixed-use development and can serve as a transitional district to more intense commercial, mixed-use, and nonresidential districts and uses. Multi-tenant commercial development requirements have been included in the PD. At 8.76 acres of commercial zoning, this Planning area is consistent with the Neighborhood Center commercial requirements. Planning Areas 2, 3, and 4 are multi-family residential and are intended to accommodate a variety of housing types and serve as transitional districts from the more intense Mixed-Use district of PA-1to the less intense

	residential uses to the south. The land use development standards in PA2, 3 and 4 become more restrictive to respect the more sensitive single-family residential zones. Maximum height on the southernmost residential portion of the property is 2 stories, equivalent in height to a single family detached home zoning. A minimum buffer for the southern properties of 30 feet is required along the southern property line and a roadway buffer ranging from 60-65 ft. (average) at the south to 30 ft. along the northern sections of Crowfoot Valley Road are required. Parks and Open Space are provided consistent with the LDO requirements. Housing types, minimum lot areas, building heights, lot widths, required setbacks, and residential and commercial uses are delineated amongst the five (5) proposed Planning Areas and are consistent with straight zoning proposed in the Land Development Ordinance Modernization. The proposal creates a PD that is consistent with existing adjacent uses and is an infill site. The annexation and zoning fulfill the Town of Parker goal of actively pursuing annexations to allow for continuity of services within the Parker 2035 Master Plan's Planning Area. Based on this analysis, staff has determined that the request is consistent with the Parker 2035 Master Plan.
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V. LAND DEVELOPMENT ORDINANCE

DEVELOPMENT POTENTIAL (Rezoning)			
Provisions	As recommended by the Master Plan	Proposed	Analysis
Units Per Acre	Higher density residential is appropriate as a transition from more intense commercial land uses to lower density single family residential land uses.	12 dwelling units per acre	☒ Consistent ☐ Inconsistent ☐ No Change ☐ N/A
Allowed Uses	Medium Density: Residential housing. Neighborhood Centers: convenient retail, personal/business services, generally anchored by a grocery store. Other compatible uses such as small offices, recreational uses and restaurants are also permitted and higher density residential uses	A mix of housing types and Commercial uses.	☒ Consistent ☐ Inconsistent ☐ No Change
Height/Stories	N/A. The Master Plan does not speak to height.	PA-1 Four Stories or 65 feet (whichever is less) PA-2: Four Stories or 65 feet (whichever is less) PA-3: Three Stories or 50 feet (whichever is less) PA-4: Two Stories or 40 feet (whichever is less)	☒ Consistent ☐ Inconsistent ☐ No Change
Staff Analysis	As detailed in the analysis above, the requested zoning is consistent with the Parker 2035 Master Plan for the allowed uses and the requested height maximum for buildings. Based on this analysis, staff has determined that the request is consistent with The Parker 2035 Master Plan.		

VI. ACCESS, CIRCULATION & TRAFFIC ANALYSIS

Vehicular access for the proposed Avalon Parker development will be provided via an internal roadway network providing connectivity to the external transportation system at the following locations:

- A full access driveway intersecting Stroh Rd. across from the Stroh Ranch Soccer Park access driveway forming a 4-way intersection and providing access to the north end of the site and the commercial parcel.
- A right-in right-out driveway intersecting Crowfoot Valley Rd. approximately 550 feet south of the Stroh Rd./Crowfoot Valley Rd. intersection, forming a “T” intersection and providing a shared access point between the commercial parcel and the north most block of housing.
- A full access driveway intersecting Crowfoot Valley Rd. approximately 1000 feet south of the Stroh Rd./Crowfoot Valley Rd. intersection, forming a “T” intersection and providing a main access point for the housing parcel and public park.
- A ¾ movement driveway intersecting Crowfoot Valley Rd. approximately 1600 feet south of the Stroh Rd./Crowfoot Valley Rd. intersection, forming a “T” intersection and providing another access point for the housing parcel.

Based on these parameters, at buildout, the proposed Avalon Parker development is projected to generate 7,649 daily vehicle trips of which 286 are projected to be generated during the a.m. peak hour and 616 during the p.m. peak hour. Recommendations for geometric and operational improvements/modifications to the area roadways and intersections to sufficiently mitigate the impacts created by the traffic generated are provided within the Traffic Impact Report and will be evaluated through the Sketch, Preliminary, and Final Plat process.

At the time of development, the applicant will be required to ensure all required roadway improvements are constructed as identified in compliance with an approved annexation agreement and traffic study.

VII. APPROVAL CRITERIA REZONING

Title 13.04.240.f. Approval Considerations for Rezoning Requests:

1. A need exists for the proposal.

Applicant's Response

There is a strong need to expand and diversify housing options in the Town of Parker while maintaining a healthy balance of non-residential development. Land identified for housing development in the Town of Parker is limited, particularly in the multifamily rental housing category. As stated in the Parker 2035 Master Plan, single-family detached homes accounts for 75% of the housing stock in the Town, and the demand for high quality rental housing is increasing. In addition, there is a need to provide an appropriate amount of neighborhood-scale commercial/retail development to expand business opportunities and retail options for existing and future residents. The proposed development considers the Town's need for viable commercial offerings together with the emerging residential needs of the population, resulting in a well-integrated and balanced community with emphasis on small-town livability.

The proposed PD Zoning will accomplish these goals and support both the residential and non-residential needs that currently exist in the community. This PD amendment will also allow development to occur in accordance with the Town's vision for the property as identified within the Parker 2035 Master Plan.

Staff Analysis

A need exists for the annexation and zoning of the subject property because the Town of Parker Home Rule Charter and Section 13.04.250 of the Parker Municipal Code require that zoning occur concurrently with annexation requests and, the project will:

1. Provide adequate opportunities for expansion of the Town's economic and tax base.
3. Support infill development that is consistent with existing residential neighborhoods and provide neighborhood serving commercial uses.
- 5 Allow the Town to consolidate services and recognize efficiencies of scale and delivery of services; and
6. Promote orderly growth, continuity of development and certainty of development within the subject property and surrounding areas within the Town and the Town Urban Growth Area.

Based on this analysis, staff has determined that this criterion has been met.

2. The particular parcel of ground is indeed the correct site for the proposed development.

Applicant's Response

The property's location, market conditions, existing infrastructure and development in the area, and the existing land use designation make the subject parcels the ideal site for the development as proposed. As previously stated, there is desire for the provision of both apartment-style housing and neighborhood-scale commercial uses. Public facilities and services exist to support development of the property, and existing infrastructure is adequate to serve development of the property. The property is within a designated "Neighborhood Center," which envisions convenient access to commercial uses at identified intersections with thoughtful transitions to surrounding neighborhoods. Higher density residential uses are identified as a supporting use, with appropriate transitions built into the design. The proposed plan achieves this transition and integrates seamlessly within the existing built and natural environment. Furthermore, the inclusion of residential uses as part of this community will expand the employment base and support future commercial business and services.

The Site's location at the corner of two major roadways provides an ideal location for commercial development. The existence of single-family neighborhoods to the south of the Site provides an opportunity for thoughtful and deliberate transitions from non-residential to residential land uses while incorporating a high level of connectivity to adjacent areas. The proposed plan achieves this transition and integrates seamlessly with existing residential uses adjacent to the property while providing significant park and open space areas.

Staff Analysis

The property is within unincorporated Douglas County. The subject property is contiguous with the Town and is described in the Parker 2035 General Land Use Plan as being located within the Town's "Planning Area Boundary." Specifically, the subject property is located within Neighborhood Center as designated by the Parker 2035 General Land Use Plan and at the intersection of two arterial roads. Neighborhood Centers are planned to provide neighborhood serving commercial and higher density residential uses.

The subject property has been identified as property to be annexed, zoned and developed in the Town for commercial and residential uses; therefore, the subject property is appropriate for multifamily residential and commercial development.

Based on this analysis, staff has determined that this criterion has been met.

3. There has been an error in the original zoning; or**Applicant's Response**

The purpose of this application is not to correct an error in the original zoning; therefore, this factor is not applicable.

Staff Analysis

There was no error in the original zoning and the proposed residential and commercial development is consistent with the Town's 2035 Master Plan land use designation of Medium Density Residential and Neighborhood Center.

4. There have been significant changes in the area to warrant a zone change.**Applicant's Response**

Parker's growth rate as well as larger industry trends have shifted land use priorities in the Town from agricultural towards residential. Recent residential developments adjacent to the site such as Meadowlark to the south and Looking Glass to the west point to this trend. The zoning change is reflected in the Parker 2035: Choices and Changes (Master Plan) General Land Use Plan which designates the Site location as Medium Residential Density with a Neighborhood Center envisioned for the intersection of Stroh Road and Crowfoot Valley Road, the proposed location of the commercial uses in the PD. Additionally, the proposed apartments speak to the Town's Master Plan's discussion on the issue of housing affordability and notes importance of diversifying the existing housing stock through attainable housing options in response to this

Staff Analysis

The Parker 2035 Master Plan directs future zonings of unincorporated lands within the Planning Area and requests for rezonings of existing properties already annexed in the Town. The Denver Metropolitan area is home to 2.8 million people today and another million people are expected in the metro area by 2035. Parker will continue to receive a share of this growth over the next 20 years. In addition, there has been significant

residential growth to the south of this property and in Douglas County including Trails at Crowfoot, Looking Glass, Macanta and The Canyons, these neighborhoods will need commercial services. The existing Agricultural Zoning designation within unincorporated Douglas County are inconsistent with the Master Plan's Character Area designation for Medium Density Residential and Neighborhood Center.

5. Adequate circulation exists and traffic movement would not be impeded by development; and

Applicant's Response

Vehicular access is proposed along Stroh Road and Crowfoot Valley Road. and will conform to all applicable Town standards and specifications. The existing roadways and circulation network is adequate to serve the development as demonstrated in further detail in the Traffic Impact Analysis included with this application. Enhanced pedestrian connections to surrounding neighborhoods, open space areas, and future commercial development offers opportunities for residents to live, work, and play in close proximity.

Staff Analysis

At the time of development, the applicant will be required to construct all warranted traffic mitigation improvements necessary for the development as identified within the traffic study for the property to ensure adequate circulation. The applicant will also be required to make improve Stroh Road and Crowfoot Valley Road where they are adjacent to the property.

Based on this analysis, staff has determined that this criterion has been met.

6. Additional municipal service costs will not be incurred which the Town is not prepared to meet.

Applicant's Response

Existing facilities and services exist to serve development on the property, and development of the property will not result in undue financial burden. The proposed project will satisfy all applicable fees, policies, and requirements as specified by the Town of Parker and applicable service districts.

Staff Analysis

Any construction on the subject properties will be considered private and will be privately maintained.

As evidenced by the inclusion of the subject property in the Town's Planning Area, the Town is prepared to meet the additional municipal service costs associated with the subject property.

Based on this analysis, staff has determined that this criterion has been met.

7. There are minimal environmental impacts or impacts can be mitigated.

Applicant's Response

Development of the Site will not result in negative impacts to vegetation, wildlife, or environmentally sensitive areas. The floodplain along Lemon Gulch will be preserved. Development will comply with any applicable requirements of the Town and Colorado Parks & Wildlife.

Staff Analysis

The subject property is surrounded by urbanized areas and will be required to meet all Town environmental standards as set forth in the Land Development Ordinance, such review will occur during the subdivision and Site Plan processes. As a part of this review, site improvements will be required to be designed to ensure that any environmental impacts are mitigated. Lemon Gulch through the site will be preserved.

Based on this analysis, staff has determined that this criterion has been met.

8. The proposal is consistent with the Town Master Plan, maps, goals, and policies.

Applicant's Response

The proposed PD Zoning directly advances many goals and strategies stated within the Parker 2035 Master Plan as described below.

Land Use

Strategy 1.A: Strengthen the identity of Parker by encouraging a balance of land uses that supports a high quality of life and contributes to the hometown character of our community.

The proposed development will provide an innovative and well planned in the Town of Parker. A healthy balance of residential and non-residential land will be provided, meeting the needs of the local community, and advancing Parker's vision to "be a full-service community with a hometown feel."

Strategy 1.C: Ensure adequate opportunities for future expansion of our economic base in appropriate locations in the community.

Diversifying and expanding the Town's housing mix will increase opportunities for expansion of employment base. With the simultaneous provision of non-residential land, the proposed PD Zoning will ensure opportunities for existing and future Town residents to live and work in the same area.

Strategy 1.D: Increase the amount of open space using the criteria set forth in the Open Space, Trails and Greenways Master Plan which emphasizes supporting a regional greenway network that provides a community separation buffer from development in neighboring jurisdictions while maintaining the viability and connectivity of the natural ecosystem.

The proposed development will increase open space and recreational offerings for future and existing residents, supporting more active and healthier lifestyles and a stronger connection to nature. A significant amount of active open space and recreation

areas are proposed, and the plan includes trails that will connect to the established trail network, including connections to the Chery Creek Regional Trail.

Strategy 1.E: Encourage transitions between different land uses and intensities.

The proposed zoning will facilitate a development that is well integrated into surrounding land use and provide an effective and appropriate transition of uses. Mixed-use development at this location will provide an ideal transition between future commercial uses at the corner of Stroh Road and Crowfoot Valley Road and existing residential development south of the property. Furthermore, the site plan incorporates significant buffering from the Lemon Gulch floodplain area, providing protection and adequate transition to this natural resource.

Strategy 1.F: Develop land use patterns that are compatible with and support a variety of transportation opportunities and/or choices.

The subject property is located at the intersection of major roadways with planned vehicular access to all areas. Pedestrian and bicycle infrastructure will be provided by the proposed development to support a variety of transportation options and encourage a safe, pedestrian-scale environment. Furthermore, a trail will be extended along the east side of the Site to connect to the broader regional trail network.

Strategy 1.H: Encourage land uses that create a sense of community among those who work, live and play within appropriate neighborhoods.

The proposed PD and associated site plan will accommodate residential and non-residential land uses in a well-designed arrangement, exemplifying orderly and compact growth that is sensitive to the surrounding context. The amendment will also afford residents to live, work, and play in the same neighborhood, thereby encouraging and promoting social integration and strengthening the overall sense of community.

Community Appearance and Design

Strategy 2.B: Use architecture, building design, public spaces and massing to create neighborhoods that are desirable places to live.

The site plan is thoughtfully planned to encourage a walkable, pedestrian-focused environment with ample access to public open spaces. Furthermore, building design, placement, and massing is focused on high quality and durable materials, architectural variation, and promoting a strong sense of community, social interaction, and livability.

Strategy 5.C: Where appropriate, locate buildings adjacent to the street to either block or break up the view of parking lots.

As demonstrated by the site plan, buildings are oriented along the perimeter of the Site to enhance the pedestrian experience and minimize the presence of surface parking on the Site.

Housing and Neighborhoods

Strategy 1.A: When reviewing development proposals adjacent to and within existing neighborhoods, ensure that the development demonstrates compatibility with, and sensitivity to, existing neighborhood characteristics in terms of housing, quality, density, building height, placement, scale and architectural character.

The proposed PD and associated development will achieve compatibility with existing land uses in all areas including housing, quality, density, building massing and placement, and architectural character. The site plan is designed to maximize perimeter buffers, provide buffers to adjacent uses, preserve views, and encourage a highly walkable and pedestrian-friendly environment. Building design and architecture will be of an appropriate scale to the surrounding context and feature durable, high quality materials that will complement the existing built and natural environment.

Jobs and Economic Vitality

Strategy 2.A: Nurture and support established businesses and ensure adequate opportunities for future and expanded commercial activity within designated areas of Town, as specified in the General Land Use Plan.

The General Land Use Plan designates the subject property within a designated “Neighborhood Center” which envisions convenient access to commercial uses at identified intersections with thoughtful transitions to surrounding neighborhoods. Higher density residential uses are identified as a supporting use, with appropriate transitions built into the design. The proposed plan achieves this transition and integrates seamlessly within the existing built and natural environment. Furthermore, the inclusion of residential uses as part of this community will expand the employment base and support future commercial business and services.

Strategy 2.B: Balance Parker’s business and retail community includes a variety and diversity of business types as well as a variety of business scales and sizes.

Facilitating approximately 8.3 acres of land for commercial uses will increase and diversify the Town’s businesses and offer opportunities for varied types and scales. The proposed PD will allow a wider variety of commercial/retail offerings while integrated into the existing neighborhood context and provide desirable transitions from major roadways and existing uses.

Staff Analysis

As detailed in Section IV. of this staff report, the proposed rezoning to allow for the AvalonBay – Parker Planned Development is consistent with the Neighborhood Character Area Medium Density Residential and Neighborhood Center of the Parker 2035 Master Plan.

Based on this analysis, staff has determined that this criterion has been met.

9. **There is adequate waste and sewage disposal water, schools, parks and recreation, and other services to the proportional degree necessary due to the impacts created by the proposed land uses.**

Applicant's Response

Public facilities and services exist to serve the proposed development including water and sewer utilities, water resources, fire and emergency response, schools, and parks and recreation.

Staff Analysis

The property is located within Parker Water and Sanitation District and infrastructure exists serving adjoining properties.

Based on this analysis, staff has determined that this criterion has been met.

I. SUMMARY REFERRAL AGENCY COMMENTS AND CONDITIONS

Agency	Zoning Comments
Parker Engineering	Approved
Aztec Consultants	No Comment
Parker Building	Approved
Fire Life Safety	Approved
Douglas County Assessor's Office	No Comment
Douglas County Planning	No Comment
Douglas County School District	No Comment
Parker Police	No Comment
PSCO	No Comment
CORE	Approved
CenturyLink	No Comment
Comcast	No Comment
Parker Water and Sanitation District	Approved
RTD	No Comment

VIII. CONCLUSION

This zoning request is being processed to allow for:

- Residential - a maximum of 343 dwelling units (12 dwelling units per acre),
- Commercial - 8.76 acres,
- Open Space -, a minimum of 6.68 acres, and\
- Parkland 4.77 acres.

The proposed rezoning of AvalonBay – Parker Planned Development dictates height, setbacks, floor area, required open space and park space consistent with the Town’s Land Development Ordinance. Staff has reviewed the application has determined that it meets the zoning approval criteria of the Parker Land Development Ordinance and the Parker 2035 Master Plan.

Based on the analysis contained in this staff report, staff recommends that Planning Commission recommends Town Council approve the zoning request.

IX. RECOMMENDED CONDITIONS

Staff recommends that the Planning Commission recommend that the Town Council approve AvalonBay-Parker PD-Planned Development District zoning.

X. ATTACHMENTS

1. AvalonBay – Parker Development Plan
2. AvalonBay – Parker Development Guide
3. Neighborhood Outreach Summary
4. Public Comment

Report Approved By: Bryce Matthews, Assistant Director, Planning

AVB Parker Neighborhood Meeting Summary

A neighborhood meeting was held on October 18, 2022 at the Parker Fieldhouse from 6:30pm to 8:00pm. Invitations were sent two weeks in advance of the meeting to property owners within 500 ft of the site. Four members of the community attended the meeting. Members of the project team spoke with those community members in attendance and presented exhibits on the following topics:

- An overview of the Town's development review process for the current Annexation and Zoning applications and the anticipated next steps of Site Plan, Minor Development Plan, and Construction Document applications.
- The proposed PD Plan outlining the proposed commercial, residential, park, and open space land uses on the site.
- A conceptual Site Plan indicating the possible layouts of streets, buildings, open space and public amenities such as the park, regional trail connectivity, and improvements to Lemon Gulch.
- An exhibit detailing the steps of How the Site Design Comes Together taken from the Town of Parker's Development Design Standards outlining the design process the team intends to follow in preparation of a Site Plan.
- Information about AvalonBay and their work both locally in Colorado and nationwide.

Feedback from community members was invited through both a comment box and conversation with the project team to help inform the design process.

PARKER PLANNING MEETING

MONDAY FEBRUARY 13, 2023

10AM JULIA DUCAN/WILSON 7600 CROWFOOT VALLEY ROAD

OBJECTIVE: TO COME TO A REASONABLE SOLUTION FOR THE RESIDENTS OF 7600 CROWFOOT VALLEY ROAD IN ORDER TO MITIGATE CONFLICT BETWEEN AG1 PROPERTY/RR DOUGLAS COUNTY PROPERTY AND THE TOWN OF PARKER HEAVY URBAN RESIDENTIAL RENTAL APARTMENTS.

7600 CROWFOOT VALLEY ROAD RESIDENCE IS SPECIFIC TO NO OTHERS WITHIN THE PROPOSED BUILDING AREA ENVELOPE OF THE AVALON BAY APARTMENT BUILDINGS AND WILL SUFFER THE MOST DAMAGE WHICH DEROGATES REASONABLE USE OF PROPERTY ENJOYMENT.

ITEMS OF DISCUSSION

1. REVIEW OF ZONING BETWEEN PROPERTIES

- a. IDENTIFY THE OPPORTUNITY OF LAND USE CONFLICT
- b. REVIEW CURRENT BUFFERS
 - i. VISUAL VIEW WITH MEADOWLARK/LOOKING GLASS BUFFERS

2. AVALON BAY PLAN /CONCERNS

- a. LACK OF WALLS/BARRIERS/DISTANCE BETWEEN CONFLICTING ZONING PROPERTIES
- b. LOCATION OF
 - i. MECHANICAL EQUIPMENT
 - ii. WASTE MANAGEMENT
 - iii. LIGHTS
 - 1. PORCH/BUILDINGS/BALCONIES/PARKING FACILITIES
 - 2. IMPACTS OF FACING 2 STORY BUILDING TO 7600 CROWFOOT VALLEY ROAD
- c. INTERNAL PARKING LANES/2 ENTRANCE DIRECT EFFECTS TO 7600 CROWFOOT
 - i. TRAFFIC STACKUPS
 - ii. LIGHT POLLUTION
 - iii. NOISE POLLUTION

3. CONCERNS FOR 7600 CROWFOOT VALLEY ROAD

- a. TRESSPASSING
- b. NO VISUAL SCREENING
- c. TENANT NOISE
- d. CRIME
- e. TRAFFIC
- f. DIMISH PROPERTY VALUE
- g. EXCESS TRASH
- h. CONSTRUCTION
 - i. LENGTH OF PROJECT
 - ii. NOISE
 - 1. 7 DAYS A WEEK 7AM TO 7PM

- a. LACK OF ANY TIME FOR REASONABLE ENJOYMENT OF USE OF 7600 CROWFOOT VALLEY PROPERTY
- iii. LACKING HEAVY USE OF WATER TO MITIGATE DUST CONTAINMENTS THAT DIRECTLY IMPACT THE HOME ENVIRONMENT OF 7600 CROWFOOT VALLEY ROAD
- iv. EXCESS CONSTRUCTION TRASH

4. MITIGATION SOLUTIONS

- a. PROPERTY BORDER WALL WHERE RENTAL TENANTS OR THEIR PETS ARE UNABLE TO CLIMB OVER OR UNDER INTO THE BACKYARD OF 7600 CROWFOOT AND PROVIDE A SOUND BARRIER TO MITIGATE INTERUSION
- b. HEAVY LANDSCAPING WITH EVERGREEN TREES FOR VISUAL SCREENING FROM RENTAL TENANT BUILDINGS
- c. NOISE AND LIGHT PROTECTIONS?????
- d. POSITIONING OF BUILDING LOCATIONS/BALCONY LOCATIONS
 - i. TO NOT DIRECTLY FACE BACKYARD OF 7600 CROWFOOT
- e. CONSTRUCTION SITE NOISE
 - i. EVALUATION OF CONSTRUCTION OPERATING TIMES
 - 1. CONDITIONS WITH POSSIBLE WEEKEND REPRIEVES FOR RESIDENCES OF 7600 CROWFOOT VALLEY ROAD
- f. CONSTRUCTION SITE DUST POLLUTION
 - i. USE OF WATER DAILY DURING ALL EARTHMOVING OPERATIONS AND AN OFFICIAL MONITORING DUST MITIGATION EFFORTS
 - 1. EXCLUDE EXCAVATION TASKS DURING EXTREMELY WINDY CONDITIONS
 - ii. BIGGEST COMPLAINT FROM ALL 3 PREVIOUS PROJECTS (LEMON GULCH, MEADOWLARK, LOOKING GLASS WAS THE SEVERE LACK OF WATER USED DURING CLEARING AND EARTHMOVING TASKS, GREATLY IMPACTING THE HEALTH OF THE RESIDENCES, HOME AND PROPERTY.
- g. AVALON BAY PURCHASES 7600 CROWFOOT VALLEY ROAD FOR ADDITIONAL APARTMENT BUILDINGS WITH THE BLESSINGS OF THE TOWN OF PARKER
- h. KILL THE PROJECT
 - i. UNREALISTIC SINCE PROJECT HAS ALREADY BEEN SLATED WITH LEAP FROGGING URBAN RESIDENTIAL (HOUSING SUBDIVISIONS) TO HEAVY URBAN RESIDENTIAL (RENTAL APARTMENTS)

NOTES:

ORDINANCE NO. 3.361, Series of 2023

TITLE: A BILL FOR AN ORDINANCE ZONING CERTAIN PROPERTY WITHIN THE TOWN OF PARKER, COLORADO, KNOWN AS THE COYLE/PERKINS PROPERTY TO PD-PLANNED DEVELOPMENT DISTRICT PURSUANT TO THE TOWN OF PARKER LAND DEVELOPMENT ORDINANCE AND AMENDING THE ZONING ORDINANCE AND MAP TO CONFORM THEREWITH

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, THAT:

Section 1. Finding of Fact.

a. Application has been made for zoning certain property described in attached **Exhibit 1**, within the Town of Parker, Colorado (the “Property”), as PD-Planned Development District, pursuant to the Town of Parker Land Development Ordinance.

b. Public notice has been given by publication on the Town’s website at least fifteen (15) days prior to the public hearing of such zoning.

c. Written notice was sent by first class mail to all owners of property that abut the Property, at least fifteen (15) days prior to the public hearing.

d. Notice of such proposed hearing was posted on the Property for fifteen (15) consecutive days prior to said hearing.

e. The requirements contained in Section 13.04.240(f) of the Parker Land Development Ordinance are satisfied for zoning the Property to PD-Planned Development District, as described in the Parker Land Development Ordinance.

Section 2. The Property is hereby zoned PD-Planned Development District as provided in the Avalon Parker Development Guide and Plan, which is attached hereto as **Exhibit 2** and incorporated by this reference. The uses permitted for the Property are specifically described in the attached Development Guide and Plan.

Section 3. The Zoning Ordinance and Zoning Map for the Town are hereby amended to conform with the zoning changes to the Property.

Section 4. Approval of this Ordinance does not create a vested property right. Vested property rights may arise and accrue, pursuant to the provisions of Ordinance No. 3.65.1, as amended, of the Town of Parker.

Section 5. Safety Clause. The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for

the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 6. Severability. If any clause, sentence, paragraph, or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 7. This Ordinance shall become effective upon the later to occur of: (i) the date that is ten (10) days after final publication; or (ii) the date the Annexation Ordinance for the Property goes into effect, whichever occurs last.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney

EXHIBIT 1

Legal Description

A TRACT OF LAND SITUATED IN THE NORTHWEST QUARTER OF SECTION 3 AND PARTLY IN THE NORTHEAST QUARTER OF SECTION 4, ALL IN TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SECTION 3 AND CONSIDERING THE NORTH LINE OF SAID SECTION 3 TO BEAR NORTH 89°52'31" EAST WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO;

THENCE NORTH 89°52'31" EAST, A DISTANCE OF 670.60 FEET;

THENCE SOUTH 14°31'31" WEST, A DISTANCE OF 31.01 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF STROH ROAD/COUNTY RD #14 POINT ALSO BEING THE POINT OF BEGINNING;

THENCE CONTINUING SOUTH, A DISTANCE OF 1,086.08 FEET;

THENCE SOUTH 00°07'22" EAST, A DISTANCE OF 410.08 FEET TO THE NORTH CORNER OF TRACT G, MEADOWLARK SUBDIVISION FILING NO. 1;

THENCE ALONG THE NORTH LINE OF MEADOWLARK SUBDIVISION FILING NO. 1 THE FOLLOWING 2 (TWO) COURSES:

1. SOUTH 83°29'05" WEST, A DISTANCE OF 460.85 FEET;

2. SOUTH 73°13'59" WEST, A DISTANCE OF 913.32 FEET TO A POINT ON THE NORTHEAST LINE OF AN UNPLATTED TRACT RECORDED AT RECEPTION NO. 2006069697;

THENCE NORTH 50°34'22" WEST ALONG SAID NORTHEAST LINE, A DISTANCE OF 417.09 FEET TO A POINT OF NON-TANGENT CURVATURE, POINT ALSO BEING A POINT ON THE EAST RIGHT-OF-WAY LINE OF CROWFOOT VALLEY ROAD;

THENCE ALONG SAID EAST LINE OF CROWFOOT VALLEY ROAD THE FOLLOWING 8 COURSES:

1. ALONG THE ARC OF SAID CURVE TO THE RIGHT AN ARC LENGTH OF 50.00 FEET, SAID CURVE HAVING A RADIUS OF 925.25 FEET, A CENTRAL ANGLE OF 03°05'46", AND A CHORD WHICH BEARS NORTH 51°43'54" EAST A CHORD DISTANCE OF 49.99 FEET TO THE NORTHWEST CORNER OF SAID CROWFOOT VALLEY ROAD RIGHT-OF-WAY EXPANSION, POINT ALSO BEING A POINT ON THE EAST RIGHT-OF-WAY LINE OF CROWFOOT VALLEY ROAD;

2. ALONG SAID EAST RIGHT-OF-WAY LINE THE FOLLOWING 7 (SEVEN) COURSES:

3. NORTH 53°16'47" EAST, A DISTANCE OF 682.35 FEET;

4. SOUTH 36°56'11" EAST, A DISTANCE OF 24.64 FEET;

5. NORTH 53°13'11" EAST, A DISTANCE OF 385.92 FEET TO A POINT OF CURVATURE;

6. ALONG THE ARC OF SAID CURVE TO THE LEFT AN ARC LENGTH OF 279.31 FEET, SAID CURVE HAVING A RADIUS OF 1,010.00 FEET, A CENTRAL ANGLE OF 15°50'41", AND A CHORD WHICH BEARS NORTH 45°17'51" EAST A CHORD DISTANCE OF 278.42 FEET; THENCE ALONG A LINE NON-TANGENT TO SAID CURVE, SOUTH 52°37'30" EAST, A DISTANCE OF 15.00 FEET TO A POINT OF NON-TANGENT CURVATURE;

7. ALONG THE ARC OF SAID CURVE TO THE LEFT AN ARC LENGTH OF 664.82 FEET, SAID CURVE HAVING A RADIUS OF 1,025.00 FEET, A CENTRAL ANGLE OF 37°09'45", AND A CHORD WHICH BEARS NORTH 18°47'38" EAST A CHORD DISTANCE OF 653.23 FEET;

8. NORTH 00°12'45" EAST, A DISTANCE OF 55.55 FEET TO A POINT ON SAID SOUTH RIGHT-OF-WAY LINE OF STROH ROAD/COUNTY RD #14;

THENCE NORTH 89°52'31" EAST ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 595.50 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 1,454,691 SQUARE FEET OR 33.40 ACRES, MORE OR LESS.

BASIS OF BEARINGS: BEARINGS ARE BASED ON THE DEEDED NORTH LINE OF THE NORTHWEST ONE-QUARTER OF SECTION 3, TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN, DEED RECEPTION NO. DC8606653, BEARS NORTH 89°52'31" EAST. MONUMENTED AT THE WEST END BY A FOUND 3.25" ALUMINUM CAP, STAMPED: AZTEC CONSULTANTS INC 1999 LS 17666, IN A RANGE BOX, AND MONUMENTED AT THE EAST END BY A FOUND 3.25" ALUMINUM CAP, STAMPED: 2006 PLS 29761, IN A RANGE BOX.

EXHIBIT 2

DEVELOPMENT GUIDE

Avalon Parker

PD Guide Index

Table of Contents

General	4
A. Statement of Purpose	4
B. Application	4
C. Control	4
D. Relationship to the Town of Parker Land Development Ordinance	4
E. Definitions	5
F. Conflicts	5
Authority	5
A. Authority	5
B. Adoption	5
C. Enforcement	5
D. Application	6
General Provisions	6
A. Agricultural Uses	6
B. Planning Area Boundaries	6
C. Density Standards	6
D. Density Variations	6
E. Utility Connections	6
F. Underground Utilities	7
Development Standards	7
Development Planning Areas	8
Planning Area 1 – Mixed-Use Neighborhood	8
A. Purpose	8
B. Lot and Building Standards	8
C. Additional Standards	8
Planning Areas 2, 3, & 4 – Multifamily Residential	8
A. Purpose	8

B. Lot and Building Standards	8
C. Additional Standards	9
Planning Area 5	9
A. Purpose	9
B. Lot and Building Standards	9
Table of Allowed Uses	10
Use Specific Standards	13

GENERAL

A. Statement of Purpose

The purpose of the Avalon Parker Development Guide (the "Development Guide") is to establish standards for the development and improvements of the real property described in **Exhibit A**, which is attached hereto and incorporated by this reference (the "Property"), according to the Development Plan, which is attached hereto and incorporated by this reference (the "Development Plan"). The standards contained in this Development Guide are intended to carry out the goals of this planned development.

B. Application

This Development Guide shall apply to the Property as illustrated on the Development Plan.

C. Control

After the adoption of this Development Guide by the Town Council of the Town of Parker, subject to the provisions of Section 13.04.230 (Nonconforming Situations) of the Parker Municipal Code, as amended, the Development Guide in conjunction with the Town of Parker Land Development Ordinance shall control development, land use, the location and bulk of all buildings and other structures, existing and future on the Property, including:

1. Any new building or other structure, and any parcel of land, or land use;
2. The use of any existing building, other structure or parcel of land that may be changed or extended;
3. Any existing building or other structure may be enlarged, reconstructed, structurally altered, converted or relocated provided changes are in accordance with this Development Guide and the Development Plan;
4. All standards and requirements set forth or referred to in the standards and requirements for the planning area in which such buildings and other structures are located; and
5. Any other applicable standards and requirements of this Development Guide.

D. Relationship to the Town of Parker Land Development Ordinance

The provisions of this Development Guide shall prevail and govern the development of the Property; provided, however, except where the provisions of the Development Guide do not clearly address a specific subject or are in conflict with a specific provision defined in the Parker Land Development Ordinance. In such situations, the provisions of the Town of Parker Land Development Ordinance, as amended, or other applicable ordinances, resolutions or regulations of the Town of Parker shall prevail.

E. Definitions

The definitions contained in Section 13.02.010, of the Parker Municipal Code (Definitions), as amended, shall apply unless otherwise addressed herein.

- **Agriculture, Urban** – means the raising, keeping, or production of fruits, vegetables, flowers, and other crops; composting; and the processing of those agricultural products. Accessory uses may include incidental sales of produce, plants, or products raised on the premises, limiting preparing, treating, and storing agricultural products, equipment, and machinery, but does not include marijuana cultivation or the dressing of animals. Agricultural activities on properties three acres or larger shall not be considered “urban agriculture.” This definition does not include the keeping or raising of chicken, fowl, swine, goats, sheep, cattle, horses, or other farm animals.
- **Agritainment** – means events and activities that allow for recreation, entertainment, and tourism in conjunction with agricultural activities and agricultural support services. This may include farm dinners, corn mazes, hayrides, and petting zoos.
- **Dwelling, Co-Housing** – means a residential development that combines small individually owned units on a single lot with common open space and sometimes including a larger community kitchen and dining room intended for communal use on a regular basis. The residents in a co-housing development may agree to share in the provision of communal services such as cooking meals, maintenance of grounds, and child care.

F. Conflicts

Where there is more than one provision within the Development Guide that covers the same subject matter, the provision which is most restrictive or imposes higher standards or requirements shall govern unless determined otherwise by the Community Development Director.

AUTHORITY

A. Authority

The authority for this Development Guide is Section 13.04.150 (PD-Planned Development) of the Parker Municipal Code, as amended.

B. Adoption

The adoption of this Development Guide by ordinance shall evidence the findings and decisions of the Town of Parker Town Council that this Development Guide for the Property is authorized by the provisions of Section 13.04.150 of the Parker Municipal Code, as amended.

C. Enforcement

The provisions of the Development Guide relating to the use of the Property shall run in favor of the Town of Parker and shall be enforceable, at law or in equity, by the Town of Parker without any limitation on any power or authority otherwise granted by law.

D. Application

The standards contained in this Development Guide shall apply to the various planning areas contained within the Development Plan. These standards shall become the governing standards for review, approval and modification of all uses occurring within each planning area described in the Development Plan.

GENERAL PROVISIONS

A. Agricultural Uses

Existing agricultural activities and uses, and all existing accessory structures and uses which are customarily incidental or appropriate to farming and ranching shall be permitted on the Property prior to commencement of site grading within a specific planning area.

B. Planning Area Boundaries

The boundaries and acreage of all planning areas within the Property are shown on the Development Plan. Where a Planning Area abuts a street, the boundary shall be the right-of-way line of that street. Where a Planning Area abuts another Planning Area, the boundary shall be as shown on the Development Plan.

C. Density Standards

The dwelling unit density permitted in any residential planning area shall apply to the entire planning area and shall not be specifically applicable to any portion thereof. Density of any residential area shall be computed by dividing the total number of dwelling units by the gross residential acres in the area.

D. Density Variations

The total number of residential dwelling units for the Property is shown on the Development Plan. The residential density for each planning area is also shown on the Development Plan. Residential density variations within the any planning area are subject to the following:

1. The residential density of any planning area may be less than the anticipated maximum density shown on the Development Plan for that planning area.
2. The increase in maximum residential density for any planning area shall be subject to Section 13.04.240(b) of the Parker Municipal Code, as amended.
3. In no event shall the total number of residential dwelling units for the Property, as shown on the Development Plan, be exceeded.
 - a. Residential dwelling units not utilized through Site Plan approval for Planning Areas 2, 3, or 4 may be administratively transferred to Planning Area 1.

E. Utility Connections

Connection to Parker Water and Sanitation District facilities shall be required for each principal building constructed in the future on the Property.

F. Underground Utilities

All electrical and communication distribution lines shall be placed underground.

DEVELOPMENT STANDARDS

All development within the Property shall be designed in accordance with the Land Development Ordinance (LDO) and any other Town of Parker standards, Compliance with these standards shall be demonstrated at the time of subdivision and/or site plan.

DEVELOPMENT PLANNING AREAS

Planning Area 1 – Mixed-Use Neighborhood

- (a) **Purpose** – The Mixed-Use district is intended to accommodate a mix of housing types at varied densities and supporting neighborhood-centric commercial activities serving the needs of surrounding residents at a less-intense, more walkable scale. The Mixed-Use district is intended to include both vertical and horizontal mixed-use development and can serve as a transitional district to more intense commercial, mixed-use, and nonresidential districts and uses.

(b) Lot and Building Standards

Residential Density		
To be determined during Site Plan.		
Lot Standards (minimum)		
	Lot size	7,000 sq. ft.
	Lot width	35 feet
Setbacks (minimum) [1]		
	Front	5 feet
	Side	5 feet
	Side, adjoining street	10 feet
	Rear, with alley, minimum	None
	Rear, without alley, minimum	8 feet
Height (maximum)		
	Building height	Four Stories or 65 feet (whichever is less)

Notes:

[1] In instances where aerial fire apparatus is required from the internal drive, an 8 ft. maximum setback is required.

(c) Additional Standards

- Multifamily dwellings are only permitted above ground floor commercial as part of a vertical mixed-use building. Only commercial and commercial support uses shall be allowed on the first floor. Residential amenities or residential support uses (i.e. residential leasing office, residential community gym/work out center, etc.) shall only be allowed above the first floor commercial in PA-1.
- A multi-tenant commercial building, not less than three (3) tenants with a minimum of 8,000 square feet in total size, shall be built no later than the third commercial building within PA-1.
- Additional standards in the Development Design Standards may apply depending on use type.

Planning Areas 2, 3, & 4 – Multifamily Residential

- (a) **Purpose** – The Multifamily Residential Planning Areas are intended to accommodate a variety of housing types and serve as transitional districts to the Mixed-Use district of PA-1.

(b) Lot and Building Standards

Residential Density (maximum)

PA-2	21 Dwelling Units per acre
PA-3	15 Dwelling Units per acre
PA-4	14 Dwelling Units per acre
Lot Standards (minimum)	
Lot size	Single-family attached or duplex: 1,000 sq. ft. Other uses: 7,000 sq. ft.
Lot width	Single-family attached or duplex: 22 feet Other uses: 35 feet
Setbacks (minimum) [1] [2]	
Front	Single-family attached or duplex: 5 feet Single-family attached or duplex, with garage: 18 feet Other uses: 5 feet
Side	5 feet
Side, adjoining street	10 feet
Rear, with alley, minimum	None
Rear, without alley, minimum	8 feet
Height (maximum)	
PA-2	Four Stories or 65 feet (whichever is less)
PA-3	Three Stories or 50 feet (whichever is less)
PA-4	Two Stories or 40 feet (whichever is less)
Notes:	
[1] Setbacks adjacent to the dedicated public park or other park areas: 8 feet	
[2] In instances where aerial fire apparatus is required from the internal drive, an 8 ft. maximum setback is required.	

(c) Additional Standards

a. Planning Areas 2 & 3

- i. A minimum roadway buffer of 30 ft. along Crowfoot Valley Road as measured from the edge of right-of-way to building façades shall be provided.

b. Planning Area 4

- i. A 60-65 ft. average setback from the Crowfoot Valley Road back of curb to the nearest building façade shall be provided. At no point will this setback be less than 50 ft.
- ii. A minimum buffer of 30 ft. to building façade from the southern property line shall be provided.

Planning Area 5 – Open Space

- (a) **Purpose** – The OS district is intended to preserve and protect Parker’s natural environmental resources such as wildlife corridors and habitats; scenic viewsheds; cultural and historical areas and structures; and landmarks. The OS district also accommodates both limited active and passive outdoor recreation uses and activities.

(b) Lot and Building Standards

Setbacks (minimum)		
	Front	25 feet
	Side	20 feet
	Rear	20 feet

Height (maximum)

Building height

25 feet

Table of Allowed Uses

Table of Allowed Uses P = permitted by right S = Use by Special Review required A = accessory use by right blank cell = prohibited + = use-specific standards apply to that use in that zoning district				
Planning Area	1	2/3/4	5	Use Specific Standards
Residential				
Household Living				
Caretaker Residence				
Dwelling, Co-Housing	S+	P+		Use Specific Standards b. 1.
Dwelling, Duplex		P		
Dwelling, Live/Work				
Dwelling, Multifamily	P	P		
Dwelling, Single-Family Attached		P		
Dwelling, Single-Family Detached				
Home Occupation	A+	A+		Use Specific Standards a. 1.
Group Living				
Continuing Care Facility	S+			Use Specific Standards b. 2.
Group Home and Residential Facility				
Public, Institutional, and Civic Uses				
Community and Cultural Facilities				
Cemetery				
Community Facility	P	P		
Daycare, Commercial	P+			Use Specific Standards c. 1.
Daycare, Residential	P+			Use Specific Standards c. 2.
Funeral Facility				
Park	P	P	P	
Open Space	P	P	P	
Public Safety Facility				
Religious Assembly	P+			Use Specific Standards c. 3.
Educational Facilities				
School, College or University				
School, Public or Private	S			
School, Vocational or Trade	P+			Use Specific Standards c. 4.
Healthcare Facilities				
Hospital				

Table of Allowed Uses P = permitted by right S = Use by Special Review required A = accessory use by right blank cell = prohibited + = use-specific standards apply to that use in that zoning district				
Planning Area	1	2/3/4	5	Use Specific Standards
Medical or Dental Clinic	P			
Commercial Uses				
Agricultural and Animal Uses				
Agriculture, General			P	
Agriculture, Urban	A+	A+	A+	Use Specific Standards a. 2.
Agritainment			P	
Kennel, Commercial				
Stable, Commercial				
Veterinary Clinic and Hospital	P+			Use Specific Standards d. 1.
Recreation and Entertainment				
Indoor Recreation Facility	S+			Use Specific Standards d. 2.
Outdoor Recreation Facility	S			
Food and Beverage Services				
Bar and Lounge	P			
Microbrewery, Cidery, Distillery, or Winery	P+			Use Specific Standards d. 3.
Restaurant	P			
Office, Business, and Professional Services				
Administrative, Professional, and Government Office	P			
Automated Teller Machine	P+			Use Specific Standards d. 4.
Financial Institution	P+			Use Specific Standards a. 3.
Research and Development				
Personal Services				
Check-Cashing Establishment				
Laundry Facility, Commercial	P+			Use Specific Standards d. 5.
Laundry Facility, Self-Service	P+			Use Specific Standards d. 6.
Personal Instruction or Studio	P+			Use Specific Standards d. 7.
Personal Services, General	P+			Use Specific Standards d. 8.
Retail Sales				
Building Materials and Supply Store				
General Retail, 10,000 Square Feet or Less	P+			Use Specific Standards d. 9.
General Retail, More than 10,000 Square Feet	S+			Use Specific Standards d. 10.
Mobile Business				
Nursery or Garden Supply Store				
Outdoor Sales and Display				
Pawnbroker				
Lodging Facilities				
Bed and Breakfast	P+			Use Specific Standards d. 11.

Table of Allowed Uses P = permitted by right S = Use by Special Review required A = accessory use by right blank cell = prohibited + = use-specific standards apply to that use in that zoning district				
Planning Area	1	2/3/4	5	Use Specific Standards
Hotel/Motel	S			
Short-Term Rental				
Transportation, Vehicles, and Equipment				
Automotive Fuel Sales	P+			Use Specific Standards d. 12.
Automotive Repair, Major				
Automotive Repair, Minor				
Automotive Sales and Leasing, Heavy				
Automotive Sales and Leasing, Light				
Car Wash				
Drive-Through Facility	A+			Use Specific Standards a. 3.
Electric Vehicle Charging Station	A+	A+	A+	Use Specific Standards a. 4.
Equipment and Machinery Sales, Rental, and Repair				
Parking Garage				
Parking Lot				
Recreational Vehicle Sales, Rental, and Repair				
Transit Terminal or Station	P			
Sexually Oriented Businesses				
Sexually Oriented Business				
Industrial Uses				
Manufacturing and Processing				
Food and Beverage Processing				
Industrial, General				
Industrial, Light				
Industrial Hemp Processing				
Mining and Extraction				
Oil and Gas Operations				
Storage and Warehousing				
Commercial Outdoor Storage	A+			Use Specific Standards a. 5.
Contractor Office				
Distribution Facility				
Self-Storage				
Public and Semi-Public Utility Uses				
Utilities				
Public Utility, Major	S+	S+	S+	Use Specific Standards e. 1.

Use-Specific Standards – All uses with use-specific standards are indicated in the table above.

(a) Accessory Uses and Structures

1. **Home Occupation.** A home occupation shall be allowed as a permitted accessory use, provided that all of the following conditions are met:
 - a. General Standards
 1. Medical and dental clinics, short-term rentals, veterinary clinics and hospitals, light industrial or manufacturing activities, and restaurants are not permitted as home occupations
 2. Group homes, group residential facilities, day care (adult and child), assisted/independent living, and continuing care are not considered home occupations and shall be regulated in accordance with the standards pertaining to those uses in this PD.
 3. Home occupations shall be clearly incidental and secondary to the use of the dwelling as a dwelling unit and shall not change the character of the dwelling.
 4. The total area used for such purposes shall not exceed 50 percent of the building footprint of the principal dwelling.
 - b. Operational Standards
 1. Such use shall only be conducted entirely within an enclosed building.
 2. There shall be no exterior advertising of the home occupation.
 3. There shall be only incidental sale of products made by the residents and conducted on the premises.
 4. There shall not be more than one employee on site, excluding the owner of the home occupation and dwelling unit and residents of the dwelling unit.
 5. There shall not be more than two customers or patrons on site at any given time.
 6. There shall be no outside storage on the premises of materials or equipment used in connection with the home occupation.
 7. There shall be no excessive or offensive noise, vibration, smoke, dust, odors, heat, glare or light noticeable or extending beyond that property.
 8. Home occupations shall not generate traffic that significantly affects the residential character of an area, nor allow for deliveries of materials or products to the property.
 - c. In cases where clarification of a permitted home occupation is needed, the Planning Director shall determine which activities are conducive to the principal use of residence or compatible with adjoining land uses.
2. **Agriculture, Urban**
 - a. The keeping or raising of animals shall only be allowed as an accessory use on lots within an occupied dwelling unit, and are subject to the standards in the Town of Parker Land Development Ordinance, as amended.
 - b. Structures associated with this use may not exceed 25 percent of the total site area.
 - c. Produce sales shall comply with the Colorado Cottage Foods Act.
 - d. Produce sales must occur onsite, and are limited to the hours between 7:00 a.m. and 7:00 p.m.
3. **Drive-Through Facility**

- a. An establishment with a drive-through facility shall not be located within 250 feet of the hard corner (Stroh Road and Crowfoot Valley Road) or 250 feet from the residential property lines located within PA-2, unless the drive-through is located as part of a multi-tenant building, then these setbacks shall not apply.
- 4. **Electric Vehicle Charging Station**
 - a. Level 1, Level 2, and Level 3 charging stations are allowed as an accessory use to any permitted principal use.
 - b. Level 3 charging stations shall not count toward required parking spaces.
 - c. EV charging station spaces shall be reserved for the charging of electric vehicles only. Such spaces shall be posted accordingly, including any amperage and voltage levels, time limits, and contact information for reporting issues.
 - d. EV charging station equipment shall be located so that it does not interfere with vehicular, bicycle, or pedestrian access and circulation, or with required landscaping.
- 5. **Commercial Outdoor Storage**
 - a. Purpose
 - 1. Nothing in this section shall be construed as permitting any new or expanded storage, outdoor storage, and warehousing as principal uses within any zoning district of the Town or any areas of the Town zoned PD-planned development, except as provided by this section.
 - b. Storage Uses Prohibited
 - 1. All storage, self-storage, outdoor self-storage, commercial storage, and warehousing uses are prohibited as a use by right or as a Use by Special Review in all zoning districts and in all areas zoned PD-planned development, except as allowed as an accessory use.
 - c. Residential
 - 1. Storage in residential areas shall be limited to those items which are clearly incidental to residential functions and uses. Commercial or industrial related storage of materials or equipment is not allowed.
 - 2. Outdoor storage shall not be permitted in the front yard of a residential dwelling.
 - 3. Outdoor storage of items commonly used inside a residential dwelling are not permitted.
 - 4. Storage of items defined as “junk” or “litter” by the Town of Parker Land Development Code are not permitted.
 - d. Screening
 - 1. All types of accessory commercial storage shall be screened from public view and from the view of the surrounding areas as required by using consistent materials and color schemes as the principal building and in compliance with the Development Design Standards. This shall include the screening of materials and equipment used by the principal use.
 - e. Storage and Warehousing are permitted only where the use is accessory, ancillary, incidental, subordinate and integral to the operations of a primary nonresidential permitted use. Storage and warehousing as an accessory use should generally occupy not more than twenty-five (25%) of the site or building(s) with the remaining seventy-five (75%) of the site or building being the primary use. Storage and warehousing are not permitted as a principal land use within the Town of Parker.

(b) Residential Uses

1. Dwelling, Co-Housing

- a. Design and layout.
 1. The minimum project size for co-housing development is one acre.
 2. The maximum size of each co-housing unit is 800 square feet of gross floor area.
 3. A shared open space containing a minimum of 20 percent of the project area shall be provided.
 4. Underlying zoning district lot and setback requirements shall apply to the project site boundaries as a whole, but not to individual co-housing dwelling pads.
 5. Each co-housing dwelling unit shall be separated by a minimum of five feet.
 - b. Operation and ownership.
 1. Each co-housing dwelling unit shall be on a permanent foundation and shall connect to public water and sanitary sewer.
 2. One accessory storage structure less than 100 square feet may be permitted for any unit part of a co-housing project approval.
 3. One accessory storage structure less than 600 square feet may be permitted as a shared maintenance storage facility for the co-housing project. The structure shall be enclosed on all sides and separated from other structures by a minimum of three feet.
 4. Access drives within a co-housing dwelling development shall be constructed to Town standards.
 5. Co-housing projects shall be organized as condominium developments meeting all requirements of the Town's Condominium Platting and map process and Colorado state law.
- 2. Continuing Care Facility.** Continuing care facilities shall not be located within 250 feet from a hard corner unless approved by a Use by Special Review.

(c) Public, Institutional, and Civic Uses

1. Daycare, Commercial

- a. Daycares shall provide adequate drop-off and pickup queuing on-site to avoid impacting adjacent properties or roadways
 - b. Daycares shall not exceed 3,500 square feet and shall not be located within 250 feet from a hard corner.
- 2. Daycare, Residential.** A residential daycare meeting the definition of a "family child-care home," as defined by Section 26-6-102(4), C.R.S., shall be subject to compliance with the Parker Residential Code for One- and Two-Family Dwellings.
- 3. Religious Assembly.**
- a. Religious assemblies between 3,500 and 10,000 square feet shall not be located within 250 feet of a hard corner or 250 feet of a residentially zoned property; and
 - b. Religious assemblies larger than 10,000 square feet require a Use by Special Review.
- 4. School, Vocational or Trade.** Vocational or trade schools shall be limited to training for skilled career fields in which such career would be an allowed use type or activity in the underlying zoning district of the school.

(d) Commercial Uses

1. **Veterinary Clinic and Hospital.** Outdoor facilities associated with a veterinary clinic or hospital are prohibited unless such facilities:
 - a. Are not closer than 150 feet to any residentially zoned property line;
 - b. Are only used between the hours of 7:00 a.m. and 7:00 p.m.; and
 - c. Provide and maintain a pet relief area that does not interfere with any public right-of-way, easement, shared access, walkway, or other service area.
2. **Indoor Recreation Facility.**
 - a. Indoor recreation facility uses shall be conducted entirely within an enclosed building.
 - b. Indoor recreation facilities shall not exceed 15,000 square feet.
3. **Microbrewery, Cidery, Distillery, or Winery.**
 - a. Storage of raw or spent materials shall be stored within a fully enclosed principal or accessory structure, building, or container
 - b. A microbrewery, distillery, or winery shall not exceed 10,000 square feet.
 - c. Wholesale sales and bulk shipping of products shall be prohibited.
4. **Automated Teller Machine.** Freestanding automated teller machines shall not be located within 250 feet of the hard corner (Stroh Road and Crowfoot Valley Road) or 250 feet from the residential property lines located within PA-2, unless the automated teller machine is located as part of a multi-tenant building, then these setbacks shall not apply.
5. **Laundry Facility, Commercial.**
 - a. All activities must be conducted entirely within an enclosed building.
 - b. Laundry facilities shall not exceed 3,500 square feet and shall not be located within 250 feet of the hard corner (Stroh Road and Crowfoot Valley Road) or 250 feet from the residential property lines located within PA-2.
6. **Laundry Facility, Self-Service.**
 - a. All activities must be conducted entirely within an enclosed building.
 - b. Laundry facilities shall not exceed 3,500 square feet and shall not be located within 250 feet of the hard corner (Stroh Road and Crowfoot Valley Road) or 250 feet from the residential property lines located within PA-2.
7. **Personal Instruction or Studio.** Personal instruction studios shall not exceed 10,000 square feet unless otherwise approved as part of a Use by Special Review.
8. **Personal Services, General.**
 - a. Any personal service use involving the care of animals shall be subject to the following standards:
 1. Shall be located a minimum of 250 feet from any residential use or residential zoning district, except for residential uses within a mixed-use zoning district;
 2. Shall be operated entirely within an enclosed building; and
 3. Shall provide and maintain a pet relief area that does not interfere with any public right-of-way, easement, shared access, walkway, or other service area.
 - b. Personal services shall not exceed 10,000 square feet unless otherwise approved as part of a Use by Special Review.
9. **General Retail, 10,000 square feet or less.** All activities must be conducted entirely within an enclosed building.
10. **General Retail, More than 10,000 square feet.** General retail shall not exceed 15,000 square feet.

11. Bed and Breakfast.

- a. **Location.** Bed and breakfast establishments shall only be allowed in a building with residential character. Any modifications to the building shall be compatible with applicable design standards and with the character of the neighborhood.
- b. **Number of bedrooms.** The total number of bedrooms, including the bedrooms occupied by permanent residents of the building shall not exceed five.
- c. **Operations.**
 - 1. The structure shall be owner-occupied or shall be occupied by a resident manager.
 - 2. Guest stays shall be limited to a maximum of 30 days.

12. Automotive Fuel Sales.

- a. Automotive fuel sales establishments shall not be located within 500 feet of an elementary or secondary school, a hospital, a continuing care facility, a group home, or a group residential facility.
- b. Automotive fuel sales establishments shall not be located within 250 feet of the hard corner (Stroh Road and Crowfoot Valley Road) or 250 feet from the residential property lines located within PA-2.
- c. Not more than two fuel sales establishments shall be located within 660 feet of any single hard corner.

(e) Public and Semi-Public Utility Uses

1. Public Utility, Major

- a. **Purpose.** Public utility uses described in this section may be permitted upon approval by the Town Council following public notice and hearing as described in the LDO and subject to such conditions and safeguards as may be imposed by the Town Council. Certain public utility uses as specified in this section may be permitted upon approval of the Planning Director, and subject to such conditions and safeguards as may be imposed by the Town Council.
- b. **Conflict with other standards.** To the extent that there is a conflict between this section and any franchise approved by the Town for a public utility, this section shall control.
- c. **Public Utilities – where prohibited.** In addition to criteria contained below, a public utility shall not be permitted as a Use by Special Review unless the applicant demonstrates to the Town Council, by clear and convincing evidence, the following:
 - 1. There is a compelling need for such public utility to be located on the proposed site; and
 - 2. The applicant cannot adequately perform its utility functions on a site that is zoned to permit such a use, either by right or by special review, whether within or outside the Town.
- d. **Public utilities – screening.** All public utilities shall be adequately screened and buffered with landscaping, fencing or walls, or any combination thereof; shall be placed underground; or shall be enclosed in a structure in such a manner as to blend and complement the character of the surrounding area, of which the structure shall be well-landscaped. All wires and cables other than long-distance transmission wires shall be placed underground.
- e. **Public utilities – use by special review process**
 - 1. **Planning commission review and recommendation.** With the exception of applications for a water or sanitation public utility use by an applicant that

provides water or sanitation service within the corporate boundaries of the Town, an application for a public utility Use by Special Review shall be reviewed by the Town in accordance with the procedures of the Town of Parker Land Development Ordinance, as amended. The Planning Commission shall first consider whether the public utility has presented clear and convincing evidence in support of the requirements set forth in the **Public utilities – where prohibited.** section above. Regardless of its recommendation on the issue of compliance with those requirements, the Planning Commission shall consider the merits of the Use by Special Review application. The Planning Commission shall submit its recommendations to the Town Council, which shall hear and decide the application in accordance with the procedures specified in the Town of Parker Land Development Ordinance, as amended.

2. **Town council decision.** The Town Council shall first hear and decide whether the public utility has presented clear and convincing evidence in support of the requirements set forth in the **Public utilities – where prohibited.** section above. If the Town Council determines that clear and convincing evidence has not been presented, it shall deny approval of the Use by Special Review. If the Town Council determines that clear and convincing evidence has been presented in support of the requirements of the aforementioned section above, it shall, at the same hearing, hear and decide the merits of the Use by Special Review application.
3. **Public utility use by special review process for water or sanitation provider.** An application for a public utility use by an applicant that provides water or sanitation service within the corporate boundaries of the Town shall be subject to an administrative review process by the Planning Director or his or her designee. The Planning Director shall be authorized to determine if the proposed utility meets the requirements contained in the **Public utilities – criteria for review of use by special review application.** section below and, where applicable, the **Public utilities – where prohibited.** section above. The Planning Director shall further have the authority based on the nature and scope of the application to require that the applicant obtain approval by the Town Council following public notice and a hearing. The applicant shall also have the right, in the event the Planning Director denies the application or imposes conditions determined by the applicant to be unreasonable, to appeal the decision of the Planning Director to the Town Council within 15 days of the Planning Director's decision. Such appeal shall be a de novo review by the Town Council using the process for a Use by Special Review for public utilities described in the **Planning commission review and recommendation.** section above.
4. **Public utilities – criteria for review of use by special review application.** In determining whether to approve or deny an application for a public utility Use by Special Review, the Planning Commission and the Town Council shall consider the following criteria:
 - a. Whether the public utility is compatible with the surrounding area;
 - b. The effect of the public utility upon the immediate area;
 - c. The effect of the public utility upon future development of the area;

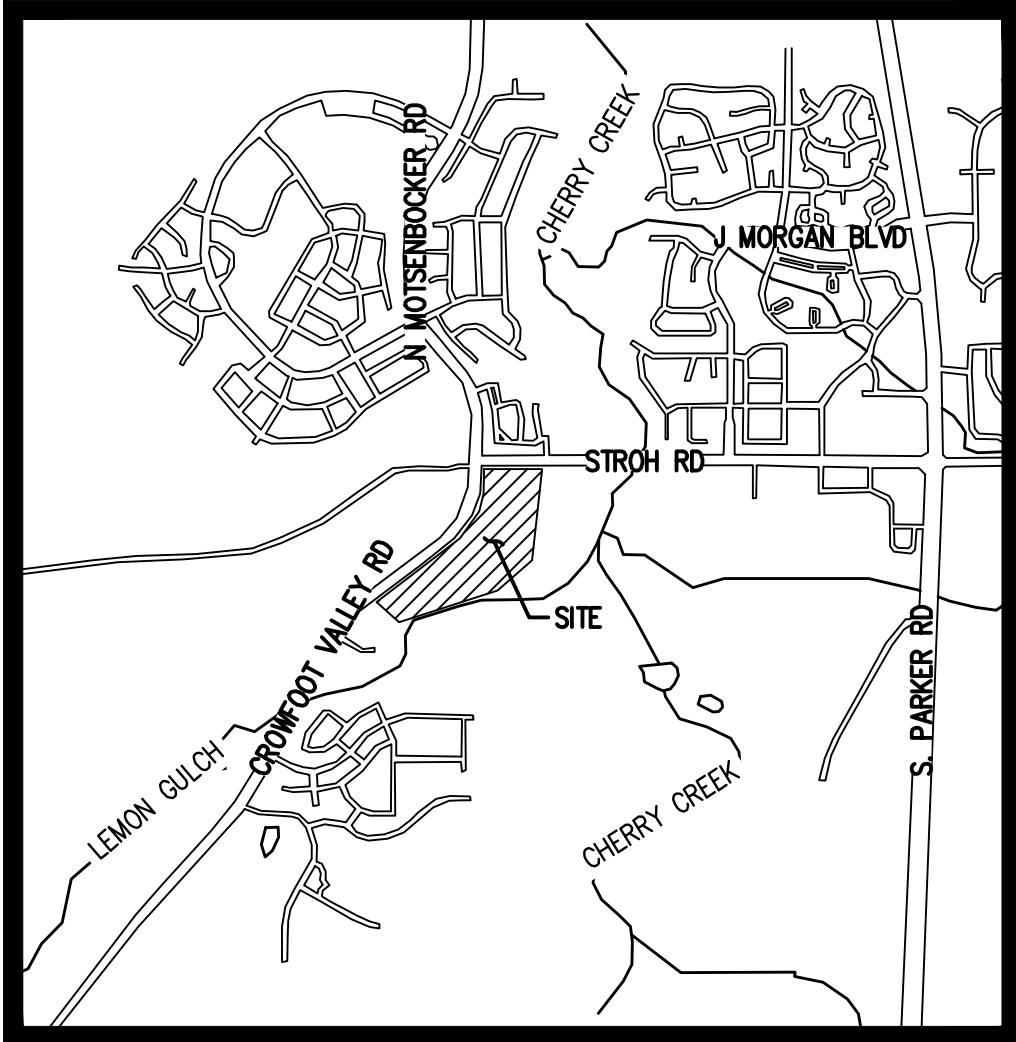
- d. Whether the proposed height limitations, setbacks, lot area and open space are sufficient to mitigate the impacts of the proposed facility on the surrounding area;
 - e. Whether land surrounding the public utility can be planned in coordination with the public utility;
 - f. Whether the public utility is in conformity with the master plan;
 - g. Whether adequate open space and visual corridors are preserved;
 - h. Whether the public utility fosters and desirable and stable environment;
 - i. Whether the public utility makes possible the innovative and efficient use of the subject property;
 - j. Whether the public utility would exacerbate a natural hazard; and
 - k. Whether there are reasonably available and economically feasible alternatives for the public utility.
5. **Public utilities – administrative approval process.** The following public utility uses and activities are subject to an administrative review and approval process instead of the use by special review requirement:
- a. Utilities that are underground and entirely within the right-of-way require a Right-of-Way (ROW) permit only. A ROW permit is reviewed and approved administratively by the Public Works Engineering Department.
 - b. Water and Sewer Providers who are proposing a water line, well, or similar service are required to submit a Use by Special Review Application, but the application is reviewed and approved by the Planning Director pursuant to the **Public utility use by special review process for water or sanitation service provider.** section above.
6. **Exceptions to review process.**
- a. Utilities associated with a multifamily development are reviewed with the site plan and a separate submittal is not required.
 - b. Utilities associated with a private single-family development are reviewed at time of Final Plat and a separate submittal is not required.

AVALON PARKER PLANNED DEVELOPMENT

SITUATED IN THE NORTHWEST 1/4 OF SECTION 3 AND THE NORTHEAST 1/4 OF SECTION 4, TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,

COUNTY OF DOUGLAS, STATE OF COLORADO

PD DEVELOPMENT PLAN



VICINITY MAP
SCALE: 1" = 1000'

LEGEND

- PLANNING AREA BOUNDARY
TRAIL
PARKS/OPEN SPACE
EXISTING FEMA 100-YR FLOODPLAIN
(APPX AREA = 2.2 ACRE)
EXISTING FEMA SPECIAL FOOD HAZARD AREA
PROPERTY BOUNDARY
RIGHT-OF-WAY

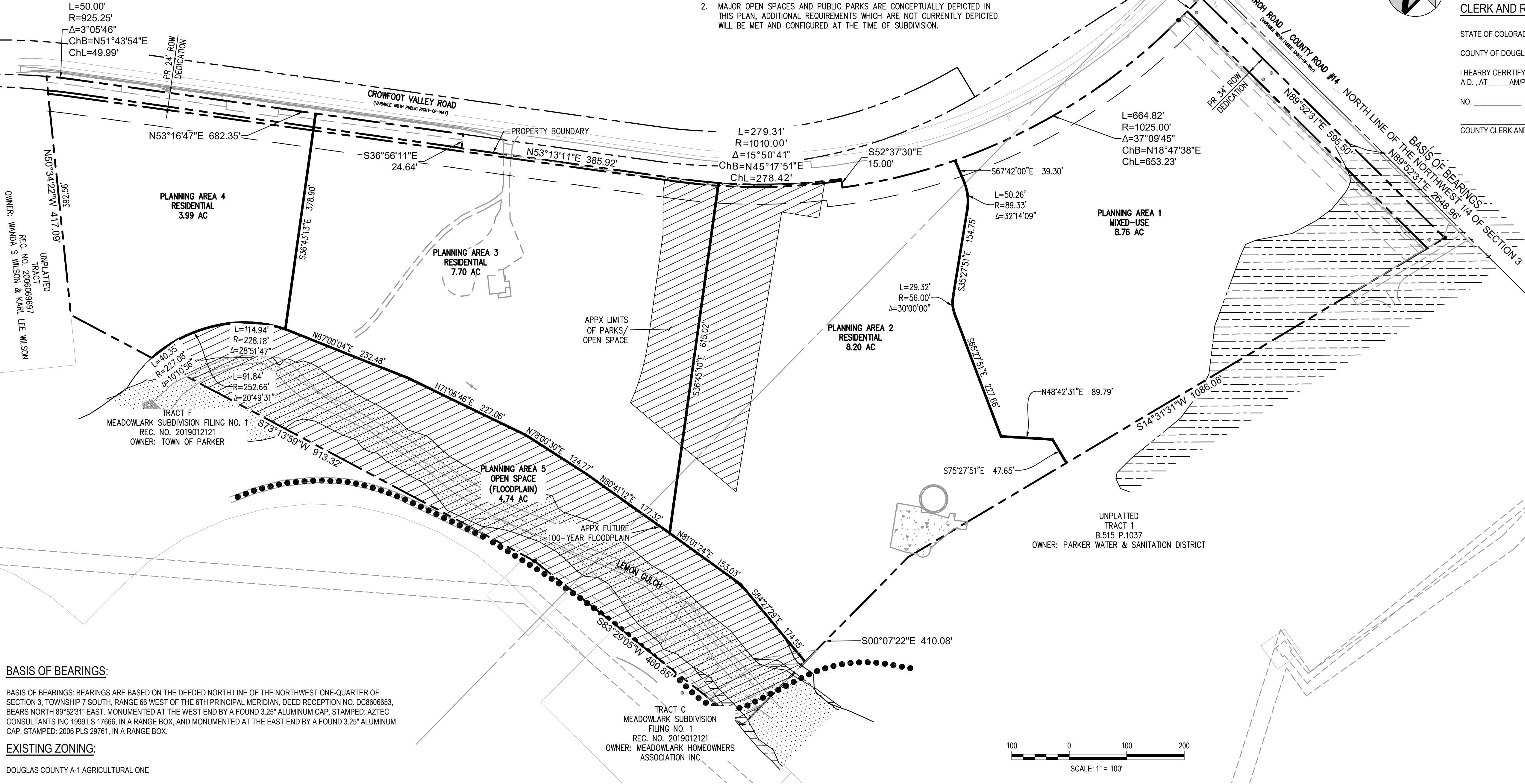
LAND USE SUMMARY

PLANNING AREA	DESCRIPTION	ACREAGE	% OF ACREAGE	MAX DENSITY (DU/ACRE)	MAX UNITS
1	MIXED-USE	8.76	31%	TO BE DETERMINED DURING SITE PLAN	
2	RESIDENTIAL	8.20	29%	21	172
3	RESIDENTIAL	7.70	27%	15	115
4	RESIDENTIAL	3.99	14%	14	56
SUBTOTAL		28.65	85.8%	12.0	343
5	OPEN SPACE (FLOODPLAIN)	4.74	14%	N/A	N/A
TOTAL		33.39	100%		

NOTE:
RESIDENTIAL DWELLING UNITS NOT UTILIZED THROUGH SITE PLAN APPROVAL FOR EACH PLANNING AREA MAY BE ADMINISTRATIVELY TRANSFERRED TO OTHER PLANNING AREAS

PARKS AND OPEN SPACE REQUIREMENTS:

- PARKS: 34.3 UNITS X 0.0139 = 4.77 ACRES
OPEN SPACE: 33.4 ACRES X 0.20 = 6.68 ACRES
- FINAL PARK ACREAGE TO BE DETERMINED AT TIME OF SUBDIVISION AND SHALL BE BASED ON THE NUMBER OF UNITS. THE CUMULATIVE NATURE OF PARK, IF SEPARATED IN DIFFERENT AREAS OF PLAN AND / OR CASH-IN-LIEU OF LAND DEDICATION WILL COLLECTIVELY MEET THE MINIMUM REQUIREMENT OF PARK ACREAGE. FINAL SITE AND CONFIGURATION TO BE DETERMINED AT TIME OF SUBDIVISION.
 - MAJOR OPEN SPACES AND PUBLIC PARKS ARE CONCEPTUALLY DEPICTED IN THIS PLAN. ADDITIONAL REQUIREMENTS WHICH ARE NOT CURRENTLY DEPICTED WILL BE MET AND CONFIGURED AT THE TIME OF SUBDIVISION.



BASIS OF BEARINGS:

BASIS OF BEARINGS: BEARINGS ARE BASED ON THE DEEDED NORTH LINE OF THE NORTHWEST ONE-QUARTER OF SECTION 3, TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN, DEED RECEPTION NO. DC6806653, BEARS NORTH 89°52'31" EAST, MONUMENTED AT THE WEST END BY A FOUND 3.25" ALUMINUM CAP, STAMPED: AZTEC CONSULTANTS INC. 1999 LS 17666, IN A RANGE BOX, AND MONUMENTED AT THE EAST END BY A FOUND 3.25" ALUMINUM CAP, STAMPED: 2006 PLS 29761, IN A RANGE BOX.

EXISTING ZONING:

DOUGLAS COUNTY A-1 AGRICULTURAL ONE

PROPOSED ZONING:

AVALON PARKER PLANNED DEVELOPMENT - TOWN OF PARKER

LEGAL DESCRIPTION:

A TRACT OF LAND SITUATED IN THE NORTHWEST QUARTER OF SECTION 3 AND THE NORTHEAST QUARTER OF SECTION 4, ALL IN TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 3 AND CONSIDERING THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 3 TO BEAR NORTH 89°52'31" EAST WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO;
THENCE NORTH 89°52'31" EAST ALONG SAID NORTH LINE, A DISTANCE OF 670.60 FEET;
THENCE SOUTH 14°31'31" WEST, A DISTANCE OF 31.01 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF STROTH ROAD/COUNTY RD #14 POINT ALSO BEING THE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 14°31'31" WEST, A DISTANCE OF 1,086.08 FEET;
THENCE SOUTH 00°07'22" EAST, A DISTANCE OF 410.08 FEET TO THE NORTH CORNER OF TRACT G, MEADOWLARK SUBDIVISION FILING NO. 1;
THENCE ALONG THE NORTH LINE OF MEADOWLARK SUBDIVISION FILING NO. 1 THE FOLLOWING 2 (TWO) COURSES:
1. SOUTH 83°29'05" WEST, A DISTANCE OF 460.85 FEET;
2. SOUTH 73°13'59" WEST, A DISTANCE OF 913.32 FEET TO A POINT ON THE NORTHEAST LINE OF AN UNPLATTED TRACT RECORDED AT RECEPTION NO. 2006069697;
THENCE NORTH 50°34'22" WEST ALONG SAID NORTHEAST LINE, A DISTANCE OF 417.09 FEET TO A POINT OF NON-TANGENT CURVATURE, POINT ALSO BEING A POINT ON THE EAST RIGHT-OF-WAY LINE OF CROWFOOT VALLEY ROAD;
THENCE ALONG SAID EAST LINE OF CROWFOOT VALLEY ROAD THE FOLLOWING 8 COURSES:
1. ALONG THE ARC OF SAID CURVE TO THE RIGHT AN ARC LENGTH OF 50.00 FEET, SAID CURVE HAVING A RADIUS OF 925.25 FEET, A CENTRAL ANGLE OF 03°05'46", AND A CHORD WHICH BEARS NORTH 51°43'54" EAST A CHORD DISTANCE OF 49.99 FEET;
2. NORTH 53°16'47" EAST, A DISTANCE OF 682.35 FEET;
3. SOUTH 36°56'11" EAST, A DISTANCE OF 24.64 FEET;
4. NORTH 53°13'11" EAST, A DISTANCE OF 385.92 FEET TO A POINT OF CURVATURE;
5. ALONG THE ARC OF SAID CURVE TO THE LEFT AN ARC LENGTH OF 279.31 FEET, SAID CURVE HAVING A RADIUS OF 1,010.00 FEET, A CENTRAL ANGLE OF 15°50'41", AND A CHORD WHICH BEARS NORTH 45°17'51" EAST A CHORD DISTANCE OF 278.42 FEET;
6. THENCE ALONG A LINE NON-TANGENT TO SAID CURVE, SOUTH 52°37'30" EAST, A DISTANCE OF 15.00 FEET TO A POINT OF NON-TANGENT CURVATURE;
7. ALONG THE ARC OF SAID CURVE TO THE LEFT AN ARC LENGTH OF 664.82 FEET, SAID CURVE HAVING A RADIUS OF 1,025.00 FEET, A CENTRAL ANGLE OF 37°09'45", AND A CHORD WHICH BEARS NORTH 18°47'38" EAST A CHORD DISTANCE OF 653.23 FEET;
8. NORTH 00°12'45" EAST, A DISTANCE OF 55.55 FEET TO A POINT ON SAID SOUTH RIGHT-OF-WAY LINE OF STROTH ROAD/COUNTY RD #14;
THENCE NORTH 89°52'31" EAST ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 595.50 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 1,454,691 SQUARE FEET OR 33.40 ACRES, MORE OR LESS.

PLANNING COMMISSION CERTIFICATE:

THIS ZONING MAP WAS REVIEWED AND RECOMMENDED FOR APPROVAL BY THE TOWN OF PARKER PLANNING COMMISSION FOLLOWING A PUBLIC HEARING ON

TOWN COUNCIL CERTIFICATE

THIS DEVELOPMENT PLAN WAS APPROVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER ON THE ____ DAY OF ____, 2023, FOR THE PROPERTY DESCRIBED AS THE AVALON PARKER PLANNED DEVELOPMENT. THE ZONING INFORMATION SHOWN HEREON WAS CONFIRMED WITH THE ADOPTION OF ORDINANCE NO. ____

CLERK AND RECORDER'S CERTIFICATE:

STATE OF COLORADO)
COUNTY OF DOUGLAS) SS
I HERBY CERTIFY THAT THIS PLAT WAS FILED IN MY OFFICE ON THIS ____ DAY OF ____, 2023
A.D., AT ____ AM/PM AND WAS RECORDED AT RECEPTION
NO. ____
COUNTY CLERK AND RECORDER

OWNER CERTIFICATE:

OWNER
THE RALPH AND MARSHA PERKINS, JR LIVING TRUST, UTA DATED MAY 24, 2021.

BY: _____
RALPH PERKINS, JR., TRUSTEE

BY: _____
MARSHA PERKINS, TRUSTEE

STATE OF COLORADO)
COUNTY OF _____) SS

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ____ DAY OF ____, 2023, BY RALPH PERKINS, JR., AS TRUSTEE OF THE RALPH AND MARSHA PERKINS, JR LIVING TRUST, UTA DATED MAY 24, 2021.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

STATE OF COLORADO)
COUNTY OF _____) SS

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ____ DAY OF ____, 2023, BY MARSHA PERKINS, AS TRUSTEE OF THE RALPH AND MARSHA PERKINS, JR LIVING TRUST, UTA DATED MAY 24, 2021.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

OWNER
BY: _____
WILLIAM L. COYLE

STATE OF COLORADO)
COUNTY OF _____) SS

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ____ DAY OF ____, 2023, BY WILLIAM L. COYLE.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC



Request for Town Council Action

Date: June 20, 2023

Submitted By: Bob Exstrom, Project Manager

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 1.582 - First Reading**
A Bill for an Ordinance to Approve the Right-of-Way Purchase and Sale Agreement By and Between Savanna Properties LLC and the Town of Parker for a Portion of Lot 22A, Block 1, Twenty Mile Village Filing No. 2

Department: Engineering and Public Works, Bob Exstrom

Second Reading: July 10, 2023

EXECUTIVE SUMMARY

The purpose of this ordinance is to approve the Right-of-Way Purchase and Sale Agreement for the conveyance of real property from Savanna Properties, LLC for a Portion of Lot 22A, Block 1, Twenty Mile Village Filing No. 2 for the Dransfeldt Road widening project.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Town is currently in receipt of final construction drawings for an upcoming capital improvement project known as the Dransfeldt Road Widening Project (the "Project"). The Project proposes to make roadway and sidewalk improvements to Dransfeldt Road between Pony Express Drive and Mainstreet. The roadway will be widened from a four (4) lane section to a five (5) lane section, including the addition of one new southbound thru/right-turn lane. Additionally, sidewalks and curb ramps will be reconstructed along the widened section to increase pedestrian mobility and ADA compliance.

In November 2022, Town Council approved Ordinance No. 1.570 which authorized staff to proceed with good faith negotiations regarding procurement of right-of-way and temporary construction easements necessary to construct the Project. There are five (5) impacted parcels inside the Project limits and this ordinance approves a purchase and sale agreement for the permanent and temporary acquisitions of real property required from Savannah Properties, LLC for a portion of Lot 22A, Block 1, Twenty Mile Village Filing No. 2.

Approximately 834 SF of additional right-of-way is needed at the northwest corner of Stage Run Road and Dransfeldt Road to relocate the existing traffic signal, to install a new traffic pedestal pole, and to accommodate new sidewalks and curb ramps.

Approximately 3,829 SF of temporary construction easement is needed to facilitate construction, to reconstruct portions of the private driveway (egress) at the NE corner disrupted by construction, and to restore private landscaping and irrigation that are anticipated to be impacted due to the widening. See the Vicinity Map attached to this memo.

FINANCIAL IMPACT

The purchase price for this acquisition including the temporary construction easement is \$43,050 (excluding closing costs). Funding has been appropriated for this acquisition in the Urban Renewal Projects fund (301-4652).

STRATEGIC GOAL(S)



SUPPORT AN
ACTIVE COMMUNITY



ENHANCE ECONOMIC
VITALITY



PROMOTE A SAFE AND
HEALTHY COMMUNITY

ATTACHMENTS

1. Vicinity Map
2. Ordinance No. 1.582

RECOMMENDED MOTION

I move to approve Ordinance No. 1.582 on first reading and to schedule second reading for July 10, 2023, as part of the consent agenda.

Dransfeldt Road Widening Right-of-Way
Agreements with Savanna Properties LLC
Vicinity Map



Temporary construction
easement

Dransfeldt Road Widening from
Mainstreet to Pony Express Drive

Right-of-way to be purchased
by Town of Parker from
Savanna Properties LLC



0 100 200
Feet

ORDINANCE NO. 1.582, Series of 2023

TITLE: A BILL FOR AN ORDINANCE TO APPROVE THE RIGHT-OF-WAY PURCHASE AND SALE AGREEMENT BY AND BETWEEN SAVANNA PROPERTIES LLC AND THE TOWN OF PARKER FOR A PORTION OF LOT 22A, BLOCK 1, TWENTY MILE VILLAGE FILING NO. 2

NOW, THEREFORE, THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, ORDAINS:

Section 1. The Town Council of the Town of Parker hereby approves the Right-of-Way Purchase and Sale Agreement by and between Savanna Properties LLC and the Town of Parker for a Portion of Lot 22A, Block 1, Twenty Mile Village Filing No. 2, which Agreement is attached hereto as **Exhibit 1** and incorporated herein by this reference, and authorizes the Mayor of the Town to enter into the Agreement on behalf of the Town. The Town Manager is authorized to execute all closing documents related to this transaction.

Section 2. Safety Clause. The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 3. Severability. If any clause, sentence, paragraph or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 4. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney

EXHIBIT 1

TOWN OF PARKER

RIGHT-OF-WAY PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT ("Agreement") is made and entered into this 9 day of May, 2023, by and between **Savanna Properties LLC**, ("Seller") and the Town of Parker, a Colorado Home Rule Municipality, whose address is 20120 E. Mainstreet, Parker, Colorado 80138 ("Purchaser").

WITNESSETH:

WHEREAS, Seller owns certain real property in Douglas County, Colorado, together with tangible and intangible rights appurtenant to or benefiting that property; and

WHEREAS, Seller wishes to transfer and convey a portion of that property to Purchaser in order to avoid condemnation proceedings, and Purchaser wishes to acquire that property from Seller.

NOW, THEREFORE, in consideration of the above premises, the mutual promises and covenants below, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. Purchase and Sale Agreement. Subject to the terms, provisions, covenants and conditions herein contained, Seller hereby agrees to sell and convey and Purchaser hereby agrees to purchase and pay for:

- (a) A parcel of real property located in Douglas County, Colorado, and more specifically described in **Exhibit A**, attached hereto and incorporated herein by this reference, together with all easements and rights-of-way appurtenant thereto and all improvements and fixtures of a permanent nature currently on the premises;
- (b) A temporary easement located in Douglas County, Colorado, and more specifically described in **Exhibit B**.

2. Purchase Price and Payment. The parties agree that the purchase price for the Property shall be **\$43,050.00** (the "Purchase Price"), payable in cash or certified funds, delivered to Seller at closing and upon delivery of the deed at closing, less any amounts to be withheld in accordance with this Agreement, and further subject to all terms and conditions set forth in this Agreement.

3. Merchantability of Title; Objections to Title.

(a) Seller represents to Purchaser that at closing Seller will have and will convey to Purchaser good, merchantable and insurable title to the Property, including fee simple title to the

Property described in **Exhibit A**, subject only to prorated general real estate taxes on the Property described in **Exhibit A** for the current year and to any burdens, easements, rights-of-way, agreements, reservations, restrictions and encumbrances described in the title commitment approved by Purchaser as hereinafter provided (the "Permitted Exceptions").

(b) Seller represents and covenants to the Purchaser that it comprises all of the parties who have a fee interest in the property interests being acquired herein, and that to the best of Seller's knowledge, there are no other interested parties in said property, except with regard to the Permitted Exceptions.

(c) If Purchaser deems, in its sole discretion, that title for any reason is not merchantable in Seller, Purchaser shall give immediate notice thereof to Seller, and Seller shall make a reasonable effort to correct any defects objectionable to Purchaser prior to the closing date.

(d) If Seller is unable or unwilling to correct such defects on or before the closing date, this Agreement, at Purchaser's option, may be declared void and of no force or effect. In the event of such termination, the parties shall have no further rights or obligations hereunder.

(e) The Seller acknowledges that the Purchase Price is full and just compensation for all of its interests, the interests of all lienors, deed of trust holders and beneficiaries, mortgagees, lessees (whether or not the lease is recorded), and any and all other legal or equitable interests in the Property that exist at the time of the closing except for the Permitted Exceptions.

4. Title Commitment; Title Policy. The Purchaser may, at its option and expense, obtain a current commitment for a title insurance policy and obtain a title insurance policy current as of the date of closing.

5. Closing Documents. At closing, the Seller shall execute and deliver to the Purchaser the following documents:

(a) A general warranty deed, prepared by legal counsel for the Town of Parker, conveying the property described in Exhibit A to Purchaser in fee simple, free and clear of all general real estate taxes on the Property except for the current year, all liens for any improvements installed as of the date of closing whether assessed or not, and all easements, covenants, liens and encumbrances which are shown on the title commitment and are not accepted by Purchaser at closing, which deed shall include a notation that the Property is being purchased under threat of condemnation and that other factors were included in the determination of the price in addition to fair market value.

(b) A temporary easement in the form attached hereto as Exhibit B.

6. Closing. The date, time and location of closing shall be mutually agreed upon by Purchaser and Seller as soon as possible following the execution of this Agreement; provided, however, that if for any reason a closing does not occur on or before **July 1, 2023**, or such other date

5/3/2023

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mutually agreed to in writing by the parties. Purchaser and Seller shall be entitled to exercise their rights contained in the "Remedies" section contained herein.

7. Closing Costs. Purchaser shall pay any closing fees charged by the title insurance company and all recording fees for the documents delivered by Seller to Purchaser hereunder. Each party shall be responsible for the payment of its own attorney's fees incurred in connection with the transaction that is the subject of this Agreement.

8. Taxes. Seller shall pay all personal property taxes and general property taxes due on the Property for the year of closing and all preceding years. General taxes for the year of closing shall be apportioned between the parties to the date of delivery of the deed.

9. Entry on Property. Seller shall allow Purchaser and its authorized representatives to enter upon the Property from time to time prior to closing for the purposes of placing markers and conducting visual inspections, surveys, subsurface drilling, soil tests, groundwater tests, environmental audits and tests to determine adverse environmental conditions and contamination. Purchaser's representatives shall give reasonable notice to the Seller upon entering the Property for these purposes. All costs and expenses of such inspection shall be borne solely by Purchaser.

10. Risk of Loss; Damage to Property. If improvements are located on the Property, loss or damage to the improvements from any cause, including but not limited to fire, vandalism, or acts of God, from the date of this Agreement until the conveyance of said deed from Seller to the Purchaser shall be the risk of the Seller. If, prior to closing, improvements are destroyed or damaged in whole or in part, this Agreement may be canceled at the option of the Purchaser. The Purchaser, at its option shall have the right to proceed with specific performance of this Agreement despite such damage, provided that the Purchaser shall be entitled to all the credit for insurance proceeds resulting from such damage, not exceeding, however, the total purchase price.

11. Seller's Representations. Seller represents that to the best of its knowledge, as of the date hereof, and as of the date of the closing, that the following are true and correct:

(a) Soils. Seller has no knowledge of any patent or latent defects, soil deficiencies, or subsurface anomalies existing on the Property;

(b) No litigation or investigations. There is no pending or threatened litigation, proceeding, or investigation by any governmental authority or any other person known to Seller against or otherwise affecting the Property other than: (list, if any) N/A, nor does Seller know of any ground for any such litigation, proceedings or investigations; and

(c) Documents. Each and every document, schedule, item, and other information delivered or to be delivered by the Seller to the Purchaser hereunder, or made available to the Purchaser for inspection hereunder, shall be accurate and correct; and

(d) No special assessments. There are no special assessments which now burden or

5/3/2023

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encumber the Property, there are no special assessments currently proposed as to the Property and the Property shall be free and clear of all liens for special improvements installed as of the date of closing, whether assessed or not; and

(e) Leases. Seller has notified Purchaser of all leases, tenancies or rental agreements relating to the Property, or to any part thereof; and

(f) Third party improvements. Seller has notified Purchaser of all improvements, real or personal, on the Property not owned by the Seller and Seller hereby warrants to Purchaser that it is the lawful owner of all other improvements located in or on the Property and is entitled to compensation for same.

(g) Easements. Seller has notified Purchaser of all easements, rights-of-way or claims of possession not shown by record, whether by grant, prescription, adverse possession or otherwise, as to any part of the Property; and

(h) No landfill. No part of the Property has ever been used as a landfill, and no materials have ever been stored or deposited upon the Property which would, under any applicable governmental law or regulation, require that the Property be treated or materials removed from the Property prior to the use of the Property, for any purpose which would be permitted by law but for the existence of said materials on the Property; and

(i) No pollution.

(1) The Property is not contaminated with any hazardous substance;

(2) Seller has not caused and will not cause, and to the best of Seller's knowledge, after diligent investigation and inquiry, there never has occurred, the release of any hazardous substance on the Property;

(3) The Property is not subject to any federal, state or local "superfund" lien, proceedings, claim, liability or action, or the threat or likelihood thereof, for the cleanup, removal, or remediation of any such hazardous substance from the Property or from any other real property owned or controlled by Seller or in which Seller has any interest, legal or equitable;

(4) There is no asbestos on the Property;

(5) There is no underground storage tank on the Property;

(6) By acquiring the Property, Purchaser will not incur or be subject to any "superfund" liability for the cleanup, removal or remediation of any hazardous substance from the real estate or any liability, cost, or expense for the removal of any asbestos or underground storage tank from the Property.

(The terms "hazardous substance," "release," and "removal," as used herein, shall have the same

5/3/2023

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meaning and definition as set forth in paragraphs (14), (22) and (23), respectively, of Title 42 U.S.C. Section 9601; provided, however, that the term "hazardous substance," as used herein, also shall include "hazardous waste," as defined in paragraph (5) of 42 U.S.C. Section 6903 and "petroleum," as defined in paragraph (8) of 42 U.S.C. 6991. The term "superfund," as used herein, means the Comprehensive Environment Response, Compensation and Liability Act, as amended, Title 42 U.S.C. Section 9601, et seq., as amended, and any similar state statute or local ordinance applicable to the Property, and all rules and regulations promulgated, administered and enforced by any governmental agency or authority pursuant thereto. The term "underground storage tank," as used herein, shall have the same meaning and definitions as set forth in paragraph (1) of 42 U.S.C. Section 6991. Seller agrees to cooperate with the Purchaser in completing an environmental audit, if one is conducted. Should any environmental audit reveal the presence of hazardous materials on the property, then the Purchaser has the express option of terminating this Agreement.)

(j) In order to provide the Purchaser with information to protect the Purchaser and its contractors and agents, the Seller agrees to provide any information whatsoever that it may have with regard to environmental contamination and will answer environmental inventory questions, to the best of the Seller's knowledge, if requested by the Purchaser.

12. Contingencies.

(a) Performance by Purchaser under this Agreement is expressly contingent upon Purchaser's inspection of the Property, review of all agreements and information affecting the Property, review and approval of the title commitment and title documents, any appraisal of the Property which the Purchaser has obtained, approval by the Purchaser of any survey of the Property and approval by the Town Council of the Town of Parker of the acquisition of the Property.

(b) Seller agrees that closing of this Agreement is contingent upon the partial release and/or satisfaction of the exceptions shown in the title commitment for the property, unless the Purchaser agrees in writing to acquire the Property subject to any such exceptions. While Purchaser will assist the Seller in obtaining releases or satisfaction of the exceptions, the obligation is Seller's.

(c) If Purchaser physically damages the remaining property of the Seller by its construction activities, the Purchaser shall be responsible to restore such damaged property or make restitution to the Seller.

(d) In the event of termination of this Agreement due to the failure of any contingency, the parties shall have no further rights or obligations hereunder.

13. Remedies.

(a) In the event that the Seller fails to consummate this Agreement for any reason, except Purchaser's default or termination of this Agreement by Purchaser pursuant to the provisions hereof, Purchaser may, at its option, enforce this Agreement by (1) terminating this Agreement and proceeding with a condemnation action, and the Purchaser may utilize this Agreement as an admission of the value of the property being acquired, or (2) bringing an action against the Seller for

5/3/2023

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specific performance or damages or both. Seller acknowledges and agrees that the subject of this Agreement is unique and irreplaceable and damages would be a wholly inadequate remedy for Purchaser in the event of termination of this Agreement by Seller.

(b) In the event that Purchaser shall fail to close on this Agreement for any reason, Seller shall not be entitled to enforce this Agreement through an action for specific enforcement, nor shall Seller be entitled to any damages from Purchaser for any such failure, and Seller's exclusive remedy shall be the rescission of this Agreement. In the event of default or termination of this Agreement by Purchaser, the parties shall have no further rights or obligations hereunder.

(c) If there is a default by the Seller under this Agreement and the Purchaser elects to treat the Agreement as terminated and files a condemnation lawsuit to obtain possession of and title to the Property, the Seller hereby agrees and stipulates that (1) there has been a failure of negotiations to acquire the Property and (2) the Purchaser may take possession of the Property immediately upon paying into the registry of the court a deposit equal to the Purchase Price. The Seller and the Purchaser agree that the terms of this paragraph shall survive a default by any party.

(d) In the event that Seller is responsible for pollution of the Property contrary to its representations in paragraph 12 above, Seller shall indemnify Purchaser for all of Purchaser's costs in remediating the pollution as required by local, state and federal law.

14. Time. Time is of the essence hereof and all terms, conditions and covenants shall be tendered or performed as specified herein.

15. Agreement Binding. The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, personal representatives, successors and assigns. The parties hereto agree that, except for such of the terms, conditions, covenants and agreements hereof which are, by their very nature, fully and completely performed upon closing, all of the terms, conditions, representations, warranties, covenants and agreements herein set forth and contained shall survive the closing and shall continue to be binding upon the parties and their above-named successors.

16. Colorado Law. This Agreement and the rights and obligations of the parties hereunder shall be governed by the laws of the State of Colorado.

17. Recording. This Agreement may be recorded in the records of the Office of the Clerk and Recorder of Douglas County, Colorado.

18. Entire Agreement. This Agreement embodies the complete Agreement between the parties and cannot be modified or amended except by the written agreement of the parties.

19. Whenever used herein, the singular number shall include the plural, the plural the singular; and the use of any gender shall be applicable to all genders.

20. Nonvoluntary Transfer. The Purchaser acknowledges that the Property is being

5/3/2023

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purchased under threat of condemnation and that other factors may have been considered in the determination of the price set forth herein in addition to fair market value. This transaction represents a nonvoluntary transfer by the owner.

IN WITNESS WHEREOF, this Agreement is executed by Seller and Purchaser as of the date first above written.

SELLER Savanna Properties LLC

BY: 

TITLE: MANAGER

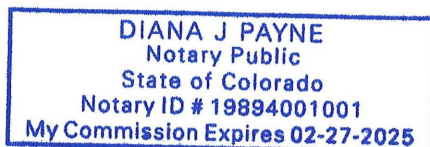
STATE OF COLORADO)
COUNTY OF Arapahoe) ss.

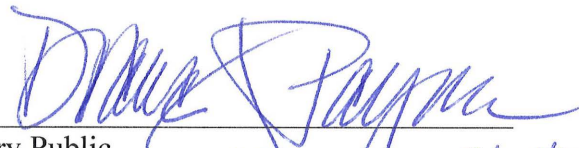
The foregoing instrument was acknowledged before me this 9th day of May, 2023, by Christine Theroux, as Manager, for Savanna Properties, LLC.

WITNESS my hand and official seal.

My Commission Expires:

2/27/2025




Notary Public
Address: 3025 S. Parker Rd, #200
AURORA, CO 80014

PURCHASER:

TOWN OF PARKER

By: _____

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

Approved as to legal form:

Kristin S. Hoffmann, Town Attorney

5/3/2023

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EXHIBIT A

LEGAL DESCRIPTION

A PARCEL OF LAND BEING A PORTION OF LOT 22A, BLOCK 1, TWENTY MILE VILLAGE FILING NO. 2, 5TH AMENDMENT RECORDED AT RECEPTION NO. 02030381 IN THE OFFICIAL RECORDS OF THE DOUGLAS COUNTY, COLORADO CLERK AND RECORDER'S OFFICE, SITUATED IN THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TOWN OF PARKER, SAID COUNTY AND STATE, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 22A;

THENCE ALONG THE SOUTHERLY LINE OF SAID LOT 22A, NORTH 81°08'30" WEST, A DISTANCE OF 41.55 FEET;

THENCE DEPARTING SAID SOUTHERLY LINE, NORTH 48°19'14" EAST, A DISTANCE OF 52.02 FEET TO THE EASTERLY LINE OF SAID LOT 22A;

THENCE ALONG SAID EASTERLY LINE, SOUTH 03°04'55" EAST, A DISTANCE OF 41.05 FEET TO THE **POINT OF BEGINNING**.

CONTAINING AN AREA OF 0.019 ACRES, (834 SQUARE FEET), MORE OR LESS.

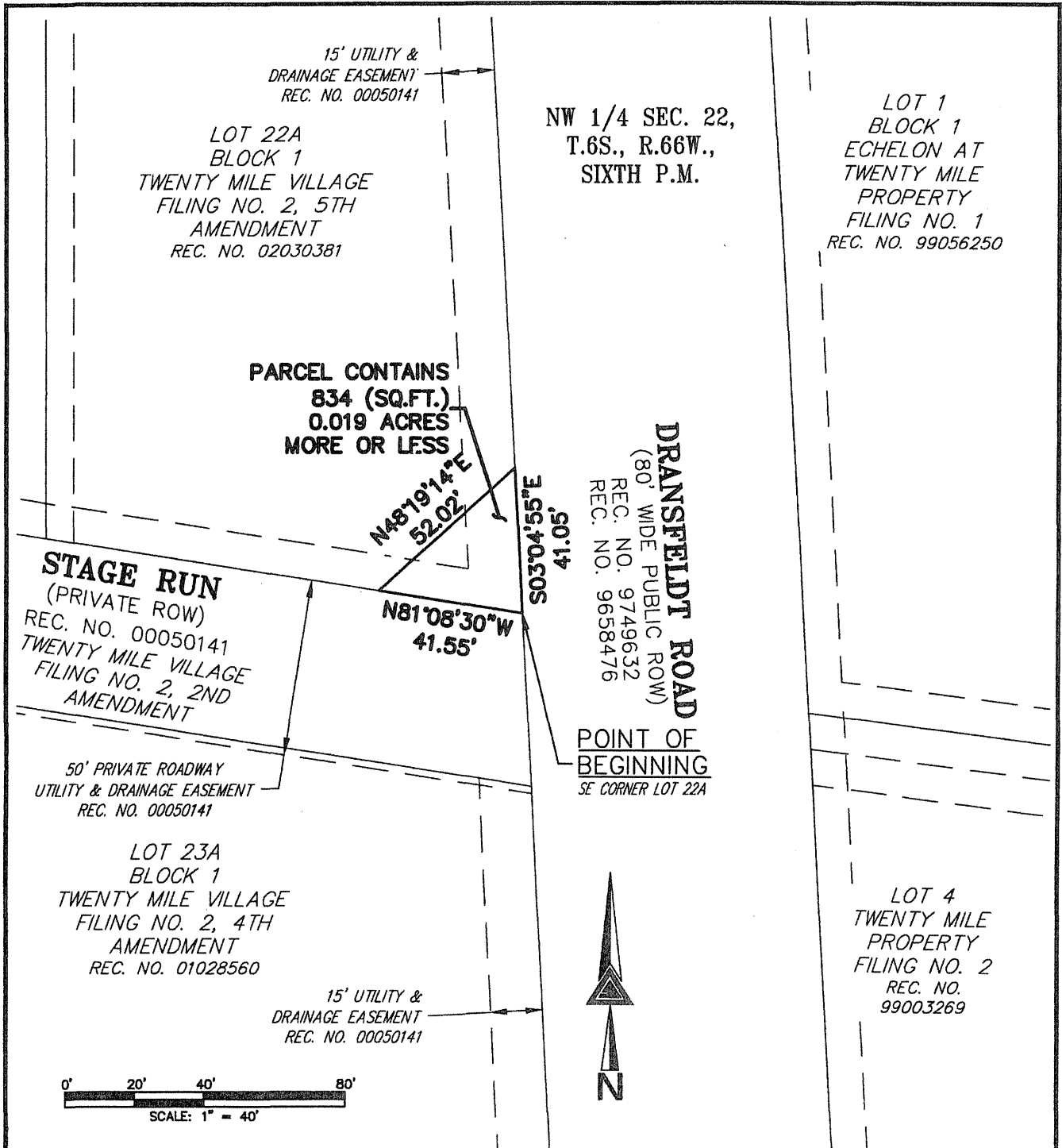
ALL LINEAL DISTANCES ARE REPRESENTED IN U.S. SURVEY FEET.

ILLUSTRATION ATTACHED AND MADE A PART HEREOF.



KARL D. SZYSZKOSKI, PLS 38691
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF AZTEC CONSULTANTS, INC.
300 E. MINERAL AVE., SUITE 1,
LITTLETON, CO 80122

ILLUSTRATION TO EXHIBIT A



NOTE: THIS ILLUSTRATION DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND IS ONLY INTENDED TO DEPICT THE ATTACHED LEGAL DESCRIPTION.

PATH: Q:\12321-08\DWG\EXHIBITS\
DWG NAME: L22A, B1 - PE.DWG
DWG: KDS CHK: JRW
DATE: 09/30/2022
SCALE: 1" = 40'



300 East Mineral Ave,
Suite 1
Littleton, Colorado 80122
Phone: (303)713-1898
Fax: (303)713-1897
www.aztecconsultants.com

RIGHT-OF-WAY
NW 1/4 SEC. 22, T6S, R66W, 6TH PM
TOWN OF PARKER, COLORADO

JOB NUMBER 12321-08

2 OF 2 SHEETS

EXHIBIT B

TEMPORARY CONSTRUCTION EASEMENT

KNOW ALL MEN BY THESE PRESENTS: That **Savanna Properties, LLC**, a Colorado limited liability company whose address is 10370 Grande Vista Ct., Littleton, CO 80124 ("**Grantor**"), in consideration of **TEN DOLLARS (\$10.00)**, receipt of which is hereby acknowledged, and other good and valuable consideration, does hereby grant, bargain, sell and convey to **TOWN OF PARKER, a Colorado Home Rule Municipality**, whose address is 20120 E. Mainstreet, Parker, Colorado 80138, ("**Grantee**"), a Temporary Easement for use during construction of the Dransfeldt roadway improvements (the "Project"), together with all rights and privileges as are necessary or incidental to the reasonable and proper use of such easement in and to, over, under and across the tract of land described as follows:

More particularly described on **EXHIBIT A**, attached hereto and by this reference made a part hereof (the "Subject Property").

1. Said Temporary Easement shall expire and be of no further force or effect twelve (12) months after the date Grantee provides written notice of the commencement of the Temporary Easement by Grantor, which notice shall be provided within two (2) years of execution of this Agreement.

2. During the term of this Temporary Easement, Grantor shall not erect or construct, or allow to be erected or constructed, any building or other structure which may interfere with Grantee's full enjoyment of the rights hereunder.

3. The parties hereto agree that neither has made nor authorized any agreement with respect to the subject matter of this instrument other than expressly set forth herein, and no oral representation, promise or consideration different from the terms herein contained shall be binding on either party, or its agents or employees hereto.

4. Grantor warrants that Grantor has full and lawful authority to make the grant hereinabove contained and promises and agrees to defend Grantee in the exercise of its rights hereunder against any defect in Grantor's title to the land involved or Grantor's rights to make the grant hereinabove contained. Grantee warrants that Grantee has full and lawful authority to enter into this agreement.

5. Except as set forth herein and any other agreement between the parties, Grantee shall not interfere with the commercially reasonable use of the Property outside the Temporary Easement Area.

6. Grantee further agrees to provide the following to Grantor during the term of this Temporary Easement:

- A. Neither Grantee nor any of its representatives or agents shall be permitted to enter upon the Subject Property, unless and until Grantee has provided Grantor with proof of insurance from the Contractor utilized by Grantee to construct the Project naming Grantor as an additional insured on such Contractor's policy of insurance for any and all construction activities within the Subject Property. Said insurance

policy shall include insurance coverage of not less than \$1 million per occurrence, and \$2 million aggregate. Grantee's Contractor shall be fully and exclusively responsible for any and all loss, liability, personal or other injury, damages, etc. that might result to any person from any of Grantee's activities within the Subject Property (regardless of whether such damage occurs within the Subject Property), which includes but is not limited to any and all activities performed by any of its agents, representatives, contractors, or subcontractors within the Subject Property.

- B. Grantee shall use commercially reasonable efforts to limit the impact on Grantor's operations from any construction work done by Grantee pursuant to this Agreement. Grantee shall restore the surface of the Temporary Easement Area including replacing any trees which are killed or removed to the extent disturbed by Grantee to as near a condition as existed before Grantee commenced its construction work as is reasonably practicable within one year following completion of the Construction Activities, but in any event prior to expiration of the Term. Grantee shall further require the Contractor of the Project to include dust mitigation and reduction measures, including (1) the installation of a six (6) foot fence with fabric along the property lines facing the Project for screening and to serve as a wind barrier, and (2) the application of water to open embankment areas on an as needed basis to mitigate and reduce airborne dust.
- C. Grantee shall provide to Grantor prior to commencement of the Project a notice of commencement including the contact information for both the Project Construction Manager working on behalf of the Town, and contact information for a representative of the Contractor.
- D. Grantee shall assure that any equipment and materials are stored only on the Subject Property utilized for the Temporary Easement and may not be stored in any other location on Grantor's Property. Provided however, that the Grantee shall ensure that Contractor will not store heavy equipment on that portion of the Temporary Easement located within and adjacent to Grantor's parking lot overnight or during the weekends when work is not continuing. In addition, Grantor shall use its best efforts to store such heavy equipment within the Town right-of-way, but such storage may encroach or straddle the Temporary Easement Property adjacent to the Town right-of-way, but shall not encroach within that portion of the Temporary Easement located within and adjacent to Grantor's parking lot.
- E. In the event that the construction of the Project requires a known interruption of water service to the Grantor's property, the Grantee will provide Grantor at least one week's notice before the water service is interrupted.
- F. Once construction has commenced and between the Date of Commencement and the expiration of the right of access granted under this Temporary Easement, the Grantee shall be responsible for snow removal from the sidewalks in the Temporary Easement Area for the term of this agreement.

7. If either party to this Agreement breaches any obligation, covenant, representation or warranty hereunder (such party, the “**Breaching Party**”), the other party (such party, the “**Non-Breaching Party**”) shall provide the Breaching Party with written notice of the same (“**Breach Notice**”). Upon delivery of the Breach Notice, the Breaching Party shall have ten (10) days or such reasonable amount of time necessary to cure such breach (provided, the Breaching Party commences cure prior to expiration of the Cure Period and uses diligent efforts to complete such cure) (such period, the “**Cure Period**”) to cure the breach hereunder. If the Breaching Party fails to cure the breach during the Cure Period, the Non-Breaching Party may seek any and all remedies available at law or in equity, including without limitation, specific performance, injunctive and equitable relief, and damages, and all such remedies shall be cumulative.

8. Any notice required or permitted to be sent pursuant to this Agreement (each, a “**Notice**”) shall be in writing and shall be deemed given, sent, delivered or received upon the earlier of: (i) when personally or actually delivered, or (ii) three (3) business days after having been deposited in a U.S. Postal service depository and sent by registered or certified mail, return receipt requested, with all required postage prepaid, or (iii) one (1) business day after being deposited with a commercial overnight courier (e.g., Federal Express, UPS or DHL) by overnight delivery with all required charges prepaid, and in each case, addressed as follows:

If to Grantor:	Savanna Properties, LLC 10370 Grande Vista Ct. Littleton, CO 80124 Attention: Christine Theroux Email: drctheroux@gmail.com
With a copy to:	Beck, Payne, Frank & Piper, P.C. 3025 S. Parker Rd., Suite 200 Aurora, CO 80014 Attention: Diana J. Payne Email: djp@beckpayne.com
If to Grantee:	Town of Parker 20120 E. Mainstreet Parker, CO 80138 Attention:
With a copy to:	Hoffmann, Parker, Wilson & Carberry, P.C. 511 16 th Street, Suite 610 Denver, CO 80202 Attention: Corey Y. Hoffmann

9. Whenever used herein, the singular number shall include the plural, the plural the singular; and the use of any gender shall be applicable to all genders. All of the covenants herein contained shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, personal representatives, successors and assigns.

10. The terms, covenants and provisions hereof shall be governed by and construed under the applicable laws of the State of Colorado without reference to conflict of laws principles.

WITNESS our hand(s) and seal(s) this _____ day of _____, 2023.

GRANTOR:

SAVANNA PROPERTIES, LLC

BY: _____

TITLE: _____

STATE OF COLORADO)
)ss.
COUNTY OF)

The foregoing instrument was acknowledged before me this _____ day of _____, 2023, by Christine Theroux, as Manager, for Savanna Properties, LLC.

WITNESS my hand and official seal.

My Commission Expires:

Notary Public
Address:

GRANTEE: TOWN OF PARKER

By: _____
Michelle Kivela, Town Manager

Date: _____

Attest: _____
Chris Vanderpool, Town Clerk

Approved as to legal form:

Kristin S. Hoffmann, Town Attorney

LEGAL DESCRIPTION

A PARCEL OF LAND BEING A PORTION OF LOT 22A, BLOCK 1, TWENTY MILE VILLAGE FILING NO. 2, 5TH AMENDMENT RECORDED AT RECEPTION NO. 0230381 IN THE OFFICIAL RECORDS OF THE DOUGLAS COUNTY, COLORADO CLERK AND RECORDER'S OFFICE, SITUATED IN THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TOWN OF PARKER, SAID COUNTY AND STATE, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 22A;

THENCE ALONG THE EASTERLY LINE OF SAID LOT 22A, SOUTH 03°04'55" EAST, A DISTANCE OF 258.01 FEET;

THENCE DEPARTING SAID EASTERLY LINE, SOUTH 48°19'14" WEST, A DISTANCE OF 10.22 FEET;

THENCE NORTH 03°04'55" WEST, A DISTANCE OF 203.24 FEET;

THENCE SOUTH 86°55'05" WEST, A DISTANCE OF 29.20 FEET;

THENCE NORTH 03°04'55" WEST, A DISTANCE OF 58.27 FEET;

THENCE NORTH 86°55'05" EAST, A DISTANCE OF 22.19 FEET;

THENCE NORTH 03°04'55" WEST, A DISTANCE OF 5.63 FEET TO THE NORTHERLY LINE OF SAID LOT 22A;

THENCE ALONG SAID NORTHERLY LINE, SOUTH 82°40'24" EAST, A DISTANCE OF 15.25 FEET TO THE **POINT OF BEGINNING**.

CONTAINING AN AREA OF 0.088 ACRES, (3,829 SQUARE FEET), MORE OR LESS.

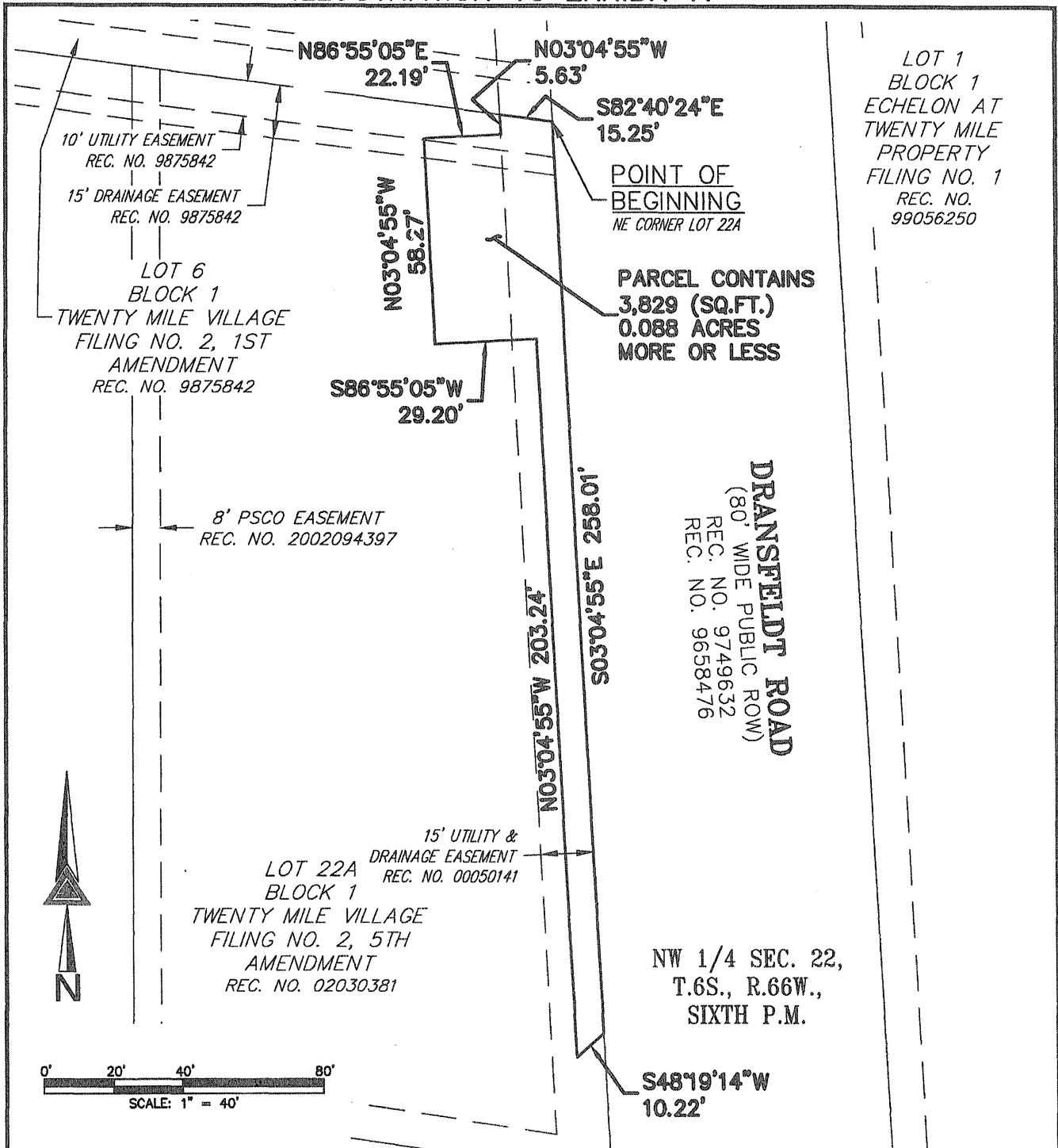
ALL LINEAL DISTANCES ARE REPRESENTED IN U.S. SURVEY FEET.

ILLUSTRATION ATTACHED AND MADE A PART HEREOF.



KARL D. SZYSZKOSKI, PLS 38691
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF AZTEC CONSULTANTS, INC.
300 E. MINERAL AVE., SUITE 1,
LITTLETON, CO 80122

ILLUSTRATION TO EXHIBIT A



NOTE: THIS ILLUSTRATION DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND IS ONLY INTENDED TO DEPICT THE ATTACHED LEGAL DESCRIPTION.

PATH: Q:\12321-08\DWG\EXHIBITS\
 DWG NAME: L22A, B1 - TCE.DWG
 DWG: KDS CHK: JRW
 DATE: 09/20/2022
 SCALE: 1" = 40'



300 East Mineral Ave.
 Suite 1
 Littleton, Colorado 80122
 Phone: (303)713-1898
 Fax: (303)713-1897
 www.aztecconsultants.com

TEMPORARY CONSTRUCTION EASEMENT
 NW 1/4 SEC. 22, T6S, R66W, 6TH PM
 TOWN OF PARKER, COLORADO
 JOB NUMBER 12321-08 2 OF 2 SHEETS



Request for Town Council Action

Date: June 20, 2023

Submitted By: Mary Munekata, Senior Planner
Brett Collins, Projects Administrator
Mary Colton, Parks and Recreation Director
John Fussa, Community Development Director

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 4.52.4 - First Reading**
A Bill for an Ordinance to Amend Ordinance Nos. 4.52.1, Series of 2004, 4.52.2, Series of 2006, and 4.52.3, Series of 2008, to Amend the Title to Chapter 10.10, Subsection 10.10.010(a), and Sections 13.06.070, 13.07.080, 13.07.140 and 13.10.110 of the Parker Municipal Code Concerning the Parks, Trails, Open Space & Streetscape Design and Construction Manual

Department: Community Development, Mary Munekata
Parks, Recreation, and Open Space, Brett Collins

Second July 17, 2023

Reading:

EXECUTIVE SUMMARY

The Parks, Trails, Open Space & Streetscape Design and Construction Manual project is a follow-on to the Town's 2019 adoption of revised standards in the Land Development Ordinance (LDO) for parks, trails and open space required with new residential development. To implement the revised standards, new and clear design guidelines, illustrations, and construction specifications are needed to supplement them. Additionally, the Town's current Construction Specifications and Design Considerations for Parks, Trails and Streetscapes manual that provides technical guidance for the design and construction of these improvements is in need of updating.

The above-referenced manual has been revised and renamed the Parks, Trails, Open Space & Streetscape Design and Construction Manual. The manual will be used by applicants and Town staff to guide the planning, design, and construction of required parks, trails, and open space within new residential development. It will also be used by Town staff to inform the design of new municipal parks and renovation of existing parks as repair and maintenance work is planned in the future.

The Community Development and the Parks and Recreation Departments are partners on the Parks, Trails, Open Space & Streetscape Design and Construction Manual and have worked to advance the project in collaboration with the Engineering/Public Works and Cultural

Departments.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

Parks, trails, and open space play a significant role in the Town of Parker residents' quality of life and have been a long-standing priority of the Town Council. In 2019, the Town updated the LDO standards for parks, trails, and open space for new residential development. These standards govern the number and type of parks that must be provided with new residential development as well as the types of amenities to be incorporated in the parks. The standards support the Town's goal of having new residential development incorporate adequate park, recreational, and open space opportunities.

New and revised design guidelines are also needed to supplement the previously updated LDO standards for parks, trails, open space, and streetscapes to further assist applicants with planning and design. Together, they will provide guidance and clarity regarding required improvements while helping them meet Town expectations for high quality residential development with park, recreation, and open space amenities.

In addition to the new design guidelines above, the Town's current *Construction Specifications and Design Considerations for Parks, Trails and Streetscapes* manual that provides technical guidance for the design and construction of these improvements is in need of updating. This project combines the recently updated LDO parks standards and the revision to the current technical construction manual into one comprehensive document for the design and construction of parks, trails, open space, and streetscapes.

The revised manual has been developed by Town staff with the assistance of a parks design consultant and renamed the *Parks, Trails, Open Space & Streetscape Design and Construction Manual*. The manual will assist applicants who have submitted residential development applications by providing clarity about the Town's expectations for the planning, design and construction of parks, recreation, and open space amenities with the development. It also provides applicants with flexibility in meeting the Town's goal of achieving high quality amenitized parks within new residential neighborhoods. The manual provides specific guidance on parks, trails and open space including:

- *Alignment* with the Parks, Recreation and Open Space Master Plan; Open Space, Trails and Greenways Master Plan; Land Development Ordinance (revised parks standards); and the Parker 2035 Master Plan
- *Clear definitions* to understand and use the manual
- *Design principles* to establish the design intent, values and important considerations for planning and designing parks, trails, open space, and streetscapes
- *Design guidelines* that provide specific design criteria and standards to achieve the identified design principles
- *Standard construction specifications* and details for implementation

During the course of the project, the parks design consultant and staff reached out to developers, landscape architects, and land use planning firms working in the Town on residential projects for comments and professional input. Their comments helped to inform the development of the manual.

As a technical guiding document, the *Parks, Trails, Open Space & Streetscape Design and Construction Manual* will continue to be updated administratively to stay current, incorporate best practices and reflect changing community needs. Applicants and the development community will benefit from improved guidance and standards with greater predictability for successful outcomes in terms of parks, recreation, and open space improvements. The new manual is comprehensive, user-friendly, illustrative, and includes the following components:

1. **Section 01** | Introduction
2. **Section 02** | Parks, Trails, & Open Space
3. **Section 03** | Streetscape
4. **Section 04** | Parks, Trails, Open Space, & Streetscape Amenities
5. **Section 05** | Parks, Trails, Open Space, & Streetscape Materials
6. **Section 06** | Signage Standards
7. **Appendix A** | Standard Construction Details
8. **Appendix B** | Standard Construction Specifications

The Planning Commission will hold a public hearing on July 13, 2023 and make a recommendation to Town Council regarding adoption of the *Parks, Trails, Open Space & Streetscape Design and Construction Manual*.

FINANCIAL IMPACT

None

STRATEGIC GOAL(S)



DEVELOP A VISIONARY
COMMUNITY THROUGH
BALANCED GROWTH



SUPPORT AN
ACTIVE COMMUNITY



PROMOTE A SAFE AND
HEALTHY COMMUNITY



ENHANCE ECONOMIC
VITALITY

ATTACHMENTS

1. Parks, Trail Open Space & Streetscape Design and Construction Manual
2. Ordinance No. 4.52.4

RECOMMENDED MOTION

I move to approve Ordinance No. 4.52.4 on first reading and to schedule second reading for July 17, 2023, as part of the consent agenda.



PARKER
COLORADO
Parks and Recreation

**PARKS, TRAILS,
OPEN SPACE
& STREETScape
DESIGN AND
CONSTRUCTION
MANUAL
2023**

ACKNOWLEDGEMENTS

Parks, Trails, Open Space & Streetscape Design and Construction Manual Revised and Adopted: July 17, 2023

Town of Parker Council

Jeff Toborg - Mayor
Anne Barrington - Town Councilmember
John Diak - Town Councilmember
Laura Hefta - Town Councilmember
Todd Hendreks - Town Councilmember
Joshua Rivero - Town Councilmember
Brandi Wilks - Town Councilmember

Town of Parker Staff

The development of this manual was a collaboration of multiple departments within the Town of Parker and includes the following:

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John Fussa	- Community Development, Director
Bryce Matthews	- Community Development, Assistant Director
Alex Mestdag	- Engineering Services Manager
Andy Anderson	- Communications Manager
Carrie Glassburn	- Cultural Director



Consultant

Hord Coplan Macht

Town of Parker Planning Commission

Gary Poole - Chair
Eliana Burke
Roxy Colette
Richard Forester
Erik Frandsen
Ruth Ann Nelson
Kimberly Rodell
Jane Lane (Alternate Commissioner)
Nicholas Metz (Alternate Commissioner)
Ira Shapiro (Alternate Commissioner)

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POPP Public Outdoor Ping Pong
RhinoSports
Sanderson Concrete
Town of Parker
Tulpi Designs
Velosolutions USA
Victory Stanley Inc.

TABLE OF CONTENTS



SECTION 01 | INTRODUCTION

01 Introduction	02
a. Goals	
b. Applicability	
02 Purpose	04
a. Community Process	
b. Planning Framework	
03 Using the Design Guidelines & Constr. Specifications	06
a. Organization	
b. Reference Resources	

SECTION 02 | PARKS, TRAILS, & OPEN SPACE

01 Introduction	10
02 Definitions & Design	11
a. Neighborhood-Serving Parks	
b. Community-Serving Parks	
c. Open Space	
d. Recreation Facility (Indoor or Outdoor)	
03 Design Principles.....	15
a. Design for People & Safety (CPTED)	
b. Design for Accessibility (ADA) Compliance	
c. Design for Flexibility & Adaptability	
d. Design to Preserve & Enhance the Parks'	
Natural Features & Characteristic Landscape	
e. Design for Sustainability, Maintenance & Programming	
f. Design for Compatibility with Neighborhoods/Community	
04 Design Guidelines	21
a. Natural Features	
i. Topography/ Natural Features	22
ii. Floodplain/ Riparian Areas	22
iii. Vegetation/ Soil Preservation	23
iv. Earthwork and Drainage.....	24
b. Local & Regional Connectivity	
i. Connectivity	25
c. Sustainable Practices & Maintenance	
i. Landscape.....	26
1. Plant Material	
2. Ground Cover	
ii. Irrigation.....	29
1. Irrigation System Design	
2. Irrigation Materials	

d. Parks & Open Space Amenities

<i>i. Gardens</i>	32
1. Arboreta / Decorative Garden	
2. Community Garden / Raised Garden	
<i>ii. Gathering & Social Spaces</i>	34
1. Outdoor Performance Space/Stage	
2. Festival/Event Space	
3. Outdoor Nature Classroom	
4. Programmable Space (Indoor or Outdoor)	
5. Shelters	
<i>iii. Interpretive & Placemaking</i>	36
1. Interactive, Functional, or Visual Art	
2. Interpretive Signage or Elements	
3. Site Design Theme	
<i>iv. Outdoor Specialized</i>	38
1. Ping pong	
2. Foosball	
3. Chess Table	
4. Cornhole	
5. Disc Golf Course	
6. Bike Park, Skills Area, Pump Track	
7. Horseshoe Pit	
8. Dog Off-Leash Area (Fenced)	
9. Skatepark	
<i>v. Paths, Trails & Trailheads</i>	41
1. Recreation Trail Corridors	
2. Regional Trails	
3. Local Trails	
4. Greenway Connection or Trailhead	
5. Hard Surface Multi-use Trail	
6. Internal Access Pathway	
7. Loop Pathway	
8. Soft Surface Trail	
9. Bridge Underpass	
<i>vi. Play Space & Equipment</i>	50
1. Design Guidelines for Play Areas	
2. Accessibility & American with Disabilities Act (ADA) Compliance	
3. Safety Standards & Inspections	
4. Universal & Inclusive Play	
5. Thematic Play Features	
6. Open Turf Play Area	
7. Play Area, Small-Scale	
8. Play Area, Large Destination-Scale	
9. Shade Shelter	
10. Seating	
11. Play Equipment	
12. Surfacing Options	
13. Standard Play	
14. Universal & Inclusive Play Elements Examples	
<i>vii. Sports & Fitness</i>	62
1. General Considerations	
2. Multipurpose Field	
3. Ball Fields	
4. Sport Courts	
5. Field Support Amenities	
6. Sport Courts Support Amenities	
7. Sports Field Structure & Fencing	
8. Sports Field/ Court Lighting	
9. Alternative Surfaces	
<i>viii. Outdoor Fitness Equipment</i>	77
<i>ix. Specialized Facilities</i>	78
1. Aquatics & Water Access	
2. Indoor Facilities	
<i>x. Parking</i>	82



05 Guidelines for Art in Parks	83
a. Definition of Public Art	
b. General Criteria	
c. Siting & Displaying Works of Art	

SECTION 03 | STREETScape

01 Introduction	88
a. Definitions	
b. Design Principles	
02 Design Guidelines	90
a. Typical Median or Landscape Island	
b. Sight Distance Triangles	
c. Conduits	
d. Commercial & Mixed-Use Streetscape	
e. Residential Streetscape	
f. Street Trees & Planting	
<i>i. General Plant Material Guidelines.....</i>	<i>95</i>
<i>ii. Tree Placement Guidelines</i>	<i>96</i>
<i>iii. Shrubs, Ornamental Trees and/or Ground Cover</i>	<i>96</i>
<i>iv. Perennials</i>	<i>97</i>
<i>v. Annual Bedding Plants.....</i>	<i>97</i>
<i>vi. Optional Residential Tree Lawn Guidelines.....</i>	<i>97</i>
g. Sustainable maintenance guidelines	
<i>i. Maintenance of Improvements in Public Right-of-Way.....</i>	<i>99</i>
<i>ii. Planting, Maintaining & Removal of Trees on Public Property.....</i>	<i>99</i>
<i>iii. Maintenance and Installation of Landscaping.....</i>	<i>99</i>
<i>iv. Removal of Dead or Dangerous Trees, Limbs or Shrubs.....</i>	<i>100</i>
<i>v. Infected or Infested Trees</i>	<i>100</i>
<i>vi. Obstruction of Public Property</i>	<i>100</i>
<i>vii. Determination of Hazard/ Notice to Responsible Party/ Assessment of Costs</i>	<i>101</i>

SECTION 04 | PARKS, TRAILS, OPEN SPACE & STREETScape SUPPORT AMENITIES

01 Introduction	104
a. Organization	
b. Support Amenity Standards	
<i>i. Site Furnishings.....</i>	<i>106</i>
1. Benches	
2. Chairs	
3. Picnic Tables	
4. Trash/ Recycling Receptacles	
5. Dog Waste Station	
6. Drinking Fountain	
7. Bicycle Rack	
8. Bicycle Repair Station	

<i>ii. Structures & Parking</i>	108
1. Restrooms	
2. Shade Structure	
3. Parking	
<i>iii. Lighting</i>	111
1. Lighting	
<i>iv. Safety Barriers & Flagpole</i>	114
1. Bollard-Steel Pipe & Concrete Filled	
2. Flagpole	

SECTION 05 | PARKS, TRAILS, OPEN SPACE & STREETSCAPE MATERIALS

01 Introduction	116
a. Organization	
b. Materials	
<i>i. Paths, Trails & Sidewalks</i>	118
1. Concrete Flatwork	
2. Decorative Concrete	
3. Unit Paving	
4. Crusher Fines	
5. Detectable Warning Surfaces	
<i>ii. Drives & Parking Lots</i>	120
1. Drives & Parking Lots	
<i>iii. Curbs & Walls</i>	120
1. Curbs & Walls	
<i>iv. Fencing & Railings</i>	121
1. Fencing	
2. Pedestrian Guardrails/Railings	
<i>v. Planting & Signage</i>	122
1. Tree Pits & Planters	
2. Recommended Plant Lists & Seed Mixes	
c. Landscape Products	
<i>i. Soils & Irrigations</i>	123
1. Planting Mix (Topsoil)	
2. Soil Amendments	
3. Irrigation	
<i>ii. Landscape Standards</i>	125
1. Barrier Fabric	
2. Wood & Rock Mulch	
3. Staked & Guyed Trees	

SECTION 06 | SIGNAGE STANDARDS

01 Introduction	128
02 Park & Open Space Signs - Monument Signs	128
a. Large Monument	
b. Small Monument	
03 Wayfinding	129
04 Trails Regulatory Signs	130
a. Trail Identification Signs	
b. Mileage Markers	
c. Regulatory	



05 Parks, Trails & Open Space Regulatory Signs131

- a.** Rules & Regulations - Parks, Trails & Open Space
- b.** Rules & Regulations - Synthetic Turf
- c.** Rules & Regulations - Fields, Court Sports & Specialized Facilities

06 Parks, Trails & Open Space Interpretive Signs 132

APPENDIX A | STANDARD CONSTRUCTION DETAILS

01 Site..... SD

- SD-1.** Tree Protection Fencing
- SD-2.** CU Soil Tree Pit
- SD-3.** Tree Planting
- SD-4.** Tree Planting on Slope
- SD-5.** Shrub Planting
- SD-6.** Perennial Planting

02 Irrigation..... IR

- IR-1.** Electric Control Valve for Spray Zones
- IR-2.** Electric Control Valve for Dripper Line Zones
- IR-3.** Manual Drain Valve
- IR-4.** Quick Coupler Valve
- IR-5.** Gear Drive Sprinkler Head
- IR-6.** Pop-up Sprinkler Head
- IR-7.** Irrigation Sleeving
- IR-8.** Irrigation Trenching
- IR-9.** Wire Splice Access Route
- IR-10.** Mainline Thrust Blocking
- IR-11.** Controller and Enclosure Elevation
- IR-12.** CV Dripper Line with Flush Valve Installation for Tree Irrigation in Native Areas
- IR-13.** Indicator Head for Netafim CV Dripper Line Pipe Loops
- IR-14.** CV Dripper Line with Flush Valve Installation at End or Each Dripper Pipe Loop
- IR-15.** Temporary Irrigation System Point of Connection and Back Flow Assembly Section
- IR-16.** Temporary Electric Control Valve
- IR-17.** Temporary Pop-Up Head
- IR-18.** Temporary Quick Coupler Valve
- IR-19.** Temporary Irrigation System Pipe and Wire Sleeving
- IR-20.** Temporary Drain Valve
- IR-21.** Temporary Wire Splice Connection
- IR-22.** Drinking Fountain, Service Line and Discharge Sump
- IR-23.** Drinking Fountain Point of Connection
- IR-24.** Irrigation System Point of Connection and Back Flow Assembly
- IR-25.** Controller Grounding Diagram
- IR-26.** Two Wire Path Wire Splice Access Loop
- IR-27.** Two Wire Path Wire Electric Control Valve

03 Paving & Surfacing.....	PV
PV-1. Concrete Flatwork PV-2. Concrete Flatwork - Joints PV-3. Concrete Mow Band PV-4. Concrete Trail Intersection PV-5. Asphalt - Single Lift PV-6. Crusher Fines Paving - On Aggregate Base PV-7. Crusher Fines Paving - On Subgrade PV-8. Poured-In-Place Playground Surfacing PV-9. Poured-In-Place Safety Surfacing - Edge Restraint PV-10. Engineered Wood Fiber Surfacing PV-11. Play Area Edge At Engineered Wood Fiber Surfacing PV-12. Synthetic Grass Surfacing	
04 Park Structures.....	ST
ST-1. Shelter Foundation ST-2. Dugout Elevations ST-3. Dugout Layout Plan	
05 Site Furnishings & Fixtures	SF
SF-1. Picnic Table SF-2. Bench (Backed) SF-3. Bench (Backless) SF-4. Trash / Recycling Receptacle SF-5. Dumpster Enclosure - Elevation SF-6. Dumpster Enclosure - Section SF-7. Dog Waste Station SF-8. Bicycle Rack SF-9. Bicycle Service Station SF-10. 4' Wide Single Decorative Gate, Pedestrian SF-11. Decorative Fencing SF-12. Guardrail (At Trails) SF-13. Guardrail (At Parks) SF-14. Double Leaf Gate, Vehicular SF-15. Outfield Fence and Gate SF-16. Prairie Dog Fencing SF-17. Roadway Parking Lot Pole Base Light SF-18. Pedestrian Light Pole Base SF-19. Natural Area Fence SF-20. Backstop SF-21. Foul Pole SF-22. Players Bench SF-23. Cabana With Bench	
06 Signage.....	SN
SN-1. Mileage Marker SN-2. Monument Sign - Large SN-3. Monument Sign, Large - Enlargement SN-4. Monument Sign - Small SN-5. Monument Sign, Small - Enlargement	



SN-6. Park Directional Signage

SN-7. Parks, Trails, and Open Space Regulatory Signs -
In-Ground Mount

SN-8. Parks, Trails, and Open Space Regulatory Signs -
Fence Mount

07 Field and Court LayoutsFC

FC-1. Soccer Field Layout - 360' x 225' or 300' x 180'

FC-2. Soccer Field Layout - 270' x 165' or 240' x 120'

FC-3. Futsal Court Layout

FC-4. Pickleball Court Layout

FC-5. Tennis Court Layout

FC-6. Basketball Court Layout - 84' x 56' or 60' x 40'

FC-7. Ballfield Layout - 90' Bases

FC-8. Ballfield Layout - 65' Bases

APPENDIX B | STANDARD CONSTRUCTION SPECIFICATIONS

DIVISION 03 - CONCRETE

* SECTION 033000 - CAST-IN-PLACE CONCRETE

DIVISION 05 - METALS

SECTION 055213 - PIPE AND TUBE RAILINGS

DIVISION 10 - SPECIALTIES

SECTION 107360.01 - MANUFACTURED SHADE STRUCTURES

DIVISION 11 - EQUIPMENT

SECTION 116800 - PLAY EQUIPMENT AND STRUCTURES

SECTION 116833.01 - OUTDOOR ATHLETIC EQUIPMENT

DIVISION 12 - FURNISHINGS

SECTION 129300 - SITE FURNISHINGS

DIVISION 13 - SPECIAL CONSTRUCTION

SECTION 133416.53 - CONTINUOUS ELEVATED ANGLE-FRAME BLEACHERS

DIVISION 31 - EARTHWORK

SECTION 311000 - SITE CLEARING

SECTION 312000 - EARTH MOVING

SECTION 312270.01 - TEMPORARY EROSION AND SEDIMENTATION CONTROL

DIVISION 32 - EXTERIOR IMPROVEMENTS

* SECTION 321313 - CONCRETE PAVING

* SECTION 321316 - DECORATIVE CONCRETE PAVING

* SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

SECTION 321400 - UNIT PAVING

SECTION 321540 - CRUSHER FINES PAVING

- * SECTION 321723 - PAVEMENT MARKINGS
- * SECTION 321726 - DETECTABLE WARNING SURFACING
 - SECTION 321800.01 - INFIELD SURFACING
 - SECTION 321813 - SYNTHETIC GRASS SURFACING
 - SECTION 321816.13 - PLAYGROUND PROTECTIVE SURFACING
 - SECTION 321823.03 - SPORTS COURT SURFACING
 - SECTION 323113 - CHAIN LINK FENCES AND GATES
 - SECTION 323119 - DECORATIVE METAL FENCES AND GATES
 - SECTION 323129.01 - WOOD FENCES AND GATES
 - SECTION 328400 - PLANTING IRRIGATION
 - SECTION 329113 - SOIL PREPARATION
 - SECTION 329200 - TURF AND GRASSES
 - SECTION 329300 - PLANTS
 - SECTION 329600 - TRANSPLANTING

* Sections provided are supplemental to CDOT specifications. Relevant CDOT specification Divisions and Sections are provided at Appendix B Standard Construction Specifications.

An aerial photograph of a theme park, likely Six Flags Great Escape & Escape Island, taken from a high vantage point. The image shows a large crowd of people walking through the park, which is filled with various rides and structures. In the background, a large roller coaster with a circular loop is visible. The sky is overcast with grey clouds. The entire image has a dark blue tint. The text '01' is positioned on the left side, above a horizontal line.

01

INTRODUCTION



01 INTRODUCTION

The Town of Parker Land Development Code states “The Town hereby finds that it is in the public interest for all developments to provide landscape improvements for the purposes of complementing the natural landscape; improving the general appearance of the community and enhancing its aesthetic appeal; preserving the economic base; improving the quality of life; delineating and separating use area; increasing the safety, efficiency and aesthetics of use areas and open space; screening and enhancing privacy; mitigating the adverse effects of climate, aspect and elevations; conserving energy; abating erosion and stabilizing slopes; deadening sound; and preserving air and water quality.” To ensure that these goals are accomplished, the Town of Parker has developed this Parks, Trails, Open Space & Streetscape Design and Construction Manual (Referred to in this document as ‘Design and Construction Manual’).

This document is intended to be used by developers, designers and contractors in the Town of Parker. It is intended to aid in the planning, design and construction process and to save time by putting forth the expectations of the Town for parks, trails, open space and streetscape design and construction improvements. The Town will not accept maintenance of improvements that do not meet these guidelines and standards. Although this material should be adapted for specific conditions, these standards are to be considered a minimal baseline for development and are subject to change.



a. Goals

The Goals of this Manual were to:

1. Align with the Parks, Recreation & Open Space Master Plan, and Open Space Trails and Greenways Master Plan.
2. Provide flexibility to achieve the desires and aspirations for the highest quality and amenitized parks.
3. Develop a manual that can be easily revised and updated.
4. Provide a manual that incorporates information in a clear and easily referenced format.

Guiding Principles:

1. Promote health and wellness within the community; including active and passive recreational activities.
2. Design all parks, trails, open space and streetscapes to be accessible and inclusive.
3. Create safe communities with a “hometown feel” through programs and amenities within Parker’s parks, trails, and open spaces.
4. Create sustainable and long-lasting public spaces for generations to enjoy.

b. Applicability

This manual provides design guidelines and standards that shall apply to all new park development, redevelopment and improvements to be maintained by the Town of Parker.

This design and construction manual is to be used in conjunction with other planning documents, both regulatory and advisory.

The standards and guidelines identified throughout this document are to be used as tools in assuring that the physical appearance of the built environment provides the guidance necessary to ensure the highest possible standards of design.

Document Navigation:

Use the hyperlinks within this Design and Construction Manual to easily navigate to an outside source.

- Clicking a [green hyperlinked reference](#) takes you to the online reference.

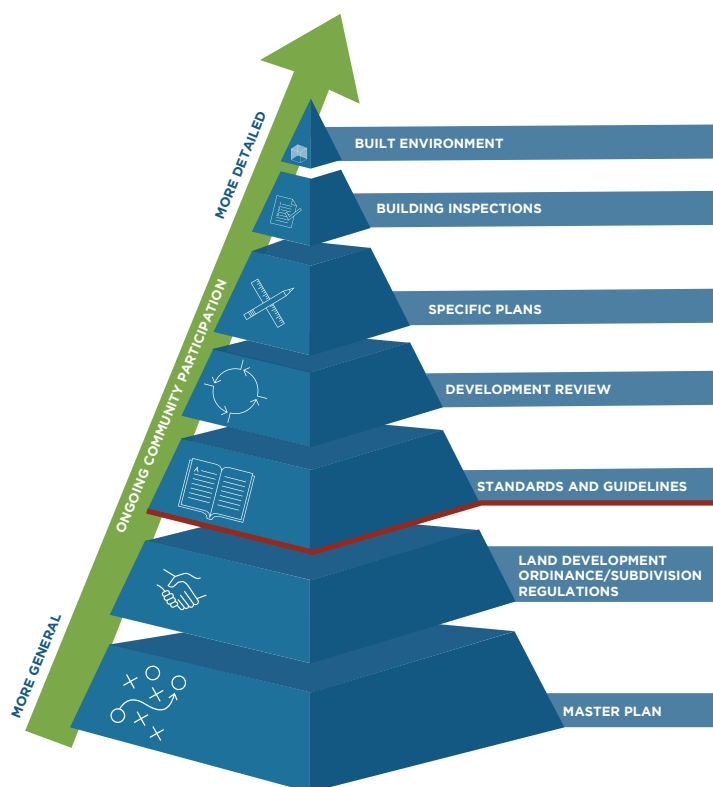
02 PURPOSE

The Town of Parker has developed this Design and Construction Manual to provide design guidance and construction specifications for the planning, design, and development of parks, trails, open space and streetscapes associated with new development and Town projects.

The Design and Construction Manual is a supplement to illustrate and provide specific guidance to the Town's parks, trails and open space Land Development Ordinance. The manual provides design guidelines, construction specifications and details for the Land Development Ordinance requirements for parks, trails, open space and streetscapes. This document shall be used in conjunction with the Town of Parker Land Development Ordinance.

a. Community Process

The pyramid graphic to the right displays how building a community is a cumulative process that involves local government, community participation, and various levels of approval. The 'Standards and Guidelines' (referring to this document) is underlined to show the relationship as part of a hierarchy of building a community and coordination with the Parker Parks, Recreation and Planning Departments.

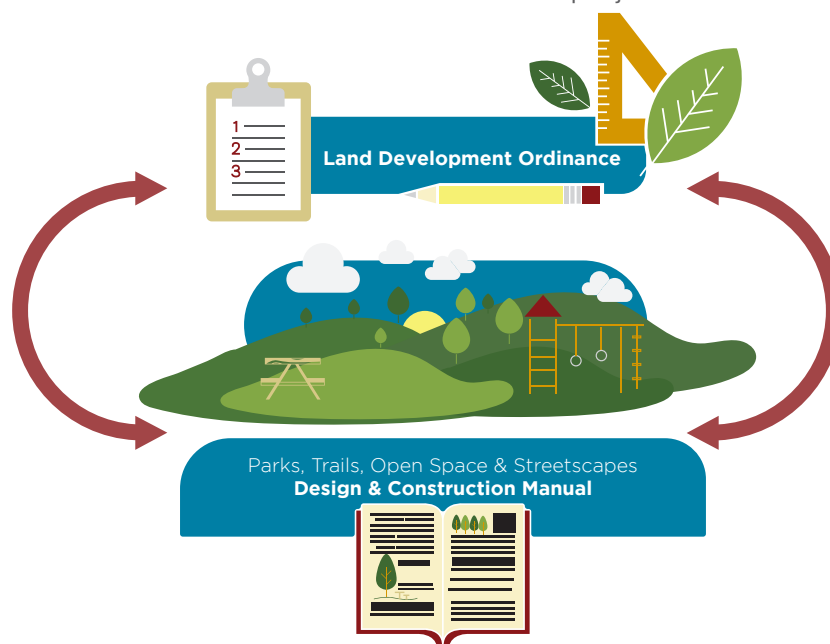




b. Planning Framework

Below is the process for development of the Design & Construction Manual.

- Step 1 - New Design Guidelines:** Develop guidelines to supplement and illustrate the Town's parks, trails and open space Land Development Ordinance standards - to assist developers and park designers in planning and designing these facilities and understanding the Town's expectations and options available. These design standards are incorporated into the Town's newly updated *Parks, Trails, Open Space and Streetscape Design & Construction Manual* (step 2).
- Step 2 - Updates:** Update the Town's current *Construction Specifications and Design Considerations for Parks, Trails and Streetscapes*, incorporating the new design guidelines, and re-title document as the *Parks, Trails, Open Space and Streetscape Design & Construction Manual*. Development of this manual was a collaborative effort between several Town departments including Parks and Recreation, Community Development - Planning, Forestry and Open Space, Cultural, Communications, Engineering and project consultant Hord Coplan Macht.



03 USING THE DESIGN GUIDELINES & CONSTRUCTION SPECIFICATIONS

The Design and Construction Manual shall be used in conjunction with the Land Development Ordinance for the design of new parks and recreational facilities, and rehabilitation of existing parks and recreation facilities within the Town of Parker.

This manual does not substitute for professional experience and sound judgment must be exercised in the design of facilities. The guidelines do not preclude the use of different methods when special conditions or site specific conditions are encountered as long as proper authorization is obtained from the Town of Parker.

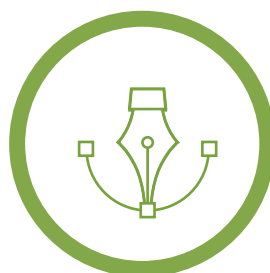
The design and construction of parks and recreational facilities shall comply with standards, guidelines, details and specifications referenced in this document and all other that may apply but not explicitly referenced. If conflicts arise between the Design and Construction Manual and other governing documents, contact the Town of Parker for clarification. If deviation from this manual is necessary or desired, then a request shall be submitted to the Town of Parker for review and approval by the Town. Site Plan Amendment or Adjustment may also be required by Planning.

This manual applies to all facilities and improvements within the Town of Parker. The manual is structured to guide the design of parks, trails, open spaces and streetscapes in order for these spaces, features and amenities to provide facilities for the community that are sustainable, maintainable and safe and enjoyable for the community.

The Design and Construction Manual is a living document and will be updated periodically as needed.



Design Guidelines



Reference Resources



Details



Specifications



a. Organization

This Design and Construction Manual is organized into the following parts:



Part 1: Design Guidelines

- The design guidelines provide best practices, recommended examples, and minimum requirements for the Town of Parker's parks, trails, open spaces and streetscapes.
- The guidelines are divided into six sections of design guidelines, and two appendices that provide Town of Parker standard construction details and specifications.



Part 2: Reference Resources

- The reference resources include key Town of Parker planning documents to refer to for planning, design and construction.
- Other reference resources, codes and standards not listed may be applicable to a project. The developer/designer/contractor shall ensure all current applicable codes, standards and guidelines are followed in the design and construction of projects.



Part 3: Standard Construction Details

- Town of Parker standard details provided within this manual directly correlate to the specifications and guidelines.
- Standard construction details are provided in Appendix A and include site, irrigation, paving & surfacing, park structures, site furnishings & equipment, signage and field & court layout details.
- All details are downloadable through the Town of Parker website. [Click here for link.](#)



Part 4: Standard Construction Specifications

- The Town of Parker standard construction specifications for Parks, Trails, and Open Space are provided in Appendix B.
- All specifications can be requested from the Town of Parker.

b. Reference Resources

References:

Below is a list of additional references to be used in the development of Parks, Trails, Open Space and Streetscapes.

Guiding Documents:

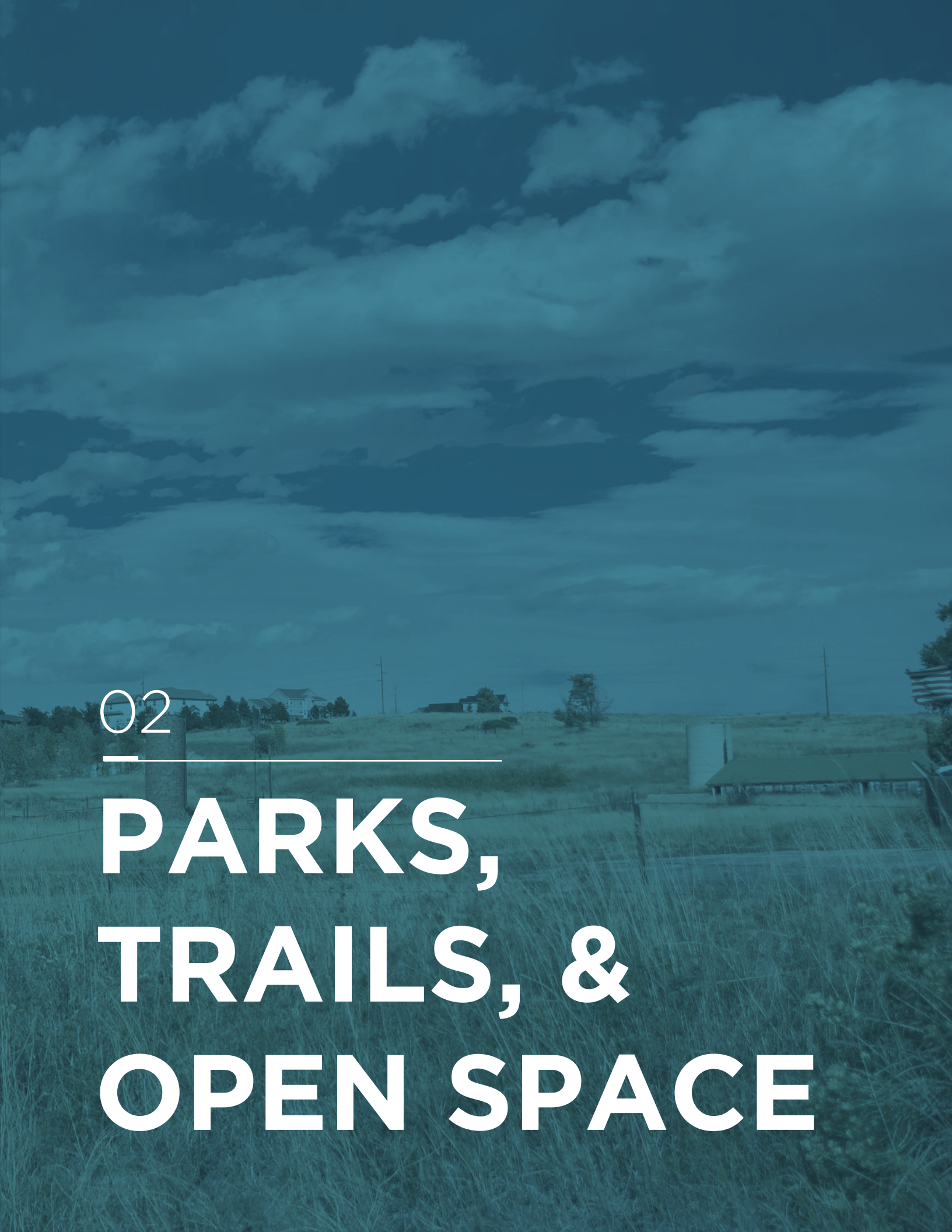
- Town of Parker Municipal Code for complete information on Town requirements and the review process. [Click Here.](#)
- Land Development Ordinance Parks Standards 13.08.030 [Click Here.](#)
- Land Development Code [Click Here.](#)
- Open Space, Trails and Greenways Master Plan [Click Here.](#)
- Roadway Design and Construction Criteria Manual [Click Here.](#)
- Storm Drainage and Environmental Criteria Manual [Click Here.](#)
- Current Town of Parker adopted building code [Click Here.](#)
- Parker Development Design Standards [Click Here.](#)
- Open Space, Trails and Greenways Master Plan (*latest version*)
- Town of Parker's Public Art Master Plan

State, County and National Standards:

- Universal Building Code (UBC)
- Douglas County Health Department (DCHD)
- American Society for Testing and Materials (ASTM)
- Americans with Disabilities Act Standards for Accessible Design (ADA)
- Public Rights-of-Way Accessibility Guidelines (PROWAG)
- American Association of State Highway Transportation Officials (AASHTO)
- American National Standards Institute (ANSI)
- Architectural Barriers Act (ABA) Accessibility Guidelines: Outdoor Developed Areas
- Current version of the ICC Accessible and Usable Buildings and Facilities
- ADA Title II Action Guide for State and Local Governments
- Consumer Products Safety Commission (CPSC)
- Manual on Uniform Traffic Control Devices (MUTCD)
- USDA Forest Service Equestrian Design Guidebook

*Other resources as referenced in this manual



A photograph of a rural landscape featuring a grassy field, a few scattered trees, and some buildings in the distance. The entire image is covered with a semi-transparent blue overlay. The text '02' is positioned on the left side, above a horizontal line.

02

PARKS, TRAILS, & OPEN SPACE

01 INTRODUCTION

Recreation and open space are critical components of a community's quality of life. They provide a variety of necessary opportunities to engage in outdoor recreation, access nature, and engage in both active and passive activities suitable for all residents.

The Town of Parker is committed to providing exceptional public parks, trail systems and open space that will meet the anticipated needs and demands of the residents. The purpose of developing standards is to ensure accessible, safe, and clearly defined options for both neighborhood and community spaces.

As described in the Town of Parker Open Space, Trails and Greenways Master Plan, "Open space and trails are an integral component of the quality of life", and are "central to our identity as a community" (*Parker Online* 4)*. For the most updated town-owned parks, open space, trails, and facilities map, refer to the [link here](#). As parks, trails, open spaces and facilities continue to expand and evolve, the guidelines set forth in this manual are meant to provide a fluid and effective means for new and improved parks, trails, open spaces and facilities that provide high quality amenities for the community.



* = "Open Space, Trails and Greenways Master Plan." *Parker Online*, July 12, 2010, <http://www.parkeronline.org/DocumentCenter/View/21717/Master-Plan-Update-2-with-Maps?bidId=>

02 DEFINITIONS & DESIGN

The words and phrases in this section provide the definitions needed to navigate the Parks, Trails, Open Space & Streetscape Design and Construction Manual.

Key Definitions:

- a. Neighborhood-Serving Parks
- b. Community-Serving Parks
- c. Open Space
- d. Recreation Facility (Indoor or Outdoor)

a. Neighborhood-Serving Parks

Neighborhood-serving parks are subdivision level or smaller parks providing essential recreation opportunities, play space, and small group gathering space to nearby neighborhoods. Amenity requirements and options for the different types of parks are provided in the Land Development Ordinance (LDO). Design of Neighborhood-Serving Parks is required to align with LDO definition and requirements.

Size & Characteristics:

- The minimum size of neighborhood-serving parks shall be one (1) acre. The maximum size shall be (9.99) acres. The preferred size of neighborhood-serving parks is one and one-half (1.5) to five (5) acres. A minimum of ninety percent (90%) of the land shall be developable for park uses.
- Refer to the [*Parker Land Development Ordinance*](#) Section 13.08.030(g)(3)d.8. for additional information regarding size, land and amenity requirements.
- Small to large, accessible park that may contain a variety of functions and activities.
- Create defined edges or boundaries of the park.
- Amenities for active use include but are not limited to playgrounds, play fields, multipurpose courts, gathering areas, or sport court games.
- Designed as outlined in the LDO.
- Park shall contain both active and passive recreational amenities.

Age group requirements:

- Recreational amenities are to be provided for all age groups.
- Playgrounds must include play areas for 2 to 5 year olds, with a preference to also include play areas for 5 to 12 year olds. Allowing a play area for ages 2 to 5 years old only will be made on a case by case basis depending on the surrounding amenities in parks.

Design requirements:

- Character is to match both the surrounding neighborhood and community aesthetic.
- All walkways are to be clearly identified, accessible, and emphasized for safety.
- Amenities are to meet the needs of the surrounding neighborhoods.



b. Community-Serving Parks

Community-serving parks are parks providing a variety of recreation opportunities and specialized uses for several neighborhoods or the entire community. These sites may support organized sports, large group gatherings, active and passive uses, and trails, while also providing access to unique landscapes and natural areas. Design of Community-Serving Parks is required to align with the LDO definition and requirements.

Size & Characteristics:

- Refer to the [**Parker Land Development Ordinance**](#) 13.08.030(g)(3)d.8. for information regarding size, land, and amenity requirements.

Design requirements:

- Refer to the [**Parker Land Development Ordinance**](#) 13.08.030(g)(4)h. for the various options for Parks and Open Space Amenities. Refer to the contents of this manual for further guidelines on these amenities.
- Improve on-site/off-site water quality and integrate water quality treatment when applicable.
- Provide both active and passive recreational amenities.

Age Group requirements:

- Recreational amenities are to be provided for all age groups.
- Provide play areas for 2 to 5 year olds and 5 to 12 year olds.



c. Open Space

Open space is private open land area set aside for the exclusive use and enjoyment of a development's residents, employees, or users. All open space should be left in its natural or existing condition except as determined by the Town. Existing trees and vegetation shall be preserved wherever possible. Refer to [**Parker Land Development Ordinance**](#) Section 13.08.030(g)(3)e.

Open Space Size & Characteristics:

- Minimum percentage recommended. The Town will determine the amount of public open space. Open space to be dedicated and/or set aside on a case-by-case basis depending upon proposed density, lot sizes and characteristics of the subject land, with the goal of achieving a minimum of twenty percent (20%) of the total development parcel as open space.
- Undeveloped land, preserved or partially preserved in its natural state. May contain a variety of environmental qualities such as wildlife corridors, geological features, waterways, scenic views, or natural habitats.
- Preservation of natural areas and resources, preservation of scenic views, greater resident access to open areas and recreation and enhancement to the quality of new development in the Town.
- Varies in size, depending on available land, function, and need.

- Environmentally-focused with minimal outdoor uses by the public. Examples of possible uses include nature trails, scenic view points, or other nature-centered activities.
- More pedestrian-focused, outdoor uses with adequate seating and focal points of activity.

Design requirements:

- Refer to the [**Parker Land Development Ordinance**](#) Sections 13.08.030(g)(4)h. for the various options for Open Space and Open Space Amenities. Refer to the contents of this manual for further guidelines on these amenities.
- Other design requirements may be negotiated between the town and the developer.



d. Recreation Facility (Indoor or Outdoor)

Recreation Facility, Indoor:

Recreation facility, indoor means a commercial recreational use within a building that provides entertainment or sport, including bowling, skating, arcade, health club, and movie theater. Accessory uses may include limited retail, concessions, and maintenance facilities.

Recreation Facility, Outdoor:

Recreation facility, outdoor means recreation and entertainment activities operated by a commercial enterprise that is mostly outdoors including picnic area, outdoor swimming pool, skateboard park, tennis court, basketball court, baseball diamond, soccer and football field, amphitheater, outdoor arena, outdoor theater, drive-in theater, golf course, golf driving range, miniature golf, batting cage, or other similar outdoor recreational uses. Accessory uses may include limited retail, concessions, and maintenance facilities.

Size & Characteristics:

- Size and function can vary depending on program and use. For Town owned facilities coordinated the required program needs, size and associated support amenities required.
- Other functions and/or support buildings and amenities may include concessions, restrooms, meeting spaces, storage, equipment, etc.
- Refer to the [Parker Land Development Ordinance](#) Section 13.02.010 for more clarification on recreational facilities. Table 13.05.A for more information on allowed uses and Section 13.05.030(e) for additional guidelines on commercial uses.
- Recreational facilities constructed in parks and open space shall comply with all applicable Town construction standards and specifications.

Design requirements:

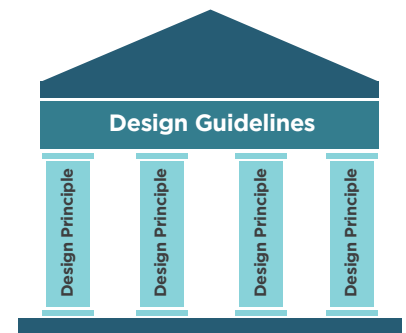
- Provide connectivity to parks, trails, and open spaces.
- Integrate public recreational facilities within or adjacent to parks and open spaces to provide opportunities for multi-use facilities and activities.
- Design and location shall be compatible with adjacent land uses, parks, open spaces, and community character.
- Include adequate parking or other means of transportation for larger events and tournaments.
- Adequate drainage and water quality treatments should be provided, and shall be compatible with adjacent land uses.
- For parking requirements for recreation facilities refer to the Parker Land Development Ordinance and Table 2.5 Community Park Parking Guidelines.

03 DESIGN PRINCIPLES

Design principles are the values and critical considerations that set the foundation for design guidelines, which are covered in section 04 of this chapter.

The design principles for the Town of Parker Parks, Trails, Open Space, and Streetscapes are as follows:

- a. Design for People and Safety (CPTED)
- b. Design for Accessibility (ADA) Compliance
- c. Design for Flexibility & Adaptability
- d. Design to Preserve & Enhance the Parks' Natural Features & Characteristic Landscape
- e. Design for Sustainability, Maintenance & Programming
- f. Design for Compatibility with Neighborhoods/Community



a. Design for People & Safety (CPTED)

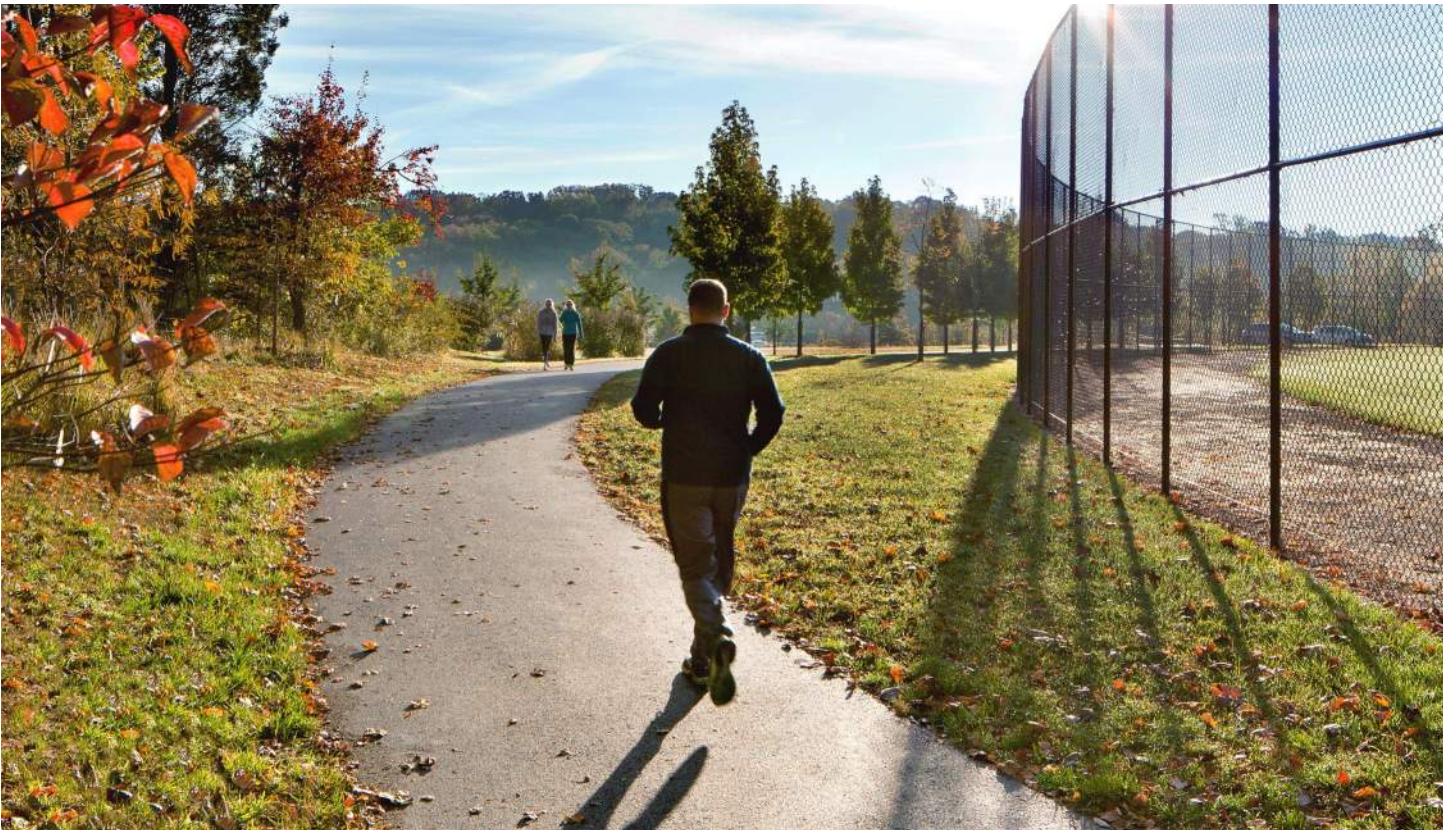
Crime Prevention through Environmental Design, or CPTED, is an approach that combines planning and design standards with crime prevention programs in communities. The design of public spaces can have a direct impact on the perception of safety within the Town of Parker, and include the following principles:

1. Encourage Safety Through High-visibility (Natural Surveillance)
2. Ensure Accessibility (Natural Access Control)
3. Clearly Define Public and Private Areas (Territorial Reinforcement)
4. Maintain and Care for Public Spaces (Maintenance and Management)



1. Encourage Safety Through High-visibility

- Maximize visibility from adjacent buildings and roads throughout open spaces and parks.
- Maximize surveillance on site by activating spaces with programming.
- Ensure views are unobstructed.
- Ensure well-defined, well-lit park entry and exit points.
- Concentrate activity areas that encourage multiple park users to congregate in designated areas for increased periods of time.
- Where applicable, provide water, shade, and seating to encourage the extended presence of visitors to parks.
- Provide security level lighting throughout the park.



2. Ensure Accessibility

- Ensure well-designed trails, landscaping, and other amenity orientation to guide visitors through a space.
- Ensure adequate bollards and/or barriers to restrict vehicles from entering public spaces.
- Ensure thoughtful design of furnishing placement to indicate pedestrian areas.
- Ensure fencing is adequately designed and placed to promote safety for children and families (prioritize play areas and recreational areas).
- Where applicable, ensure gates within fencing to help control access and promote safety.
- Establish clear signage that promotes easy wayfinding.

3. Clearly Define Public and Private Areas

- Ensure a clear distinction between Public vs. Private ownership.
- Ensure clear signage for recreational spaces.
- Where applicable, provide trees and/or formal planting to create natural barriers.
- Where applicable, provide hardscape and/or paving to create man-made indicators.

4. Maintain and Care for Public Spaces

- Indicate care and ownership over spaces to create a sense of place and pride.
- Ensure vandalism is quickly addressed to help ensure a sense of safety (paint over graffiti, within a reasonable amount of time repair/replace any damaged amenities).
- Create a visible presence.
- Trim and maintain trees and vegetation that may obscure park and open space lighting.

b. Design for Accessibility (Americans with Disabilities Act) Compliance

Accessibility and inclusion are critical to providing outdoor spaces that users of all abilities can access and enjoy safely. All public parks, trails, open spaces, streetscapes, and park amenities shall be designed to meet Americans with Disabilities Act Guidelines. Designs shall go beyond the minimum accessibility and meet universal principles as well. Refer to the below references for accessibility.

1. Accessibility References

- 2010 ADA Standards for Accessible Design (ADA)
- Public Rights-of-Way Accessibility Guidelines (PROWAG)
- ADA Title II Action Guide for State and Local Governments (parking, sport courts, fields, playgrounds etc.)
- Architectural Barriers Act Accessibility Guidelines: Outdoor Developed Areas
- United States Access Board for outdoor developed Areas Chapter 10 Accessibility standards for federal outdoor developed areas
- ICC Accessible and Usable Buildings and Facilities

2. ADA vs. Universal Design Principles

ADA and Universal Design share many of the same core design principles. ADA standards are regulations and codes enforced by federal law, whereas Universal Design goes beyond these standards by proposing ways in which designs can create spaces for all users. According to the American Society of Landscape Architects (ASLA), “Landscape Architects and designers can apply universal design principles to create more inclusive spaces for underserved communities, which include those who experience” (“Professional”)*:

- “Disabilities and/or limited mobility”
- “Aging”
- “Lack of community access”
- “Neuro-cognitive disorders”
- “Neurodevelopmental and/or Intellectual Disabilities”
- “Blindness and Low Vision”
- “Deafness and Hardness of Hearing”

ASLA also notes that “Universal landscape planning and design ensures people with disabilities can better participate in public life. These principles, which build off The Center for Universal Design’s principles, should guide the planning and design of all public spaces, regardless of intended audience” (“Professional”)*:

- Accessible
- Comfortable
- Participatory
- Ecological
- Legible
- Multi-Sensory
- Predictable
- Walkable / Traversable

By recognizing the various needs, abilities, and limitations of all community members, public spaces and recreational activities become more family friendly and inviting for all users.

3. Town of Parker ADA and Universal Design Guidelines for Parks and Open Spaces

- Accessibility to all local parks, trails, open space, streetscapes and recreation facilities is to be a priority.
- Any facilities that do not currently meet ADA accessibility design guidelines shall be updated when a renovation or improvement project occurs. This includes public parks, sports fields, outdoor courts, town pools, parking spaces, toilet facilities, spectator seating, and recreation centers.
- When possible, elements of universal design shall be included in all new construction.
- Refer to Play Space & Equipment Section 02(04)(d)(vi). for more information on how to incorporate universal design and inclusion into playground spaces and surrounding park space.

* = “Professional Practice.” ASLA, <https://www.asla.org/universaldesign.aspx>. Accessed 16 February 2023.



c. Design for Flexibility & Adaptability

Designing spaces that are flexible and adaptable to changing trends, functions, or environmental factors best ensures that public spaces continue to be well used and appreciated by the community. Designing for flexibility and adaptability in park design provides opportunities for multi-use design to accommodate a variety of uses and activities, including recreation, events, and passive uses.

The following design principles and considerations for flexible and adaptable spaces are as follows:

1. Design public spaces with diverse elements that accommodate a range of demographics and users of all abilities.
2. Design spaces that are flexible and adaptable to changing trends, functions, and environmental factors within a neighborhood or community.
3. Park design should allow for seasonal adaptability with areas designed to accommodate seasonal activities as appropriate.
4. Consideration should be given to adaptive reuse of existing buildings and structures within the park and open spaces, preserving heritage and history, while providing flexible spaces.
5. Provide multi-functional open spaces and parks to allow for various large and small scale events and activities for all ages.





d. Design to Preserve & Enhance the Parks' Natural Features & Characteristic Landscape

Designing spaces that preserve and enhance park and open spaces' natural features and characteristic landscape is essential for ensuring community value and a sense of place.

The following design principles for preserving natural features in open space and park design are as follows:

1. Use of native, adaptive and xeric plants to minimize water overuse and promote healthy ecosystems.
2. Avoid construction near wetlands, nature preserves, or other protected natural areas.
3. Provide water sensors or other irrigation devices to help minimize over-watering.
4. Do not remove topsoil from sites, to ensure the health of the soil and vegetation.
5. Preserve existing natural spaces and limit their disturbance as much as possible.
6. Limit the disturbance of fallen trees and mulch, unless it causes a public safety issue. Undergrowth is important for natural habitats.
7. Use mulch and compost for new vegetation.
8. Provide adequate seating that takes advantage of natural views for areas for the community to appreciate.
9. Encourage educational signage to be installed in areas that preserve or enhance nature, to educate the public on the value of a particular area and promote a sense of pride.
10. Promote the use of sustainable and environmentally friendly design.
11. Design spaces that include native planting and a reduction of water use.

e. Design for Sustainability, Maintenance & Programming

Sustainability is a broad term most often described as “meeting the needs of the present without compromising the ability of future generations to meet their needs.” - Brundtland Report for the World Commission on Environment and Development 1992.

The Town of Parker is committed to providing spaces that meet and support sustainable design, proper maintenance, and appropriate programming. The design principles to be considered are as follows:

1. Choose sustainable materials and construction techniques. Consider using recycled or salvaged materials, locally sourced materials, and materials that have a low environmental impact.
2. Minimize the impact of development by preserving existing vegetation, minimizing grading, and using sustainable construction methods.
3. Choose low-maintenance plants and materials that require minimal watering, pruning, and upkeep.
4. Use natural drainage systems to minimize the need for irrigation and stormwater management.
5. Design public spaces to be durable and low-maintenance by using construction techniques that minimize erosion, and resist damage from heavy use.
6. Incorporate energy-efficient lighting, heating, and cooling systems.
7. Implement sustainable water management practices such as rain gardens, bioswales, and permeable paving.
8. Reduce the amount of hard surfaces (i.e. pavement, concrete, etc.) in order to diminish air pollution caused by the heat island effect.
9. Enhance biodiversity in parks, trails, and open spaces by preserving and restoring habitats, creating wildlife corridors, and planting native species.

f. Design for Compatibility with Neighborhoods/Community

The purpose of designing public spaces that are compatible is to protect established neighborhoods and growing communities by recognizing their distinct characteristics and addressing how the design can contribute to that character.

When improving upon an existing design, or adding a new park or open space, the following design principles should be followed:

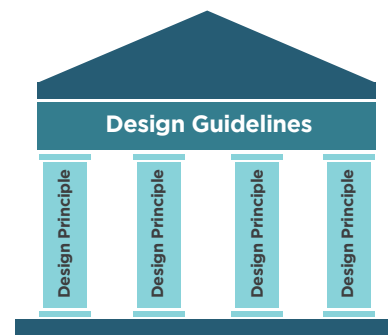
1. Assess if there is a prevalent pattern of design characteristics within a given neighborhood or area of the community, and ensure the new design adapts and maintains a similar pattern.
2. Encourage compatible designs that do not deviate substantially from the established pattern.
3. Encourage compatibility through adherence to a higher standard of design and construction, without hindering efforts to improve and upgrade neighborhoods.
4. Design spaces that are flexible and adaptable to changing trends, functions, and environmental factors within a neighborhood or community.
5. Provide multi-functional open spaces and parks to allow for various large and small scale events and activities for all age groups.
6. Neighborhood site furnishings can be flexible from the design standards set forth within this document. However, all selected furnishings must be commercial grade quality.

04 DESIGN GUIDELINES

Design guidelines are more specific applications for design that are layered with the design principles outlined in Section 03 of this Chapter. All of the following design guidelines are supported by the principles.

The design guidelines for the Town of Parker Parks, Trails, and Open Space are as follows:

- a. Natural Features
- b. Local & Regional Connectivity
- c. Sustainable Practices & Maintenance
- d. Parks and Open Space Amenities





a. Natural Features

The physical characteristics of a site, topography, natural features and viewsheds shall be considered early in the design process. The evaluation of key site characteristics will ensure the least disturbance of the existing site and protect the most valuable natural features including but not limited to vegetation and tree groves, steep slopes/topography, drainage ways and view corridors.

i. Topography/Natural Features

The design of topography and natural features shall ensure protection of significant topography and natural features, a safe design, adequate drainage, and proper maintenance.

Guidelines for topography and natural features include:

1. Protect all significant natural features including but not limited to: drainageways, groves/forests, prairies, riparian areas, rock outcroppings, wildlife corridors, native landscapes, etc.
2. Utilize the natural site topography and preserve areas with significant slopes.
3. Design to take advantage of the solar exposure of slopes by integrating amenities of the built environment into the compatible exposure.
4. Utilize existing topography that may provide buffers and barriers to surrounding uses.

5. Natural features are to remain as natural as possible with minimal maintenance, to encourage a healthy ecosystem and wildlife corridor connections.

ii. Floodplain/Riparian Areas

The Federal Emergency Management Administration (FEMA) defines a floodplain as any land area susceptible to being inundated by floodwaters from any source.

A riparian area is defined by the Colorado Department of Parks and Wildlife and U.S. Environmental Protection Agency (EPA) as “the areas alongside a river or stream. These conditions support a unique set of wildlife species” (“Riparian”)*.

Both of these areas are important for habitat conservation in and around parks and open spaces.

* = “Riparian and Wetland.” *Colorado Parks and Wildlife*, <https://cpw.state.co.us/conservation/Pages/CON-Riparian-Wetland.aspx>

The following guidelines are to be followed to maintain a healthy ecosystem and to keep the public safe:

1. Floodplain and riparian areas are to be preserved as much as possible.
2. Uses within these zones shall be restricted to those which are required by public necessity. Examples include but not limited to bridges, water pumps or control structures.
3. Use is to be restricted from public recreation. Exceptions may include activities with minimal impacts such as boardwalks, greenbelt trails, or educational signage.
4. Wildlife habitat improvements are acceptable uses within these zones as long as they have minimal impact to the surrounding ecosystem. Examples include the planting of native vegetation, installation of nesting structures, or riparian clean-up or restoration activities.
5. All use or encroachment activities must meet the approval of the Federal Emergency Management Agency and National Flood Insurance Program, and does not jeopardize the Town's participation in the Natural Flood Insurance Program.

iii. Vegetation/Soil Preservation

Preserving existing vegetation and the quality of soil and topsoil will benefit the health and microbial diversity of an ecosystem. Topsoil is the nutrient-rich, mineral-dense upper most layer of soil that contains natural organic matter essential for healthy plant growth.

Design guidelines for vegetation preservation:

- Create or preserve existing vegetative ecosystems that reflect the native conditions of the area.
- New construction designs shall avoid disturbing or preserve as much of the existing vegetation as possible.
- Where possible, existing trees are to be protected with tree protection fencing during construction.
- Consult a licensed Arborist to identify and assess any existing historic vegetation prior to project work.

Design guidelines for soil preservation:

- Native soils are to be preserved on site as much as possible. Minimize the amount of foreign soil imported from other locations.
- Improve upon local soils by providing good composition, structure, aeration, nutrients, and drainage.
- Conduct a horticultural suitability soil test for any new improvement or project work. Results and recommendations from this test shall be incorporated into the plans and specifications. Results shall determine the type and rate of soil amendments, if leaching is required, and the details of future maintenance requirements.





iv. Earthwork and Drainage

- All earthwork operations shall be executed in a manner which minimizes dust, noise, excessive accumulation of debris, danger to the public and interference with other construction.
- Positive drainage shall be provided at all times throughout the earthwork operations.
- Completed grades shall be smoothly and uniformly sloped, properly compacted, and shall provide drainage away from site improvements. All banks or slopes constructed shall be maintained in a stable condition to prevent slips, washouts or erosion, by approved methods. All maintenance shall be at the Contractor's expense until Town acceptance (typical warranty period is two (2) years. All finished grades to be within .2 feet (two tenths) of final design grade elevation.
- No area to be seeded or sodded shall be steeper than a 4:1 maximum slope (4' horizontal: 1' vertical), nor flatter than a two percent (2%) minimum cross slope. Areas where water will be likely to collect may require a steeper grade in order to drain adequately.
- Storm drainage ditches, water quality and detention ponds shall be designed to handle the appropriate design storm flows, and to provide ease of maintenance. For design of stormwater facilities refer to the Town of Parker Storm Drainage and Environmental Criteria Manual.
- Grading, storm drainage and related drawings shall clearly describe treatment of transition areas from vertical headwalls to adjacent 4:1 maximum slopes, detailed grades at pipe inlets and outfalls and similar situations. Rip rap results in difficult maintenance - its' use shall be limited except as required by the Town of Parker Storm Drainage and Evaluation Criteria Manual and consideration given toward ease of maintenance.

b. Local & Regional Connectivity

The Town of Parker trail systems are for both local and regional connectivity. A well-connected network of paths, trails, and multi-modal routes provides an effective means to accommodate all forms of multi-modal travel to neighborhoods, the town center, adjacent public uses and to and through parks and open spaces.

i. Connectivity

Bicycle trails should conform to:

Designing local and regional connectivity to parks, trails and open spaces is essential for creating accessible and enjoyable outdoor spaces for communities. The following are some guidelines to consider when designing for connectivity:

- Parks, trails, and open spaces should be designed to meet the needs of a range of users, including walkers, joggers, rollers, cyclists, families with strollers, and people with disabilities.
- Determine potential routes and connections between the park, trail or open space, including sidewalks, bike lanes, and public transportation options.
- Ensure that all routes and connections prioritize safety and accessibility for all users, including pedestrians, cyclists, and those with disabilities.
- Provide a range of connections to accommodate different modes of transportation, including bike paths, walking trails, and public transportation. This will encourage a wider range of people to access the parks, trails, and open spaces.
- Consider the potential for future growth and development in the area and plan for connectivity that can accommodate that growth.



[Refer to the link here for Existing and Proposed Town-Maintained and Owned Parks, Open Space, Trails and Facilities Overview](#)



c. Sustainable Practices & Maintenance

Parker is committed to protecting water resources via green infrastructure practices, reducing urban heat island effect with healthy tree canopies, and ensuring the materials and practices used are beneficial to the long-term health of the community. Parker is also committed to designing with sustainable and best management practices that enhance and minimize the disturbance to long term use and functionality of the surrounding ecosystems. Included with these commitments is the ability to sustain low maintenance designs and operation costs.

i. Landscape

According to the American Society of Landscape Architects (ASLA), “sustainable landscapes are responsive to the environment, re-generative, and can actively contribute to the development of healthy communities”. In addition, these landscapes “sequester carbon, clean the air and water, increase energy efficiency, restore habitats, and create value through significant economic, social and, environmental benefits” (“Designing”)*.

The term “landscaping” refers to planting trees, shrubs and ground cover, placement of boulders and decorative rock, bed edger materials, mulches and related work. Planting design shall utilize Xeriscape principles. Irrigated turf shall be used in active areas only and native and xeriscape planting shall be utilized in all other areas. Landscape plan final drawings, specifications and details shall be submitted to the Town for review and approval prior to construction.

Selecting the right plant for the right place within a site promotes health and longevity of the plant and reduces maintenance needs.

* = “What are Sustainable Landscapes?” ASLA, <https://www.asla.org/sustainablelandscapes/about.html#:~:text=What%20are%20Sustainable%20Landscapes%3F,the%20development%20of%20healthy%20communities>.

1. PLANT MATERIAL

- Refer to the [Town of Parker Recommended Plant List](#) for acceptable species. Species not listed on the “Preferred Plants” list may be submitted for consideration, provided they are not on the Towns “Excluded Species” list.
- Adequate variety (Biological Diversity) in the planting shall be provided to avoid epidemic insect or disease problems.
- Minimum average plant sizes shall be as follows:
 - » Deciduous shade trees - 2.5” caliper - measured 6” above ground, per “American Standard for Nursery Stock” ANSI Z60.1-1996.
 - » Ornamental trees - 2” caliper - measured 6” above ground, per “American Standard for Nursery Stock” ANSI Z60.1-1996.
 - » Evergreen trees - 6’ minimum height, measured to midpoint of most recent year’s growth.



- Shrubs - minimum of 5 gallon or larger, 2'-3' in height for deciduous, 18" - 24" spread for junipers, or as per "American Standard for Nursery Stock" ANSI Z60.1-1996.
- Design guidelines for landscape design:
 - » Plants shall be hardy to this area, in a healthy and vigorous state of growth, and conform in size, shape and character to the most recent edition of the American Association of Nurserymen Standards.
- All material shall be planted in accordance with the Town of Parker Details and Specifications.
- Where a screen or buffer is indicated on an approved landscape or site plan, the shrubs or other materials shall be planted and maintained to provide a continuous solid visual screen within 3 years from the time of planting.
- Installation of accepted root barriers may be considered for approval on a case by case basis.
- Refer to the [Parker Land Development Ordinance](#), Chapter 13 for other landscape requirements.
- Provide higher density planting in areas vulnerable to erosion.
- Xeriscape principles for landscape design are recommended, to meet sustainability goals. Native, xeric, and regionally adapted plants shall be used.
- Where applicable, design planting beds with shrubs and perennials.
- Plant varieties should be selected for year round interest (deciduous and evergreens, varied blooming throughout the growing season, winter berries, or ornamental grasses and low maintenance).
- Do not plant varieties that have any form of poisonous parts, thorns, or flowers that attract bees near playgrounds or other amenities that children could congregate.
- Do not locate plantings in areas that could be easily trampled in activity and social gathering areas where social paths between activities/amenities may form.
- Sizing and spacing in planting design:
 - » Shrubs and perennials should be spaced keeping mature spread and height in mind.
 - » Size perennials, shrubs and ornamental grasses at 100% mature growth. Masses of plants can be spaced at 75-80% mature growth.
 - » Group plantings with similar growth requirements for optimal growth and reduced maintenance needs.
- Separate plantings from turf areas with concrete mow bands, edging strips or sidewalks.

- Shrubs, perennials, and groundcovers should be spaced at a minimum of one-half of their mature diameter from all walkways to prevent impeding on walkways, parking lots or drives and the need for additional maintenance.
- Plant height should not obstruct visibility within sight triangles located at entries, drives, trail crossings, or at park or facility signage. Planting heights within parking lot islands shall not obstruct visibility within parking lot circulation.
- Refer to the [Parker Land Development Ordinance](#) Section 13.06.070 for other landscape maintenance requirements.
- Edging materials placed near building foundations shall allow for positive drainage away from the structures.
- Native or drought-tolerant approaches to landscaping will be considered, and are encouraged for planting in appropriate areas.
- It shall be noted that adequate permanent irrigation must be provided for establishment and maintenance, and that native grasses shall be maintained in a condition of acceptable height, free of weeds and debris, and shall not represent a fire hazard nor become a nuisance site for water or wind erosion. Native shrubs and trees, due to their drought-tolerance, are recommended in these areas.

2. GROUND COVER

- Ground covers should be spaced to ensure full coverage within two years of installation.
- Grass or other living plants shall be the primary ground cover in landscaped areas.
- Sodding is recommended but grass seeding is allowed under special circumstances.
- Vines are an acceptable ground cover in non-pedestrian areas.
- Ground covers used in lieu of grass shall be planted to present a finished appearance and complete coverage after three growing seasons.
- Other types of ground cover, e.g. bark mulches, wood chips, boulders, cobble or river rock, and similar shall be limited to small areas. Boulders, cobble, and river rock shall be placed over a suitable weed barrier or ground fabric.
- Native grasses shall have above ground temporary irrigation systems installed capable of providing head to head coverage.
- Native seed mixes shall consist of native species appropriate for the location. The seed mixes shall be established based on soil conditions and surrounding vegetation and shall utilize native and native adaptive species.
- Refer to [Section 05 Parks, Trails, and Open Space & Streetscape Materials](#) for additional information.



ii. Irrigation

Properly designed and functioning irrigation systems are beneficial both economically, environmentally, and is a sustainable practice.

An irrigation system refers to a permanently-installed (or temporary for native seed areas) automatic, underground pop-up irrigation system, which might include spray or rotor heads, bubblers, drip or trickle emitters or a variety of products. Manually operated systems are not acceptable.

1. IRRIGATION SYSTEM DESIGN

- The Contractor (or their design consultant) is requested to meet with Parks Staff to establish irrigation program requirements on a project-by-project basis prior to beginning design. Final drawings, specifications and details shall be furnished, subject to review and approval by Town Parks Staff, prior to design completion.

Design guidelines for Irrigation:

- Refer to [Appendix A for Standard Irrigation Details](#).
- Refer to [Appendix B for Irrigation Specifications](#).

- The irrigation system shall provide head to head coverage for all irrigated areas.
- Overspraying of buildings/structures, walks, trails, parking and other site features is not allowed.
- Coordinate planting and hydrozones to provide the appropriate water use.
- Meet with the local water service provider, and provide water service provider documentation (Landscape/Irrigation Worksheet and any other required documentation) to determine adequate tap size based on irrigation demand. All irrigation systems shall be approved by Parker Water and Sanitation District and Parks staff.
- Provide adequate number of zones to irrigation within the water window. Coordinate required water window with Parks staff. The design must obtain the Town's water window during the initial design phase.
- Temporary above-ground irrigation systems are acceptable only in locations of native seed establishment and must be in place for two years.



COVERAGE

1. All irrigation systems shall be designed to properly irrigate “bluegrass” type turf, regardless of whether “bluegrass” is originally seeded or sodded. “Native Seed” areas shall have irrigation designed in the same manner. Irrigation system design shall exceed minimum coverage requirements to ensure sustainability.
2. Provide pressures as needed to operate heads per manufacturer’s recommendation.
3. Regarding precipitation rate, all systems shall be capable of applying one and three-fourth inches (1-3/4”) of water per week to the irrigated area. Watering time shall not exceed eight (8) hours per day for seven days per week (design for every third day watering or similar is encouraged). Tap size (s) required shall be determined by the water service provider.
- Precipitation rates of sprinkler heads selected shall be appropriate to plant material, slope, soil, intake character and similar criteria, and the precipitation rate for sprinklers on one valve shall not vary by more than ten percent (10%) unless approved by Parks Staff.
- Areas with significantly different watering needs, i.e. slopes vs. level areas, bed areas or north-facing vs. south-facing areas shall be valved separately.
4. Head spacing shall be rated, at a minimum, for 5 mile per hour winds, per manufacturers’ recommendations. In no case shall maximum spacings exceed the following:

Triangular

S = 50% catalog diameter maximum

L = 86% of head spacing (+47%) catalog diameter maximum

Square

S = 50% of catalog diameter maximum

Rectangular

S = 45% catalog diameter maximum

L = 60% catalog diameter maximum

VELOCITY

The irrigation system shall be designed and its components selected so that the velocity in the copper service line from tap to meter does not exceed five feet per second (5 fps) and so that velocity in all other system piping does not exceed five feet per second (5 fps). Flow in gallons per minute shall not exceed 75% of the maximum safe-rated flow through the meter. Furthermore, surge pressures shall be calculated and if necessary, slower-opening and closing valves, air vent/vacuum relief valves or other components shall be specified to preclude damage from surge pressures.

DRAIN VALVES

- No automatic drains will be accepted. Mainline pipe shall be graded to drain toward manual drain valves at all low points on the mainline. The drain valve shall be as specified, and installed with valve box, gravel sump and related work. Gravel sumps shall be sized to hold the total volume of water which will drain to the sump from the pipe. Where possible, pipe shall be drained into a ditch or similar channel and water carried away.
- Adequate isolation valves and blowout connections shall be provided so that system may be conveniently blown free of water with an air compressor.

ELECTRICAL

The Contractor (or his design consultant) shall determine the electrical demand, and shall coordinate with CORE, or local service provider regarding the electrical service. All timing and costs for electrical service shall be the responsibility of the Contractor until the project is accepted by the Town, and this portion of the work is also subject to review and approval by Parks Staff. All electric service shall be independent from any other systems.

2. IRRIGATION MATERIALS

The Town has standardized irrigation equipment and materials. Refer to Appendix A and B for irrigation details and specifications. All irrigation equipment selected shall be represented by a local distributor who carries replacement parts. Install only new, non-damaged or repaired irrigation materials. Used materials will not be accepted.

SPRINKLER HEADS

- All sprinkler heads for a particular function in a system shall be of the same manufacturer in spec.
- Shrub heads, bubblers, trickle emitters and other xeric irrigation equipment shall be as approved by Parks Staff on a project-by-project basis.
- To prevent runoff and maximize sprinkler head effectiveness, maximum application rate shall be 1.25 inches per hour.

BACKFLOW PREVENTION

- Only a Reduced Pressure Backflow Preventer Assembly is acceptable. No other devices or combinations will be accepted. All devices and installations must be in accordance with the applicable water and sanitation district specifications.
- The Town follows the requirements of the Uniform Plumbing Code, latest edition, for the protection of potable water supplies. Direct specific questions to Parks Staff.

RISERS

- Risers for spray heads, gear driven rotary heads, and drip emitters should only be employed when needed due to site constraints, and only when approved by Parks Staff.

PIPE

- All pipe running from the tap and water main to the meter shall be in accordance to applicable water and sanitation district specifications and tap, meter and service line shall be the same nominal pipe size.
- All mainline elbows, tees and plugs shall be thrust blocked in accordance with the details and specifications. 3" and larger mainlines are to be gasketed and designed with pipe restraints.

VALVES

- Master shut-off valves and flow sensors should be integrated with the automatic irrigation controller.
- Each remote control valve shall irrigate a hydrozone with similar microclimate, soil conditions, slope, and plant materials with similar water demand.
- The flow control stem on a regular automatic control valve shall not be used to cut pressure by more than twenty percent (20%).
- Gate valves for use inside the meter vault or as a curb stop shall be per the Water District specifications. Gate valves on the irrigation mainline shall be in accordance with the details and specifications, and as approved by Parks Staff.

VALVE BOXES

- Cut or modified boxes are not permitted.
- Extensions shall be furnished as necessary. Design must follow specified size based on size and quantity of valves installed, and in accordance with the details and specifications.

PUMPS

- If a pump(s) is required, all materials shall be subject to review and approval by Parks Staff.



d. PARKS & OPEN SPACE AMENITIES

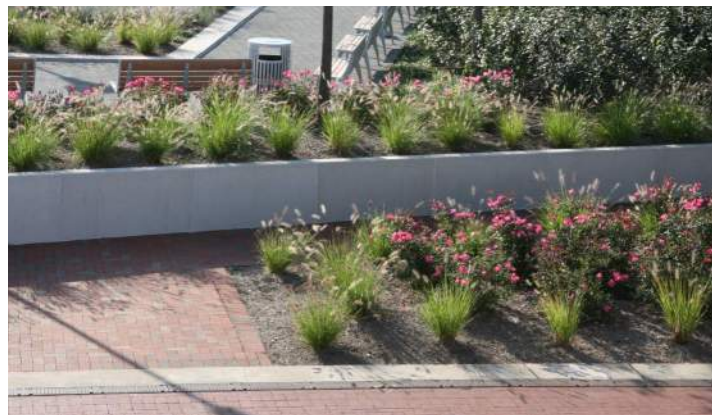
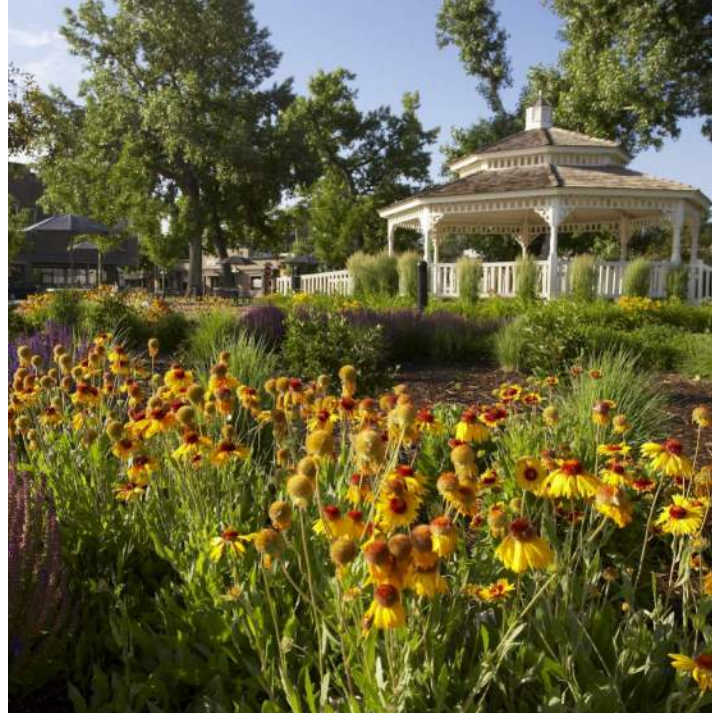
i. Gardens

1. ARBORETA/ DECORATIVE GARDEN

An arboreta and/or decorative garden is a public, botanical collection containing trees and mainly woody plants for educational and ornamental purposes.

Design Criteria:

- Sizes will vary based on site constraints and community need. Size shall be minimum 1000 square feet for a Decorative Garden and 5 acres for an Arboreta.
- A decorative garden shall include a variety of woody shrubs and perennials that provide flower from spring through fall and provide fall color.
- An arboreta shall provide a variety of low water use trees located in an area that is accessible to the public and provides space for sitting on the grass, seating on benches and educational signage.
- ADA accessible walkways are to be provided throughout.
- Educational signage and plant labels are encouraged.
- Gardens are to be highly visible and well-lit to ensure safe usage by the public.
- Refer to Section 02(04)(d)(X.) [**Table 2.4 Community Park Parking Guidelines**](#) for information on minimum parking space requirements.



Amenity Guidelines:

- Provide a minimum of (2) seating areas per garden space.
- Provide a trash receptacle at the entry/exit points of the garden.
- Provide signage at the entry of the arboreta/ garden indicating rules and regulations specific to the space.
- Provide irrigation per Town standards.



2. COMMUNITY GARDEN/ RAISED GARDEN

A community garden is a piece of land where residents of the community can cultivate and maintain a garden. This type of space typically consists of at-grade and raised garden beds.

Design Criteria:

- Size is determined by the amount of space needed to support the local demand.
- Shall consist of a minimum of (12) beds, size 12'L x 4'W or 8'L x 4'W).
- Provide water hydrant at each end of the garden and within adequate hose length to all areas of the garden.
- Back-up drip irrigation is required.
- All applicable water regulations and conservation strategies shall be applied.
- Plots are to be organized to maximize efficiency.
- Do not locate gardens above septic fields or within close proximity to streams or natural water features.
- ADA accessible walkways are to be provided throughout gardens and between garden plots.
- Parking and restrooms should be located within a convenient distance from the gardens.
- Refer to Section 02(04)(d)(X.) [**Table 2.4 Community Park Parking Guidelines**](#) for information on minimum parking space requirements.
- Provide signage at the entry of the garden indicating rules and regulations specific to the space.
- Provide a 4' height ornamental transparent perimeter fence around the garden space. Must meet local fire and building codes.
- Provide adequate setbacks for vehicular pathway and double-gate entry for maintenance and emergency access.
- Provide a minimum sized storage shed of 100 square feet. Must meet local fire and building codes. Storage shed materials shall compliment adjacent community.



Amenity Guidelines:

- A minimum of (1) elevated ADA -compliant garden bed is to be provided. A shallow planting shelf or designated space for a wheelchair to easily access the planter shall be part of the design.
- Provide (1) trash & recycling receptacle at the entry/exit point of the garden.
- Provide a minimum of (1) compost bin adjacent to the garden beds.



ii. Gathering & Social Spaces

Gathering and social space design strategies are important, flexible areas that allow for a multitude of events and assemblies. A variety of sizes and amenities can be included within these spaces, depending on the expected use and direction of the town.

1. OUTDOOR PERFORMANCE SPACE/STAGE

Outdoor performance spaces/stages are open air venues that provide a unique social gathering space for the community. They shall include sloping or terraced seating. They can range in size from small, intimate spaces to large areas with freestanding structures.

Design Criteria:

- Size is determined by the amount of space needed to support the event type. Size requirement to be approved by the Town.
- Designs and style shall match the character of the neighborhood and Town.
- The amount of seating and size of stage shall be determined based on anticipated performances and event types.
- The amphitheater shall meet all ADA guidelines.
- Compatible option with Community-serving Parks only.
- Multi-use structures are encouraged when stage is not in use (eg. picnicking).

Amenity Requirements:

- Multi-use shade structure/Band shell (for stage)
- Adequate parking
- ADA Accessible walkways
- Electrical connections suitable for stage-like performances
- Permanent restroom facilities
- Signage
- Seating and/or open area for gathering
- Public drinking fountain
- Adequate lighting for evening events
- Permanent seating and/or open area to allow temporary seating.
- Refer to Section 02(04)(d) (X.) [Table 2.4 Community Park Parking Guidelines](#) for information on minimum parking space requirements.



2. FESTIVAL/ EVENT SPACE

Festival and event spaces are flexible areas that suit the needs of a variety of event types and sizes. Depending on the location, the space can function as passive park space, street, or multi-use field during non-event times, and can also occupy large crowds and temporary structures during specific events. Minimum size shall be a minimum of 30,000 square feet. Size requirement to be approved by the Town.

Design Criteria:

- Refer to the Parker Land Development Ordinance Section 5.02.840 for local festival permit requirements., and Section 13.04.210 for temporary structures and uses.
- Spaces shall meet all ADA guidelines.
- Compatible option with Community-serving Parks only.

Amenity Requirements:

- Adequate permanent or temporary parking
- ADA Accessible walkways
- Electrical connections suitable for stage-like performances
- Permanent or temporary restroom facilities
- Signage
- Emergency access.



3. OUTDOOR NATURE CLASSROOM

Outdoor nature classrooms are gathering spaces dedicated for learning opportunities in a natural setting. They shall provide a shade structure or deciduous shade trees for comfort.

Design Criteria:

- Minimum size 500 square feet. With minimum seating capacity of 20 people.
- ADA accessible route must be provided to and within classroom.
- Any structures or site furnishings are to be exterior rated and safe for public use.

Amenity Requirements:

- Shade structure or deciduous shade trees.
- Temporary shade (properly rated post and shade element) required while trees are established.
- Seating (benches, seating boulders, concrete seatwalls, etc.)
- Temporary Restroom



4. PROGRAMMABLE SPACE (INDOOR OR OUTDOOR)

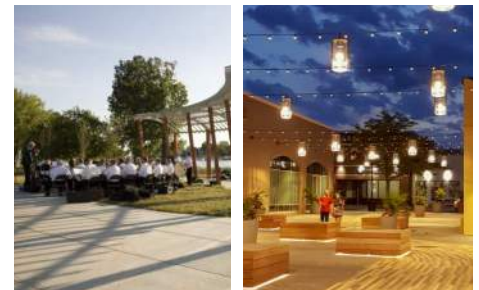
Programmable space is any usable, indoor or outdoor, urban or passive space that can serve a multitude of different functions. It could be designed as a public plaza, open lawn, pier or overlook with seating and accessible access, or other area that can be easily transformed into various activities.

Design Criteria:

- Spaces shall meet all ADA guidelines.
- Space should be flexible enough for a diverse amount of activities and experiences.
- Space should engage and reinforce the public realm of adjacent streets, trails, open space and park networks.
- Spaces shall meet the needs of the surrounding community.
- Temporary restrooms required for larger crowds.

Amenity Recommendations:

- Multiple seating opportunities
- Electricity hook-ups that can withstand generators, food trucks, sound systems, etc.
- Hardscape that can withstand pedestrian and vehicular traffic (concrete, crusher fines, artificial turf, etc.)
- Features suitable for indoor/outdoor classrooms, aerobics, yoga, concerts, farmers markets, flea markets, festivals, etc.



5. SHELTERS

For shelters refer to Section 04 Parks, Trails, Open Space, and Streetscape Support Amenities.



iii. Interpretive & Placemaking

Interpretive elements and placemaking design strategies add unique value to the experience within a space. Elements can include historical, cultural, communal, or other themes relevant to the site, and shall be negotiated between the Town and the developer.

1. INTERACTIVE, FUNCTIONAL, OR VISUAL ART

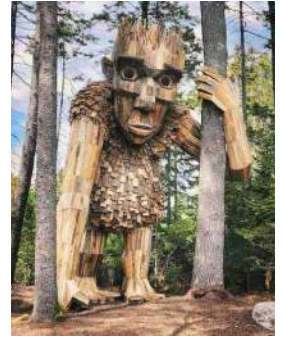
Interactive, functional, or visual art can add character and a sense of place within a park or open space. Features can range in style, size, color scheme, function, character, and level of interactivity.

Design Criteria:

- Structures must be safe for public use and installed per manufacturer's recommendations. Provide engineered stamped drawings of all structures.
- Any structures, materials, or site furnishings are to be rated for exterior use.
- All features must add to the character of the community and space in which it occupies.
- Art must be able to withstand harsh weather conditions with minimal maintenance required.
- Signage must be provided indicating rules of usage and if any age restrictions are necessary.
- Security lighting and clear sight-lines to the art is necessary to prevent misuse and/or vandalism.

Examples:

- Kinetic wind or art sculpture
- Stationary art sculpture
- Custom or visually interesting site furnishings.
- Custom or visually unique playground equipment.
- Murals
- Decorative paving or walls with integrated design (ie. sandblasting and staining, mosaic tiles, etc.)
- Refer to [Section 02 \(05\) Guidelines for Art in Parks](#) for additional ideas and examples.



2. INTERPRETIVE SIGNAGE OR ELEMENTS

Interpretive signage or elements serve an important function to enhance the visitor experience of a place. Whether it's recognizing the historical value of a location, referencing a map of surrounding trail systems, or understanding the significance of local ecosystems, interpretive signage allows for key learning opportunities for both local residents and visitors.

Design Criteria:

- Provide a minimum of two signs.
- Text and graphics should be easy to read, clear, and not overcrowded with information.
- Do not use more than three different types of font styles or sizes.
- Mount at appropriate height and angle for comfortable viewing. Refer to ADA accessibility guidelines.
- Materials should be durable, weather-proof, and safe for public use.
- Frame and posts style can vary, material shall be steel.
- Finish shall be powder coat or corten steel.
- Sign face shall be manufactured by Fossil Industries or approved equal.

Examples:

- Way-finding signage
- Educational signage
- Signage with interactive or moving pieces.
- Sandblasted elements into rock or concrete.
- Signage incorporated into play structures.



3. SITE DESIGN THEME

Site design themes are what defines places and spaces. A common theme helps unite a design and overall concept through elements such as circulation of pedestrian walkways, site furnishings, custom structures, styles, colors, and planting design.

Design Criteria:

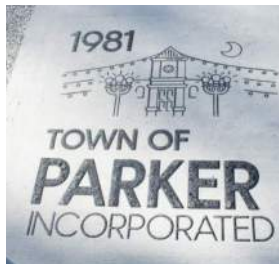
- Site design themes should tie a concept together without feeling disconnected to the community.
- Community engagement is highly encouraged in established communities to ensure the design is widely accepted and meets the needs of the users.
- Custom elements are encouraged to make a space truly unique.
- Ensure the theme is relevant to the community or space.

Examples:

- Where appropriate, themes can be inspired by principles such as historical land uses, ecological features, significant individuals of the community, or even an idea that is valued by the community.



Soda Springs Park, CO. is designed to embrace Colorado's natural ecology and geology.



O'Brien Park Playground, CO. is designed as an iconic play space honoring the Town of Parker's unique history.



Greenbriar Park, MD. is designed around the 'rustic' character of the surrounding landscape and the 'Story of a Raindrop.'

iv. Outdoor Specialized

1. PING PONG

Ping pong, otherwise known as table tennis, should meet the International Table Tennis Federation (ITTF) Handbook dimensions .

Design Criteria:

- Weatherproof
- Commercial grade, rustproof materials
- Anchor to concrete with tamper-proof hardware

Potential Manufacturers:

- Anova Site Furnishings
- Sanderson Concrete
- Stone Age Concrete Table Tennis
- POPP
- Doty & Sons Concrete Products, Inc.
- Others as approved by the Town.



2. FOOSBALL

Foosball is a table-top version of soccer.

Design Criteria:

- Weatherproof
- Commercial grade, rustproof materials
- Anchor to concrete with tamper-proof hardware
- Installed on a level surface

Potential Manufacturers:

- Anova Site Furnishings
- Sanderson Concrete
- Stone Age Concrete Table Tennis
- Doty & Sons Concrete Products, Inc.
- Others as approved by the Town.



3. CHESS TABLE

Chess is a very popular board game between two players. When incorporated into a public table, players can bring their own pieces to play in an outdoor setting. Refer to the International Chess Federation (FIDE) for board game standards.

Design Criteria:

- Weatherproof
- Commercial grade materials
- Must be surface mounted
- Must provide a minimum of (1) ADA accessible table within a park.

Potential Manufacturers:

- Victor Stanley
- Others as approved by the Town.



4. CORNHOLE

Cornhole is a game involving bean bags being thrown into the hole of an angled board. Refer to the American Cornhole Official Rules (ACO) for spacing and standards.

Design Criteria:

- Weatherproof
- Concrete materials
- Cornhole boards placed 27 feet front edge to front edge

Potential Manufacturers:

- Anova Site Furnishings
- Kay Park & Recreation
- Doty & Sons Concrete Products, Inc.
- Others as approved by the Town.



5. DISC GOLF COURSE

Minimum course size shall be nine holes. Preferred course size is 25-30 acres for 18 holes. Average hole to be 200-400 ft. Holes should not be shorter than 100ft. It is preferable to start and end the course in the same location. Locate courses away from active park areas, gathering areas and parking lots. Position tees and baskets to maximize man-made and natural features. Refer to the Pro Disc Golf Association (PDGA) for regulations and Disc Golf Course Design Goals.

Design Criteria:

- Innova Discatcher Pro 28 golf baskets or approved equal.
- Provide Tees minimum 6' x 12' concrete paved surface.
- Provide course signs and signs at each hole providing the hole number, length, par and recommended flight path.
- For safety, the course will not conflict with other park or other uses. Ensuring good visibility throughout the course is important.

Parking Requirements:

- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Spaces Guidelines](#), for more information on parking space requirements.



6. BIKE PARK, SKILLS AREA, PUMP TRACK

Bike park, skills area or pump tracks are all outdoor spaces specifically designed for both kids and adults to learn essential BMX, mountain bike and/or regular bike skills. The design is highly variable, depending on the size, age range, and level of difficulty. The minimum size shall be 0.5 acres. Preferred size is 3 acres or more.

Associations to Reference:

- International Mountain Bicycling Association (IMBA)
- International BMX Federation

Recommended Consultants:

- Velosolutions
- Alpine Bike Parks
- FlowRide Concepts
- Gravity Logic
- Others as approved by the Town.

Additional Parking Requirements:

- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Spaces Guidelines](#), for more information.



7. HORSESHOE PIT

Horseshoe pits are for the game of horseshoe, which consists of throwing a metal horseshoe onto a stake at the opposite end of a pitch. Refer to the National Horseshoe Pitchers Association (NHPA) and the Colorado Horseshoe Pitchers Association (CHPA) for rules and regulations.

Design Criteria:

- Horseshoe pits should be regulation grade.
- Backboards and stake should be outdoor rated and made of rustproof and rot resistant materials.
- Pits should be set per regulation distance and filled with sand.

Parking Requirements:

- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Spaces Guidelines](#), for more information on parking space requirements.



8. DOG OFF-LEASH AREA (FENCED)

Minimum size of off-leash area shall be (3) three acres. Preferred size is (5) five acres. Locate dog off-leash areas away from natural areas, wildlife and waterways.

Design Criteria:

- Fencing shall be a minimum 4' height metal fence matching Town of Parker fencing standards with the exception the bottom rail shall be located at the bottom of the fence panel (flat bottom). Maximum gap from finish grade to bottom rail shall be two inches. Gaps between pickets shall be a maximum of three inches.
- Provide separate lockable sections of dog park (minimum of 2) to allow for re-vegetation and maintenance. Provide a lockable 12' wide maintenance gate between areas. When possible, provide separate areas for large and small dogs.
- Provide an entry/exit point with double gates with self closing hinges. Entry/exit area shall be concrete paving from walk connection to 5' beyond double gate.
- Gates shall have commercial grade hardware and latch that is ADA accessible from both sides. All gates must meet local fire and building code.
- Surfacing options include: 70/30 sand/pea gravel mix, irrigated bluegrass, irrigated natural grass, synthetic turf (appropriate for dog parks), or crusher fines paving, and may include a mixture of multiple surfacing materials. Provide quick couplers to allow for washing down the surface. Surfacing options should be discussed with the town on a case by case basis to determine surfacing.
- Provide vegetative, berm or other screening of off-leash area.
- Provide minimum of 4 benches
- Provide shade structures and/or trees.
- Optional agility course obstacles may be included.
- Provide dog waste stations. One (1) for each acre plus one at each entry.
- Provide rules and regulations sign at each entry.
- Provide minimum (2) trash receptacles and additional as needed based on size and demand.
- Prefer inclusion of a drinking fountain with pet bowl.
- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Guidelines](#) for information on parking space requirements.



9. SKATEPARK

A skatepark is a built environment designed specifically for skateboards, BMX bikes, scooters, wheelchairs, and inline skaters.

Design Criteria:

- Minimum size of skate park to be 8000 SF.
- Skatepark shall be cast-in-place concrete. Design to accommodate all ages and skill levels.
- Provide separation between skatepark and playground areas of a minimum of 50 feet. Locate in close proximity to parking and restroom facilities. Account for proper flow, traffic, capacity, and speed of elements within the park.
- When possible, engage the community for feedback on difficulty, stylistic discipline, types of skate-related features and challenges.
- Design for high visibility within the skating area as well as the area surrounding the park.
- Provide benches, shade, drinking fountain, and trash receptacles.
- Provide proper drainage within the park.
- Aesthetic Appeal and surrounding landscaping to match the Town's character and aesthetic.
- Must include at least one functional skateable art feature.

Recommended Consultants:

- Grindline Skateparks
- Pillar Design Studios
- Pivot Custom Skateparks
- Spohn Ranch Skateparks
- Team Pain
- Others as approved by the town.



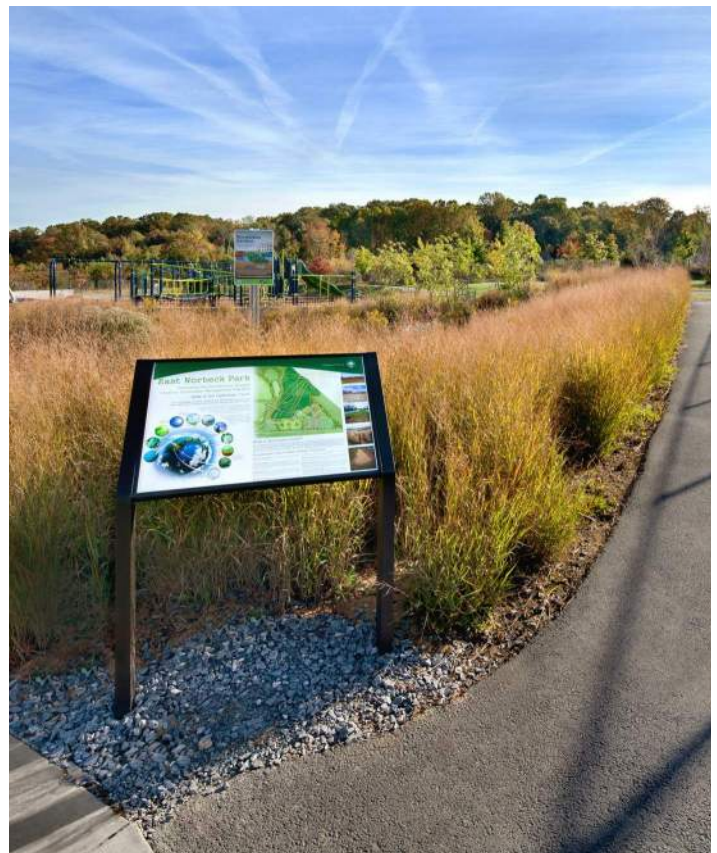
Parking Requirements:

- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Guidelines](#), for information on parking space requirements.

v. Paths, Trails & Trailheads

Trail Guidelines

- All local, regional and multi-use trails in the Town shall be designed and constructed to provide a safe and enjoyable experience for all citizens while providing for ease of maintenance.
- All paths, trails, and trailheads are to align with the goals, strategies, and criteria outlined within the Parker Open Space, Trails, and Greenways Master Plan.
- All Trails and associated facilities shall be designed and built in compliance with Americans with Disabilities Act (ADA), Mile High Flood District, Army Corp of Engineers, American Association of State Highway and Transportation Officials (AASHTO) Manual, Colorado Department of Transportation Roadway Design Guide: Chapter 14 Bicycle and Pedestrian Facilities, and Town of Parker Details and Specifications.
- All trails within parks or open spaces are to be designed for multi-use applications for pedestrians, bicycles, rollers or other human-powered recreational modes of transportation.
- To encourage and facilitate alternative modes of travel to parks, and open spaces, provide trail connections from the parks to public paths, streets, and bike ways.
- All walks and trails shall be designed to meet all current ADA standards and guidelines to include a minimum cross slope in the appropriate direction of one quarter inch per foot (1/4" per foot) or one and three-quarters percent (1.75%), and centerline gradient shall not exceed one foot in twenty feet or four and three-quarters percent (4.75%) (per ADA recommendations). Exceptions to these guidelines may be submitted for review.
- Trail Width:
 - » Local: Eight (8) Feet
 - » Regional: Ten (10) Feet
- Provide an unobstructed three (3) feet recovery zone/shoulder on each side of the trail where space allows.
- Trails through irrigated bluegrass are to be hard surface trails.
- Concentrated drainage shall be designed to pass under walks and trails by culvert or standard approved walk chase. Culverts or walk chases should be designed for the two- (2) year to ten- (10) year event and coordinated with surrounding drainage facilities. The minimum allowed culvert size is eighteen (18) inches RCP and is required to have a flared end section (F.E.S.). Low water trail crossings will not be allowed unless approved by the Town.
- All trails are to provide signage clearly indicating the maximum speed of uses, to ensure the safety of all recreational activities on the trail.
- Design Speed: Trails shall have a design speed of twenty (20) miles per hour. Where slopes exceed 5%, trails shall have a design speed of thirty (30) miles per hour.
- Curve Radius: The minimum curve radius shall be designed in compliance with the AASHTO manual.
- Sight Distance: Trails shall be designed with a minimum sight distance in compliance with the AASHTO manual.



Trail Material

- Trails shall be designed with a minimum thickness of six (6) inches of CDOT Class B or D Portland cement concrete.
- In rare cases, a soft surface (crusher fines) trail may be appropriate and must be approved by the Town. Soft surface trails are not appropriate as regional trails, where they are adjacent to roads or on slopes greater than five (5) percent. Slopes greater than five (5) percent need to be approved by the Town.

Trail Grade and Drainage

- The maximum trail cross slope shall be one and three-quarters percent (1.75%), the cross slope on corners and curves shall be towards the inside where drainage permits.
- The centerline gradient shall not exceed four and three-quarters percent (4.75%). Trails adjacent to roads or in topographically challenged areas may exceed five percent (5%) where approved by the Town. When trails exceed 5%, they must follow the Forest Service Outdoor Recreation Accessibility Guidelines and provide trail accessibility signage per Town of Parker standards.
- Trails shall not hold water, and if drainage is anticipated across the trail, a chase drain or other diversion method shall be provided.

Stairs

- On local trails, where topography prevents safe trail grades, stairs may be considered. When stairs are used, an alternative ADA compliant route without stairs shall be provided.
- When stairs are used, the minimum width shall be eight (8) feet and meet local building codes and ADA guidelines.

Railings

- Railings shall be required where there is reasonable risk of trail users falling down an embankment with a slope of greater than 3:1 or where there is a vertical displacement. Railings shall be a minimum of 46" in height and be Fortress Decorative Metal Fence. A 36" rub-rail shall be required at all bridges. The railing shall flare at both ends. Railings shall be no closer than 24" from the edge of the trail. Refer to [Section 05: Parks, Trails, Open Space & Streetscape Materials \(b. Pedestrian Guardrails/Railings\)](#) for more information.





Utilities

- Manholes, valve boxes and other utility appurtenances shall not be constructed in the pavement of the trail. Utility structures constructed at grade level shall be a minimum of two (2) feet from the edge of pavements. Structures constructed above grade shall be a minimum of four (4) feet from the edge of pavement.

Trail Intersections with Roads

- Trails shall intersect with roads as perpendicular as possible (no less than 70 degrees). Intersections shall be designed in accordance with AASHTO Standards and the Manual on Uniform Traffic Control Devices (MUTCD) for signs and striping. All ramp sections at the road interface shall be constructed per Town details.

Trail Intersections

- Trail intersections shall be as perpendicular as possible (no less than 70 degrees). 'T' intersections shall have a minimum radius of fifteen (15) feet.

Bridges

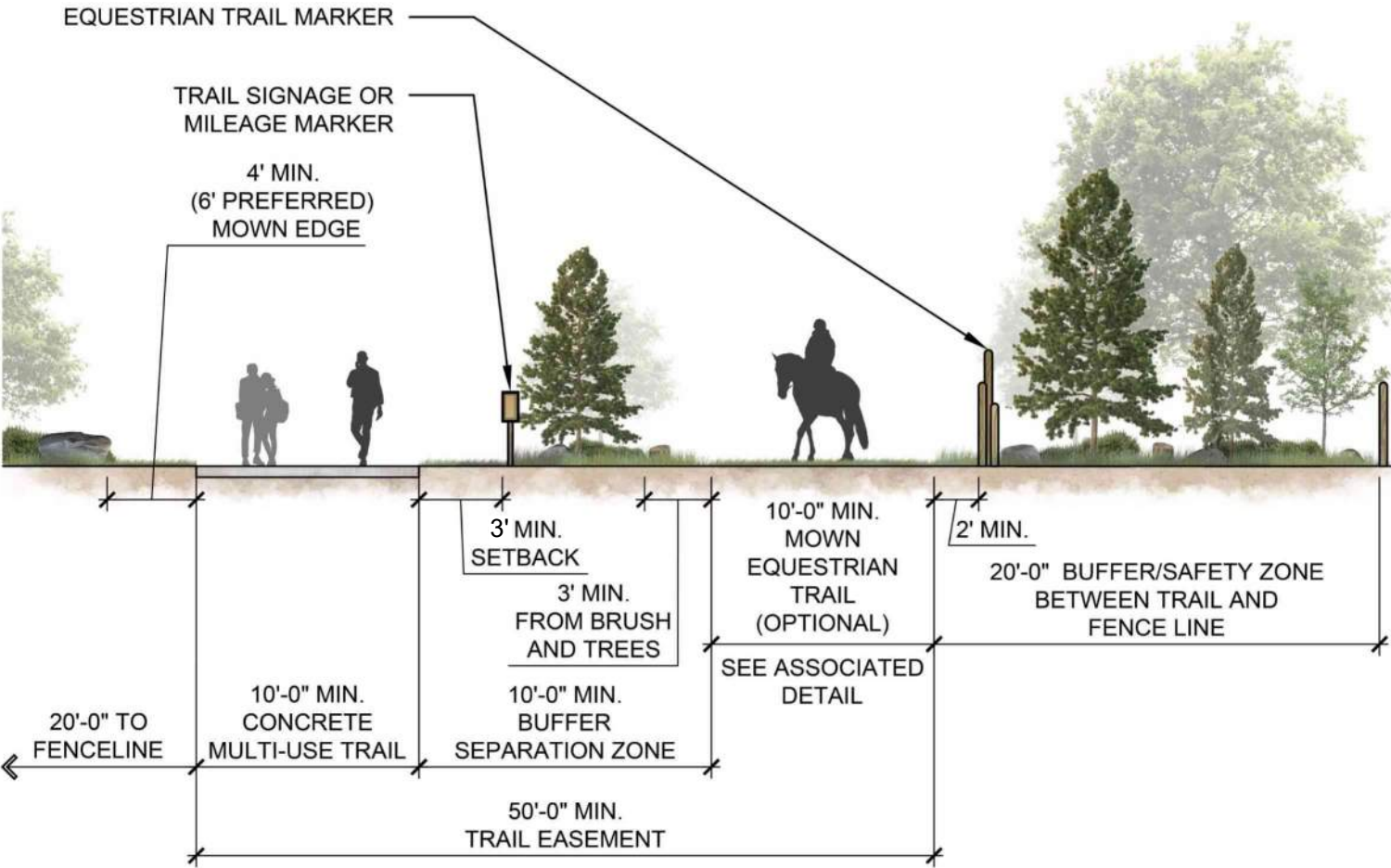
- Bridges shall have a width of ten (10) feet minimum or four (4) feet greater than the width of the interfacing trail. Bridges shall be generally straight with approaches that meet curve radius and sight distance design standards. Bridges shall be designed to accommodate maintenance vehicles, including pickups. The vehicle load shall be 10,000 pounds plus 30% impact.
- Bridge deck shall be 5" thick minimum, broom finished concrete deck and expansion joints shall be bicycle and rollerblade safe.
- Prefabricated self-weathering steel underhung truss structure.
- Provide 42" height minimum guardrail on bridges accommodating bicycle traffic, in accordance with AASHTO Guide for Development of Bicycle Facilities (section 5.2.10, Bridges and Underpass'). In addition to guardrail, provide 36" height rub-rail at all bridges.
- Provide 54" height guardrails and handrails at least 42" height per USDA Forest Service Equestrian Design Guidebook.



1. RECREATION TRAIL CORRIDORS

A recreational trail corridor is classified as a trail plus a scenic or recreational easement. These types of trails are site specific, and can vary depending on existing conditions.

Buffers, fence lines, and separation zone distances may differ due to specific site conditions and are to be reviewed and approved by the Town. Below is a cross section of a typical recreation trail corridor (*Graphic 2.1*).



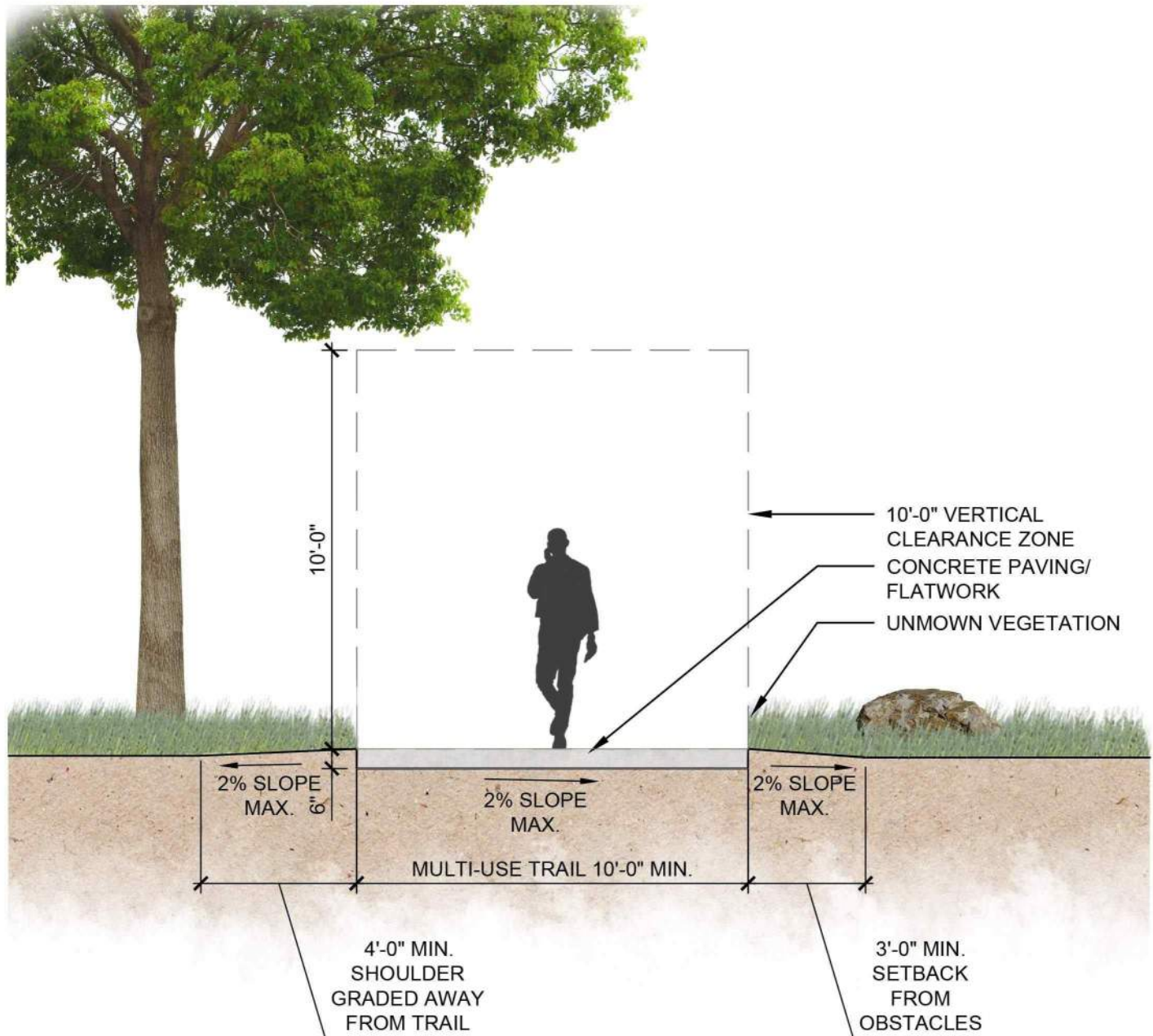
Graphic 2.1 : Recreation Trail Corridor

2. REGIONAL TRAILS

A regional trail is a public trail system that provides critical connections across regional planning areas, counties, or cities. These trails are often part of a significantly larger network of trails, all of which usually have shared-uses. The general public often use these multi-use trails for bicycling, walking, hiking, running, skating, dog walking, e-biking and other non-vehicular recreational opportunities. The trail width for regional trails shall be a minimum of ten (10) feet.

Site conditions on either side of regional trails may vary; however, tree canopies and other obstructions should be maintained to allow a clearance of ten (10) feet. Below is a cross section of a typical regional trail (**Graphic 2.2**).

Refer to Signage Standards in Section 06 for trail signage recommendations.



Graphic 2.2 : Regional Trail

3. LOCAL TRAILS

A local trail often interconnects neighborhoods, parks, and open spaces. In comparison to regional trails, local trails are often shorter in length, width, and have a lower volume of users. These trails are also multi-use trails, and utilize the same types of recreational activities as the regional trails. Site conditions on either side of regional trails may vary, however tree canopies and other obstructions should be maintained to allow a clearance of ten (10) feet. Trail width shall be a minimum of eight (8) feet. Refer to Signage Standards in Section 06 for trail signage recommendations.

Below is a cross section of a typical local trail (**Graphic 2.3**).

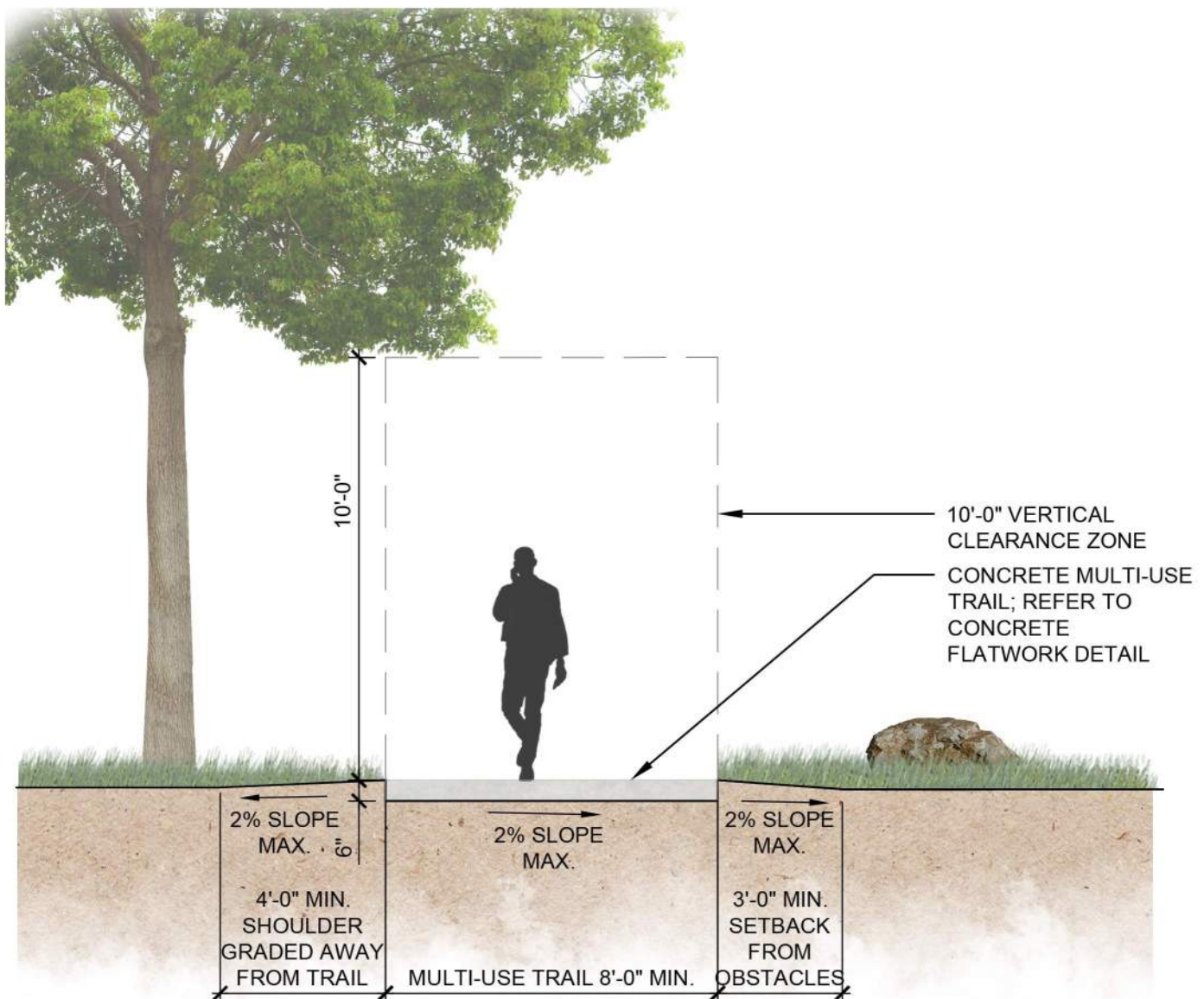
4. GREENWAY CONNECTION OR TRAILHEAD

A Greenway Connection or Trailhead is the connection or beginning of a trail that provides access to the community. It should provide trail information including a trail map, rules and regulations signage, trash receptacles, and parking (number of spaces based on type of trail and anticipated usage).

5. HARD SURFACE MULTI-USE TRAIL

Hard surface multi-use trails shall be concrete, designed specifically for various high-volume, non-motorized recreational uses.

These trails can consist of regional trails, local trails, internal access pathways, or loop pathways. They are commonly outside of the roadway right-of-way, and supply the community with a multitude of accessible, durable, low-maintenance routes.



Graphic 2.3 : Local Trail

6. INTERNAL ACCESS PATHWAY

Internal access pathways are commonly restricted to routes within a park or open space. They can also consist of accessible routes connecting smaller spaces and areas, either from residential communities to local trails, or other routes not meant for heavy loads of pedestrian traffic. Access pathways width shall be a minimum of eight (8) feet.

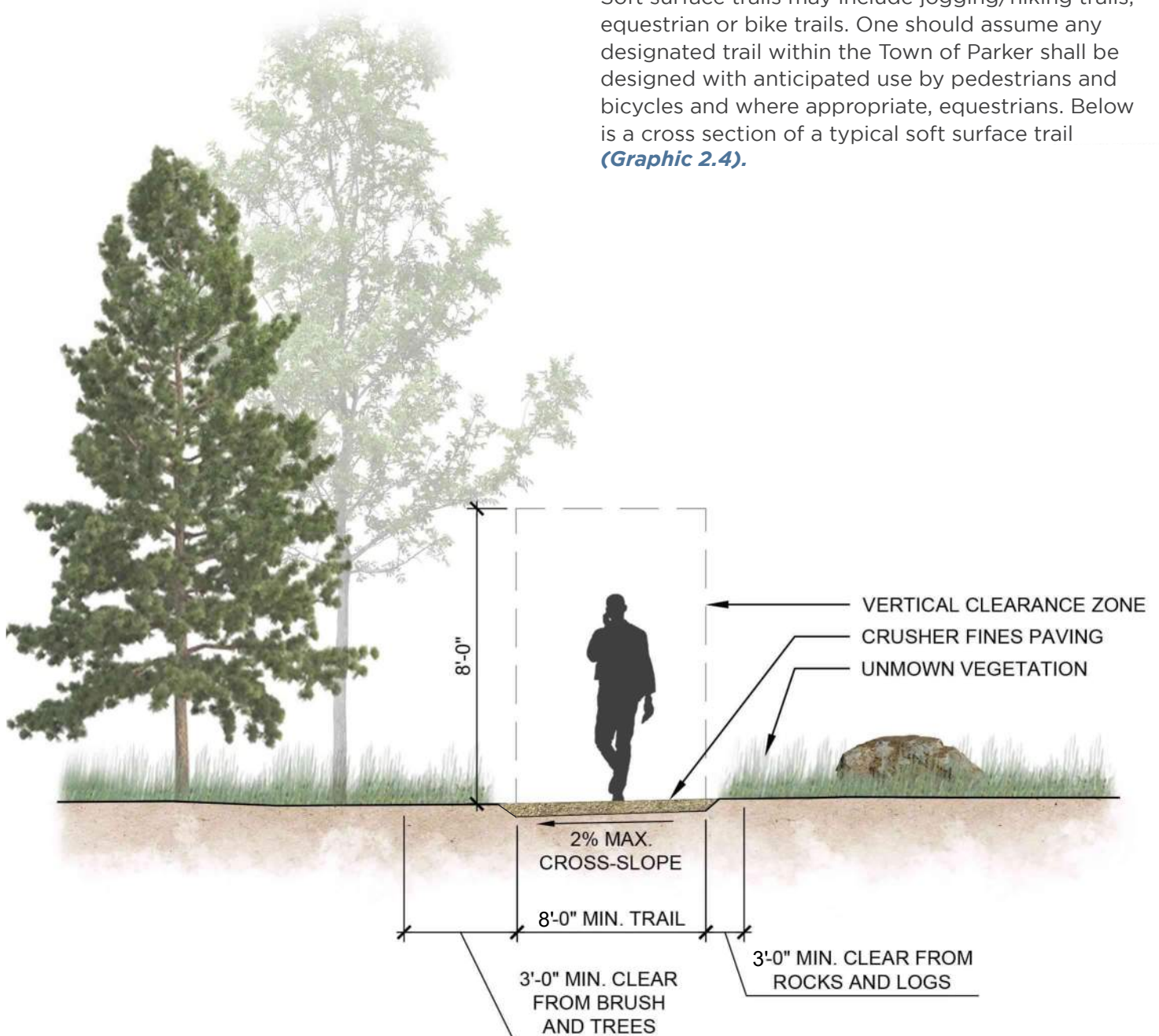
7. LOOP PATHWAY

Loop pathways are closed pathways that eventually circle back to the node where the user began. These pathways can vary in length and difficulty. Signage should be provided at the beginning of the loop to provide the user with mileage information. Loop pathway width shall be a minimum of eight (8) feet.

8. SOFT SURFACE TRAIL

Soft surface trails are alternative trail systems that are not paved. These trails shall be constructed of crusher fines for slopes less than 5% or stabilized crusher fines paving for slopes greater than 5%. Soft surface trails may include jogging/hiking trails, equestrian or bike trails. One should assume any designated trail within the Town of Parker shall be designed with anticipated use by pedestrians and bicycles and where appropriate, equestrians. Below is a cross section of a typical soft surface trail

(Graphic 2.4).



Graphic 2.4 : Soft Surface Trail

a. Jogging/ Hiking

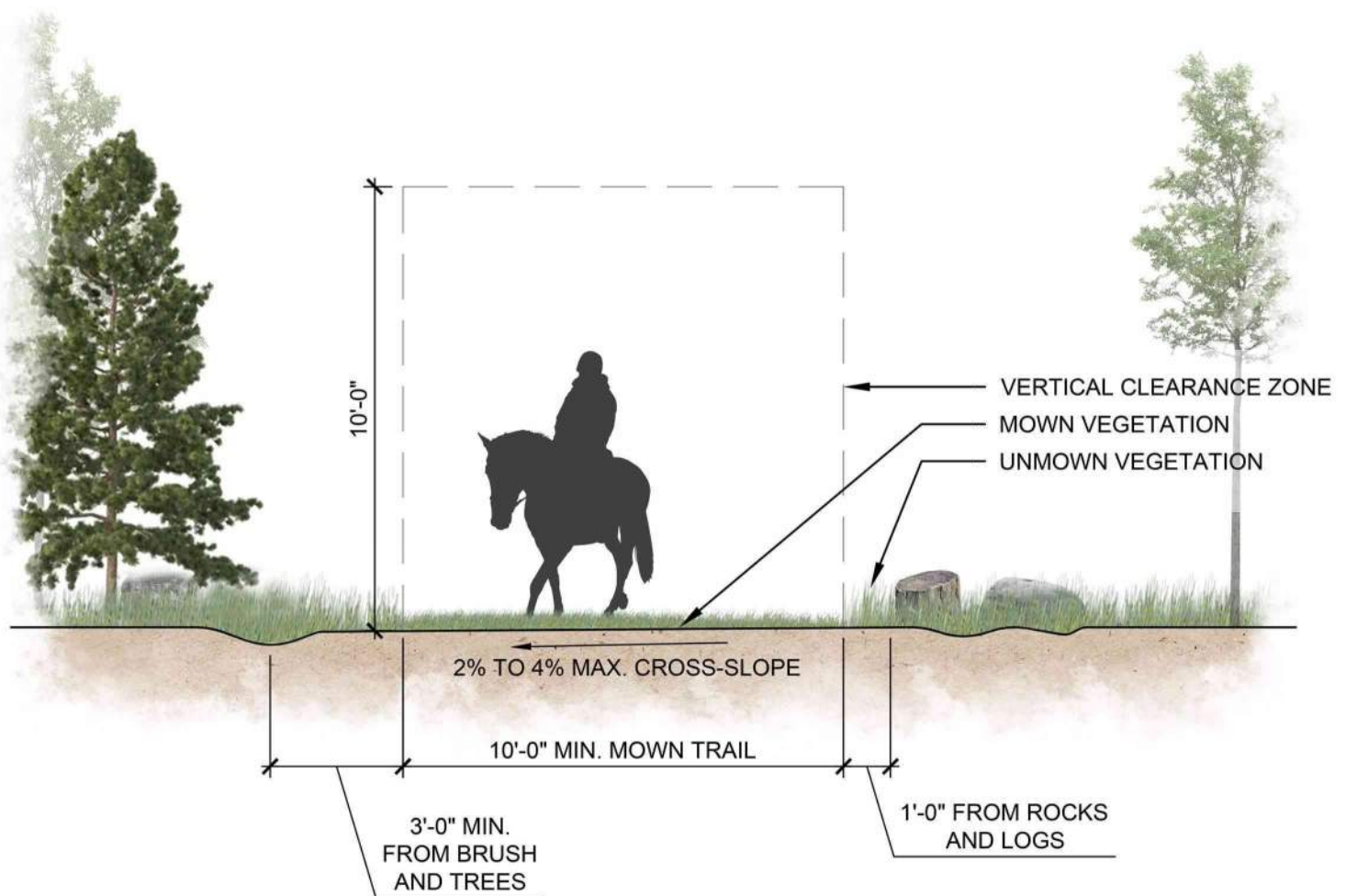
- Jogging/ Hiking trails are anticipated to be utilized by pedestrians and bicycles. These trails must be a minimum of eight (8) feet wide.

b. Equestrian/ Bike

- An equestrian trail, otherwise known as a bridle path, may be shared with bicycle users. These trails must be a minimum of ten (10) feet wide to support a horse and rider comfortably, while also having a minimum of ten (10) feet vertical clearance.
- Signage should be displayed along the trail indicated rules and etiquette for both riders and bicyclists regarding passing, speeds, and overall use.

c. Mown Equestrian Trail

- Mown equestrian trails are trails that are natural trails with soil and grass as the surface material.
- Trail shall be a minimum width of ten (10) feet.
- Signage shall be provided indicating direction of trail and allowable use (equestrian only).
- Below is a cross section of a typical mown equestrian trail (**Graphic 2.5**).

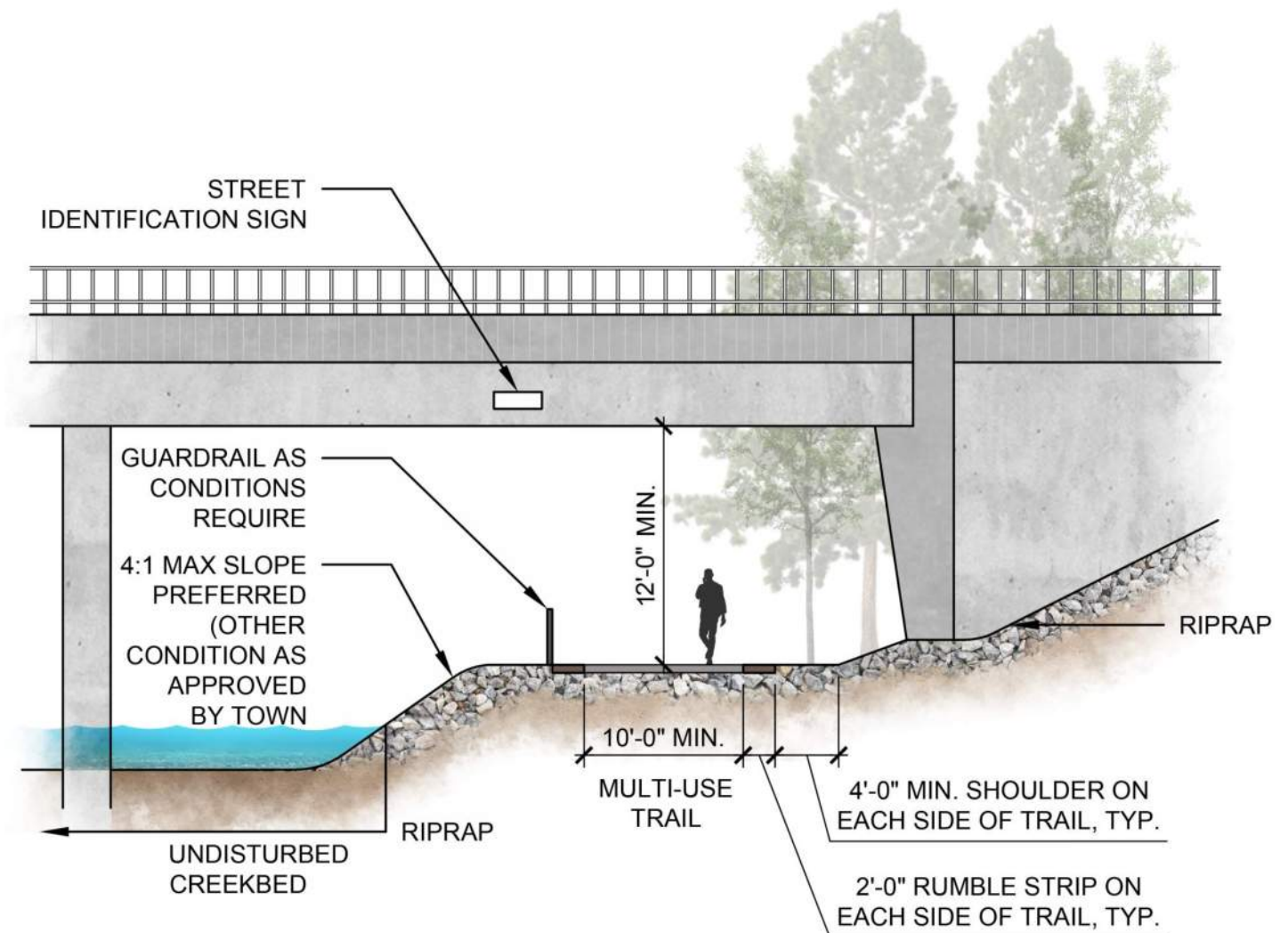


Graphic 2.5 : Mown Equestrian Trail

9. BRIDGE UNDERPASS

Bridge underpasses are defined as a “common solution to avoiding at-grade crossings of roads and active railroad tracks.”

- A minimum ten (10) foot multi-use trail with a twelve (12) foot vertical minimum clearance is required.
- Refer to (AASHTO), and USDA Forest Service Equestrian Design Guidebook for additional requirements.
- Provide adequate sight distance and lighting (natural and/or artificial) inside, outside, and at the approaches.
- Provide a two (2) foot wide rumble strip on either side of the trail.
- Where needed, provide retaining walls for grade separation.
- Below is a cross section of a typical bridge underpass (**Graphic 2.6**).



Graphic 2.6 : Bridge Underpass

Vi. Play Space & Equipment

The Town of Parker believes that safety, child development, and inclusion are high priorities for the design of playgrounds. Playgrounds are also intended to provide innovative spaces and challenging play opportunities, as well as enhancement of children's total development needs, including physical, social, creative, reflective and tactile experiences. They must also provide equal play opportunities for kids and families of all abilities, as well as being subject to the regulations of various State and Federal agencies.

1. DESIGN GUIDELINES FOR PLAY AREAS

1. Play areas shall be located next to gathering/social areas including shelters, restrooms and activity centers and adjacent to open lawn areas.
2. Play areas shall be designed as an inclusive play environment complying with/in compliance with design considerations as noted in section 04.(d). (vi).
3. Provide age-separated play areas, with playgrounds for ages 2 to 5 years and 5 to 12 years. Design of play areas that are also engaging spaces for teens and adults is encouraged. Provide unobstructed lines of sight between separate play areas for ease of supervision.
4. Maintain a minimum of 100 feet between a play area and ballfields, parking lots and streets. When it is not possible to separate play areas from parking lots and streets by 100 feet, provide fencing meeting ASTM F2049-11 for safety.
5. The play area should be sited to be visible from the street or parking lot for surveillance.
6. Develop natural barriers or features to separate play areas from conflicting or incompatible uses.
7. Incorporate shade structures and seating around the play area.
8. All play area designs shall be reviewed and approved by the Town of Parker. Plans shall include detailed design, playground equipment design and 3D renderings and surfacing design.
9. The play equipment shall meet the physical and developmental needs for a variety of users.
10. Design considerations should include durability and long-term maintenance requirements of the specific equipment, as well as the potential occurrence of vandalism and graffiti.
11. Plantings adjacent to play areas should be designed so highly bee attractant and thorny species are not located adjacent to the play area.
12. Signs and/or labels should be provided on or near play equipment or activity to provide guidance to supervisors as to the age appropriateness of the equipment and ADA requirements.

2. ACCESSIBILITY & ADA COMPLIANCE

All playgrounds shall be accessible. Accessibility is about travel, movement and approach. All play areas shall be designed to meet ADA Accessibility Standards for Play Areas. Play areas shall comply with minimum ADA standards. Each play area shall strive to exceed minimum ADA requirements to meet the needs and abilities of all users. Considerations in addition to the ADA Standards include:

1. Orient transfer decks to relate directly to the accessible play area entry and route.
2. Provide an ADA ramp into play areas with EWF. The ramp shall be designed to not impede safety zones. Refer to Surfacing Section 2.15 for acceptable locations of EWF surfacing.
3. Provide ADA access to all seating and shade structures.
4. An accessible route to play equipment should be visibly clear, with no obstructions, tripping hazards or other obstacles.



3. SAFETY STANDARDS & INSPECTIONS

All play area and equipment shall be designed to meet the following:

1. American with Disabilities Act (ADA) for Play Areas.
2. Playground equipment and design shall meet current U.S. Consumer Product Safety Commission (CPSC) guidelines; and shall meet or exceed ASTM standards.
3. All safety surfacing in playgrounds shall comply with the minimum safety standards in ASTM F 1292- "Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment."
4. Accessible safety surfacing shall comply with the minimum accessibility standards in ASTM F 1951 "Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment."
5. Playground equipment and surfacing shall meet International Play Equipment Manufacturers Association (IPEMA) standards and certifications, unless specifically approved by the Director of Parks, Recreation and Open Space.
6. All play areas prior to being open to the public shall receive an audit to be conducted by a NRPS/NPSI Certified Playground Safety Inspector to verify compliance with safety standards. A letter shall be provided to the Town that states the play equipment installation has been inspected and the equipment has been installed per manufacturer's specifications, and that it complies with the minimum playground safety regulations.

4. UNIVERSAL & INCLUSIVE PLAY

All play areas are required to provide a universal and inclusive play experience. A play area shall provide intergenerational opportunities for all to engage in play and socialization. An inclusive play area provides engaging play experiences that meet the needs of all people including those who have autism, intellectual disabilities, physical disabilities, hearing impairments, cerebral palsy, spina bifida and other disabilities as well as the needs of typical children. An inclusive play area accommodates everyone and challenges them at their own developmental level. All play area design shall be designed to be inclusive. Universal and inclusive playgrounds ensures that users of all abilities and disabilities can enjoy various play activities and provides opportunity for side-by-side play for all abilities. Design considerations for a universal and inclusive playground include:

1. Provide playgrounds that provide ample stimulation and opportunities for physical challenges for all abilities and opportunities for a variety of spaces that encourage social interaction and sensory play and stimulation.
2. Select play equipment that is specifically designed for users of various abilities to participate in, together and adjacent to one another.
3. Provide varying ranges of risk play experiences.
4. Provide areas of unstructured play to encourage open-ended and creative play.
5. Provide ease of access for varying abilities to different play features. This can be through multiple access ways to reach that play features.
6. Provide edge detection at play area edges and color delineations on the ground and play equipment for users with low vision.
7. Provide visual connectivity between spaces for ease of signing for deaf or hard of hearing.



8. Many autistic children are over or under stimulated, so it is important to provide small quite spaces and lower-level sensory activities throughout the playground as well as larger engaging areas to allow users to choose the environment that suits them.
9. Sensory play, music/ sound play is encouraged as free-standing elements and/or elements integrated into the playground equipment.
10. Provide barriers or fencing that help prevent wandering/running children from exiting the play area and give care givers peace of mind while their children play. This is a safety concern for families with small children and children with tendencies to run.
11. Provide seating throughout the play area. Provide a variety of seating including seating with backs and arm rests for additional support for users.

5. THEMATIC PLAY FEATURES

Thematic play adds character and a sense of place to a play area and is highly encouraged by the Town of Parker to incorporate into a play space. Thematic Play Features shall be a minimum of 250 square feet. Below are guidelines to follow when including thematic play features:

1. The theme should stay away from overly-used themes, such as princess castles, sunken ships, etc.
2. Depending on the location, the theme associated with a play area can be inspired by a historical event, a whimsical story, a natural landscape educational experience, or other feature that can tie into the Town's public spaces, surrounding context or overall park design.

3. Thematic play features shall provide high overall play value for a variety of users.
4. Thematic play features can incorporate art with play.
5. Examples of thematic play features can be found on page 65.

6. OPEN TURF PLAY AREA

An open turf play area will be a minimum size of 2,000 square feet.

1. The turf play area size is determined based on the usable area. Usable area includes maximum 3% slope for turf sod and 2% slope for synthetic turf.
2. Turf play area shall be within 30 feet of the playground and preference is the turf play area is immediately adjacent to the playground.
3. The turf play area will be irrigated sod. Sod species will be able to withstand high traffic use.
4. Preference is to provide synthetic turf.

7. PLAY AREA, SMALL-SCALE

A small-scale play area will be a minimum of **5,000** square feet of play area and include age separated play for 2-5 years and 5-12 years. Play areas are for play apparatus and equipment only and does not include pathways for circulation, seating and shade or any other non-play function. Approval is required by the Town for play areas that do not include age separated play. The play area will provide design requirements as listed in this section.



8. PLAY AREA, LARGE DESTINATION-SCALE

A large destination scale play area will be a minimum of 15,000 square feet and include age separated play for 2-5 years and 5-12 years and an area for teen play or social space. Play areas are for play apparatus and equipment only and does not include pathways for circulation, seating and shade or any other non-play function.

The play area will provide design requirements as listed in the Universal & Inclusive Play found within Section 02(04)(d)(vi)(4).

The destination play area will be designed to have a unique character or theme and play features that encourage a community draw of visitors to the playground.



9. SHADE SHELTER

A shade shelter is required at all play areas. A minimum of one shade shelter will be provided adjacent to the play area and will provide picnic table seating with visibility to the play area. Unique shelter design is encouraged to add architectural interest to the park. Shade shelter size depends on the size of the park and play area. Refer to the Gathering Spaces & Self-directed Group Activities category within Table 13.08.E of the [*Land Development Ordinance*](#) for requirements and standards.

10. SEATING

Provide a shaded grouped seating and individual seating for direct supervision of children in play areas.

- Provide seating for 3 people for every 1000 square feet of play area.
- Acceptable seating options include, seat walls, benches, picnic tables, swing benches and boulders.
- A minimum of 50% of seating shall have a back.
- Provide shade for 30% of seating areas.

11. PLAY EQUIPMENT

Play equipment will be commercial grade play equipment and meet all ADA, CPSC and IPEMA standards. All play equipment shall be installed in accordance with the manufacturer's specifications. All playground equipment, whether premanufactured or custom play elements, shall conform to the playground standards. The Town must approve colors and features of the play equipment. Provide 3D renderings for approval of play equipment design and colors.

1. Play equipment design should consider durability and the long-term maintenance requirements of the specific equipment, and minimize the potential for vandalism and graffiti.
2. The design and equipment should include a variety of play elements that encourage:
 - Swinging
 - Spinning
 - Hand over hand and side to side climbing
 - Balance challenges
 - Overhead activities
 - Sliding
 - Sensory development
 - Crawling
 - Imagination
 - Adventure
 - Musical play
 - Climbing
3. Wood play equipment will be considered for nature play areas with the approval of the Town.

4. Unique innovative designs that provide increased play value, thematic play, nature play, etc. are highly encouraged.
5. All proposed play equipment is expected to be in place for a minimum of twenty (20) years.
6. Swings, slides, spinning and climbing should be provided as standard elements in all play areas.
7. Provide a minimum of two feet separation from the required fall zone and play area edge.
8. Include play area signage at the entry to each play area for the age the equipment is appropriate for.
9. Orient the swing area away from the active play area to avoid conflicts in play circulation. For all swings provide a minimum of one ADA molded seat for each set of swings. Disc swings are encouraged for inclusive play areas.

a. Climbing Structure or Boulders

Climbing structures or boulders shall be a minimum size of 400 square feet (not including the fall zone). Multiple climbing structures and boulders can be play functionally linked to meet the minimum square feet requirement. Additional design criteria include:

- Climbing structures can be premanufactured reinforced concrete climbing boulders, traditional stand-alone climbing structures.
- Provide required fall zones and safety surfacing around all climbing structures and boulders.

b. Nature Play Features

Natural play features must be provided for a minimum area of 400 square feet (not including the fall zone). Nature play features must contain a variety of natural play opportunities and consists of natural elements.

1. Nature play features must be in areas of the park close to open spaces, trails or playgrounds. When located adjacent to playgrounds they must be contained separately and ideally located a minimum of 20 feet away from the play equipment areas.
2. Natural play features can include commercial premanufactured “wood look” play equipment or natural wood play elements with approval of Town including the following:
 - Premanufactured wood play structures or swings
 - Boulders
 - Balance Logs
 - Log steppers
 - Climbers
 - Natural materials for movable parts
 - Rock building areas
 - Log tunnels
 - Imaginative play area
 - Social/seating area
 - Other natural play features that encourage interactive and imaginative play





3. All wood structures and features to be sustainably harvested hard wood with a minimum rating of 1200.
4. Provide safety surfacing for all nature play features.

c. *Zip Line*

Zip lines must be premanufactured and can be integrated into play structures or separated. Zip lines shall be a minimum of 50 feet long with a rope and seat system. No hand hold only zip lines are allowed. Preferred length is 80 feet or greater.

1. Where possible design a zip line or companion zip line that has an accessible seat.
2. Zip line area shall include safety surfacing.



12. SURFACING OPTIONS

Safety surfacing materials are intended to provide the most inclusive play experience and reduce maintenance. Acceptable safety surfacing options include engineered wood fiber (at natural play areas only with approval from the Town), synthetic turf or poured-in-place rubberized surfacing (no tiles). All surfacing shall meet current ASTM Standard F1292, and ASTM Standard 1951-21.

a. *Engineered Wood Fiber*

- Shall be energy absorbing protective surfacing manufactured for playground installations. It shall be non-toxic, free of bark and organic materials, independently tested by ASTM Standard F2075-20, meet ADA requirements and Head Impact Criteria (HIC).
- Only acceptable in natural play areas.
- Must be 12" minimum compacted depth. Provide 3"-4" of freeboard (after compaction). Thickness shall be sufficient to attenuate falls per ASTM F1292.
- Needs to be compacted to meet ADA upon completion of the playground installation.

b. Poured-in-Place Rubberized Surfacing:

- Poured-in-place rubberized safety surfacing shall meet the following requirements in order to improve the durability and minimize replacement and/or repair costs:
 - Meet ASTM F2479-17 Standard
 - Minimum 10 years warranty on material and installation.
 - Binder used for the surfacing shall be aliphatic urethane type or superior.
 - A protective coat/sealant shall be provided as part of the initial installation to help protect the surface from elements.
 - The poured-in-place surfaces should be designed as follows:
 - » Poured-in-place shall be on a concrete base with weep holes and an underdrain system or similar provisions for drainage.
 - » Adjust the depth of the subsurface and poured-in-place surface to meet the needs of the critical fall heights of the play equipment.
 - » Use a combination of standardized colors (i.e. 30% black, 70% green), rather than a single solid color, so that color mixtures can be adjusted to match faded colors in the future for patching and repairs.
- » If the surface has shapes or patterns, use simple shapes or patterns that are easy to patch. Avoid any patterns or shapes under high-traffic areas like swings and the base of slides.
 - » Avoid joints in surfacing at posts, under slides, swings and under components in the areas that extend through the poured in place surfacing.
 - » Product: Surface America - Playbound or approved equivalent.





c. *Artificial Turf*

The artificial turf surfaces should be designed to include:

- Synthetic turf system (turf, shock pad, and infill) shall be selected to meet Head Impact Criteria (HIC) safety ratings.
- Select synthetic turf material that meets ADA accessibility and is antimicrobial.
- Rubber infill is not acceptable. Use coated silica sand (Envirofill) or other non-toxic, non-flammable infill.
- Shall be IPEMA certified.
- Provide shock pad to meet HIC with the complete synthetic turf system (turf, shock pad and infill).
- Provide an underdrain system per synthetic turf manufacturer recommendations
- Recommended for fall heights of 12' or under.
- Minimum 8 year warranty.

13. STANDARD PLAY

The following information provides design guidelines for play equipment and safety surfacing.

THEMATIC PLAY FEATURES

Thematic play features can add character and a sense of place within a play space. Features can be incorporated directly into the play equipment style and color scheme, surfacing material, flatwork, and free standing elements.

Description

All thematic play features should add an artistic element to the playground, create a sense of place, and meet all playground safety requirements.

Examples

- Sandblasting graphics
- Uniquely themed play structures
- Thematic climbers
- Sculptures
- Interactive play
- Interactive art



UNIVERSAL & INCLUSIVE PLAY ELEMENTS

Providing opportunities for children of all abilities and disabilities to participate in group play is an important factor for socialization and development. Universal and inclusive play elements allow for families to experience play without limitations.

Description

Play features should provide transfer stations, and consider wheelchair mobility, sensory disorders, needs for children with Autism, and other developmental conditions.

Examples

- ADA accessible play equipment
- Sensory Play
- Other, see Section 02(04)(d) (vi)(4).



CLIMBING STRUCTURE

Climbing plays a key role in early childhood motor skills development. It is also beneficial for spacial and directional awareness, and boosts physical skills such as balance, hand and foot coordination, and agility.

Description

Climbing structures can range from natural materials (wood), to artificial materials (metal, plastic, and rope). The structure can be free-standing, or linked to other play structures.

Examples

- Climbing tower with slides
- Climbing walls
- Freestanding climbers
- Net climbers
- Quad climbers
- Wood post climbers (only in nature play areas)



CLIMBING BOULDER

Climbing boulders are a great physical challenge for users of all ages, and add a very aesthetically pleasing natural element to the play space.

Description

Climbing boulders should provide adequate areas for hand holds or hand grips, and foundation installation should provide a stable climbing experience.

Examples

- Large performance boulder
- Small climbing boulder with connecting rope play
- Boulder-themed climbing wall



NATURE PLAY FEATURES

Nature play features provide a connection to nature, and an opportunity for more free and open play possibilities. Use of natural materials may be allowed with Town's Approval; however concrete or other man-made options that mimic nature are acceptable.

Potential Manufacturers

- Earthscapes
- Kompan Robinia Play Structures
- Nature's Instruments
- Natural materials selected and designed to meet CPSC Standards.
- Others as approved by the Town.

Installation

- Natural play features should be installed in safety surfacing that meets required HIC.



ZIP LINES

Zip lines offer a unique playground feature that adds a safe, thrilling, two-way challenge for users. They provide a variety of sensory, motor skills, cognitive skills, and social/emotional skills.

Description

Zip lines should allow for at least one ADA accessible seat. Zip lines can be integrated into play structures or be separated. Zip line shall be a minimum of 50 feet long.

Examples

- Cableways
- Single zip line
- Double zip line
- Sloped vs. Flat Zip line



SURFACING

Safety surfacing can be used in a variety of different playground spaces, and can transition between materials within the same play space to allow for different themes, and accessibility routes.

Acceptable Products

Engineered Wood Fiber (EWF)

Provides an accessible, natural, surfacing material. However, this material should be used minimally for ADA accessible routes to play equipment.

Suggested Uses:

- To be used in areas identified as nature play spaces.



Artificial turf

Suggested Uses:

- Hillside play
- Flat play surfaces
- Neighborhood and community parks

Poured in Place surfacing

Suggested Uses:

- Hillside play
- Flat play surfaces
- Neighborhood and community parks

14. UNIVERSAL & INCLUSIVE PLAY ELEMENTS EXAMPLES

Universal and inclusive play areas should provide a variety of opportunities to develop cognitive, sensory, physical development and social skills. Below are a variety of examples of the variety of experiences that will provide these opportunities.

BALANCE & MOTION

Balance allows children to have better control over their bodies. This is a great skill for child development, and there are several ways for this activity to be fully inclusive.

Description

Inclusive equipment designed for balance should be accessible by wheelchair, and have durable materials.

Examples

- Balance boards that move
- Group spinners
- Solo spinners
- ADA accessible trampoline
- ADA accessible merry-go-round



SWINGS

Swings help develop fine motor skills, including grip strength, and hand/arm/ finger coordination. It also has therapeutic benefits, and can easily incorporate universal and inclusive components.

Description

One inclusive swing component should be incorporated into every playground, if belt swings are to be provided in the playground.

Examples

- Disc swing
- ADA molded seat swing
- Friendship swing
- Wheelchair accessible swing



SENSORY PLAY

Sensory play is a great feature that supports language development, cognitive growth, fine and gross motor skills, problem solving skills, and social interaction.

Description

Sensory play components can be free-standing, or incorporated into other playground components.

Examples

- Sensory panels
- Sensory walls
- Roller table
- Interactive features that move and make sound



SENSORY SITE FEATURES

Sensory site features can be incorporated into a playground in other ways aside from playground equipment components.

Description

Sensory play components can be free-standing, or incorporated into other playground components.

Examples

- Sensory garden with child friendly vegetation that encourages smell and touch
- Concrete sensory walks with various patterns and textures
- Water Play



QUIET SPACES TO ALLEVIATE OVER-STIMULATION

Quiet spaces allow an area for over-stimulated kids to alleviate stress and allow them to regain control and focus.

Description

Quiet spaces shall allow for the reduction of sights, sounds, and loud noises, while also maintaining visibility for parents. Roof cover, and partial cover on 2-3 sides is required.

Examples

- Covered structures that provide solitude
- Partially enclosed spinning seats
- Partially enclosed stationary seating
- Shaded seating at the perimeter of the play area



HILLSIDE PLAY

Hillside play enables a space for users to experience a variety of play options on a sloped surface.

Description

An ADA accessible route to the top of the hill is required. A minimum of 2 hillside play features are recommended for each hillside play experience. A slope of 30-35 degrees is recommended.

Examples of Hill Features

- Slide (Standard or Roller)
- Hooped climbers
- Rope climbers
- Hand grips



MUSIC / SOUND PLAY

Music and sound play has beneficial auditory, tactile, memory, and cognitive stimulation for kids. It's also very therapeutic, and can come in a variety of different types and styles.

Description

Any mallets or additional pieces needed to play equipment shall be securely fastened to the equipment. Safety surfacing not typically needed for music/ sound play; verify with manufacturer.

Examples

- Standard music Instruments (chimes, xylophones, bells, drums, etc.)
- Talk tubes
- Interactive, electronic games



TEETER TOTTERS / ROCKERS

Teeter totters and rockers support sensory regulation, core strengthening and balance.

Description

Teeter totters should allow for wheelchair accessibility or should allow for easy transfer out of a wheelchair and into the equipment.

Examples

- Wheelchair accessible swing
- Wheelchair accessible rocker
- Teeter totter with molded seat





VII. Sports & Fitness
1. GENERAL CONSIDERATIONS

Sports and fitness facilities provide active recreation opportunities for the community. They are a critical part of the development of parks. All sports and fitness facilities shall be ADA accessible, including but not limited to the fields, courts, dugouts, and seating. Accessibility should not be limited to one field or one court but rather provide accessibility to all fields and courts.



a. Additional Parking

Refer to Section 02(04)(d)(X.) **Table 2.4 Community Park Parking Guidelines**, for information on minimum parking space requirements. Additional parking requirements are based on each field or court. Additional parking will need to be provided based on the total number of fields and courts provided in the park. The Town may require additional parking above and beyond these numbers based on programming and need.

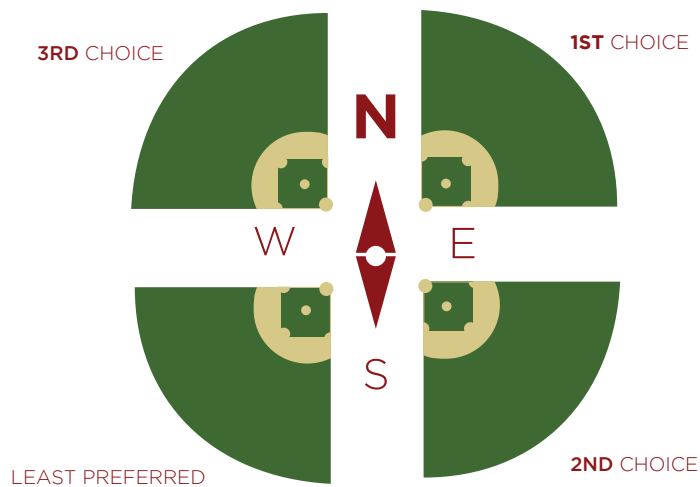
b. Layout/Orientation/Sizing - Fields

The location and orientation of recreation fields should be sited for minimal impact to natural and sensitive areas. Location of recreation fields should also be sited to minimize potential conflicts with gathering areas, play areas and other passive uses. Adequate distance between ball fields and parking should be considered to minimize parking and foul ball conflicts.

Supporting features including bleachers, dugouts, seating, other support amenities along with buffer zones should be considered when siting recreational fields.

- The preferred orientation for fields is on the long axis north/south. Other orientations may be acceptable due to specific site conditions.
- For multipurpose fields, it is recommended to use the largest field size possible to accommodate a variety of sport types. Where possible, provide two adjacent fields to allow alternate layout and seasonal field rotation.
- At multiple athletic field complexes, additional space may also be needed for buffer zones and drainage features between fields.

- Preferred field orientation of ballfields is shown in **Graphic 2.7: Ballfield Orientation** below.



Graphic 2.7 : Ballfield Orientation

Layout, orientation and sizing of fields are provided in [Table 2.1](#). Refer to Appendix A for details of the fields and courts. Refer to Appendix B for specifications relevant to these facilities.

c. Grading and Drainage

Table 2.1 Field Layout, Orientation and Sizing

Sports Field Type	Size	Preferred Orientation	Required Athletic Equipment & Support Amenities
*Multipurpose Field A	225' x 360' (20' minimum runout)	Long Axis North/South	1. Soccer Goals (refer to support amenities) 2. Lacrosse Goals
Multipurpose Field B	180' x 300' (20' minimum runout)	Long Axis North/South	1. Soccer Goals (refer to support amenities)
Multipurpose Field C	165' x 270' (20' minimum runout)	Long Axis North/South	1. Soccer Goals (refer to support amenities)
Multipurpose Field D	120' x 240' (20' minimum runout)	Long Axis North/South	1. Soccer Goals (refer to support amenities)
Baseball/Softball	200' Foul Line (with grass infield) - refer to detail	See 2.1: Preferred Orientation Diagram	1. Backstop (refer to detail) 2. Bleachers (refer to support amenities)
Baseball/Softball	250' Foul Line (with skinned infield)	See 2.1: Preferred Orientation Diagram	1. Backstop (refer to detail) 2. Bleachers (refer to support amenities) 3. Dugouts (refer to detail)
Baseball/Softball	300' Foul Line (with skinned infield)	See 2.1: Preferred Orientation Diagram	1. Backstop (refer to detail) 2. Bleachers (refer to support amenities) 3. Dugouts (refer to detail)

* = Standard size requirement, unless a smaller size is approved by the Town.

Grading and Drainage are important to ensure fields are properly graded and drained to meet play field requirements and be able to maintain as much year-round playability on the fields and courts as possible. Provide grading and drainage within specification tolerances. [Table 2.2](#) includes grading and drainage guidelines for athletic fields and court facilities.

- Grading shall comply with ADA standards.
- Do not create areas of ponding or water retention.
- Avoid building fields and courts at the bottom of a slope.

- Utility boxes and drainage grates shall not be located on playing fields.
- Consider spectator areas when grading the play field sidelines. Provide adequate level areas for spectator seating.
- Ensure soil under fields provides adequate drainage to eliminate ponding.

Table 2.2 Field and Court Grading and Drainage

Sports Field/Court Type	Grading Requirements	Drainage Requirements
Multipurpose Field	Preferred: Crowned in the center along long axis with a maximum slope of 2%. Alternate grading may be considered based on the recommendation of a professional engineer.	Provide perimeter drain at edge of runout
Baseball/Softball	Slope to drain at 1% from home plate to the infield edge and 2% from the infield edge to the outside of the warning track.	Provide positive drainage away from home plate at all locations
Badminton	Preferred: Crowned in the center along long axis with a slope of 1.5%. Alternate grading may be considered based on the recommendation of a professional engineer.	-
Basketball	Drain end to end at 1%	-
Bocce	Provide a level playing surface	Provide underdrain system
Futsal	Preferred: Crowned in the center along long axis with a slope of 1.5%. Alternate grading may be considered based on the recommendation of a professional engineer.	Provide perimeter drain at edge of runout
Pickleball	Court should slope end-to-end, side-to-side or corner-to-corner in one plane at 0.833% minimum and 1% maximum slope	Ensure surrounding area does not drain onto courts
Tennis	Court should slope end-to-end, side-to-side or corner-to-corner in one plane at 0.833" minimum and maximum of 1%.	Ensure surrounding area does not drain onto courts
Volleyball (Sand)	Slope end-to-end at 1.5% slope	Provide underdrain system. Drain surrounding area away from court

2. MULTIPURPOSE FIELD

1. Large turf athletic fields can be utilized for multiple sports (i.e. football, soccer, lacrosse, etc.) for all ages and provide a space for three season to year-round sports facilities for the community.
2. Multipurpose fields shall consist of natural irrigated high-use turf or synthetic turf. Synthetic turf fields are highly encouraged as a sustainable option that reduces water use and maintenance costs as well as provides more year-round opportunities for community use and programming. Refer to Alternative Surfaces section for additional information on synthetic turf. Refer to [Table 2.1](#) for multipurpose field sizing and orientation.
3. Include sports lighting where appropriate.
4. Field goals are required.
5. Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Guidelines](#), for information on minimum parking space requirements.



3. BALL FIELDS

Ballfields shall typically consist of irrigated turf with turf or skinned infields. However, the developer should consider using more sustainable options, such as synthetic turf. Synthetic turf may be required based on factors such as maintenance requirements, available water supply, suitability of the site for the long-term support of irrigated turf, and whether installation of synthetic turf will contribute to the Town's sustainability. Baseball and softball fields shall include the following:

- Refer to specifications for infield mix and warning track materials.
- Where mounds are required (300' foul line fields) provide All-American Sports Clay by All American Sports Material.
- Backstop to be 20' height x 20' straight section with 10' wings
- Outfield fence – Refer to Section 02 (7.0)(a).
- (2) GFCI duplex outlets (one per side)
- Aluminum Tip-n-roll bleachers (one per side with accessible seating incorporated). Bleachers shall be three row at 21 feet length for 200' foul line and 27' length for 250' and 300' foul line.
- Pro style molded bases
- Mounds for 300' foul line fields
- Scoreboard required for 300' foul line fields
- Foul ball poles
- The Town and the developer may negotiate lighting.
- Lighting may be required based on factors such as anticipated hours of programming.
- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Guidelines](#), for information on minimum parking space requirements.

a. Dugouts

Dugout shall be provided at all 250' and 300' foul line baseball and softball fields. Dugouts shall be chainlink fence with a solid roof. All dugouts shall comply with ADA guidelines to and within the dugout. Refer to Appendix A for details and Appendix B for specifications. Dugouts shall include the following:

- Players bench
- ADA turnaround area
- Bat racks



4. SPORT COURTS

Layout/orientation/sizing – Sport Courts

Table 2.3 indicates the size, preferred orientation and required Athletic Equipment and Support Amenities for the sport courts.



Table 2.3 Court Layout, Orientation and Sizing

Sports Court Type	Size	Preferred Orientation	Required Athletic Equipment & Support Amenities
Badminton	44' x 20' (10' Minimum Clearance)	Long Axis North / South	1. Badminton Net
Basketball	Neighborhood-Serving: 40' x 60' Community-Serving: 56' x 84'	Long Axis North / South	1. Basketball Goals 2. (2) Benches 3. (1) Trash Receptacle
Bocce	13' to 19'-6" x 78' to 92'	Long Axis North / South Flexible	1. Bocce Ball Rack 2. (2) Benches 3. (1) Trash Receptacle
Futsal	125'-138' x 66'-82'	Long Axis North / South (However can be flexible)	1. Soccer Goals
Pickleball (2 Court Minimum)	20' x 44' (10' baseline runout and 7' sideline runout minimum)	Long Axis North / South	1. Net 2. 10' Height Chainlink Perimeter Fence 3. 4' Height Chainlink Divider Fence 4. Bleachers <i>(for 2 or more courts)</i> 5. Backboard <i>(1 per set of courts)</i> 6. Windscreens 7. GFCI Duplex Outlet <i>(1 per 4 courts)</i> 8. Trash Receptacle <i>(1 per 4 courts)</i> 9. Lights as required by Town
Tennis (2 Court Minimum)	36' x 78' (10' sideline clearance and 21' end clearance)	Long Axis North / South	1. Net 2. 10' Height Chainlink Perimeter Fence 3. 4' Height Chainlink Divider Fence 4. Bleachers <i>(for 2 or more courts)</i> 5. Backboard <i>(1 per set of courts)</i> 6. Windscreens 7. GFCI Duplex Outlet <i>(1 per 4 courts)</i> 8. Trash Receptacle <i>(1 per 4 courts)</i> 9. Lights as required by Town
Volleyball	30' x 60' (10' minimum sideline clearance)	Flexible	1. Nets & Posts 2. (2) Benches 3. (1) Trash Receptacle

a. Badminton

A badminton court shall be located on irrigated turf. It can be located in an active or passive area of the park. Badminton courts shall include the following.

- Permanent posts with removable commercial grade net
- Striping for the court can be mown or painted

b. Basketball

Basketball courts provide an activity that is often enjoyed by all ages ranging from older children to active adults. Basketball courts shall include the following.

- Secure geotechnical testing and recommendations to determine required soil preparation for courts.
- Courts shall be construction of post tension concrete (depth and psi as recommended by a structural engineer).
- All markings on the playing surface shall be applied using wear resistant paint. All markings shall be a minimum of 2" width, color to be white or yellow.
- Court surfacing may consist of acrylic sport court surfacing that is wear and slip resistant.
- Basketball Goals
- Where appropriate and needed due to adjacent uses, provide 10' height chainlink fencing around the perimeter of the court.
- Field support amenities per page 77
- Refer to Section 02(04)(d)(X.) [**Table 2.4 Community Park Parking Guidelines**](#), for information on minimum parking space requirements.

c. Bocce

Bocce court size may vary. Refer to refer to layout, orientation and sizing table for sizing information. Bocce courts shall include the following:

- The surface shall be flat and leveled
- Perimeter curbing shall be concrete with a wood or composite wood bumper board. All fasteners to attach the boards shall be recessed.
- Surfacing may be one of the following:
 - Stabilized crusher fines
 - Synthetic turf (appropriate pile height for Bocce)
 - Pacific Pearl Bocce Surface System (by Bocce Builders of America or approved equal)
- Provide underdrain system connected to the surrounding storm system or daylighted on site.
- Provide Bocce Ball Rack and Balls
- Refer to Section 02(04)(d)(X.) [**Table 2.4 Community Park Parking Guidelines**](#), for information on minimum parking space requirements.

d. Futsal

Futsal is a variation of soccer that is played on a smaller playing surface and mainly played indoors on a hard court or outdoors on turf, synthetic turf or hard-court surfacing. Futsal can be played on a sport court surface.

- Surfacing shall be irrigated high-use turf, synthetic turf, or sport court (5" minimum thickness) or post-tension concrete paving.
- Provide two goals (one at each end of the court).
- Provide two players benches (one on each side of the court).
- Provide 6' height chainlink fencing around the perimeter of the Futsal court.
- Refer to Section 02(04)(d)(X.) [**Table 2.4 Community Park Parking Guidelines**](#), for information on minimum parking space requirements.

e. Pickleball

Pickleball is a growing and active sport in the community. Pickleball courts shall be designed per the *Pickleball Courts: A Construction & Maintenance Manual*. A minimum of two pickleball courts shall be provided and additional courts as required by the Town. Pickleball courts shall include the following.

- Secure geotechnical testing and recommendations to determine required soil preparation for courts.
- Courts shall be constructed of post tension concrete (depth and psi as recommended by a structural engineer).
- Provide acrylic coating (blue court, green run out) – or other colors as acceptable to the Town.
- Perimeter Fencing shall be 10' height chainlink fencing
- Divider Fencing to be 4' height chainlink fencing
- (1) backboard for every set of courts
- Windscreens (at fencing and gates)
- Cabana or shade shelter with seating between or next to the courts
- Nets
- (1) GFCI duplex outlet for every two courts
- Provide one set of bleachers for every four courts (locate bleachers in on the side of the court that is most easily viewed for the championship match)
- Squeegee and water broom (with hardware to secure to fencing)
- The Town and the developer may negotiate lighting.
- Lighting may be required based on factors such as anticipated hours of court use.
- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Guidelines](#), for information on minimum parking space requirements.



f. Tennis

Tennis courts shall be provided with a minimum of two courts. For competition or complexes provide a minimum of six courts with eight courts being preferred. Tennis courts shall be designed per the *Tennis Court: A construction and Maintenance Manual*. Quantity of courts required for the park may be negotiated by the Town and the developer. Tennis courts shall include the following.

- Secure geotechnical testing and recommendations to determine required soil preparation for courts.
- Courts shall be construction of post tension concrete (depth and psi as recommended by a structural engineer)
- Provide acrylic coating (blue court, green run out) – or other colors as acceptable to the Town
- Perimeter Fencing shall be 10' height chainlink fencing
- Divider Fencing to be 4' height chainlink fencing
- (1) backboard for every set of courts
- Windscreens (at fencing and gates)
- Cabana with seating between the courts
- Nets
- (1) GFCI duplex outlet for every four courts
- Provide one set of bleachers for every four courts (locate bleachers in on the side of the court that is most easily viewed for the championship match)
- Squeegee and water broom (with hardware to secure to fencing)
- The Town and the developer may negotiate lighting.
- Lighting may be required based on factors such as anticipated hours of court use.
- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Guidelines](#), for information on minimum parking space requirements.

g. Volleyball

Volleyball courts shall be sand. Volleyball courts should be located in close proximity to gathering and social areas. They should be separated from play areas. Volleyball courts shall include the following.

- Neighborhood-serving: (1) court minimum
- Community-serving: (2) court minimum
- Volleyball court shall consist of a concrete wall to contain the sand.
- Sand shall be 30 mesh silica sand at a depth between 24"-42" (preferred depth).
- An underdrain system shall be provided and connect to a sump, or other biofiltration method that allows the water to infiltrate on-site.
- Volleyball posts shall be galvanized and spaced to accommodate a (32) feet wide by 3 feet tall net. Net posts shall be 8 feet above the finish playing surface. The net shall have a stainless-steel cable along the top and rope along the bottom.
- Boundary lines
- Refer to Section 02(04)(d)(X.) [***Table 2.4 Community Park Parking Guidelines***](#), for information on minimum parking space requirements.

h. Tournament Sport Court or Multi-court Complexes

In order to accommodate tournaments, athletic complexes with larger quantities of sport court facilities (i.e. tennis, pickleball, etc.) may be required by the Town.

- A minimum of six courts shall be provided for multi-court complexes. The addition of a seventh court allows a location for warm-up during the tournament play.
- All Tournament Sport Court/Multi-court complexes shall have court and facility lighting, restrooms, shade, parking, and seating.



5. FIELD SUPPORT AMENITIES

a. SOCCER GOALS

Provide two soccer goals for each multi-purpose field or quantity required by Town.

Model

Scoremaster (mfr)
Moveable Regulation Soccer Goals
(Size per multi-purpose field)
Or approved equal

Installation

- Freestanding / Portable



b. LACROSSE GOALS

Provide two lacrosse goals per Multipurpose Field size A.

Model

Scoremaster (mfr).
Model: #SM-L1000
Or approved equal

Installation

- Freestanding / Portable



c. PLAYERS BENCH

Provide one players bench in each dugout.

Model

PW Athletic Mfg. Co. (mfr),
Model: # 1103-21G-21' Aluminum
Bench with back with galvanized
frame. Color silver.
Or approved equal

Installation

- Surface mounted on
concrete paving.



d. FOUL POLE

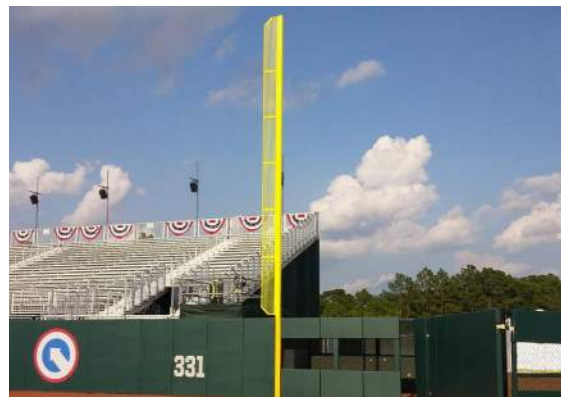
Provide a foul pole in line with foul lines.

Model

Sportsfield Specialties (mfr)
Model: #LGFP420, 20'-0" height
with mesh swing.
Color to be yellow.
Or approved equal

Installation

- In-ground mount
per manufacturers
recommendations. Provide
engineered stamped
drawings.



e. OUTFIELD FENCE GUARD

Provide fence guard along entire length of outfield fence.

Model

Beacon Athletics (mfr)
Fence Guard - Premium Thickness
Color to be Yellow.
Provide along entire length of
outfield fence.
Or approved equal

Installation

- Per manufacturers recommendations.



f. SCOREBOARD

Scoreboards shall be provided at all fields intended to be programmed.

Models (or approved equals)

Single cabinet, aluminum construction, electronic display scoreboard with the following features:

- Size: 14-foot length by 5-feet height overall minimum cabinet.
- Cabinet Finish: High performance coating, color as selected by Owner from manufacturer's full range.
- Includes Captions For: "HOME", "GUESTS", "INNING", "BALL", "STRIKE", "OUT", "H", "E". 9-inch height minimum white lettering.

- Digits: 18-inch height minimum, LED, amber color.
- Two-post mounting.
- Integrated lighting protection.
- Power: UL/ETL listed 120 VAC.
- Control console designed for wired or wireless use.
- Warranty: 5-years minimum

Installation

- Provide engineered stamped drawings and calculations for design of scoreboard assembly, including mounting and foundations.



g. BASEBALL/SOFTBALL BASES

Provide home plate and bases for each baseball/softball field.

Models (or approved equals)

Beacon Athletics (mfr)
First Base: Champro Pro-Style Double 1st Base Set.

All Other Bases: Champro Pro-Style Base Set.

Installation

- Per manufacturers recommendation.



h. PLATES AND PITCHING RUBBER

Models (or approved equals)

Beacon Athletics (mfr)
Home Plate: Home Plate with Anchor and Stanchion.

Pitcher's Rubber: Champro 3-Spike Pitcher's Rubber.
Provide at 300' foul line fields, or other distances where approved by Owner.

Installation

- Per manufacturers recommendation.



6. SPORT COURTS SUPPORT AMENITIES

a. BADMINTON NET POSTS

Provide set of posts per court.

Model

Porter (mfr)
Ultimate Outdoor Volleyball
Standards
Or approved equal

Installation

- Per manufacturers recommendation.



b. BADMINTON NET

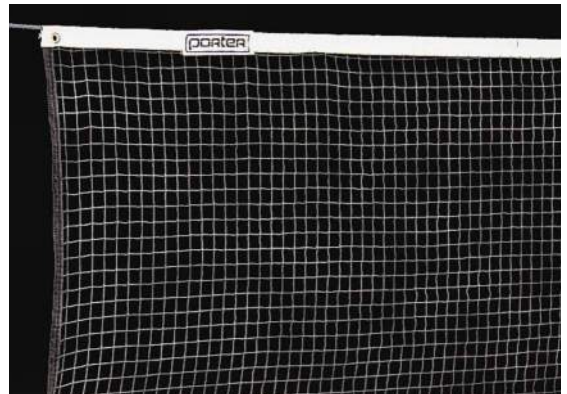
Provide one net system per court.

Model

Porter (mfr)
Badminton Net 20 x 30"
Product Code: 2236110
Or approved equal

Installation

- Per manufacturers recommendation.



c. BASKETBALL GOAL

Provide two goals for each full-size basketball court.

Model

Porter (mfr)
Heavy-Duty Basketball System
Product Code: 195580
Or approved equal

Installation

- In-ground mount.
Foundation design by manufacturer. Design to meet local soil conditions.



d. BOCCE

Provide one bocce ball rack per court.

Model

Boccemasters (mfr)
Bocce Ball Rack or approved
equivalent.
Or approved equal

Installation

- Anchor to concrete edge
with vandal resistant
hardware.



e. FUTSAL GOALS

Provide two futsal goals for each futsal court.

Model

Forza (mfr)
Model: 3m x 2m FORZA ALU110
Socketed Futsal Soccer Goal
110mm reinforced powder
coated aluminum
5mm thick braided goal net
Or approved equal

Installation

- Per manufacturer's recommendation.



f. PICKLEBALL NET POSTS

Provide net posts for each pickleball court.

Model

Douglas (mfr)
Model: SW-36 Deluxe Pickleball
Posts 2-7/8" OD.
Color to be Black
Or approved equal

Installation

- Per manufacturer's recommendation.



g. PICKLEBALL NET POSTS - GROUND SLEEVES

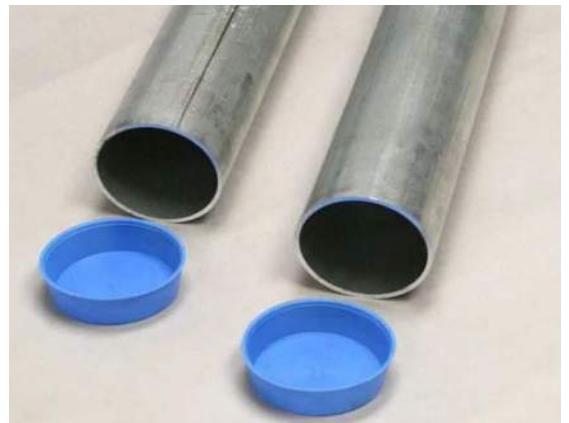
To be used with Pickleball net posts.

Model

Douglas (mfr)
Model: GS-24RD/AL Aluminum
Ground Sleeves 24" Long for
2-7/8" OD Posts
Or approved equal

Installation

- Per manufacturers recommendation.



h. PICKLEBALL NET

Provide a net for each pickleball court.

Model

Douglas (mfr)
Model: JTN-30 Pickleball Net –
36" x 21'-9"
Color to be Black
Or approved equal

Installation

- Per manufacturers recommendation.



i. PICKLEBALL / TENNIS WINDSCREENS

Provide windscreens on all perimeter fencing and gates.

Model

Douglas (mfr)
Polypro Plus Premium – 9' height
Color to be Black
Or approved equal

Installation

- Per manufacturers recommendation.



j. PICKLEBALL / TENNIS CABANAS

Provide cabanas between pickleball and tennis courts.

Model

Sun-Trends Inc. (mfr)
8' long cabana with 8' long cabana
bench (two sided flat).
Color to be Blue.
Or approved equal

Installation

- Inground mount. Provide engineered stamped drawings for installation through post tension concrete.



k. TENNIS NET POSTS

Provide net posts for each tennis court.

Model

Douglas (mfr)
SW-36 Deluxe POP Tennis Posts
2-7/8" OD.
Color to be Black.
Or approved equal

Installation

- Per manufacturers recommendation.



l. TENNIS NET GROUND SLEEVES

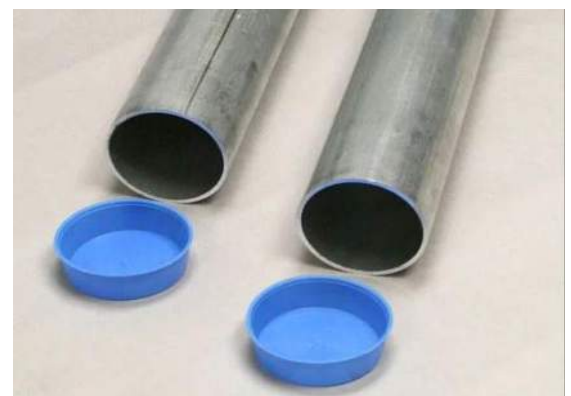
Provide one bocce ball rack per court.

Model

Douglas (mfr)
GS-24RD/AL Aluminum Ground
Sleeves 24" Long for 2-7/8" OD
Posts. Or approved equal

Installation

- Per manufacturers recommendation.



m. TENNIS NET

Provide a net for each tennis court.

Model

Douglas (mfr)
Model: PN-30 POP Tennis Net-
31" x 21'-9"
Color to be Black.
Or approved equal

Installation

- Per manufacturers recommendation.



n. VOLLEYBALL NET POSTS

Provide net posts for each volleyball court.

Model

Porter (mfr)
Model: 2219-20A Volleyball Pro
Series Competition Posts
4" Square Aluminum
Color to be Black
Or approved equal

Installation

- Per manufacturers recommendation.



o. VOLLEYBALL NET

To be used with Pickleball net posts.

Model

Porter (mfr)
Model: Ultimate Outdoor
Volleyball Net
Or approved equal

Installation

- Embed mount with ground sleeves per manufacturers recommendation.



7.0 SPORTS FIELD STRUCTURES & FENCING

a. Outfield Fence

- Shall be 8' height chainlink fence with standard fence cap (yellow). Taller heights may be warranted based on adjacent conditions.
- Provide (2) 8' wide gates to equal (1) 16' wide maintenance gate at the sideline or outfield fence.
- Provide 4' wide pedestrian gate on each side.

b. Backstop

Refer to backstop detail in Appendix A and chainlink fence specification in Appendix B.

Design requirements:

- Backstops to be designed tall and wide enough to limit foul balls hitting fans or adjacent amenity areas or parking.
- Fencing shall be galvanized or black vinyl coated chainlink fence.
- Kickboards to be Trex or equivalent composite material.

c. Dugout

Dugouts shall be designed to provide ADA accessibility to and within the dugout. Refer to dugout detail in Appendix A.

Design Requirements and Recommendations:

- Dugout shall have a solid roof.
- Dugout shall consist of chainlink fencing enclosure.
- Recommend masonry walls that match the park aesthetic when possible.

d. Concessions

Concessions shall be provided at parks with multi-field or multi-court complexes that will have tournament play.

e. Design Considerations

- Concessions building shall be sized per anticipated use and meet all local building and health codes.
- Concessions buildings shall meet ADA standards for those operating and accessing the concessions.
- Building materials shall be durable, vandal resistant and consistent with the design aesthetic of the park and surrounding community.

8.0 SPORTS FIELD/COURT LIGHTING

Sports field lighting will be required at all sports complexes and as required by the Town. All sports field and court lighting shall be designed to meet the appropriate light levels of the field or courts and the age of the users. Fields and courts with lighting shall be sited to minimize impact to the surrounding park uses (residential, commercial, etc.).

Products:

- Baseball/Softball: Musco Light Structure System LED or Cluster with TLC for LED with Musco Control-Link Control System
- Pickleball/Tennis Courts: LSI Courtsider or Courtsider XL or equal with Musco lighting control



9.0 ALTERNATIVE SURFACES

Artificial Turf shall be provided whenever possible to reduce water use and maintenance and provide a year-round playing surface. Artificial turf may be required by the Town. When using synthetic turf refer to Appendix A for details and Appendix C for specifications.

Requirements for synthetic turf include:

- Field striping required for each field shall be coordinated by the Town. Striping colors shall be as follows:
- Football – White
- Soccer – Yellow
- Girls/Women's Lacrosse – Red
- Boys/Men's Lacrosse – Blue
- It may be determined to utilize Boys and Girls Unified Lacrosse layouts
- Provide fencing as needed to protect synthetic turf from vehicular traffic.
- Provide quick couplers adjacent to field to allow for washing down the fields.
- Provide underdrain system with off-field drainage to storm system.



VIII. Outdoor Fitness Equipment

Outdoor fitness equipment may be located along trails or in parks at appropriate locations that allow visibility and safety to the fitness equipment area. There are multiple options available for fitness equipment that are appropriate for a variety of ages.

Consider the park and trail amenities to determine appropriate target ages for the fitness equipment. Ideally provide a variety of equipment that is suitable to meet the needs of multiple ages. Separation of fitness equipment based on targeted age may be appropriate to provide the most enjoyable experience while using the equipment.

All outdoor fitness equipment areas in a park shall be a minimum of 500 square feet (located in one location or a total if dispersed). All fitness equipment areas shall meet ADA standards and provide inclusive opportunities.

Options may include senior/active adult friendly equipment, parkour/obstacle equipment that may be age appropriate for older youth/young adult, traditional more compact fitness equipment. Equipment shall be selected to provide as much multigenerational use as possible.

Consider potential maintenance of equipment during equipment selection.

Potential acceptable manufactures may include:

- Greenfields Outdoor Fitness (multigenerational units)
- Gametime: Outdoor Fitness Equipment
- Kompan: Outdoor Fitness Equipment
- Landscape Structures
- FitCore Extreme (Ages 5-12 and 13+)
- HealthBeat Outdoor Fitness System (13+)
- TriActive : Senior Fitness Equipment
- Others as approved by the Town



IX. Specialized Facilities

1. AQUATICS & WATER ACCESS

All aquatics and water access facilities must comply with ADA standards, building codes, local health department codes, and other applicable requirements.

a. Splash Pad or Water Play

The minimum size of splash pad shall be a minimum of 2,500 square feet. Design of the splash pad shall incorporate features that are appropriate for the scale of the pad and tie into the theme and character of the surrounding park. Additional design guidelines are as follows:

- The goal is to provide a system that is long lasting and reduces required maintenance.

- Provide seating outside of the ‘splash zone’ for parental supervision. Seating may include seatwalls, benches, boulders, etc. It is preferred to provide 50% of the seating shaded with a shade structure.
- Do not plant trees near the splash pad to avoid accumulation of leaves and needles in the splash pad equipment.
- Splash pad shall have a recirculating water system meeting health and safety codes.
- Provide a combination of in-ground spray orifices and stainless-steel upright equipment as sources of the spray features.
- Surfacing shall be durable slip-resistant decorative concrete surfacing. Extend paving to provide a minimum six feet clear zone beyond the interactive spray area to allow passage without getting wet.



b. *Swimming*

Park pools provide a variety of uses including recreational swimming, competitive local and regional meets and swim programs (fitness, lessons, etc.). All pools will include appropriate ancillary pool facilities. Coordinate with the Town of Parker's aquatics department on required programming for the facility.

- Swimming pools and facilities shall meet all building codes, ADA standards, local health codes and any other applicable authority having jurisdiction codes and requirements.
- Building materials shall be durable, vandal resistant and consistent with the design aesthetic of the park and surrounding community. Drawings will be reviewed and approved through the Site Plan process.
- The pool deck shall be large enough to host competitive swim meets providing support infrastructure for meets.
- Provide shaded seating areas
- For pools that will host competitive swim meets adequate pool deck space and bleachers shall be provided.
- Deck shall be slip-resistant concrete paving.
- Provide fencing meeting local health code requirements.
- Site furnishings (tables and chairs, lounge chairs, benches, trash receptacles, etc.)
- Pool ancillary facilities and specialized features may include but are not limited to:
 - Locker rooms and restrooms
 - Concessions
 - Leisure pool features (i.e. slides, climbing walls, spray features, etc.)
 - Storage rooms and buildings
 - Lawn area



2. INDOOR FACILITIES

All aquatics and water access facilities must comply with ADA standards, building codes, local health department codes, and other applicable requirements.

a. Activity Building/Clubhouse

An activity building or clubhouse provides an indoor location for classes, fitness facilities, social gathering spaces and many other uses. Building size will be based on the program. Coordinate with the Town on building program and uses that will complement and enhance the resources of the Town and community.

Design Considerations:

- Activity Building/Clubhouse shall meet all building codes, ADA standards and any other applicable authority having jurisdiction requirements.
- Building materials shall be durable, vandal resistant and consistent with the design aesthetic of the park and surrounding community. Drawings will be reviewed and approved through the Site Plan process.
- Refer to Section 02(04)(d)(X.) **Table 2.4 Community Park Parking Guidelines**, for information on minimum parking space requirements.

b. Environmental Education Center

An Environmental Education Center provides an indoor facility that provides programming, and educational opportunities that inspire and educate the community on local, regional, national and even world-wide natural and environmental information, opportunities and issues. Building size will be based on the program of the facility. Coordinate with the Town on building program and uses that will complement and enhance the resources of the Town and community.

Design Considerations:

- The Environmental Education Center shall meet all building codes, ADA standards and any other applicable authority having jurisdiction requirements.
- Building materials shall be durable, vandal resistant and consistent with the design aesthetic of the park and surrounding community. Drawings will be reviewed and approved through the Site Plan process.



c. Recreation Center or Fieldhouse

A Recreation Center or Fieldhouse provides an indoor facility for sports, fitness, and cultural activities. Potential facility programming may include indoor turf field, gymnasium, swimming pool (lap and/or leisure), ice rinks, indoor running track, circuit and cardio equipment area, fitness classrooms, art studio/classrooms, multi-purpose rooms, offices, etc. Design of the facility should include extensive public engagement and coordination with the Town on building program and uses that will complement and enhance the resources of the Town and community. Building size will be based on need and programming.

Design Considerations:

- The Environmental Education Center shall meet all building codes, ADA standards and any other applicable authority having jurisdiction requirements.
- Building materials shall be durable, vandal resistant and consistent with the design aesthetic of the park and surrounding community. Drawings will be reviewed and approved through the Site Plan process.
- Refer to Section 02(04)(d)(X.) [Table 2.4 Community Park Parking Guidelines](#), for information on minimum parking space requirements.



X. Parking

1. GENERAL CONSIDERATIONS

For information regarding minimum required parking spaces for community parks and amenities, refer to [Table 2.4](#). A site that includes multiple park amenities will be required to provide the cumulative minimum number of parking spaces required by each amenity. Final parking requirements subject to the Town's Land Development Ordinance requirements.

Table 2.4 Community Park Parking Guidelines	
Park Amenity	Minimum Parking Spaces Required
Multipurpose Soccer/Football Field	
225' x 360' (College)	60 per field
165' x 300' (High School)	60 per field
150' x 225' (Youth)	40 per field
Multipurpose Baseball/Softball Field	40 per field
Tennis Courts	3 per court
Pickleball Courts	5 per court
Basketball Courts	5 per court
Horseshoe Pit	1 per two pits*
Bocce Ball	1 per two courts*
Trailheads	5 per mile of trail
Swimming Pool Deck	3 per 1,000 square feet
Playgrounds	1 per 1,000 square feet
Picnic Shelters	2 per picnic table
Amphitheater/Outdoor Performance Venue	1 per 100 square feet of seating area
Off Leash Dog Parks	10 per acre
Disc Golf	5 per 9 holes
Skatepark	5 per 1,000 square feet
Bike Skills Skills Area	5 per acre
Community/Decorative Garden	1 per 600 square feet
Outdoor Fitness Equipment	1 per 5 pieces of equipment
Activity Building/Clubhouse	1 per 300 square feet
Recreation Center/Fieldhouse	1 per 300 square feet
Volleyball Court	2 spaces per court
Futsal Court	5 spaces per court
Badminton	2 spaces per court
Environmental Center	1 per 300 square feet

Note:

**If less than two, no spaces are required.*

1. All parking is required to be off-street.
2. Higher parking counts may be required for locations with athletic complexes and tournament play.
3. Indoor and outdoor recreation facility parking counts may vary or need special studies. Refer to [LDO Table 13.08.F](#) for more information.

05 GUIDELINES FOR ART IN PARKS

The Town of Parker values public art as unique opportunities for cultural enhancement and a sense of pride within the community. Integrating art into public spaces helps to promote vibrant and visually stimulating spaces, enhances local character, promotes quality design, attracts citizens and visitors to public spaces, and in return helps stimulate local economy. Art comes in a variety of styles and forms, but is meant to create a deeper connection with the community in which people live, work, shop, and enjoy recreational activities.

a. Definition of Public Art

Art in the public realm includes, but is not limited to:

1. Three-dimensional: structures, sculptures, site furnishings, playground equipment, etc.
2. Two-dimensional: murals, chalk art, paintings, sandblasted graphics, paving patterns, mosaics, building facades, etc.
3. Mixed media: lighting effects, sound effects, or any combination of forms or media.



*See the Town of Parker's Public Art Master Plan for a complete list of definitions and criteria.

b. General Criteria

Art should meet the following criteria:

1. Must be suitable for the potential site:
 - Appropriate to the function of the space
 - Conceptually compatible with the surrounding design and character
 - Scale, form, context and materials to be appropriate for the site and public use
2. Structural or surface integrity must be safe for public interaction.
3. Any three-dimensional art must be securely anchored or mounted.
4. Display quality artistic craftsmanship from reputable artist or designer.
5. Must be resistant to weather damage, including wind, water, and UV exposure.
6. Must be compliant with public building and safety codes.
7. Art and location to be reviewed by the Town Cultural Director and Art in Public Places Committee during site planning process.



c. Siting & Displaying Works of Art

Site Selection to include the following criteria:

1. Location should not endanger public safety or interfere with pedestrian or vehicular sight lines or traffic flow.
2. Must not block, compete with, or cause a visual distraction from signage or other public safety indicators.
3. Art must be fully ADA accessible.
4. Art installation should not have an impact on the environment or use of the space.
5. Surrounding recreational activities should not impact or endanger individuals viewing or interacting with the art.
6. The location should not interfere with routine maintenance, landscape maintenance, snow removal, or irrigation systems.
7. Permanent installations should take into account future development plans, to avoid unnecessary relocations.
8. Locations should be thoughtfully placed in a setting that is cohesive with the overall design. Art should not be located in a space that does not fit into the overall aesthetic of the area.
9. Designs should have a mixture of public art types. Refer to the following examples for various art opportunities.



*See the Town of Parker's Public Art Master Plan for a complete list of siting and displaying works of art.

ART IN PARKS

Elements Examples



TRADITIONAL SCULPTURES/ MURALS

Traditional sculptures are three-dimensional art pieces that can be made of a variety of different materials and take various shapes and forms. Murals are painted art pieces on a wall or other flat surface.

Design Criteria

- All materials should be exterior rated.
- Provide anti-graffiti coating on all permanent flatwork art.

Examples

- Free-standing sculptures
- Painted graphically wrapped utility boxes
- Bridge or building murals
- Painted tunnels, walks or plazas



ARCHITECTURAL ART

Architectural art is either art incorporated into the building design facade or structure, or is attached to the exterior of a building, bridge or other physical structure.

Design Criteria

- Art must meet all International and Colorado Building Code requirements.

Examples

- Shade structure or overhang attached to a building
- Unique shapes and/or colors of structures, windows or roofs.
- Custom facades or art attached to the facade



PLAY AREA ART

Playground art incorporates art directly into the play structures and/or play surfacing of a playground. Various colors, styles, materials, and themes can be used to create an original play experience.

Design Criteria

- Playgrounds must meet all playground guidelines noted in Section 02 of this manual.

Examples

- Playground equipment themes
- Safety surfacing designs
- Interactive sensory play structures or equipment
- Seek-and-find scavenger hunt elements



SITE/ LANDSCAPE ART

Site and/or landscape art consists of either site furnishing elements, site or retaining walls, or planting materials used in an artistic or creative way.

Design Criteria

- Elements must be safe for public use and meet all ADA accessibility requirements.

Examples

- Custom benches or seats
- Custom skate stops
- Custom or themed bike racks
- Site walls utilizing formliners, sandblasting or inlaid impressions
- Planting & murals

*See the Town of Parker's Public Art Master Plan for a complete list.

ART IN PARKS

Elements Examples

PLAZAS, STREETSCAPES

Streetscapes are the natural and built spaces in an urban setting that include the street and the public spaces adjacent to it. These public spaces include walkways, crosswalks, steps, ramps, and other spaces important to the fabric of a street environment.

Design Criteria

- All paint, site furnishings, and hardscape materials must be exterior rated, be able to withstand maintenance operations and be safe for public use.

Examples

- Patterns painted on walkways, crosswalks, or stairs
- Custom site furnishings
- Patterns displayed using hardscape materials



SHADE STRUCTURES

Shade structures provide shade for users, but can be designed to provide shade in an artful and inviting way.

Design Criteria

- All structures must meet all state and local codes.
- Drawings must be stamped by a Colorado licensed engineer.
- Final drawings shall be approved by the Town.

Examples

- Perforated patterns within roof to cast unique shade images on the ground
- Custom sculptural structures that also provide shade



GATEWAYS / SIGNAGE / BANNERS

Gateways, signage and banners can be custom designed to fit the character of a space and provide information for the user per LDO requirements.

Design Criteria

- Must be made of durable materials that are easily maintainable.

Examples

- Trail signage
- Educational signage
- Wayfinding signage
- Gateway signage over streets or park entrances
- Interchangeable banners along streetscapes
- Monument signs and rules and regulations signs



LIGHTING & SEASONAL

Lighting can provide an artistic feeling to a space, whether it is year-round lighting of a plaza, site furnishings or seasonal accents to enhance a space.

Design Criteria

- Lighting shall be coordinated with an Electrical Engineer to ensure proper installation, foot candle requirements, and power needs.

Examples

- Site furnishing lighting
- Projector lights with images
- Seasonal lighting of structures or trees



*See the Town of Parker's Public Art Master Plan for a complete list.



03

STREETSCAPE

01 INTRODUCTION

Streetscapes shall be defined as any areas landscaped along roadways within or beyond the Public Right-of-Way, and/or any median strips located within divided lane roadways. Streetscapes shall be designed to provide for visual relief along the Town's roadways and constructed for safety, cost effectiveness, and minimal maintenance.





a. Definitions

1. Streetscape / Landscape Improvements :

The sidewalk, plant material and related irrigation facilities for a Town approved landscaping plan for street, road right-of-way, parks, open space and other public places.

2. Sight Distance Triangle : Are areas at the corners of intersections of roads where views of approaching traffic should not be obstructed.

3. Trench Drain : Elongated surface for water to drain from a specific area.

4. Median Planting : The area between the lanes of opposing traffic

5. Street Tree Planting Strip : The area between the back of curb and the Right Of Way

6. Tree Lawn : The area between the back of the curb and the sidewalk

7. Ornamental Pockets : Narrow or small decorative areas of planting within a streetscape



b. Design Principles

The following design principles are to be followed when designing or improving both the commercial and/or residential streetscapes.

Streetscapes Are:

- 1. Public Spaces -** To be designed for people to interact, socialize, and feel comfortable as they move and travel throughout their community.
- 2. Safe -** To be safe for public use, meet code requirements, must be ADA accessible, provide clear and visible signage, and design for the safe interaction of pedestrians, bicycles, and vehicles when crossing paths.
- 3. Flexible -** To allow spaces within the streetscape to evolve and change to meet the needs of the community. This could involve the addition of parklets, moving curbs or redirecting traffic, adding street trees or seating spaces, providing bicycle or scooter sharing stops, or other amenities that improve the area.
- 4. Sustainable -** To improve the health of the surrounding ecosystem and natural ecology. Improvements could include the addition of planting and shade trees, the addition of bioswales and well-designed water collection designs, and the use of sustainable materials.
- 5. Functional -** To provide aesthetically pleasing, well-designed spaces that generate higher revenues for businesses and higher values for homeowners.

02 DESIGN GUIDELINES

The following standards do not necessarily apply to residential and commercial streetscapes. They do apply to all streetscapes that are intended to be owned and maintained by the Town of Parker.

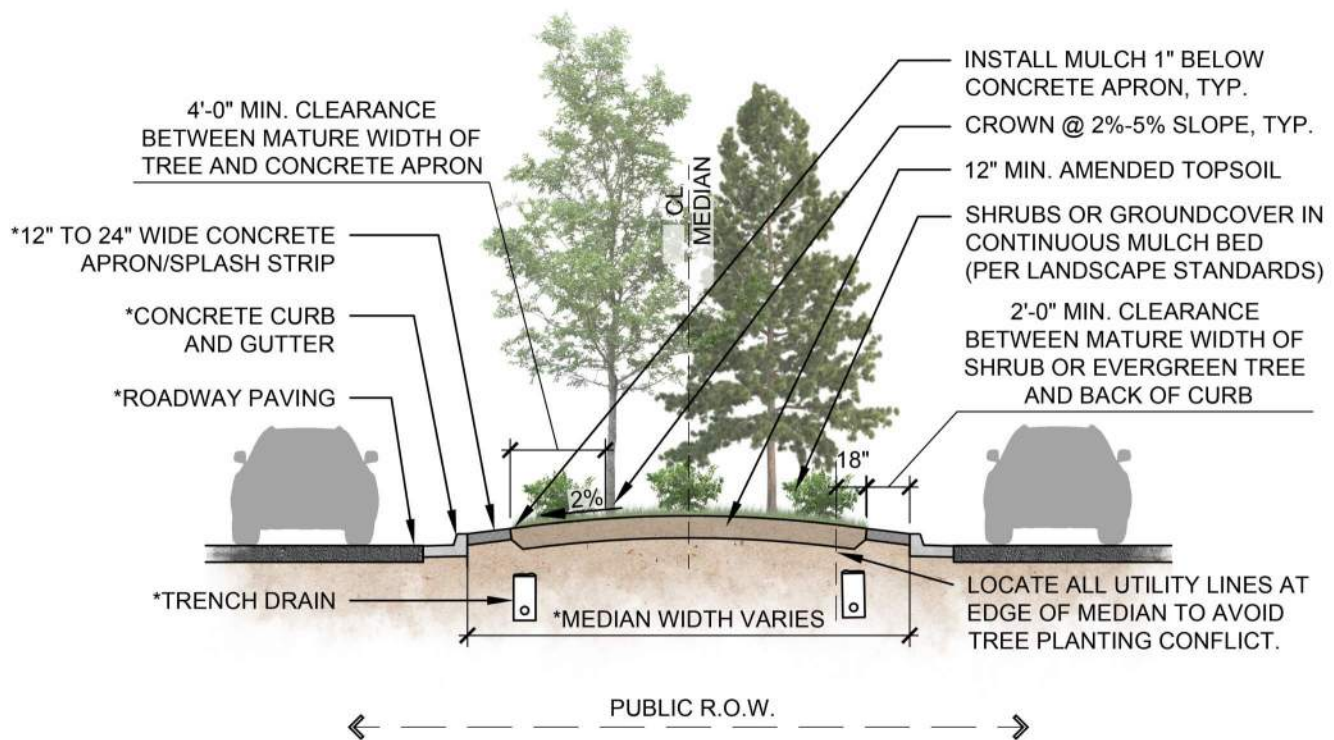
Determination as to applicability will be made during the design review process.

Maintenance of Improvements in Public Right-Of-Way; Planting, Maintaining and Removal of Trees on Public Property; Maintenance and Installation of Landscaping; Removal of Dead or Dangerous Trees, Limbs or Shrubs; Infected or Infested Trees; Obstruction of Public Property; and Determination of Hazard/Notice to Responsible Party/Assessment of Costs shall be applicable to all right-of-way in the Town of Parker, unless otherwise approved by the Town.

a. Typical Median or Landscape Island

Design Standards:

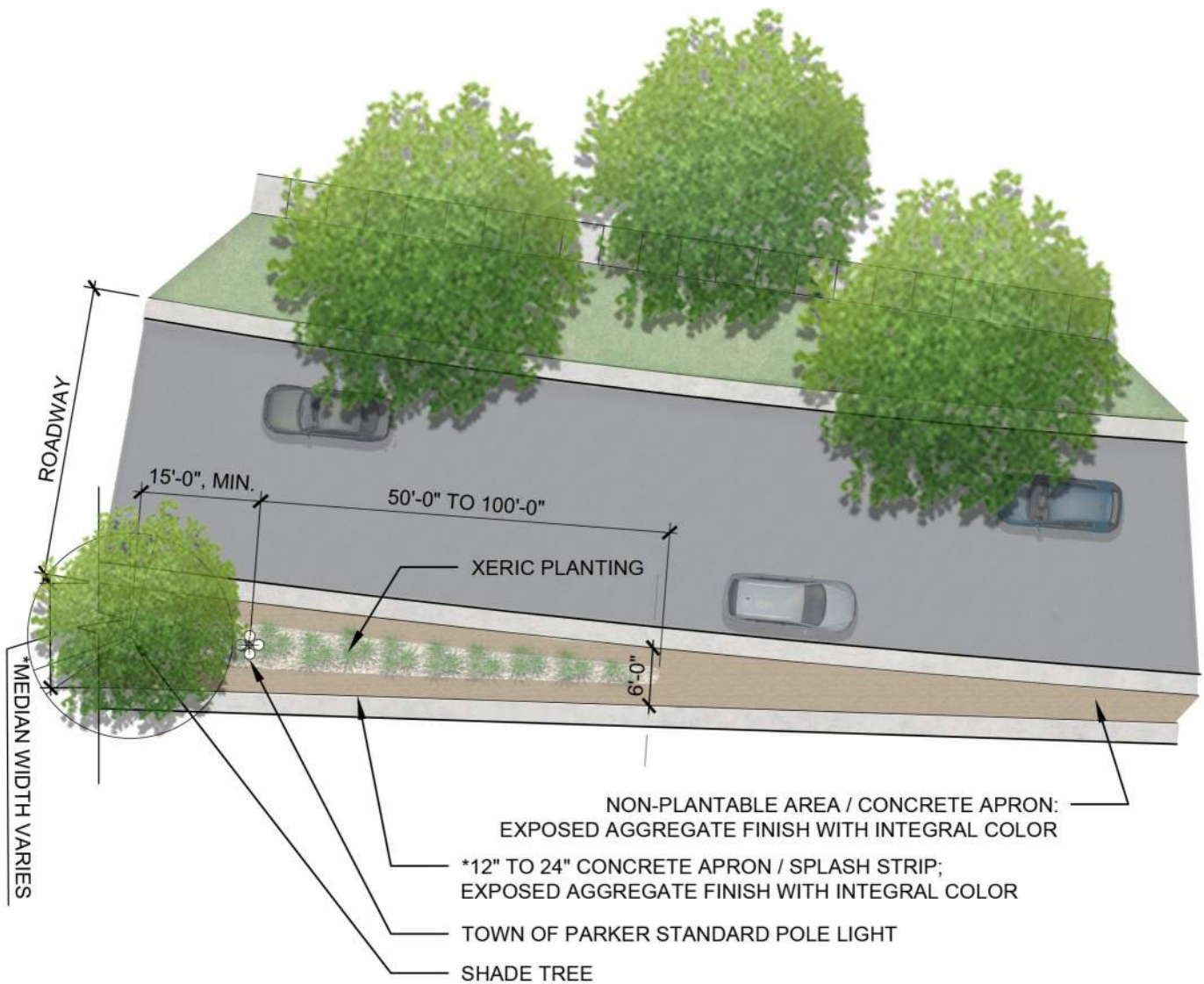
1. The first 50' to 100' of any median shall be planted with a xeric, low maintenance grass. Raised planter beds, where specified, will begin 50' to 100' from the beginning of medians, where the native grass plantings end (Refer to Graphic: Example Streetscape Plan View in this section 3.2).
2. A minimum 1' wide concrete apron shall be provided along all median edges to prevent roadway salt/sand damage in the planting area. The apron shall be sloped a minimum of 2% to allow for runoff (Refer to Graphic 3.2: Example Streetscape Plan View in this section).
3. The median planting strip shall be designed so planting areas are no less than six (6) feet wide. Non-plantable areas within medians (areas less than six (6) feet wide) shall be colored concrete (Davis Color Rustic Brown) with an exposed aggregate finish (Refer to Graphic 3.2: Example Streetscape Plan View in this section).
4. Trench Drains are required within medians at vertical curb and gutter along arterial roadways, in accordance with the Town of Parker's Roadway Design and Construction Criteria manual.



NOTES:

*REFER TO PARKER ROADWAY DESIGN AND CONSTRUCTION CRITERIA MANUAL

Graphic 3.1: Typical Median or Landscape Island



NOTE:

BASIS-OF-DESIGN FOR INTEGRAL COLOR CONCRETE: DAVIS COLORS (MFR) "RUSTIC BROWN" #6058; LIQUID MIX RATE @ 2.46 LBS PER 94 LB SACK OF CEMENT; POWDER MIX RATE @ 2 LBS PER 94 LB SACK OF CEMENT

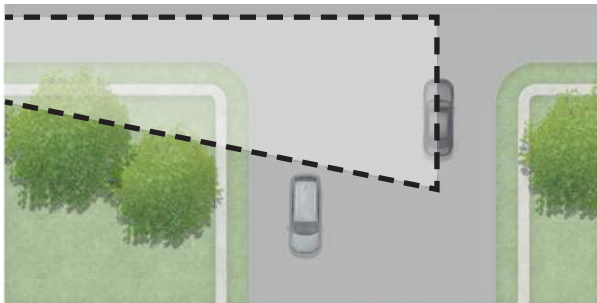
*REFER TO PARKER ROADWAY DESIGN AND CONSTRUCTION CRITERIA MANUAL

Graphic 3.2: Example Streetscape Plan View

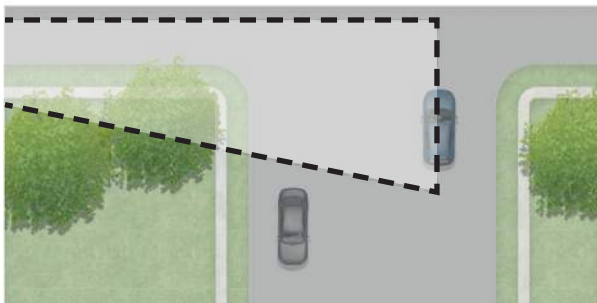
b. Sight Distance Triangles

Design Standards:

1. Sight distance triangles shall be maintained at all intersections of a private drive with a public street, and at the intersection of two public streets, their size varying by road classification, projected traffic level, and speed.
2. These sight triangle areas are to contain no obstructions to the view of the driver of a vehicle. Any landscaping placed within these areas shall allow visibility across the area.
3. All shrubs, boulders, ground covers, and similar features shall be maintained at or below a height of 24" (at maturity) above the grade of the lower of the adjacent roadways.
4. Trees may not be placed within the sight triangles at roadway intersections. Locate trees to ensure full growth does not infringe on sight distance triangle.
5. All plantings within sight triangles shall be designed and installed in compliance with the latest edition of the Town of Parker's Roadway Design and Construction Criteria manual. See detail 24 in Appendix A.



Acceptable: Trees planted outside of the site triangle.



Not Acceptable: Trees planted or branching within limits of site triangle. Increasing the demand for pruning.



SITE TRIANGLE, TYP.

Graphic 3.3: Sight Triangle Plan View

c. Conduits

Design Standards at Landscape Medians:

1. Conduits shall be placed underneath all new roadways at 500' increments.
2. Place two (2) – four (4) inch PVC conduit pipes perpendicular to the roadway for connections to water, for irrigation, and power, for electric service.
3. Conduits shall be clearly marked above proposed grade by cutting an "X" on the head of the curb with a demo saw.

d. Commercial & Mixed-Use Streetscape

Commercial and mixed-use streetscapes are the areas between businesses, retail, or office buildings and the street.

Design Standards:

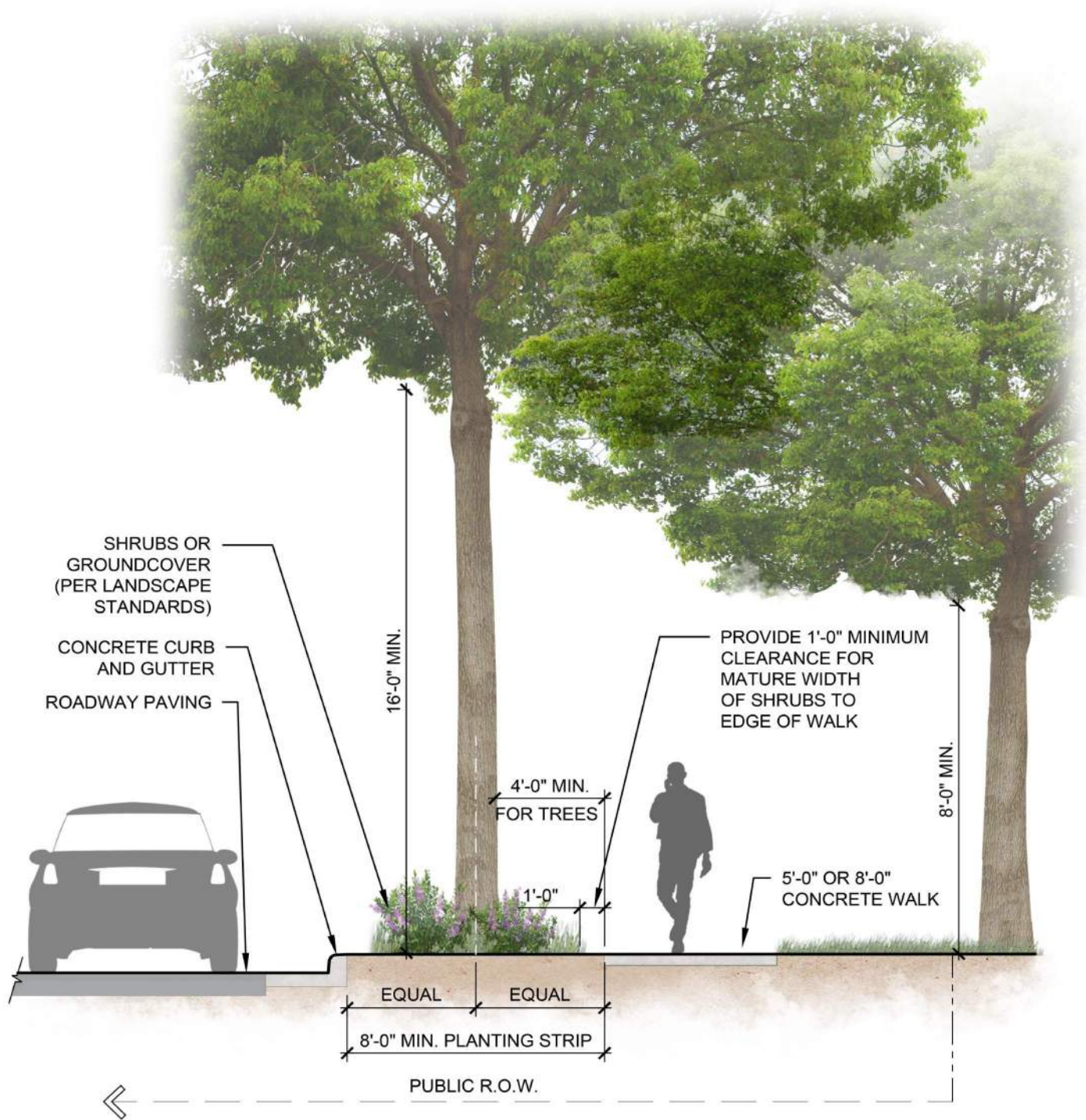
1. Paving, plantings, lighting, site furnishings, and signage are to have a unified aesthetic that matches the character and design of the surrounding area.
2. Convenient parking for vehicles and bicycles should be provided.
3. Refer to the [*LDO*](#) and the [*Roadways Design & Construction Manual*](#) for additional guidelines for commercial and mixed-use streetscape design.

e. Residential Streetscape

Residential streetscapes are the areas between single family or multi-family residential areas and the street.

Design Standards:

1. Paving, plantings, lighting, site furnishings, and signage are to have a unified aesthetic that matches the character and design of the surrounding area.
2. Convenient parking for vehicles and bicycles should be provided.
3. Refer to the [*LDO*](#) and the [*Roadways Design & Construction Manual*](#) for additional guidelines for residential streetscape design.



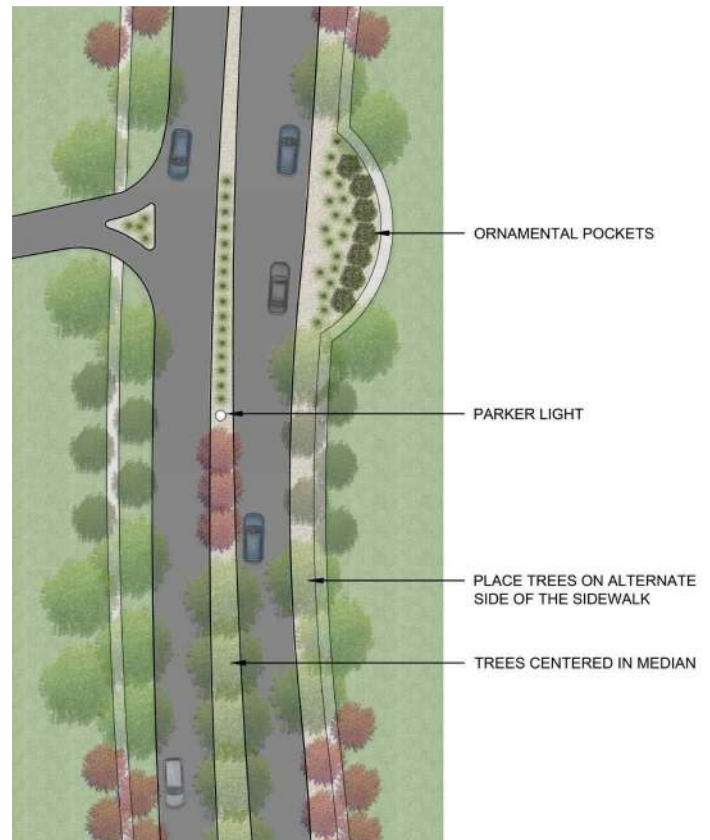
NOTE:
PRIVATE ROADWAY CRITERIA TO MATCH PUBLIC STREETScape CRITERIA.

Graphic 3.4: Typical Streetscape Cross Section with Detached Walk

f. Street Trees & Planting

i. General Plant Material Guidelines:

1. Trees and shrubs shall be selected with the mature size in mind to prevent mature plants from over-crowding each other, thus minimizing pruning. A plant's mature spread will limit its location. Refer to the "Town of Parker Recommended Plants List".
2. A Minimum Overhead Clearance shall be maintained throughout the life of all street and median deciduous trees (Refer to Graphic 3.4: Typical Streetscape Section with Detached Walk).
 - a. The branching height of all trees shall be maintained at no less than sixteen (16) feet above the street.
 - b. The branching height of all trees shall be maintained no less than eight (8) feet above the sidewalk.
 - c. Trees shall be located to allow for adequate sight distance to all traffic signs in accordance with the Town's Roadway Design and Construction Criteria Manual.
3. Spacing for all vegetation shall be 90% of the mature spread stated on the included "Town of Parker Recommended Plant List". In some instances, understory trees and shrubs shall be allowed within this 90% spacing to provide a higher density of planting, as long as the mature size (height, branching structure, etc.) of each of the plants will not hinder either plants growth.
4. Select plants that require minimal maintenance.
5. Where signs, lights, overhead or underground utilities, utility poles and fire hydrants would limit mature vegetation size, adjustments in species or location should be considered to minimize excessive pruning.
6. Create "Ornamental Pockets" where the median blocks the intersection of two roads to provide a view when traveling the intersecting road (Refer to Graphic 3.5: Example Streetscape Plan View). "Ornamental Pockets" shall also be located at intervals within the Street Tree Planting Strip to create interest and variety in the plant materials used along the streets in the Town of Parker.
7. Xeriscape plantings are encouraged to minimize water consumption.
8. Within any given street block, a maximum of five (5), and minimum of three (3), shade tree species shall be selected to limit over-use of one species. Exceptions can be submitted for consideration, and will be approved/disapproved during the Site Plan Review Process. Select plant materials with similar characteristics such as color and form to provide uniformity within the block, concentrating species with ornamental characteristics at vistas and intersections.
9. The use of some plant material is restricted, refer to the Allowed and Excluded Plants List ("Town of Parker Recommended Plant List").



Graphic 3.5: Example Streetscape Plan View

ii. Tree Placement Guidelines:

1. Median Planting

- a. Place Shade Trees in the center of the raised planter bed to maximize the amount of area available for root growth for each tree. Provide utility placement at the edges of the medians to allow for proper tree placement in the center.
- b. Medians that are wider than standard may be able to fit more than a single Ornamental Tree within the width of the median. Size shall be the determining factor in addition to whether the location of the tree will necessitate excessive pruning to keep the tree out of the roadway.

2. Street Tree Planting Strip

- a. The Design Intent for tree placement within the Street Tree Planting Strip is to provide a continuous tree canopy over the street space as well as the pedestrian space. This canopy may be achieved by placing trees on alternate sides of the sidewalk (Refer to Graphic 3.5: Example Streetscape Plan View). Other design proposals may be submitted for consideration during the plan review process
- b. At street intersections, the tree closest to the intersecting street shall be located on the side of the sidewalk away from the street to maintain adequate visibility (Refer to Graphic 3.3: Sight Triangle Plan View)

3. Evergreen Trees

- a. Evergreen trees shall not be placed where they will obstruct the visual line of sight on a public right-of-way, or where they will project winter shade onto a public street causing ice on the roadway.
- b. A maximum of five (5) evergreen trees shall be allowed in one grouping to prevent snow-drifts.
- c. Evergreen trees shall be placed at least ten (10) feet from the edge of pavement, curbs or sidewalks, or far enough to permit clearance of the tree's mature spread.
- d. Other design proposals may be submitted for consideration during the plan review process, with an explanation for placement noted on the plan (i.e. topography, suitability for the area due to special circumstances, etc.)

iii. Shrubs, Ornamental Trees and/or Ground Cover

1. Shall be used throughout the median plantings to provide under story growth, which maximize screening between the traffic corridors and helps keep mulch in place.
2. Shrubs shall be used within the "Ornamental Pockets" in the Street Tree Planting Strips (Refer to Graphics 3.6 and 3.7 for acceptable and non-acceptable Ornamental and Shade Tree planting).



***Graphic 3.6: Not Acceptable:
The Ornamental & Shade Trees are not
able to co-exist and grow to full potential.***



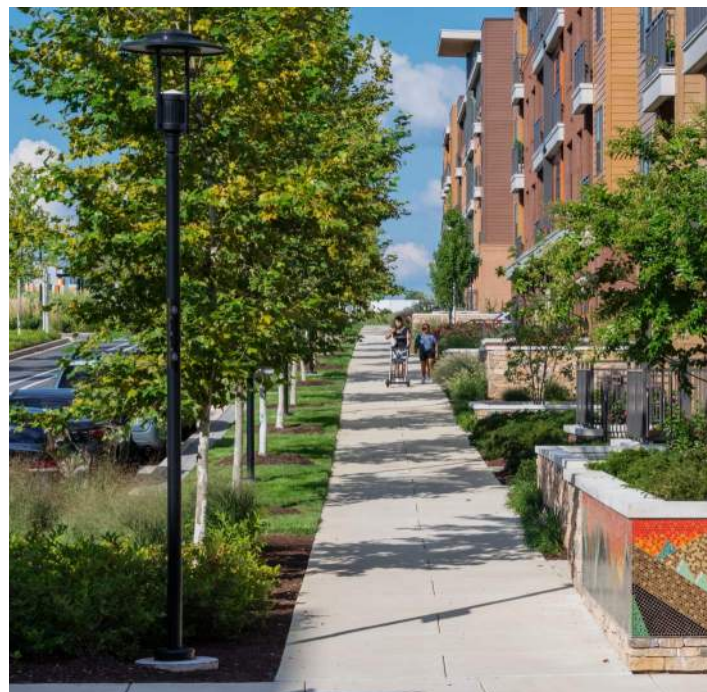
***Graphic 3.7: Acceptable:
The Ornamental & Shade Trees are to co-ex-
ist and grow to full potential.***

iv. Perennials

1. General Guidelines:
 - a. Shall be used at high visibility areas within the Median plantings and the “Ornamental Pockets” in the Street Tree Planting Strip to provide additional interest. Size and maintenance requirements shall be the determining factors for the location and use of any perennial plant material. Perennial planting areas shall be clearly labeled as such on any landscape plans submitted for Site Plan Review. When perennial plantings are used, they shall adhere to these standards:
 - Large groupings of same species plants shall be used for greater visual impact.
 - Select plants so that visual impact is maintained through all seasons.

v. Annual Bedding Plants

- a. The use of annual bedding plants is discouraged in planting beds to be maintained by the Town due to their high maintenance demands. Only upon direct approval through the Site Plan Review shall annual plantings be allowed. However, the Town may make direct requests for annual planting beds where they deem appropriate. Annual planting areas shall be clearly labeled as such on any plans submitted for Site Plan Review.



vi. Optional Residential Tree Lawn Guidelines:

1. General Guidelines:
 - a. In lieu of traditional turf grass, xeric landscapes can be installed within a portion of the tree lawn or in its entirety.
 - b. The Town does not require review and approval of individual tree lawn areas if the species are consistent with the Town’s plant list, except for deciduous shade trees. Please check with your HOA for any additional approvals.
 - c. Planting in this area should provide: species diversity, visual interest by using various colors, textures, growth habits, and plants with winter interest.
 - d. When installing plant material other than traditional turf grass, water conserving xeric plants shall be used.
 - e. It will take 1 to 2 growing seasons of regular deep watering to grow the kind of extensive root system these plants need to withstand dry conditions. Water deeply and infrequently once established.
2. Plant Material
 - a. A minimum coverage of 75% live xeric plant material shall be used including: ornamental grasses, perennials, deciduous and evergreen shrubs, groundcover, vines, etc. Artificial plant material shall not be allowed.
 - b. Seed mixes shall not be used in tree lawns with the exception of Buffalo Grass, Blue Grama or a blend of the two.
 - c. No more than 20% of the plant material will be over 2’ in height at maturity with the maximum height of 4’ for any plant, with the exception of trees. The total height is measured from the sidewalk level.
 - d. A deciduous shade tree shall only be planted in a tree lawn (by the adjacent property owner) with the review and approval by the Town. The Town shall determine the species on a site-by-site basis. Deciduous shade trees shall be 2.5” caliper trees at planting. Evergreen trees and ornamental trees shall not be allowed.

e. All plant material shall be selected from the Town's plant lists. Other plants may be proposed for consideration/approval by the Town, prior to planting.

3. Coverage

a. A maximum exposed coverage of 25% organic wood mulch, rock mulch, and/or stepping-stones shall be allowed.

b. The mature plant size shall be considered when determining plant area coverage and exposed areas.

4. Site Distances

a. The site distance setback at intersections and driveways must not be obstructed. (All site distance requirements are referenced in the Town of Parker's Roadway Design and Construction Criteria manual.) The total height is measured from the sidewalk level.

b. All plants, boulders, etc. shall be less than 2' in height within 10' of any driveway.

c. All plants, boulders, etc. shall be less than 2' in height within 25' of a local/local or local/collector intersection, as measured from the flow line.

5. Existing Trees

a. A one-foot radius per inch of trunk diameter shall be undisturbed for planting or any other site modification around the base of the tree.

b. New plants around the base of existing trees shall be one-gallon size or smaller to reduce the amount of damage to the tree roots.

c. Mulch shall be installed and maintained so as to be a minimum of 3" away from the trunk of trees.

6. Water, Soil, and Irrigation

a. Water shall be applied in a manner that allows maximum soil penetration and minimum runoff and evaporation.

b. Existing irrigation shall be modified to accommodate the new landscape design and promote water conservation.

c. Only water conserving drip or subsurface irrigation shall be used.

7. Design, Installation and Maintenance:

a. The design, installation, and maintenance shall promote: water conservation, creative designs with appropriate and diverse plant selection, and sound horticultural practices.

b. Successful xeriscape requires proper soil preparation. It is recommended that 6 cubic yards per 1,000 square feet of organic matter be incorporated into the soil to a depth of 6", prior to planting.

c. Avoid the use of landscape fabric under mulched plant material, as it will inhibit the spread of the plant.

d. Spacing for all vegetation shall be 90% of the mature spread. All plant material shall be appropriately spaced to accommodate the natural mature plant habit.

e. Avoid rows of larger plants.

f. Plants shall not obstruct any sidewalk or street.

g. A 40' separation shall be maintained between street trees and approximately the same distance for street trees and front yard trees.

h. The adjacent property owner is responsible for maintenance including: proper pruning, weeding, plant replacement, supplemental mulching, and watering.

i. Identify all utilities prior to digging.



g. Sustainable Maintenance Guidelines

THE FOLLOWING SECTIONS APPLY TO ALL RIGHT-OF-WAY (STREETSCAPE) IN THE TOWN OF PARKER, UNLESS OTHERWISE APPROVED BY THE TOWN:

i. Maintenance of Improvements in Public Right-Of-Way:

1. It shall be the duty of the owner, occupant or lessee of any real property abutting a constructed right-of-way (the “Responsible Party”) to provide for the continuing care, maintenance, repair and replacement of all improvements installed in any right-of-way area between their property line and the curb line adjoining their property, which includes, but is not limited to, trees, shrubs, turf, groundcover plantings, irrigation, sidewalks, driveways, planters, benches, lighting and trash receptacles (the “Improvements”). Such maintenance shall include, but is not limited to, mowing, weeding, watering, pruning of trees and shrubs, insect and disease control of plant material, repair and adjustment of irrigation systems, repair and/or replacement of concrete walkways and clearing walkways and driveways of snow and ice.
2. Areas created prior to the enactment of the ordinance from which this section was derived may be subject to these requirements, as part of a Town approved landscape plan for the subject real property.

ii. Planting, Maintaining & Removal of Trees on Public Property:

The Town Forester shall establish rules and regulations for the planting and maintaining of trees on any public right-of-way or other public place in the Town and it shall be unlawful for any person to plant trees upon any public right-of-way or other public place in the Town except as prescribed in such rules and regulations. The rules and regulations shall contain:

1. Spacing requirements for trees on the public right-of way and other public places;
2. The standards that are to be followed when planting trees on the public right-of-way;

3. The types of trees which are prohibited on any public right-of-way or other public place;
4. Requirements for maintenance and removal of such trees upon the public right-of-way or other public place.

iii. Maintenance and Installation of Landscaping

1. It shall be the duty of the Responsible Party that owns, leases or occupies any real property located within the Town to provide for regular weeding, pruning, mowing, watering and other maintenance required for a neat appearance and healthy condition of all plantings located on said real property. Said maintenance shall be done at the expense of the Responsible Party. Plant materials which exhibit evidence of pests, disease, or damage shall be appropriately treated, and dead plant materials shall be removed and replaced with the approval of the Town.
2. It shall be the duty of the Responsible Party that owns, leases or occupies any real property abutting a public right-of-way located within the Town to provide for landscaping of any right-of-way area between his property line and the curb line or the edge of the roadway and between the property line and the center line of any alley. Areas created prior to the enactment of the ordinance from which this section was derived may be subject to these requirements, as part of a Town approved landscape plan for the subject real property.



iv. Removal of Dead or Dangerous Trees, Limbs or Shrubs:

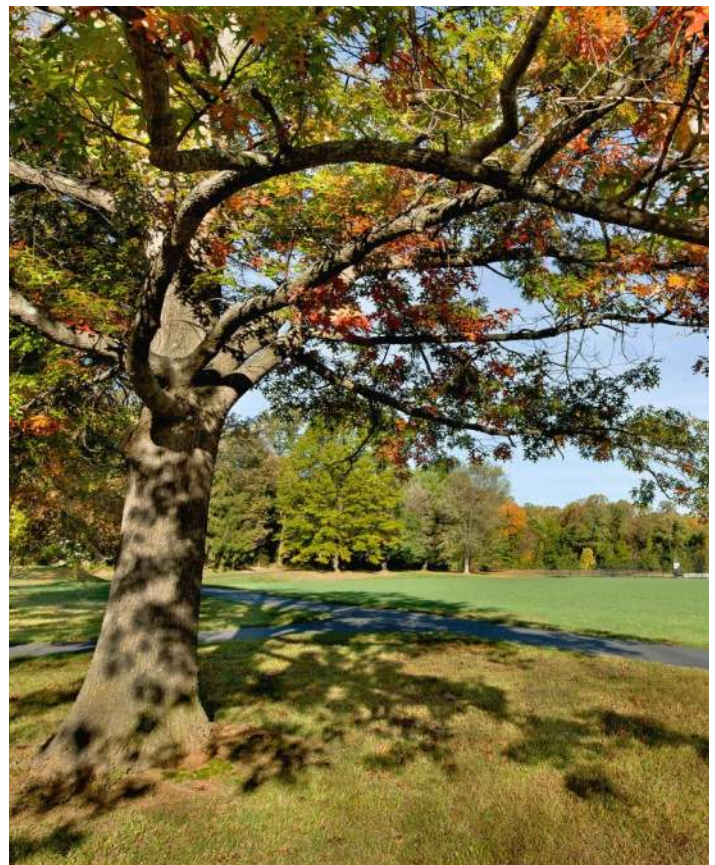
1. The Responsible Party shall remove any dead, dying or structurally unsound trees, limbs or shrubs from the real property owned, occupied or leased by the Responsible Party or the public right-of-way abutting said property, when said dead, dying or structurally unsound trees or limbs are dangerous to life, limb, or property.
2. When a dead, dying or structurally unsound tree, limb or shrub has the potential to affect adjacent property, and is dangerous to life, limb or property, the responsible party shall remove such tree or limb so as to avoid injury or damage to or on the adjacent property.
3. The responsible party shall remove any live, dead or dying tree, limb or shrub that is blocking a sight triangle or traffic sign causing a potential traffic hazard, as determined by the Town. The Town authorized representative may order the property owner to remove any such tree, limb or shrub.

v. Infected or Infested Trees

1. The Town authorized representative may inspect any tree or tree part, including logs or branches existing or growing upon any property within the Town. The Town shall conduct surveys to determine if any destructive or communicable disease, or other pestilence exists which may be detrimental to or endanger the good health and well being of trees in the Town.
2. Upon discovery of any destructive or communicable disease, breeding place of the disease, or pestilence that endangers the good health and well being of trees, or is capable of causing an epidemic spread of communicable disease or insect infestation, the Town or authorized representative shall at once notify in writing the Responsible Party, of the condition thereof and order such Responsible Party to eradicate, remove, or otherwise control such condition within a specified time.

vi. Obstruction of Public Property

1. The Responsible Party shall maintain and care for the trees upon the property owned, leased or occupied by the Responsible Party and upon the public right-of-way abutting said property so that said trees do not interfere with, obstruct, or in any way endanger the safe public use of streets, alleys, sidewalks, or other public places. Stumps are not permitted on the public right-of-way or other public place.
2. A Minimum Overhead Clearance shall be maintained throughout the life of all street and median deciduous trees (Refer to Graphic 3.3: Sight Triangle Plan View). The branching height of all trees shall be maintained at no less than sixteen (16) feet above the street, and no less than eight (8) feet above the sidewalk.
3. When the Town or authorized representative determines that a tree is in such a condition that it interferes with, obstructs, or in any way endangers the safe public use of streets, alleys, sidewalks, or other public places, the Town shall direct the Responsible Party to prune, remove, or otherwise take such action as is necessary to eliminate the interference, obstruction, or dangerous condition of the tree.



vii. Determination of Hazard/ Notice to Responsible Party/ Assessment of Costs

1. When the Town Forester or authorized representative determines that the Improvements described herein are in a state of disrepair, a notice to repair shall be sent to the Responsible Party described herein.
2. Service of the notice described above shall be made by either serving such notice on the person named in the notice, or by sending such notice by first class mail to the residence or place of business of the person named in the notice and by posting such notice in a conspicuous place on the property abutting or adjacent to the Improvements described herein. If the notice is served on one other than the owner of the property that is in disrepair or adjacent to or abutting the subject public right-of-way that is in disrepair, a copy of the notice shall also be mailed to the owner at the address contained in the Douglas County Assessor's records.
3. The notice described herein shall contain:
 - a. A description of the required care, maintenance, repair or replacement;
 - b. A statement of the Improvement that requires care, maintenance, repair or replacement;
 - c. A statement advising of the right to an administrative hearing to appeal the notice to the Public Works Director, if requested within fifteen (15) days; and
 - d. A requirement that notification of intent to comply shall be made to the Town Foresters office within thirty (30) days from the date of issuance of the notice; and this notice shall also indicate that failure to make the repairs described in the notice within sixty (60) days shall be unlawful, and the failure to comply with the notice may result in work being done by the Town at the expense of the party to whom the notice is issued.
4. If the person to whom the notice is directed fails to comply within the time specified in the notice, the Town Forester or authorized representative may order the care, maintenance, repair or replacement of the Improvements by or on behalf of the Town, and the procedures outlined

herein for collection of costs and expenses shall apply.

- a. When work has been performed by the Town, the Town Forester shall bill any or all Responsible Parties for the costs and expenses necessary to provide care, maintenance, repair or replacement.
- b. If the Responsible Party shall fail within thirty (30) days after billing to pay the costs and expenses of work by the Town, such costs and expenses may be collected by the Town in a civil action or assessed and filed as a lien against the real property owned, leased or occupied by the Responsible Party.
- c. If the costs of care, maintenance, repair or replacement have not been otherwise collected, the Finance Director shall prepare a statement enumerating the actual costs plus fifteen percent (15%) of the costs for inspection and other additional administrative costs. The costs enumerated in this statement shall be a first and prior lien upon the property owned, leased or occupied by the Responsible Party relating back to the date upon which the care, maintenance, repair or replacement was performed. A copy of this statement shall be deposited in the United States mail or personally hand-delivered to the Responsible Party. The Responsible Party may request a hearing before the Public Works Director to contest the amount of the costs. Such request must be made in writing and be filed with the Finance Director within thirty (30) days of the date of mailing or service of the first statement to the Responsible Party. The Responsible Party shall be given at least two (2) weeks' written notice of the date, time and place of any hearing scheduled before the Public Works Director. The decision of the Public Works Director shall be final. If the statement remains unpaid, the amount shall be certified by the Finance Director to the Douglas County Treasurer. The Douglas County Treasurer, upon receipt of the certified statement, is hereby authorized to place the amount upon the tax list for the current year and to collect that amount in the same manner taxes are collected with a ten-percent penalty thereon.

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04

PARKS, TRAILS, OPEN SPACE & STREETSCAPE SUPPORT AMENITIES

01 INTRODUCTION

Providing support amenities in the park, open space and streetscape designs support and enhance the user experience. The location, quantity, and style of support amenities should be appropriate to the context and use of the public space.

Support amenities within this section include the following categories:

- Site Furnishings
- Structures & Parking
- Lighting
- Safety Barriers and Flagpole

Site furnishings accepted by the Town of Parker are designed to complement each other in color, materials, form and style, and have been tested for durability and maintenance.

General guidelines for support amenities:

- All support amenities must be ADA accessible.
- Any specialty site furnishings will be reviewed with the same criteria as approved furnishings.
- Site furniture and amenities shall be designed or permanently secured per manufacturer's recommendations.
- Site furnishings shall be oriented to discourage skateboard activity to the greatest extent possible.
- Neighborhood park site furnishings can be flexible from the design standards within the following support amenities. However, all selected furnishings must be commercial grade quality.

Park Definition:

Park is a public or private land used for active or passive recreational uses that may include facilities for organized activities, including playing fields, playgrounds, and ball courts. Accessory uses may include group picnic shelters, hard-surfaced pathways, restrooms, parking lots, and similar facilities.

Open Space Definition:

Open Space is a public or private land and aquatic areas without visible evidence of residential, commercial, or industrial development that are regulated or managed to protect the natural environment and significant cultural, historical, geological, and ecological resources. Such areas may include natural, cultural, and visual resources, trail corridors, community buffers, greenways, and environmental hazard areas, such as floodplains and steep slopes.

Streetscape Definition:

Streetscapes shall be defined as any areas landscaped along roadways within or beyond the Public Right-of-Way, and/or any median strips located within divided lane roadways. Streetscapes shall be designed to provide for visual relief along the Town's roadways and constructed for safety, cost effectiveness, and minimal maintenance.



a. Organization

There are several instances where parks, open space and streetscapes all share the same amenity type.

The following Support Amenity Standards (subsection b) includes support amenities that are identified as being used in either parks, streetscapes, or in both locations.

The Support Amenity Standards Tables are divided into categories with various options and requirements from each category. These include:

1. Applicability
2. Description & Placement
3. Model and/or Features
4. Installation

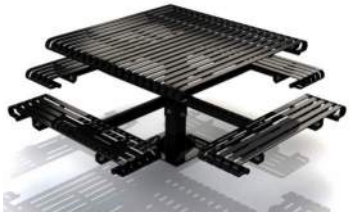
Applicability is shown in the form of a 2-column table adjacent to the amenity. A check mark indicates that the amenity is compatible in a park and open space location, or a streetscape application. An example of this is shown below.

PARKS & OPEN SPACE	STREETSCAPE
✓	✓

Graphic 4.1: Example of Amenity Compatibility Table

b. Support Amenity Standards

i. Site Furnishings

PARKS & OPEN SPACE	STREETSCAPE	1. BENCHES		
		Model Victor Stanley (mfr). Model RB-28 (backed) / RB-12 (backless) Backed: 6'-0"L x 2'-0"W x 1'-5"H (seat)/2'-7"H (back) Backless: 6'-0"L x 1'-8"W x 1'-5"H (seat)	Installation Surface-mount using self-tapping concrete screws. Bench must be anchored to concrete; if unit pavers, crusher fines, or other surface material is being used, provide appropriate detailing of concrete foundations below finish grade. Provide space on bench pad for accessible seating adjacent to the bench.	
✓	✓	Color: Black		
		2. CHAIRS		
		Model Victor Stanley (mfr). Model NRS-24 with bolt-on armrest. 24" steel scroll seating.	Installation Surface-mount using stainless steel vandal resistant anchors.	
✓	✓	Color: Black		
		3. PICNIC TABLE		
		Model <i>a. Square</i> Locate picnic tables in shade, close to parking and within activity centers. For each grouping of tables of up to four tables, provide one 3-seat accessible table. If only one table is provided, provide an accessible table. (STANDARD) Victor Stanley (mfr). Model: CRPR-4 48" square top (4 seat) (ADA) Victor Stanley. Model: CRPR-3 48" square top (3 seat)	Installation Surface-mount using stainless steel vandal resistant anchors. Color: Black	
✓	✓			
		<i>b. Rectangle</i>		
		Model (STANDARD) Victor Stanley (mfr). Model FRST-6 6' long table with (2) 6' bench. (ADA) Victor Stanley. Model FRST-6 accessible 8' long table with (1) 6' bench and (1) 8' bench.	Installation Surface-mount using stainless steel vandal resistant anchors.	
✓	✓	Color: Black		

PARKS & OPEN SPACE	STREETSCAPE	4. TRASH/RECYCLING RECEPTACLE		
		Provide trash receptacles in easily accessible areas and in locations for ease of pickup. Space trash receptacles a minimum of 10 feet away from benches. Model Victor Stanley (mfr). Model Rb-45. 45 Gal, standard tapered formed lid. Trash receptacle lids to have no lid or flat top. Recycling receptacle lid to have a flat top “recycling” lid. Color: Black Installation Surface-mount using self-tapping concrete screws in size as recommended by manufacturer.		
✓	✓			
		5. DOG WASTE STATION		
		Provide at all pedestrian access points into the park, open space, with a minimum of three per park. Waste station dispenser to include sign, dispenser, and receptacle mounted on pole. Model (Trash Receptacle) Pet Waste Eliminator (mfr). Model SKU #E44 - 22 Gallon Waste Receptacle (Dog Bag Dispenser) Model 2100 - Padlock Way. (Sign) American Sign (mfr). Or approved equal Color: Hunter Green Installation Install dispenser, trash receptacle and sign on an 8'-0", 4" x 4" cedar post (24" below finish grade). Receptacle and bag dispenser must meet ADA standards. Bag dispenser to include Master Lock 0536 and Town of Parker sticker.		
✓				
		6. DRINKING FOUNTAIN		 
		Every park should include at least one drinking fountain adjacent to play areas, gathering spaces and sports fields and integrated into restrooms. Locate in close proximity to high activity areas. Model Most Dependable Fountains, Inc. (MDF) Product #2240 SMSS with bottle filler and two-season fountain covers. (Image 1) Option to include pet fountain. (Image 2) Color: Black Installation Pad and drinking fountain height must meet ADA standards. All connections must be double clamped.		
✓				Image 1 Image 2

PARKS & OPEN SPACE	STREETSCAPE	7. BICYCLE RACK Provide bicycle racks adjacent to building entrances, park entrances, activity centers and sports fields. Model MADRAX (mfr) Model: U200 2" square tube, 18-5/6" W X 34" H" Or approved equal Installation Surface mount with tamper resistant concrete anchors (4 spikes per rack). Spikes to be mushroom head spikes 3/8" X 3". Color: Black; Powder Coat 
✓	✓	
		9. BICYCLE REPAIR STATION Locate bicycle repair station in an area that provides ample room to work on a bike. Provide paved surface under and around bike repair station. Models (or approved equals) Dero Bike Rack Company (mfr) <i>Fixit-H:</i> Surface mount, powder coated, green RAL 6016, Configuration: EPX Color: Green Style:FT <i>Air Kit Frame:</i> Fixit Mount, REV. B, powder coated, green RAL 6016, Size: FX Rev B, Configuration: EPX Color: Green <i>Assembly Tools:</i> Tamper-resistant tools for installation Air Kit Prime FX, A Size: AK PR FX A Installation Surface-mount using self-tapping concrete screws. 
✓		

ii. Structures & Parking

PARKS & OPEN SPACE	STREETSCAPE	1. RESTROOMS		
		a. <i>Permanent</i>		
✓		Permanent restrooms are to be provided at all Community-Serving Parks. Permanent restrooms are desirable at all parks and open space facilities. Permanent restrooms should be designed per current Building Codes and the architectural design should be contextual to the site and surrounding community. Design of restroom facilities will be reviewed and approved through the Site Plan or Final Plat Review process.		
		Features • Sink: Penal-Ware 1652LRB Series 18” Lavatory with Rectangular Bowl - ADA Compliant, or approved equal • Toilet: Penal-Ware 1675 Series Blowout Jet Toilet, Off Floor, or approved equal • Hardware: 45HOL 15 H 626 - Best Privacy Lever with Securitron, M32 Magnalocks, or approved equal • Soap Dispenser: Bobrick Model B-2111 Surface Mounted Soap Dispenser, or approved equal • Toilet Tissue Dispenser: Bobrick Surface-Mounted Twin Jumbo Roll Model B-2892, or approved equal • Hand Dryer: Global Industrial High Velocity Automatic Hand Dryer Model 641164, or approved equal • Indoor/Outdoor Traffic Control: Securitron M32 Magnalock, or approved equal • Digital Timer: Securitron DT-7 Prime Time Digital Timer, or approved equal • Alarm: Securitron PZ1 Piezo Sounder, or approved equal • Flush Valve: Zurn Z6143AV AquaVantage ‘AV’ Concealed Closet Flush Valve, or approved equal • ADA Accessible drinking fountain located on outside of building • Provide vandal resistant lighting • Provide motion sensors for exterior and interior lighting • Provide heating for year-round use • Provide anti-graffiti coating to all interior, publicly accessible painted surfaces		

PARKS & OPEN SPACE	STREETSCAPE		
✓		<i>b. Portable</i> Portable restrooms are to be used for temporary events. If a portable restroom is used for a park, an enclosure shall be provided. Locate away from gathering areas and accessible for delivery/pickup and routine maintenance. Features Model Archolet (mfr) ADA Model #481003 restroom enclosure. Size 8'-1"L x 7'4 1/2" W x 9' 1-1/2"H Or approved equal Provided by MZI mzi.marty@gmail.com Color Dark Green Installation In-ground mount. Provide engineered shop drawings for design of foundation and shelter.	 
✓		<i>c. Vault</i> Vault Restrooms are only acceptable in open spaces where water is not available and upon approval of the Town. Recommended vault Restroom Manufacturer's: -Public Restroom -Biological Mediation Systems -CXT -Other as approved by the Town	
✓		2. SHADE STRUCTURE <i>a. Medium and Large</i> Shade structure with minimum 1100 SF roof for medium shelters and 1500 SF for large shelters accommodating more than (10) users. Locate in area central to park and providing ease of access to other high-use program elements. Model Recommended manufacturers: • Classic Recreation Systems • Icon Shelter Systems • Polygon • Others as approved by the Town Frame: Steel, TGIC powder-coat finish. While steel is preferred, final frame material may be negotiated by the Town and the developer. Roof: Standing seam over tongue & groove wood roof deck. Columns: Where possible provide decorative masonry columns consistent with Park design aesthetic and materials. Color: Black; other colors may be considered and require Town of Parker approval. Anchor bolts: Internal to column. Other: Provide duplex convenience outlets, (2) min., integrated into columns. Provide security level lighting in shade structure. Wood structures are allowed with approval by the Town.	

PARKS & OPEN SPACE	STREETSCAPE	<i>b. Small</i> Shade structure with minimum 800 SF roof, accommodating (5) to (10) users. Locate adjacent to high-use program elements, where shade and rest may be desired. Model Potential manufacturers: • Classic Recreation Systems, • Icon Shelter Systems • Polygon • Others as approved by the Town Color: Black; other colors may be considered and require Town of Parker approval. Anchor bolts: Internal to column. Other: Provide duplex convenience outlets, (1) min., integrated into columns. Provide security level lighting in shade structure. Wood structures are allowed with approval by the Town. Frame: Steel, TGIC powder-coat finish. Roof: Shed roof, standing seam, over tongue & groove roof deck. Alternate roof designs such as shed roofs, clearstory, and hip are encouraged to create interest.	
✓	✓	3. PARKING <i>a. Off-street</i> Where required, provide in accordance with Town of Parker Land Development Ordinance (chapter 13.06) Site Plan Standards and Procedures. Refer to Table 2.4 Community Park Parking Guidelines, for more information on off-street parking requirements per park amenity.	
	✓	<i>b. On-street</i> Where required, provide in accordance with Town of Parker Land Development Ordinance (chapter 13.06) Site Plan Standards and Procedures.	

iii. Lighting * Refer to Sports & Fitness in Section 02 for Sports Field and Court Lighting.

PARKS & OPEN SPACE	STREETSCAPE	1. LIGHTING a. General All lighting shall conform to Town of Parker Land Development Ordinance and per standards and guidelines of the Illuminating Engineering Society (IES). Lighting shall utilize LED fixtures and best practices in designing for dark-sky compliance. Lighting requirements set forth within these specifications may not apply to master planned communities. This will be determined during the design.	
✓	✓		
✓		b. Trail, Park & Natural Area Lighting Lighting is to reside within the boundaries or adjacent to trails, parks, or natural areas only. Conforming to Town of Parker Land Development Ordinance and per Illuminating Engineering Society (IES), provide pedestrian lighting along major circulation routes and gatherings areas at a minimum. For more remote applications, where power supply may limited or cost prohibitive, solar powered lighting should be considered. Photovoltaic panels may be provided at individual poles or in a centralized array. Trail Light Model Architectural Area Lighting PROV2-36L-295-4K7-2-BLS-STND_MNT-UNV This is type 2, directional for trail = 3596 lumens Or approved equal Trail Pole Pole without GFI_Architectural Area Lighting PR4-4R12-226-BLS Or approved equal Park Light Model Architectural Area Lighting PROV2-36L-295-4K7-5W-BLS-STND_MNT-UNV This is type 5, symmetric for park = 3529 lumens Or approved equal Park Pole Pole with GFI_Architectural Area Lighting PR4-4R12-226-GFI MOD (10" FROM TOP OF POLE)-BLS Or approved equal	
✓	✓	c. Roadway & Parking Lot Lighting Lighting is to reside within the boundaries or adjacent to roadways or parking lots outside of the limits of Downtown and/or Sulphur Gulch. Conforming to Town of Parker Land Development Ordinance and per Illuminating Engineering Society (IES), provide lighting for comfortable and safe environment. Model Gardco (mfr), P26-64L-600-NW-G2-AR-4-UNV-BK, "Pure Form" model, P26 Medium Area Light. Housing: Providence Medium 2.0 house - LED Qty: 64 LEDs - CCT/CRI: 4,000K, 70CRI Or approved equal Color: Black - Pole Mount: Arm Mount - Voltage: Universal 120-277V Pole Black Pole by Lytepole, 401-4011-20-20'-AB-D1-TBK-CO, 20' ht. x 4" dia., 11 ga., straight round, medium gray finish. Or approved equal	

d. Parker Style Streetscape Lighting

Parker Style Streetscape Lighting is to reside within the boundaries of Downtown Parker and/or Sulphur Gulch only. Placement of Parker Style Streetscape lighting will be determined during the design.

Conforming to Town of Parker Land Development Ordinance and per Illuminating Engineering Society (IES), provide lighting for comfortable and safe environment.

Downtown Streetscape Light 22A-1046

All Parker Streetscape Lights are to have the outlet located on the base for use to light the median trees during the Holiday Season.

Model

Architectural Area Lighting PROV2-36L-615-4K7-4W-BLS-TRA57-5-UNV-DB35F16-188-MOD GFI-T-FINAL

Parker Five Globe Lights

All Parker Five Globe Lights are to have the outlet located on the base for use to light the median trees during the Holiday Season.

Model

Niland (mfr), VP-103-TF-9.2-VP4-5C-3012-TRWP-GFI-IUC

Placement

Locate one (1) "Parker Globe Light" every 100-150 linear feet within the median planter beds on all arterial roadways. All other medians are subject to design review. These standards may not pertain to master-planned communities. A determination on applicability will be made during the design review process.

Proximity to Trees

Trees shall not be located within fifteen (15) feet of any light measured from the center of the tree (Figure 1). Trees adjacent to lights (but beyond fifteen (15) feet) shall be deciduous shade trees only. Ornamental trees are not allowed next to lights because they block visibility of the light.

Placement within Median

Utilities, electrical lines, and light poles in medians are to be placed at the edges to allow for tree planting.



PARKS & OPEN SPACE	STREETSCAPE	<i>e. Pedestrian Lighting</i> Pedestrian Lighting is any lighting along pedestrian areas that do not reside within the boundaries of Downtown Parker, Sulphur Gulch, trails, parks or natural areas. Conforming to Town of Parker Land Development Ordinance and per Illuminating Engineering Society (IES), provide along major circulation routes and gatherings areas at a minimum.	
✓	✓	Model Architectural Area Lighting (mfr), “Providence” model, or approved equal • Housing: Providence Medium 2.0 house • LED Qty: 36 LED • Lumen Output: 295 • CCT/CRI: 4,000K, 70CRI Color: Black Gloss 2 Pole Mount: Standard Mount Voltage: Universal 120-277V Pole Hubbell Lighting (mfr.), model PR4-4R12-226-BLS, 12’ height, with GFIC duplex outlet in weather proof enclosures.	
✓	✓	<i>f. Catenary Lighting</i> Where appropriate to provide overhead, suspended lighting and where it may be desirable to eliminate the clutter of poles or provide a unique ambiance. Lighting should conform to Town of Parker Land Development Ordinance.	
✓	✓	<i>g. Accent / In-Ground Lighting</i> Where appropriate to highlight features such as art installations, or provide accents to architectural and landscape elements such as walls, planters, flag pole, seating, etc. Lighting should conform to Town of Parker Land Development Ordinance. In-Ground Light Model KIM LTV82-RG-XX-12L-RGBW-UV-XX-XX Or approved equal. Distribution, color temperature, and lens options per specific project needs.	
✓		<i>h. Architectural Lighting</i> Per Illuminating Engineering Society (IES) standards and as required to meet applicable building codes and Town of Parker Land Development Ordinance.	
✓		<i>i. Shelter Lighting</i> Conforming to Town of Parker Land Development Ordinance and per Illuminating Engineering Society (IES), provide shelter lighting for shelters located within populated gathering areas, along circulation routes, and near playgrounds, at a minimum. Model Kenall MS15FL-PP-XX-15L35K-XX-XX-XX Finish, options and accessories per specific project needs.	

iv. Safety Barriers and Flagpole

PARKS & OPEN SPACE	STREETSCAPE	1. BOLLARD - STEEL PIPE & CONCRETE FILLED <i>a. Steel Pipe & Concrete Filled</i> Steel Pipe Bollard filled with concrete is a security post that ensures a high level of impact protection. Primer coating is ready for additional paint and can be cut to certain depths. Bollard caps or covers can also be added.			
✓		Model R-10070-04 Steel Pipe Security Bollard (4-12"), Reliance Foundry, or approved equal Color: Black	Installation Concrete embedment. Set bollard 36" into concrete and fill with concrete. Ensure that bollard is plumb.		
✓		<i>b. Collapsible Fold-Down</i> Clean, versatile design is suitable for a variety of locations. Made of carbon steel and powder coated. Model MCSP-SS2-EZ, MaxiForce, or approved equal Color: Black	Installation Fold-down mounting.		
✓		<i>c. Decorative</i> Versatile ductile iron bollard features annular rings and a spherical top casting. A clean design as stand-alone or to cover impact-resistant security posts. Model R-7571, Reliance Foundry, or approved equal Color: Black	Installation Concrete embedment.		
✓		2. FLAGPOLE Number of poles vary depending on project and number of flags. Mounting height 30' per LDO requirements. Model Concord American Flagpole (mfr), IRW-GS. Alloy 6063-T6 Tapered Aluminum Tube. 16 Gauge galvanized steel tube at base. Or approved equal Color: Chrome; variations in color may be considered but require Town of Parker approval	Installation Foundation design should be consulted by a qualified engineer familiar with site soil conditions. Lighting Illumination of flags shall comply with the provisions of the Parker Land Development Ordinance Section 13.08.110, <i>Exterior Lighting</i>. Provide lighting per lighting standards.		



05

PARKS, TRAILS, OPEN SPACE & STREETSCAPE MATERIALS



01 INTRODUCTION

Various material types are provided in parks, trails, open spaces and streetscapes. All materials shall meet design criteria in the Town of Parker Roadway Design and Construction Criteria Manual.

a. Organization

b. Materials

1. Concrete Flatwork
2. Decorative Concrete
3. Unit Paving
4. Crusher Fines
5. Detectable Warning Surfaces
6. Drives & Parking Lots
7. Curbs & Walls
8. Fencing
9. Pedestrian Railings
10. Tree Pits and Planters
11. Recommended Plant Lists & Seed Mixes

c. Landscape Products:

1. Planting Mix (topsoil)
2. Soil Amendments
3. Irrigation
4. Barrier Fabric
5. Wood and Rock Mulch
6. Staked and Guyed Trees



a. Organization

There are several instances where parks, trails, open space and streetscapes share the same materials.

The following Materials Standards (subsection b) include materials that are identified as being used in either parks, streetscapes, or in both locations.

The Materials Standards Tables are divided into categories with various options and requirements from each category. These include:

1. Applicability
2. Description & Placement
3. Model and/or Features
4. Installation

Applicability is shown in the form of a 2-column table adjacent to the material type. A check mark indicates that the material is compatible in a parks and open space location, or a streetscape application. An example of this is shown below.

PARKS & OPEN SPACE	STREETSCAPE
✓	✓

Graphic 5.1: Example of Material Compatibility Table

b. Materials

i. Paths, Trails & Sidewalks

PARKS & OPEN SPACE	STREETSCAPE	1. CONCRETE FLATWORK Concrete flatwork is a very common material used for sidewalks and plazas within a streetscape. Design Criteria • Must meet all CDOT and ADA accessibility standards. • Refer to construction details and specifications regarding strength, install, finish, reinforcement, slope, and types of joints.	
✓	✓	2. DECORATIVE CONCRETE Decorative concrete is a type of concrete that can vary in aesthetic appeal to give a unique character to a public space. It must meet all of the design criteria of concrete flatwork, and shall not create any slipping, tripping or other accessibility hazards in order to ensure public safety. Locate and use of decorative concrete shall be approved by the Town. a. Integral Color • A coloring admixture, or concrete pigment, is added to the concrete mix to give a consistent color throughout the entire thickness of the concrete. • Colors to be approved by the Town. b. Exposed Aggregate • An exposed aggregate surface is created by removing the top layer of concrete, in order to reveal the decorative coarse aggregate beneath. • This method creates a unique and slip resistant texture. c. Stamped Patterns • Concrete that has been imprinted, patterned, textured, or embossed. • This effect can give a variety of decorative styles to a concrete surface, such as geometric paver-like patterns, stone, or other effect. • Pattern to be approved by the Town. d. Sandblasted Graphics • Graphics or lettering can be sandblasted into concrete to create specific shapes, logos, words, or other images. • Lithochrome exterior rated paint is recommended to be added to the sandblasted graphics or lettering to enhance the visibility of the effect. • Lithochrome paint colors to be approved by the Town.	  

PARKS & OPEN SPACE	STREETSCAPE	3. UNIT PAVING Unit paving is aesthetically pleasing, impervious units that contain permeable joints. This type of paving can include a variety of different types, styles, sizes, and colors. a. Stone - Stone pavers are typically square or rectangle in shape, and can be arranged into a variety of patterns. - The finish of these stones can include honed or sandblasted, saw cut, flamed, chiseled, tumbled, or antiqued. - Color, type, and finish to be approved by the Town. b. Precast Concrete - Precast concrete pavers are tiles that are designed to mimic natural stone. - Their composition includes a mixture of sand, gravel, and pebbles. - The patterns and finishes can vary. - Color, type, and finish to be approved by the Town. c. Permeable Interlocking Concrete Paver (PICP) - PICP's consist of solid concrete paving units with joints that create openings in the pavement when assembled together to form a pattern. - Often installed with varying-sized stone or aggregate underneath. - Color, type, and pattern to be approved by the Town.	  
✓	✓	4. CRUSHER FINES Crusher fines paving is to be used in parks, trails and open spaces where soft surface paved conditions are desired. Provide stabilized crusher fines material per specifications.	
✓	✓	5. DETECTABLE WARNING SURFACES Unit paving are aesthetically pleasing, impervious units that are contain permeable joints. This type of paving can include a variety of different types, styles, sizes, and colors. Refer to CDOT specifications for acceptable detectable warning surface materials.	

ii. Drives & Parking Lots

PARKS & OPEN SPACE	STREETSCAPE	1. DRIVES & PARKING LOTS Drives and parking lots shall be designed to meet anticipated vehicular loads. All parking lots and drives shall provide a geotechnical report to determine pavement recommendations. Acceptable materials include concrete and asphalt. Concrete shall be provided at locations where there will be oversized vehicular traffic or heavy vehicle turning. Follow CDOT specifications for all concrete and asphalt paving for parks, trails, open spaces and streetscape projects. Refer to Appendix B for more information.	
✓	✓	a. Concrete - Refer to Details in Appendix A. b. Asphalt - Refer to Details in Appendix A.	

iii. Curbs & Walls

PARKS & OPEN SPACE	STREETSCAPE	1. CURBS & WALLS Retaining walls shall be used minimally; however, when needed walls shall be made of durable materials that match the aesthetic of the park, trail, open space and surrounding community.	
✓		Design Considerations - Wall materials shall be approved by the Town. - Retaining walls shall include structural engineered design. - Walls shall have proper underdrain system directed towards the storm system. - Walls shall be designed to discourage skateboarding and graffiti vandalism. Walls designed to avoid the need for skate stoppers are preferred. - Walls shall have an anti-graffiti coating applied. - Guardrails shall be provided at the top of walls when walls are over 30 inches in height with turf or walkways adjacent to the top. - Acceptable materials may include: a. Cast-in- Place Concrete b. Precast Concrete c. Segmental block d. Metal (with prior approval of the Town)	 

iv. Fencing & Railings

PARKS & OPEN SPACE	STREETSCAPE	1. FENCING Parks shall be designed functionally and visually to be as open as possible and limit the use of fencing. Fencing materials shall be as indicated below. a. Chainlink - Fencing shall only be provided for ballfields, multipurpose fields, sport courts, joint use areas or where there is a safety issue that cannot be reasonably addressed by some other means. - Chainlink fencing shall be galvanized or black vinyl coated and mesh size appropriate for use. - Height as appropriate for use. b. Decorative Metal Decorative metal fencing shall be used in any location where a fence is needed that is not around fields or courts. Design Considerations - Fencing shall be used between play areas and parking lots, streets or where other high volume vehicular uses occur. - Fencing, barriers, and gates adjacent to playgrounds are to follow ASTM F2049 standards. Model - Fence: Fortress Fence V2 Flat Top/Flat Bottom Three rail panel Commercial, 46" height ornamental fencing with Assurance 3" air space. Color to be black. Or approved equal. c. Wood Wood fencing is only allowed in open spaces or in other areas with approval from the town. - Provide wood fence per details and specifications pursuant to any LDO fencing standards and Development Design Standards.	  
		2. PEDESTRIAN GUARDRAILS/RAILINGS Refer to Appendix A for fencing and guardrail details and Appendix B for specifications a. Guardrails Guardrails shall be provided when potential fall height next to a pedestrian use area is 30 inches or greater. Model - Parks: Fence and Guardrail: Fortress Fence V2 Flat Top/Flat Bottom three rail panel Commercial, ornamental fencing with Assurance 3" air space. Color to be black. Or approved equal. - Trails: Guardrail: Assembly shall be delegated design and meet structural performance criteria as specified and in accordance with all applicable codes of local jurisdiction. - Guardrail standard height to be 42" at parks and trails. Guardrail height at bridges or adjacent to equestrian trails to be 54". b. Handrails Handrails shall be used in locations where steps or ramps are needed. - Handrails shall meet ADA guidelines. - Handrails shall be galvanized with two coats of high performance coatings (color to be black).	 

v. Planting & Signage

PARKS & OPEN SPACE	STREETSCAPE	1. TREE PITS & PLANTERS Tree pits and tree planters are either flush or raised planting areas that include the soil at an adequate depth for trees, as well as the surface treatment for pedestrian safety, and an irrigation system and drainage. 1. Tree Grates • Tree grates are flush with the surrounding streetscape paving, and are placed over tree pits or basis. • Recommended material: cast iron, cast aluminum or post-consumer recycled plastic. • Potential Manufacturer: PolyGrate (may be considered for parks), Ironsmith or approved equal. 2. Soil Backfill • In streetscape locations, and at planting areas confined on at least two sides by paving or walls provide CU soils backfill per standard details.	
✓	✓	2. RECOMMENDED PLANT LISTS & SEED MIXES Refer to the Parker Recommended Plant List • Seed mixes shall consist of native and indigenous species and be designed with the following existing site, location and maintenance considerations. • Assess the site conditions including soil type (provide soil test), site location, moisture levels, slope, exposure, and other factors that may impact plant growth. • Consider the purpose of the area, i.e., prairie, meadow, water quality, detention, riparian, bioretention, and design seed mixes to meet them. • Choose a seed mix that is well-suited to the maintenance resources available for the area. • Engage a plant ecologist. • Choose a seeding rate that provides overall coverage outlined in the technical specifications. • All seed mixes are to approved by Parker Parks and Recreation Department.	
✓	✓		

c. Landscape Products

i. Soils & Irrigation

PARKS &
OPEN SPACE

STREETSCAPE

1. PLANTING MIX (TOPSOIL)

An approved, imported, high quality planting mix (Topsoil) shall be used within raised medians.

a. Existing Roadway Medians

Existing roadway medians will require twelve (12) inches of an approved imported planting mix (Refer to Graphic 3.1: Typical Median or Landscape Island; Streetscape Section 03) in areas of ornamental plantings. This topsoil shall be fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter, and free of roots, stumps, stones larger than 2 inches in any dimension, and other extraneous or toxic matter harmful to plant growth.

- Obtain topsoil from local sources or from areas having similar soil characteristics to that found at the project site. Obtain topsoil only from naturally, well-drained sites where topsoil occurs in a depth of not less than 4 inches. Do not use soil products obtained from bogs or marshes. Mountain peat moss is not acceptable.
- Roadway structural shall not be installed within 20' of trees and 5' of a planting bed.
- Decompact soils prior to installation of topsoil.

b. New Roadway Medians

New roadway medians shall be filled with existing topsoil, twelve (12) inches deep, as much as is possible by equalizing cut and fill (Refer to Graphic 3.1: Typical Median or Landscape Island; Streetscape Section 03).

If existing topsoil is not available, follow requirements of New Roadway Medians above. Existing soils, when used in the medians, shall be reasonably cleaned of subsoil, clay lumps, brush, weeds and other litter, and free of roots, stumps, stones larger than 2 inches in any dimension, and other extraneous or toxic matter harmful to plant growth. If there is not enough topsoil to fill the need, off-site topsoil shall be imported.

- Remove roadway structural fill from planting median and decompact soils prior to installation of topsoil.



i. Soils & Irrigation

PARKS & OPEN SPACE	STREETSCAPE	2. SOIL AMENDMENTS Soil Amendments shall be added to planting bed areas to promote the health and vigor of the proposed plant materials. If existing on-site topsoil is approved by the Town for use, planting bed shall be amended to a 12" depth. Refer to "Appendix B" for soil amendment specification criteria. a. CU-Structural Soil CU-Structural Soil may be required beneath sidewalks and around new tree plantings in situations where tree planting pits or vaults are utilized, or where the distance between the back of curb/paving and sidewalk is less than six (6) feet wide. Determination as to applicability will be made during the design review process. The use of CU-Structural Soil is to encourage deep root growth away from the pavement surface, minimizing upheaval of the sidewalk, as well as to promote root growth toward the sidewalk and away from the roadway. Refer to Appendix A for CU-Structural Soil Detail. Refer to the article by Cornell's Urban Horticulture Institute for a description of the system and construction specifications at this link.	 
✓	✓	3. IRRIGATION Irrigation shall be provided to all landscape plant material. a. Reference Refer to "Appendix A" for irrigation details and "Appendix B" for irrigation specifications. Irrigation materials shall meet the Town standards. Locate one (1) irrigation controller within each streetscape median.	

ii. Landscape Standards

PARKS & OPEN SPACE	STREETSCAPE	1. BARRIER FABRIC Barrier Fabric shall be used in all planting beds with rock mulch, boulders, cobble, or river rock and wood mulch. a. Placement Fabric is not to be used in areas with perennial or annual plantings so that their growth is not hindered. b. Type The filtration/separation fabric shall be a water permeable fabric of fiberglass or polypropylene fabric (Mirafi, Typar, Trevira, or approved equal).	
✓	✓	2. WOOD & ROCK MULCH A Triple Shredded Red Cedar Wood Mulch, or approved alternative, shall be used within the raised planter beds to help control weeds and conserve water. Apply wood mulch at a minimum 4" depth and rock mulch at 3" depth. All mulch shall be installed away from the trunks of all trees. Options for rock mulch include the following: • 1-1/2" to 6" angular and round as negotiated with the Town.	
✓	✓	3. STAKED & GUYED TREES Provide stakes (minimum 2" x 2") and deadmen of sound new hardwood, treated softwood, or redwood, free of known holes and other defects. Provide wire ties and guys of 2-strand, twisted, pliable galvanized iron wire, not lighter than 12 gauge. Provide manufactured fabric tree strap with grommet to protect tree trunks from damage by wires.	

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06

SIGNAGE STANDARDS

01 INTRODUCTION

Parks, trails and open space signage is required for all Town owned facilities. Provide Parker standard signage as outlined in this section. Signage for neighborhood parks not maintained by the Town may include signage design that is consistent with the development aesthetic with review and approval by the Town. Park sign information is provided in this section and details can be found in Appendix A.

02 PARK AND OPEN SPACE SIGNS - MONUMENT SIGNS

Each park and open space shall have monument signs placed at each main park and open space entrance. These locations shall be adjacent to streets and points of access. Access points may be adjacent to pedestrian or vehicular locations depending on the size and uses of the park. Monument sign locations shall be coordinated with the Town.

a. Large Monument

Large Monument signs shall be provided at all park and open space location that are five acres or larger. Refer to Appendix A for details.



Graphic 6.1: Double-Sided, Non-illuminated Large Monument Sign*

* Sign Graphics Courtesy of Yesco Sign & Lighting, Co.

b. Small Monument

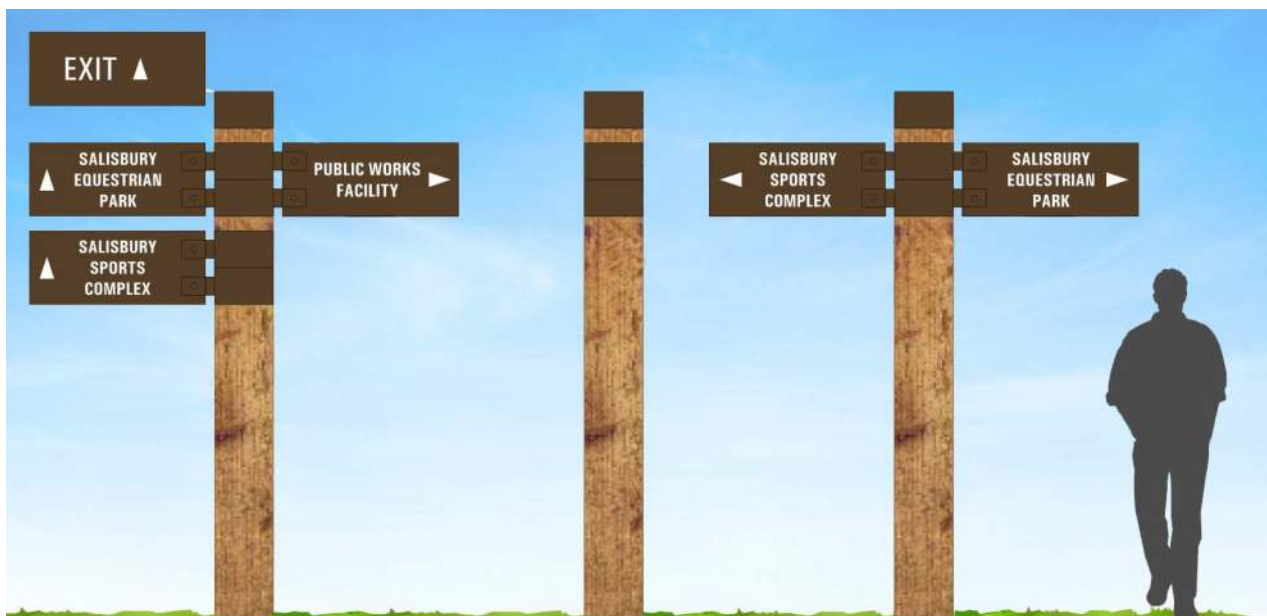
Small Monument signs shall be provided at all park and facility locations with a size of five acres or less. Refer to Appendix A for details. Town may require a large monument sign if setback necessitates a larger sign for visibility.



Graphic 6.2: Double-Sided, Non-illuminated Small Monument Sign*

03 WAYFINDING

Wayfinding signs shall be provided in parks and open spaces to direct park users to entry/exit locations, restrooms, shelters, and specialized park amenities (i.e. skateparks, disc-golf locations, etc.). Refer to Appendix A for details.



Graphic 6.3: Non-illuminated Directional Sign*

* Sign Graphics Courtesy of Yesco Sign & Lighting, Co.

04 TRAILS REGULATORY SIGNS

Trail regulatory signs shall be located along trails in locations as required adjacent trail entrances, trail connections and trail intersections and where appropriate to provide information as relevant to the trail user. Refer to Appendix A for details.

a. Trail Identification Signs

Trail signs shall be provided at all trail entrances and intersections and shall follow the Town standards. For neighborhood parks (not maintained by the Town) signs may follow the theme of the community.



b. Mileage Markers

Mileage markers shall be located along regional trails owned and maintained by the Town. Locate at half mile intervals and at trail entrances and intersections.



c. Regulatory

Trail regulatory signage shall be located in strategic locations to provide trail users adequate time to accommodate upcoming change in trail conditions. Locations shall be placed based on the fastest vehicle traveling along the trail. Potential signage may include but not be limited to curve, slow, stop, yield blind corner, to indicate separation between pedestrians and bicycles on a multi-use trail, indicating acceptable users on the trail (i.e. pedestrians, bicycles, equestrian, etc.). Signs and pavement markings should be used in conjunction with the Manual on Uniform Traffic Control Devices (MUTCD).



05 PARKS, TRAILS & OPEN SPACE REGULATORY SIGNS

Rules and regulatory signs shall be located at all specialized facilities and synthetic turf fields or play areas. Ensure that signs are placed in visible locations, such as at entrance points and key intersections within the park. Signs should be at eye level and in a location that is easy to read from a distance. Refer to Appendix A for details.

a. Rules & Regulations - Parks, Trails & Open Space

Trails rules and regulations signs shall be located at all entrances to trails and trail intersections. Trail rules and regulations signs also include the speed limit of the trail. Coordinate the speed limit with the Town. Rules and regulations signs shall follow the Town of Parker standards.

b. Rules & Regulations - Synthetic Turf

At each entrance into a synthetic turf field provide a synthetic turf rules and regulations sign. Provide Town standard sign.

c. Rules & Regulations - Fields, Court Sports & Specialized Facilities

For all court sports and specialized facilities including the following:

- Baseball/Softball Fields
- Tennis Courts
- Pickleball Courts
- Volleyball Court
- Skateparks
- Bike park, skills area or pump track
- Dog off-leash area
- Disc-Golf Courses

Coordinate specific rules required with the Town and provide signs at each entrance to the court and facilities. Follow Town sign standards.

Below is an example of Parks, Trails, and Open Space Regulatory Signs (**Graphic 6.4**).



Graphic 6.4: Parks, Trails, and Open Space Regulatory Sign Examples

06 PARKS, TRAILS & OPEN SPACE

INTERPRETIVE SIGNS

When providing educational interpretive signage, follow the Town standards for interpretive signs. The Town to review and approve all information on the interpretive sign. Provide sign details and graphic renderings for sign permit approval by the Town. Basis of design Fossil Industries graphic panels, mounting and hardware.



Graphic 6.5: Interpretive Sign Example

A photograph of a rural landscape featuring a grassy field, a small building, a silo, and a windmill in the distance, all under a cloudy sky. The entire image is covered with a semi-transparent blue overlay. The text 'APPENDIX A' is positioned in the upper left area of the image.

APPENDIX A

STANDARD CONSTRUCTION DETAILS

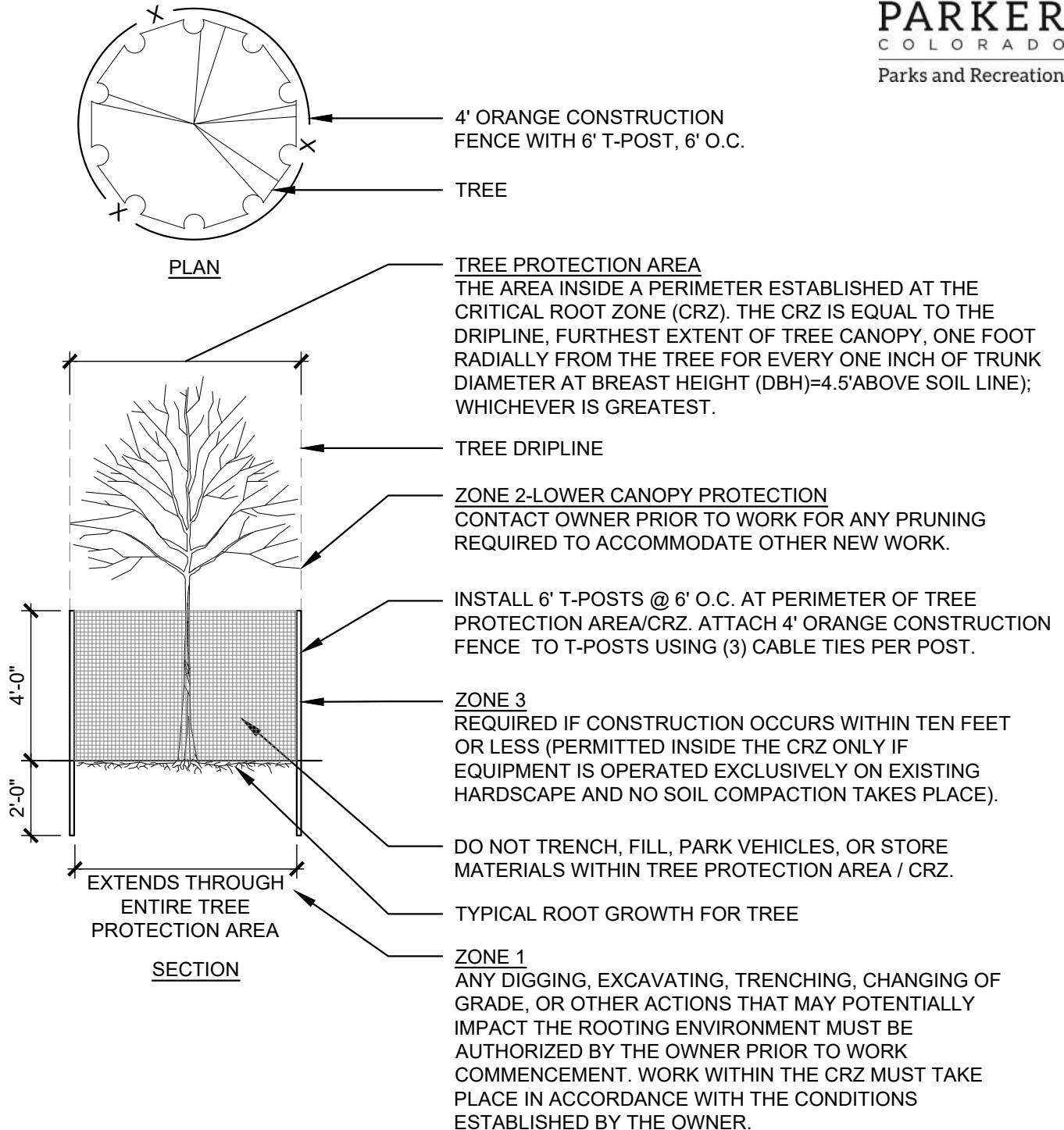
DETAILS LEGEND

SD - SITE DETAILS
IR - IRRIGATION DETAILS
PV - PAVING AND SURFACING DETAILS
ST - PARK STRUCTURE DETAILS
SF - SITE FURNISHINGS & FIXTURES DETAILS
SN - SIGNAGE DETAILS
FC - FIELD AND COURT LAYOUTS

NOTES:

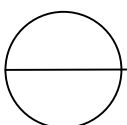
1. ALL DETAILS PROVIDED FOR GENERAL INTENT AND CONFIGURATIONS MAY VARY BASED ON SITE CONDITIONS AND RELATIONSHIPS OF ADJACENT PAVING AND SITE PROGRAM.
2. THE CONSTRUCTION DETAILS ARE PROVIDED FOR CONVENIENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONSULTANT (USER) TO EDIT TO MEET THE REQUIREMENTS OF THE PROJECT AND ALL APPLICABLE CODES. THE TOWN IS NOT RESPONSIBLE FOR ERRORS, OMISSIONS, OR REGULATORY NON-CONFORMANCE AS A RESULT OF THE USE OF THESE DETAILS.

TOWN OF PARKER STANDARD DETAILS



NOTES:

1. FENCING HEIGHT MUST BE A MINIMUM OF 48".
2. ATTACH "TREE PROTECTION AREA" SIGNS TO FENCING EVERY 50 FEET.
3. CONSTRUCTION FENCE SHALL BE INSTALLED PRIOR TO OTHER BMP'S AND ANY LAND DISTURBING ACTIVITIES.
4. ANY DAMAGED FENCE SHALL BE REPAIRED ON A DAILY BASIS.
5. MULCH TO BE 'NATURAL WOOD MULCH' FROM A-1 ORGANICS.



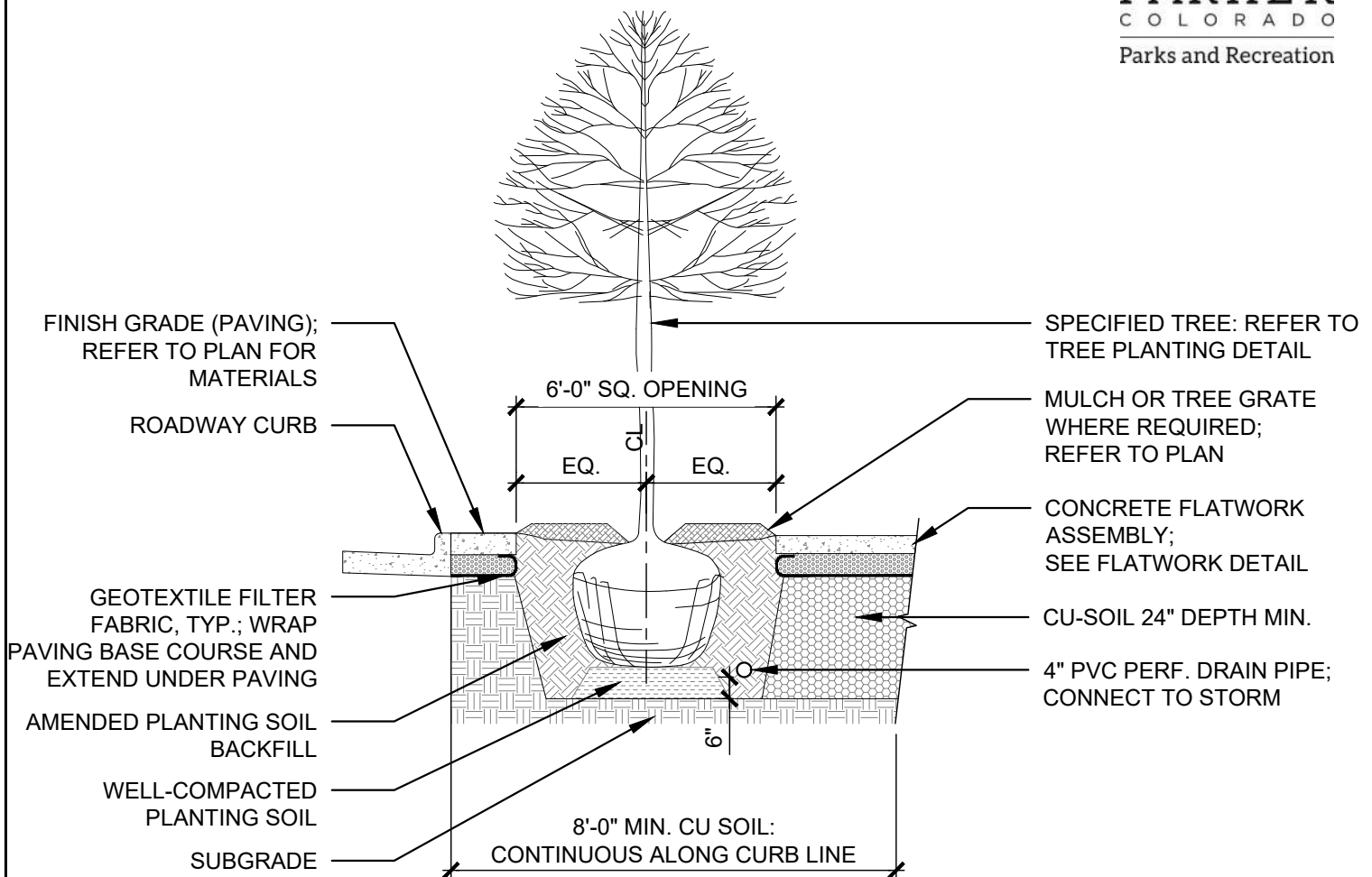
TREE PROTECTION FENCING

1/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

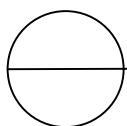


PARKER
COLORADO
Parks and Recreation



NOTES:

1. TREES SHALL BE PLANTED WITH THE ROOT COLLAR/FLARE VISIBLE ABOVE GRADE AND TWO OR MORE STRUCTURAL ROOTS LOCATED WITHIN THE TOP 1" TO 2" OF THE ROOT BALL/FINISHED GRADE MEASURED 3" TO 4" FROM TRUNK.
2. WHEN ROOT BALL WILL REMAIN INTACT, CUT OFF BOTTOM 1/4 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF REMAINDER OF BASKET AFTER TREE IS SET IN HOLE, REMOVE BASKET COMPLETELY. AT A MINIMUM, THE TOP 2/3 OF THE BURLAP AND BASKET SHALL BE REMOVED FROM THE ROOT BALL ON ALL TREES. REMOVE ALL NYLON TIES, TWINE, ROPE AND BURLAP. REMOVE UNNECESSARY PACKING MATERIAL.
3. TREE WRAP IS NOT TO BE USED ON ANY NEW PLANTINGS, EXCEPT IN LATE FALL PLANTING SITUATIONS, AND ONLY AFTER CONSULTATION WITH THE TOWN ARBORIST.
4. RESETTING OF IMPROPERLY PLANTED TREES WILL ONLY BE ALLOWED IF IT IS DETERMINED THAT DOING SO WILL IN NO WAY COMPROMISE THE ROOT BALL, AND SHALL ONLY BE DONE WITH APPROVAL OF THE TOWN ARBORIST.



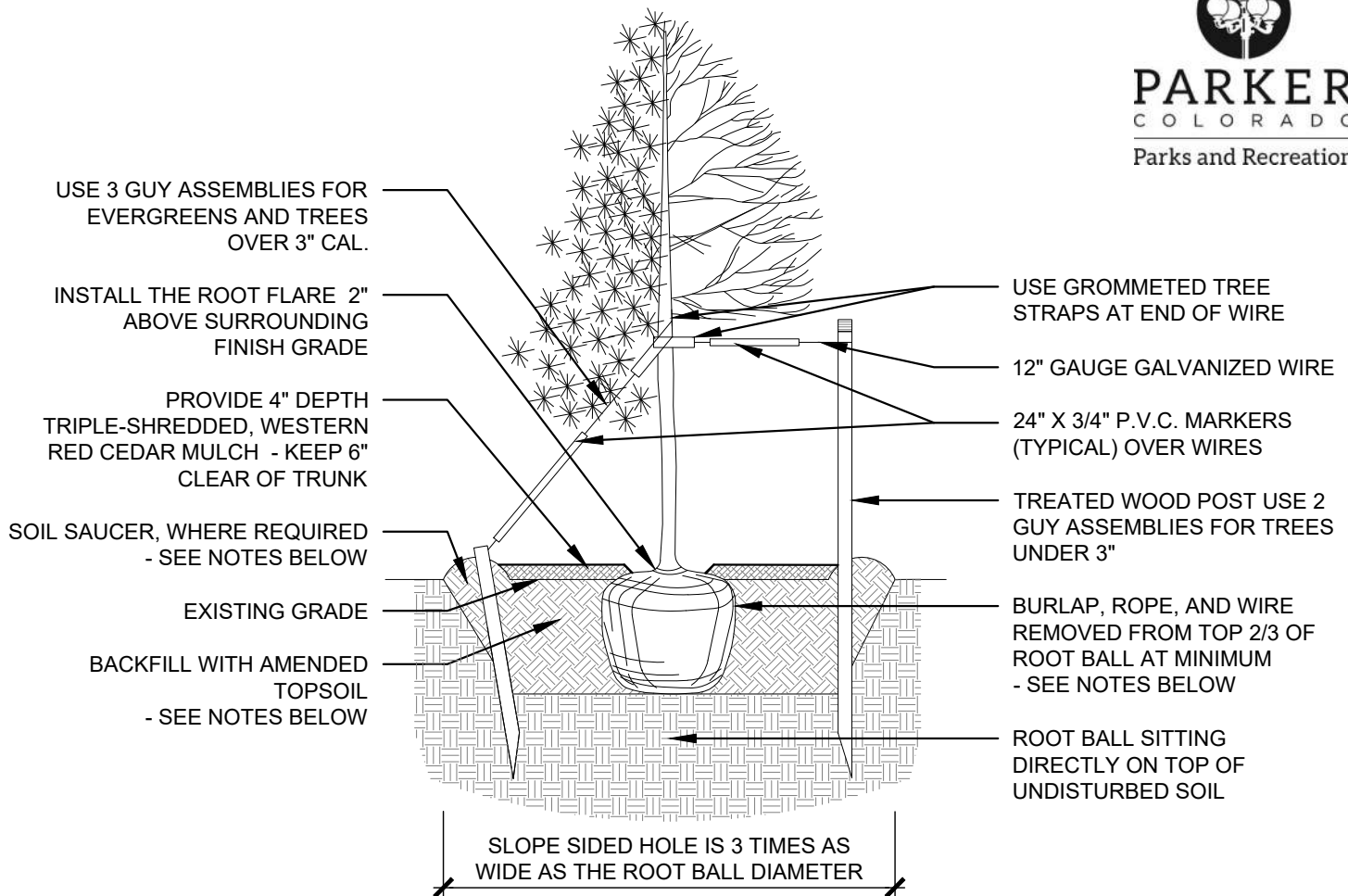
CU SOIL TREE PIT

1/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

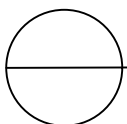


PARKER
COLORADO
Parks and Recreation



NOTES:

1. EXCAVATE PLANTING HOLES WITH SLOPING SIDES, MAKE EXCAVATIONS AT LEAST THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER AND NO DEEPER THAN THE DISTANCE FROM THE TOP OF THE ROOT BALL TO ALLOW FOR SETTLING. DO NOT DISTURB SOIL AT BOTTOM OF PLANTING HOLES, BUT DO SCORE THE SIDES OF THE PLANTING HOLE. THE PLANTING AREA SHALL BE LOOSENED AND AERATED AT LEAST THREE TIMES THE DIAMETER OF THE ROOT BALL.
2. BACKFILL SHALL CONSIST OF APPROVED ON-SITE TOPSOIL BLENDED W/ COMPOST AMENDMENT. IF ON-SITE TOPSOILS ARE NOT APPROVED FOR USE, BACKFILL W/ IMPORTED TOPSOIL BLENDED WITH COMPOST AMENDMENT. REFER TO SPECIFICATION SECTION 329113 FOR ADDITIONAL INFORMATION.
3. TREES SHALL BE PLANTED WITH THE ROOT COLLAR/FLARE VISIBLE ABOVE GRADE AND TWO OR MORE STRUCTURAL ROOTS LOCATED WITHIN THE TOP 1" TO 2" OF THE ROOT BALL/FINISHED GRADE MEASURED 3" TO 4" FROM TRUNK. THIS INCLUDES TREES THAT ARE SET ON SLOPES (SEE SLOPE PLANTING DETAIL). TREES THAT DO NOT HAVE A VISIBLE ROOT COLLAR SHALL BE REJECTED. DO NOT COVER THE ROOT BALL WITH SOIL.
4. WHEN ROOT BALL WILL REMAIN INTACT, CUT OFF BOTTOM 1/4 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF REMAINDER OF BASKET AFTER TREE IS SET IN HOLE, REMOVE BASKET COMPLETELY. AT A MINIMUM, THE TOP 2/3 OF THE BURLAP AND BASKET SHALL BE REMOVED FROM THE ROOT BALL ON ALL TREES. REMOVE ALL NYLON TIES, TWINE, ROPE AND BURLAP. REMOVE UNNECESSARY PACKING MATERIAL.
5. FORM SOIL INTO A 6" TALL WATERING RING (SAUCER) AROUND PLANTING AREA. THIS IS NOT NECESSARY IN IRRIGATED TURF AREAS. APPLY 4" DEPTH OF SPECIFIED MULCH OVER PLANTING AREA AND INSIDE SAUCERS. AWAY FROM TRUNK.
6. STAKING AND GUYING OF TREES IS OPTIONAL IN MOST PLANTING SITUATIONS. IN AREAS OF EXTREME WINDS, OR ON STEEP SLOPES, STAKING MAY BE REQUIRED TO STABILIZE TREES. STAKING AND GUYING MUST BE REMOVED WITHIN 1 YEAR OF PLANTING DATE.
7. TREE WRAP IS NOT TO BE USED ON ANY NEW PLANTINGS, EXCEPT IN LATE FALL PLANTING SITUATIONS, AND ONLY AFTER CONSULTATION WITH THE TOWN ARBORIST.
8. RESETTING OF IMPROPERLY PLANTED TREES WILL ONLY BE ALLOWED IF IT IS DETERMINED THAT DOING SO WILL IN NO WAY COMPROMISE THE ROOT BALL, AND SHALL ONLY BE DONE WITH APPROVAL OF THE TOWN ARBORIST.



TREE PLANTING

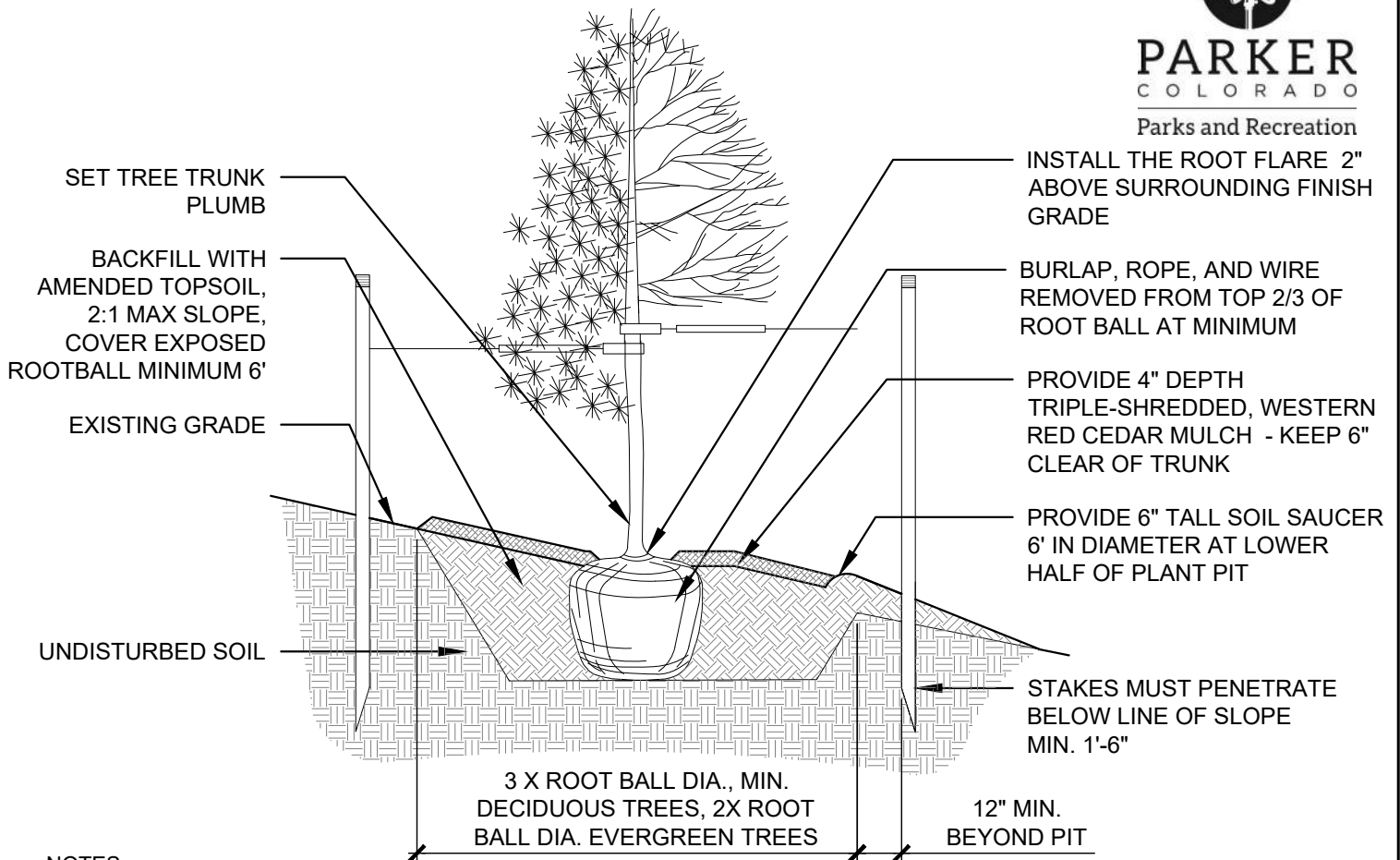
1/4"=1'-0"

TOWN OF PARKER STANDARD DETAILS



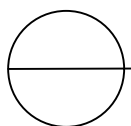
PARKER
COLORADO

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NOTES:

1. THIS INSTALLATION SHALL APPLY TO ALL TREE TYPES AND SIZES PLANTED ON SLOPES 4:1 OF GREATER.
2. EXCAVATE PLANTING HOLES WITH SLOPING SIDES, MAKE EXCAVATIONS AT LEAST THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER AND NO DEEPER THAN THE DISTANCE FROM THE TOP OF THE ROOT BALL TO ALLOW FOR SETTLING. DO NOT DISTURB SOIL AT BOTTOM OF PLANTING HOLES, BUT DO SCORE THE SIDES OF THE PLANTING HOLE. THE PLANTING AREA SHALL BE LOOSENEED AND AERATED AT LEAST THREE TIMES THE DIAMETER OF THE ROOT BALL.
3. BACKFILL SHALL CONSIST OF APPROVED ON-SITE TOPSOIL BLENDED W/ COMPOST AMENDMENT. OF ON-SITE TOPSOILS ARE NOT APPROVED FOR USE, BACKFILL W/ IMPORTED TOPSOIL BLENDED WITH COMPOST AMENDMENT. REFER TO SPECIFICATION SECTION 329113 FOR ADDITIONAL INFORMATION.
4. TREES SHALL BE PLANTED WITH THE ROOT COLLAR/FLARE VISIBLE ABOVE GRADE AND TWO OR MORE STRUCTURAL ROOTS LOCATED WITHIN THE TOP 1" TO 2" OF THE ROOT BALL/FINISHED GRADE MEASURED 3" TO 4" FROM TRUNK. THIS INCLUDES TREES THAT ARE SET ON SLOPES (SEE SLOPE PLANTING DETAIL). TREES THAT DO NOT HAVE A VISIBLE ROOT COLLAR SHALL BE REJECTED. DO NOT COVER THE ROOT BALL WITH SOIL.
5. WHEN ROOT BALL WILL REMAIN INTACT, CUT OFF BOTTOM 1/4 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF REMAINDER OF BASKET AFTER TREE IS SET IN HOLE, REMOVE BASKET COMPLETELY. AT A MINIMUM, THE TOP 2/3 OF THE BURLAP AND BASKET SHALL BE REMOVED FROM THE ROOT BALL ON ALL TREES. REMOVE ALL NYLON TIES, TWINE, ROPE AND BURLAP. REMOVE UNNECESSARY PACKING MATERIAL.
6. FORM SOIL INTO A 6" TALL WATERING RING (SAUCER) AROUND PLANTING AREA. THIS IS NOT NECESSARY IN IRRIGATED TURF AREAS. APPLY 4" DEPTH OF SPECIFIED MULCH OVER PLANTING AREA AND INSIDE SAUCERS. AWAY FROM TRUNK.
7. STAKING AND GUYING OF TREES IS OPTIONAL IN MOST PLANTING SITUATIONS. IN AREAS OF EXTREME WINDS, OR ON STEEP SLOPES, STAKING MAY BE REQUIRED TO STABILIZE TREES. STAKING AND GUYING MUST BE REMOVED WITHIN 1 YEAR OF PLANTING DATE.
8. TREE WRAP IS NOT TO BE USED ON ANY NEW PLANTINGS, EXCEPT IN LATE FALL PLANTING SITUATIONS, AND ONLY AFTER CONSULTATION WITH THE TOWN ARBORIST.
9. RESETTING OF IMPROPERLY PLANTED TREES WILL ONLY BE ALLOWED IF IT IS DETERMINED THAT DOING SO WILL IN NO WAY COMPROMISE THE ROOT BALL, AND SHALL ONLY BE DONE WITH APPROVAL OF THE TOWN ARBORIST.

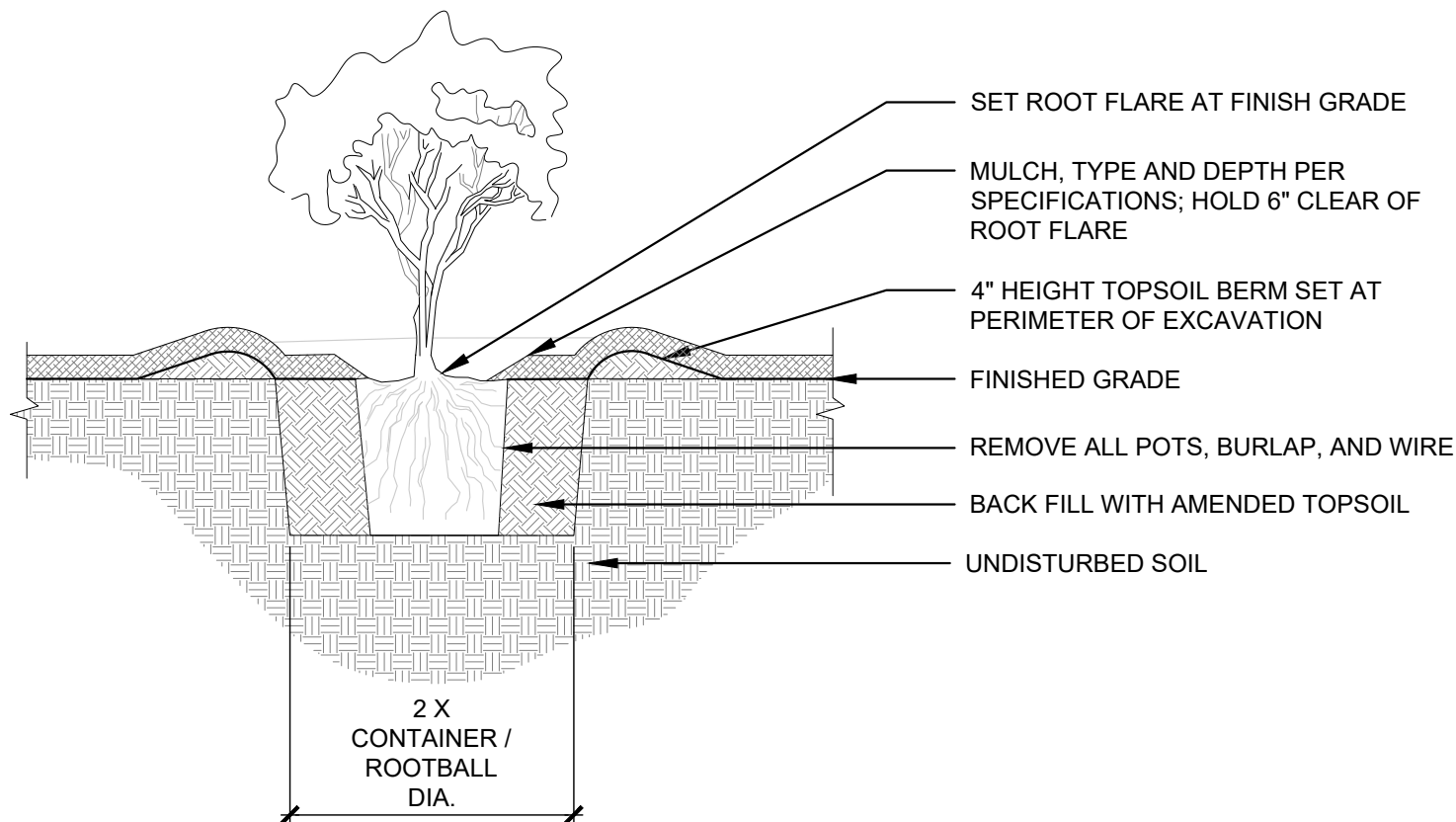


TREE PLANTING ON SLOPE

1/4" = 1'-0"

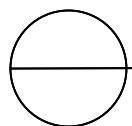
DATE: MAY 2023 | DETAIL SD-4

TOWN OF PARKER STANDARD DETAILS



NOTES:

1. PRUNE ALL DAMAGED, DISEASED OR WEAK LIMBS.
2. CLEANLY PRUNE ALL DAMAGED ROOT ENDS.
3. DO NOT ALLOW ROOTS TO DRY OUT DURING INSTALLATION PROCESS.
4. DEEP WATER AFTER PLANTING.



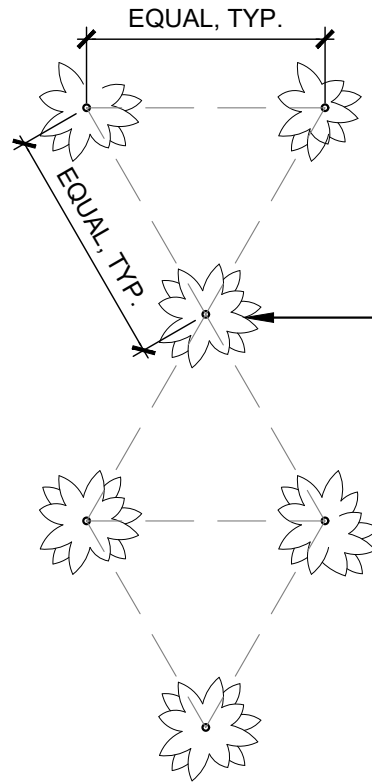
SHRUB PLANTING

1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

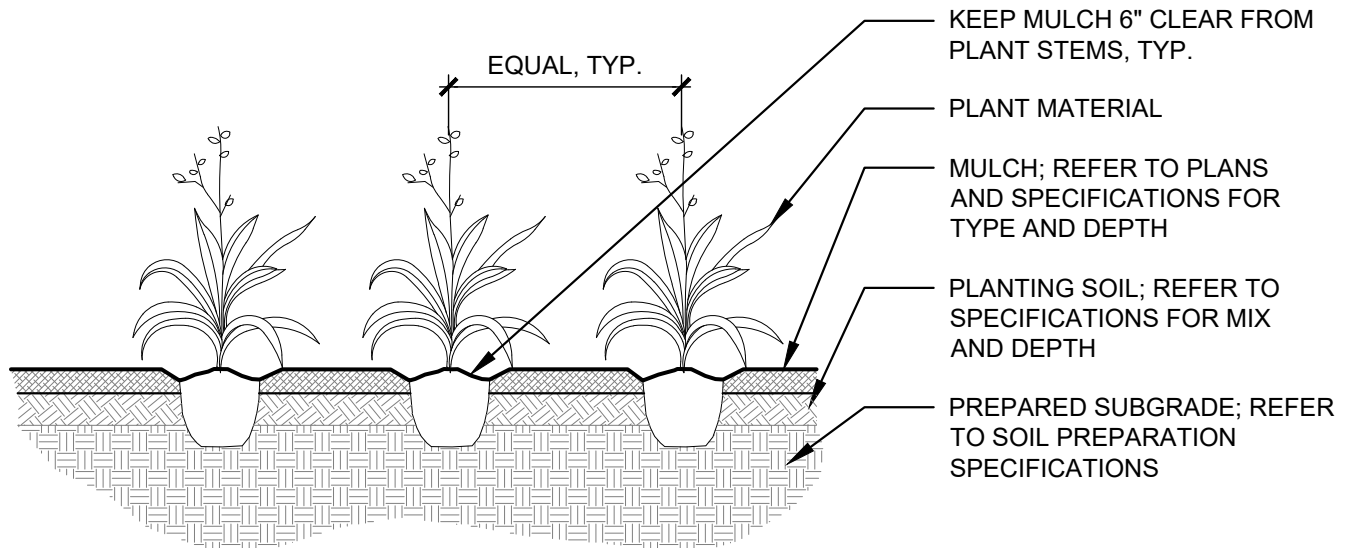


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STAGGERED PLANT LAYOUT, TYP.
SEE PLANT SCHEDULE
FOR SPACING

PLAN



KEEP MULCH 6" CLEAR FROM
PLANT STEMS, TYP.

PLANT MATERIAL

MULCH; REFER TO PLANS
AND SPECIFICATIONS FOR
TYPE AND DEPTH

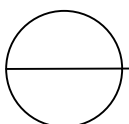
PLANTING SOIL; REFER TO
SPECIFICATIONS FOR MIX
AND DEPTH

PREPARED SUBGRADE; REFER
TO SOIL PREPARATION
SPECIFICATIONS

SECTION

NOTES:

1. WHEN BACKFILLING AROUND PLANTS, DO NOT ALLOW AIR POCKETS TO FORM.
2. AFTER PLANTING, WATER THOROUGHLY.



PERENNIAL PLANTING

1/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

CARSON INDUSTRIES JUMBO VALVE BOX MODEL 1324-15 WITH 15" DEEP BODY AND BOLT DOWN COVER (COLOR GREEN) FOR 1.5" AND 1" VALVES AND CARSON INDUSTRIES 1730-18 SUPER JUMBO VALVE BOX WITH 18" DEEP BODY AND BOLT DOWN COVER (COLOR GREEN) FOR 2" VALVES. ONE VALVE PER BOX CENTERED BOTH WAYS. SET TOP OF BOX AT COMPACTED THATCH GRADE OF ADJACENT TURF OR SURFACE OF MULCH.

BRAND (CONTROLLER LETTER AND VALVE STATION NUMBER) INTO VALVE BOX LID WITH 1" HIGH LETTERS MIN.

SPEARS P.V.C. UNION MODEL 898 F.I.P. DIM. TO MATCH ELECTRIC CONTROL VALVE

RAIN BIRD EFB-CP-PRS-D SERIES ELECTRIC CONTROL VALVE

SPEARS TRUE UNION BALL VALVE MODEL 1821-SR WITH STEEL REINFORCED THREADED ENDS F.I.P. DIM. TO MATCH ELECTRIC CONTROL VALVE.

ALL MANIFOLD FITTINGS TO MATCH FIP DIMENSION OF ELECTRIC CONTROL VALVE. ALL MANIFOLD COMPONENTS TO BE SCHEDULE 80 P.V.C. FITTINGS AND SCHEDULE 80 P.V.C. NIPPLES SUPPLIED AS SR STEEL REINFORCED

3/4" CRUSHED ROCK COMPACTION AND LEVELING BED COMPACTED TO 95% M.P.D. PER ASTM D-1557. EXTEND COMPACTION AND LEVELING BED 6" BEYOND PERIMETER OF VALVE BOX IN ALL DIRECTIONS.

SCHEDULE 80 P.V.C. RISER NIPPLE LENGTH AS REQ. FIP DIMENSION TO MATCH FIP DIMENSION OF ELECTRIC CONTROL VALVE.

NEW CL-200, SDR-21, P.V.C. IRRIGATION MAINLINE.

DO NOT MODIFY SIDE WALLS OF VALVE BOX. ANY MODIFIED VALVE BOX WILL BE REJECTED.

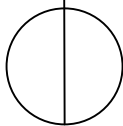
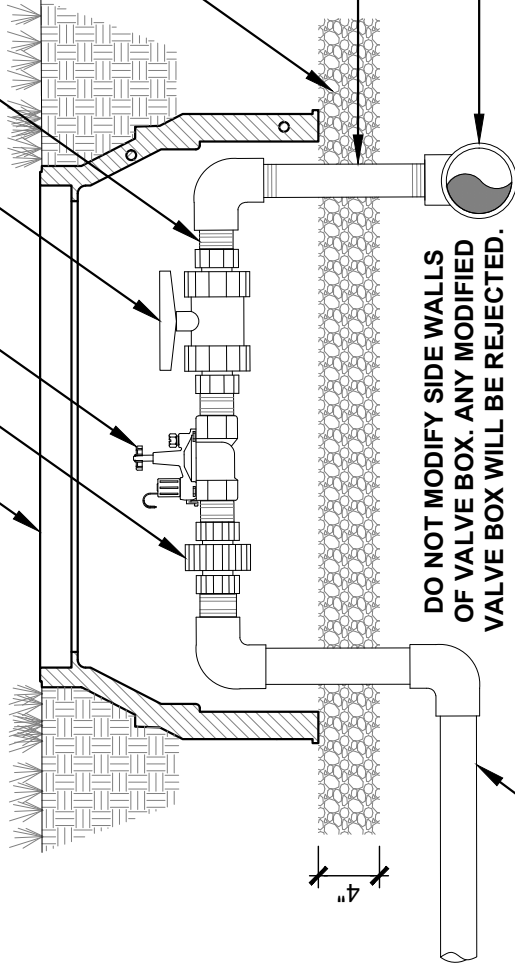
PROVIDE 2" CLEAR BETWEEN UNDERSIDE OF VALVE AND SURFACE OF COMPACTED GRAVEL.

PROVIDE 3" MINIMUM AND 6" MAXIMUM BETWEEN UNDERSIDE OF VALVE BOX LID AND TOP OF FLOW CONTROLS FULLY EXTENDED.

CL-200, SDR-21 P.V.C. SECONDARY PIPE.



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ELECTRIC CONTROL VALVE FOR SPRAY ZONES

NO SCALE

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BRAND (CONTROLLER LETTER AND VALVE STATION
NUMBER) INTO VALVE BOX LID WITH 1" HIGH LETTERS MIN.

RAIN BIRD EFB-CP-PRS-D
SERIES ELECTRIC CONTROL VALVE

ALL MANIFOLD FITTINGS TO MATCH FIP
DIMENSION OF ELECTRIC CONTROL VALVE. ALL
MANIFOLD COMPONENTS TO BE SCHEDULE 80
P.V.C. FITTINGS AND SCHEDULE 80 P.V.C.
FITTINGS AND SCHEDULE 80 P.V.C. NIPPLES
SUPPLIED AS SR STEEL REINFORCED

3/4" CRUSHED ROCK COMPACTION AND
LEVELING BED COMPACTED TO 95% M.P.D.
PER ASTM D-1557. EXTEND COMPACTION AND
LEVELING BED 6" BEYOND PERIMETER OF
VALVE BOX IN ALL DIRECTIONS.

SCHEDULE 80 P.V.C. RISER NIPPLE LENGTH
AS REQ. FIP DIMENSION TO MATCH FIP
DIMENSION OF ELECTRIC CONTROL VALVE.

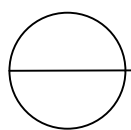
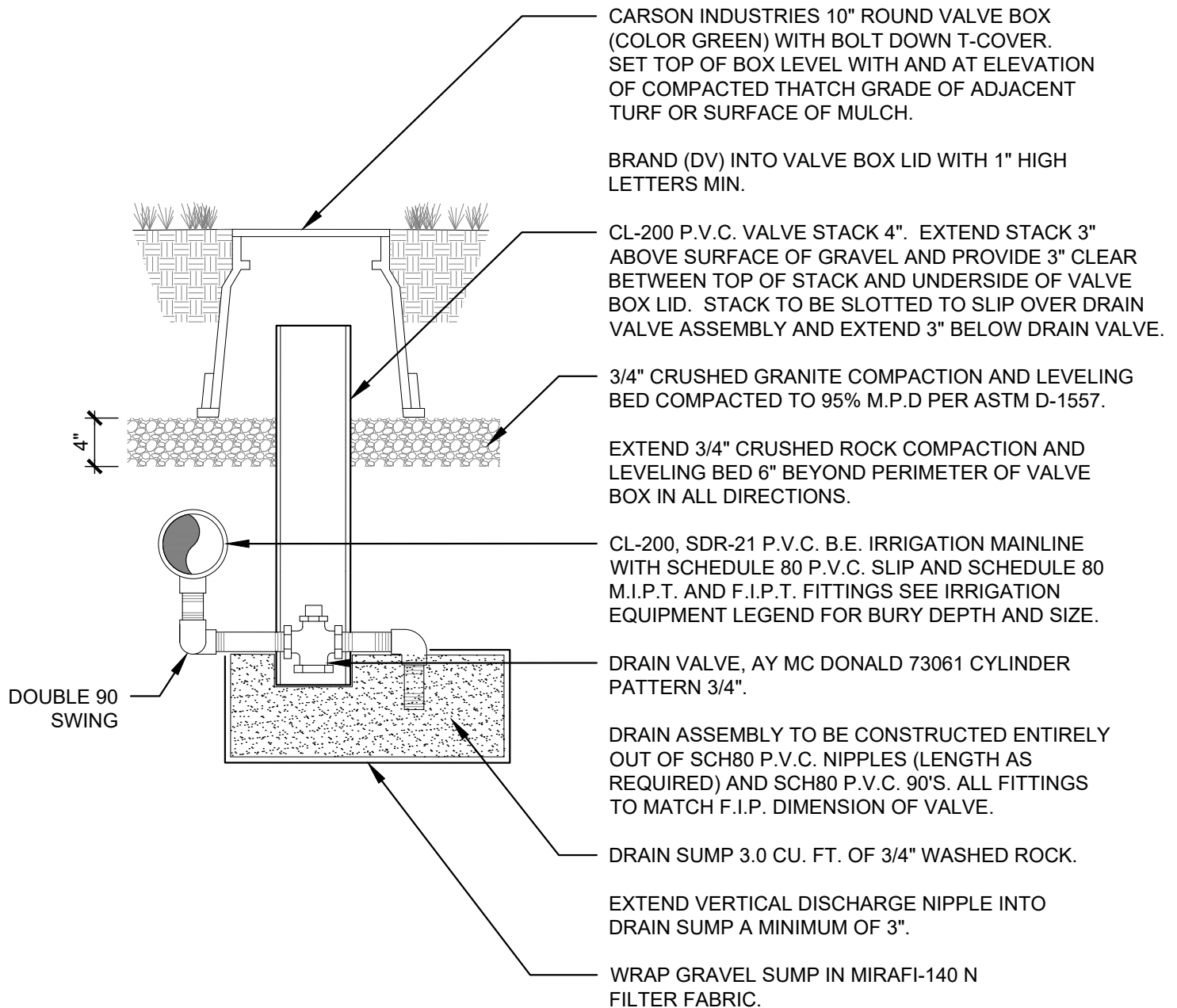
PROVIDE 2" CLEAR BETWEEN
UNDERSIDE OF VALVE AND
SURFACE OF COMPACTED GRAV

PROVIDE 3" MINIMUM AND 6" MAXIMUM BETWEEN UNDERSIDE OF VALVE BOX LID AND TOP OF FLOW CONTROLS FULLY EXTENDED.

NO SCALE

DATE: MAY 2023 | DETAIL IR-2

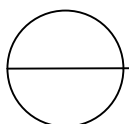
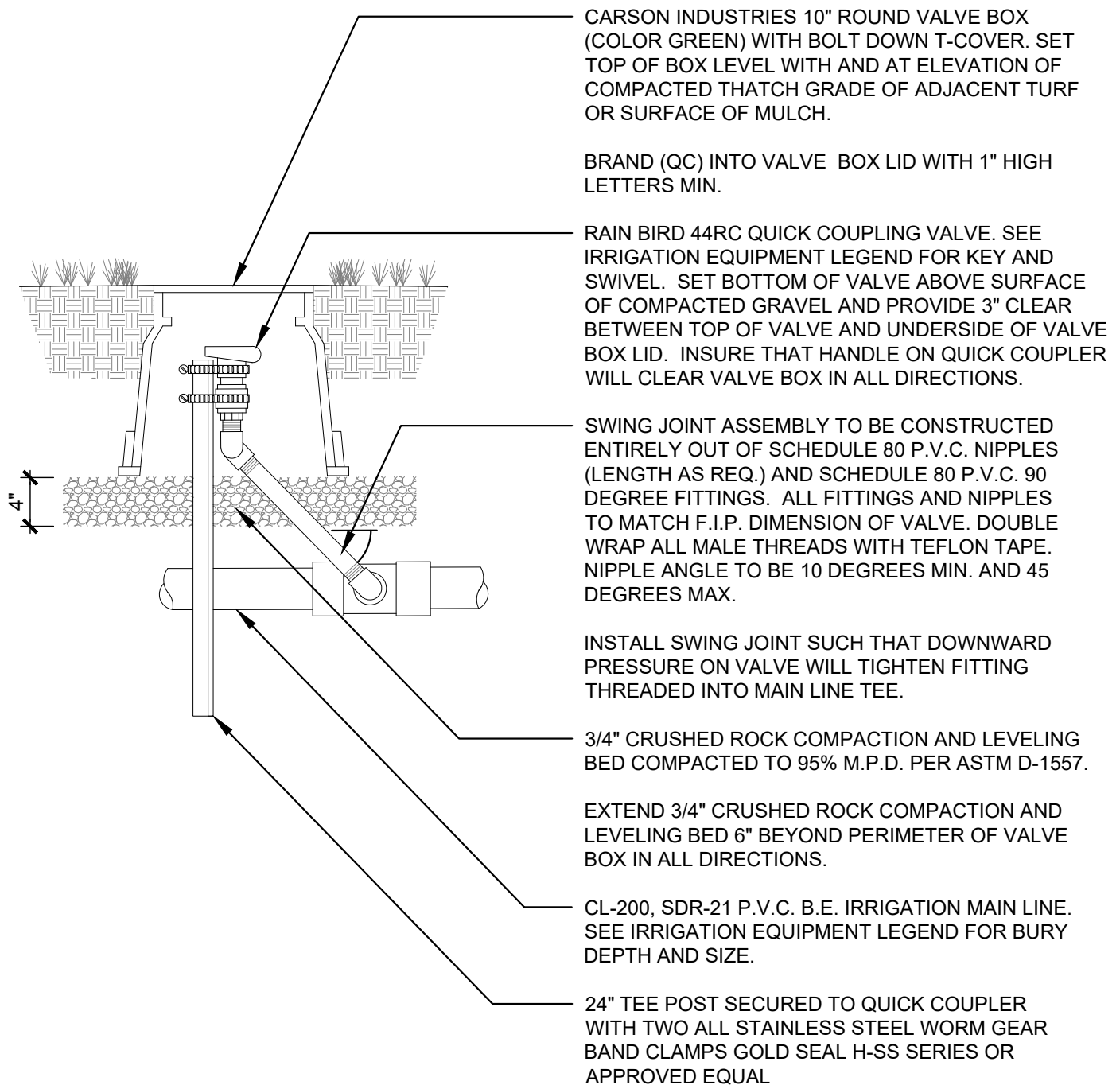
TOWN OF PARKER STANDARD DETAILS



MANUAL DRAIN VALVE

NO SCALE

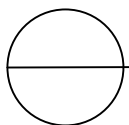
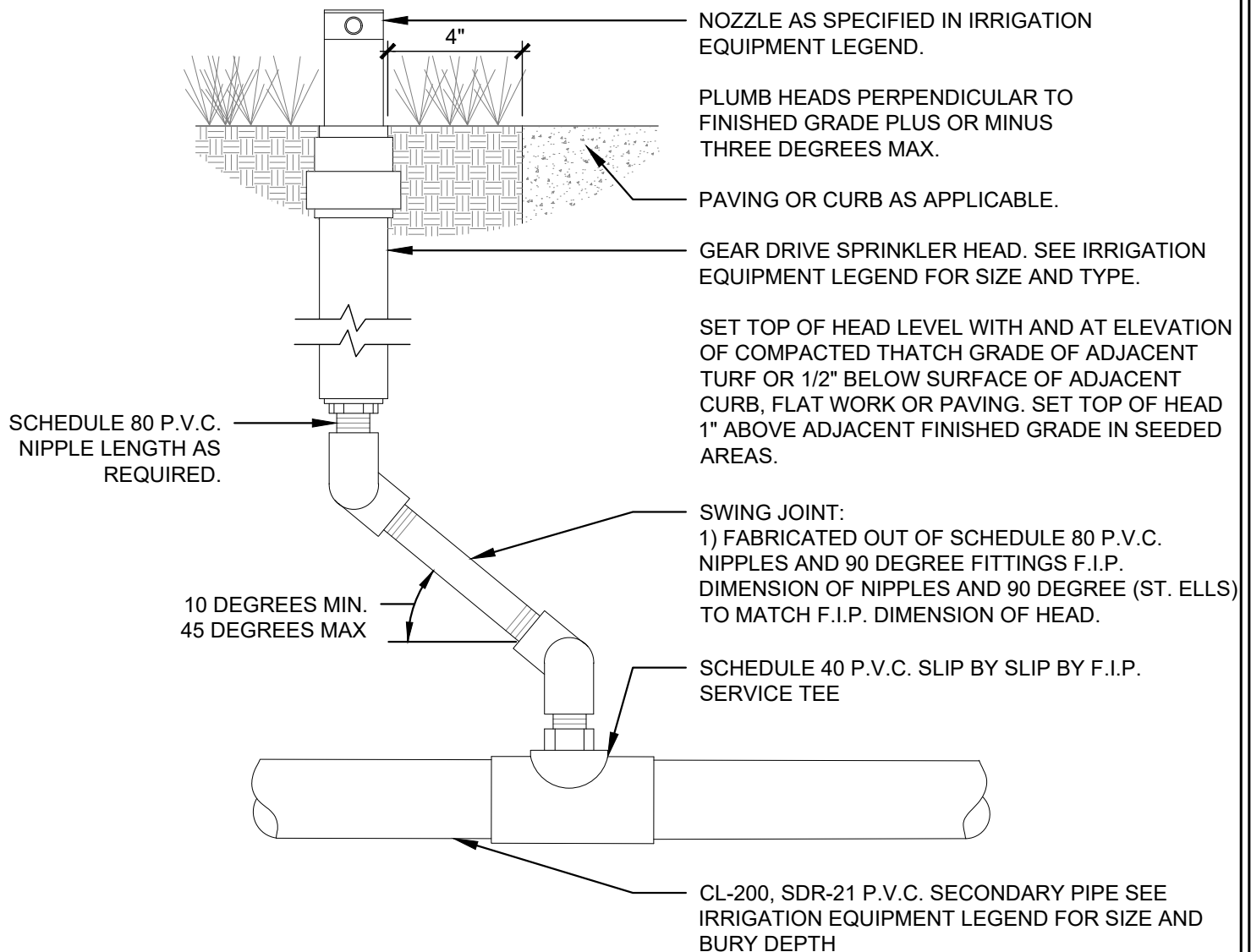
TOWN OF PARKER STANDARD DETAILS



QUICK COUPLER VALVE

NO SCALE

TOWN OF PARKER STANDARD DETAILS



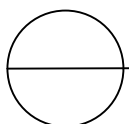
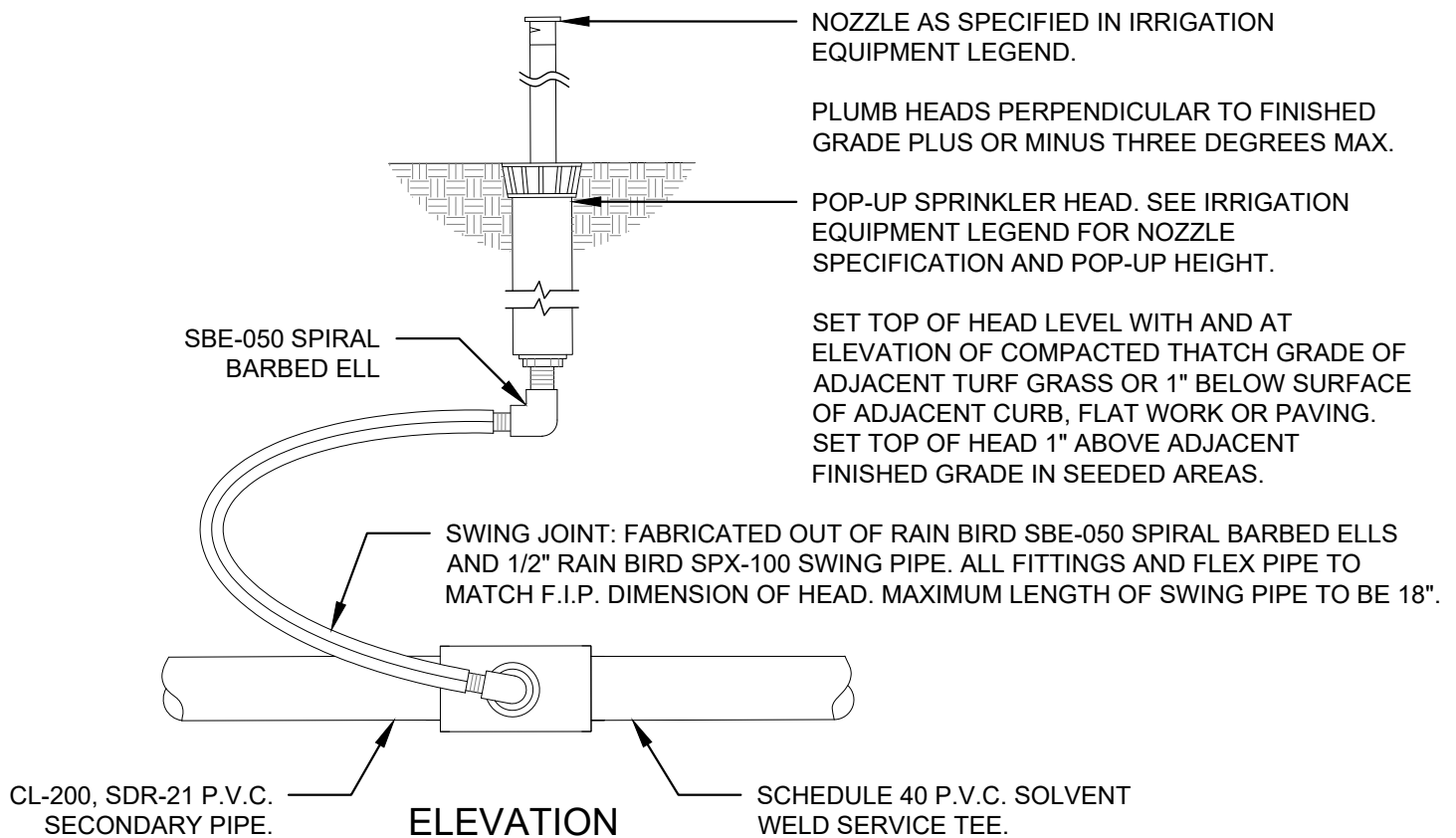
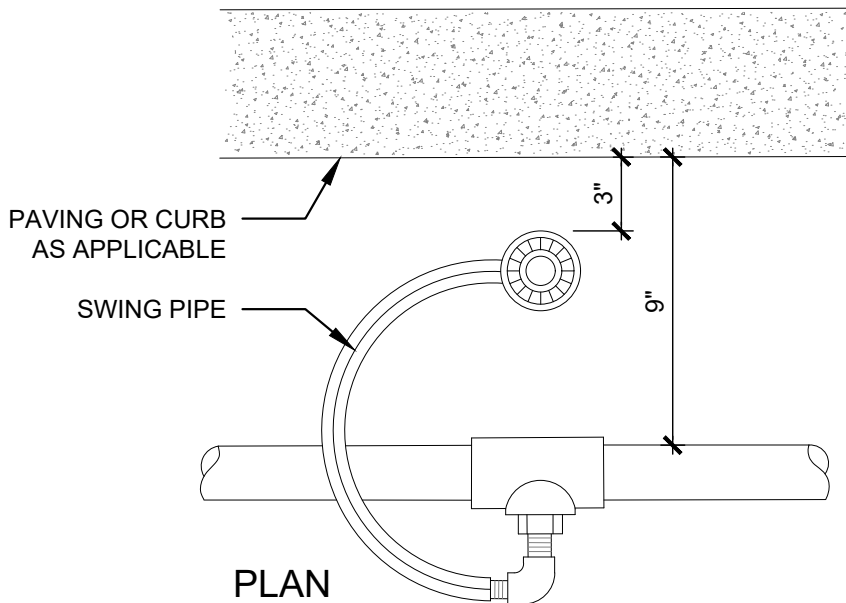
GEAR DRIVE SPRINKLER HEAD

NO SCALE

TOWN OF PARKER STANDARD DETAILS



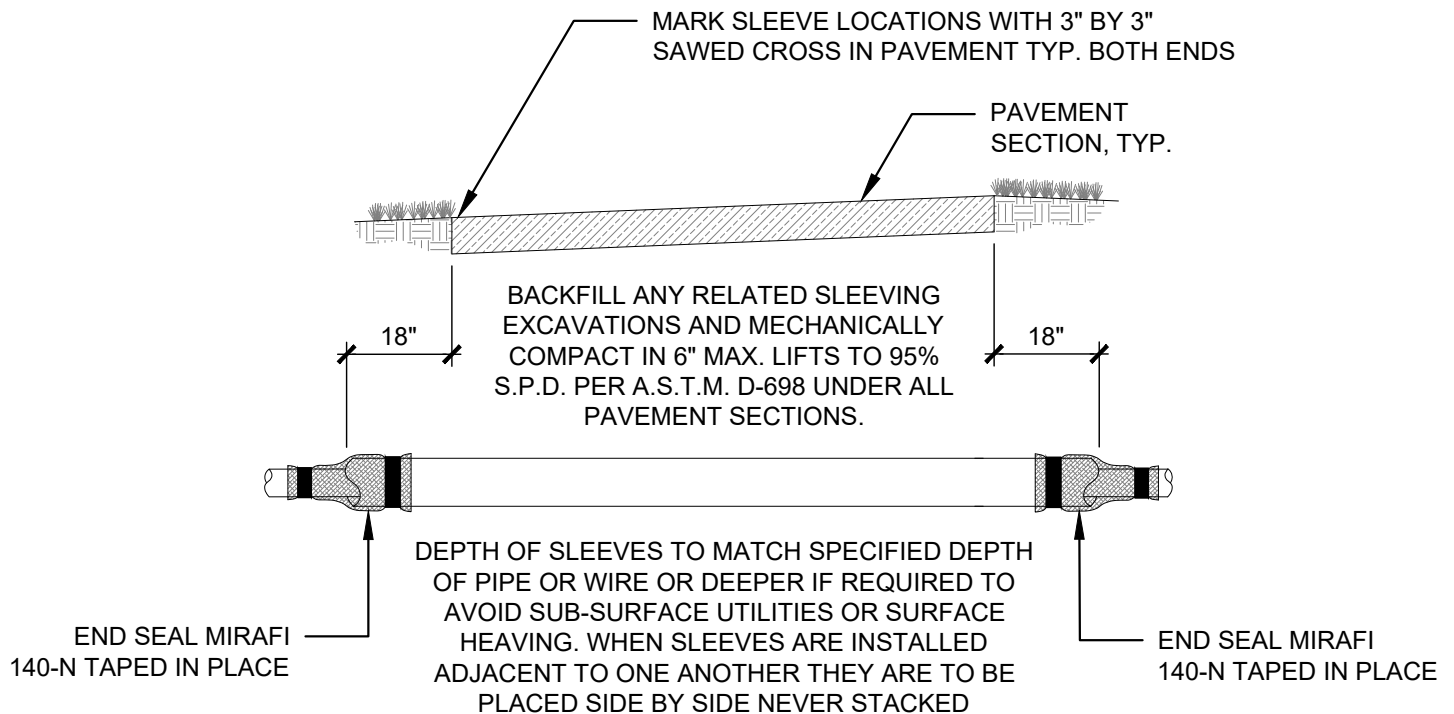
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POP-UP SPRINKLER HEAD

NO SCALE

TOWN OF PARKER STANDARD DETAILS

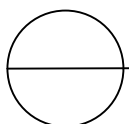


SLEEVE SHALL BE S.I.D.R.-11.5 H.D.P.E. INSTALLED BY DIRECTIONAL BORING UNDER EXISTING ASPHALT OR CONCRETE PAVEMENT IF REQUIRED AND CL-200 P.V.C. INSTALLED BY OPEN TRENCHING UNDER PROPOSED ASPHALT OR CONCRETE PAVEMENT. MAINLINE SLEEVES ARE 4", WIRE SLEEVES ARE 4" AND SECONDARY PIPE SLEEVES ARE 4".

SLEEVE WILL BE MEASURED FROM THE POINT WHERE THE MAINLINE PIPE, SECONDARY PIPE OR WIRE ENTER THE SLEEVE (AT THE SPECIFIED DEPTH) TO THE POINT WHERE THE MAINLINE PIPE, SECONDARY PIPE OR WIRE EXIT THE SLEEVE (AT THE SPECIFIED DEPTH). ANY ADDITIONAL PIPE OR BORING REQUIRED TO ACHIEVE THE SPECIFIED PIPE AND OR WIRE DEPTH AND ANY ADDITIONAL PIPE OR BORING REQUIRED TO RETURN TO THE SURFACE INCLUDING ANY AND ALL PULL PIPE WILL BE CONSIDERED AS A SUBSIDIARY OBLIGATION OF THE CONTRACTOR UNDER THE CONTRACT UNIT PRICE FOR SLEEVE AND WILL NOT BE PAID FOR SEPARATELY.

ALL SURFACE RESTORATION (REQUIRED BY BORING AND SLEEVE OPERATIONS) INCLUDING BACKFILL, COMPACTION, FINE GRADE AND SOD PATCH OR NATIVE SEEDING WILL BE CONSIDERED AS A SUBSIDIARY OBLIGATION OF THE CONTRACTOR UNDER THE CONTRACT UNIT PRICE FOR SLEEVE AND WILL NOT BE PAID FOR SEPARATELY.

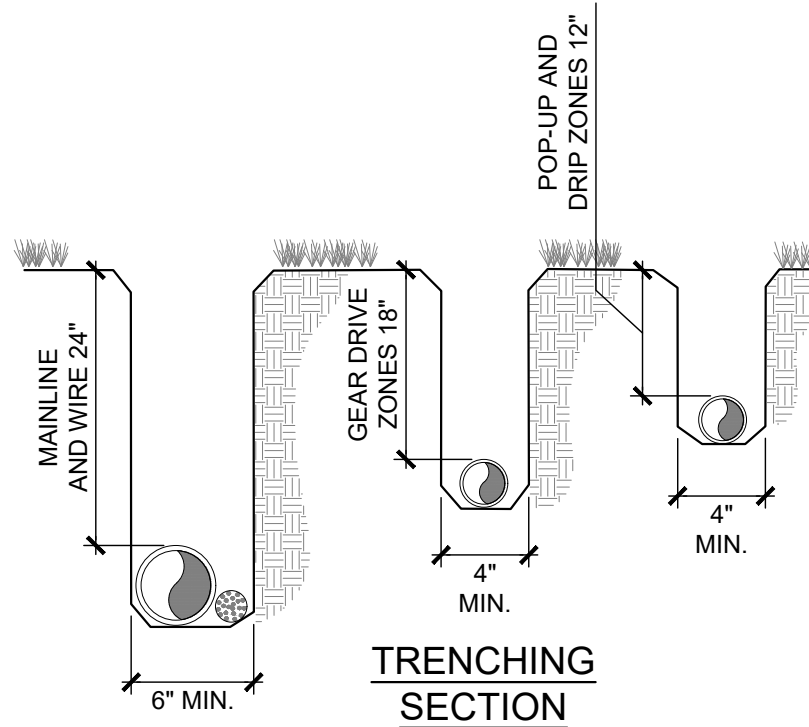
ADJUST SLEEVE DEPTH AS REQUIRED TO AVOID SUBSURFACE UTILITIES AND OR TO AVOID SURFACE HEAVING. ANY ADDITIONAL PIPE OR BORING REQUIRED TO CARRY SLEEVE DEEPER WILL BE CONSIDERED AS A SUBSIDIARY OBLIGATION OF THE CONTRACTOR UNDER THE CONTRACT UNIT PRICE FOR SLEEVE AND WILL NOT BE PAID FOR SEPARATELY.



IRRIGATION SLEEVE

NO SCALE

TOWN OF PARKER STANDARD DETAILS



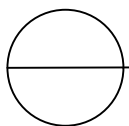
TRENCH DEPTH ARE MINIMUMS WITH A MAXIMUM OVER EXCAVATION OF 2". ALL TRENCHES ARE TO BE CLEANED WITH "CRUMBER" ATTACHMENT OR BY HAND PRIOR TO INSTALLING PIPE PROVIDING A SMOOTH AND UNIFORM BEDDING SURFACE. REMOVE ANY EXPOSED ROCK OR DEBRIS FROM TRENCH BOTTOM OR WALLS PRIOR TO INSTALLING PIPE AND OR WIRE.

ALL MAINLINE TRENCHES AND RELATED EXCAVATIONS SHALL BE MECHANICALLY COMPACTED IN 8" LIFTS MAXIMUM. TO 90% S.P.D. PER ASTM D-698 IN ALL LANDSCAPE AREAS.

SECONDARY PIPING CAN BE MECHANICALLY OR HYDRAULICALLY COMPACTED TO MATCH THE DENSITY OF ADJACENT UNDISTURBED SOIL.

BACKFILL, COMPACTION, FINE GRADE AND SURFACE RESTORATION INCLUDING FINE GRADE AND CLEAN UP MUST BE ONGOING THROUGHOUT CONSTRUCTION. NO MORE THAN THREE SECONDARY ZONES AND 200 LIN. FT. OF MAINLINE TRENCH CAN BE OPENED UP AT ONE TIME. NO ADDITIONAL SECONDARY OR MAINLINE TRENCHING WILL BE AUTHORIZED UNTIL THE BACKFILL, COMPACTION AND RESTORATION OF CURRENTLY OPEN TRENCHES AND RELATED EXCAVATIONS IS IN PROGRESS.

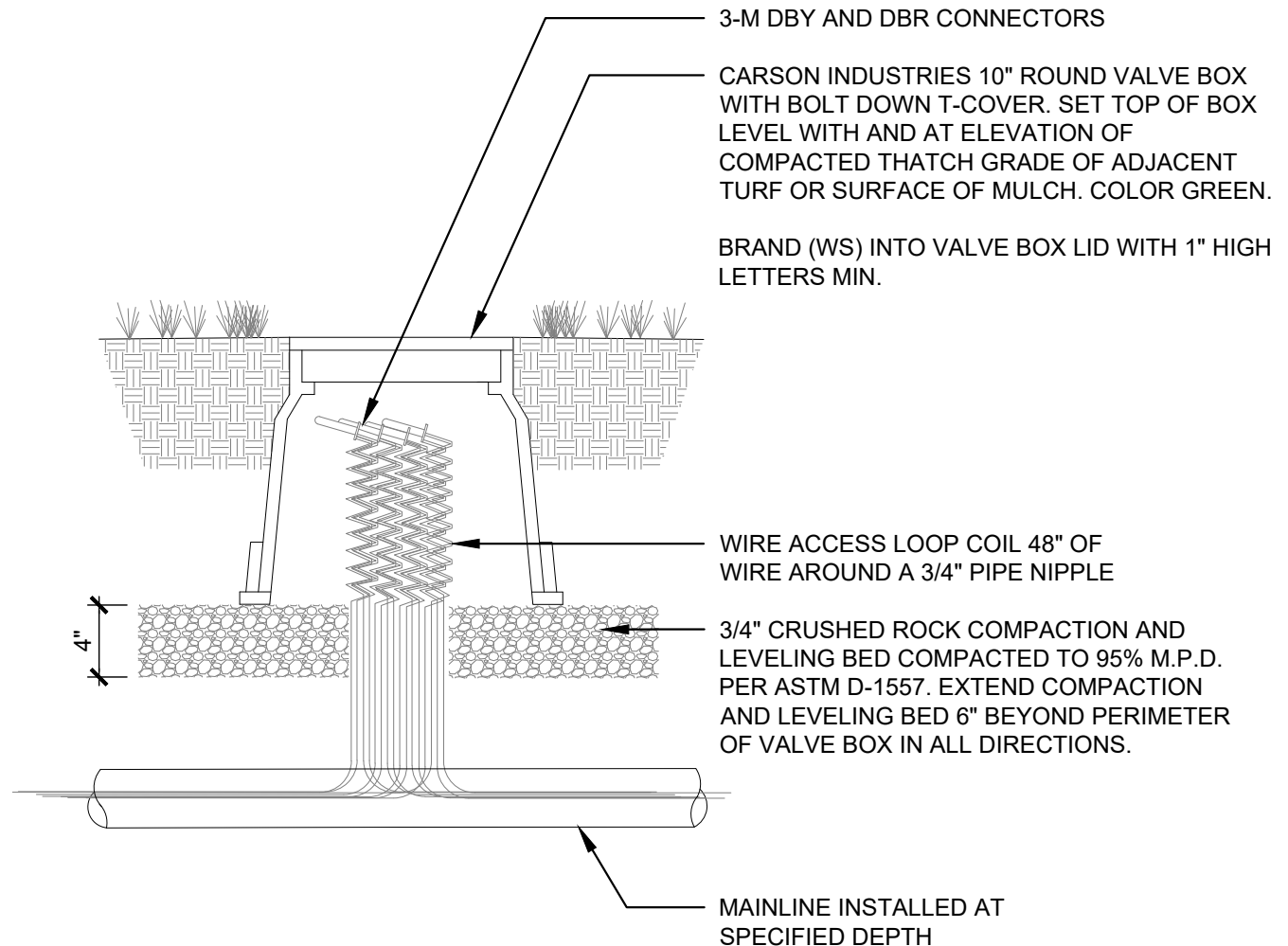
ALL OPEN EXCAVATIONS MUST BE PROTECTED IN CONFORMANCE WITH O.S.H.A. REGULATIONS.



IRRIGATION TRENCHING

NO SCALE

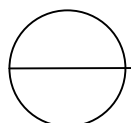
TOWN OF PARKER STANDARD DETAILS



LOOP A MIN. OF 48" OF WIRE AT ALL SPLICE CONNECTIONS AS REQUIRED TO PULL THE WIRE SPLICE DBY KIT 24" ABOVE GRADE FOR ACCESS

CAP ALL EXTRA/SPARE WIRE TERMINATIONS WITH DBY SPLICE KITS

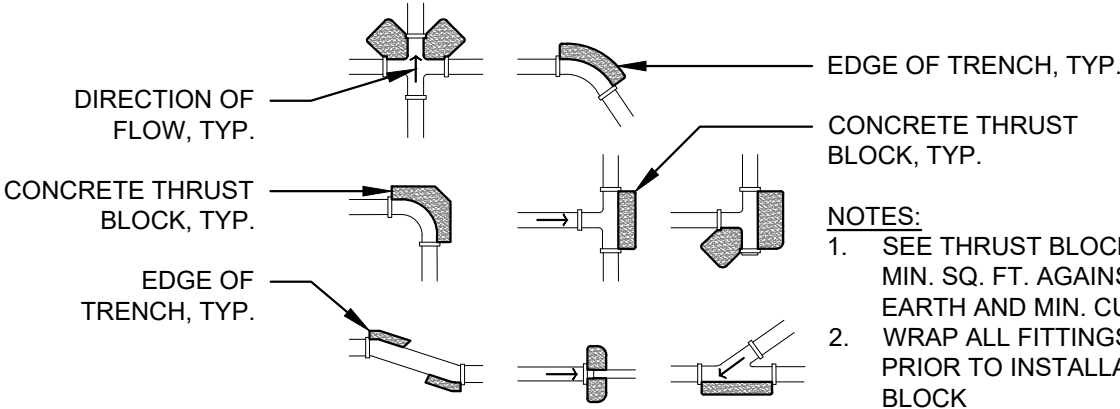
USE CARSON INDUSTRIES 1419 STANDARD RECTANGULAR VALVE BOX FOR SPLICES OF MORE THAN 20 WIRES



WIRE SPLICE ACCESS ROUTE

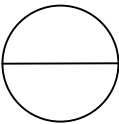
NO SCALE

TOWN OF PARKER STANDARD DETAILS



THRUST BLOCK CONFIGURATION

MAIN LINE THRUST BLOCK SURFACE AREA AGAINST UNDISTURBED EARTH IN SQ. FT. AND TOTAL CONCRETE VOLUME IN CU. FT. Assumes an estimated soil bearing strength of 1,000 lbs/sq. ft.					
FITTING SIZE	90 DEGREE	45 DEGREE	22.5 DEGREE	11.25 DEGREE	TEE OR CAP
2.5" & SMALLER	2 SQ. FT. 4 CU. FT.	1 SQ. FT. 2 CU. FT.	1 SQ. FT. 2 CU. FT.	1 SQ. FT. 2 CU. FT.	2 SQ. FT. 4 CU. FT.
3" & LARGER	4 SQ. FT. 8 CU. FT.	2 SQ. FT. 4 CU. FT.	2 SQ. FT. 4 CU. FT.	2 SQ. FT. 4 CU. FT.	4 SQ. FT. 8 CU. FT.
INSTALLATION NOTES: CONCRETE TO BE 3,500 P.S.I. MIN. INSTALL BOND BREAKER AROUND PIPE AND FITTING PRIOR TO POUR. DO NOT POUR CONCRETE ON TOP OF PIPE.					



MAINLINE THRUST BLOCKING

NO SCALE

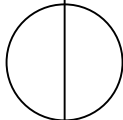
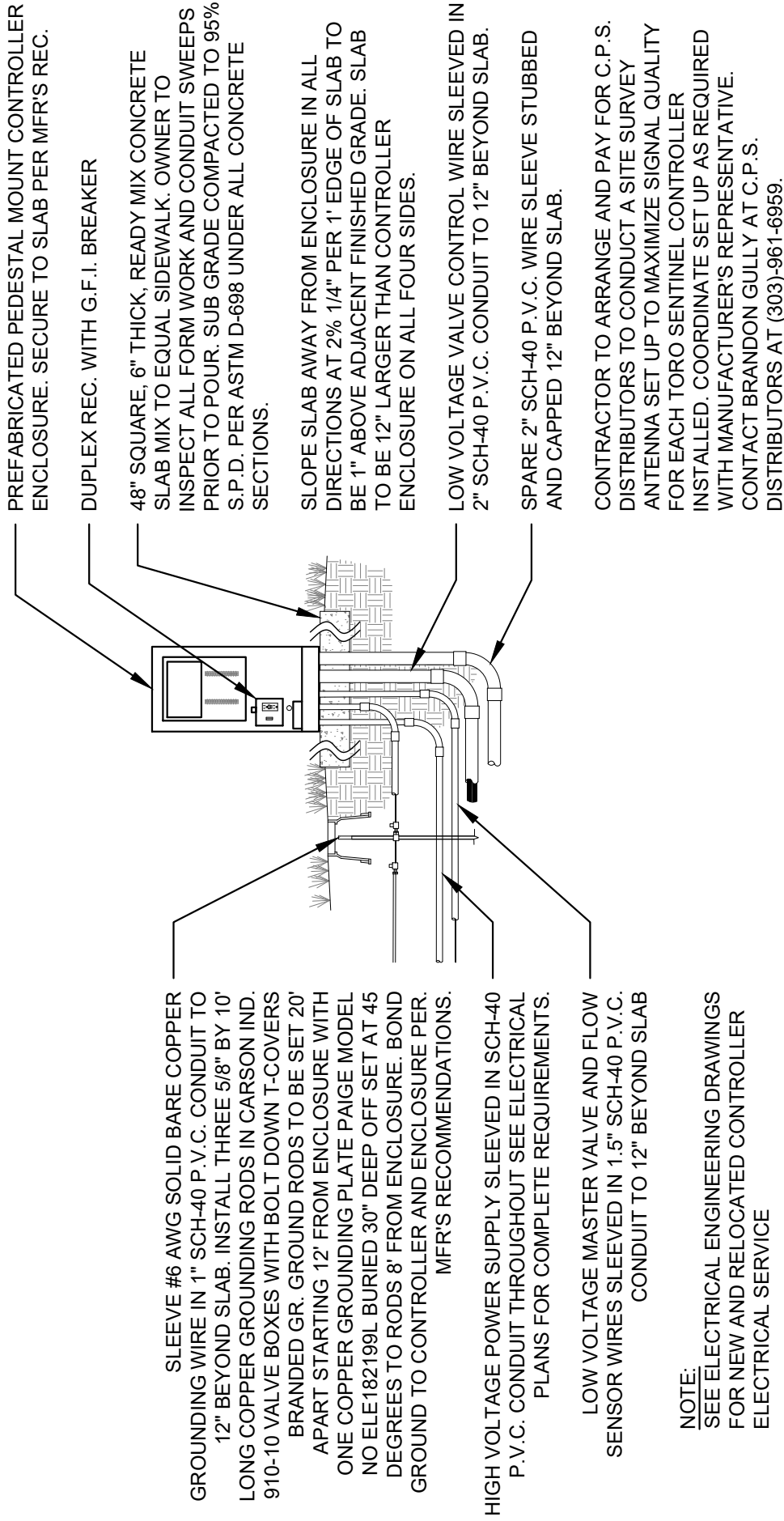
TOWN OF PARKER STANDARD DETAILS



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CONTROLLER SPECIFICATION SUMMARY:

CONTROLLER (C1) - - - - - CONTRACTOR TO SUPPLY AND INSTALL ONE NEW TORO SENTINEL SERIES
CONTROLLER MODEL NO. (SEE DRAWINGS)



CONTROLLER AND ENCLOSURE ELEVATION

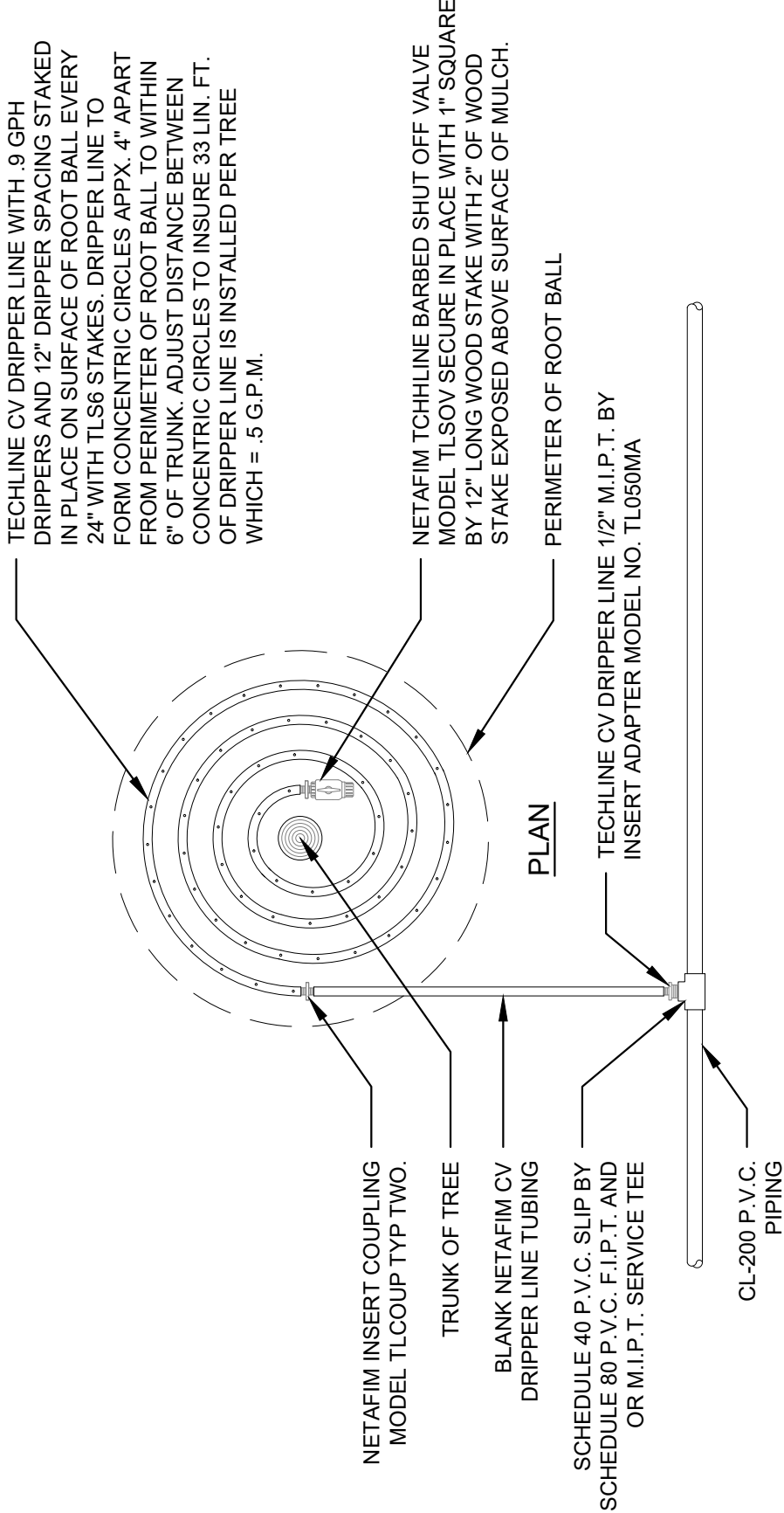
NO SCALE

TOWN OF PARKER STANDARD DETAILS



PARKER
C O L O R A D O

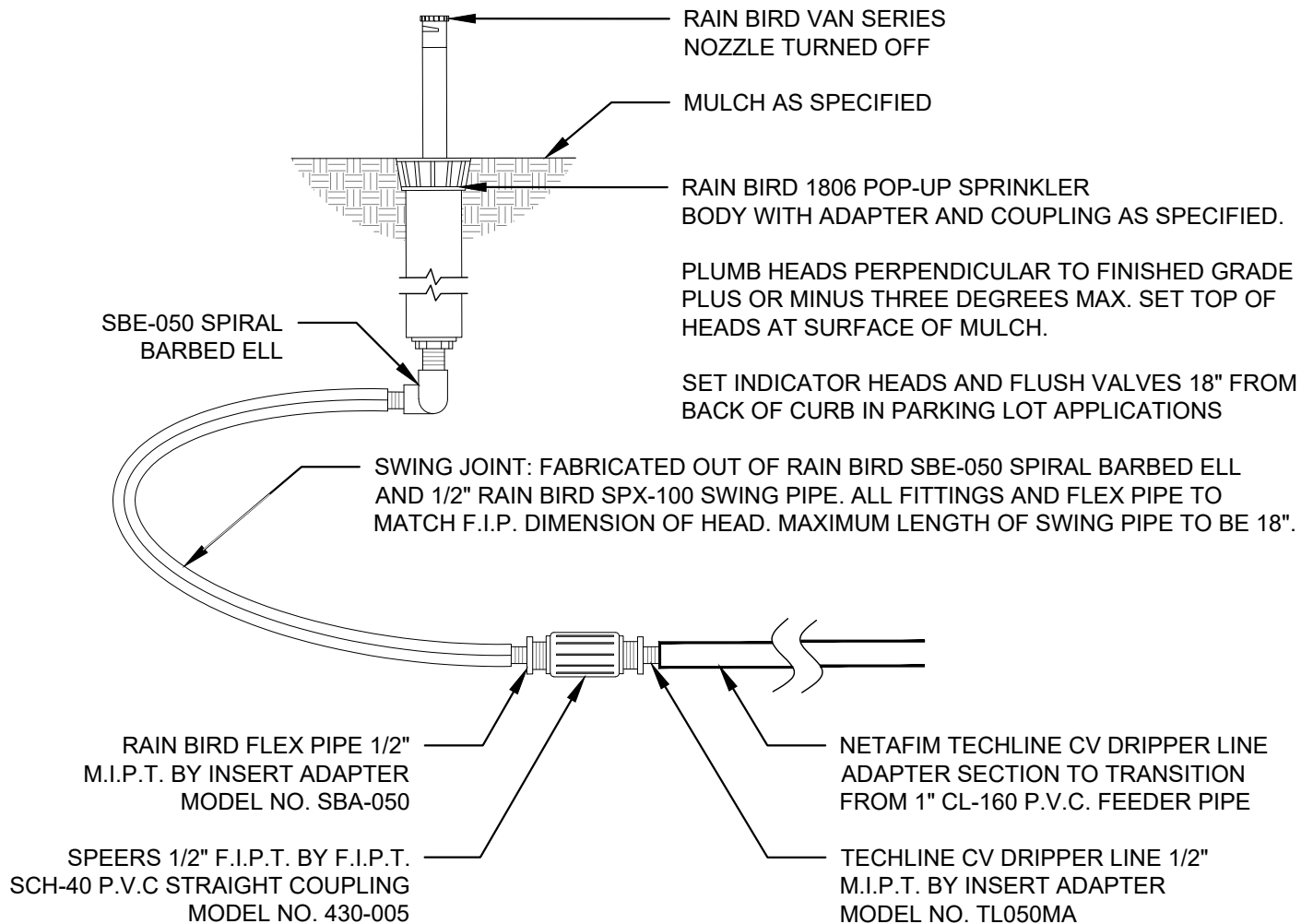
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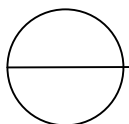
CV DRIPPER LINE WITH FLUSH VALVE INSTALLATION FOR TREE IRRIGATION IN NATIVE AREAS

NO SCALE

TOWN OF PARKER STANDARD DETAILS



INDICATOR HEAD FOR NETAFIM CV DRIPPER LINE PIPE LOOPS



NO SCALE

TOWN OF PARKER STANDARD DETAILS



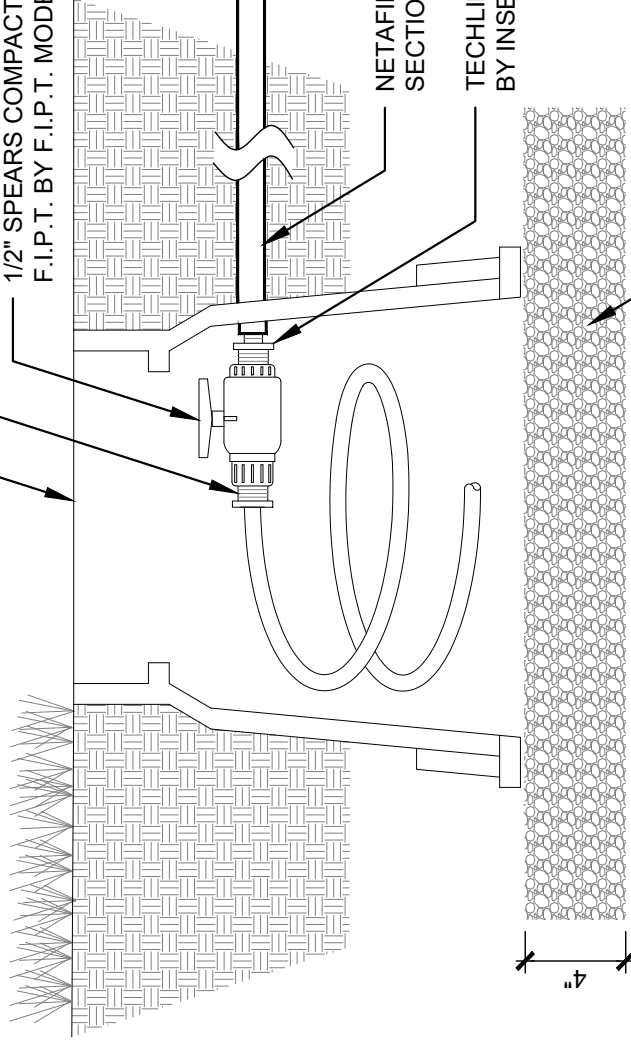
NOTES:

1. SET FLUSH VALVES AND INDICATOR HEADS 18" FROM BACK OF CURB IN PARKING LOT APPLICATIONS
2. BRAND (FV) INTO VALVE BOX LID WITH 1" HIGH LETTERS MIN.
3. INSTALL INDICATOR HEAD PER DETAIL B/IR1.8 18" UPSTREAM OF ALL FLUSH VALVES LOCATED AT THE END OF EACH DRIPPER TUBING FEEDER LOOP. INDICATOR HEADS ARE NOT REQUIRED AT EACH TREE RING.

CARSON INDUSTRIES 10" ROUND VALVE BOX WITH BOLT DOWN T-COVER. SET TOP OF BOX LEVEL WITH AND AT ELEVATION OF COMPACTED MULCH, TURF OR 1" ABOVE FINISHED GRADE IN NATIVE GRASS AREAS. COLOR GREEN.

RAIN BIRD 1/2" M.I.P.T. BY INSERT ADAPTER MODEL NO. SBA-050 AND 16" OF SPX-100 FLEX PIPE

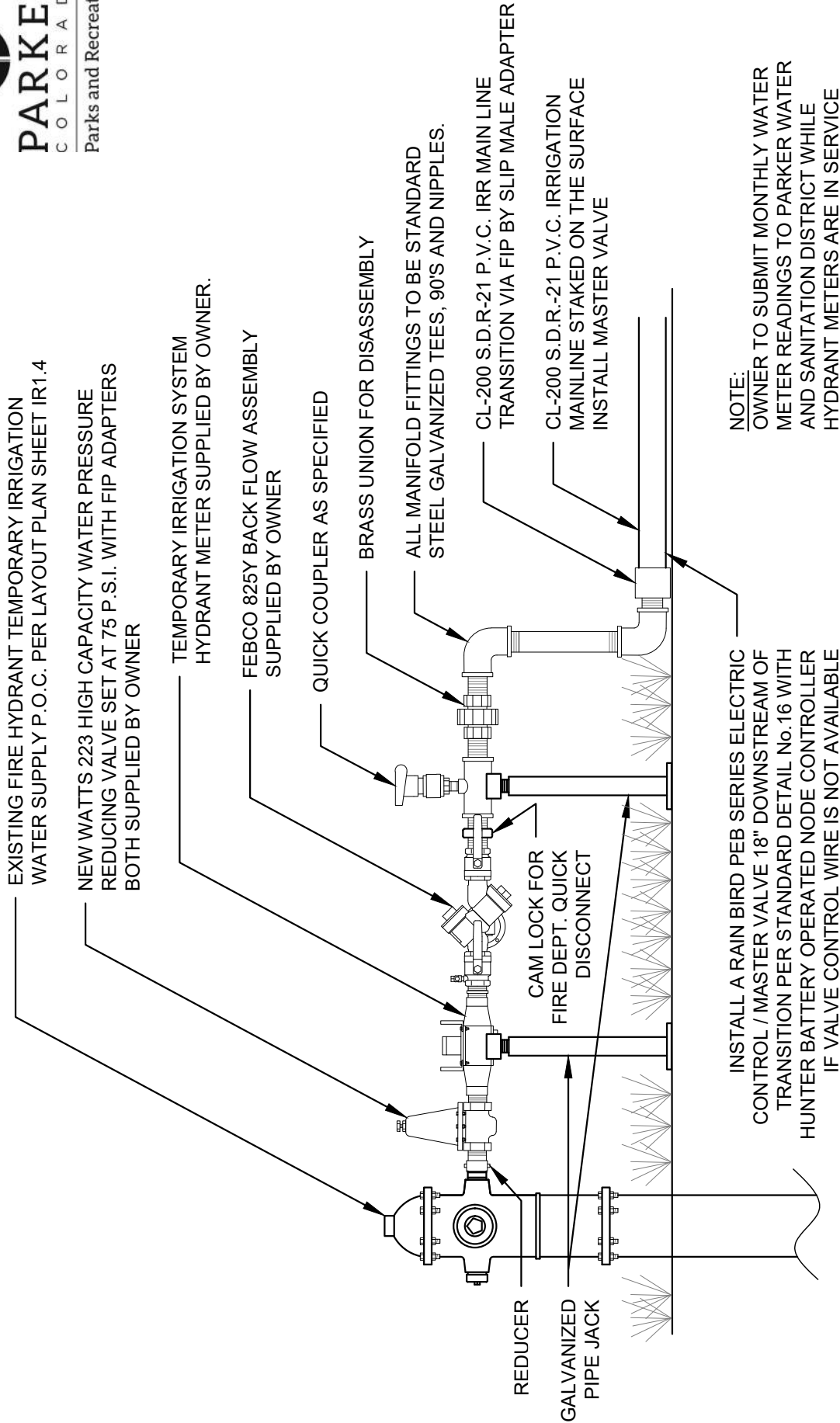
1/2" SPEARS COMPACT BALL VALVE (REGULAR STYLE) F.I.P.T. BY F.I.P.T. MODEL 2121-005



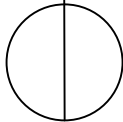
CV DRIPPER LINE FLUSH VALVE INSTALLATION AT END OF EACH DRIPPER PIPE LOOP

NO SCALE

TOWN OF PARKER STANDARD DETAILS



TEMPORARY IRRIGATION SYSTEM POINT OF CONNECTION AND BACK FLOW ASSEMBLY SECTION

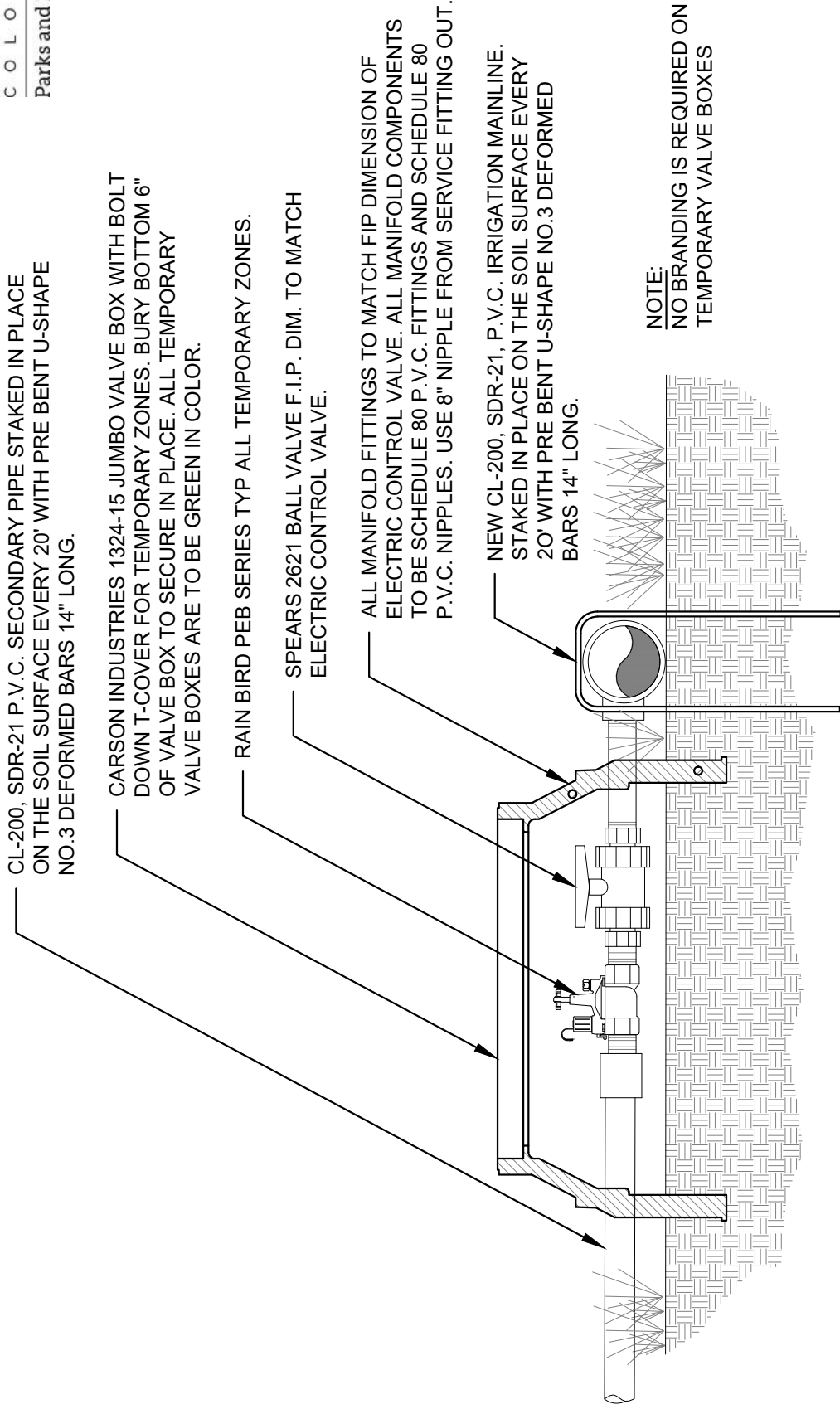


NO SCALE

TOWN OF PARKER STANDARD DETAILS



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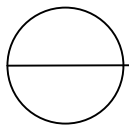
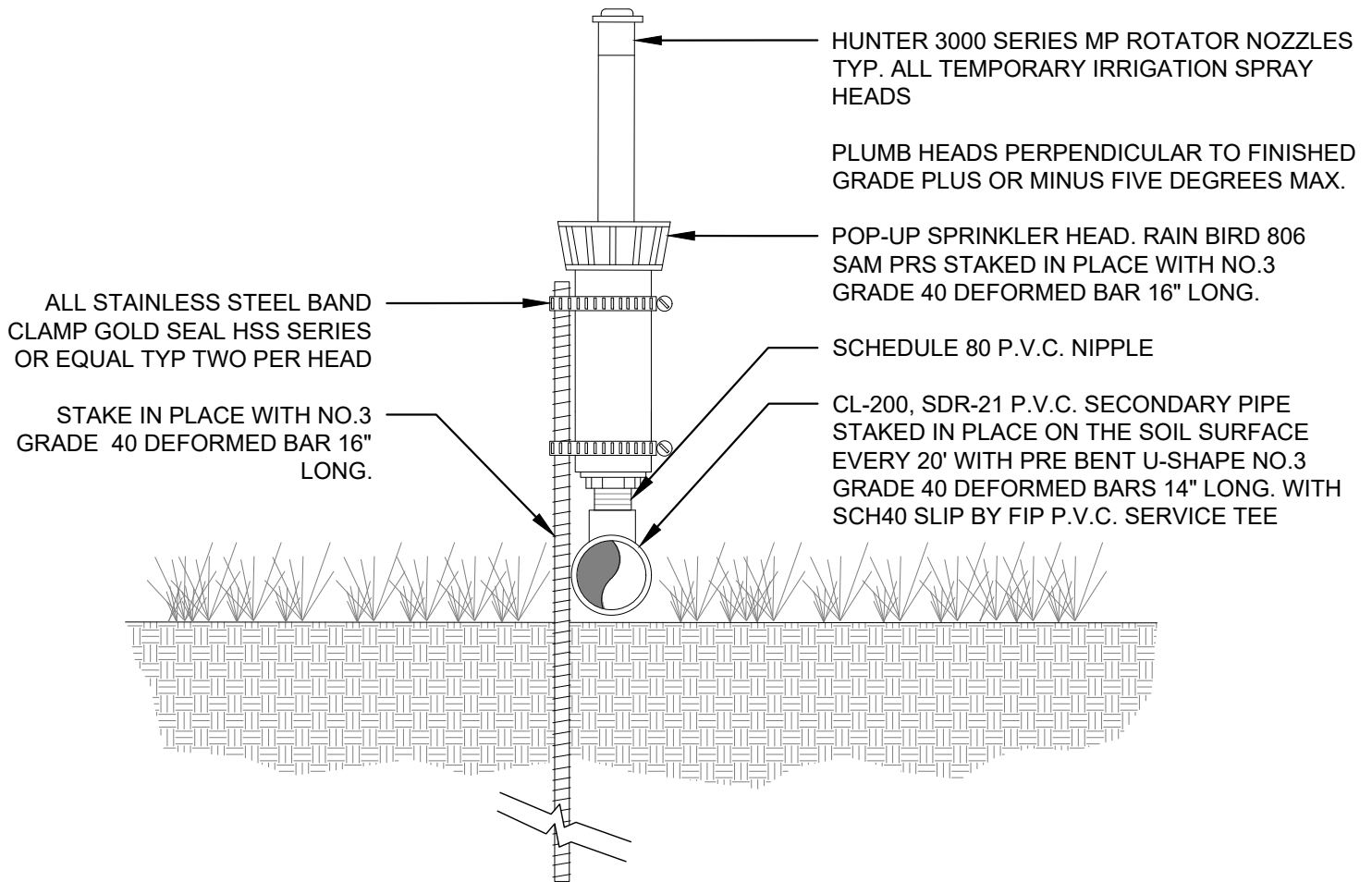
TEMPORARY ELECTRIC CONTROL VALVE

NO SCALE

TOWN OF PARKER STANDARD DETAILS



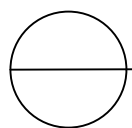
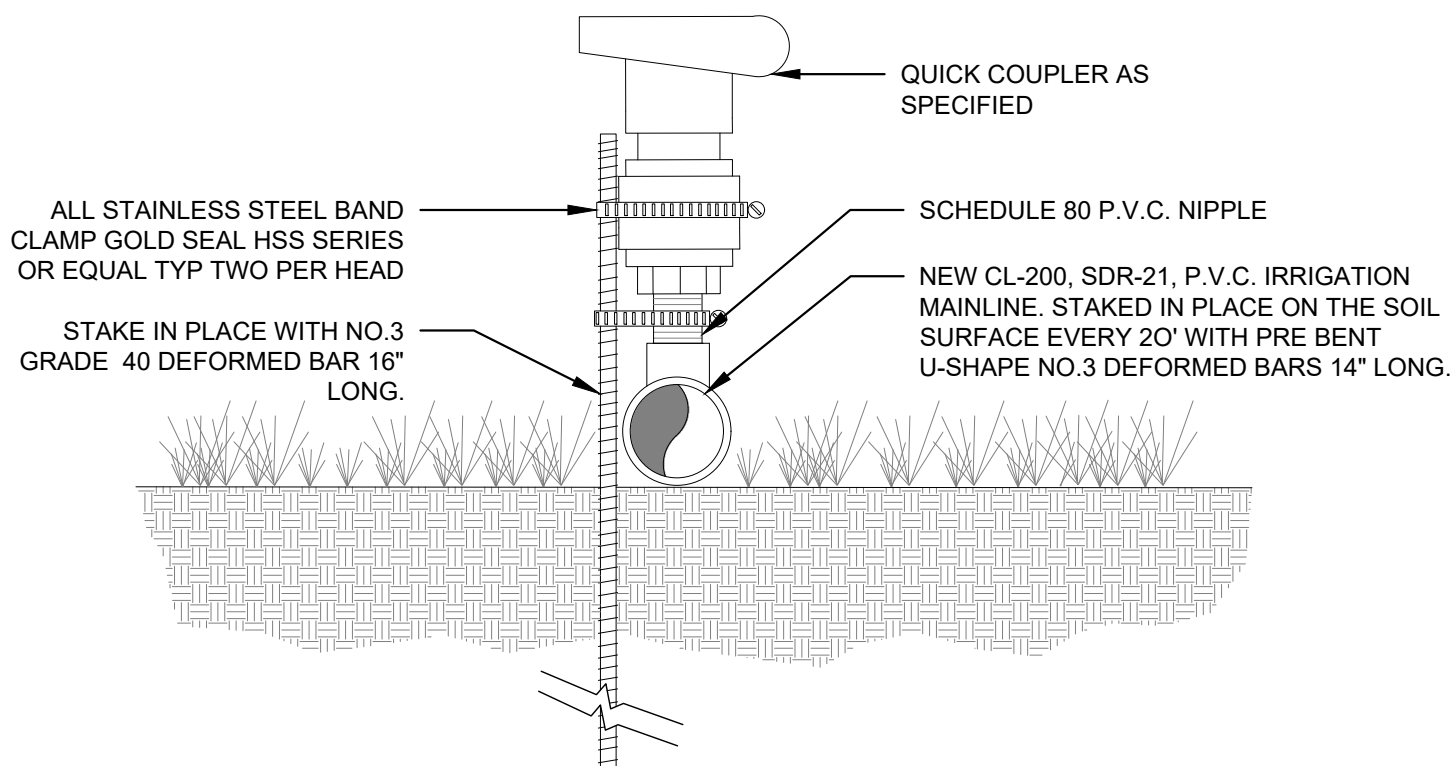
PARKER
COLORADO
Parks and Recreation



TEMPORARY POP-UP HEAD

NO SCALE

TOWN OF PARKER STANDARD DETAILS



TEMPORARY QUICK COUPLER VALVE

NO SCALE

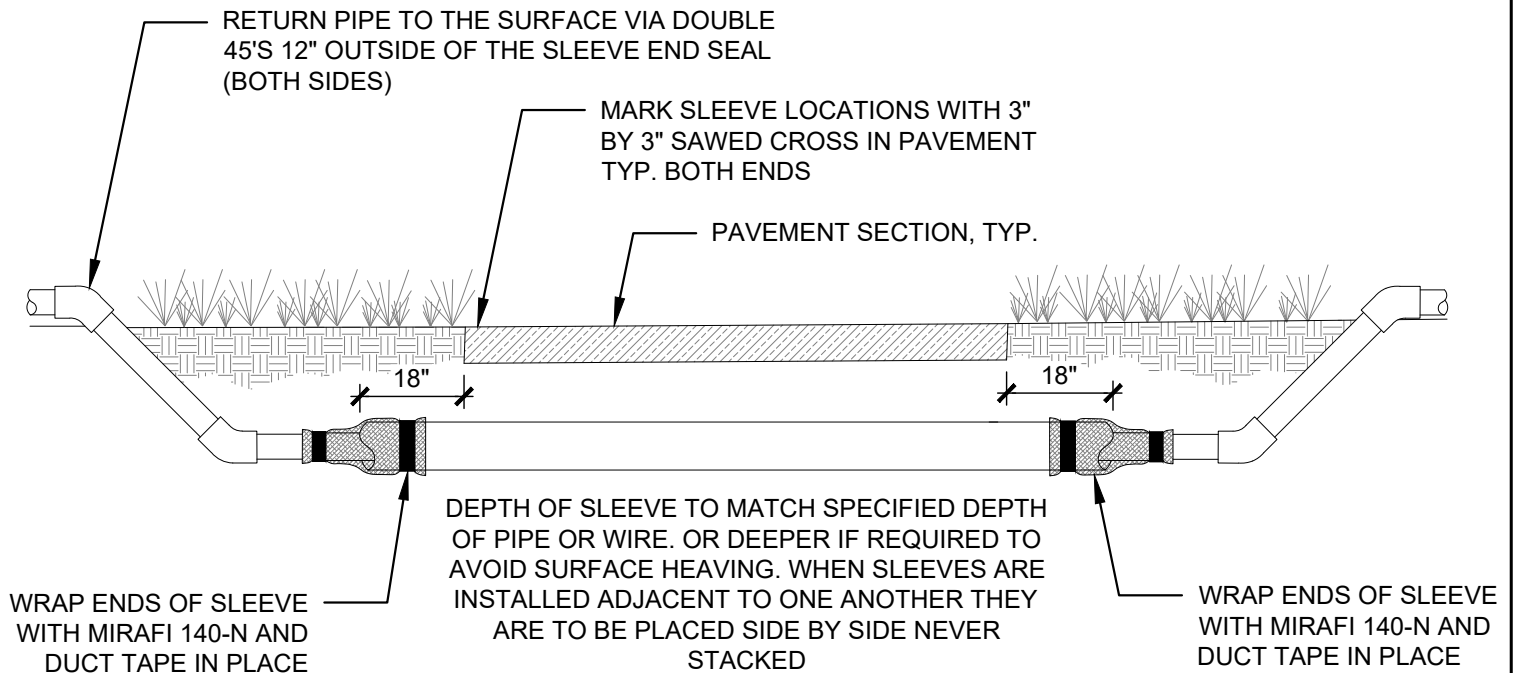
TOWN OF PARKER STANDARD DETAILS



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TEMPORARY SLEEVING IS TO BE ABANDONED IN PLACE
AFTER THE TEMPORARY IRRIGATION SYSTEM IS
REMOVED

BACKFILL ANY RELATED SLEEVING EXCAVATIONS AND
MECHANICALLY COMPACT IN 6" MAX. LIFTS TO 95% S.P.D.
PER A.S.T.M. D-698 UNDER ALL PAVEMENT SECTIONS.



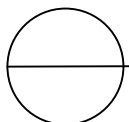
SLEEVING SHALL BE S.I.D.R.-11.5 H.D.P.E. INSTALLED BY DIRECTIONAL BORING UNDER EXISTING ASPHALT OR CONCRETE PAVEMENT IF REQUIRED AND CL-200 P.V.C. INSTALLED BY OPEN TRENCHING UNDER PROPOSED ASPHALT OR CONCRETE PAVEMENT. MAINLINE SLEEVES ARE TWO PIPE DIAMETERS LARGER THAN THE PIPE BEING SLEEVED, WIRE SLEEVES ARE 4" AND SECONDARY PIPE SLEEVES ARE 4".

SLEEVING WILL BE MEASURED FROM THE POINT WHERE THE MAINLINE PIPE, SECONDARY PIPE OR WIRE ENTER THE SLEEVE (AT THE SPECIFIED DEPTH) TO THE POINT WHERE THE MAINLINE PIPE, SECONDARY PIPE OR WIRE EXIT THE SLEEVE (AT THE SPECIFIED DEPTH). ANY ADDITIONAL PIPE OR BORING REQUIRED TO ACHIEVE THE SPECIFIED PIPE AND OR WIRE DEPTH AND ANY ADDITIONAL PIPE OR BORING REQUIRED TO RETURN TO THE SURFACE INCLUDING ANY AND ALL PULL PIPE WILL BE CONSIDERED AS A SUBSIDIARY OBLIGATION OF THE CONTRACTOR UNDER THE CONTRACT UNIT PRICE FOR SLEEVING AND WILL NOT BE PAID FOR SEPARATELY.

ALL SURFACE RESTORATION (REQUIRED BY BORING AND SLEEVING OPERATIONS) INCLUDING BACKFILL, COMPACTION, FINE GRADE AND SOD PATCH OR NATIVE SEEDING WILL BE CONSIDERED AS A SUBSIDIARY OBLIGATION OF THE CONTRACTOR UNDER THE CONTRACT UNIT PRICE FOR SLEEVING AND WILL NOT BE PAID FOR SEPARATELY.

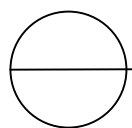
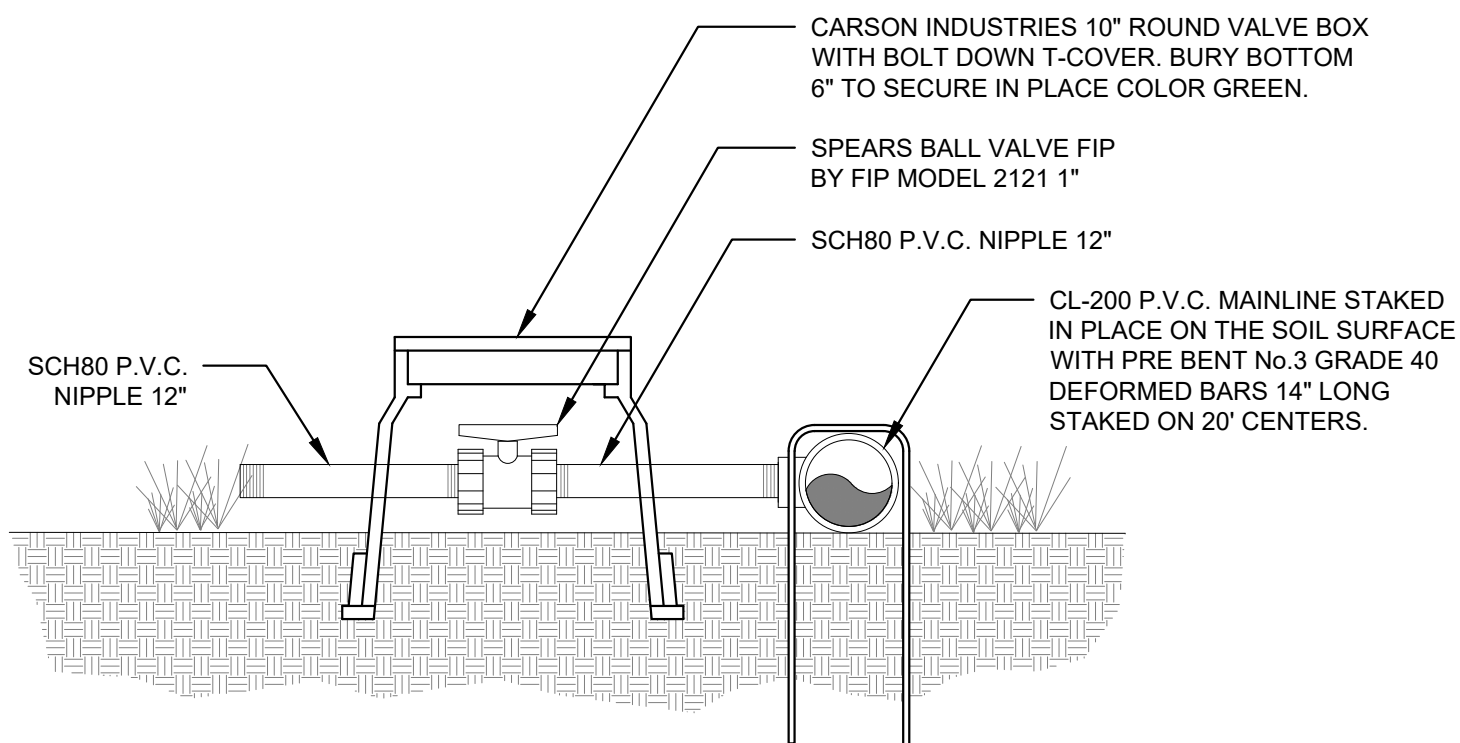
ADJUST SLEEVING DEPTH AS REQUIRED TO AVOID SUBSURFACE UTILITIES AND OR TO AVOID SURFACE HEAVING. ANY ADDITIONAL PIPE OR BORING REQUIRED TO CARRY SLEEVING DEEPER WILL BE CONSIDERED AS A SUBSIDIARY OBLIGATION OF THE CONTRACTOR UNDER THE CONTRACT UNIT PRICE FOR SLEEVING AND WILL NOT BE PAID FOR SEPARATELY.

TEMPORARY IRRIGATION SYSTEM PIPE AND WIRE SLEEVING



NO SCALE

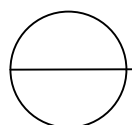
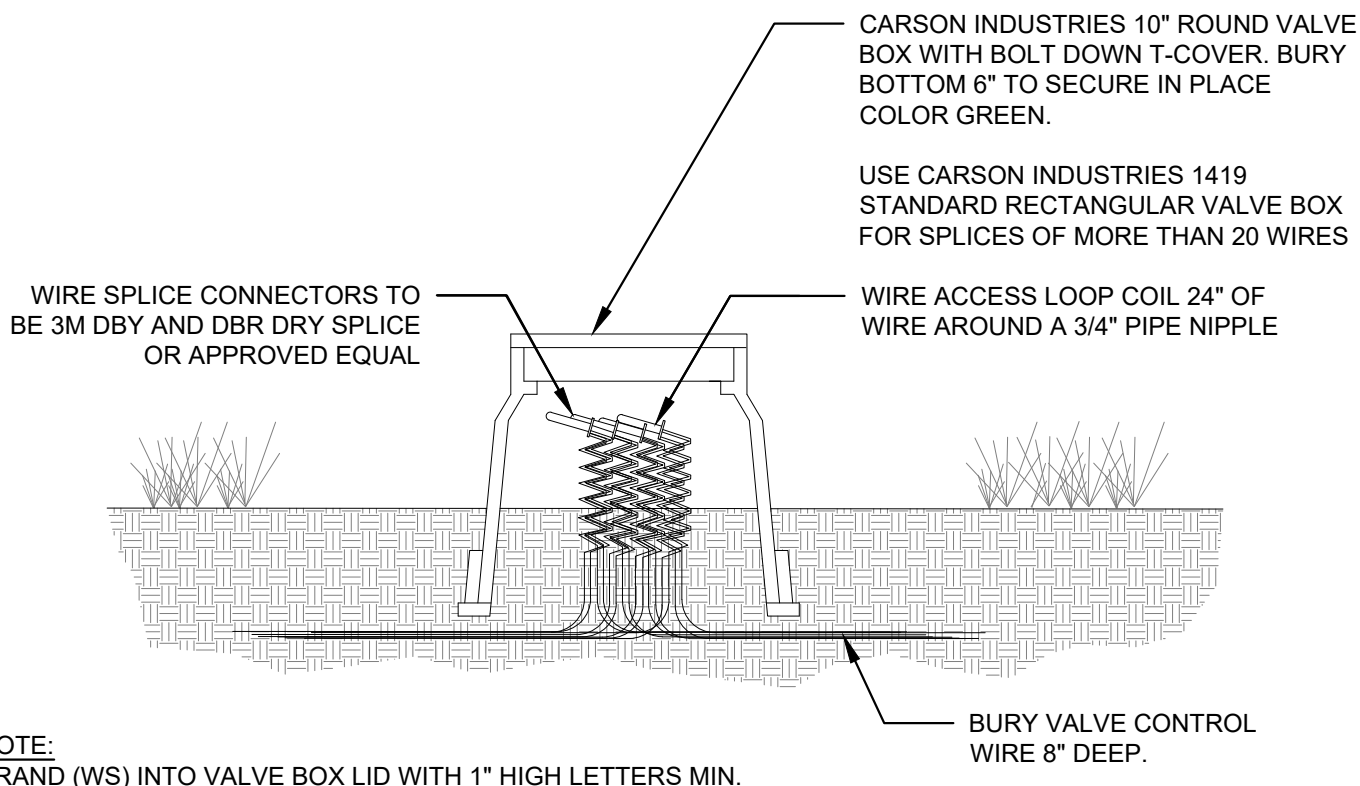
TOWN OF PARKER STANDARD DETAILS



TEMPORARY DRAIN VALVE

NO SCALE

TOWN OF PARKER STANDARD DETAILS



TEMPORARY WIRE SPLICE CONNECTION

NO SCALE

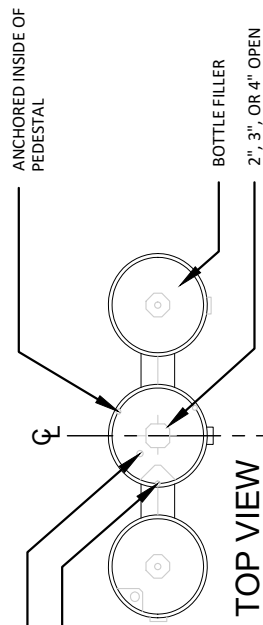
TOWN OF PARKER STANDARD DETAILS

NOTES:

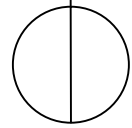
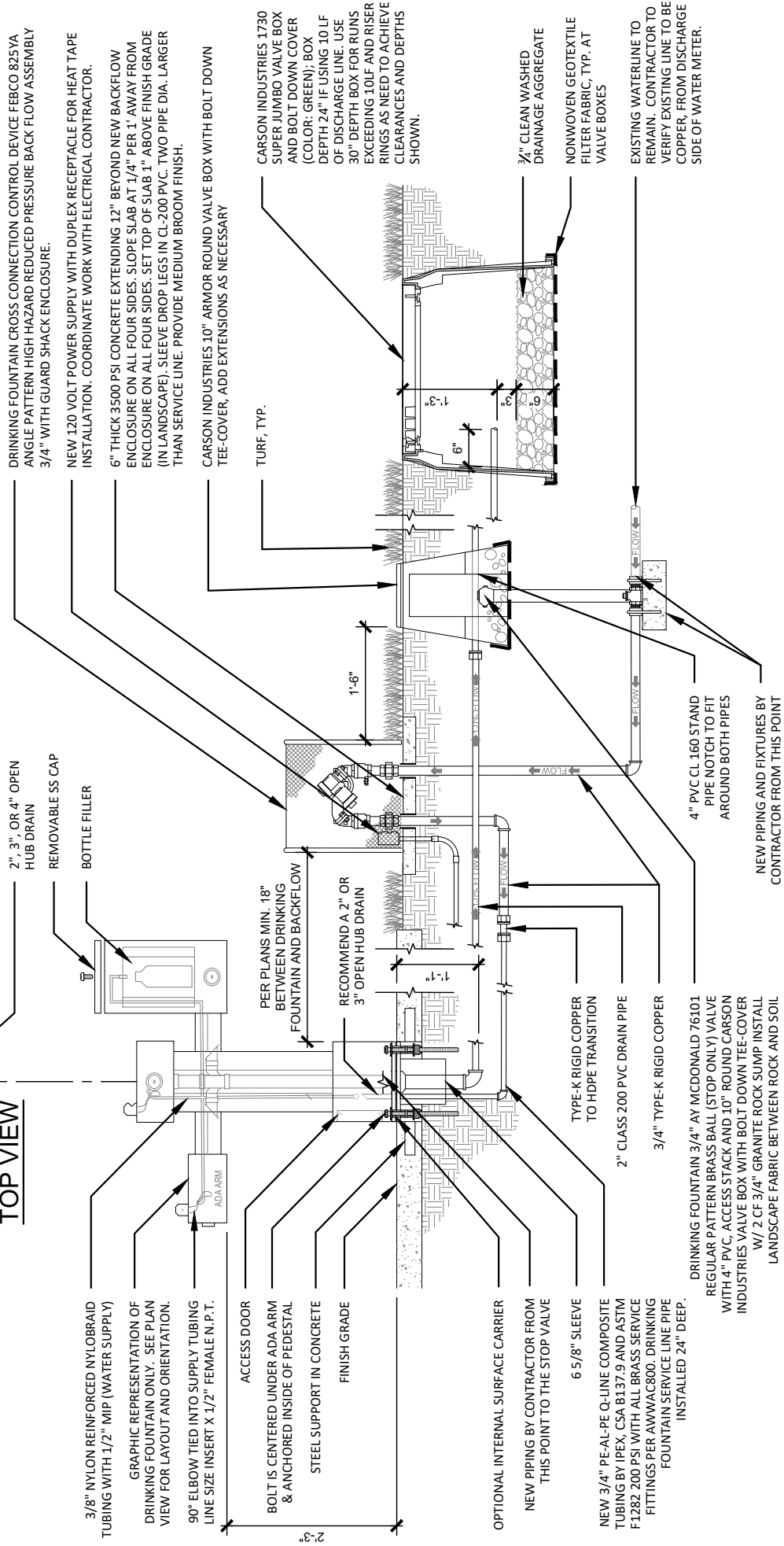
1. MOST DEPENDABLE FOUNTAIN 2440 SWISS WITH BOTTLE FILLER AND TWO SEASON FOUNTAIN COVERS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. PAD & DRINKING FOUNTAIN HEIGHT MUST MEET ADA STANDARDS.
3. ALL CONNECTIONS MUST BE DOUBLE CLAMPED.
4. COLOR TO BE DETERMINED BY OWNER.
5. REMOVE AND REPLACE EXISTING STOP AND WASTE VALVE AS NOTED.
6. 27" CLEAR MUST BE MAINTAINED FROM PAVING FINISH GRADE TO BOTTOM OF DRINKING BOWL. COORDINATE TOP OF CONCRETE PEDESTAL TO ACCOMMODATE 27" CLEARANCE.
7. FOR BACKFLOW ENCLOSURE AND SETTER SPECIFICATION: INSTALL ONE GUARD SHACK ENCLOSURE WITH SETTER AND FROST GUARD FOR DRINKING FOUNTAIN BACK FLOW ASSEMBLY. GUARD SHACK AND FROST GUARD COLORS TO BE GREEN.



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Parks and Recreation



TOP VIEW



DRINKING FOUNTAIN, SERVICE LINE AND DISCHARGE SUMP

NO SCALE

TOWN OF PARKER STANDARD DETAILS



BACK FLOW ENCLOSURE AND SETTER SPECIFICATION:
INSTALL ONE GUARD SHACK ENCLOSURE WITH ENCLOSURE SETTER
AND FROST GUARD FOR DRINKING FOUNTAIN BACK FLOW ASSEMBLY.

NEW 120 VOLT POWER SUPPLY WITH DUPLEX RECEPTACLE FOR HEAT
TAPE INSTALLATION. SEE E.E. PLANS FOR COMPLETE REQUIREMENTS
AND COORDINATE WORK WITH ELECTRICAL CONTRACTOR ON SITE.
TYP BOTH BACK FLOW ASSEMBLIES.

IRRIGATION SYSTEM CROSS CONNECTION CONTROL DEVICE FEBCO
825YA ANGLE PATTERN HIGH HAZARD REDUCED PRESSURE BACK FLOW
ASSEMBLY SHOWN DIAGRAMMATICALLY.

SIX INCH THICK 3500 PSI CONCRETE EXTENDING 12" BEYOND NEW BACK
FLOW ENCLOSURE ON ALL FOUR SIDES. SLOPE SLAB AT 1/4" PER 1' AWAY
FROM ENCLOSURE ON ALL FOUR SIDES. SET TOP OF SLAB 1" ABOVE
ADJACENT FINISHED GRADE. SLEEVE DROP LEGS IN CL-200 PVC. TWO
PIPE DIA. LARGER THAN SERVICE LINE. PROVIDE MEDIUM BROOM FINISH.

DRINKING FOUNTAIN CROSS CONNECTION
CONTROL DEVICE FEBCO 825YA ANGLE
PATTERN HIGH HAZARD REDUCED
PRESSURE BACK FLOW ASSEMBLY 3/4".
WITH GUARD SHACK ENCLOSURE.

CONCRETE PAD PER NOTE
THIS SHEET

NEW 3/4" PE-AL-PE Q-LINE
COMPOSITE TUBING BY IPEX PER
C903, CSA B137.9 AND ASTM F1282
200 PSI WITH ALL BRASS SERVICE
FITTINGS PER AWWAC800.
DRINKING FOUNTAIN SERVICE
LINE PIPE INSTALLED 24" DEEP.

TYPE-K RIGID COPPER TO HDPE
TRANSITION

3/4" TYPE-K RIGID COPPER

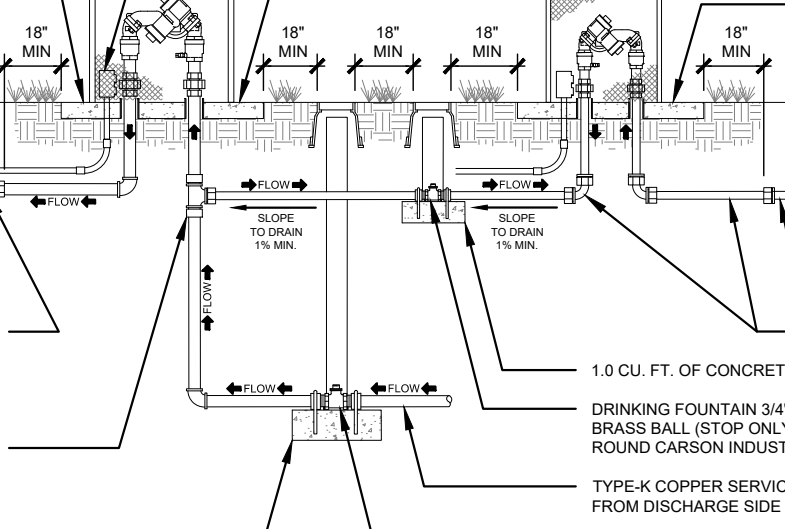
1.0 CU. FT. OF CONCRETE WITH TWO NO.4 STRAPS

DRINKING FOUNTAIN 3/4" AY MCDONALD 76101 REGULAR PATTERN
BRASS BALL (STOP ONLY) VALVE WITH 4" P.V.C. ACCESS STACK AND 10"
ROUND CARSON INDUSTRIES VALVE BOX WITH BOLT DOWN TEE-COVER.

TYPE-K COPPER SERVICE LINE WITH ALL SILVER SOLDERED FITTINGS
FROM DISCHARGE SIDE OF WATER METER.

IRRIGATION SYSTEM AY MCDONALD 76001 CYLINDER PATTERN STOP
AND DRAIN VALVE SIZED TO MATCH IRRIGATION SERVICE LINE WITH 4"
P.V.C. ACCESS STACK AND 10" ROUND CARSON INDUSTRIES VALVE BOX
WITH BOLT DOWN TEE-COVER. (SHOWN BEYOND DRINKING FOUNTAIN
SERVICE LINE).

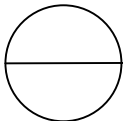
CONCRETE PAD PER
NOTE THIS SHEET



TYPE-K COPPER DISCHARGE
SIDE DROP LEG SERVING
IRRIGATION SYSTEM MAIN LINE
CONVERT TO CL-200 P.V.C. MIN.
18" BEYOND CONCRETE PAD

DRINKING FOUNTAIN POINT OF
CONNECTION ON CHARGED SIDE
DROP LEG 24" BELOW GRADE WITH
SILVER SOLDERED SERVICE TEE

1.5 CU. FT. OF CONCRETE
WITH TWO NO.4 STRAPS



DRINKING FOUNTAIN POINT OF CONNECTION

NO SCALE

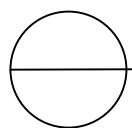
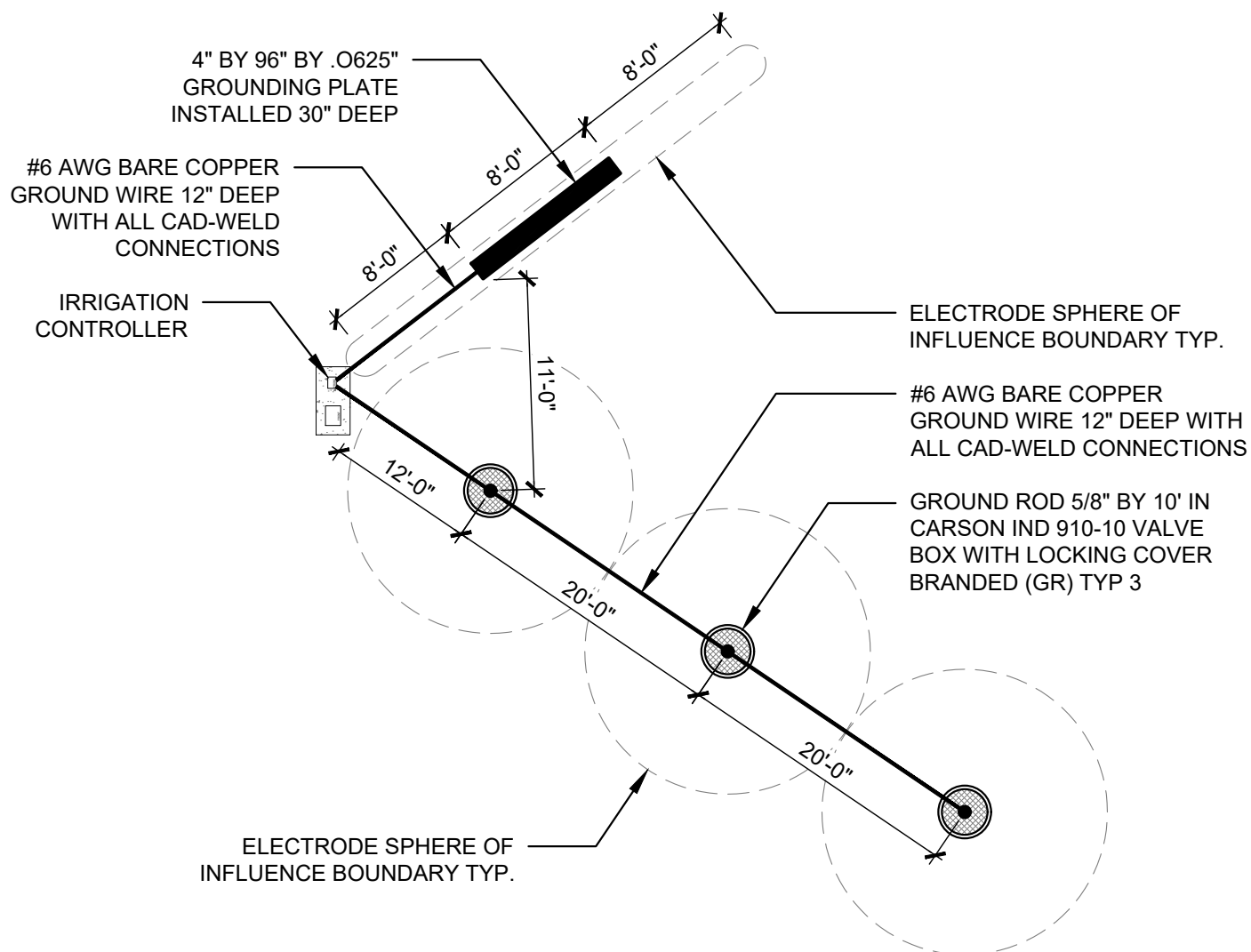
Parks and Recreation



NO SCALE

DATE: MAY 2023 | DETAIL IR-24

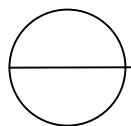
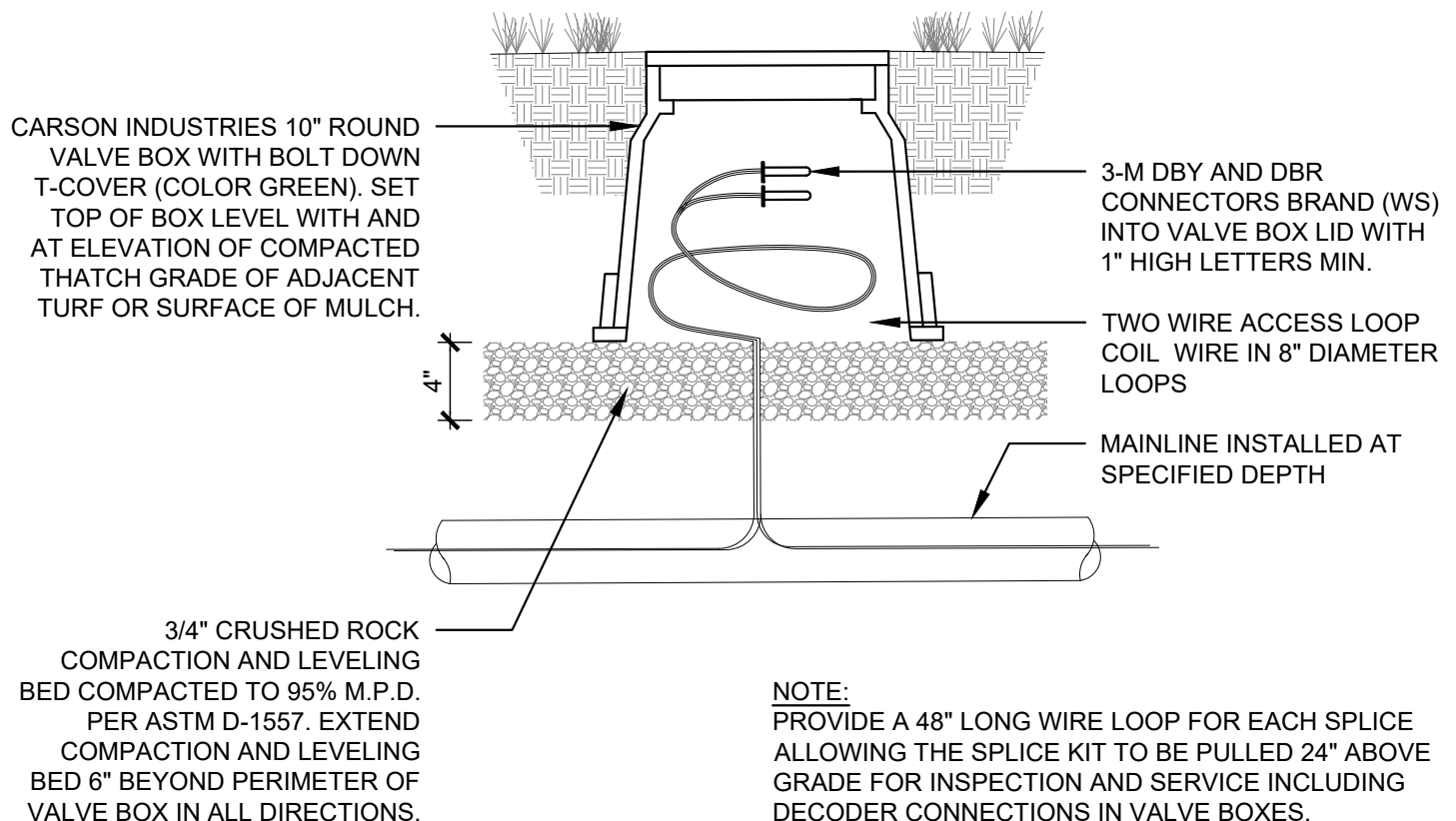
TOWN OF PARKER STANDARD DETAILS



CONTROLLER GROUNDING DIAGRAM

NO SCALE

TOWN OF PARKER STANDARD DETAILS



TWO WIRE PATH WIRE SPLICE ACCESS LOOP

NO SCALE

TOWN OF PARKER STANDARD DETAILS

CARSON INDUSTRIES JUMBO VALVE BOX MODEL 1324-15 WITH 15" DEEP BODY AND BOLT DOWN COVER (COLOR GREEN) FOR 1.5" AND 1" VALVES AND CARSON INDUSTRIES 1730-18 SUPER JUMBO VALVE BOX WITH 18" DEEP BODY AND BOLT DOWN COVER (COLOR GREEN) FOR 2" VALVES. ONE VALVE PER BOX CENTERED BOTH WAYS. SET TOP OF BOX AT COMPACTED THATCH GRADE OF ADJACENT TURF OR SURFACE OF MULCH.

BRAND (CONTROLLER LETTER AND VALVE STATION NUMBER) INTO VALVE BOX LID WITH 1" HIGH LETTERS MIN.

SPEARS P.V.C. UNION MODEL 898 F.I.P. DIM. TO MATCH ELECTRIC CONTROL VALVE

RAIN BIRD EFB-CP-PRS-D SERIES ELECTRIC CONTROL VALVE

SPEARS TRUE UNION BALL VALVE MODEL 1821-SR WITH STEEL REINFORCED THREADED ENDS F.I.P. DIM. TO MATCH ELECTRIC CONTROL VALVE.

ALL MANIFOLD FITTINGS TO MATCH FIP DIMENSION OF ELECTRIC CONTROL VALVE. ALL MANIFOLD COMPONENTS TO BE SCHEDULE 80 P.V.C. FITTINGS AND SCHEDULE 80 P.V.C. NIPPLES SUPPLIED AS SR STEEL REINFORCED

DECODER WITH DBY CONNECTORS

TWO WIRE PATH WITH DBY CONNECTORS

3/4" CRUSHED ROCK COMPACTION AND LEVELING BED COMPACTED TO 95% M.P.D. PER ASTM D-1557. EXTEND COMPACTION AND LEVELING BED 6" BEYOND PERIMETER OF VALVE BOX IN ALL DIRECTIONS.

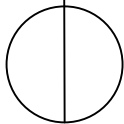
SCHEDULE 80 P.V.C. RISER NIPPLE LENGTH AS REQ. FIP DIMENSION TO MATCH FIP DIMENSION OF ELECTRIC CONTROL VALVE.

NEW CL-200, SDR-21, P.V.C. IRRIGATION MAINLINE.

DO NOT MODIFY SIDE WALLS OF VALVE BOX. ANY MODIFIED VALVE BOX WILL BE REJECTED.

PROVIDE 2" CLEAR BETWEEN UNDERSIDE OF VALVE AND SURFACE OF COMPACTED GRAVEL.

PROVIDE 3" MINIMUM AND 6" MAXIMUM BETWEEN UNDERSIDE OF VALVE BOX LID AND TOP OF FLOW CONTROLS FULLY EXTENDED.



TWO WIRE PATH WIRE ELECTRIC CONTROL VALVE

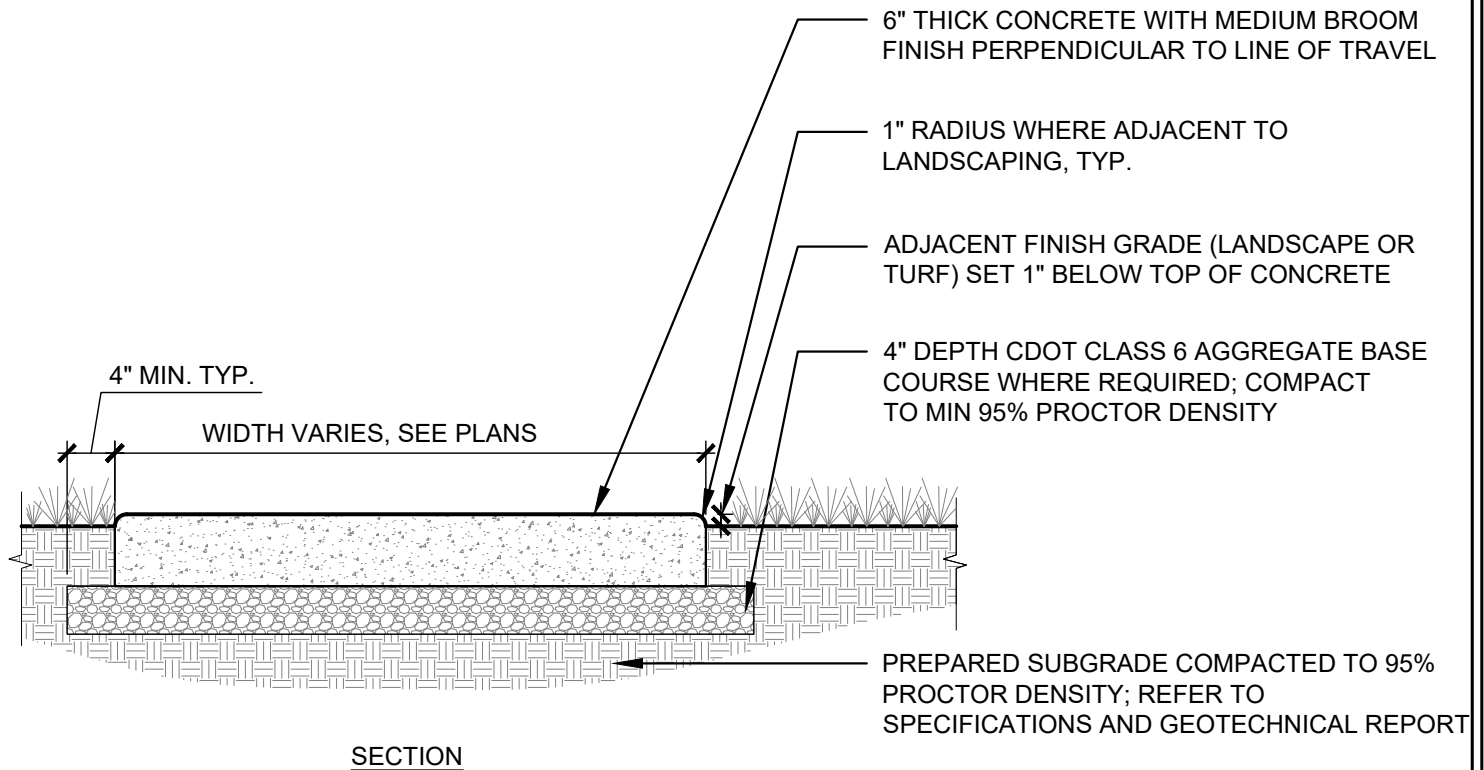
NO SCALE



PARKER
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Parks and Recreation

TOWN OF PARKER STANDARD DETAILS

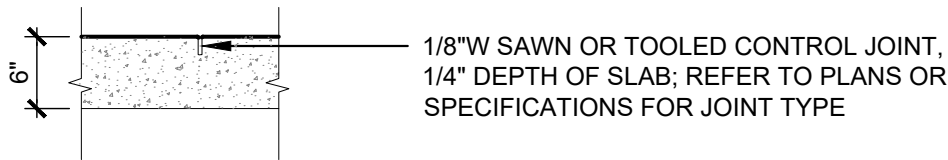


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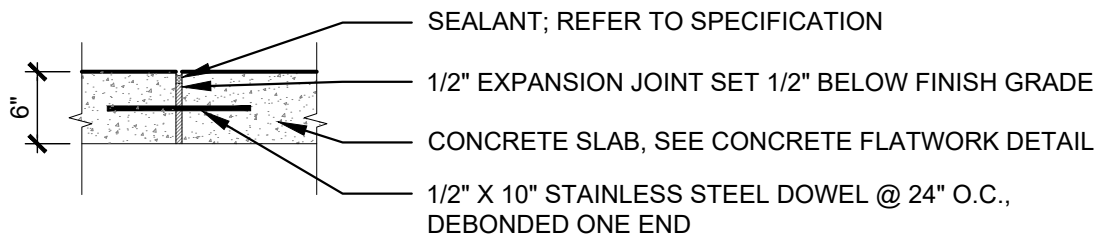
1. CONCRETE TO BE FIBER MESH REINFORCED, 4500 PSI 28-DAY COMPRESSIVE STRENGTH CONFORMING TO CDOT CLASS P PORTLAND CEMENT CONCRETE PAVEMENT.
2. PROVIDE EXPANSION JOINTS @ 60'-0" O.C. MAX., OR AS SHOWN ON DRAWINGS.
3. CONTROL JOINTS IN SIDEWALKS APPROXIMATELY WIDTH OF WALK OR 6'-0" MIN. O.C.- TYPICAL, UNLESS OTHERWISE NOTED.
4. PROVIDE NO SHINE TROWEL EDGES.
5. CROSS-SLOPE TO DRAIN AT 1.75% OR AS SHOWN ON PLANS.
6. REFER TO GEOTECH REPORT FOR ADDITIONAL RECOMMENDATIONS.



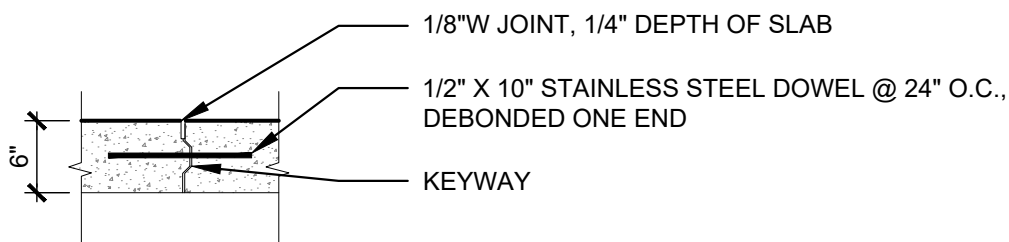
TOWN OF PARKER STANDARD DETAILS



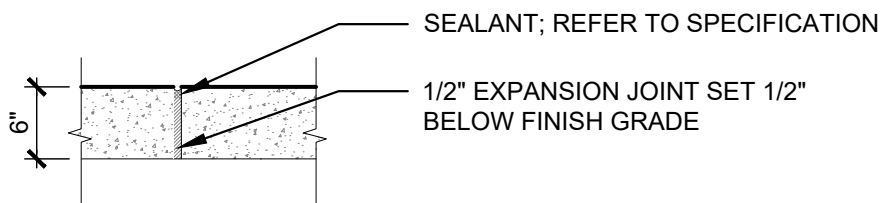
CONTROL JOINT



EXPANSION JOINT

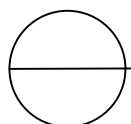


CONSTRUCTION JOINT



ISOLATION JOINT

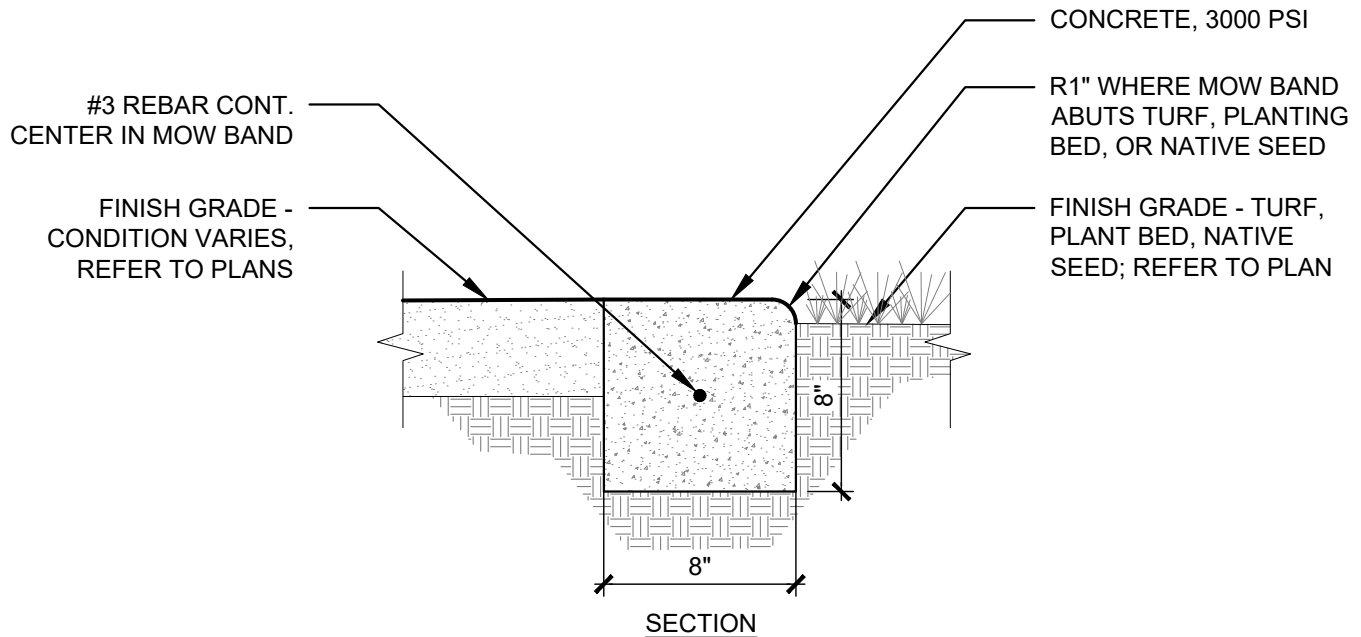
NOTE:
SAWN JOINTS ARE REQUIRED ON ALL TRAILS.



CONCRETE FLATWORK - JOINTS

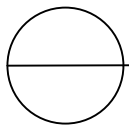
3/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



NOTES:

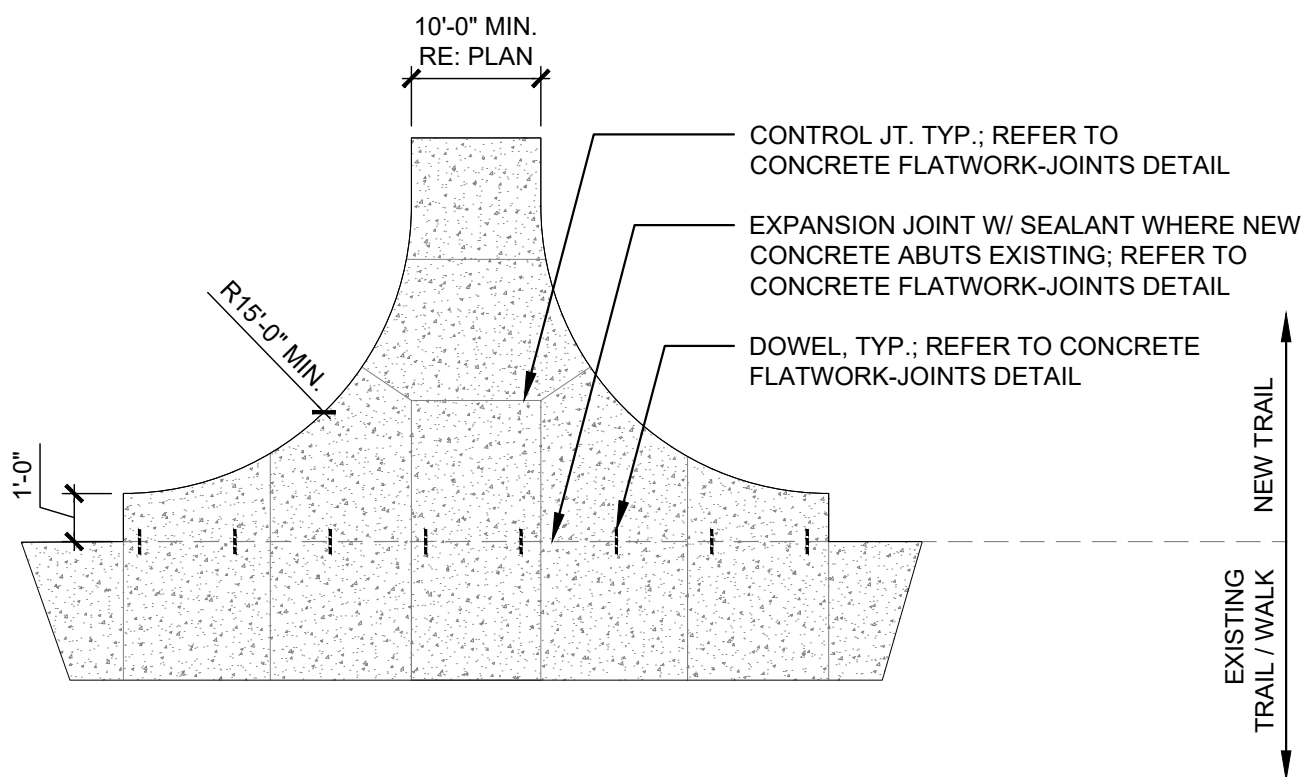
1. PROVIDE CONTROL JOINTS AT 10' O.C. MIN, TYPICAL
2. PROVIDE EXPANSION JOINT WHERE MOW BAND ABUTS FIXED STRUCTURE SUCH AS FACE OF BUILDING, WALLS, CURBS, UTILITY STRUCTURES, ETC.
3. TOP OF CONCRETE MOW BAND TO BE THE FOLLOWING DIMENSION ABOVE TOP OF ADJACENT MATERIAL:
 - 1.5" ABOVE NATIVE SEED OR PLANTING BED
 - FLUSH WITH ADJACENT PAVING



CONCRETE MOW BAND

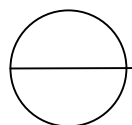
1 1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



NOTE:

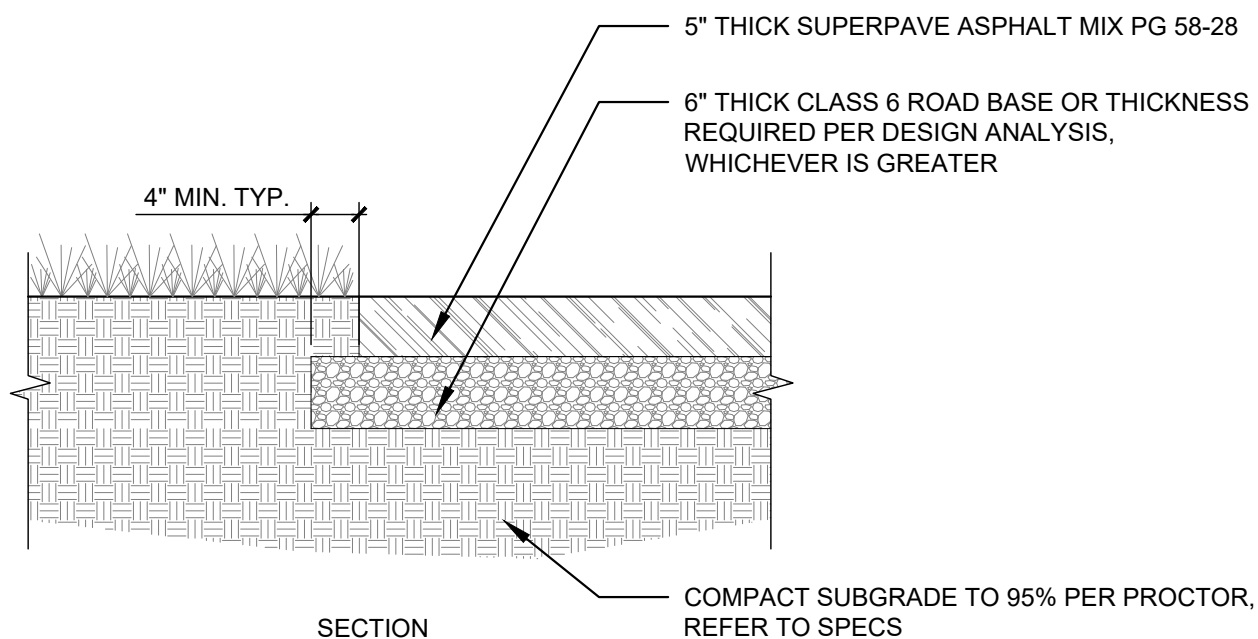
TRAIL INTERSECTIONS SHALL BE AS PERPENDICULAR AS POSSIBLE (NO LESS THAN 70 DEGREE).



CONCRETE TRAIL INTERSECTION

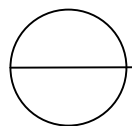
1/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



NOTES:

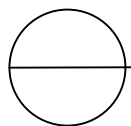
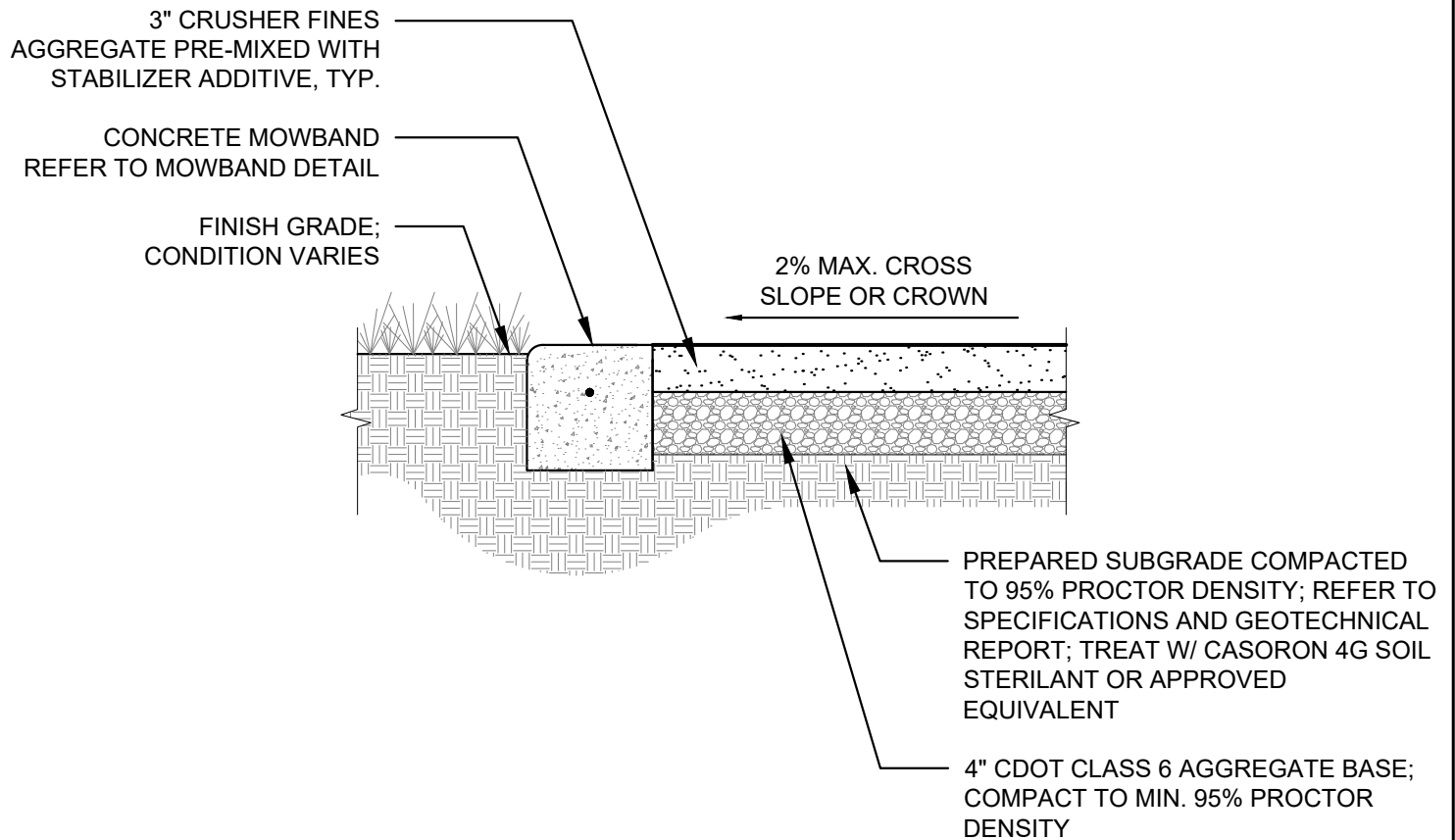
1. MATERIALS AND PROFILE TO CONFORM TO ROADWAY DESIGN AND CONSTRUCTION CRITERIA MANUAL SECTION 6.0.



ASPHALT - SINGLE LIFT

3/4" = 1'-0"

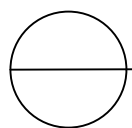
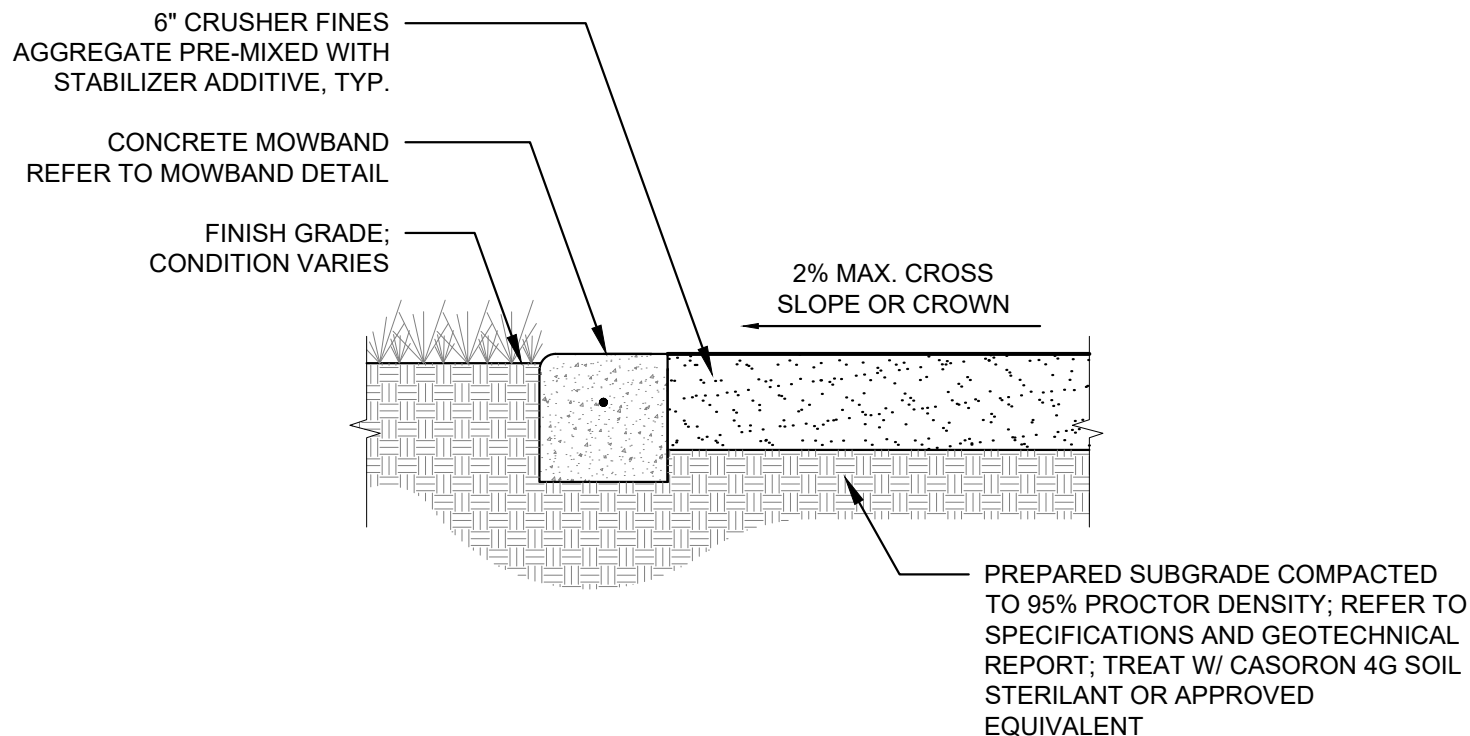
TOWN OF PARKER STANDARD DETAILS



CRUSHER FINES PAVING - ON AGGREGATE BASE

1" = 1'-0"

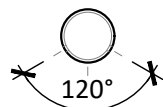
TOWN OF PARKER STANDARD DETAILS



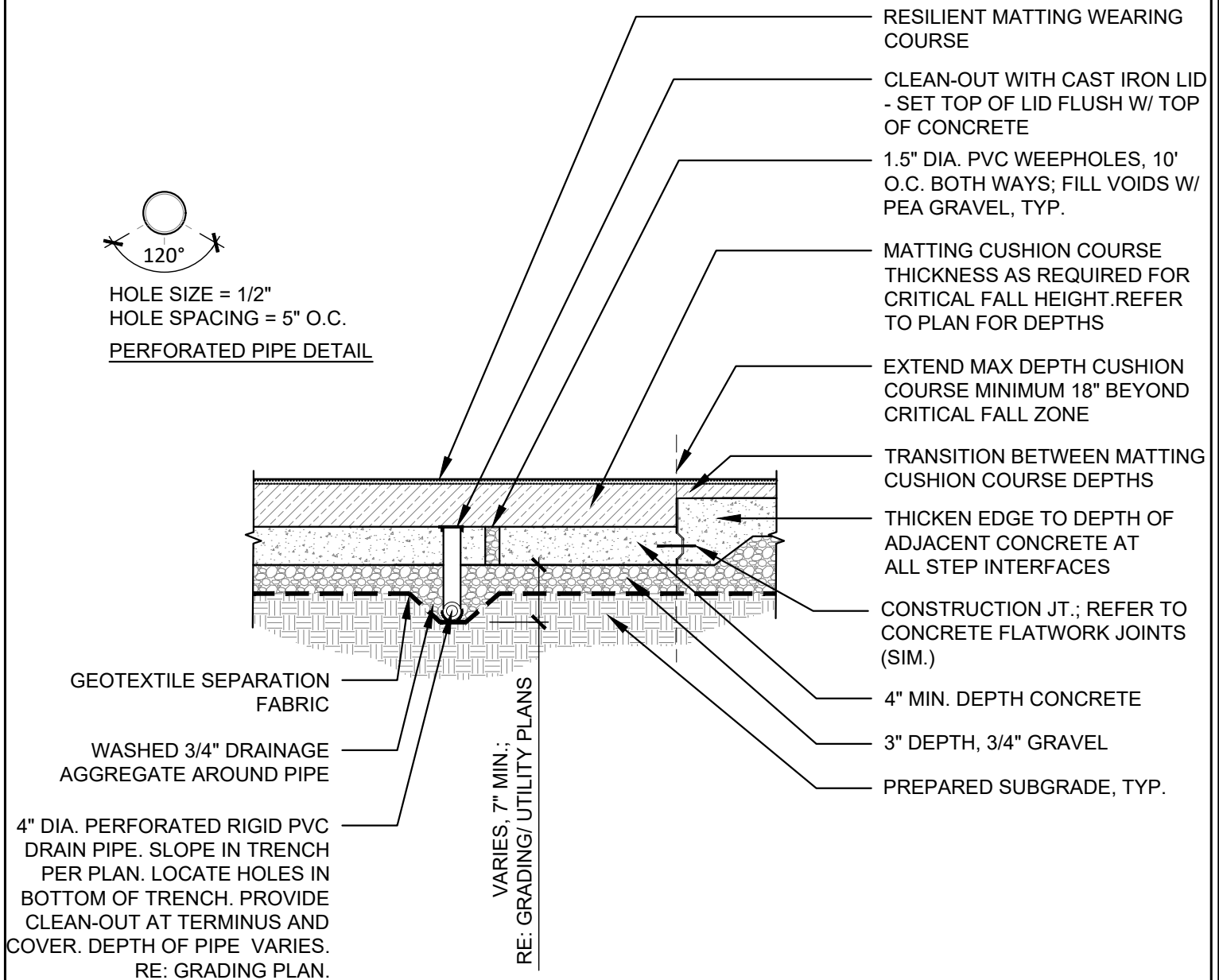
CRUSHER FINES PAVING - ON SUBGRADE

1" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

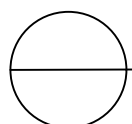


HOLE SIZE = 1/2"
HOLE SPACING = 5" O.C.
PERFORATED PIPE DETAIL



NOTES:

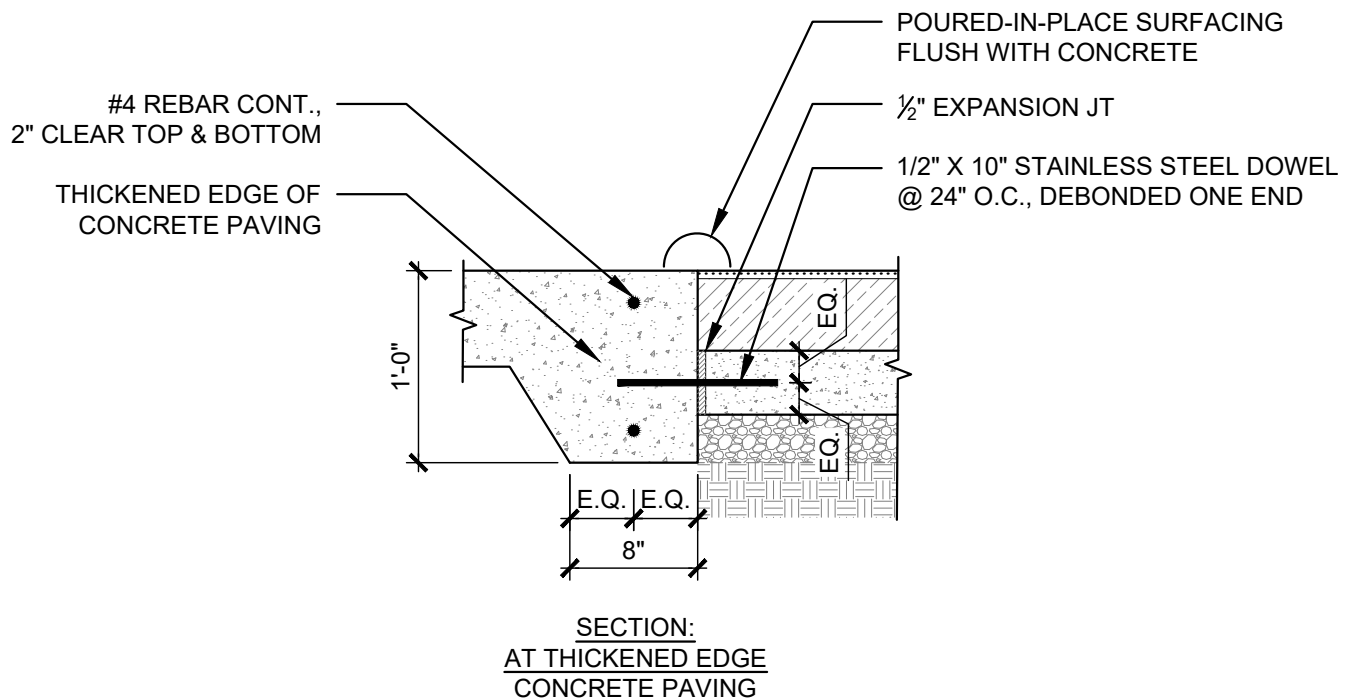
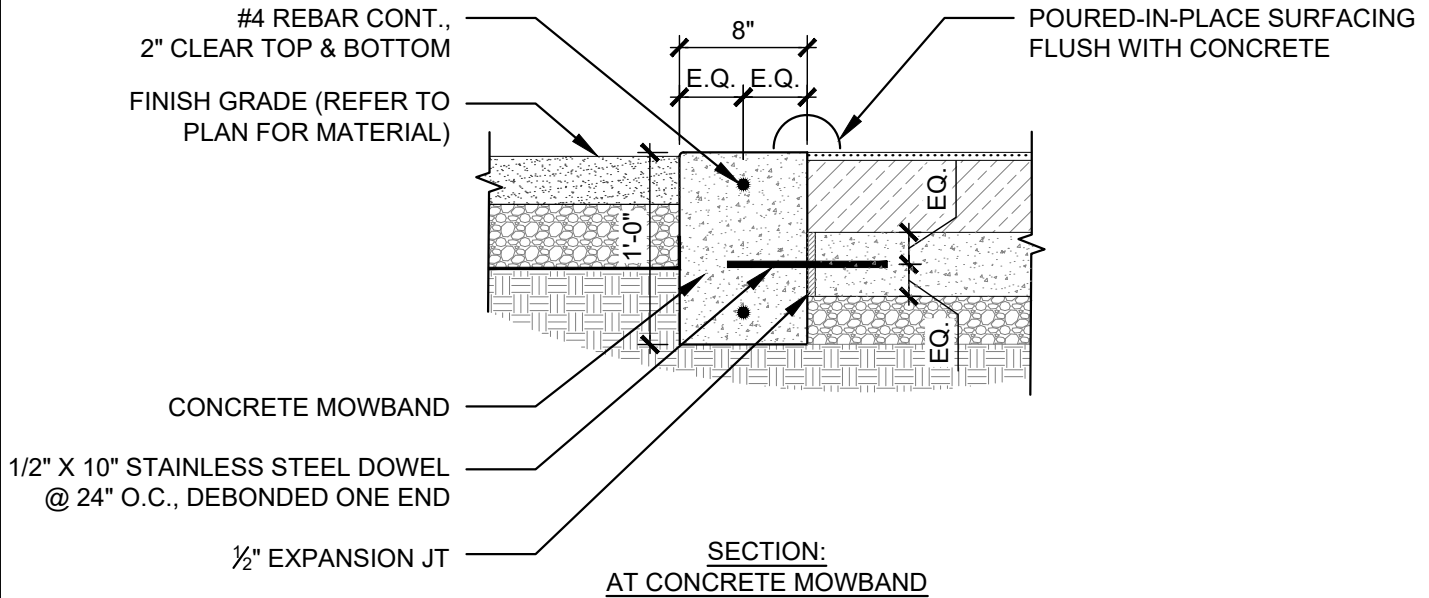
1. ALL PERFORATED PIPE AND FITTINGS SHALL BE SCHEDULE 40 AND SHALL MEET ASTM D2729 OR ASTM F758.
2. SLEEVE ALL PENETRATIONS AT WALLS AND UNDER WALKS, MOWBANDS, ETC.



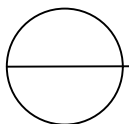
POURED-IN-PLACE PLAYGROUND SURFACING

3/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



POURED-IN-PLACE SAFETY SURFACING - EDGE RESTRAINT

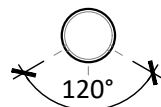
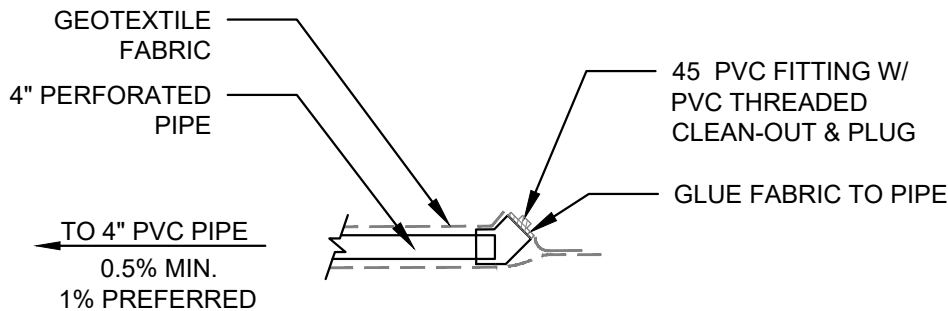


1" = 1'-0"

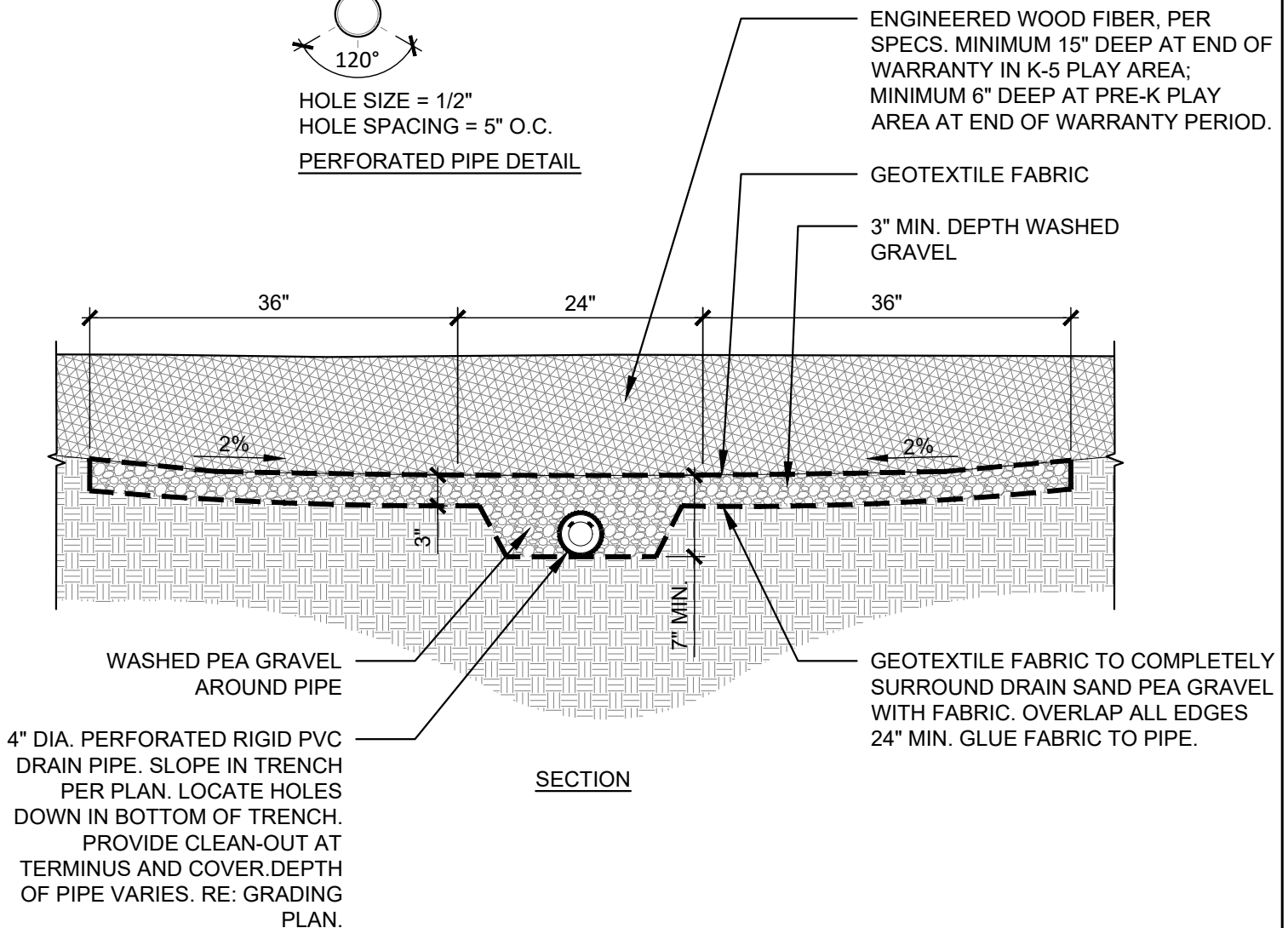
TOWN OF PARKER STANDARD DETAILS



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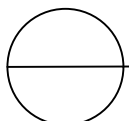


HOLE SIZE = 1/2"
HOLE SPACING = 5" O.C.
PERFORATED PIPE DETAIL



NOTES:

1. ALL PERFORATED PIPE AND FITTINGS SHALL BE SCHEDULE 40 AND SHALL MEET ASTM D2729 OR ASTM F758.
2. SLEEVE ALL PENETRATIONS AT WALLS AND UNDER WALKS, MOWBANDS, ETC.



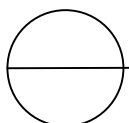
ENGINEERED WOOD FIBER (EWF) SURFACING

3/4" = 1'-0"

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- ## PLAY AREA EDGE AT ENGINEERED WOOD FIBER SURFACING



DATE: MAY 2023 | DETAIL PV-11

FINISH GRADE; RE: CONCRETE FLATWORK DETAIL
- PROVIDE THICKENED EDGE OF CONC. WHERE CONC. FLATWORK IS PROVIDED

1/2" RADIUS, TYP.

TURF ATTACHMENT PER MFR. INSTRUCTIONS

2" X 4" PRESSURE TREATED LUMBER
NAILER BOARD

STAINLESS STEEL CONCRETE ANCHOR, 18" O.C.
- EMBED MIN. DEPTH PER MFR. INSTRUCTIONS

SEE EDGE RESTRAINT ENLARGEMENT

TOP OF SYNTHETIC TURF, FINISHED GRADE, RE: PLANS

SHOCK ATTENUATION PAD, IF APPLICABLE

2" DEPTH LEVELING COURSE FOR SYNTHETIC TURF

6" DEPTH WASHED DRAINAGE AGGREGATE

KEEP LEVELING COURSE CLEAR 1'-6" BEYOND TRENCH; TYP.

SLOPE @ 0.5% MIN.

CL DRAINAGE TRENCH

VARIES SEE PLAN

1'-0"

6"

GEOTEXTILE FABRIC

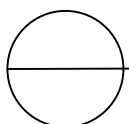
PERFORATED HDPE DRAIN PIPE SET IN $\frac{3}{4}$ " WASHED CRUSHED GRAVEL. PIPE SIZE VARIES, RE: PLANS.

VARIES +/- 6'-0"; RE: PLANS

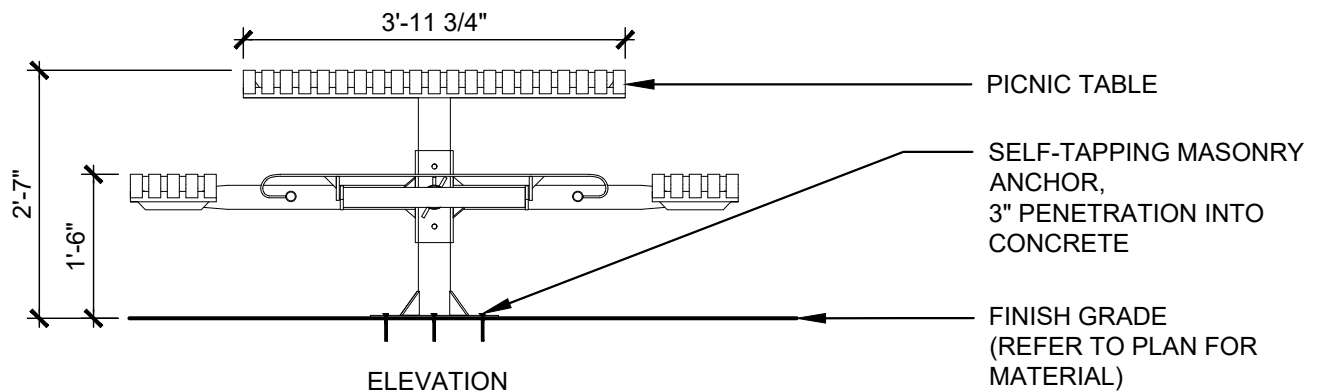
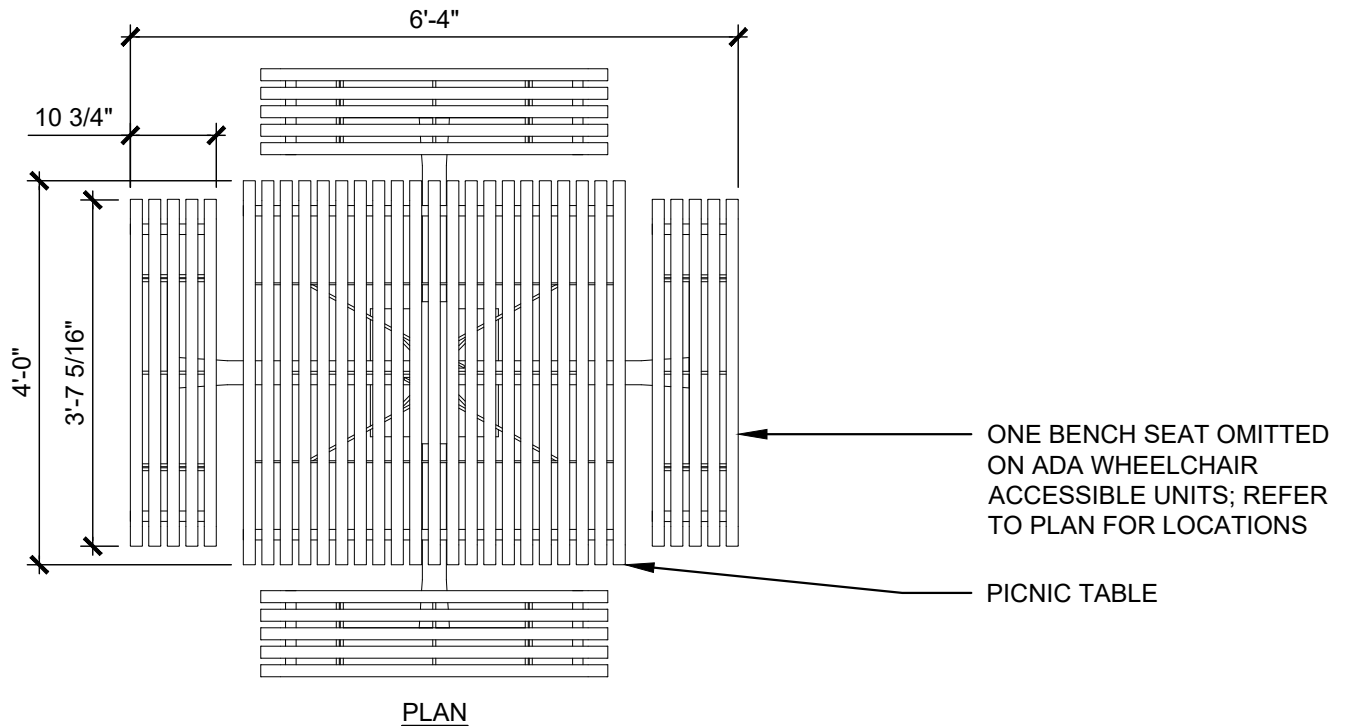
1'-0"

1'-0"

1. RE: GEOTECH REPORT FOR SUB-GRADE PREPARATION RECOMMENDATIONS

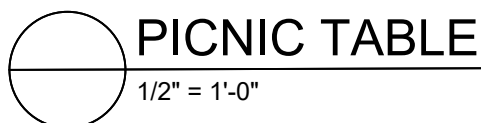

$$\frac{3}{4}'' = 1'-0''$$

TOWN OF PARKER STANDARD DETAILS



NOTES:

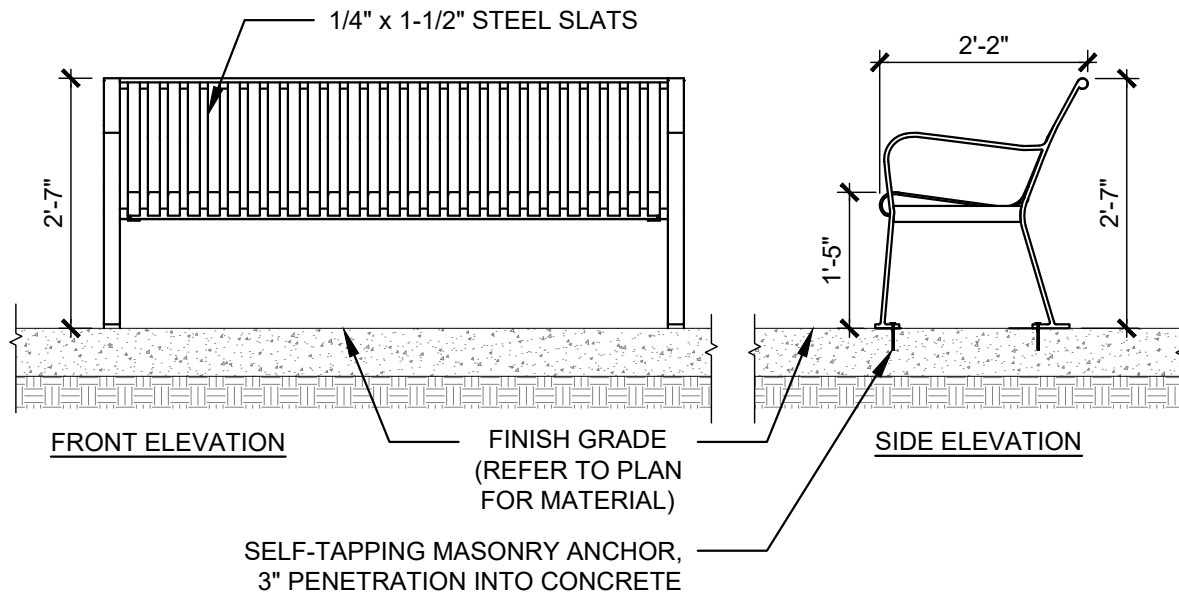
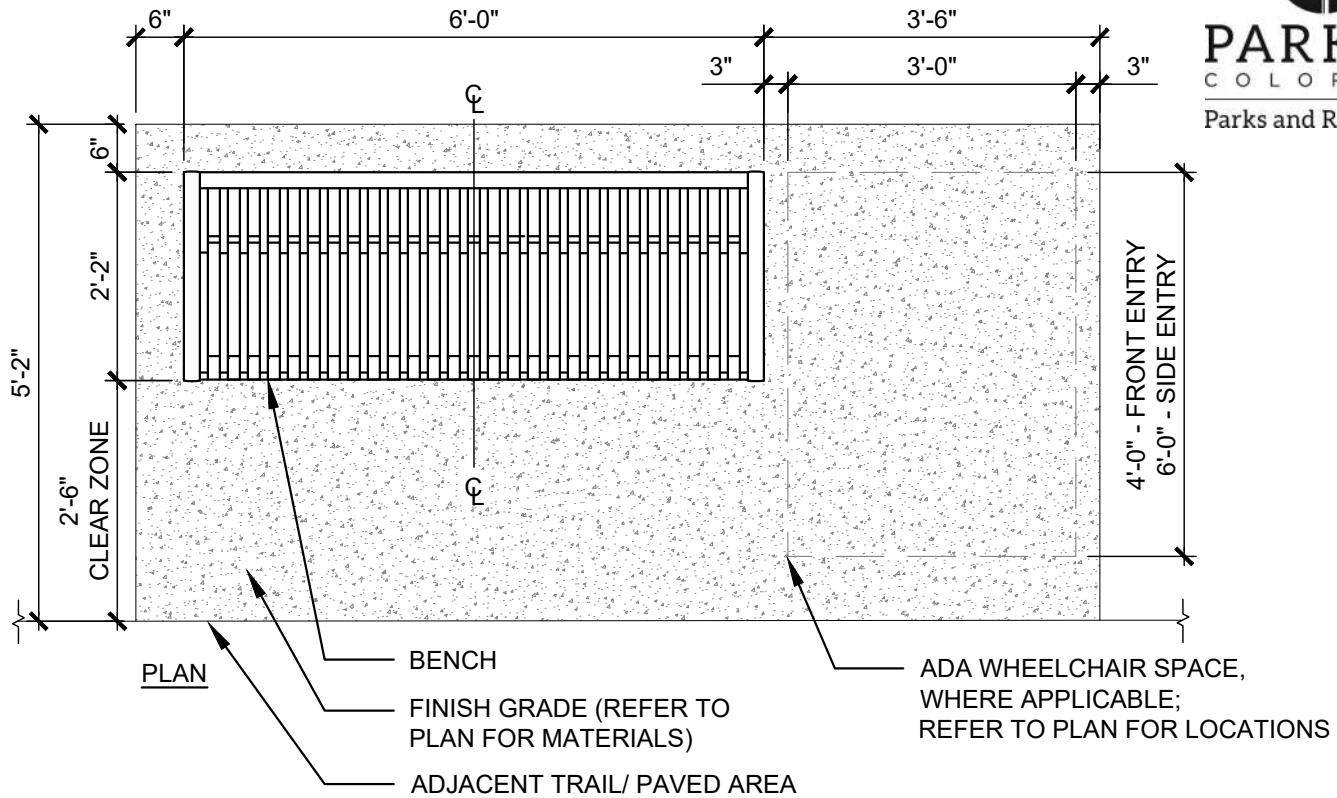
1. BASIS-OF-DESIGN PICNIC TABLE:
VICTOR STANLEY (MFR). MODEL CRPR-4 48" SQUARE TOP (4-SEAT) AND MODEL CRPR-3 48" SQUARE TOP (3-SEAT; ADA WHEELCHAIR ACCESSIBLE).
2. WHERE TABLE SITS ON UNIT PAVING OR CRUSHER FINES PAVING, MASONRY ANCHOR TO EXTEND THROUGH UNIT PAVING AND EMBED INTO C.I.P. CONCRETE SLAB OR FOOTING TO MIN. 3" DEPTH.



TOWN OF PARKER STANDARD DETAILS

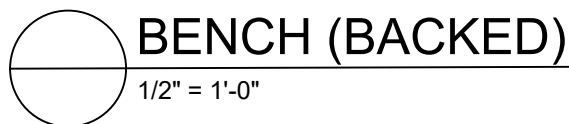


PARKER
COLORADO
Parks and Recreation



NOTES:

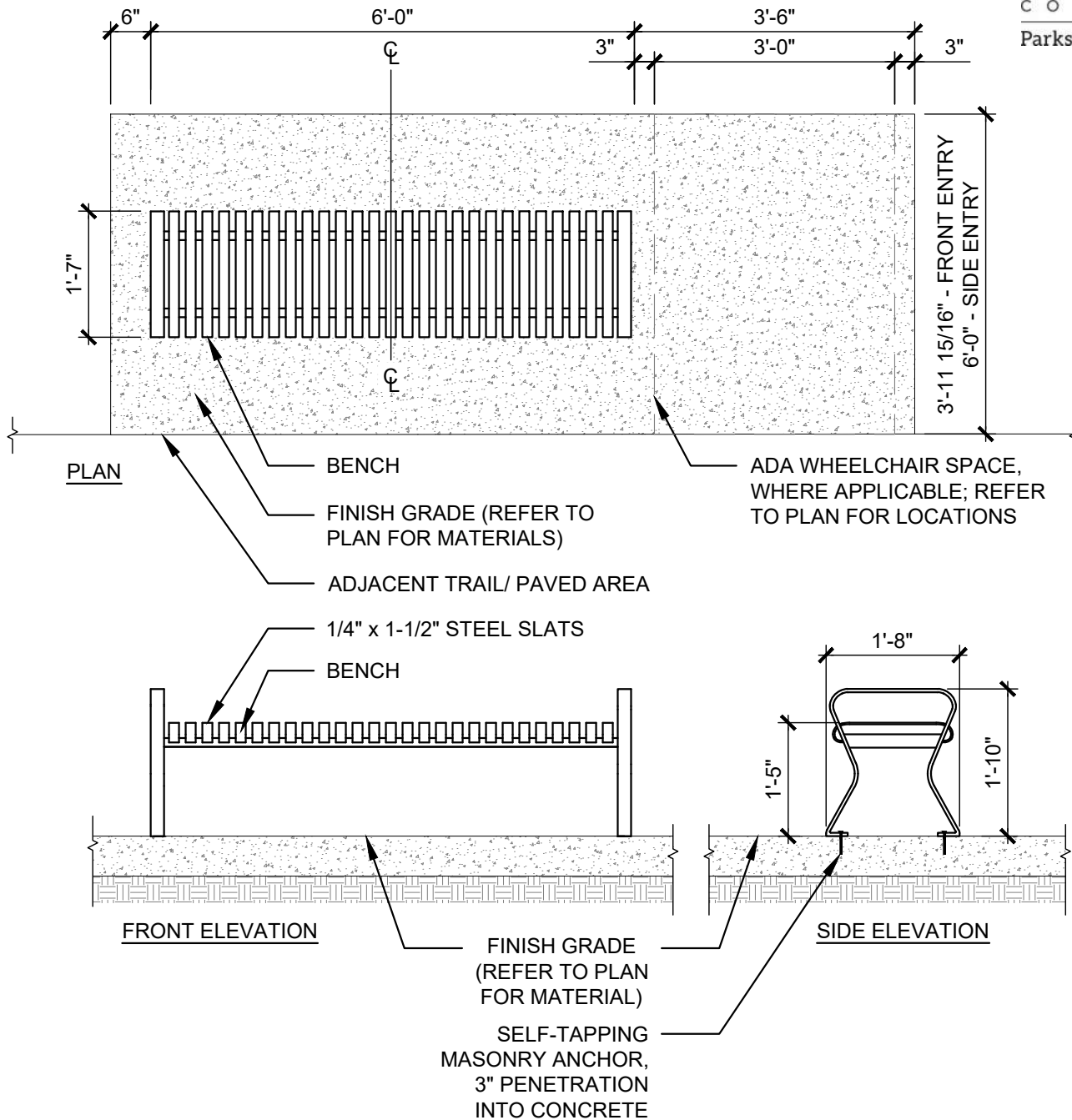
1. BASIS-OF-DESIGN BENCH: VICTOR STANLEY. RB-28 (BACKED), 6'-0"L x 2'-0"W x 1'-5"H BENCH, COLOR: STANDARD BLACK, SURFACE MOUNTED; MASONRY ANCHOR SIZE AS RECOMMENDED BY MFR.
2. WHERE BENCH SITS ON UNIT PAVING OR CRUSHER FINES PAVING, MASONRY ANCHOR TO EXTEND THROUGH UNIT PAVING AND EMBED INTO C.I.P. CONCRETE SLAB OR FOOTING TO MIN. 3" DEPTH.
3. PAD THICKNESS 4" PER PLANS AND FLATWORK DETAILS.



TOWN OF PARKER STANDARD DETAILS

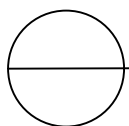


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NOTES:

1. BASIS-OF-DESIGN BENCH: VICTOR STANLEY. RB-12 (BACKLESS), 6'-0"L x 1'-8"W x 1'-5"H BENCH. COLOR: STANDARD BLACK. SURFACE MOUNTED; MASONRY ANCHOR SIZE AS RECOMMENDED BY MFR.
2. WHERE BENCH SITS ON UNIT PAVING OR CRUSHER FINES PAVING, MASONRY ANCHOR TO EXTEND THROUGH UNIT PAVING AND EMBED INTO C.I.P. CONCRETE SLAB OR FOOTING TO MIN. 3" DEPTH.
3. PAD THICKNESS 4" PER PLANS AND FLATWORK DETAILS.



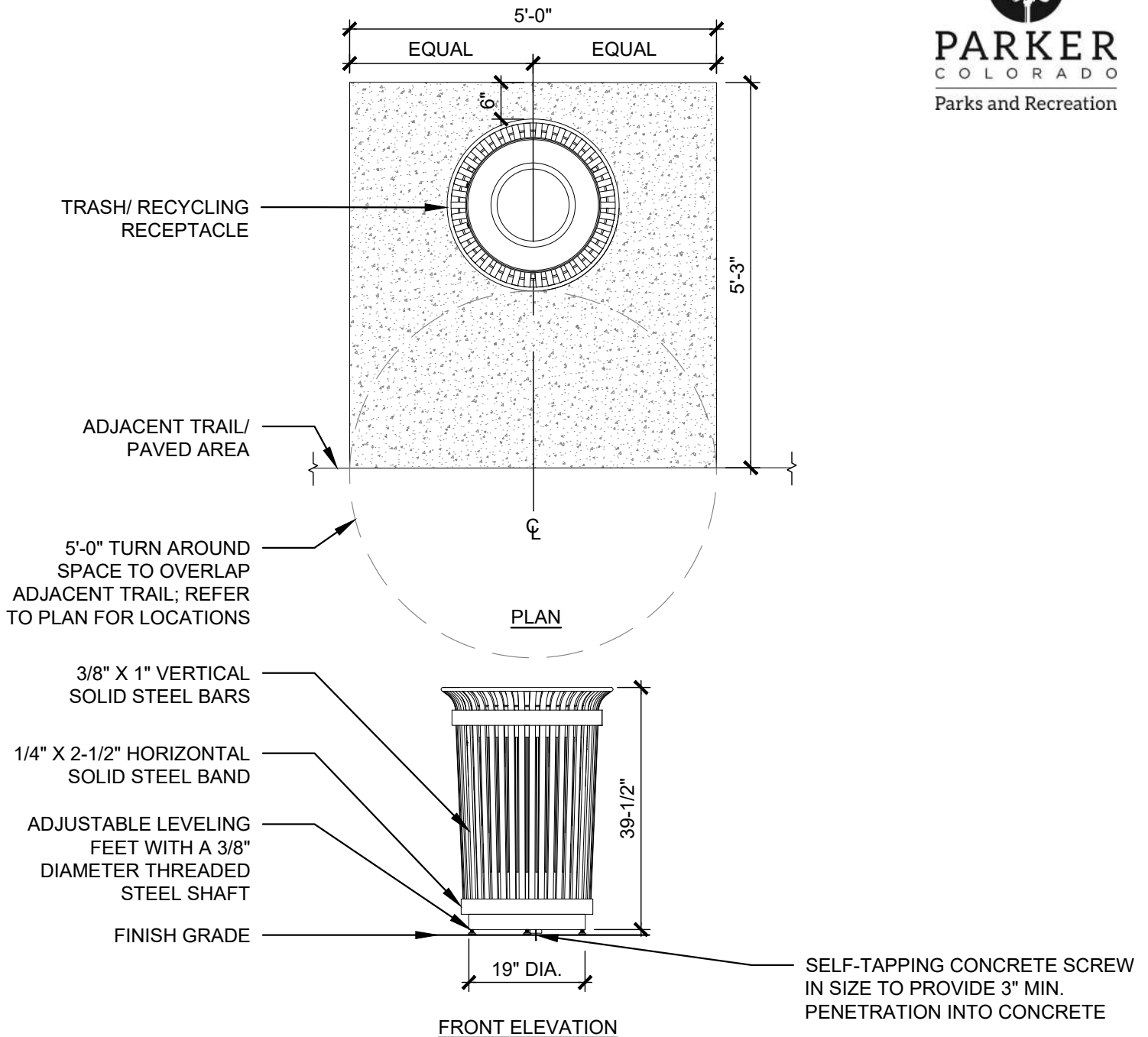
BENCH (BACKLESS)

1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

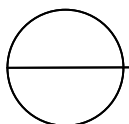


PARKER
COLORADO
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NOTES:

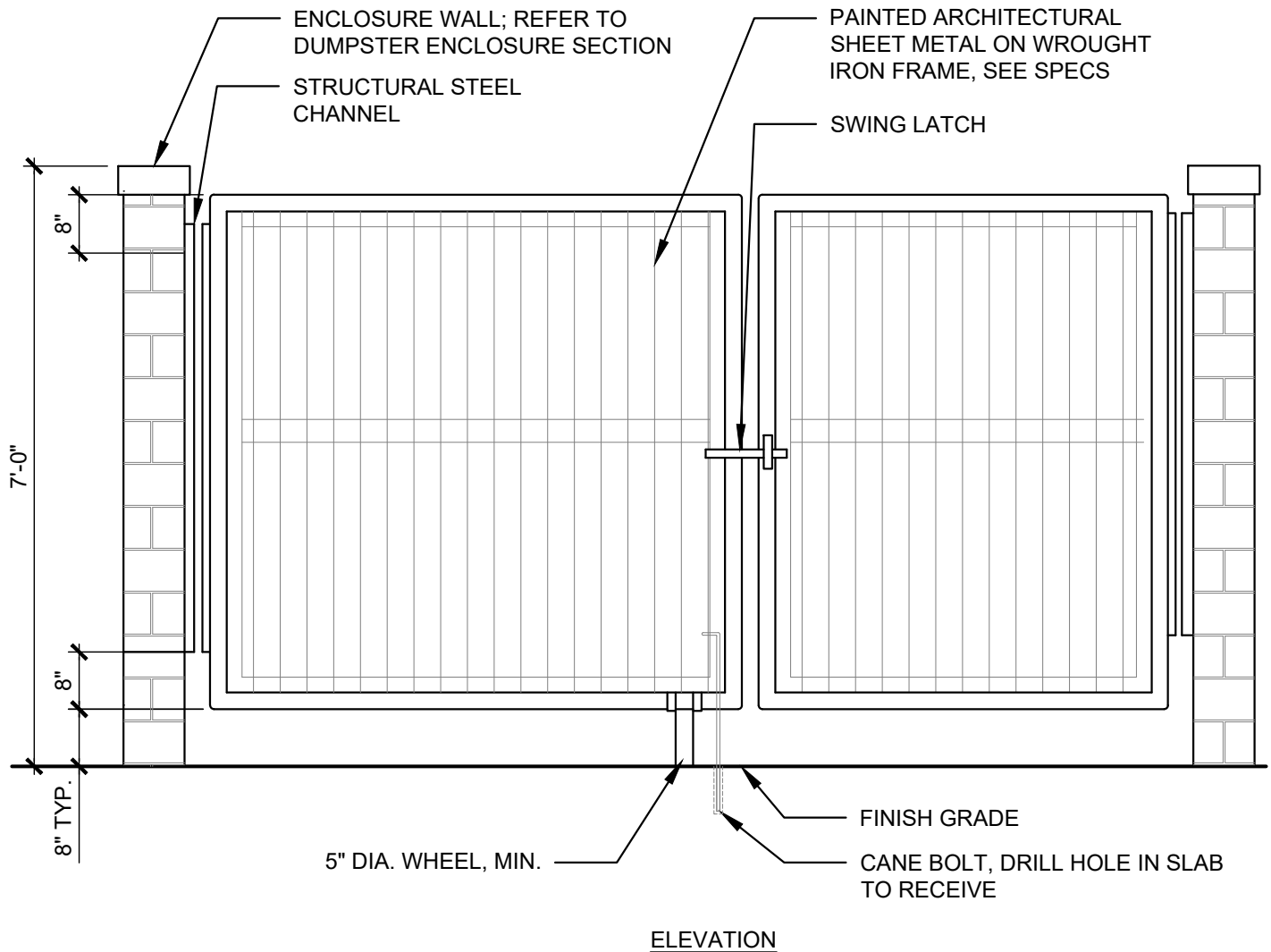
1. BASIS-OF-DESIGN: VICTOR STANLEY (MFR.) MODEL RB-45, 45 GAL., STANDARD TAPERED FORMED LID, COLOR: STANDARD BLACK; SURFACE MOUNT; PROVIDE W/ LINER.
2. WHERE RECEPTACLE SITS ON UNIT PAVING OR CRUSHER FINES PAVING, SELF-TAPPING CONCRETE SCREWS TO EXTEND THROUGH UNIT PAVING AND EMBED INTO C.I.P. CONCRETE SLAB OR FOOTING TO MIN. 3" DEPTH.
3. ADA COMPLIANT WHEELCHAIR ACCESS SHALL BE PROVIDED AS INDICATED ON THE PLANS. DETAIL PROVIDED FOR GENERAL INTENT AND CONFIGURATIONS MAY VARY BASED ON SITE CONDITIONS AND RELATIONSHIPS OF ADJACENT PAVING AND SITE PROGRAM.
4. RECYCLING RECEPTACLE TO HAVE A FLAT TOP "RECYCLING" LID.
5. PAD THICKNESS 4" PER PLANS AND FLATWORK DETAIL.



TRASH/ RECYCLING RECEPTACLE

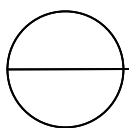
1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



NOTES:

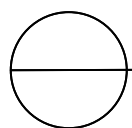
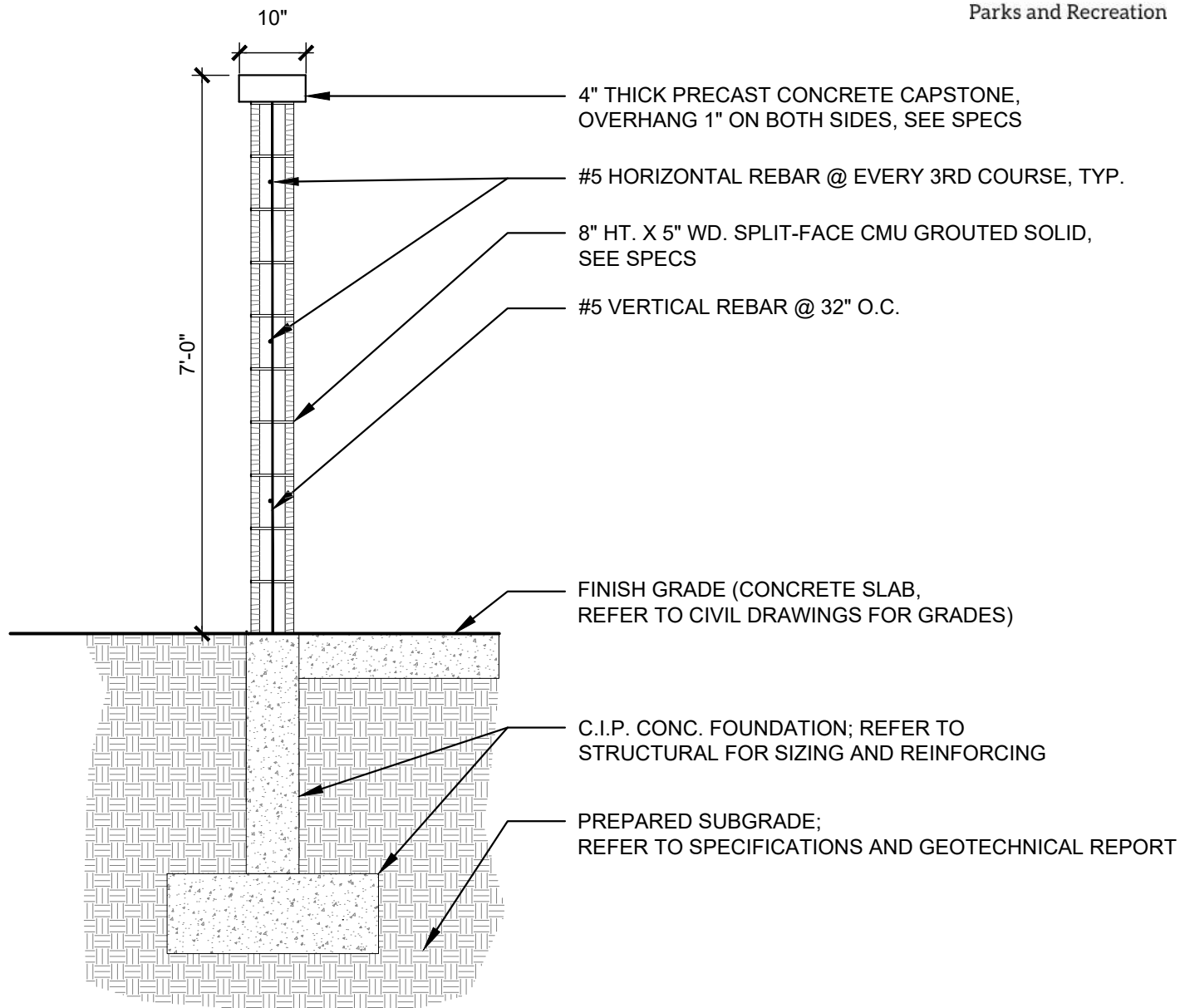
1. PROVIDE ARCHITECT MATERIAL SAMPLES FOR SHEET METAL AND WROUGHT IRON PRIOR TO INSTALLATION.
2. FINAL DESIGN TO BE COMPLIANT WITH LOCAL JURISDICTION'S DESIGN CODE



DUMPSTER ENCLOSURE - ELEVATION

1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



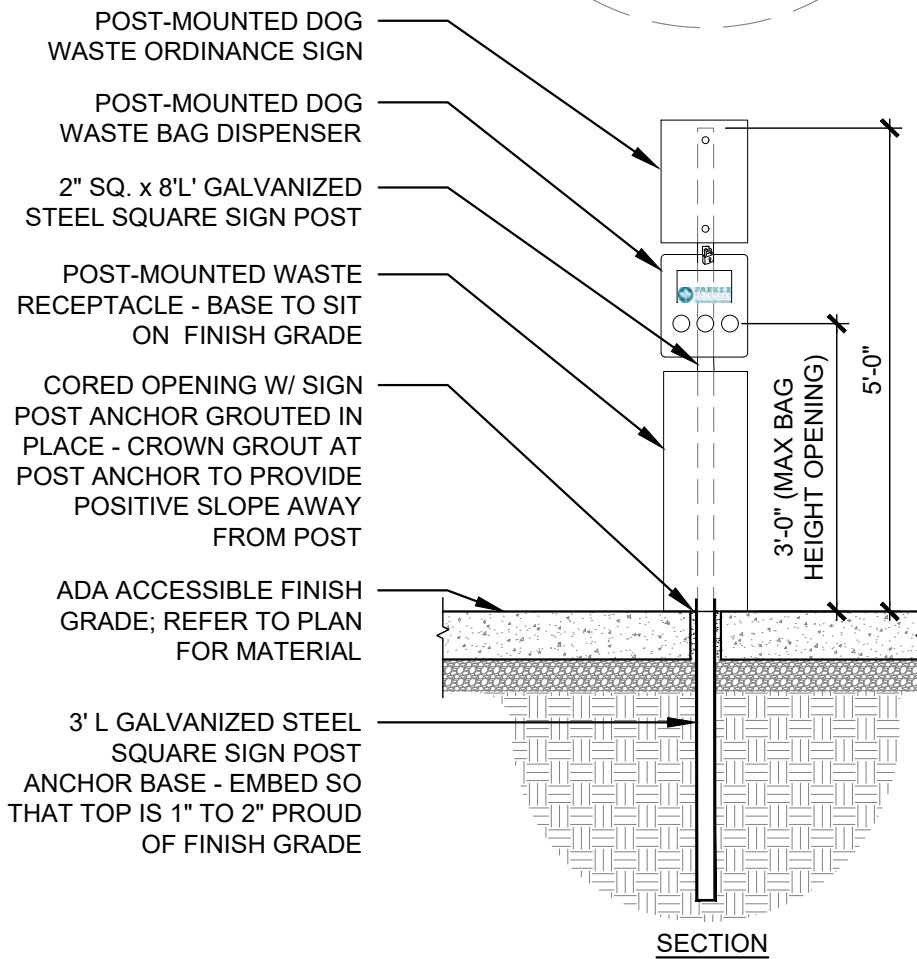
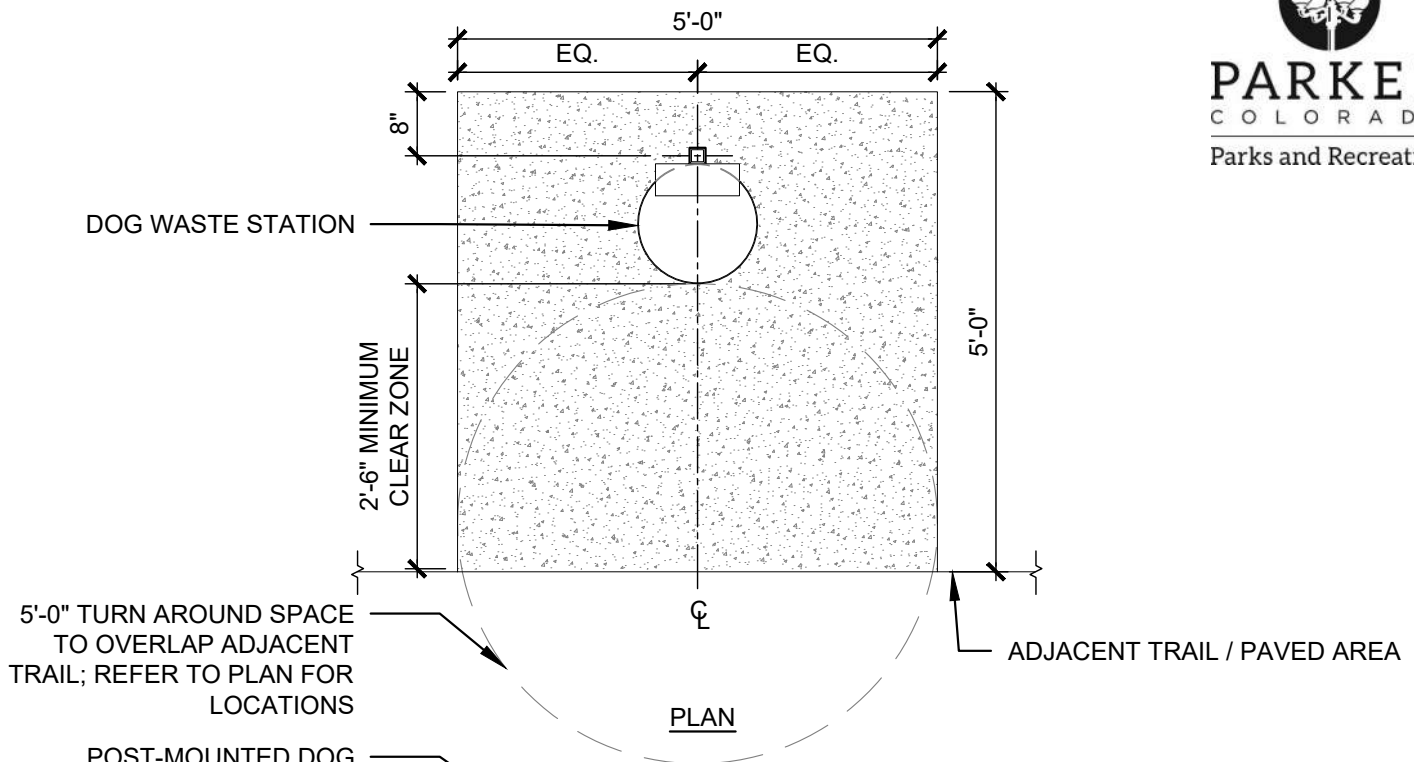
DUMPSTER ENCLOSURE - SECTION

1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

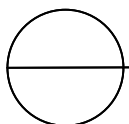


PARKER
COLORADO
Parks and Recreation



NOTES:

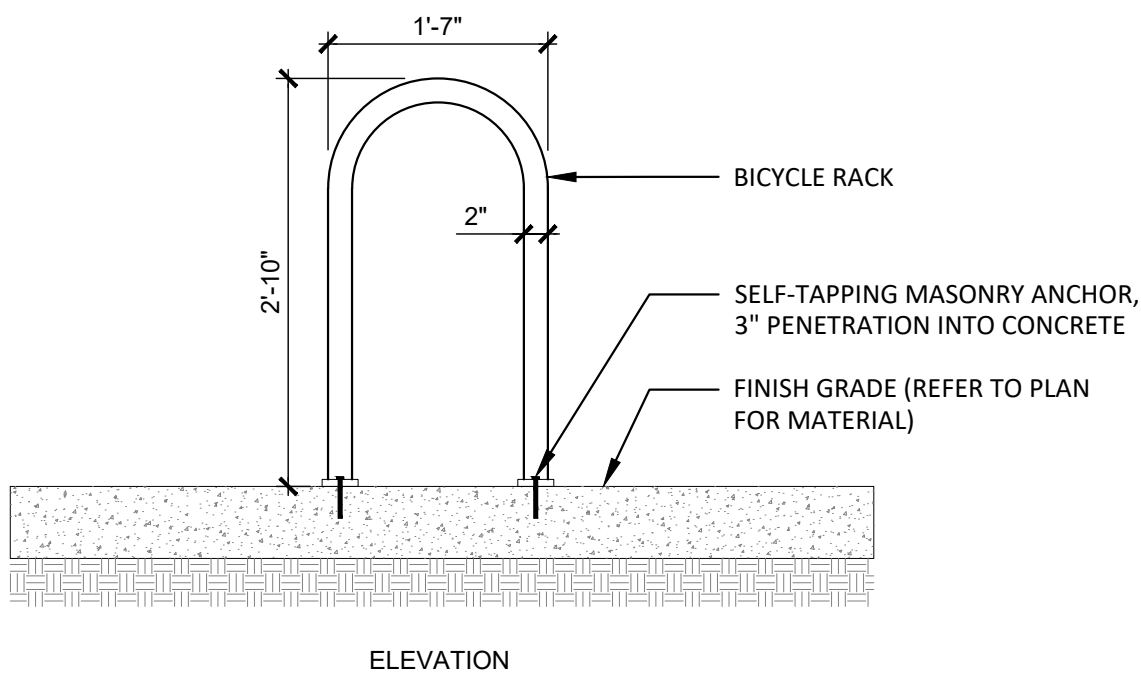
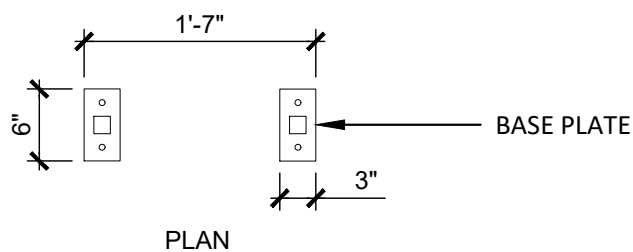
1. BASIS-OF-DESIGN:
PET WASTE RECEPTACLE:
PET WASTE ELIMINATOR (MFR)
MODEL #SKU:E44, 22 GALLON
STEEL TRASH RECEPTACLE,
COLOR: HUNTER GREEN;
2. DOG WASTE BAG DISPENSER
TO INCLUDE MASTER LOCK 0536
AND TOWN OF PARKER STICKER.
3. ADA COMPLIANT WHEELCHAIR
ACCESS SHALL BE PROVIDED AS
INDICATED ON THE PLANS.
DETAIL PROVIDED FOR GENERAL
INTENT AND CONFIGURATIONS
MAY VARY BASED ON SITE
CONDITIONS AND
RELATIONSHIPS OF ADJACENT
PAVING AND SITE PROGRAM.
4. PAD THICKNESS 4" PER PLANS
AND FLATWORK DETAIL.



DOG WASTE STATION

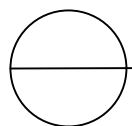
1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



NOTES:

1. BASIS-OF-DESIGN: BIKE RACK (MADRAX U-200), SURFACE MOUNTED, COLOR: BLACK
2. FINAL LOCATION TO BE VERIFIED IN FIELD WITH OWNER AND DESIGN TEAM COORDINATE WITH OWNER ON EXACT LOCATION.
3. WHERE BICYCLE RACK SITS ON UNIT PAVING, MASONRY ANCHOR TO EXTEND THROUGH UNIT PAVING AND EMBED INTO C.I.P. CONCRETE FOOTING TO MIN. 3" DEPTH.



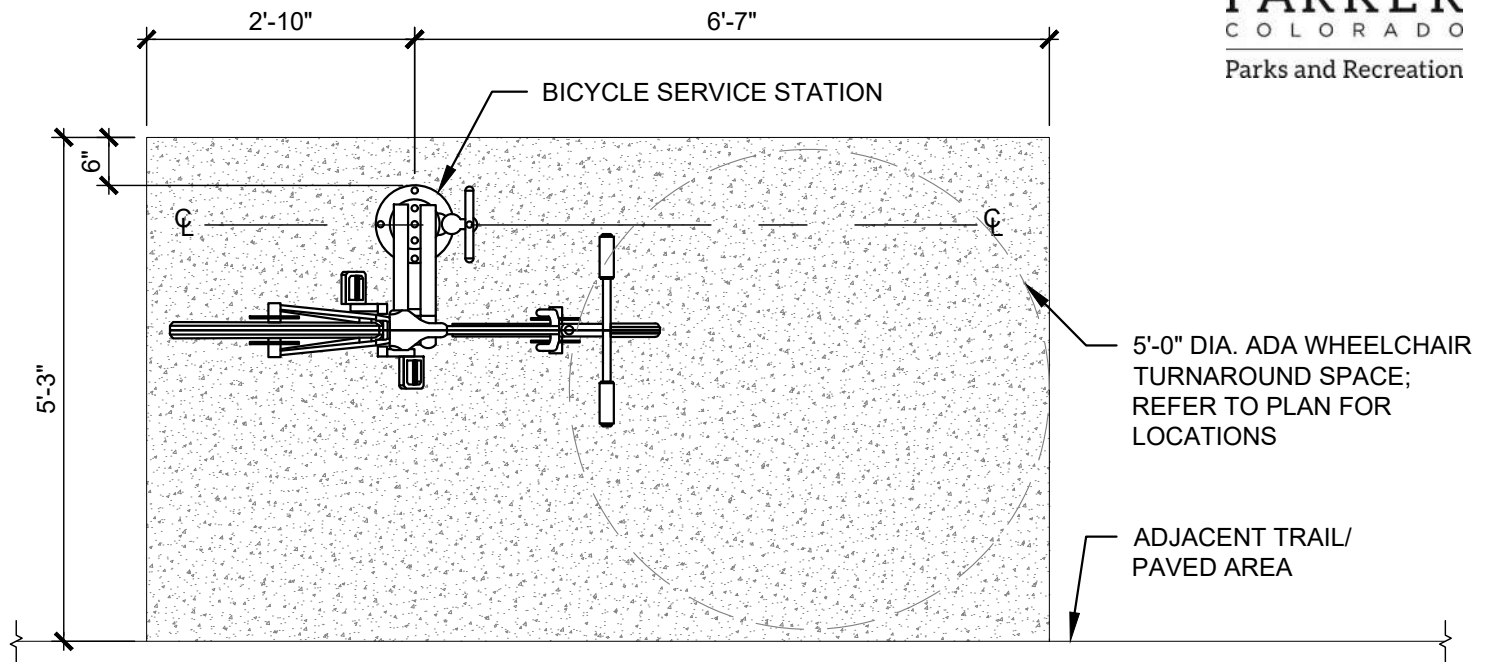
BICYCLE RACK

3/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



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PLAN

NOTES:

1. BASIS-OF-DESIGN:

FIXIT-H: SURFACE MOUNT, POWDER COATED, GREEN RAL 6016,
COLOR: GREEN STYLE: FT
CONFIGURATION: EPX

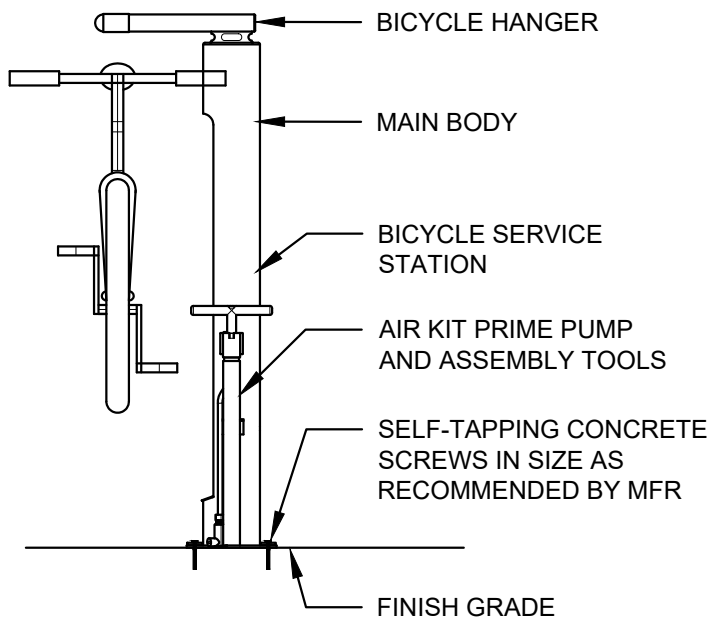
AIR KIT PRIME: FIXIT MOUNT, REV. B, POWDER COATED, GREEN RAL 6016
SIZE: FX REV B COLOR: GREEN
CONFIGURATION: EPX

ASSEMBLY TOOLS: TAMPER-RESISTANT TOOLS FOR INSTALLATION
AIR KIT PRIME FX, A SIZE: AK PR FX A.

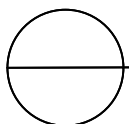
2. WHERE BICYCLE REPAIR STATION SITS ON UNIT PAVING, SELF-TAPPING CONCRETE SCREWS TO EXTEND THROUGH UNIT PAVING AND EMBED INTO C.I.P. CONCRETE FOOTING TO MIN. 3" DEPTH.

3. ADA COMPLIANT WHEELCHAIR ACCESS SHALL BE PROVIDED AS INDICATED ON THE PLANS. DETAIL PROVIDED FOR GENERAL INTENT AND CONFIGURATIONS MAY VARY BASED ON SITE CONDITIONS AND RELATIONSHIPS OF ADJACENT PAVING AND SITE PROGRAM.

4. PAD THICKNESS 4" PER PLANS AND FLATWORK DETAIL.



FRONT ELEVATION



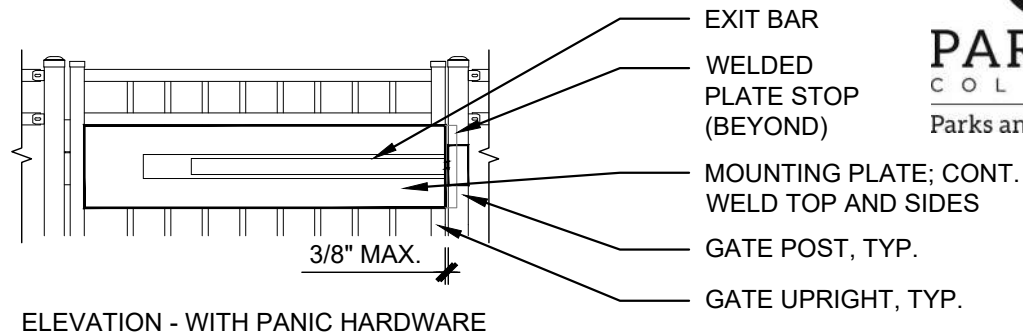
BICYCLE SERVICE STATION

1/2" = 1'-0"

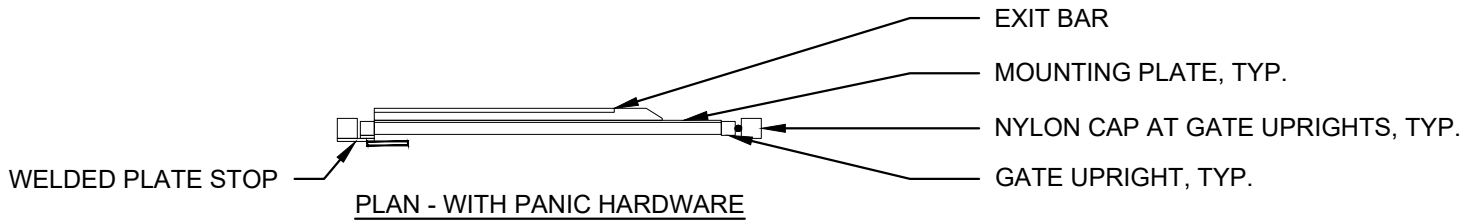
TOWN OF PARKER STANDARD DETAILS



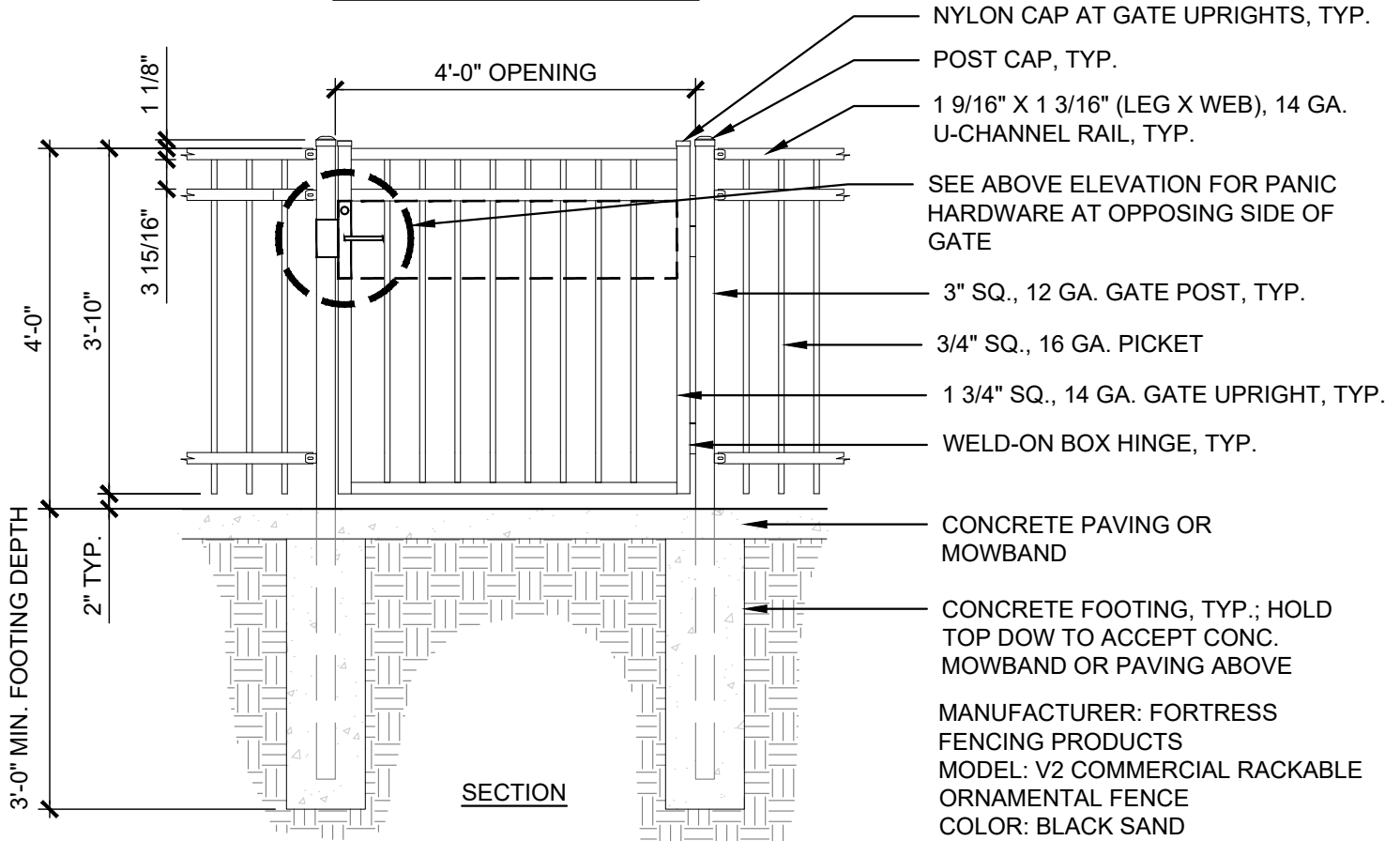
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ELEVATION - WITH PANIC HARDWARE



PLAN - WITH PANIC HARDWARE

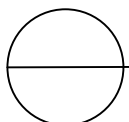


SECTION

MANUFACTURER: FORTRESS
FENCING PRODUCTS
MODEL: V2 COMMERCIAL RACKABLE
ORNAMENTAL FENCE
COLOR: BLACK SAND

NOTES:

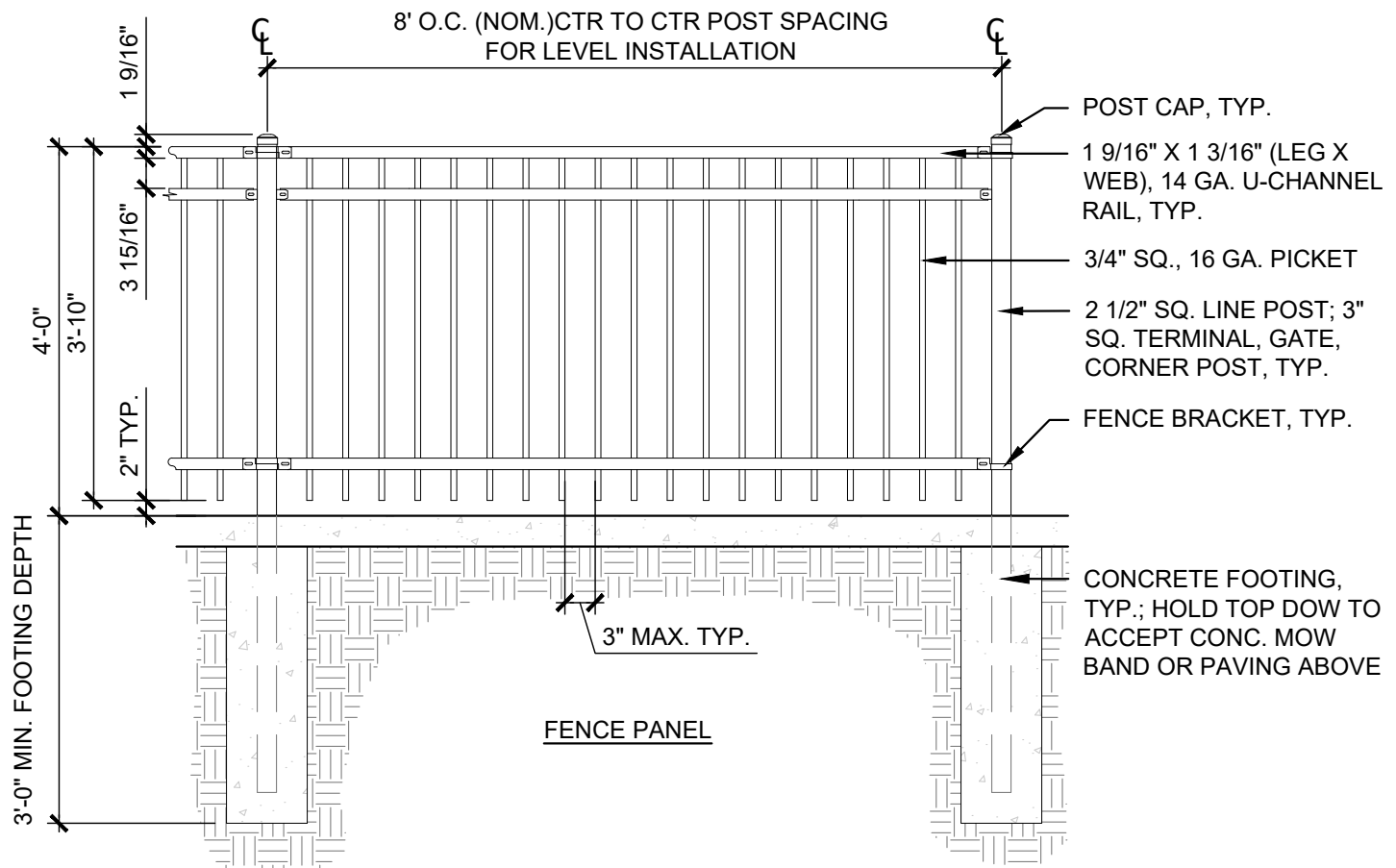
1. REFER TO MANUFACTURER'S SPECIFICATIONS FOR FENCE AND GATE INSTALLATION. ALL DIMENSIONS SHOWN ARE NOMINAL.
2. VERIFY HINGE AND LATCH CLEARANCES W/ MFR.
3. FENCE ASSEMBLY IS DELEGATED-DESIGN AND ALL POST AND COMPONENT SIZING SHALL BE VERIFIED WITH MFR. BASED ON STRUCTURAL PERFORMANCE AND LOADING CRITERIA OF LOCAL JURISDICTION. REFER TO SPECIFICATIONS.



4' WIDE SINGLE DECORATIVE GATE, PEDESTRIAN

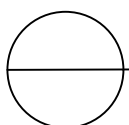
1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



NOTES:

1. BASIS OF DESIGN: FORTRESS FENCING PRODUCTS; MODEL: V2 COMMERCIAL RACKABLE ORNAMENTAL FENCE; COLOR: BLACK SAND
2. REFER TO MANUFACTURER'S SPECIFICATIONS FOR FENCE AND GATE INSTALLATION.
3. POST SIZING INDICATED FOR 4'-0" MAX. HEIGHT FENCE. INCREASES IN FENCE HEIGHT AND UNIQUE CONDITIONS MAY REQUIRE INCREASE IN POST SIZE AND GAUGE PER MFR'S PRE-ENGINEERED SYSTEM. FENCE ASSEMBLY IS DELEGATED-DESIGN AND ALL POST AND COMPONENT SIZING SHALL BE VERIFIED WITH MFR. BASED ON STRUCTURAL PERFORMANCE AND LOADING CRITERIA OF LOCAL JURISDICTION. REFER TO SPECIFICATIONS.



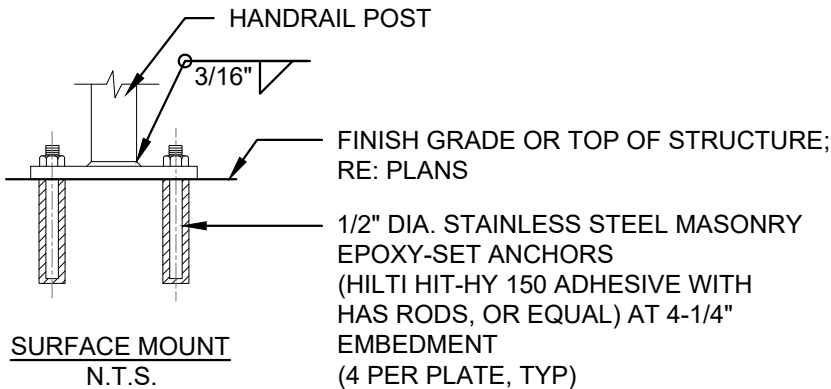
DECORATIVE FENCING

1/2" = 1'-0"

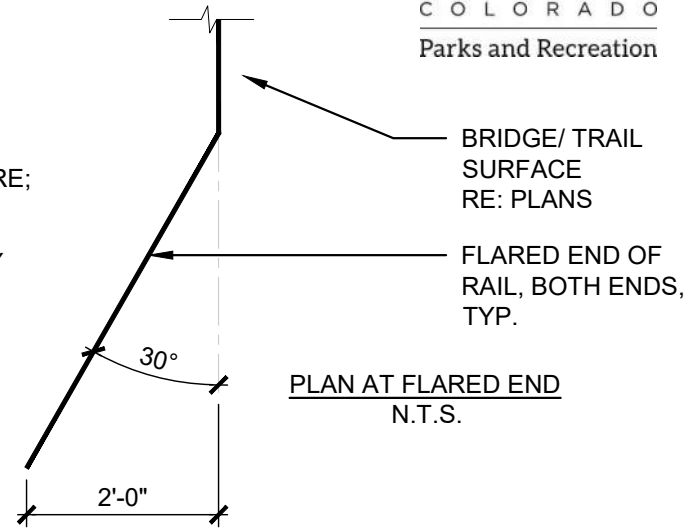
TOWN OF PARKER STANDARD DETAILS



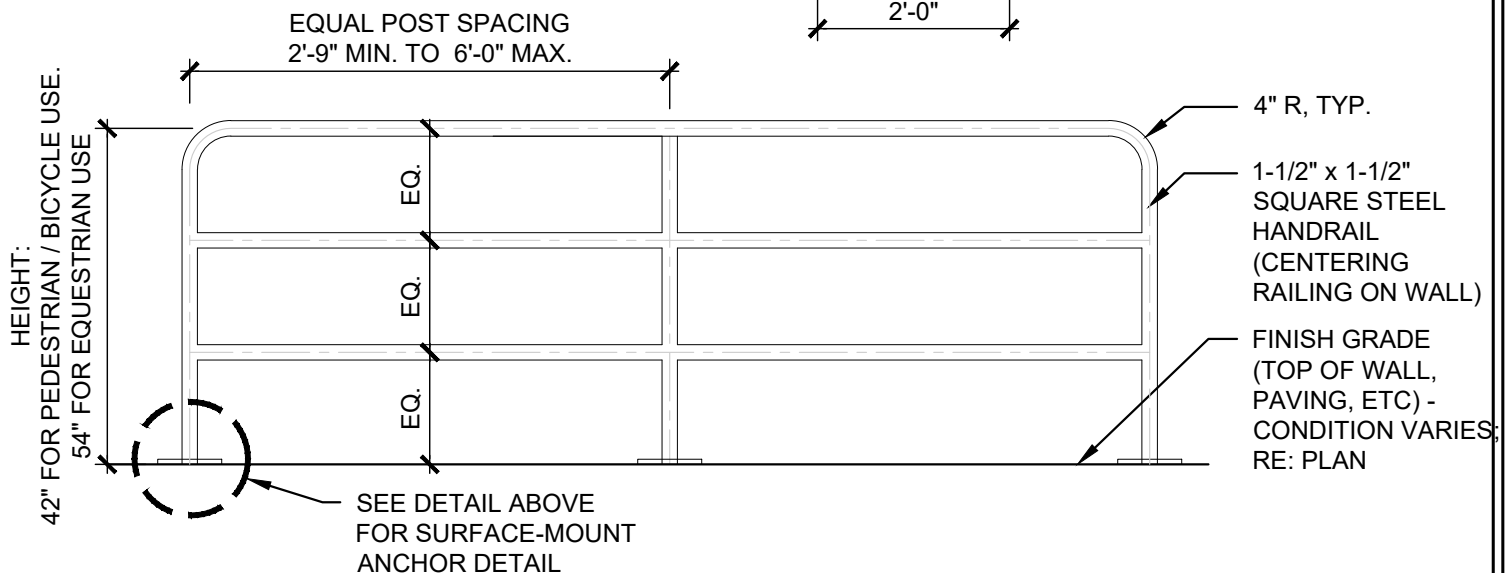
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SURFACE MOUNT
N.T.S.



PLAN AT FLARED END
N.T.S.



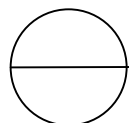
ELEVATION

NOTES:

1. RAIL ASSEMBLY IS DELEGATED DESIGN AND SHALL MEET STRUCTURAL PERFORMANCE CRITERIA AS SPECIFIED AND IN ACCORDANCE WITH ALL APPLICABLE CODES OF LOCAL JURISDICTION. SEE SPECIFICATION SECTION 055213 PIPE AND TUBE RAILINGS.
2. PROVIDE FLARED END RAIL CONDITION WHERE REQUIRED OR INDICATED.

RAIL AND ANCHOR COATING:

1. RAIL AND ANCHOR SHALL BE STEEL AND SAND BLASTED TO A NEAR WHITE FINISH PER STEEL STRUCTURES PAINTING COUNCIL (SSPC) SP10.
2. FIELD WELDS SHALL BE GROUND SMOOTH PRIOR TO BLASTING.
3. COAT HANDRAIL AND ANCHOR WITH TNE MEC (OR EQUIVALENT) POLYAMIDE EPOXY: 66 HI-BUILD EXPOXOLINE, GRAY - ANSI No. 61 (INO5), 4.0 TO 6.0 MILLS DRY FILM THICKNESS.
4. THE FINAL COAT OF PAINT SHALL BE TNE MEC (OR EQUIVALENT) ALIPHATIC POLYESTER POLYURETHANE: ENDURE SHIELD, PARKER BROWN (F073D3884A), 1.5 TO 2.5 MILLS DRY FILM THICKNESS.
5. PRIMER AND PAINT SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



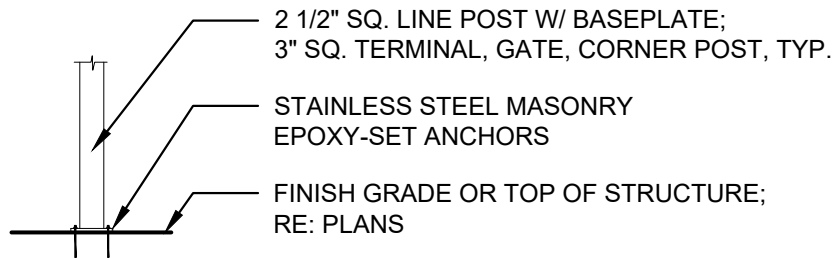
GUARDRAIL (AT TRAILS)

1/2" = 1'-0"

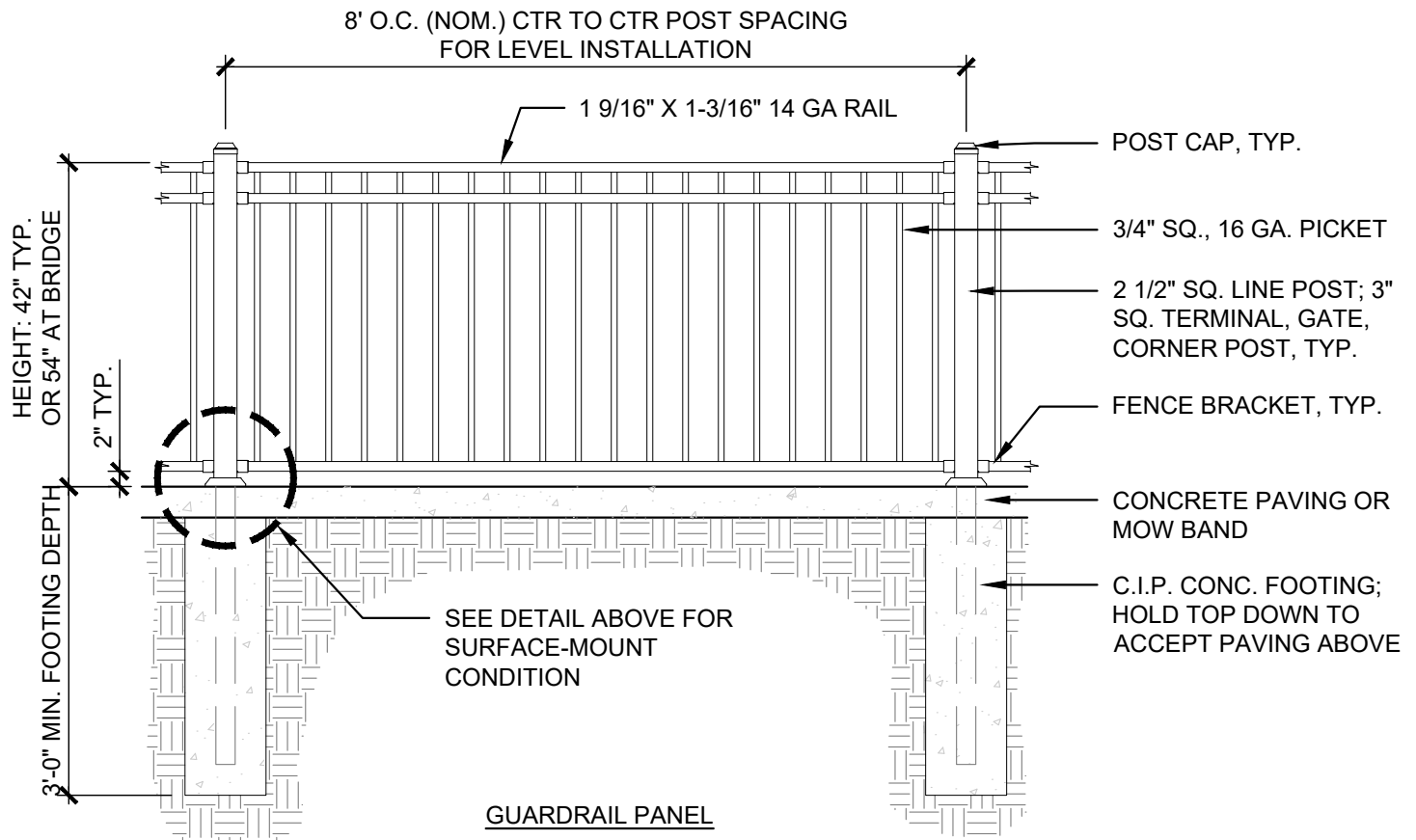
TOWN OF PARKER STANDARD DETAILS



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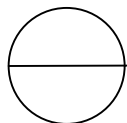


SURFACE MOUNT



NOTES:

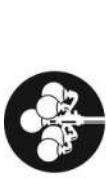
1. BASIS OF DESIGN FENCE: MANUFACTURER: FORTRESS FENCING PRODUCTS; MODEL: V2 COMMERCIAL FLAT TOP/FAT BOTTOM THREE-RAIL ORNAMENTAL FENCE W/ ASSURANCE 3" MAX. AIR SPACE; COLOR: BLACK SAND
2. REFER TO MANUFACTURER'S SPECIFICATIONS FOR FENCE AND GATE INSTALLATION.
3. POST SIZING INDICATED FOR 4'-0" MAX. HEIGHT FENCE. INCREASES IN FENCE HEIGHT AND UNIQUE CONDITIONS MAY REQUIRE INCREASE IN POST SIZE AND GAUGE PER MFR'S PRE-ENGINEERED SYSTEM. FENCE ASSEMBLY IS DELEGATED-DESIGN AND ALL POST AND COMPONENT SIZING SHALL BE VERIFIED WITH MFR. BASED ON STRUCTURAL PERFORMANCE AND LOADING CRITERIA OF LOCAL JURISDICTION. REFER TO SPECIFICATIONS.



GUARDRAIL (AT PARKS)

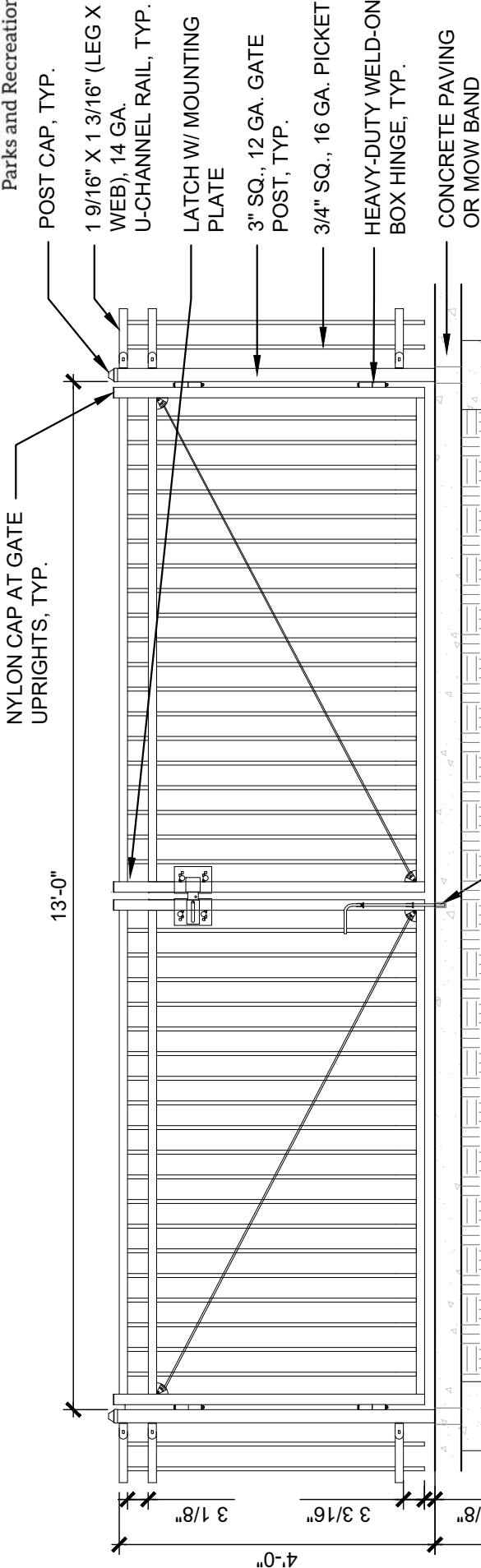
1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



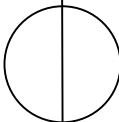
PARKER
C O L O R A D O

Parks and Recreation



NOTES:

1. REFER TO MANUFACTURER'S SPECIFICATIONS FOR FENCE AND GATE INSTALLATION. ALL DIMENSIONS SHOWN ARE NOMINAL.
2. VERIFY HINGE AND LATCH CLEARANCES W/ MFR.
3. FENCE ASSEMBLY IS DELEGATED-DESIGN AND ALL POST AND COMPONENT SIZING SHALL BE VERIFIED WITH MFR. BASED ON STRUCTURAL PERFORMANCE AND LOADING CRITERIA OF LOCAL JURISDICTION. REFER TO SPECIFICATIONS.



DOUBLE LEAF GATE, VEHICULAR

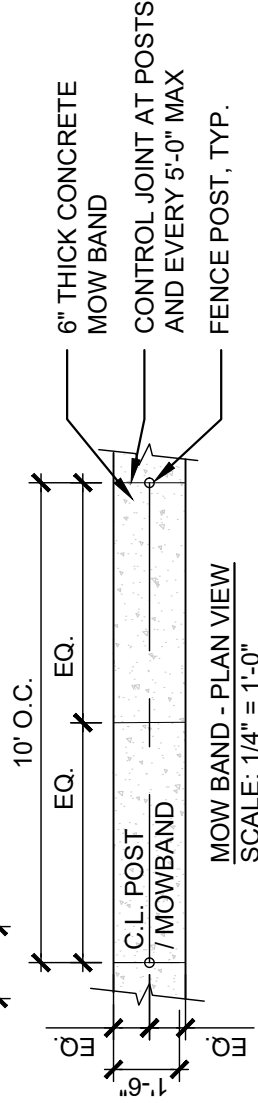
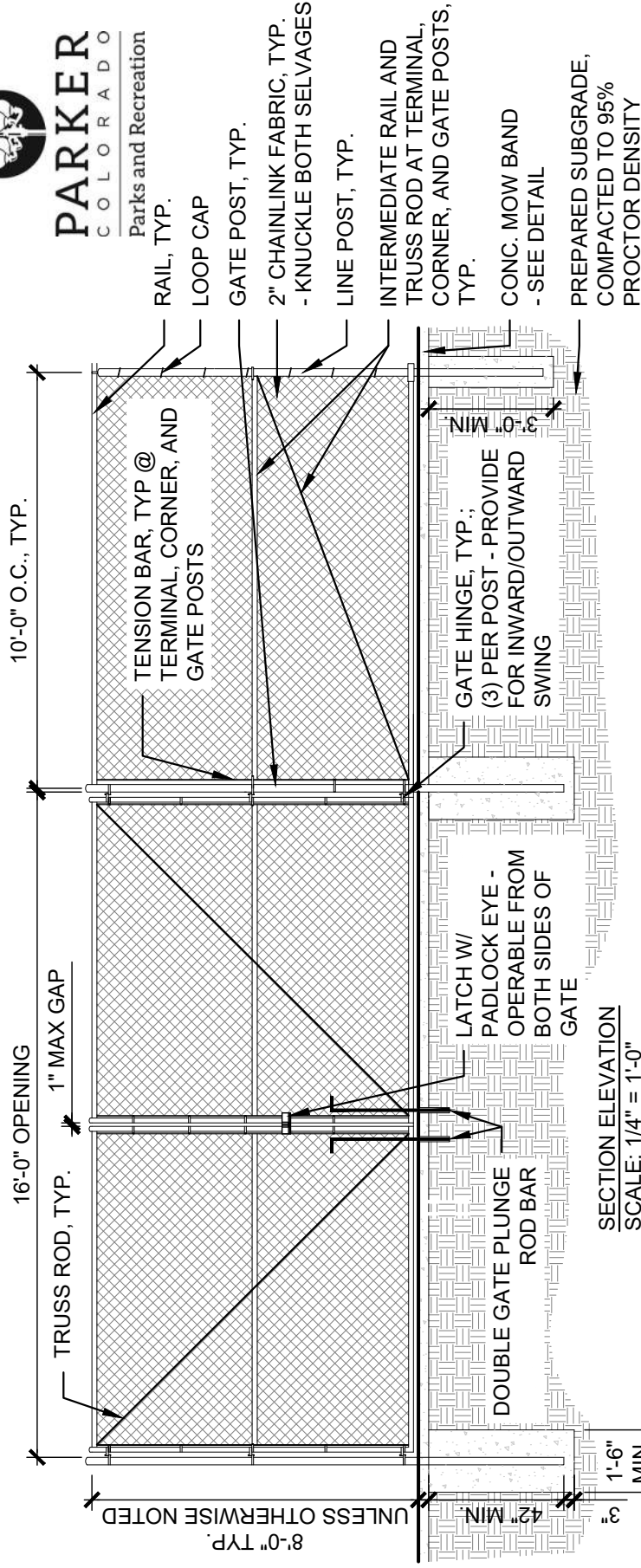
1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



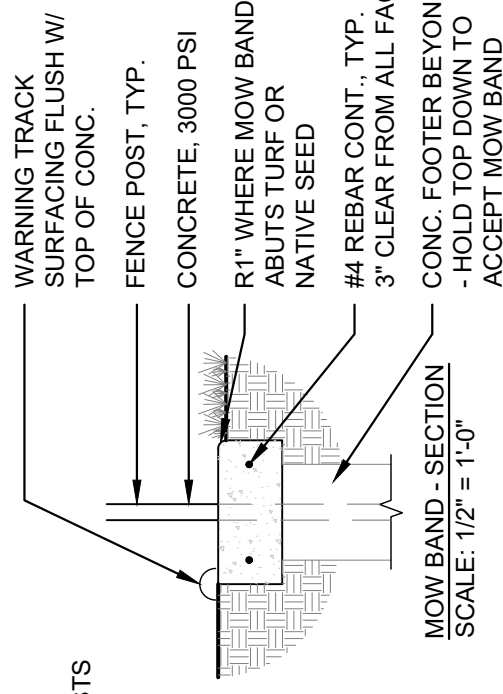
PARKER
COLORADO

Parks and Recreation



NOTES:

1. REFER TO MANUFACTURER'S SPECIFICATIONS FOR FENCE AND GATE INSTALLATION. ALL DIMENSIONS SHOWN ARE NOMINAL.
2. VERIFY HINGE AND LATCH CLEARANCES W/ MFR.
3. FENCE ASSEMBLY IS DELEGATED-DESIGN AND ALL POST AND COMPONENT SIZING SHALL BE VERIFIED WITH MFR. BASED ON STRUCTURAL PERFORMANCE AND LOADING CRITERIA OF LOCAL JURISDICTION. REFER TO SPECIFICATIONS.
4. 4000 PSI CONCRETE FOOTER, ALL POSTS.

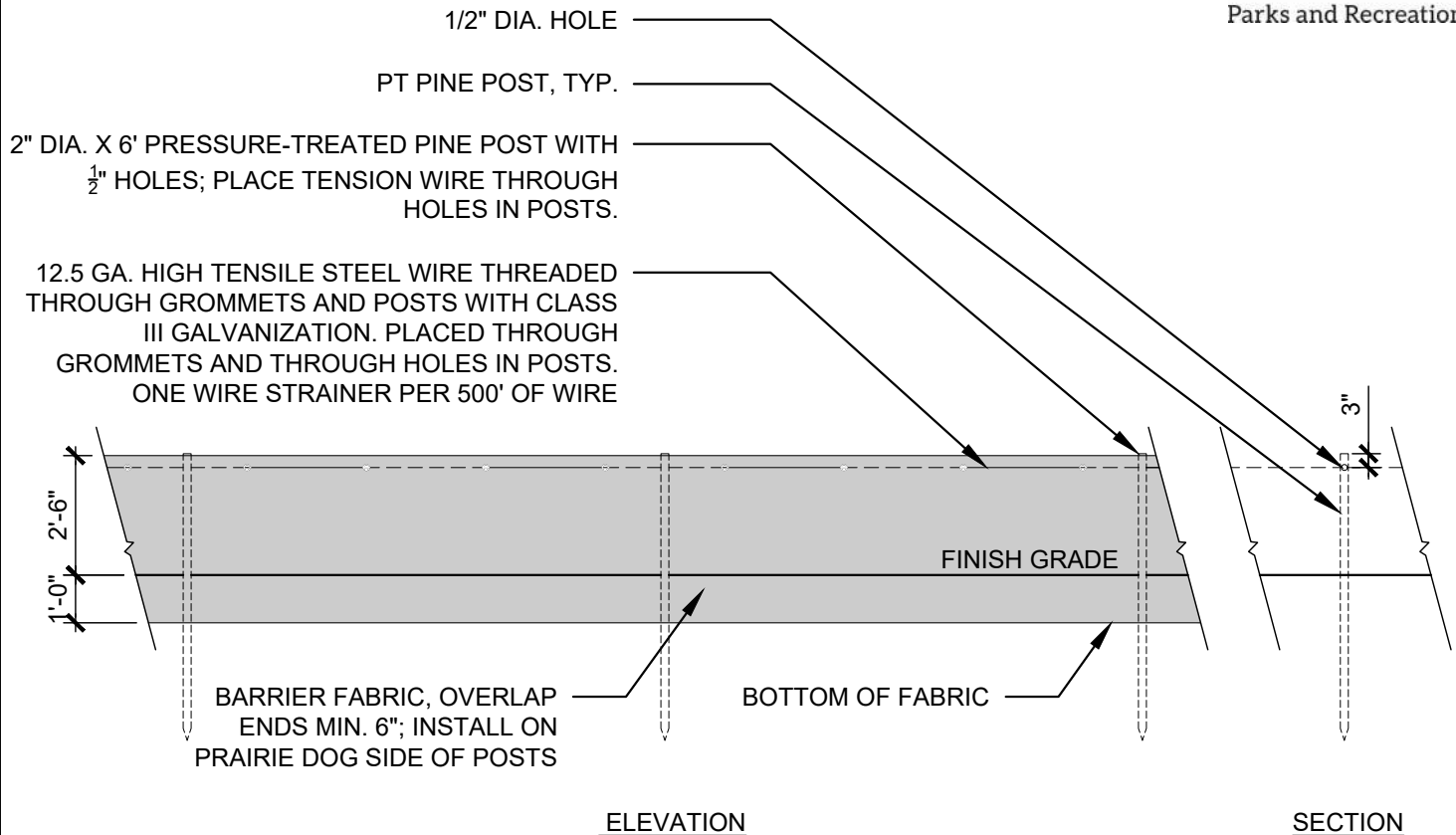


OUTFIELD FENCE AND GATE

AS NOTED

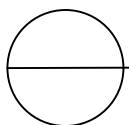
DATE: MAY 2023 | DETAIL SF-15

TOWN OF PARKER STANDARD DETAILS



NOTES:

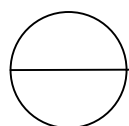
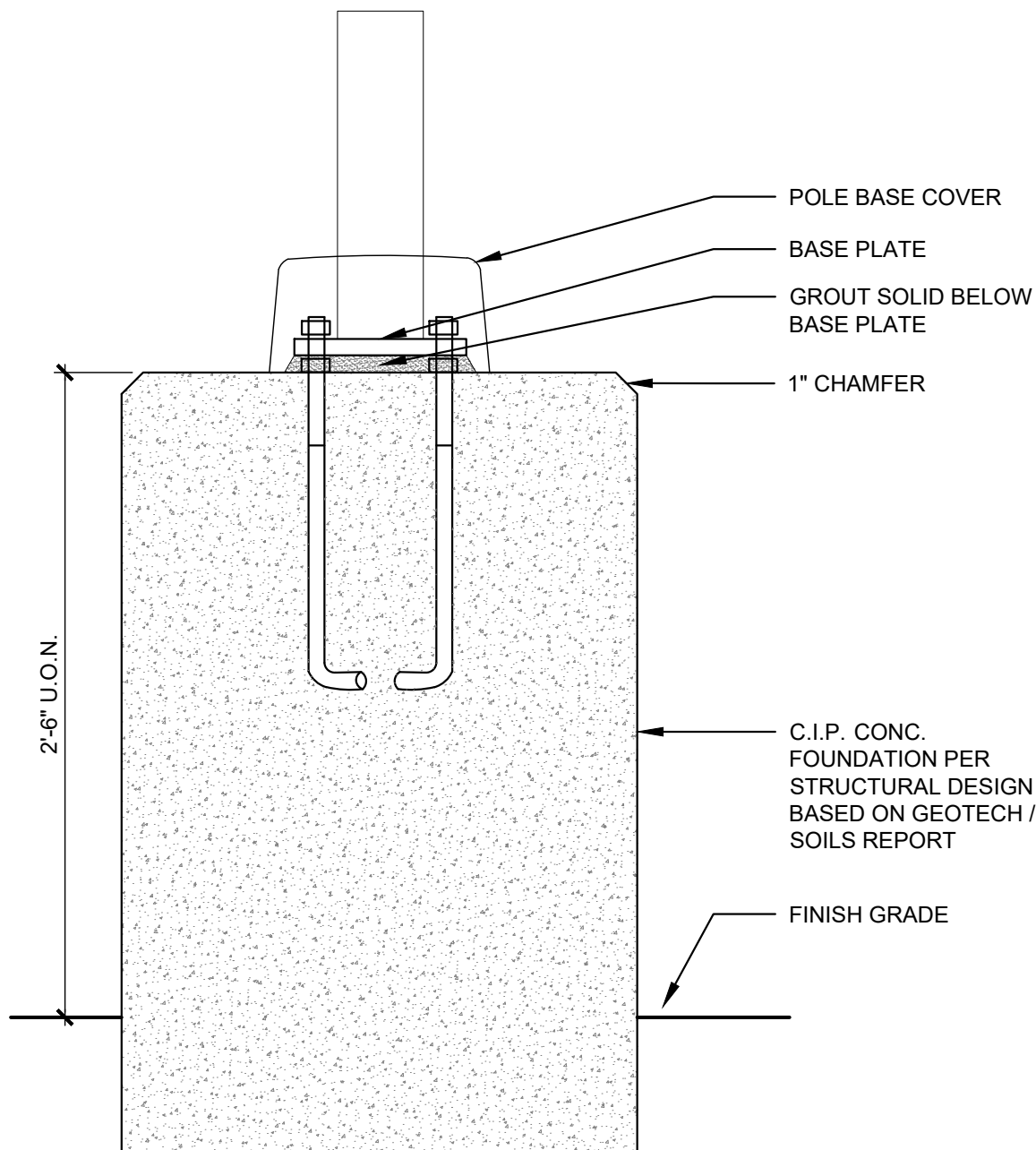
1. BASIS-OF DESIGN FABRIC: REEF INDUSTRIES (MFR) "AMORLON A-50" SERIES WOVEN UV STABILIZED POLYETHYLENE COATED HDPE; 42" WIDE; DARK GREEN COLOR; WITH METAL 12.5 GA. HIGH-TENSILE STEEL WIRE WITH CLASS III GALVANIZATION. PROVIDE ONE GALVANIZED HIGH-TENSILE WIRE RATCHET STRAINER PER 500 LF OF WIRE. GROMMETS AT 3" FROM TOP EDGE AND AT 30" O.C.
2. STAPLES SHALL NOT BE USED TO ATTACH FABRIC TO WOOD POSTS OR OTHER WOOD MEMBERS EXCEPT AS NOTED FOR TERMINAL POSTS.
3. AT END OF RUNS, ROLL FABRIC AROUND A PRESSURE-TREATED 2"X2" AND FASTEN TO TERMINAL POST W/ GALVANIZED FENCE STAPLES AT 6" O.C.



PRAIRIE DOG FENCING

1/4" - 1'-0"

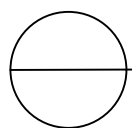
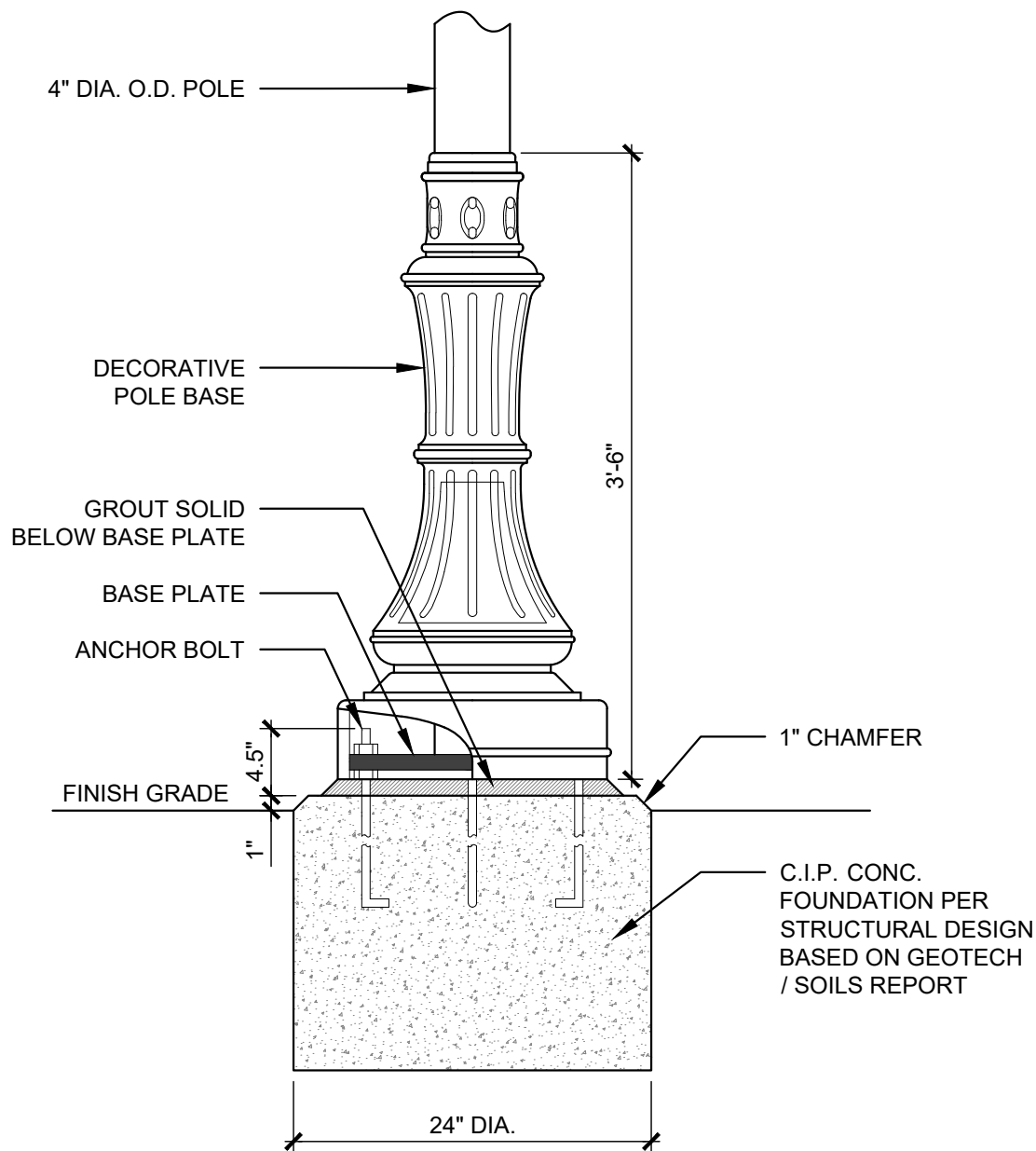
TOWN OF PARKER STANDARD DETAILS



ROADWAY PARKING LOT POLE BASE LIGHT

1 1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



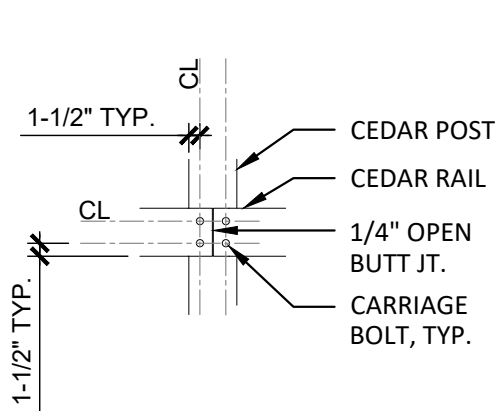
PEDESTRIAN LIGHT POLE BASE

1" = 1'-0"

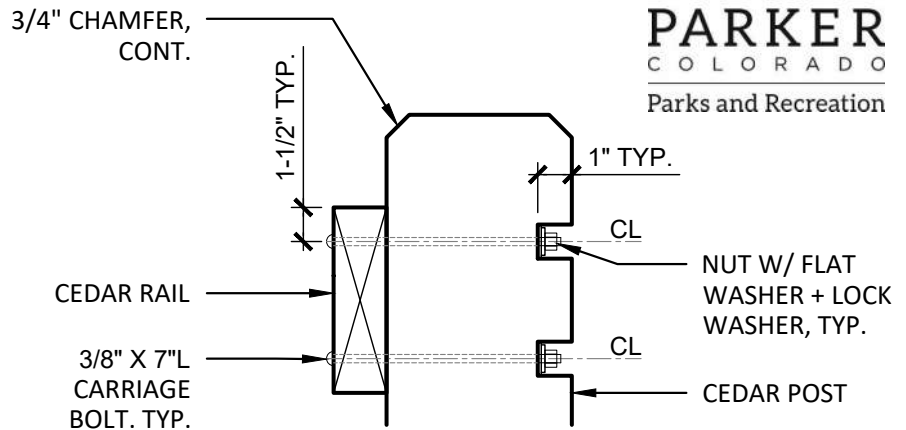
TOWN OF PARKER STANDARD DETAILS



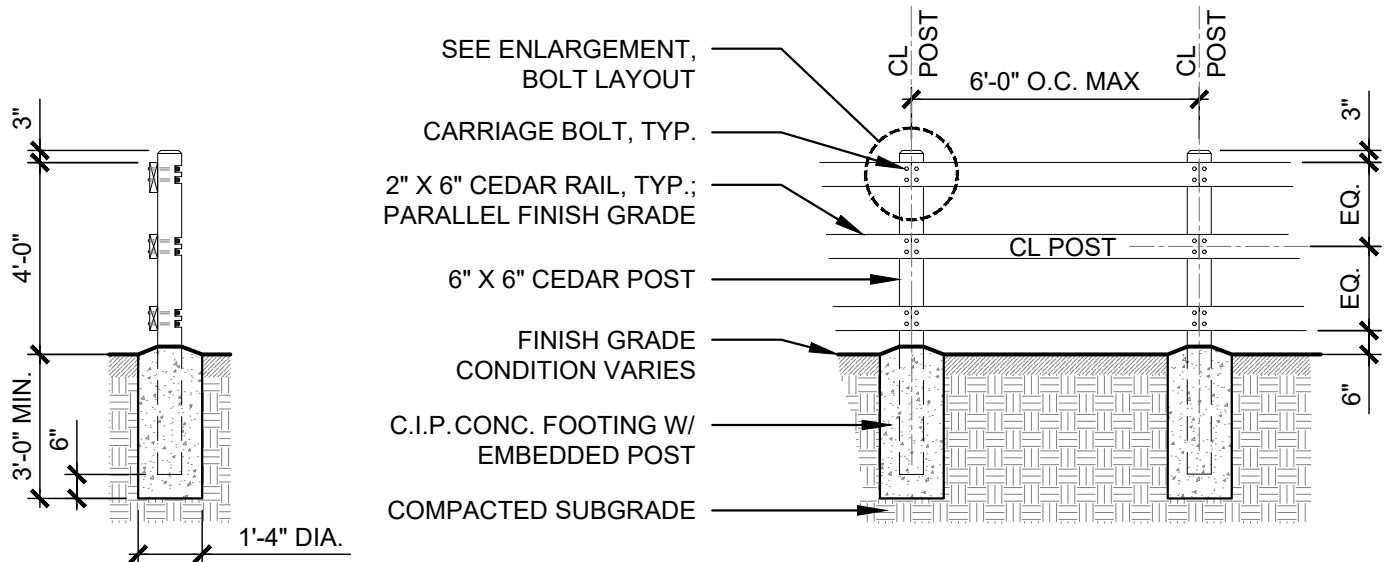
PARKER
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ENLARGEMENT - BOLT LAYOUT - ELEVATION
SCALE: 1/2" = 1'-0"



ENLARGEMENT - BOLT LAYOUT - SECTION
N.T.S.



4' HT FENCE - SECTION

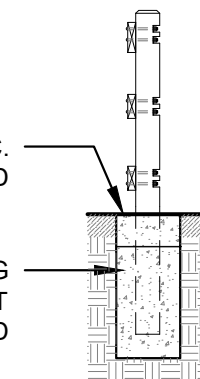
4' HT FENCE - ELEVATION

NOTES:

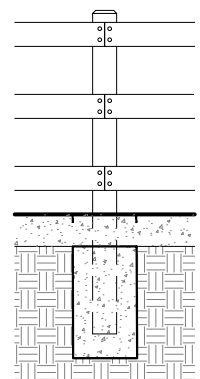
1. POSTS SHALL BE ROUGH-SAWN WESTERN RED CEDAR COMPLYING WITH THE FOLLOWING GRADING STANDARDS: NLGA 131 a,b,c; WCLIB 131 a,b,cc; WWPA 80.10, 80.11, 80.12.
2. RAILS SHALL BE ROUGH-SAWN, NO-HOLE KNOTTY APPEARANCE GRADE WESTERN RED CEDAR COMPLYING WITH THE FOLLOWING GRADING STANDARDS: NLGA 130 a,b,c; WCLIB 130 a,b,cc; WWPA 70.10, 70.11, 70.12.
3. ALL FASTENERS SHALL BE HOT-DIP GALVANIZED STEEL.

18"W x 8" TH. C.I.P. CONC. MOWBAND

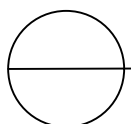
HOLD T.O. FOOTING DOWN TO ACCEPT MOWBAND



W/ MOWBAND - SECTION



W/ MOWBAND - ELEVATION



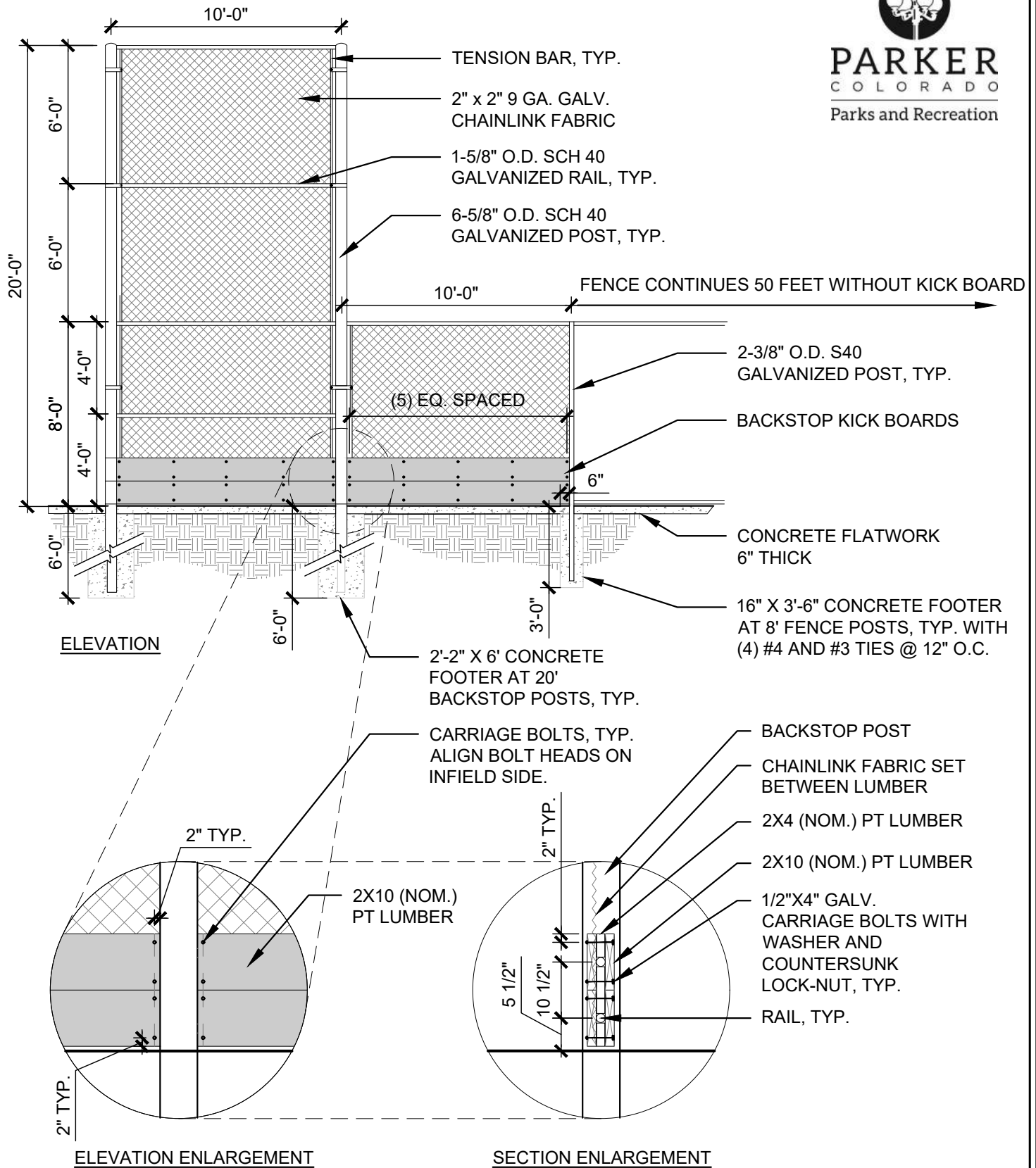
NATURAL AREA FENCE

1/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

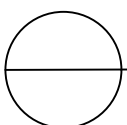


PARKER
COLORADO
Parks and Recreation



NOTE:

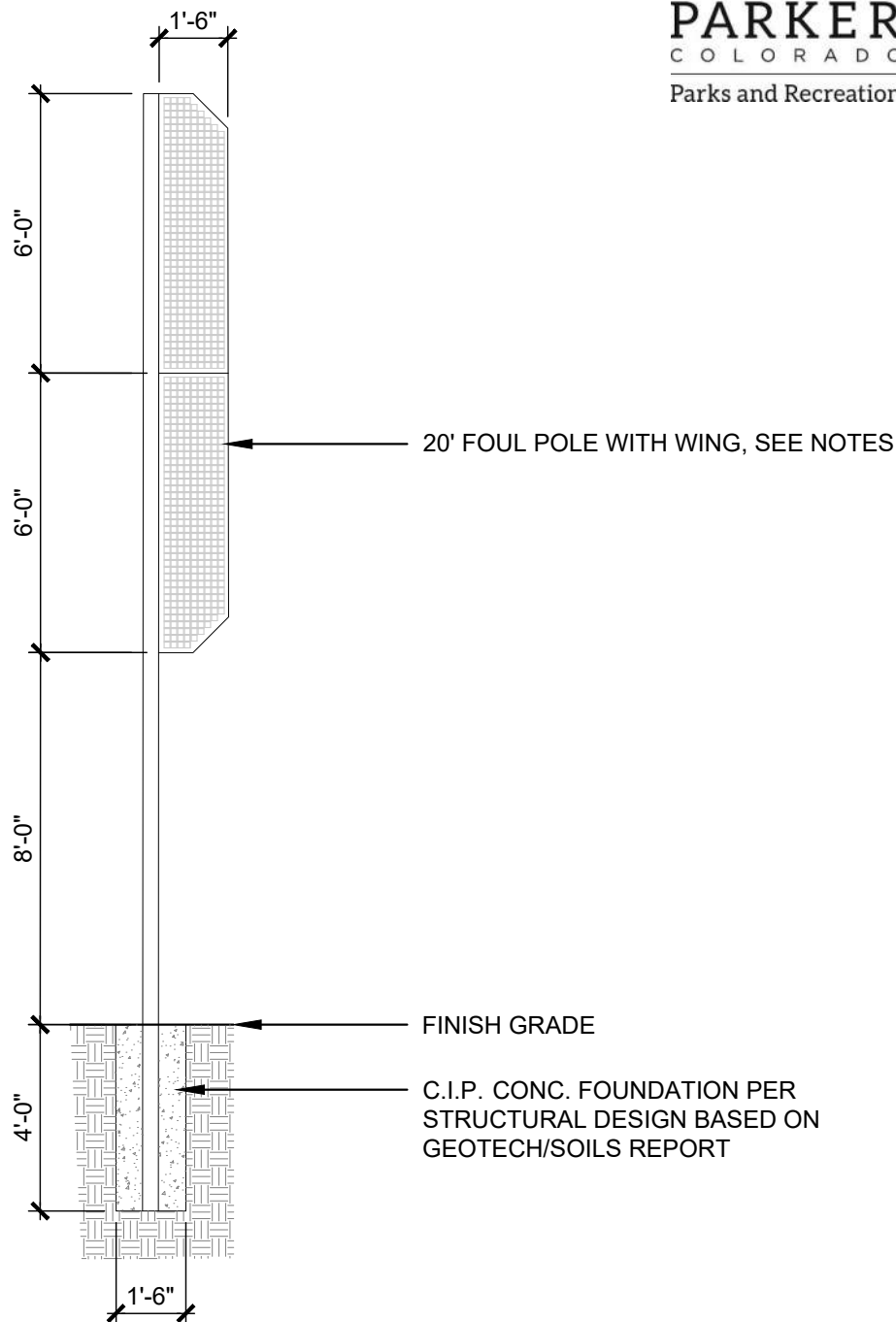
1. VERIFY THE BACKSTOP POST SPACING WITH OWNER PRIOR TO CONSTRUCTION.



BACKSTOP

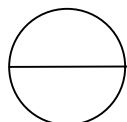
NTS

TOWN OF PARKER STANDARD DETAILS



NOTES:

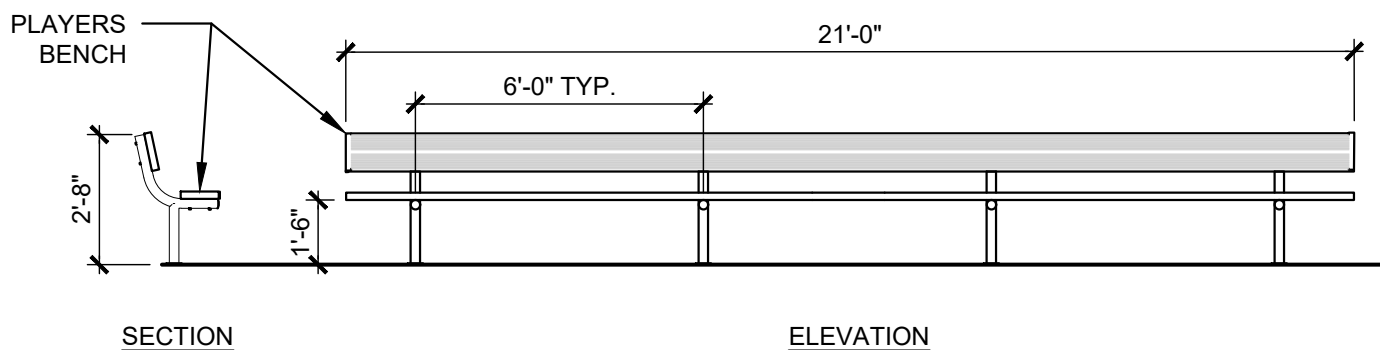
1. BASIS-OF-DESIGN: SPORTFIELD SPECIALTIES (MFR.), MODEL FPW420, 20' FOUL POLE W/ WING; GROUND SLEEVE MOUNTED.
2. INSTALL FOUL POLE PER MANUFACTURER'S RECOMMENDATIONS.



FOUL POLE

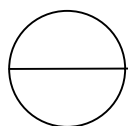
1/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



NOTES:

1. BASIS-OF-DESIGN: PW ATHLETICS, MODEL # 1103-21G, ALUMINUM CURVED BACK BENCH, GALVANIZED FRAME, SURFACE-MOUNT.
2. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

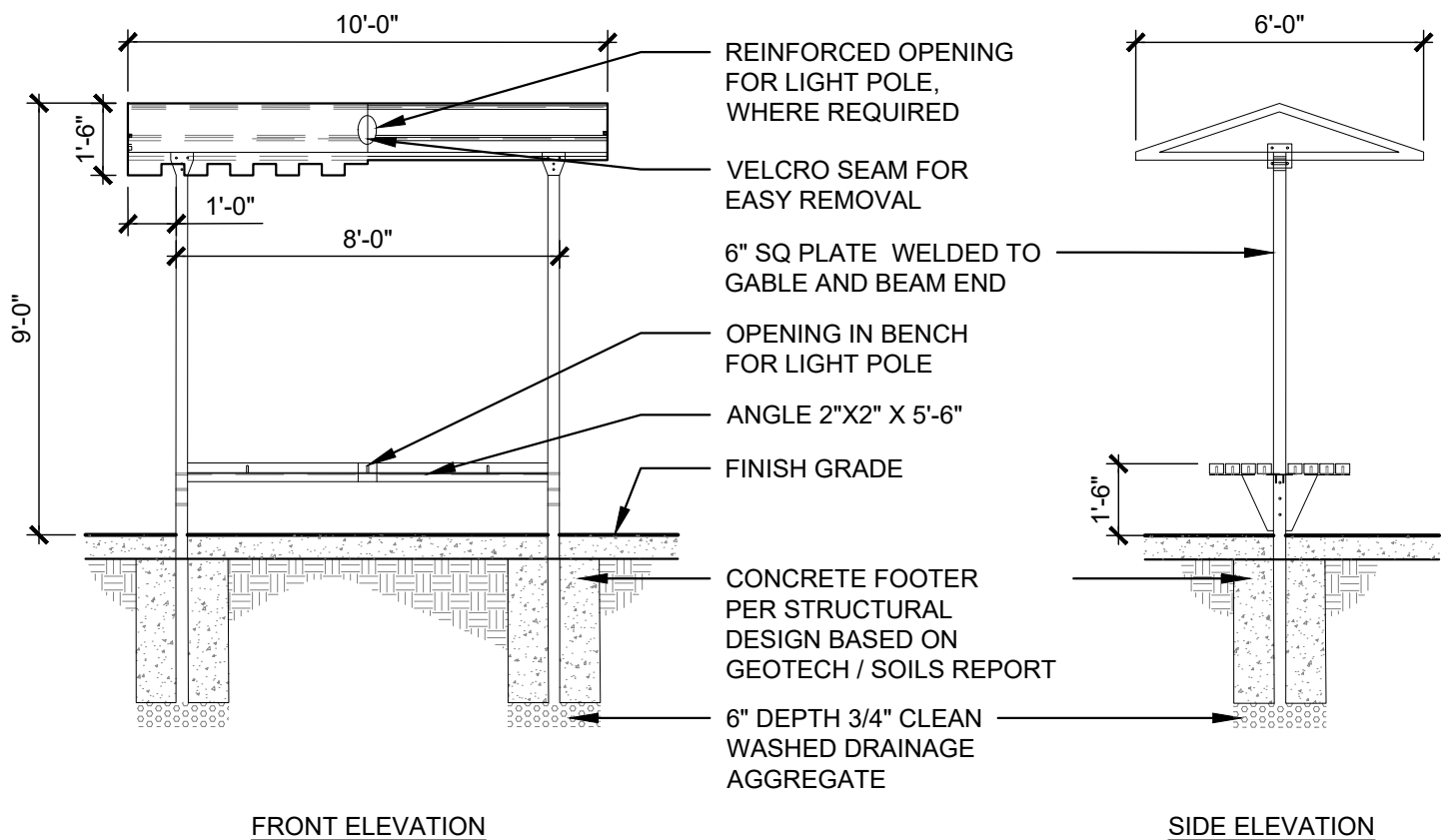


PLAYERS BENCH

1/4" = 1'-0"

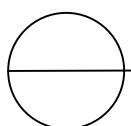
DATE: MAY 2023 | DETAIL SF-22

TOWN OF PARKER STANDARD DETAILS



NOTES:

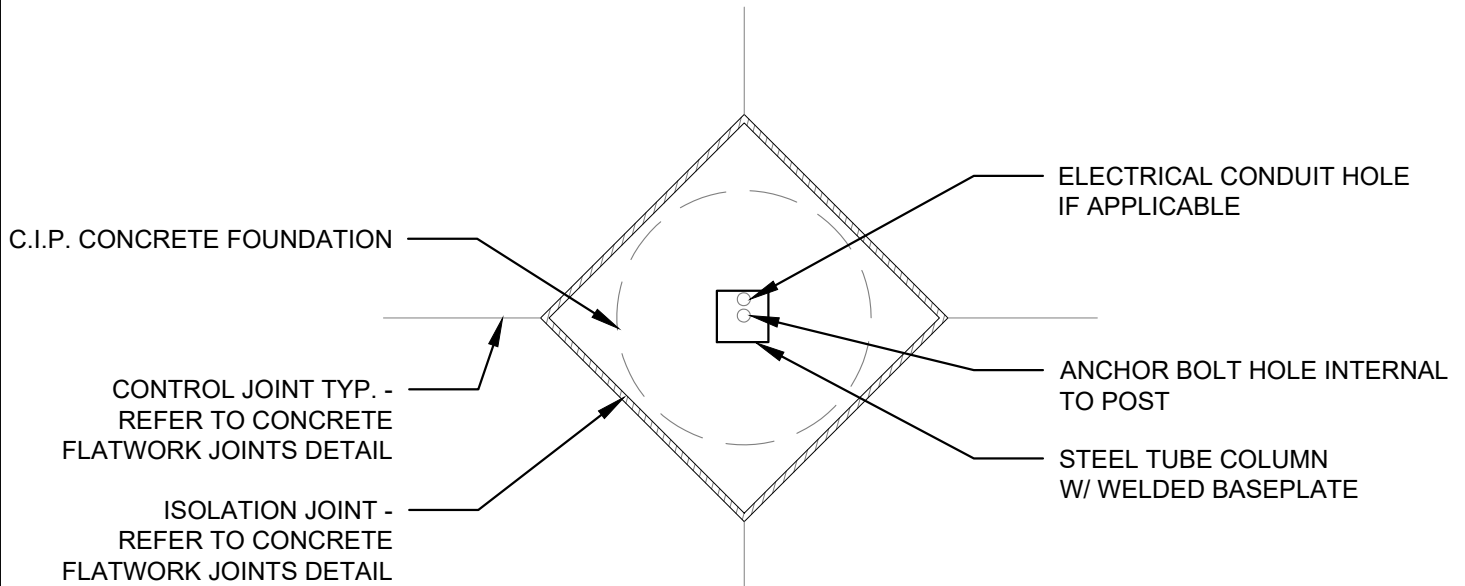
1. BASIS-OF-DESIGN: SUN TRENDS, INC. (MFR.) 8' LONG CABANA WITH 8' LONG 2-SIDED FLAT BENCH; IN-GROUND MOUNT W/ GROUND SLEEVE OR SURFACE MOUNT AS INDICATED.
FRAME: POWDERCOATED STEEL, BLACK.
CANOPY FABRIC COLOR: BLUE.
BENCH: DURAWOOD COMPOSITE SLATS.
2. TO BE INSTALLED BY TENNIS COURT CONTRACTOR



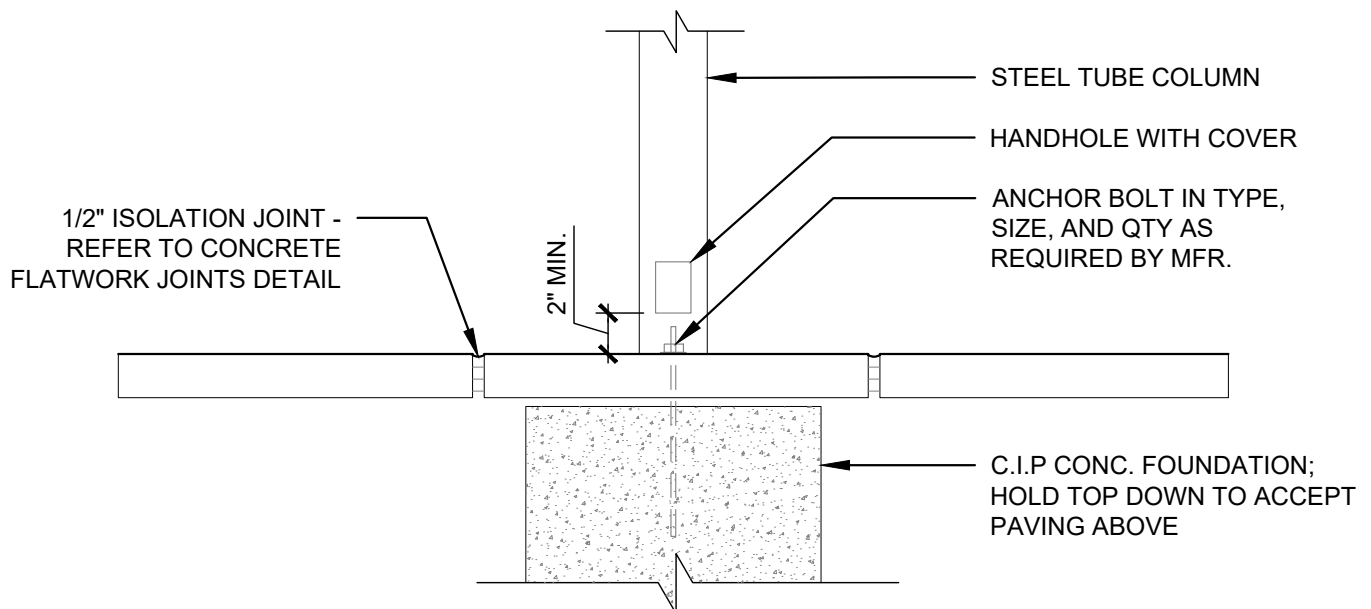
CABANA WITH BENCH

1/4" = 1'-0"

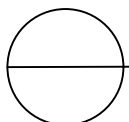
TOWN OF PARKER STANDARD DETAILS



PLAN



SECTION



SHELTER FOUNDATION

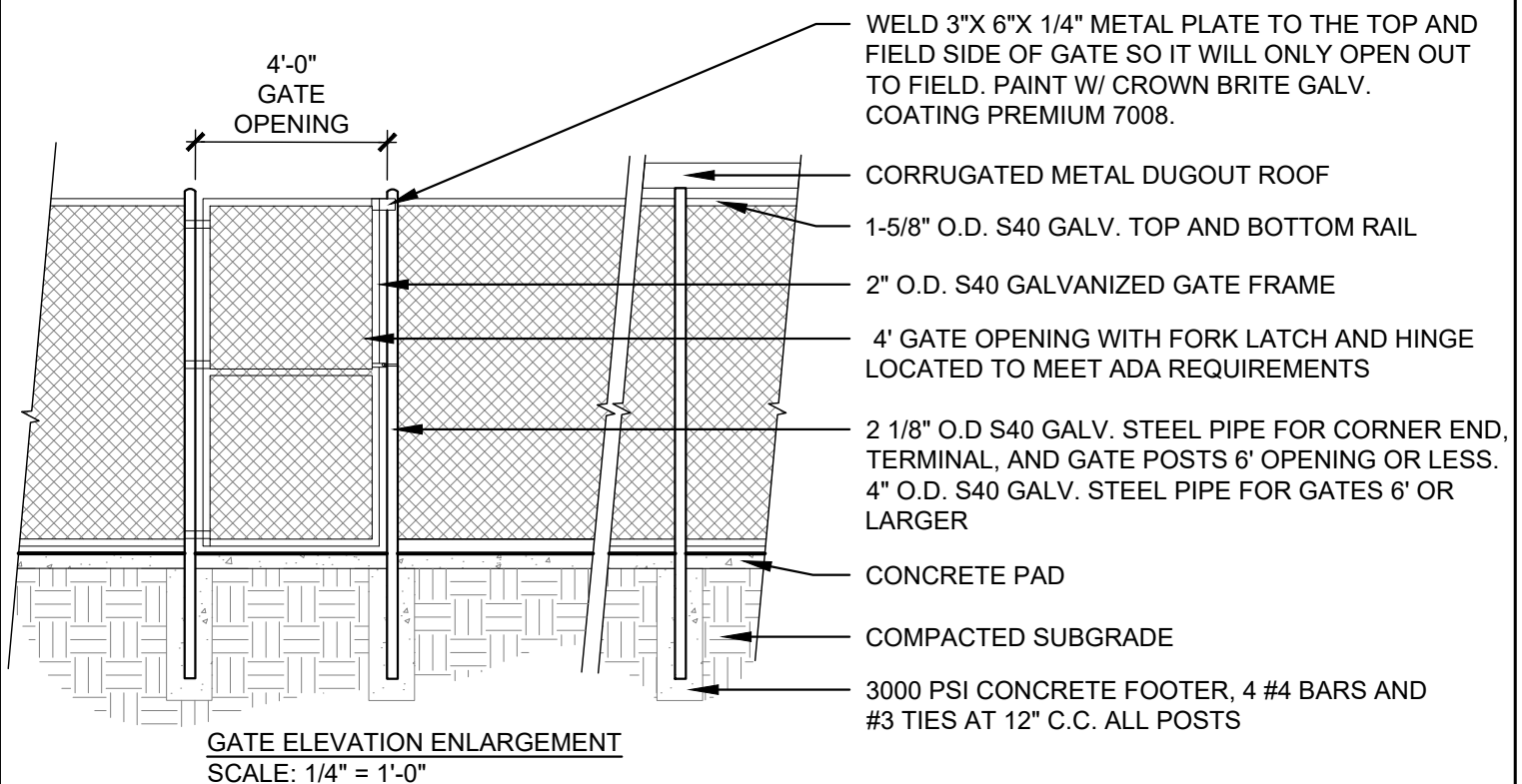
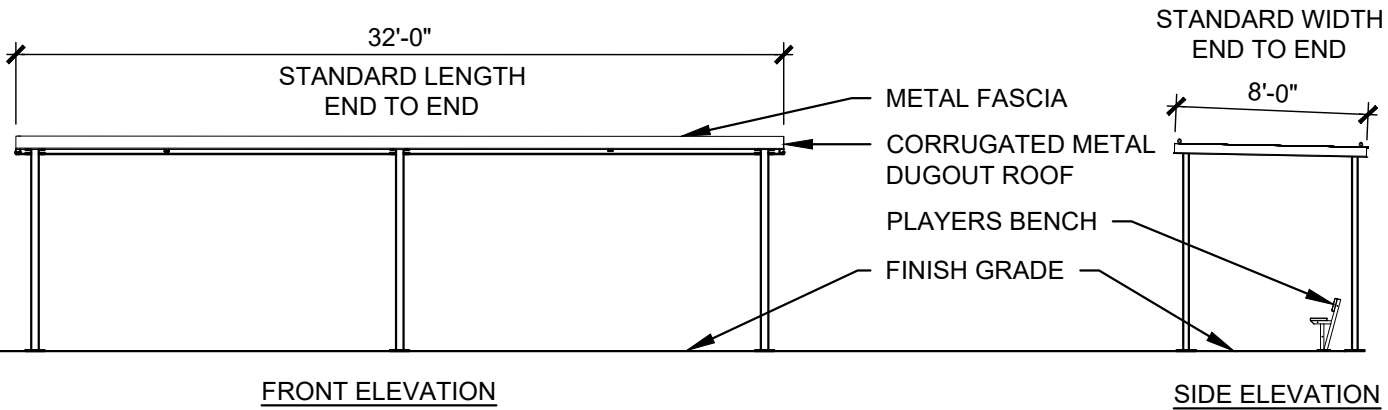
3/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



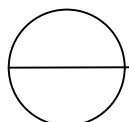
PARKER
COLORADO
Parks and Recreation

STEEL FRAME STRUCTURE:
POWDER COATED TUBULAR STEEL DESIGN
MEETS LOCAL BUILDING CODE REQUIREMENTS



NOTE:

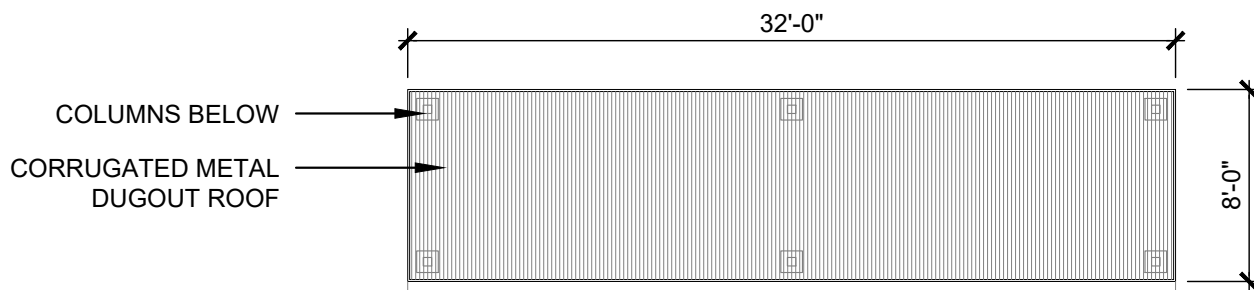
1. BASIS-OF-DESIGN: GAMESHADE DUGOUTS MODEL GD8X32 (8'W X 32'L)
2. FENCING TO BE ON THREE SIDES OF DUGOUT.
3. PROVIDE COLORADO STAMPED ENGINEERED SHOP DRAWING.
4. REFER TO MFR. SPECIFICATIONS FOR DUGOUT INSTALLATION.



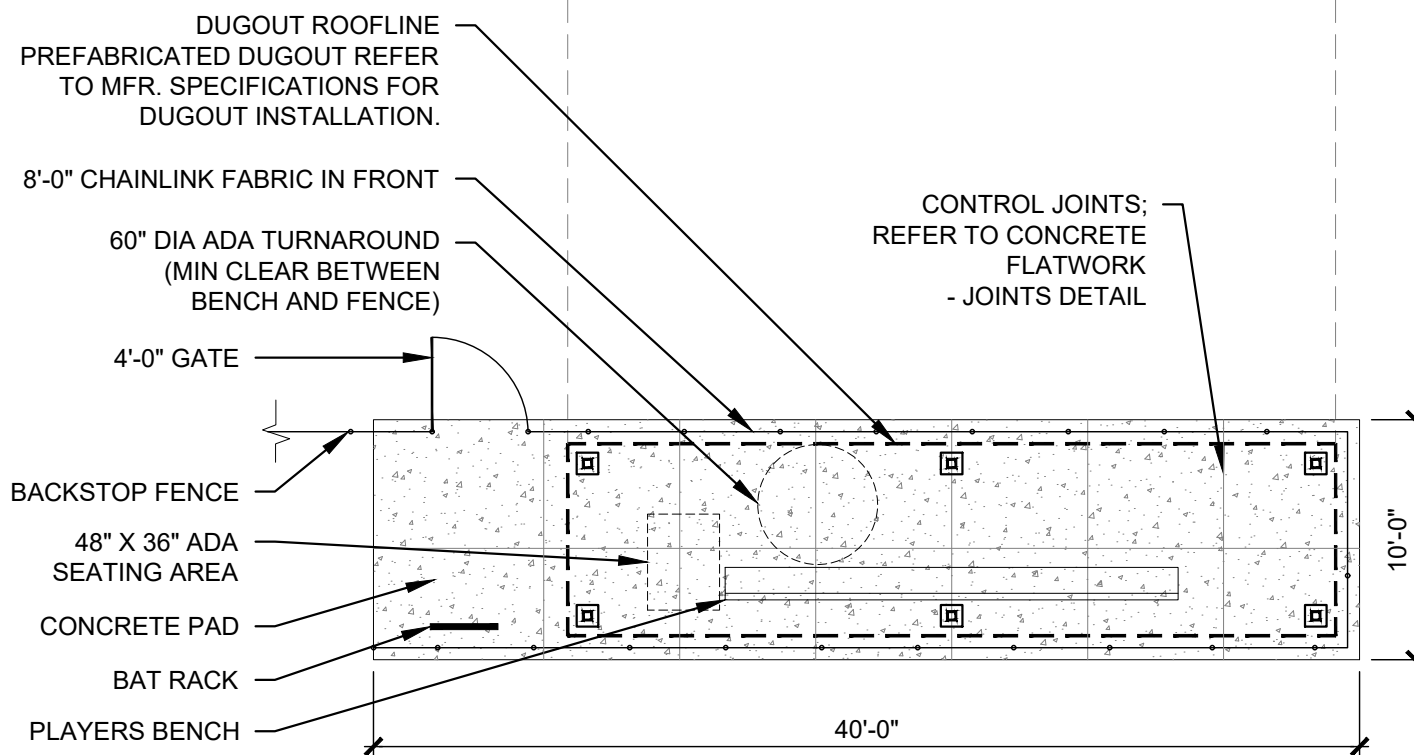
DUGOUT ELEVATIONS

1/8" = 1'-0"

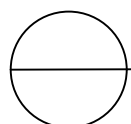
TOWN OF PARKER STANDARD DETAILS



DUGOUT ROOF PLAN VIEW



LAYOUT PLAN



DUGOUT LAYOUT PLAN

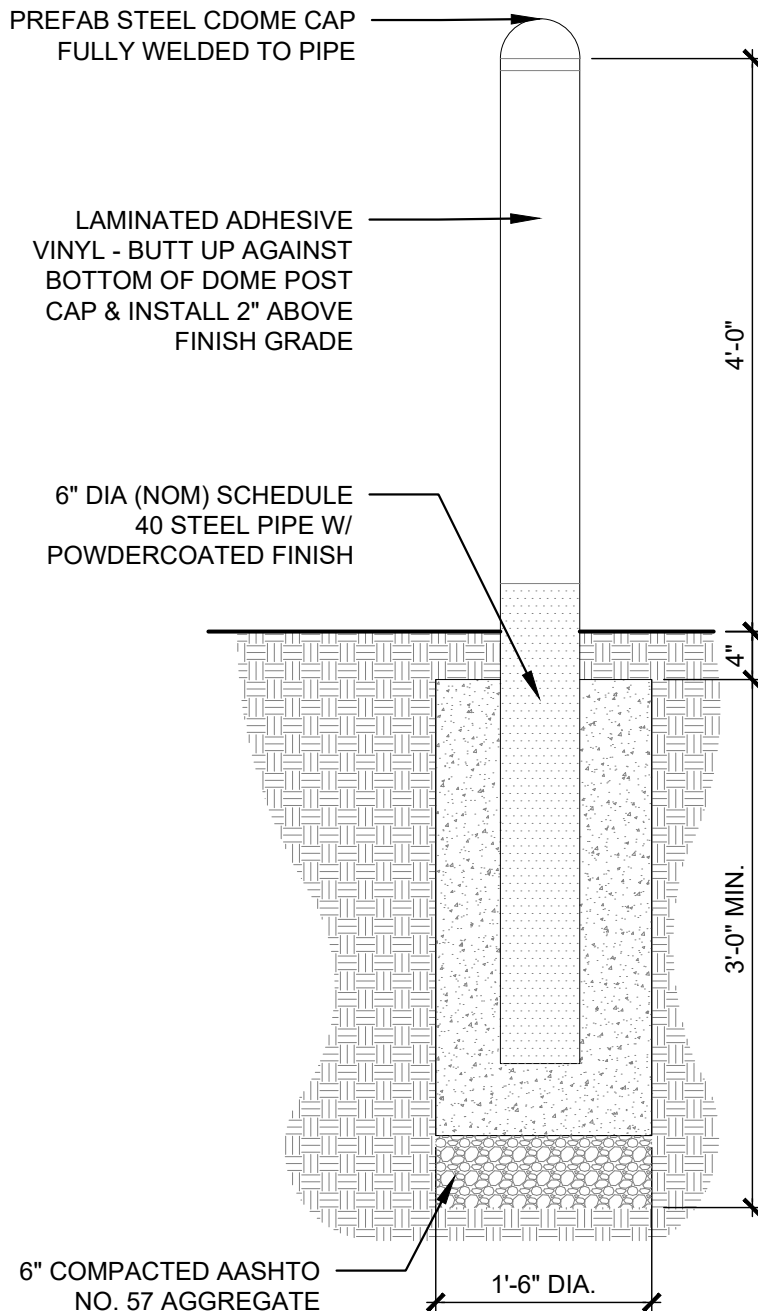
1/8" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



NOTES:

1. VINYL WRAP BASIS-OF-DESIGN:
ARLON(MFR) "DPF 6100 XLP" SERIES
ADHESIVE VINYL WRAP W/ ARLON "3350
ANTI-GRAFFITI" SERIES PVDF
OVER-LAMINATE. INK COLOR: PANTONE
3308 C, CMYK 100 0 60 72
2. PIPE AND DOME POST CAP TO BE
POWDERCOATED TIGER DRYLAC (MFR)
RAL #6005, MOSS GREEN
3. OWNER TO PROVIDE ARTWORK FOR
LAMINATED ADHESIVE VINYL
4. INSTALL TO MAINTAIN 4'-0" CLEARANCE
FROM EDGE OF TRAIL.
5. CONCRETE SHALL BE 4,000 PSI AT 28 DAYS
6. WELD PER INDUSTRY STANDARDS - GRIND
ALL WELDS SMOOTH
7. FACE GRAPHIC PERPENDICULAR TO
CENTERLINE OF THE TRAIL
8. FINAL LOCATION OF INSTALLATION TO BE
DETERMINED BY OWNER

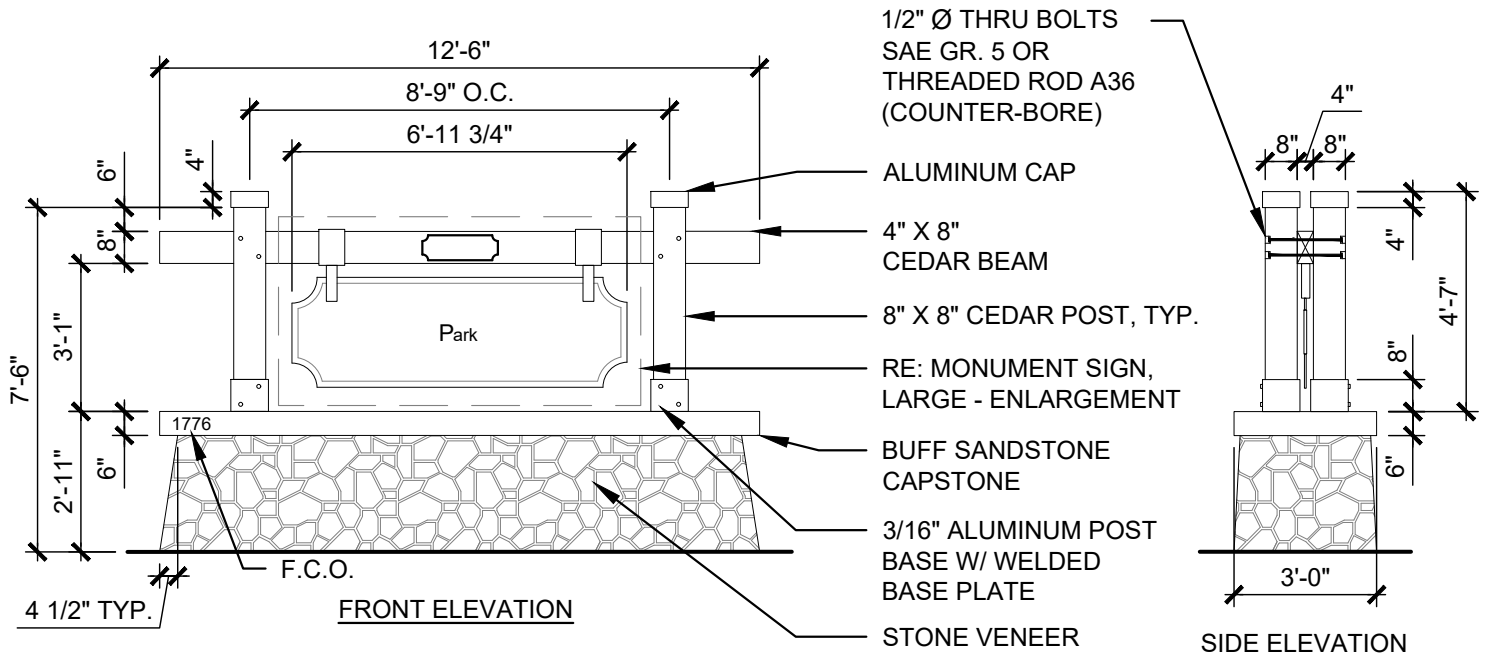
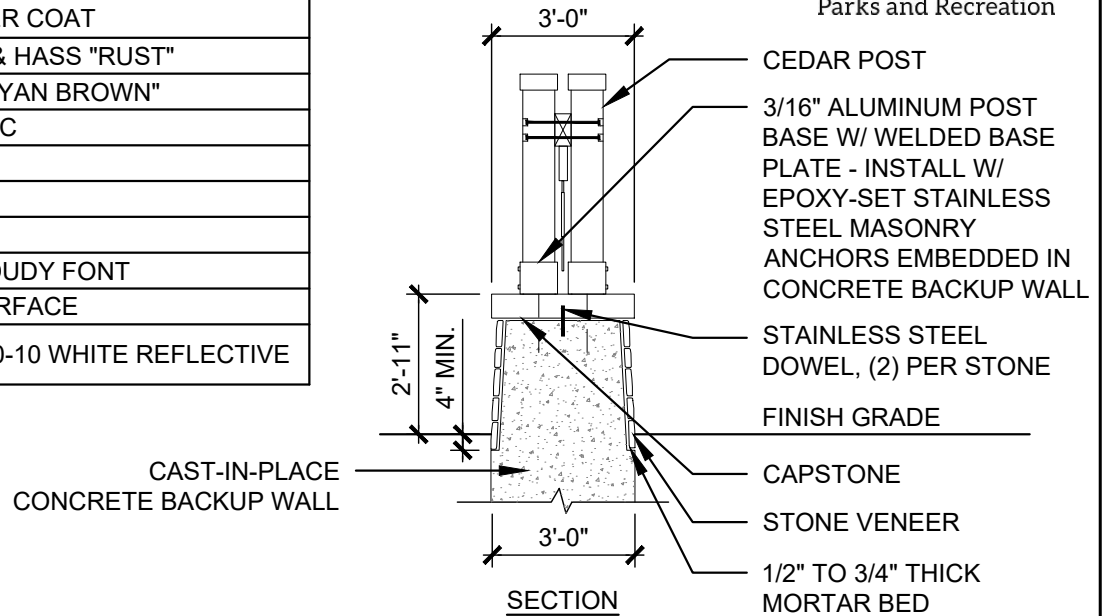


TOWN OF PARKER STANDARD DETAILS



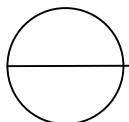
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Parks and Recreation

FABRICATION SPECIFICATIONS		
CAP	MATERIAL	ALUMINUM (CUSTOM BUILT)
	THICKNESS	0'-0 3/16"
	FINISH	POWDER COAT
	COLOR	ROHM & HASS "RUST"
POST	STAIN	SW "BAYAN BROWN"
F.C.O.	MATERIAL	ACRYLIC
	THICKNESS	0'-0 1/4"
	COLOR	WHITE
	STAND-OFF	FLUSH
	TEXT	4"IN GOUDY FONT
	VINYL LAYER	1ST SURFACE
	VINYL COLOR	3M# 680-10 WHITE REFLECTIVE



NOTES:

1. POSTS AND BEAM TO BE ROUGH-SAWN WESTERN RED CEDAR COMPLYING WITH THE FOLLOWING GRADING STANDARDS: NLGA 131 a,b,c; WCLIB 131 a,b,cc; WWPA 80.10, 80.11, 80.12.
2. BASIS-OF-DESIGN STONE VENEER: CSV-2030 BUCKS COUNTY (SUPPLIER) FIELDSTONE
3. PROVIDE FOUNDATION AND REINFORCING FOR CAST-IN-PLACE BACKUP WALL PER STRUCTURAL ENGINEER'S DESIGN BASED ON GEOTECH / SOILS REPORT
4. ANTI-GRAFFITI COATING TO BE APPLIED TO THE METAL SIGN FACE AND STONE. BASIS-OF-DESIGN: VANDLTOP (MFR) SACRIFICIAL TOP COAT OR APPROVED EQUAL. APPLY PER MANUFACTURER INSTRUCTIONS.



MONUMENT SIGN - LARGE

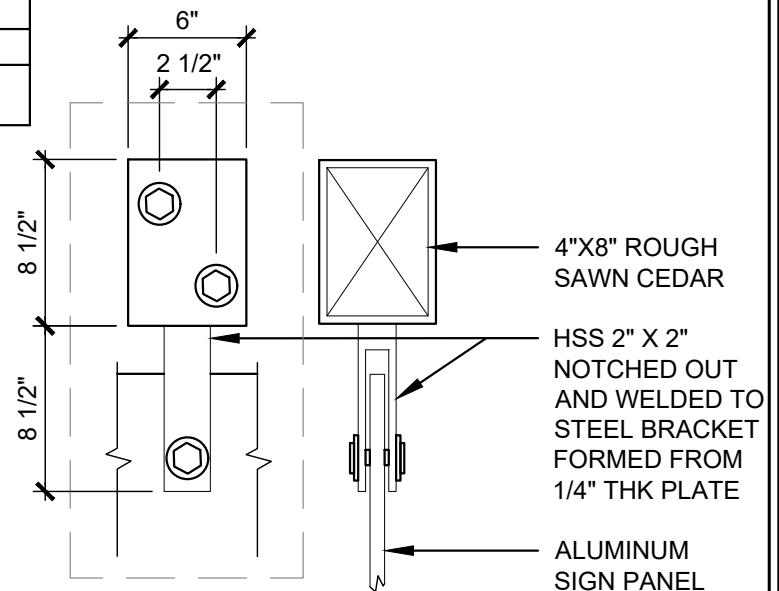
1/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

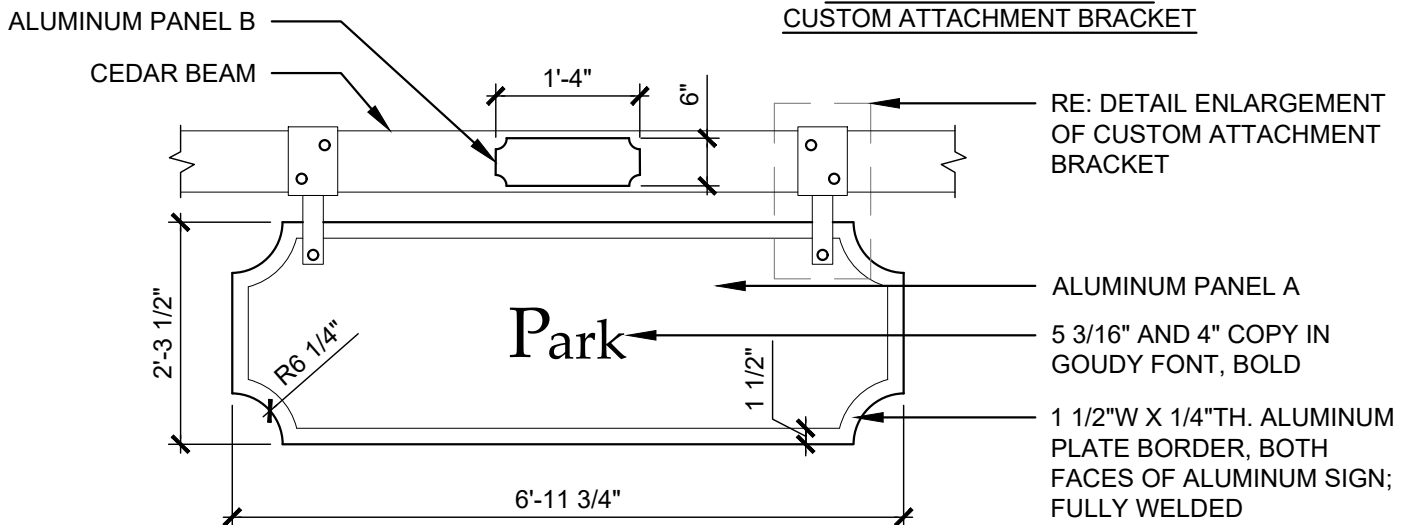


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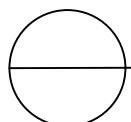
FABRICATION SPECIFICATIONS		
PANEL A	TYPE	ALUMINUM (3 LAYERS)
	THICKNESS	1/4" FACE + 1/4" BORDERS EA SIDE
	FINISH	POWDER COAT
	COLOR	ROHM & HOSS: RUST
PANEL B	TYPE	ALUMINUM
	THICKNESS	1/8"
	PAINT	MATCH DUPONT CS380 GREEN, SEMI-GLOSS
	COPY LAYER	1ST SURFACE
	VINYL COLOR	3M# 680-10 WHITE REFLECTIVE



DETAIL ENLARGEMENT OF CUSTOM ATTACHMENT BRACKET



DETAIL OF PANEL



MONUMENT SIGN, LARGE - ENLARGEMENT

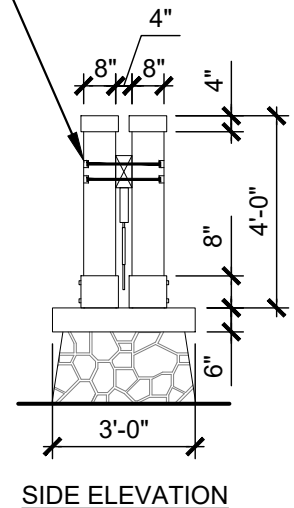
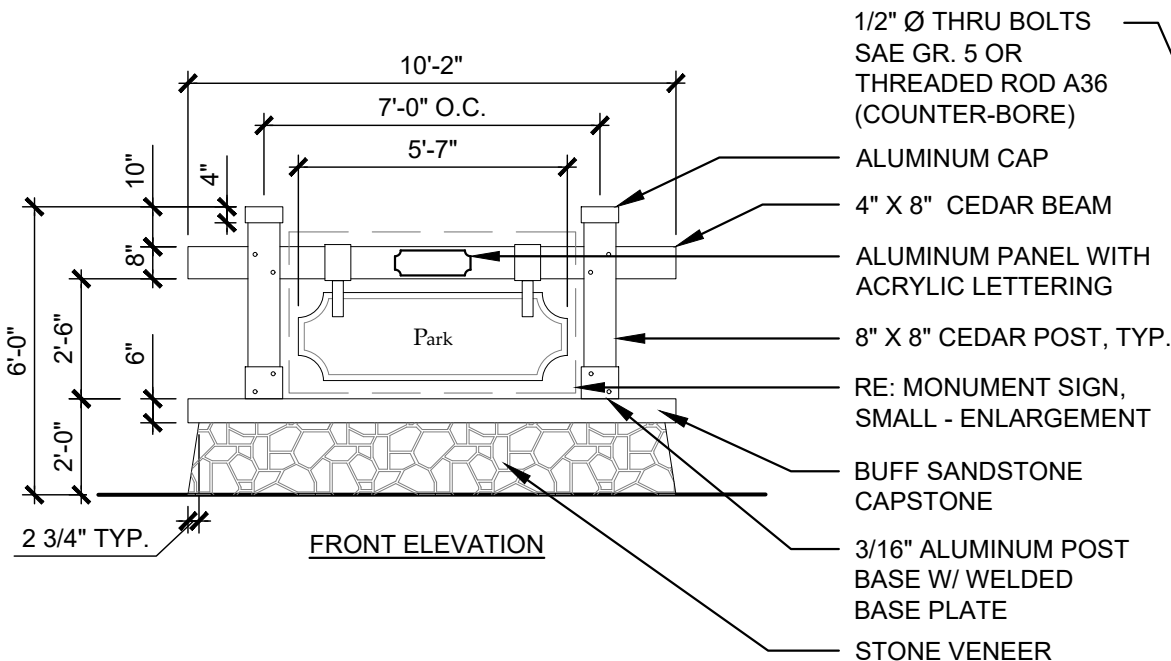
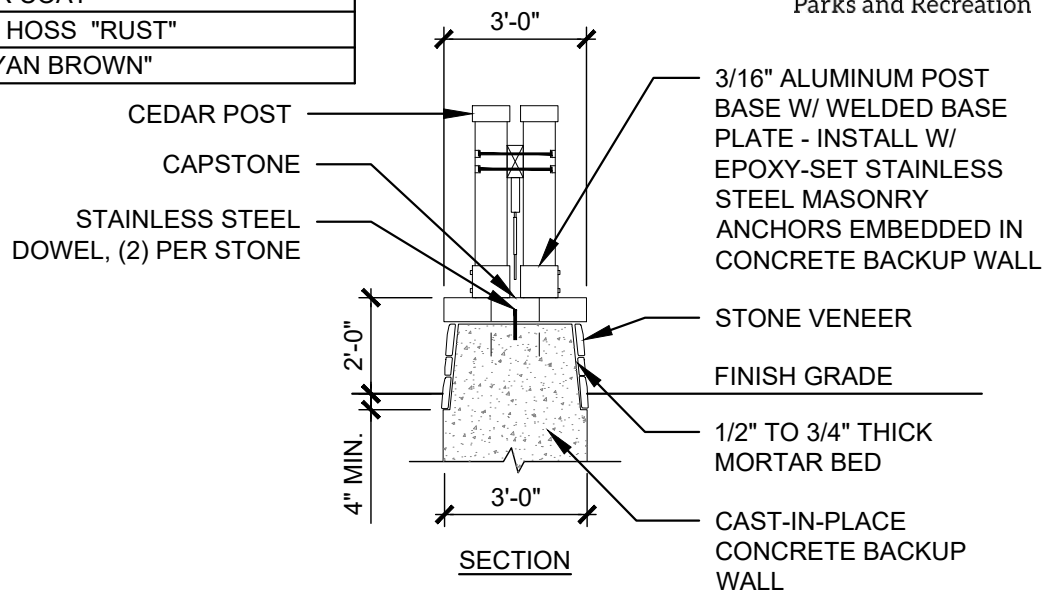
N.T.S.

TOWN OF PARKER STANDARD DETAILS



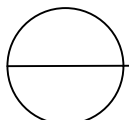
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Parks and Recreation

FABRICATION SPECIFICATIONS		
CAP	MATERIAL	ALUMINUM (CUSTOM BUILT)
	THICKNESS	0'-0 3/16"
	FINISH	POWDER COAT
	COLOR	ROHM & HOSS "RUST"
POST	STAIN	SW "BAYAN BROWN"



NOTES:

1. POSTS AND BEAM TO BE ROUGH-SAWN WESTERN RED CEDAR COMPLYING WITH THE FOLLOWING GRADING STANDARDS: NLGA 131 a,b,c; WCLIB 131 a,b,cc; WWPA 80.10, 80.11, 80.12.
2. BASIS-OF-DESIGN STONE VENEER: CSV-2030 BUCKS COUNTY (SUPPLIER) FIELDSTONE
3. PROVIDE FOUNDATION AND REINFORCING FOR CAST-IN-PLACE BACKUP WALL PER STRUCTURAL ENGINEER'S DESIGN BASED ON GEOTECH / SOILS REPORT
4. ANTI-GRAFFITI COATING TO BE APPLIED TO THE METAL SIGN FACE AND STONE. BASIS-OF-DESIGN: VANDLTOP (MFR) SACRIFICIAL TOP COAT OR APPROVED EQUAL. APPLY PER MANUFACTURER INSTRUCTIONS.



MONUMENT SIGN - SMALL

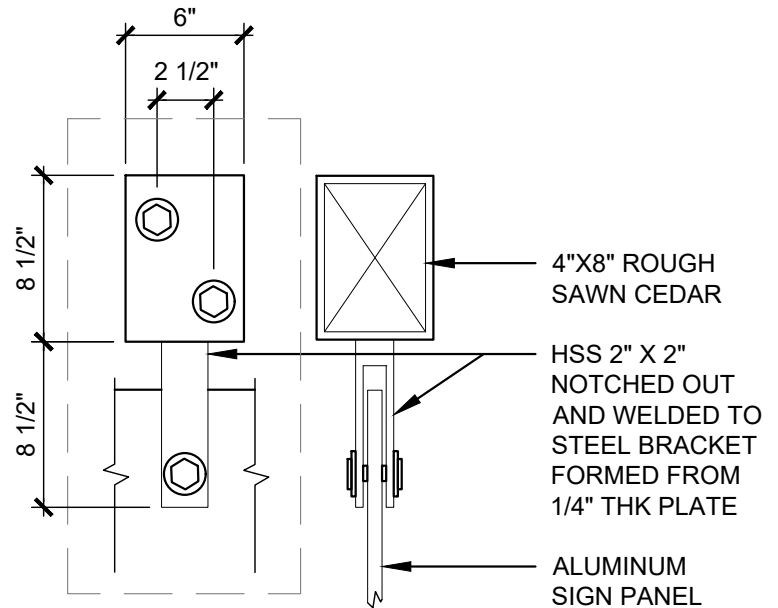
1/4" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

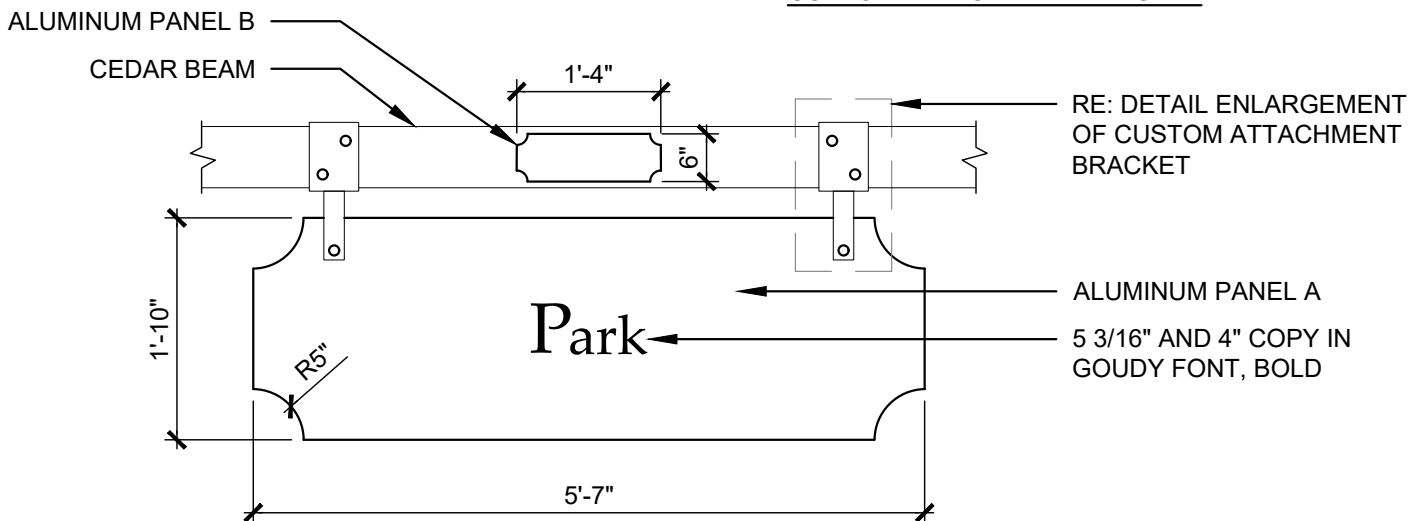


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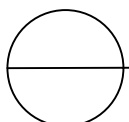
FABRICATION SPECIFICATIONS		
PANEL A	TYPE	ALUMINUM
	THICKNESS	1/4" FACE
	FINISH	POWDER COAT
	COLOR	ROHM & HOSS "RUST"
PANEL B	TYPE	ALUMINUM
	THICKNESS	1/8"
	PAINT	MATCH DUPONT CS380 GREEN, SEMI-GLOSS
	FINISH	POWDER COAT
	COPY LAYER	1ST SURFACE
	VINYL COLOR	3M# 680-10 WHITE REFLECTIVE



DETAIL ENLARGEMENT OF
CUSTOM ATTACHMENT BRACKET



DETAIL OF PANEL



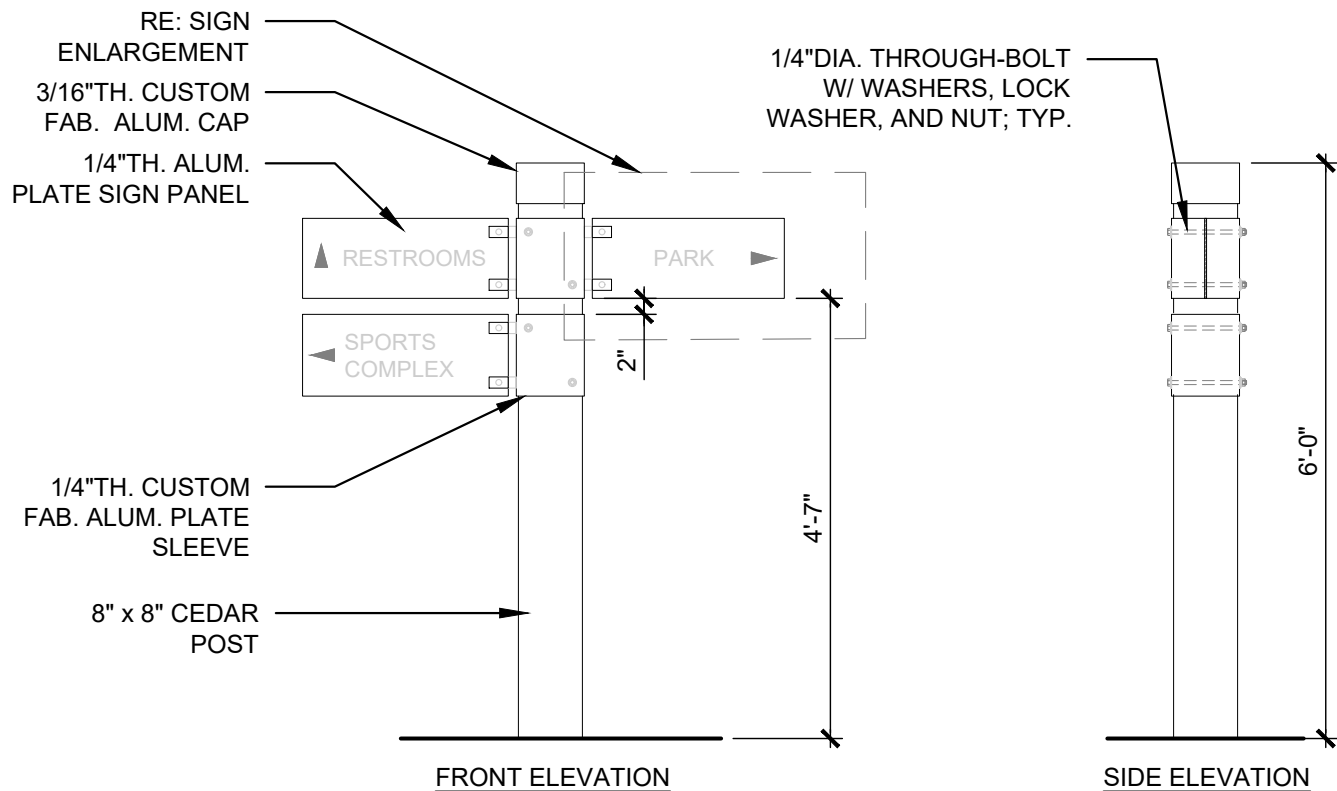
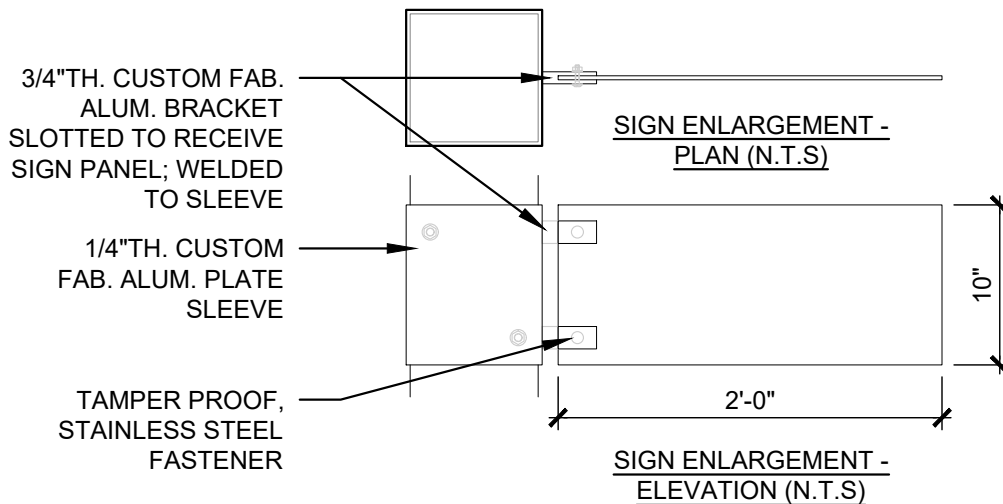
MONUMENT SIGN, SMALL - ENLARGEMENT

N.T.S.

TOWN OF PARKER STANDARD DETAILS

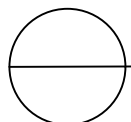


PARKER
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NOTES:

1. POSTS TO BE ROUGH-SAWN WESTERN RED CEDAR COMPLYING WITH THE FOLLOWING GRADING STANDARDS: NLGA 131 a,b,c; WCLIB 131 a,b,cc; WWPA 80.10, 80.11, 80.12.
2. POSTS TO HAVE APPLIED STAIN: SHERWIN WILLIAMS "BANYAN BROWN".
3. METAL SIGN AND BRACKETS TO BE POWDERCOATED; COLOR: ROHM & HASS "RUST."
4. SIGN COPY/GRAPHICS: APPLIED VINYL; COLOR: REFLECTIVE, WHITE.
5. FASTENERS TO BE TYPE 304 OR TYPE 316 STEEL. USE NYLON WASHERS AT ALL PENETRATIONS TO ISOLATE STEEL HARDWARE FROM ALUMINUM SIGN AND BRACKETS.
6. ANTI-GRAFFITI COATING TO BE APPLIED TO THE METAL SIGN FACE. BASIS-OF-DESIGN: VANDLTOP (MFR) SACRIFICIAL TOP COAT OR APPROVED EQUAL. APPLY PER MANUFACTURER INSTRUCTIONS.



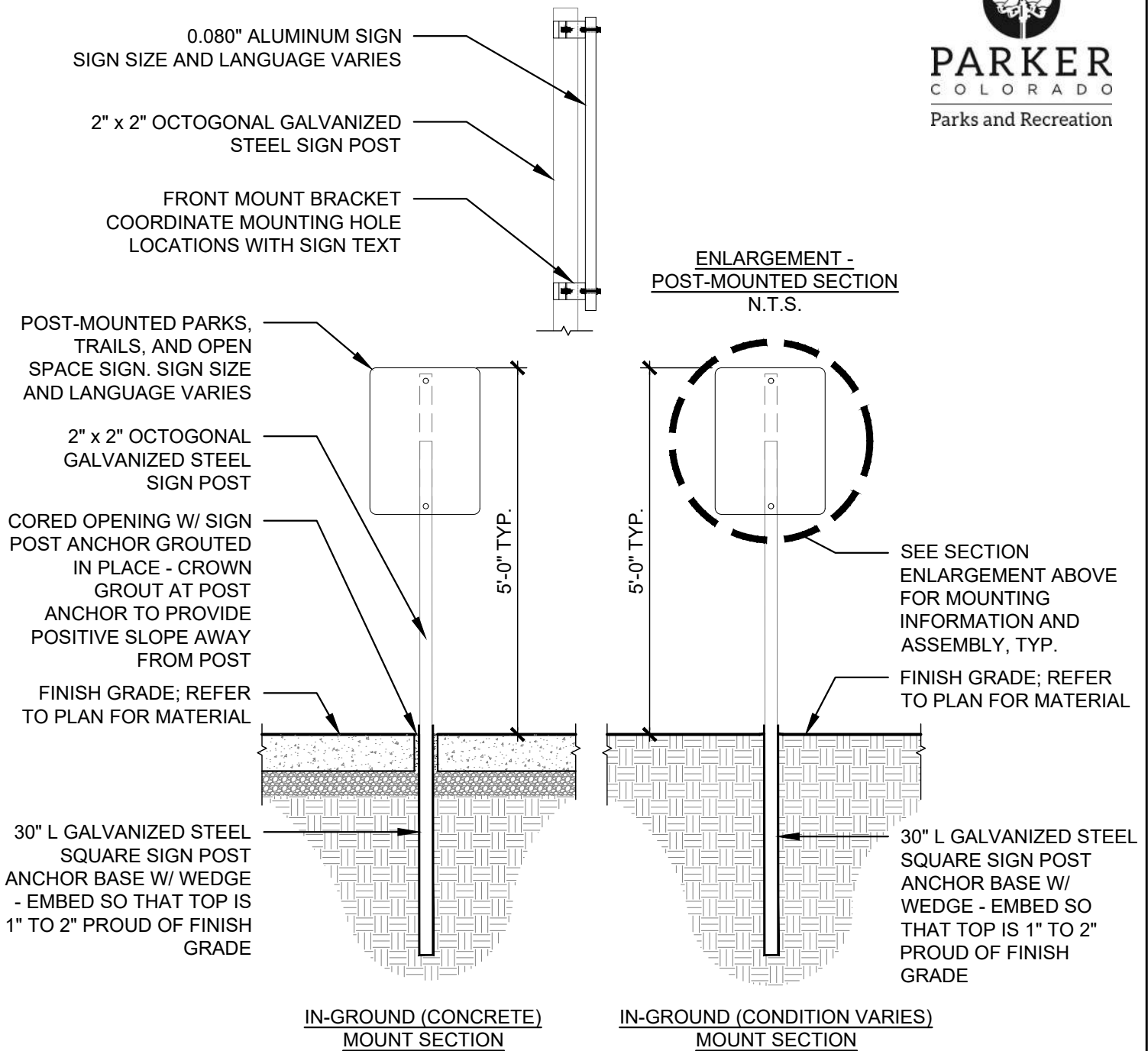
PARK DIRECTIONAL SIGNAGE

1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



PARKER
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BASIS-OF-DESIGN:

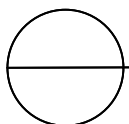
S-SQUARE TUBE PRODUCTS (MFR) "NEX SIGN POST - PLAIN", 12 GA., GALVANIZED, WITH 30" L OCTOGONAL SIGN POST. INCLUDE NEX ANCHOR BASE, WEDGE, AND FRONT MOUNT BRACKET W/ PEM NUTS.

NOTES:

1. REFER TO SECTION 06, SIGNAGE STANDARDS FOR FURTHER DESIGN CRITERIA, LANGUAGE, SIZE, AND COLOR. FOLLOW TOWN SIGN STANDARDS.
2. REFER TO PLANS FOR GROUND CONDITION
3. ALL SIGNS TO HAVE UV RESISTANT AND WATERPROOF VINYL GRAPHIC WITH PERMANENT UV PROTECTED LAMINATE FINISH (GRAFFITI PROOF COATING)

PARKS, TRAILS, AND OPEN SPACE

REGULATORY SIGNS - IN-GROUND MOUNT

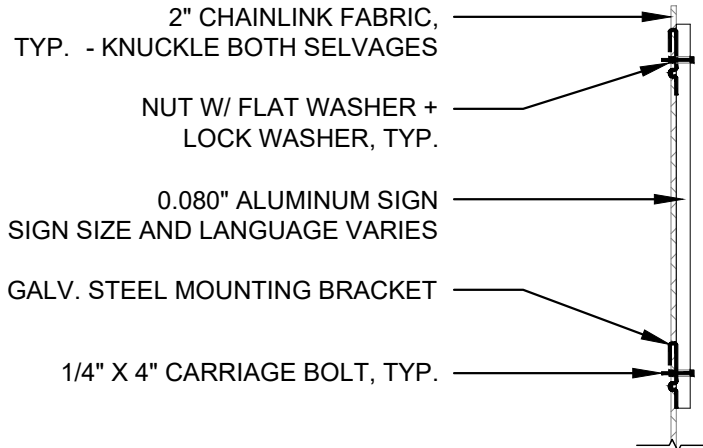


1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS



PARKER
COLORADO
Parks and Recreation



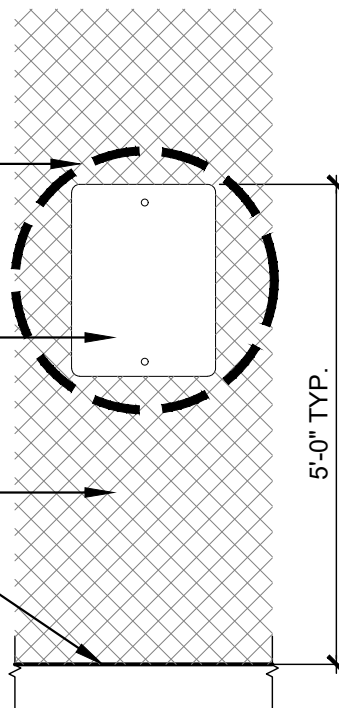
ENLARGEMENT -
FENCE-ATTACHMENT SECTION
N.T.S.

SEE SECTION ENLARGEMENT ABOVE FOR
MOUNTING INFORMATION AND ASSEMBLY

FENCE-MOUNTED PARKS, TRAILS, AND
OPEN SPACE SIGN. SIGN SIZE AND
LANGUAGE VARIES

2" CHAINLINK FABRIC, TYP.
- KNUCKLE BOTH SELVAGES

FINISH GRADE; REFER TO PLAN FOR
GROUND CONDITION

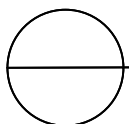


FENCE-MOUNT
ELEVATION

NOTES:

1. BASIS-OF-DESIGN: REFER TO SECTION 06, SIGNAGE STANDARDS FOR FURTHER DESIGN CRITERIA, LANGUAGE, SIZE, AND COLOR. FOLLOW TOWN SIGN STANDARDS.
2. ALL SIGNS TO HAVE UV RESISTANT AND WATERPROOF VINYL GRAPHIC WITH PERMANENT UV PROTECTED LAMINATE FINISH (GRAFFITI PROOF COATING)

PARKS, TRAILS, AND OPEN SPACE REGULATORY SIGNS - FENCE MOUNT

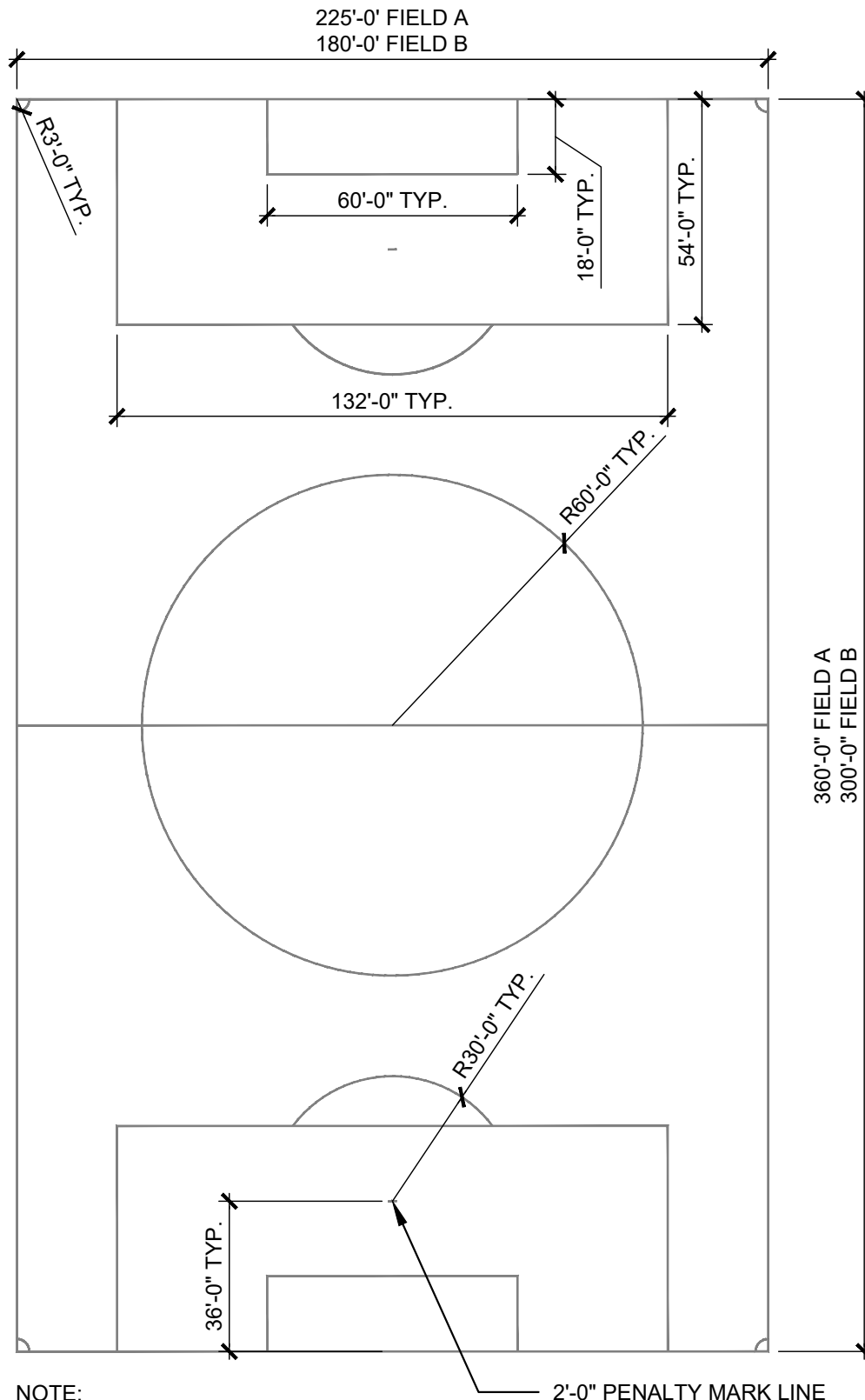


1/2" = 1'-0"

TOWN OF PARKER STANDARD DETAILS

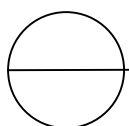


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NOTE:

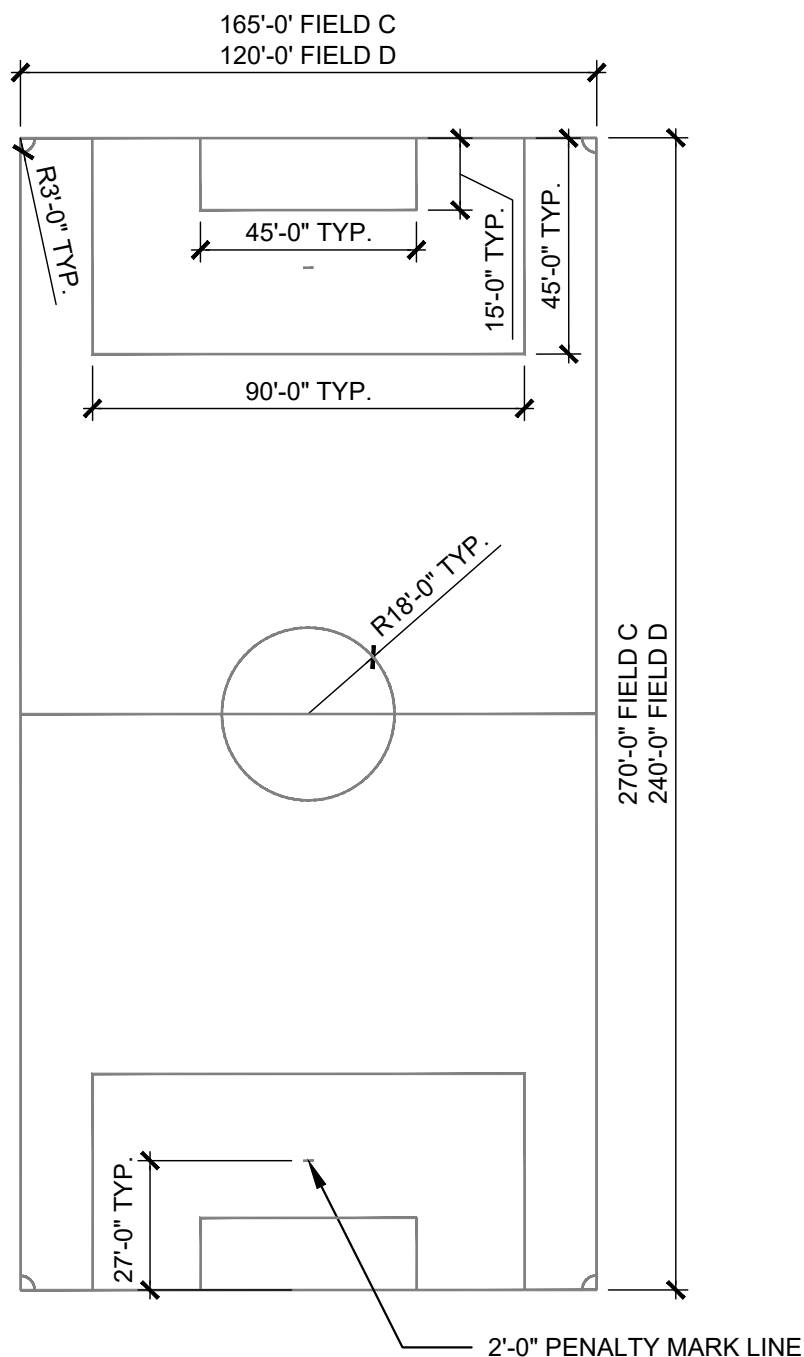
1. BLUEGRASS OR SYNTHETIC TURF; RE: PLANS
2. ALL LINE STRIPING TO BE 4" WIDTH



SOCCER FIELD LAYOUT - 360' x 225' OR 300' x 180'

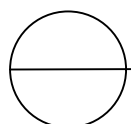
1" = 40'-0"

TOWN OF PARKER STANDARD DETAILS



NOTE:

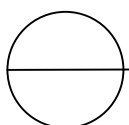
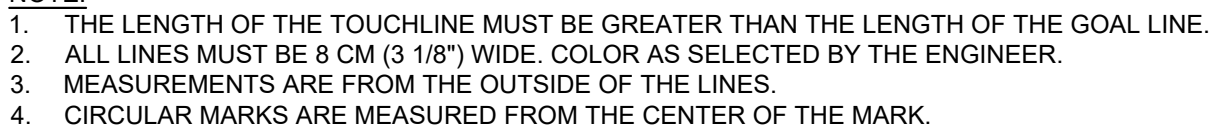
1. BLUEGRASS OR SYNTHETIC TURF; RE: PLANS
2. ALL LINE STRIPING TO BE 4" WIDTH



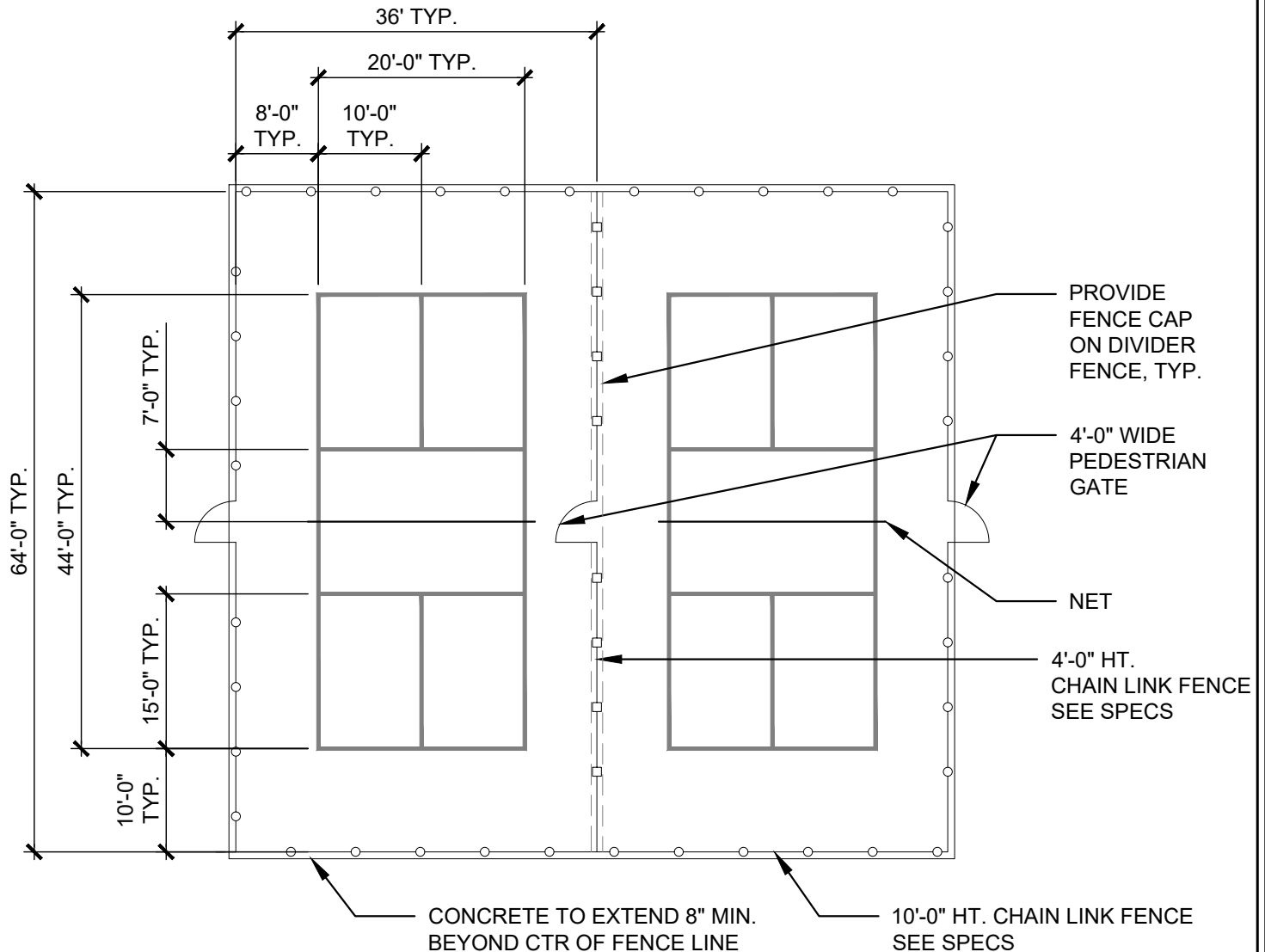
SOCCER FIELD LAYOUT - 270' x 165' OR 240' x 120'

1" = 40'-0"

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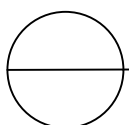

$$1'' = 20'-0''$$

TOWN OF PARKER STANDARD DETAILS



NOTES:

1. ALL LINES SHALL BE 2" WIDE, COLOR AS SELECTED BY THE ENGINEER.
2. ORIENT COURT NORTH-SOUTH WHEN FEASIBLE TO MINIMIZE SUN IN PLAYERS' VISION.
3. GATE LOCATIONS PER SITE PLAN. SEE SPECIFICATION SECTION 323113.
4. INSTALL DARK GREEN WINDSCREEN ON ALL 10' HEIGHT FENCING. SEE SPECIFICATION SECTION 116833.

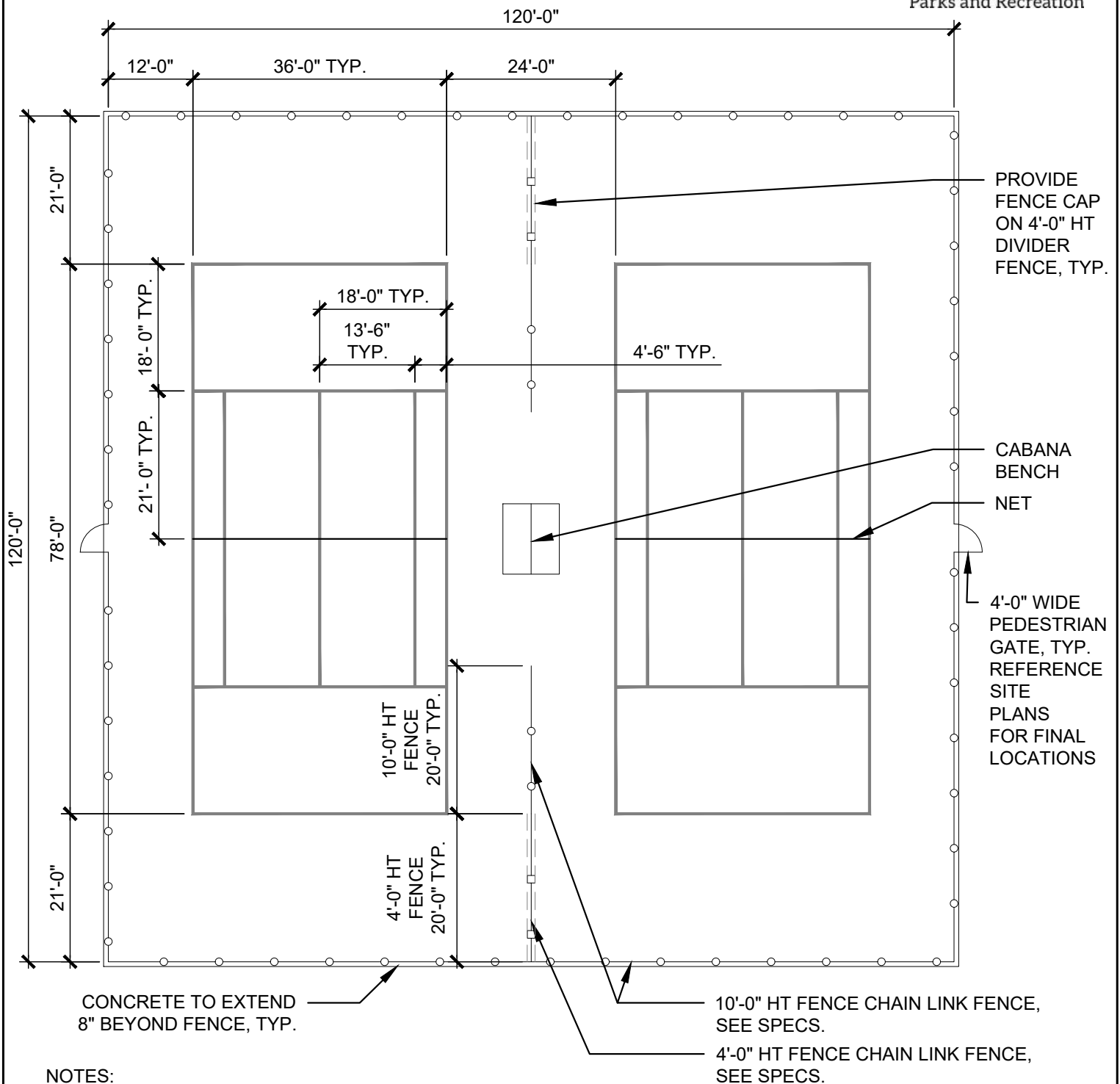


PICKLEBALL COURT LAYOUT

TOWN OF PARKER STANDARD DETAILS

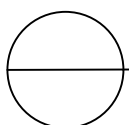


PARKER
COLORADO
Parks and Recreation



NOTES:

1. ALL LINES SHALL BE 2" WIDE, COLOR AS SELECTED BY THE ENGINEER.
2. GATE LOCATIONS PER SITE PLAN. SEE SPECIFICATION SECTION 323113.
3. INSTALL DARK GREEN WINDSCREEN ON ALL 10' HEIGHT FENCING. SEE SPECIFICATION SECTION 116833.



TENNIS COURT LAYOUT

1" = 20'-0"

PARKER
COLORADO
Parks and Recreation



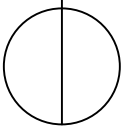
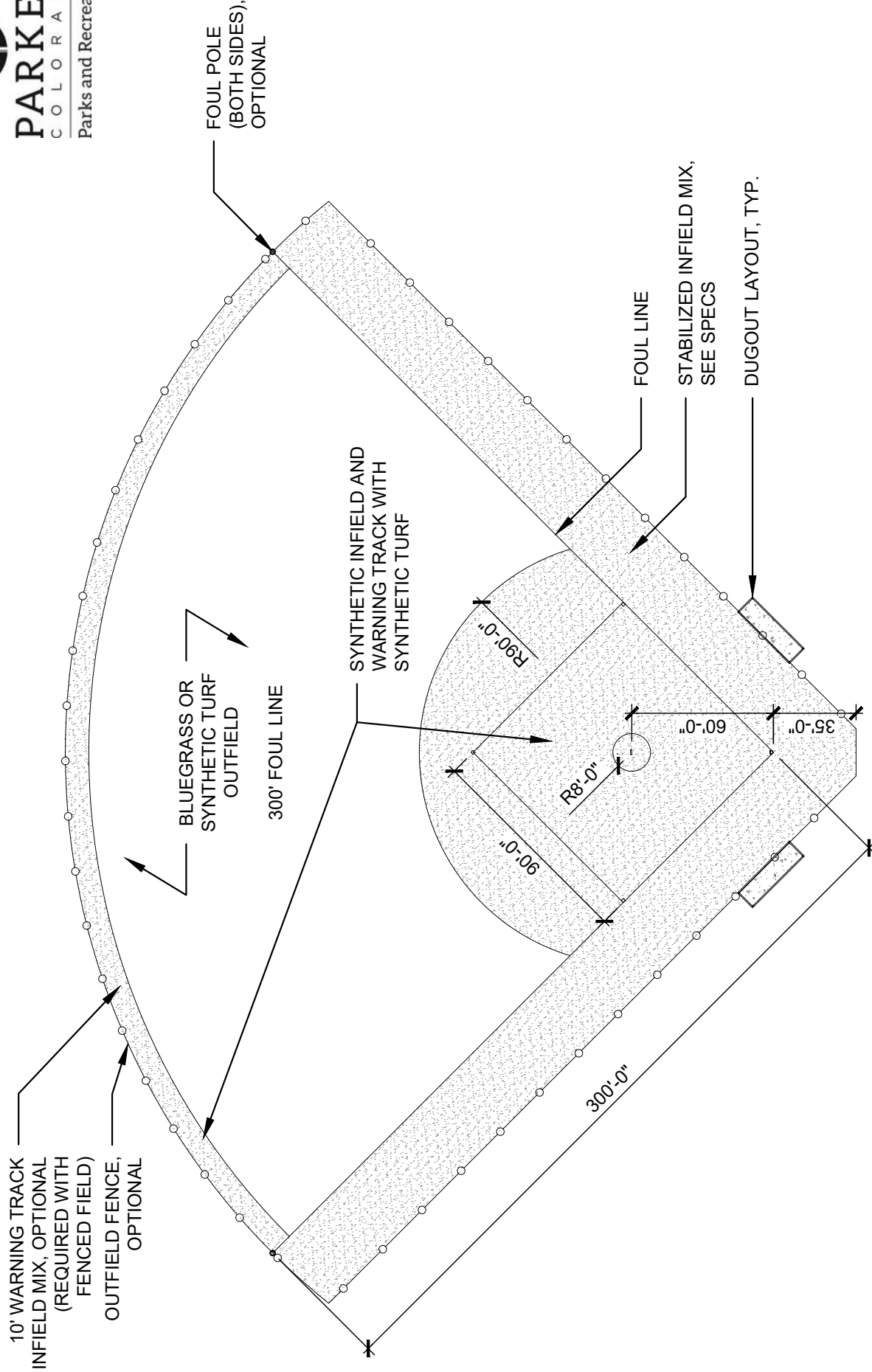
-

1" = 16'-0"

TOWN OF PARKER STANDARD DETAILS



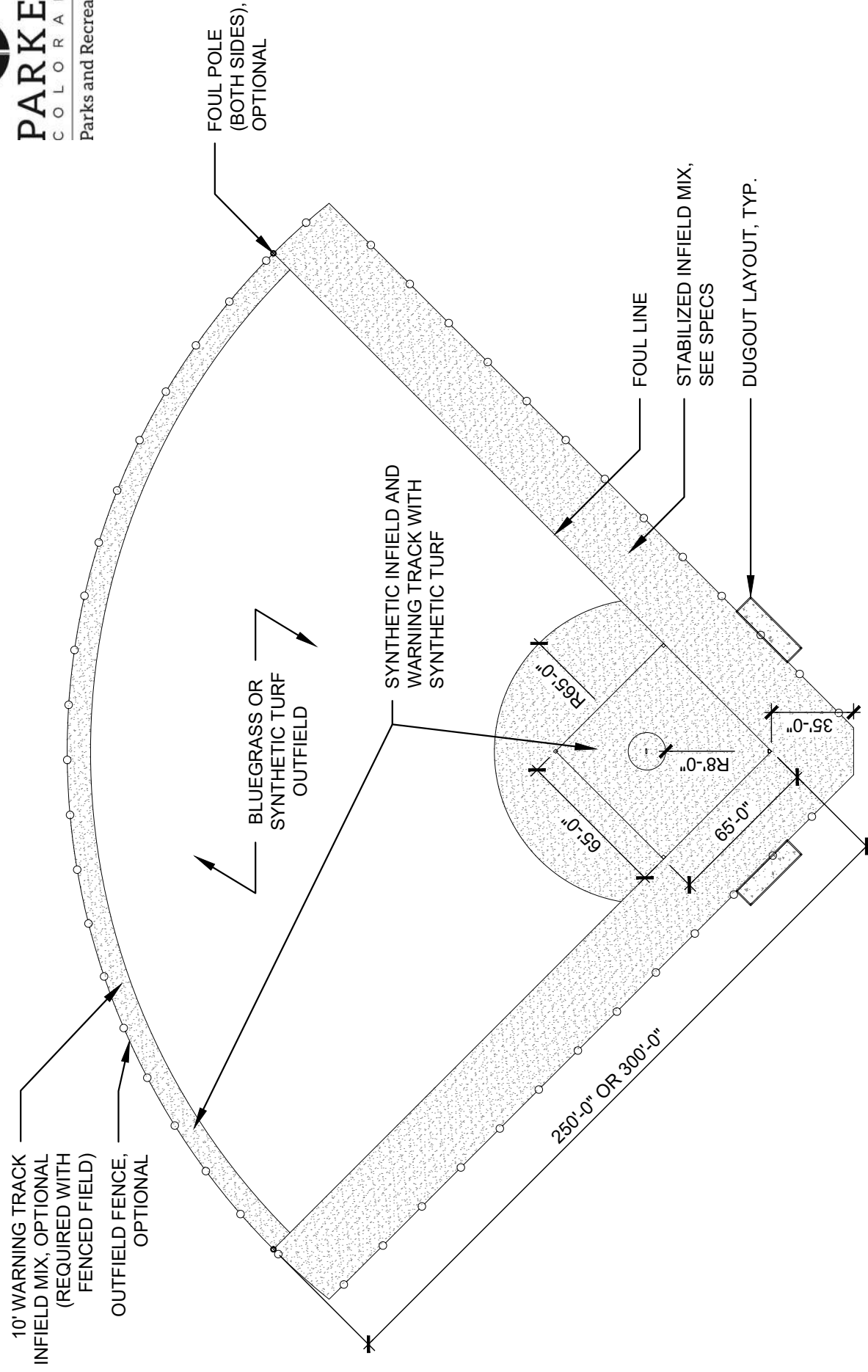
PARKER
C O L O R A D O
Parks and Recreation



BALLFIELD LAYOUT - 90' BASES

1" = 60'-0"

PARKER
C O L O R A D O
Parks and Recreation



BALLFIELD LAYOUT - 65' BASES

1" = 60'-0"

A background image of a park scene, overlaid with a dark teal color. In the foreground, several people are playing soccer on a grassy field. In the middle ground, there is a large, open-sided gazebo with a dark roof. In the background, there are trees and a row of houses on a slight hill. The overall atmosphere is peaceful and recreational.

APPENDIX B

STANDARD CONSTRUCTION SPECIFICATIONS

Note:

The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

TABLE OF CONTENTS

DIVISION 03 - CONCRETE

*SECTION 033000 - CAST-IN-PLACE CONCRETE

DIVISION 05 - METALS

SECTION 055213 - PIPE AND TUBE RAILINGS

DIVISION 10 - SPECIALTIES

SECTION 107360 - MANUFACTURED SHADE STRUCTURES

DIVISION 11 - EQUIPMENT

SECTION 116800 - PLAY EQUIPMENT AND STRUCTURES

SECTION 116833 - OUTDOOR ATHLETIC EQUIPMENT

DIVISION 12 - FURNISHINGS

SECTION 129300 - SITE FURNISHINGS

DIVISION 13 - SPECIAL CONSTRUCTION

SECTION 133416 - CONTINUOUS ELEVATED ANGLE-FRAME BLEACHERS

DIVISION 31 - EARTHWORK

SECTION 311000 - SITE CLEARING

SECTION 312000 - EARTH MOVING

SECTION 312270 - TEMPORARY EROSION AND SEDIMENTATION CONTROL

DIVISION 32 - EXTERIOR IMPROVEMENTS

*SECTION 321216 - ASPHALT PAVING

*SECTION 321313 - CONCRETE PAVING

*SECTION 321316 - DECORATIVE CONCRETE PAVING

*SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

SECTION 321400 - UNIT PAVING

SECTION 321540 - CRUSHER FINES PAVING

*SECTION 321723 - PAVEMENT MARKINGS

*SECTION 321726 - DETECTABLE WARNING SURFACING

SECTION 321800 - INFIELD SURFACING

SECTION 321813 - SYNTHETIC GRASS SURFACING

SECTION 321816 - PLAYGROUND PROTECTIVE SURFACING

SECTION 321823 - SPORTS COURT SURFACING

SECTION 323113 - CHAIN LINK FENCES AND GATES

SECTION 323119 - DECORATIVE METAL FENCES AND GATES

SECTION 323129 - WOOD FENCES AND GATES

SECTION 328400 - IRRIGATION

SECTION 329113 - SOIL PREPARATION

SECTION 329200 - TURF AND GRASSES
SECTION 329300 - PLANTS
SECTION 329600 - TRANSPLANTING

*Sections provided defer to or are supplemental to CDOT specifications. Relevant CDOT specifications include but are not limited to the following:

1. Plant Mix Pavements, General: CDOT Construction Specifications, Section 401.
2. Hot-Mix Asphalt Pavement: CDOT Construction Specifications, Section 403.
3. Prime Coat, Tack Coat, and Rejuvenating Agent: CDOT Construction Specifications, Section 407.
4. Joint and Crack Sealant: CDOT Construction Specifications, Section 408.
5. Asphalt Materials: CDOT Construction Specifications, Section 411.
6. Portland Cement Concrete Pavement: CDOT Construction Specifications, Section 412.
7. Detectable Warning Surfacing: CDOT Construction Specifications, Section 608
Detectable Warnings.
8. Preparation of Design Mixes: CDOT Construction Specifications, Section 601.05.
9. Fine Aggregates: CDOT Construction Specifications, Section 703.01.
10. Coarse Aggregate: CDOT Construction Specifications, Section 703.02.
11. Portland Cement: CDOT Construction Specifications, Section 701.01.
12. Fly Ash: CDOT Construction Specifications, Section 701.02.
13. High-reactivity Pozzolans: CDOT Construction Specifications 701.04.
14. Water: CDOT Construction Specifications, Section 712.01.
15. Air-Entraining Admixtures: CDOT Construction Specifications, Section 711.02.
16. Chemical Admixtures: CDOT Construction Specifications, Section 711.03.
17. Preformed Joint Filler: CDOT Construction Specifications, Section 705.01.
18. Joint Sealant with Backer Rod: CDOT Construction Specifications, Section 705.01.
19. Curing Materials: CDOT Construction Specifications, Section 711.01.
20. Reinforcing Steel: CDOT Construction Specifications, Section 709.01.
21. Dowel Bars and Tie Bars: CDOT Construction Specifications, Section 709.03.

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SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. **This section is supplemental to the most recent edition of the Colorado Department of Transportation (CDOT) Construction Specifications, Division 600 Miscellaneous Construction, Section 601 Structural Concrete. The work performed for Cast-in-Place Concrete shall be in accordance with CDOT Construction Specifications Section 601 Structural Concrete and revisions or supplemental information herein.**

1.2 SUMMARY

- A. Section includes:
 - 1. Section includes cast-in-place concrete conforming with CDOT Type B or Type D Portland cement concrete.
 - 2. Cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.
- B. The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.
- C. Related Requirements:
 - 1. Section 312000 "Earth Moving" for drainage fill under slabs-on-grade.
 - 2. Preparation of Design Mixes: CDOT Construction Specifications, Section 601.05.
 - 3. Fine Aggregates: CDOT Construction Specifications, Section 703.01.
 - 4. Coarse Aggregate: CDOT Construction Specifications, Section 703.02.
 - 5. Portland Cement: CDOT Construction Specifications, Section 701.01.
 - 6. Fly Ash: CDOT Construction Specifications, Section 701.02.
 - 7. High-reactivity Pozzolans: CDOT Construction Specifications 701.04.
 - 8. Water: CDOT Construction Specifications, Section 712.01.
 - 9. Air-Entraining Admixtures: CDOT Construction Specifications, Section 711.02.
 - 10. Chemical Admixtures: CDOT Construction Specifications, Section 711.03.
 - 11. Preformed Joint Filler: CDOT Construction Specifications, Section 705.01.
 - 12. Joint Sealant with Backer Rod: CDOT Construction Specifications, Section 705.01.
 - 13. Curing Materials: CDOT Construction Specifications, Section 711.01.
 - 14. Reinforcing Steel: CDOT Construction Specifications, Section 709.01.
 - 15. Dowel Bars and Tie Bars: CDOT Construction Specifications, Section 709.03.
 - 16. American Concrete Institutes (ACI) PRC-347.3: Guide to Formed Concrete Surfaces.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 SUMMARY

- A. Cast-in-place concrete shall conform to CDOT Construction Specifications, Division 600 Miscellaneous Construction, Section 601 Structural Concrete.

1.5 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
 - a. The Engineer.
 - b. Contractor's superintendent.
 - c. Independent testing agency responsible for concrete design mixtures.
 - d. Ready-mix concrete manufacturer.
 - e. Concrete Subcontractor.
 - f. Special concrete finish Subcontractor.
 - 2. Review special inspection and testing and inspecting agency procedures for field quality control, construction contraction and isolation joints, and joint-filler strips, semirigid joint fillers, steel reinforcement installation, and concrete protection.

1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include crystalline waterproofing admixtures.
- B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
 - 1. Indicate amounts of mixing water to be withheld for later addition at Project site.
- C. Steel Reinforcement Shop Drawings: Placing Drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.
- D. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.
 - 1. Location of construction joints is subject to approval of the Engineer.

1.7 INFORMATIONAL SUBMITTALS

- A. Welding certificates.
- B. Material Certificates: For each of the following, signed by manufacturers:
 - 1. Cementitious materials.
 - 2. Admixtures.
 - 3. Form materials and form-release agents.
 - 4. Steel reinforcement and accessories.
 - 5. Fiber reinforcement.
 - 6. Curing compounds.
 - 7. Bonding agents.
 - 8. Adhesives.
 - 9. Semirigid joint filler.
 - 10. Joint-filler strips.
 - 11. Repair materials.
- C. Material Test Reports: For the following, from a qualified testing agency:
 - 1. Aggregates.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
- B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
 - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- C. Welding Qualifications: Qualify procedures and personnel according to AWS D1.4/D 1.4M.
- D. Mockups for Site Walls: Cast wall section to demonstrate typical joints, surface finish, tolerances, treatments, and standard of workmanship.
 - 1. Build wall approximately six feet in length and to average height and full width of site wall design.
 - 2. Provide specified wall finish or finish options if selection is to be made from mockup.
 - 3. Reconstruct mockups as required until Engineer has provided written acceptance of mockup.
 - 4. Build wall in location that does not interfere with actual site wall work or work of other trades. Keep wall in place as a reference during course of work. Do not demolish and remove mockup until Engineer has reviewed all site wall work and authorized removal of mockup.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. Cast-in-place concrete CDOT Type B or Type D Portland cement concrete conforming to CDOT Construction Specifications, Division 600 Miscellaneous Construction, Section 601 Structural Concrete.

PART 3 - EXECUTION

3.1 GENERAL

- A. Execution conforming to CDOT Construction Specifications, Division 600 Miscellaneous Construction, Section 601 Structural Concrete.

3.2 FINISHING FORMED SURFACES

- A. Conform to American Concrete Institutes (ACI) PRC-347.3: Guide to Formed Concrete Surfaces.
- B. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 055213 - PIPE AND TUBE RAILINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Steel pipe and tube railings.
- B. Related Requirements:
 - 1. Section 099600 "High Performance Coatings" for coatings applied to exterior railings.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of anchorages for railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- C. Schedule installation so wall attachments are made only to completed walls. Do not support railings temporarily by any means that do not satisfy structural performance requirements.

1.5 ACTION SUBMITTALS

- A. Product Data: For the following:
 - 1. Manufacturer's product lines of mechanically connected railings.

2. Railing brackets.
 3. Grout, anchoring cement, and paint products.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each type of exposed finish required.
1. Sections of each distinctly different linear railing member, including handrails, top rails, posts, and balusters, including finish.
 2. Fittings and brackets.
- D. Delegated-Design Submittal: For railings, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.6 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to the following:
1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

1.8 FIELD CONDITIONS

- A. Field Measurements: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 FABRICATORS

- A. Source Limitations: Obtain each type of railing from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design railings, including attachment to building or site construction.
- B. Structural Performance: Railings, including attachment to building construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
1. Handrails and Top Rails of Guards:
 - a. Uniform load of 50 lbf/ ft. applied in any direction.
 - b. Concentrated load of 200 lbf applied in any direction.

- c. Uniform and concentrated loads need not be assumed to act concurrently.
 - 2. Infill of Guards:
 - a. Concentrated load of 50 lbf applied horizontally on an area of 1 sq. ft..
 - b. Infill load and other loads need not be assumed to act concurrently.
 - C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.
- 2.3 METALS, GENERAL
- A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.
 - B. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails unless otherwise indicated.
- 2.4 STEEL AND IRON
- A. Recycled Content of Steel Products: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 25 percent.
 - B. Tubing: ASTM A 500 (cold formed) or ASTM A 513.
 - C. Pipe: ASTM A 53/A 53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
 - 1. Provide hot dip galvanized and high performance paint finish for exterior installations and where indicated.
 - D. Plates, Shapes, and Bars: ASTM A 36/A 36M.
- 2.5 FASTENERS
- A. General: Provide the following:
 - 1. Hot-Dip Galvanized Railings: Type 304 stainless-steel or hot-dip zinc-coated steel fasteners complying with ASTM A 153/A 153M or ASTM F 2329 for zinc coating.
 - B. Fasteners for Anchoring Railings to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring railings to other types of construction indicated and capable of withstanding design loads.
 - C. Fasteners for Interconnecting Railing Components:
 - 1. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless otherwise indicated.

2. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless exposed fasteners are unavoidable or are the standard fastening method for railings indicated.
 3. Provide tamper-resistant flat-head machine screws for exposed fasteners unless otherwise indicated.
- D. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors capable of sustaining, without failure, a load equal to 6 times the load imposed when installed in unit masonry and 4 times the load imposed when installed in concrete, as determined by testing according to ASTM E 488/E 488M, conducted by a qualified independent testing agency.
1. Material for Exterior Locations and Where Stainless Steel Is Indicated: Alloy Group 2 stainless-steel bolts, ASTM F 593, and nuts, ASTM F 594.

2.6 MISCELLANEOUS MATERIALS

- A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
- B. Etching Cleaner for Galvanized Metal: Complying with MPI#25.
- C. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- D. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.
1. Use primer containing pigments that make it easily distinguishable from zinc-rich primer.
- E. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.

2.7 FABRICATION

- A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.
- B. Shop assemble railings to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.
- C. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- D. Form work true to line and level with accurate angles and surfaces.
- E. Fabricate connections that are exposed to weather in a manner that excludes water. Provide weep holes where water may accumulate.

- F. Cut, reinforce, drill, and tap as indicated to receive finish hardware, screws, and similar items.
- G. Connections: Fabricate railings with welded connections unless otherwise indicated.
- H. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove flux immediately.
 - 4. At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.
- I. Nonwelded Connections: Connect members with concealed mechanical fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.
 - 1. Fabricate splice joints for field connection using an epoxy structural adhesive if this is manufacturer's standard splicing method.
- J. Form Changes in Direction as Follows:
 - 1. As detailed.
- K. For changes in direction made by bending, use jigs to produce uniform curvature for each repetitive configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- L. Close exposed ends of railing members with prefabricated end fittings.
- M. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work. Fabricate anchorage devices capable of withstanding loads imposed by railings. Coordinate anchorage devices with supporting structure.

2.8 STEEL AND IRON FINISHES

- A. Galvanized Railings:
 - 1. Hot-dip galvanize exterior steel railings, including hardware, after fabrication.
 - 2. Comply with ASTM A 123/A 123M for hot-dip galvanized railings.
 - 3. Comply with ASTM A 153/A 153M for hot-dip galvanized hardware.
 - 4. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.
 - 5. Fill vent and drain holes that are exposed in the finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.
- B. For galvanized railings, provide hot-dip galvanized fittings, brackets, fasteners, sleeves, and other ferrous components.
- C. Preparation for Shop Priming: Prepare hot-dip galvanized steel railings, fabrications, and hardware in accordance with ASTM D 6386.

- D. Primer Application: Apply shop primer to prepared surfaces of railings unless otherwise indicated. Comply with requirements in SSPC-PA 1, "Shop, Field, and Maintenance Painting of Steel," for shop painting. Primer need not be applied to surfaces to be embedded in concrete or masonry.
- E. Shop-Painted Finish: Comply with Section 099600 "High-Performance Coatings."
 - 1. Color: As selected by Architect from manufacturer's full range.
- F. High-Performance Coating: Apply epoxy intermediate and polyurethane topcoats to prime-coated surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Shop, Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.
 - 1. Color: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine plaster and gypsum board assemblies, where reinforced to receive anchors, to verify that locations of concealed reinforcements are clearly marked for Installer. Locate reinforcements and mark locations if not already done.

3.2 INSTALLATION, GENERAL

- A. Fit exposed connections together to form tight, hairline joints.
- B. Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
 - 1. Do not weld, cut, or abrade surfaces of railing components that are coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
 - 2. Set posts plumb within a tolerance of 1/16 inch in 3 feet.
 - 3. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.
- C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.
 - 1. Coat, with a heavy coat of bituminous paint, concealed surfaces of aluminum that are in contact with grout, concrete, masonry, wood, or dissimilar metals.
- D. Adjust railings before anchoring to ensure matching alignment at abutting joints.
- E. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing railings and for properly transferring loads to in-place construction.

3.3 RAILING CONNECTIONS

- A. Nonwelded Connections: Use mechanical or adhesive joints for permanently connecting railing components. Seal recessed holes of exposed locking screws using plastic cement filler colored to match finish of railings.
- B. Welded Connections: Use fully welded joints for permanently connecting railing components. Comply with requirements for welded connections in "Fabrication" Article whether welding is performed in the shop or in the field.
- C. Expansion Joints: Install expansion joints at locations indicated but not farther apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending 2 inches beyond joint on either side, fasten internal sleeve securely to one side, and locate joint within 6 inches of post.

3.4 ANCHORING POSTS

- A. Form or core-drill holes not less than 8 inches deep and 3/4 inch larger than OD of post for installing posts in concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions.
- B. If post flange indicated on the Drawings, cover anchorage joint with flange of same metal as post, attached to post with set screws.
- C. If no post flange is indicated on the Drawings, leave anchorage joint exposed with 1/8-inch buildup, sloped away from post.
- D. Install removable railing sections, where indicated, in slip-fit metal sockets cast in concrete.

3.5 ADJUSTING AND CLEANING

- A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas, and repair galvanizing to comply with ASSTM A 780/A 780M.

3.6 PROTECTION

- A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.

END OF SECTION

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SECTION 107360.01 - MANUFACTURED SHADE STRUCTURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawing and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes:
 - 1. Manufactured steel shade structures.
- B. Related Requirements:
 - 1. Section 033000 "Cast-in-Place Concrete" for foundations related to manufactured shade structures.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of shade structure indicated. Include construction details relative to materials, individual components and profiles, and finishes.
- B. Shop Drawings: For full shade structure assembly and foundations; include plans, elevations, sections, details, coordination with electrical components, and attachments to other Work. Indicate relationship of shade structure and foundations to adjacent paving and site features.
- C. Samples: For each finish material, manufacturers standard, but not less than 3 by 4 inches.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Provide maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials.

1.7 QUALITY ASSURANCE

- A. Source Limitations: Obtain each shade structure system from a single manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Requirements:
 - 1. Unload materials with protective straps or padded forks; no hand unloading or chains.
 - 2. Store product in a dry place protected from weather and out of direct sun.

1.9 MANUFACTURER WARRANTY

- A. Provide manufacturer's standard warranty.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design shade structure and foundations to which it is attached.
- B. Applicable Codes: Design and workmanship shall be in accordance with IBC 2018 or latest edition and all applicable codes of local jurisdiction.
- C. Minimum Design Loads: Design loads shall be in accordance with ASCE/SEI Minimum Design Loads and Associated Criteria for Buildings and Other Structures, latest edition.
- D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.
 - 1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

2.2 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or approved substitution product by one of the following:
 - 1. Classic Recreation Systems, Inc.
 - 2. Icon Shelter Systems.
 - 3. CEAS West

2.3 FABRICATION

- A. Provide pre-cut and pre-fabricated components including all parts necessary to field-construct the shade structures.

2.4 FINISHES, GENERAL

- A. Provide manufacturer's factory installed high-performance coatings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, construction layout, and other conditions affecting performance of the Work.
- B. Do not begin installation before final grading is completed unless otherwise permitted by the Engineer.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Provide construction layout and field engineering as specified in Section 17300 "Execution."
- B. Verify locations of sub-grade utilities, lawn sprinkler systems, and underground structures prior to installation.

3.3 INSTALLATION

- A. Comply with manufacturer's written instructions for installing shade structures.

3.4 CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

3.5 PROTECTION

- A. Protect finishes of shade structures from damage during construction period with temporary protective coverings approved by shade structure manufacturer. Remove protective coverings at time of Substantial Completion.

- B. Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit, or provide new units.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 116800 - PLAY EQUIPMENT AND STRUCTURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes playground equipment as follows:
 - 1. Freestanding playground equipment.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Definitions in ASTM F1487 apply to Work of this Section.
- C. IPEMA: International Play Equipment Manufacturers Association.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For each type of playground equipment.
 - 1. Include plans, elevations, sections, and attachment details.
 - 2. Include fall heights and use zones for playground equipment, coordinated with the critical-height values of protective surfacing specified in Section 321816.13 "Playground Protective Surfacing."
- C. Samples for Initial Selection: For each type of exposed finish.
 - 1. Manufacturer's color charts.

2. Include Samples of accessories involving color selection.

1.6 INFORMATIONAL SUBMITTALS

- A. Sample Warranty: For manufacturer's special warranties.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For playground equipment and finishes to include in maintenance manuals.

1.8 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of playground equipment that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:
 - a. Structural failures.
 - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use.
2. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain playground equipment from single source from single manufacturer.
- B. Playground equipment and components shall have the IPEMA Certification Seal.
- C. The following playground equipment and components shall have the IPEMA Certification Seal:
 1. Equipment provided on the Drawings. If playground equipment is custom and does not have an IPEMA Certification Seal, equipment shall be inspected by an independent Certified Playground Safety Inspector (CPSI) verifying play equipment meets safety requirements by the Consumer Product Safety Commission.

2.2 PERFORMANCE REQUIREMENTS

- A. Safety Standard: Provide playground equipment according to ASTM F1487.

2.3 FABRICATION

- A. Provide sizes, strengths, thicknesses, wall thickness, and weights of components as required to comply with requirements in ASTM F1487. Factory drill components for field assembly. Unnecessary holes in components, not required for field assembly, are not permitted. Provide complete play structures, including supporting members and connections, means of access and egress, designated play surfaces, barriers, guardrails, handrails, handholds, and other components indicated or required for equipment indicated.
- B. Metal Frame: Fabricate main-frame upright support posts from metal pipe or tubing with cross-section profile and dimensions as required. Unless otherwise indicated, provide each pipe or tubing main-frame member with manufacturer's standard drainable bottom plate or support flange. Fabricate secondary frame members, bracing, and connections from either steel or aluminum.
- C. Wood Frame: Fabricate main-frame upright support posts from wood. Fabricate secondary frame members, bracing, and connections from wood, steel, or aluminum.
- D. Composite Frame: Fabricate main-frame upright support posts from metal and plastic. Fabricate secondary frame members, bracing, and connections from either steel or aluminum.
- E. Play Surfaces: Manufacturer's standard elevated drainable decks, platforms, landings, walkways, ramps, and similar transitional play surfaces, designed to withstand loads; fabricated from perforated or expanded metal made into floor units with slip-resistant finish. Fabricate units in modular sizes and shapes to form assembled play surfaces indicated.
- F. Protective Barriers: Fabricate according to ASTM F1487. Extend barriers to height above the protected elevated surface according to requirements for use by age group indicated. Fabricate from one or more of the following:
 - 1. Welded-metal pipe or tubing with vertical bars.
 - 2. Steel sheet with openings for vision and ventilation.
 - 3. Metal-pipe or -tubing frame with wire-mesh infill panels.
 - 4. Transparent plastic panels with openings.
 - 5. Vertical wood balusters with metal pipe or tubing or wood frame.
 - 6. Wood panels with openings for vision and ventilation.
- G. Guardrails: Provide guardrails configured to completely surround the protected area, except for access openings. Fabricate from welded metal pipe or tubing. Extend guardrails according to requirements for use by age group indicated.
- H. Handrails: Welded metal pipe or tubing, maximum OD between 0.95 and 1.55 inches.
 - 1. Provide handrails at heights to comply with requirements for use by age group indicated according to ASTM F1487.
- I. Roofs and Canopies: Designed to discourage and minimize climbing by users.
 - 1. Fabricated from metal-pipe or -tubing-framed welded wire opaque plastic.
- J. Signs: Manufacturer's standard sign panels, fabricated from opaque plastic with graphics molded in, attached to freestanding, upright support posts.

1. Text: Minimum informational content according to ASTM F1487.
2. Colors: As indicated on the Drawings.

2.4 MATERIALS

- A. Aluminum: Material, alloy, and temper recommended by manufacturer for type of use and finish indicated.
- B. Steel: Material types, alloys, and forms recommended by manufacturer for type of use and finish indicated, hot-dip galvanized.
- C. Stainless-Steel Sheet: Type 304; finished on exposed faces with No. 2B finish.
- D. Wood: As indicated, surfaced smooth on all sides and all edges rounded.
- E. Opaque Plastics: Color impregnated, UV stabilized, and mold resistant.
- F. Transparent Plastic: Abrasion-resistant, UV-stabilized polycarbonate sheet; clear, colorless; not less than 3/16 inch thick.
- G. Suspension Chain and Fittings: ASTM A467/A467M, Class CS, 4/0 or 5/0, welded-straight-link coil chain; hot-dip galvanized; with commercial-quality, hot-dip galvanized steel connectors and swing or ring hangers.
- H. Suspension Cable: Manufacturer's standard hot-dip galvanized zinc-plated or PVC-coatedable; with commercial-quality, hot-dip galvanized or zinc-plated steel connectors and swing or ring hangers.
- I. Iron Castings and Hangers: Malleable iron, ASTM A47/A47M, Grade 32510, hot-dip galvanized.
- J. Post Caps: Cast aluminum or color-impregnated, UV-stabilized, mold-resistant polyethylene or polypropylene; color to match posts.
- K. Platform Clamps and Hangers: Cast aluminum or zinc-plated steel, not less than 0.105-inch-nominal thickness.
- L. Hardware: Manufacturer's standard; commercial-quality; corrosion-resistant; hot-dip galvanized steel and iron, stainless steel, or aluminum; of a vandal-resistant design.
- M. Fasteners: Manufacturer's standard; corrosion-resistant; hot-dip galvanized or zinc-plated steel and iron, or stainless steel; permanently capped; and theft resistant.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for earthwork, subgrade elevations, surface and subgrade drainage, and other conditions affecting performance of the Work.

1. Do not begin installation before final grading required for placing playground equipment and protective surfacing is completed.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written installation instructions for each equipment type unless more stringent requirements are indicated. Anchor playground equipment securely, positioned at locations and elevations indicated.
 1. Maximum Equipment Height: Coordinate installed fall heights of equipment with finished elevations and critical-height values of protective surfacing. Set equipment so fall heights and elevation requirements for age group use and accessibility are within required limits. Verify that playground equipment elevations comply with requirements for each type and component of equipment.
- B. Post and Footing Excavation: Excavate holes for posts and footings as indicated in firm, undisturbed or compacted subgrade soil.
- C. Post Set on Subgrade: Level bearing surfaces with drainage fill to required elevation.
- D. Post Set with Concrete Footing: Comply with Section 033000 "Cast-in-Place Concrete" for measuring, batching, mixing, transporting, forming, and placing concrete.
 1. Set equipment posts in concrete footing. Protect portion of posts above footing from concrete splatter. Verify that posts are set plumb or at the correct angle, alignment, height, and spacing.
 - a. Ensure footers do not impede safe zones or may be exposed by routine and normal play.
 - b. Place concrete around posts and vibrate or tamp for consolidation. Hold posts in position during placement and finishing operations until concrete is sufficiently cured.
 2. Embedded Items: Follow equipment manufacturer's written instructions and drawings to ensure correct installation of anchorages for equipment.
 3. Finishing Footings: Smooth top, and shape to shed water.

3.3 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative.
 1. Perform inspection and testing for each type of installed playground equipment according to ASTM F1487.
- C. Playground equipment items will be considered defective if they do not pass tests and inspections.

- D. Prepare test and inspection reports.
- E. Notify Owner 48 hours in advance of date(s) and time(s) of testing and inspection.

END OF SECTION

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SECTION 116833.01 - OUTDOOR ATHLETIC EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Supplementary Conditions and Division 01 Specification Section, apply to this Section.

1.2 SUMMARY

- 1. Soccer Goal.
- 2. Lacrosse Goal.
- 3. Baseball: Prefabricated Dugout, Players Bench, Foul Pole, Outfield Fence Guard, Bases, Home Plate, Pitching Rubber, and Scoreboard.
- 4. Badminton: Net Posts and Nets.
- 5. Basketball Goal.
- 6. Bocce Rack.
- 7. Futsal Goal.
- 8. Pickleball: Net Posts, Nets, and Windscreens.
- 9. Pickleball/Tennis Cabana.
- 10. Tennis: Net Posts, Nets, and Windscreens.
- 11. Volleyball: Net Posts and Nets.

- B. Related Requirements:

- 1. Section 033000 Cast-in-Place Concrete for foundations.
- 2. Section 323113 Chainlink Fences and Gates.
- 3. Section 329250 Synthetic Grass Surfacing.
- 4. Section 321823.03 Sports Court Surfacing.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 SUBMITTALS

- A. Product data: Submit manufacturer's technical data and installation instructions for each item of equipment required.
- B. Operations and maintenance: Provide tools, touch-up paint, maintenance recommendations, recommendations for graffiti removal and spare parts including nuts and bolts.

C. Shop Drawings for Prefabricated Dugout.

1. Include plans, elevations, sections, details, and attachments to other work. Include foundations.
2. For structural performance of assembly, foundations, and attachment of assembly to foundations, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

PART 2 - PRODUCTS

2.1 SOCCER GOAL

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Scoremaster (mfr) "Movable Regulation Soccer Goals", or approved equivalent.

1. Size in accordance with field size, or as approved by Engineer.

2.2 LACROSSE GOALS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Scoremaster (mfr) "SM-L1000 Lacrosse Goals", or approved equivalent.

2.3 BASEBALL

- A. Prefabricated Dugout.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Sportsfield Specialties, Inc. (mfr.) GD8X32 - GameShade® Dugout, 8'W x 32'L.
 - a. Powdercoated metal color: As selected by Engineer from manufacturer's full range of available colors.
 - b. Delegated Design: Include Stamped and Sealed Drawings and Calculations by a Licensed Professional Engineer of Record in the State of Colorado. Include design of full assemble, included foundations and attachments.
 - 1) Performance Requirements: Assembly and attachments shall withstand the design wind loads and stresses for under exposure conditions indicated for project location according to [ASCE/SEI 7] <Insert requirement>.

- B. Players Bench.

1. Basis-of-Design Product: Subject to compliance with requirements, provide PW Athletic Manufacturing Co. (mfr) Model: # 1103-21G-21' Aluminum Bench with back with galvanized frame, or approved equivalent.
 - a. Color: Silver.
 - b. Surface-mount, typical. In-ground mount with approval of Engineer.

- C. Foul Pole.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Sportsfeld Specialties (mfr) Model: #LGFP420, 20'-0" height, with mesh swing, or approved equivalent.
 - a. Color: Yellow.
 - b. Embed mount in ground sleeve.
 - c. Delegated Design: Provide engineer's sealed drawings and calculations for full assembly, including foundation design.
- D. Outfield Fence Cap/Guard.
 1. Basis-of-Design Product: Subject to compliance with requirements, provide Beacon Athletics (mfr) "Fence Guard - Premium Thickness", or approved equivalent.
 - a. Color: Yellow:
 - b. Provide continuous along length outfield fence.
- E. Bases.
 1. Basis-of-Design Product: Subject to compliance with requirements, provide Beacon Athletics (mfr), or approved equivalent.
 - a. First Base: "Champro Pro-Style Double 1st Base Set."
 - b. All Other Bases: "Champro Pro-Style Base Set."
- F. Home Plate and Pitching Rubber.
 1. Basis-of-Design Product: Subject to compliance with requirements, provide Beacon Athletics (mfr), or approved equivalent.
 - a. "Home Plate with Anchor and Stanchion."
 - b. Pitcher's Rubber: "Champro 3-Spike Pitcher's Rubber."
 - 1) Provide at 300' foul line fields, or other distances where approved by Engineer.
- G. Scoreboard.
 1. Manufacturer: Subject to compliance with requirements, provide products by one of the following or approved equivalent.
 - a. Fair-Play Corporation, model BA-7100-2.
 - b. Nevco, model 1600.
 - c. Electro-Mech Scoreboard Company, model LX1250-ETN.
 2. Description: Single cabinet, aluminum construction, electronic display scoreboard with the following features:
 - a. Size: 14-feet length by 5-feet height overall minimum cabinet.
 - b. Cabinet Finish: High performance coating, color as selected by Engineer from manufacturer's full range.
 - c. Includes captions for: HOME, GUESTS, INNING, BALL, STRIKE, OUT, H, E. 9-inch height minimum white lettering.

- d. Digits: 18-inch height minimum, LED, amber color.
- e. Two-post mounting.
- f. Integrated lighting protection.
- g. Power: 120 VAC.
- h. Control Console: Designed for wired or wireless use.
- i. Warranty: 5-years minimum.

2.4 BADMINTON

A. Net Posts.

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Porter (mfr) "Ultimate Outdoor Volleyball Standards," or approved equivalent.
 - a. Embed mount in ground sleeves.

B. Nets.

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Porter (mfr) "Badminton Net 20' x 30'", Product Code: 2236110, or approved equivalent.

2.5 BASKETBALL GOAL

A. Basis-of-Design Product: Subject to compliance with requirements, provide Porter (mfr) "Heavy-Duty Basketball System," Product Code: 195580, or approved equivalent.

- 1. Embed mount.
- 2. Delegated Design: Provide engineer's sealed drawings and calculations for full assembly, including foundation design.

2.6 BOCCE RACK

A. Basis-of-Design Product: Subject to compliance with requirements, provide Boccemasters (mfr) "Bocce Ball Rack.", or approved equivalent.

- 1. Anchor to concrete curb edge with stainless steel, vandal resistant, masonry anchors.

2.7 FUTSAL GOAL

A. Basis-of-Design Product: Subject to compliance with requirements, provide Forza (mfr) " 10ft X 6.5ft Forza ALU110 Freestanding Futsal Soccer Goal," or approved equivalent.

2.8 PICKLEBALL

A. Net Posts.

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Model Douglas (mfr) "SW-36 Deluxe Pickleball Posts 2-7/8" OD.", or approved equivalent.
 - a. Color: Black.

- b. Embed mount using "GS-24RD/AL Aluminum Ground Sleeves", 24" Long for 2-7/8" OD Posts.
 - 2. Nets.
 - a. Basis-of-Design Product: Subject to compliance with requirements, provide Model Douglas (mfr) "Model: JTN-30 Pickleball Net – 36" x 21'-9".", or approved equivalent.
 - b. Color: Black.
 - B. Windscreen.
 - 1. Douglas (mfr.) PolyPro Plus Premium, 4-ply hems with #2 brass grommets at 12-inches on center, center reinforcement with #2 brass grommets at 18-inches on center, and 8-inch by 10-inch AVR style air vents at 10-feet on center.
 - a. Size: 9-ft height (for 10-ft fence), custom length to provide continuous coverage of perimeter fence, including application for gates and transoms.
 - b. Color: black or green, as selected by Engineer.
- 2.9 PICKLEBALL/TENNIS CABANAS
- A. Basis-of-Design Product: Subject to compliance with requirements, provide Sun-Trends Inc. (mfr) 8' long cabana with 8' long cabana bench (two sided flat), or approved equivalent.
 - 1. Color: Blue
 - 2. Embed mount with ground sleeve or surface mount, as indicated on the Drawings.
 - 3. Delegated Design: Provide engineer's sealed drawings and calculations for full assembly, including foundation design, at post-tension concrete court.
- 2.10 TENNIS EQUIPMENT
- A. Net Posts At New Court Surfaces.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Douglas (mfr) SW-36 Deluxe POP Tennis Posts 2-7/8" OD., or approved equivalent.
 - a. Color: Black.
 - b. Embed mount using "Douglas (mfr) GS-24RD/AL Aluminum Ground Sleeves", 24" Long for 2-7/8" OD Posts.
 - B. Net Posts At Existing Court Surfaces
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Douglas (mfr) Premier Square Tennis Surface Mount Posts, 3" square, or approved equivalent.
 - C. Nets
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Douglas (mfr) Model: PN-30 POP Tennis Net-31"x 21'-9", or approved equivalent.
 - a. Color: Black.

- b. Include Douglas (mfr.) Deluxe ACS Adjustable Center Strap.
- D. Windscreen.
 - 1. Douglas (mfr.) PolyPro Plus Premium, 4-ply hems with #2 brass grommets at 12-inches on center, center reinforcement with #2 brass grommets at 18-inches on center, and 8-inch by 10-inch AVR style air vents at 10-feet on center.
 - a. Size: 9-ft height (for 10-ft fence), custom length to provide continuous coverage of perimeter fence, including application for gates and transoms.
 - b. Color: black or green, as selected by Engineer.

2.11 VOLLEYBALL NET POSTS

- A. Net Posts.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Porter (mfr) "2219-20A Volleyball Pro Series Competition Posts 4" Square Aluminum", or approved equivalent.
 - a. Color: Black.
 - b. Embed mount in ground sleeves.
- B. Nets.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Porter (mfr) "Ultimate Outdoor Volleyball Net", or approved equivalent.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance of the Work. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of athletic recreation equipment where required.
- B. Unless otherwise indicated, install athletic field equipment after landscaping and paving have been completed.
- C. Install athletic field equipment level, plumb, true, and securely anchor at locations indicated on Drawings.

- D. Post Setting: Set cast-in support posts in concrete footing with smooth top, shaped to shed water. Protect portion of posts above footing from concrete splatter. Verify that posts are set plumb or at correct angle and are aligned and at correct height and spacing. Hold posts in position during placement and finishing operations until concrete is sufficiently cured.
- E. Pipe Sleeves: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between posts and sleeve with nonshrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.

END OF SECTION 116833.01

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SECTION 129300 - SITE FURNISHINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Benches.
- 2. Backless benches.
- 3. Tables and chairs.
- 4. Bicycle racks.
- 5. Trash receptacles.
- 6. Recycling receptacles.
- 7. Manufactured bollards.

- B. Related Requirements:

- 1. Section 033000 "Cast-in-Place Concrete" for installing anchor bolts in concrete footings or slabs.
- 2. Section 312000 "Earth Moving" for excavation for installing concrete footings.

1.3 DEFINITIONS

- 1.4 Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Initial Selection: For units with factory-applied finishes.
- C. Samples for Verification: For each type of exposed finish, not less than 6-inch- long linear components and 4-inch- square sheet components.
- D. Product Schedule: For site furnishings. Use same designations indicated on Drawings.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Protect and store site furnishings away from active work zones and equipment.
- B. Site furnishings to be protected at all times, including during and following installation. Site furnishings to be installed free of damage and protections to remain in-place until necessary to remove for inspection or substantial completion.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For site furnishings to include in maintenance manuals.

1.8 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

PART 2 - PRODUCTS

2.1 BENCHES

- A. Products: Subject to compliance with requirements, provide the following:
 - 1. Basis-of-Design Product: As indicated on Drawings.
- B. Description:
 - 1. Size: As indicated on Drawings.
 - 2. Color: As indicated on Drawings.

2.2 BACKLESS BENCHES

- A. Products: Subject to compliance with requirements, provide the following:
 - 1. Basis-of-Design Product: As indicated on Drawings.
- B. Description:
 - 1. Size: As indicated on Drawings.
 - 2. Color: As indicated on Drawings.

2.3 TABLES AND CHAIRS

- A. Products: Subject to compliance with requirements, provide the following:
 - 1. Basis-of-Design Product: As indicated on Drawings.

B. Description:

1. Size: As indicated on Drawings.
2. Color: As indicated on Drawings

2.4 BICYCLE RACKS

A. Products: Subject to compliance with requirements, provide the following:

1. Basis-of-Design Product: As indicated on Drawings.

B. Description:

1. Size: As indicated on Drawings.
2. Color: As indicated on Drawings

2.5 TRASH RECEPTACLES

A. Products: Subject to compliance with requirements, provide the following:

1. Basis-of-Design Product: As indicated on Drawings.

B. Description:

1. Size: As indicated on Drawings.
2. Color: As indicated on Drawings

2.6 RECYCLING RECEPTACLES

A. Products: Subject to compliance with requirements, provide the following:

1. Basis-of-Design Product: As indicated on Drawings.

B. Description:

1. Size: As indicated on Drawings.
2. Color: As indicated on Drawings

2.7 MANUFACTURED BOLLARDS

A. Products: Subject to compliance with requirements, provide the following:

1. Basis-of-Design Product: As indicated on Drawings.

B. Description:

1. Size: As indicated on Drawings.
2. Color: As indicated on Drawings

2.8 MATERIALS

- A. Anchors, Fasteners, Fittings, and Hardware: Manufacturer's standard, corrosion-resistant-coated or noncorrodible materials; commercial quality, tamperproof, vandal and theft resistant.
- B. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M; recommended in writing by manufacturer, for exterior applications.

2.9 FABRICATION

- A. Metal Components: Form to required shapes and sizes with true, consistent curves, lines, and angles. Separate metals from dissimilar materials to prevent electrolytic action.
- B. Welded Connections: Weld connections continuously. Weld solid members with full-length, full-penetration welds and hollow members with full-circumference welds. At exposed connections, finish surfaces smooth and blended, so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.
- C. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.
- D. Preservative-Treated Wood Components: Complete fabrication of treated items before treatment if possible. If cut after treatment, apply field treatment complying with AWPA M4 to cut surfaces.
- E. Exposed Surfaces: Polished, sanded, or otherwise finished; all surfaces smooth, free of burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.
- F. Factory Assembly: Factory assemble components to greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

2.10 GENERAL FINISH REQUIREMENTS

- A. Appearance of Finished Work: Noticeable variations in same piece are unacceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance of the Work.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.
- B. Unless otherwise indicated, install site furnishings after landscaping and paving have been completed.
- C. Install site furnishings level, plumb, true, and securely anchored at locations indicated on Drawings.
- D. Embed-Mount: Set cast-in support posts in concrete footing with smooth top, shaped to shed water. Protect portion of posts above footing from concrete splatter. Verify that posts are set plumb or at correct angle and are aligned and at correct height and spacing. Hold posts in position during placement and finishing operations until concrete is sufficiently cured.

3.3 CLEANING

- A. Following completion of site furnishing installation, inspect all components and surfaces. Clean all surfaces with warm water using non-abrasive cleaner, as recommended by product manufacturer, and a soft non-abrasive cloth or sponge to remove all markings, dirt, or other debris.
- B. Replace any damaged components and repair damage to finishes in compliance with manufacturer's written instructions. All finish repairs to use match adjacent surface finish and color. Replace any furnishings with damage or repairs found not acceptable to the Engineer.

END OF SECTION 129300

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SECTION - 133416.53 - CONTINUOUS ELEVATED ANGLE-FRAME BLEACHERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections apply to this Section.

1.2 SUMMARY

- A. Section includes:
 - 1. Continuous, elevated, angle-frame bleachers.
- B. Related Requirements:
 - 1. Section 033000 "Cast-in-Place Concrete" for concrete foundations.
- C. Reference Standards:
 - 1. AAMA 2603 – Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
 - 2. AISC Steel Construction Manual.
 - 3. Aluminum Association (AA) Aluminum Design Manual.
 - 4. ASTM A 36 / A 36M – Standard Specification for Carbon Structural Steel.
 - 5. ASTM A 123 / A 123M – Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - 6. ASTM A 307 – Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.
 - 7. ASTM A 572 / A 572M – Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel.
 - 8. ASTM A 992 / A 992M – Standard Specification for Structural Steel Shapes.
 - 9. AWS D1.1 / D1.1M – Structural Welding Code – Steel.
- D. Research Council on Structural Connections (RCSC) Specification for Structural Joints Using High-Strength Bolts.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Convene meeting prior to installation of new concrete substrate (if any).
 - 2. Include Contractor, Architect, Engineer, installer or manufacturer's representative, concrete substrate installer, and subgrade drainage installer (if any).
 - 3. Review materials, preparation, installation, adjusting, protection, and coordination with other work.
 - 4. Review max preferred slope-to-drain requirement for bleachers.

1.5 ACTION SUBMITTALS

- A. Product Data: Submit manufacturer's product data, including installation instructions.
- B. Shop Drawings:
 - 1. Submit manufacturer's shop drawings, including plans, elevations, sections, and details, indicating location, size, details, and quantity of steel and aluminum components and accessories.
 - 2. Indicate locations of exit stairs, ramps, seat locations, decking configurations, and overall general materials to be supplied.
 - 3. Shop drawings shall be signed and sealed by a qualified, registered professional engineer, registered in state of the installation.
- C. Samples: Submit manufacturer's color samples for selection.
- D. Delegated Design Submittal:
 - 1. Submit manufacturer's design data, including an analysis to indicate that the structural members shall have sufficient strength to support required loads and ability to resist loads subjected, without exceeding allowable stresses of the materials.
 - 2. Provide design data with seal and signature by a qualified, registered professional engineer, registered in state of the installation.

1.6 INFORMATIONAL SUBMITTALS

- A. Warranty Documentation: Submit manufacturer's standard warranty.

1.7 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:
 - 1. Manufacturer regularly engaged, for past 10 years, in design and manufacture of continuous, elevated, angle-frame bleachers of similar type to that specified.
 - 2. Fabricate structural steel in an AISC-certified plant; certified "STD" at time of the bid.
 - 3. Manufacturer listed by AISC as a certified fabricator.
 - 4. Certification and inspections in accordance with IBC Chapter 17.
- B. Installer's Qualifications:

1. Installer regularly engaged, for past 5 years, in installation of continuous, elevated, angle-frame bleachers of similar type to that specified.
 2. Employ persons trained and experienced for installation of continuous, elevated, angle-frame bleachers.
- C. Welder's Qualifications: AWS certified within past 12 months for each type of weld required.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
1. Store and handle materials in accordance with manufacturer's instructions.
 2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
 3. Do not store materials directly on ground.
 4. Protect materials and finish during storage, handling, and installation to prevent damage.

PART 2 - PRODUCTS

2.1 DESIGN REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design continuous elevated angle-frame bleachers.
- B. Design: Conform to AISC Steel Construction Manual and AA Aluminum Design Manual.
- C. Applicable Codes: Design and workmanship shall be in accordance with IBC 2021, or current IBC version as adopted by Town of Parker, and ICC 300 Bleachers, Folding and Telescopic Seating, and Grandstands.
- D. Design Loads:
1. Live Loads:
 - a. Uniform Loading, Structure: 100 psf.
 - b. Uniform Loading, Seats: 120 plf.
 2. Sway Loads:
 - a. Perpendicular to Seats: 10 plf.
 - b. Parallel to Seats: 24 plf.
 3. Wind Loads: As required by local building code and in accordance with IBC and ASCE 7.
 4. Snow Loads: As required by local building code and in accordance with IBC and ASCE 7.
 5. Handrail and Guardrail:
 - a. 100 plf. vertical.

- b. 200 lb. concentrated in any direction.
 - c. 50 lb. concentrated load on infill components.
- E. Shop Connections: Welded and capable of carrying stress put upon them.
- F. Welding: AWS D1.1.
- G. Concrete Foundations: Manufacturer shall design and install concrete foundations as specified in Section 033000 "Cast-in-Place Concrete".

2.2 CONTINUOUS ELEVATED ANGLE-FRAME BLEACHERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide products by one of the following:
 - 1. CBS Constructors.
 - 2. Sturdisteel.
 - 3. Southern Bleacher Company, Inc.
- B. Size: As indicated on Drawings.
- C. Net Seating Capacity: As indicated on Drawings.
- D. Framework: Space prefabricated angle bleacher frames at 6-foot intervals and connect by crossbraces.
- E. Rise and Depth Dimensions:
 - 1. Vertical Rise per Row: 8 inches.
 - 2. Horizontal Depth per Row: 24 inches.
 - 3. Seat Above its Respective Tread: 17 inches.
- F. Risers:
 - 1. Anodized Aluminum Board: 1-inch by 6-inches ,
 - 2. Anodized Aluminum Board At Top Row: 1-inch by 12-inches or (2) boards at 1-inch by 6-inch.
- G. Seats: Anodized aluminum board with end caps: 2-inch by 10-inches.
- H. Treads: Two mill finish aluminum boards with end caps, 2-inches by 10-inches.
- I. Guardrail:
 - 1. Sides and back of bleachers, entry stairs, walkways, ramps, portals, and landings where 30 inches or more above adjacent area or grade.
 - 2. Material: Anodized aluminum pipe with end plugs at ends of straight runs or elbows at corners.
 - 3. Secure to angle posts with galvanized fasteners.
 - 4. Top Rail: Height as indicated on drawings but not less than 42 inches minimum above walkways, entrances, and any adjacent seat.
 - 5. Chain Link Fencing: 9-gauge galvanized steel, fastened in place with galvanized fittings and aluminum ties.

J. Front Walkway:

1. Width: 60 inches.
2. Elevated:
 - a. On Slabs: 30-inches high or as indicated on Drawings .
3. Deck: Mill finish aluminum boards, 2-inches by 12-inches.

K. Steps:

1. Frames: Galvanized steel.
2. Mill finish aluminum boards, 2-inches by 10-inches with 2-inch by 2-inch dark bronze contrasting nosing.

L. Entry Stairs:

1. Entry Stairs, Guardrails, and Handrails: In accordance with local code requirements.
2. Rise: 7 inches maximum, 6-inches preferred.
3. Tread: 11 inches minimum, 12-inches preferred.

M. Aisle Width:

1. Middle Aisle Width: As indicated on Drawings, but not less than 48 inches or minimum required by IBC for egress.
2. End Aisle Width: As indicated on Drawings, but not less than 36 inches or minimum required by IBC for egress.

N. Accessibility: Incorporate wheelchair spaces within bleachers to conform to applicable code and ADA.

2.3 MATERIALS

A. Framework:

1. Galvanized Steel:
 - a. ASTM A 36, ASTM A 572 Grade 50, and ASTM A 992.
 - b. Hot-dipped galvanized after fabrication in accordance with ASTM A 123.
2. Bleacher manufacturer will not be responsible for the discoloration, staining and fading of exposed mill finish aluminum surfaces due to oxidation; prior to, during or after installation. Oxidation of mill finish aluminum surfaces is a natural phenomenon and is caused by condensation or moisture during packaging, transportation and/or storage.

B. Seat Boards: Extruded aluminum alloy 6063-T6, clear anodized 204R1, AA-M10C22A31, Class II.

C. Riser Boards: Extruded aluminum alloy 6063-T6; clear anodized 204R1, AA-M10C22A31, Class II unless otherwise indicated on the Drawings..

D. Tread Boards: Extruded aluminum alloy 6063-T6, mill finish.

E. Guardrail: Aluminum anodized pipe, 1-5/8-inch OD.

F. Accessories:

1. Steel Bolts and Nuts: ASTM A 307, galvanized.
2. Structural Connections: Snug tight to conform to RCSC Specification for Structural Joints Using High-Strength Bolts.
3. Hold-Down Clip Assembly: Aluminum alloy 6063-T6.
4. Form-Fitted End Caps: Aluminum alloy 2024, clear anodized 204R1, AA-M10C22A31, Class II.
5. Channel End Caps: Aluminum alloy 6063-T6, clear anodized 204R1, AA-M10C22A31, Class II.

G. Concrete Foundations: Specified in Section 033000 "Cast-in-Place Concrete".

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive continuous, elevated, angle-frame bleachers.
- B. Notify Architect and Engineer of conditions that would adversely affect installation or subsequent use.
- C. Do not begin surface preparation or installation until unacceptable conditions are corrected.

3.2 PREPARATION

- A. Install concrete foundations for continuous, elevated, angle-frame bleachers as specified in Section 033000 "Cast-in-Place Concrete" and indicated on the Drawings.
 1. Coordinate preferred slope-to-drain with Contractor and new concrete substrate (if any) prior to concrete installation.

3.3 INSTALLATION

- A. Install continuous, elevated, angle-frame bleachers in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Install bleachers plumb, level, square, straight, and secure.
- C. Anchor bleachers securely in place to concrete foundations.

3.4 ADJUSTING

- A. Inspect completed continuous, elevated, angle-frame bleachers and make necessary adjustments to ensure proper installation.
- B. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.

- C. Remove and replace with new material, damaged components that cannot be successfully repaired, as determined by Engineer.

3.5 PROTECTION

- A. Protect completed continuous, elevated, angle-frame bleachers to ensure that, except for normal weathering, bleachers will be without damage or deterioration at time of Substantial Completion.

END OF SECTION 133416.53

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SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Protecting existing vegetation to remain.
2. Removing existing vegetation.
3. Clearing and grubbing.
4. Stripping and stockpiling topsoil.
5. Stripping and stockpiling rock.
6. Removing above- and below-grade site improvements.
7. Disconnecting, capping or sealing, and removing site utilities.
8. Temporary erosion and sedimentation control.

- B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for temporary erosion- and sedimentation-control measures.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- C. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.

- D. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects larger than 2 inches in diameter; and free of weeds, roots, toxic materials, or other nonsoil materials. Topsoil shall include O and A soil horizons as defined by the United States Department of Agriculture (USDA) Soil Survey Manual.
 - 1. O horizon: O horizons are dominated by organic soil material. It may consist of slightly decomposed to highly decomposed litter (such as leaves, needles, twigs, moss, and lichens) that was deposited on the surface of either mineral or organic soils, or consist of organic materials that were deposited under saturated conditions and have decomposed to varying stages.
 - 2. A horizon: A horizons are mineral horizons that formed at the soil surface or below an O horizon. They exhibit obliteration of all or much of any original rock structure and show one or both of the following:
 - a. An accumulation of humified organic matter closely mixed with the mineral fraction and not dominated by properties characteristic of V, E, or B horizons; and/or
 - b. Properties resulting from cultivation, pasturing, or similar kinds of disturbance.
- E. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- F. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated on Drawings and according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- G. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.6 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Use sufficiently detailed photographs or video recordings.
 - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plant designated to remain.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.7 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Engineer and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed trafficways if required by Engineer or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing site clearing indicated on property adjoining Owner's property will be obtained by Engineer before award of Contract.
 - 1. Do not proceed with work on adjoining property until directed by Engineer.
- C. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated or directed by Owner.
- D. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.
- E. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.
- F. Tree- and Plant-Protection Zones: Protect according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- G. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 312000 "Earth Moving."
 - 1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.
- B. Antirust Coating: Fast-curing, lead- and chromate-free, self-curing, universal modified-alkyd primer complying with MPI #23 (surface-tolerant, anticorrosive metal primer).

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.

- B. Verify that trees, shrubs, and other vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- C. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

- A. Protect trees and plants remaining on-site according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations according to requirements in Section 015639 "Temporary Tree and Plant Protection."

3.4 EXISTING UTILITIES

- A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed.
 - 1. Arrange with utility companies to shut off indicated utilities.
- B. Locate, identify, and disconnect utilities indicated to be abandoned in place.
- C. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Architect and Owner not less than seven days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Owner's written permission.
- D. Excavate for and remove underground utilities indicated to be removed.

3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 - 2. Grind down stumps and remove roots larger than 2 inches in diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.
 - 3. Use only hand methods or air spade for grubbing within protection zones.
 - 4. Chip removed tree branches and dispose of off-site.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density equal to adjacent original ground.

3.6 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth of 6 inches or depth required to remove O and A soil horizons, in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - 1. Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other objects larger than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
 - 1. Limit height of topsoil stockpiles to 72 inches.
 - 2. Do not stockpile topsoil within protection zones.
 - 3. Stockpile surplus topsoil to allow for respreading deeper topsoil. Notify Owner and Architect of topsoil surplus. Owner may elect for respreading of surplus or relocating stockpile to offsite location as directed, for use by Owner.

3.7 STOCKPILING ROCK

- A. Remove from construction area naturally formed rocks that measure more than 1 foot across in least dimension. Do not include excavated or crushed rock.
 - 1. Separate or wash off non-rock materials from rocks, including soil, clay lumps, gravel, and other objects larger than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.
- B. Stockpile rock away from edge of excavations without intermixing with other materials. Cover to prevent windblown debris from accumulating among rocks.
 - 1. Limit height of rock stockpiles to 36 inches.

2. Do not stockpile rock within protection zones.
3. Stockpile surplus rock to allow later use by the Owner.

3.8 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.
 2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

3.9 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials, and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION

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SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Excavating and filling for rough grading the Site.
2. Preparing subgrades for slabs-on-grade, pavements, turf and grasses, and plants.
3. Excavating and backfilling for buildings and structures.
4. Subsurface drainage course below pavements, playground protective surfacing, and synthetic grass surfacing.
5. Base course for pavements.
6. Subsurface drainage backfill for walls and trenches.
7. Excavating and backfilling trenches for utilities and pits for buried utility structures.

- B. Related Requirements:

1. Section 311000 "Site Clearing" for site stripping, grubbing, stripping and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.
2. Section 329113 "Soil Preparation" for topsoil and planting soils.
3. Section 329200 "Turf and Grasses" for finish grading in turf and grass areas, including preparing and placing planting soil for turf areas.
4. Section 329300 "Plants" for finish grading in planting areas and tree and shrub pit excavation and planting.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Backfill: Soil material or controlled low-strength material used to fill an excavation.
 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- C. Base Course: Aggregate layer placed between the subbase course and slabs-on-grade and pavements.

- D. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- E. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- F. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water, or supporting subsurface drainage (underdrains) below pavements, synthetic grass surfacing, playground protective surfacing, and behind walls.
- G. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
 - 1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
 - 2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
 - 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.
- H. Fill: Soil materials used to raise existing grades.
- I. Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits, and boulders of rock material 3/4 cu. yd. or more in volume that exceed a standard penetration resistance of 100 blows/2 inches when tested by a geotechnical testing agency, according to ASTM D1586.
- J. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- K. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- L. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- M. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct preexcavation conference at Project site.
 - 1. Review methods and procedures related to earthmoving, including, but not limited to, the following:
 - a. Personnel and equipment needed to make progress and avoid delays.
 - b. Coordination of Work with utility locator service.
 - c. Coordination of Work and equipment movement with the locations of tree- and plant-protection zones.
 - d. Extent of trenching by hand or with air spade.

- e. Field quality control.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of the following manufactured products required:

- 1. Geotextiles.
- 2. Warning tapes.
- 3. Base course and bedding course.

1.6 INFORMATIONAL SUBMITTALS

- A. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:

- 1. Classification according to ASTM D2487.
- 2. Laboratory compaction curve according to ASTM D698.

1.7 QUALITY ASSURANCE

- A. Comply with applicable codes, ordinances, regulations, references, and standards in effect at bid date.

- 1. Uniform Building Code (UBC) or International Building Code (IBC) per jurisdiction criteria.
- 2. American Society for Testing and Materials (test methods as specified hereafter) (ASTM).
- 3. State and local codes.

- B. In case of conflict between the above codes, regulations, references and standards, and these specifications, the more stringent requirements shall govern.

- C. Testing Agency: The Engineer will employ a qualified independent geotechnical testing agency. The Contractor shall furnish testing agency access to work, facilities and incidental labor required for testing. Notify the testing and inspection agency not less than 48 hours in advance of all work requiring testing.

- D. Geotechnical Engineer: All materials and operations under this section of the specifications shall be executed under the supervision of a Geotechnical Engineer who will place qualified personnel on the site during earth moving operations as necessary. The Geotechnical Engineer shall approve all foundation excavations and give written approval of the completed foundations to the Engineer at the following times:

- 1. When excavations are first open.
- 2. Just prior to placing of concrete, shall test and control the fill compaction, approve the materials and method of placing and compacting and give written approval to the Engineer that all bearing surfaces and fill requirements have been inspected.
- 3. The Contractor shall be responsible to notify the Engineer and Geotechnical Engineer when tests are to be made.

- E. For approval of imported or on-site fill material, notify the Geotechnical Engineer at least four working days in advance of intention to import material, designate the proposed borrow area, and permit the Geotechnical Engineer to sample, as necessary, from the borrow area for the purpose of making acceptance tests to prove the quality of the material. The Geotechnical Engineer report on the acceptability shall be final and binding.
- F. Reference Standards: Compaction Standard: Standard Proctor Density ASTM D698.
- G. Preconstruction Conference: Conduct conference at Project site as directed by the Engineer prior to start of construction. The Contractor is to comply with requirements, which may also be included in Division 1, Section "Project Management and Coordination."

1.8 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the Engineer and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by Engineer or authorities having jurisdiction.
- B. Utility Locator Service: Unless already completed for site clearing activity and in accordance with Section 311000 "Site Clearing", Notify utility locator service for area where Project is located before beginning earth-moving operations.
- C. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures specified in Section 015000 "Temporary Facilities and Controls" and Section 311000 "Site Clearing" are in place.
- D. Do not commence earth-moving operations until plant-protection measures specified in Section 015639 "Temporary Tree and Plant Protection" are in place.
- E. The following practices are prohibited within protection zones:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Foot traffic.
 - 4. Erection of sheds or structures.
 - 5. Impoundment of water.
 - 6. Excavation or other digging unless otherwise indicated.
 - 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- F. Do not direct vehicle or equipment exhaust towards protection zones.
- G. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.
- H. Remove all existing fill deemed by the Geotechnical Engineer to be unsatisfactorily placed

- I. Existing Contours and Elevations: Contours and spot elevations of existing ground elevations at the site, and approximate elevations of finish-grade cuts, fills, and excavations for the work are shown on the drawings. Contours and elevations for existing ground lines are based on information provided by others, and are believed to be correct, but may not be absolutely so. Existing contours and elevations should therefore be considered approximate and should be verified at the site prior to construction.
- J. Verification of Existing Conditions: Visit the site prior to submission of bids. Verify existing conditions, elevations, and contours. In the event of discrepancies between existing conditions and those indicated on the contract documents or survey, contact the Owner's Representative for clarification.
- K. Verification of Existing Conditions: Visit the site prior to submission of bids. Verify existing conditions, elevations, and contours. In the event of discrepancies between existing conditions and those indicated on the contract documents or survey, contact the Owner's Representative for clarification.
- L. Frost Protection: When freezing temperatures may be expected, do not excavate to the full depth indicated unless the footing or slabs are to be poured immediately after the excavation has been completed. If placing of concrete is delayed, protect the bottoms of excavations from frost until concrete is placed.

1.9 WARRANTY

- A. Settlement in backfill, fill, or in structures built over backfill or fill, which may occur within the specified project warranty period, shall be corrected at no cost to the Owner. Any structures damaged by settlement shall be restored to their original condition by the Contractor, at no cost to the Owner.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D2487, Groups A-1, A-2-4, A-2-5, and A-3 according to AASHTO M145, or a combination of these groups as identified by the Geotechnical Engineer; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
 - 1. For athletic fields, satisfactory soils shall meet above criteria, however it shall be free rock or gravel larger than 1.5-inch in any dimension.
 - 2. Refer to section 329113 Soil Preparation for topsoil and planting soils.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D2487, Groups A-2-6, A-2-7, A-4, A-5, A-6, and A-7 according to AASHTO M145, or a combination of these groups, as identified by Geotechnical Engineer.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- E. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- F. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- G. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.
- H. Sand: ASTM C33/C33M; fine aggregate.

2.2 GEOTEXTILES

- A. Subsurface Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M288 and the following, measured per test methods referenced:
 1. Survivability: Class 2; AASHTO M288.
 2. Apparent Opening Size: No. 70 sieve, maximum; ASTM D4751.
 3. Permittivity: 1.5 per second, minimum; ASTM D4491.
 4. UV Stability: 50 percent after 500 hours' exposure; ASTM D4355.
- B. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 1. Survivability: Class 2; AASHTO M288.
 2. Apparent Opening Size: No. 60 sieve, maximum; ASTM D4751.
 3. Permittivity: 0.02 per second, minimum; ASTM D4491.
 4. UV Stability: 50 percent after 500 hours' exposure; ASTM D4355.

2.3 ACCESSORIES

- A. Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility; colored as follows:
 1. Red: Electric.
 2. Yellow: Gas, oil, steam, and dangerous materials.

3. Orange: Telephone and other communications.
 4. Blue: Water systems.
 5. Green: Sewer systems.
- B. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored as follows:
1. Red: Electric.
 2. Yellow: Gas, oil, steam, and dangerous materials.
 3. Orange: Telephone and other communications.
 4. Blue: Water systems.
 5. Green: Sewer systems.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

- A. Provide dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.
- B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- C. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
- D. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.

3.3 EXPLOSIVES

- A. Explosives: Do not use explosives.

3.4 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
 - 2. Remove rock to lines and grades indicated to permit installation of permanent construction without exceeding the following dimensions:
 - a. 24 inches outside of concrete forms other than at footings.
 - b. 12 inches outside of concrete forms at footings.
 - c. 6 inches outside of minimum required dimensions of concrete cast against grade.
 - d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
 - e. 6 inches beneath bottom of concrete slabs-on-grade.
 - f. 6 inches beneath pipe in trenches and the greater of 24 inches wider than pipe or 42 inches wide.
- B. Classified Excavation: Excavate to subgrade elevations. Material to be excavated will be classified as earth and rock. Do not excavate rock until it has been classified and cross sectioned by Architect. The Contract Sum will be adjusted for rock excavation according to unit prices included in the Contract Documents. Changes in the Contract Time may be authorized for rock excavation.
 - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; and soil, boulders, and other materials not classified as rock or unauthorized excavation.
 - a. Intermittent drilling; ; ram hammering; or ripping of material not classified as rock excavation is earth excavation.
 - 2. Rock excavation includes removal and disposal of rock. Remove rock to lines and subgrade elevations indicated to permit installation of permanent construction without exceeding the following dimensions:
 - a. 24 inches outside of concrete forms other than at footings.
 - b. 12 inches outside of concrete forms at footings.
 - c. 6 inches outside of minimum required dimensions of concrete cast against grade.
 - d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
 - e. 6 inches beneath bottom of concrete slabs-on-grade.
 - f. 6 inches beneath pipe in trenches and the greater of 24 inches wider than pipe or 42 inches wide.

3.5 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
 - 2. Pile Foundations: Stop excavations 6 to 12 inches above bottom of pile cap before piles are placed. After piles have been driven, remove loose and displaced material. Excavate to final grade, leaving solid base to receive concrete pile caps.
 - 3. Excavation for Underground Tanks, Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended as bearing surfaces.
- B. Excavations at Edges of Tree- and Plant-Protection Zones:
 - 1. Excavate by hand or with an air spade to indicated lines, cross sections, elevations, and subgrades. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
 - 2. Cut and protect roots according to requirements in Section 015639 "Temporary Tree and Plant Protection."

3.6 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.
- B. Where required by Geotechnical Engineer or documented on the Drawings, scarify subgrade soils beneath exterior slabs, sidewalks, and pavements to a minimum depth as indicated on the Drawings or directed by the Geotechnical Engineer, moisture condition and recompact, as specified.

3.7 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
 - 1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
 - 1. Clearance: 12 inches each side of pipe or conduit unless otherwise noted on the Drawings.

- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.
 - 1. For pipes and conduit less than 6 inches in nominal diameter, hand-excavate trench bottoms and support pipe and conduit on an undisturbed subgrade.
 - 2. For pipes and conduit 6 inches or larger in nominal diameter, shape bottom of trench to support bottom 90 degrees of pipe or conduit circumference. Fill depressions with tamped sand backfill.
 - 3. For flat-bottomed, multiple-duct conduit units, hand-excavate trench bottoms and support conduit on an undisturbed subgrade.
 - 4. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.
- D. Trench Bottoms: Excavate trenches 4 inches deeper than bottom of pipe and conduit elevations to allow for bedding course. Hand-excavate deeper for bells of pipe.
 - 1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.
- E. Trenches in Tree- and Plant-Protection Zones:
 - 1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
 - 2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.
 - 3. Cut and protect roots according to requirements in Section 015639 "Temporary Tree and Plant Protection."

3.8 SUBGRADE INSPECTION

- A. Notify Architect when excavations have reached required subgrade.
- B. If Architect determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- C. Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
 - 2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed.
- D. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
- E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

3.9 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Architect.
 - 1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Architect.

3.10 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.11 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
 - 2. Surveying locations of underground utilities for Record Documents.
 - 3. Testing and inspecting underground utilities.
 - 4. Removing concrete formwork.
 - 5. Removing trash and debris.
 - 6. Removing temporary shoring, bracing, and sheeting.
 - 7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.12 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Trenches under Footings: Backfill trenches excavated under footings and within 18 inches of bottom of footings with satisfactory soil unless otherwise indicated on the Drawings; fill with concrete to elevation of bottom of footings. Concrete is specified in Section 033000 "Cast-in-Place Concrete."

- D. Trenches under Roadways: Unless otherwise indicated on the Drawings, provide 4-inch- thick, concrete-base slab support for piping or conduit less than 30 inches below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches of concrete before backfilling or placing roadway subbase course. Concrete is specified in Section 033000 "Cast-in-Place Concrete."
- E. Backfill voids with satisfactory soil while removing shoring and bracing.
- F. Initial Backfill:
 - 1. Soil Backfill: Place and compact initial backfill of satisfactory soil, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.
 - a. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
- G. Final Backfill:
 - 1. Soil Backfill: Place and compact final backfill of satisfactory soil to final subgrade elevation.
- H. Warning Tape: Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

3.13 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 - 1. Under grass and planted areas, use satisfactory soil material.
 - 2. Under walks and pavements, use satisfactory soil material.
 - 3. Under steps and ramps, use engineered fill.
 - 4. Under building slabs, use engineered fill.
 - 5. Under footings and foundations, use engineered fill.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.14 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 - 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.15 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D698:
 - 1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
 - 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent.
 - 3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
 - 4. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

3.16 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
 - 1. Turf or Unpaved Areas: Plus or minus 1 inch.
 - 2. Walks: Plus or minus 1 inch.
 - 3. Pavements: Plus or minus 1/2 inch.
- C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

3.17 SUBSURFACE DRAINAGE

- A. Subsurface Drain: Place subsurface drainage geotextile around perimeter of subdrainage trench. Place a 6-inch course of filter material on subsurface drainage geotextile to support subdrainage pipe. Encase subdrainage pipe in a minimum of 12 inches of filter material, placed in compacted layers 6 inches thick, and wrap in subsurface drainage geotextile, overlapping sides and ends at least 6 inches.
 - 1. Compact each filter material layer to 85 percent of maximum dry unit weight according to ASTM D698.

- B. Drainage Backfill: Place and compact filter material over subsurface drain, in width indicated, to within 12 inches of final subgrade, in compacted layers 6 inches thick. Overlay drainage backfill with one layer of subsurface drainage geotextile, overlapping sides and ends at least 6 inches.
 - 1. Compact each filter material layer with a minimum of two passes of a plate-type vibratory compactor.
 - 2. Place and compact impervious fill over drainage backfill in 6-inch- thick compacted layers to final subgrade.

3.18 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

- A. On prepared subgrade, place subbase course and base course under pavements and walks as follows:
 - 1. Install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
 - 2. Place base course material over subbase course under hot-mix asphalt pavement.
 - 3. Shape subbase course and base course to required crown elevations and cross-slope grades.
 - 4. Place subbase course and base course 6 inches or less in compacted thickness in a single layer.
 - 5. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 - 6. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D698.
- B. Pavement Shoulders: Place shoulders along edges of subbase course[and base course] to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry unit weight according to ASTM D698.

3.19 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE

- A. Place drainage course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:
 - 1. Install subdrainage geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
 - 2. Place drainage course 6 inches or less in compacted thickness in a single layer.
 - 3. Place drainage course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 - 4. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D698.

3.20 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
 - 1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
 - 2. Determine that fill material classification and maximum lift thickness comply with requirements.
 - 3. Determine, during placement and compaction, that in-place density of compacted fill complies with requirements.
- B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.
- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.
- E. Testing agency will test compaction of soils in place according to ASTM D1556, ASTM D2167, ASTM D2937, and ASTM D6938, as applicable. Tests will be performed at the following locations and frequencies:
 - 1. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. or less of paved area or building slab but in no case fewer than three tests.
 - 2. Foundation Wall Backfill: At each compacted backfill layer, at least one test for every 100 feet or less of wall length but no fewer than two tests.
 - 3. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every 150 feet or less of trench length but no fewer than two tests.
- F. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.21 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.

- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.22 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.
- B. Transport surplus satisfactory soil to designated storage areas on Owner's property. Stockpile or spread soil as directed by Architect.
 - 1. Remove waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 312270.01 - TEMPORARY EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes: Furnish, install, maintain, and remove temporary erosion and sedimentation controls as shown on the drawings or specified herein, or as required to complete the work.
- B. Related Requirements:
 - 1. Section 311000 "Site Clearing" for site stripping, grubbing, stripping and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.
 - 2. Section 312000 "Earth Moving" for soil materials, site excavating, filling and grading.
 - 3. Division 22 Section "Trenching" for excavating and backfilling of utilities.
- C. Permits and Fees: Obtain and pay for all permits and fees required for the work of this section, including erosion and sediment control and water quality permits required by the Colorado Department of Public Health and Environment, Water Quality Control Division.
- D. Erosion Control: The Erosion and Sedimentation Control Drawings included in the Contract Documents is the minimum requirement to be implemented. Provide additional control as necessary to meet applicable local and State criteria.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Backfill: Soil material used to fill an excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- C. Unclassified Excavation: Removal of all material of whatever character required for the work encountered above subgrade elevations and to lines and dimensions indicated, including boulders.

- D. Fill: Fill is all material placed to raise the grade of the site or to backfill excavation, upon which the Soils Engineer has made sufficient tests and observations to enable him to issue a written statement that, in his opinion, the fill has been placed and compacted in accordance with the requirements of these specifications.
- E. BMP: Best Management Practice. Erosion and sediment control devices, which may consist of silt fence, sediment control logs, rock socks, filter fabric, riprap, etc.
- F. SWMP: Storm Water Management Plan. Identifies BMPs, which are erosion and sediment control measures for the project.
- G. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- H. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.
- I. Utilities: Include on-site underground pipes, conduits, ducts, and cables, as well as underground services to buildings.

1.4 SUBMITTALS

- A. Submittal Procedures: All submittals are to be made to the Engineer. Refer to Division 01 Section "Submittal Procedures."
- B. Product Data: Submit manufacturer's published descriptive literature and complete specifications for manufactured products specified herein and utilized on the project.
- C. Storm Water Management Plan:
 - 1. The Engineer will provide a Storm Water Management Plan (SWMP) and report addressing erosion and sediment control measures for all sites with over one acre of disturbed ground. The Engineer may also assist in preparation of the General Permit application.
 - 2. The Contractor is responsible for obtaining all required permits including a General Permit application for Storm Water Discharges associated with construction activities. Permits are to be filed with the Colorado Department of Public Health and Environment, Water Quality Control Division.
 - 3. Contractor shall have the Storm Water Management Plan (SWMP) and report available on-site at all times.

1.5 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with applicable local, State and Federal ordinances, rules and regulations concerning sedimentation control and storm water runoff.
- B. In case of conflict between the above codes, regulations, references and standards and these specifications, the more stringent requirements shall govern.

- C. Preconstruction Conference: Conduct conference at Project site as directed by Engineer prior to start of construction. Contractor to comply with requirements, which may also be included in Division 01 Section "Project Management and Coordination."

1.6 PROJECT/SITE CONDITIONS

- A. Existing Conditions: Verify all existing conditions affecting the work of this section prior to submitting bids or proposals. Additional compensation will not be allowed for revisions or modification of work resulting from failure to verify existing conditions.

1.7 WARRANTY

- A. Temporary Erosion and Sediment Control measures shall be maintained until permanent measures are in place. All damaged, disturbed or devices filled with sediment, which may occur within the specified project warranty period, shall be corrected at no cost to the Engineer. Any devices damaged by erosion or sediment shall be restored to their original condition by the Contractor, at no cost to the Engineer.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Erosion and Sedimentation Control Materials: Provide one or more of the following materials, as shown on the plans or as applicable for site conditions:
 - 1. Silt fence.
 - 2. Inlet protection.
 - 3. Sediment control logs.
 - 4. Rock riprap.
 - 5. Temporary seeding.

PART 3 - EXECUTION

3.1 PREPARATION

- A. General: Determine the existing ground elevations, drainage patterns, and changes to such patterns during excavation in order to satisfactorily plan and provide materials for adequate erosion and sediment control devices.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and rights-of-way according to requirements of authorities having jurisdiction.
- B. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.

- C. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.
- D. Secure grading permit from agency have jurisdiction prior to commencing grading operations.

3.3 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which the work of this section will be performed. Do not proceed with the work until unsatisfactory conditions have been corrected. Commencement of work implies acceptance of all areas and conditions.

3.4 INSTALLATION

- A. Erosion and Sedimentation Control Devices. Erosion and sedimentation control measures to be taken during construction include, but are not necessarily limited to the following:
 - 1. Apply soil stabilization within 14 days to all disturbed areas that are to be dormant for a period longer than 30 calendar days after reaching grade. Stabilize soil with temporary seeding per criteria of authorities having jurisdiction.
 - 2. Roads and parking areas indicated to be paved may be covered with an appropriate aggregate base course. Temporary seeding or aggregate base course is not required if final pavement construction will take place within 30 days after grading to final contours.
 - 3. Soils that will be stockpiled for more than 30 days must be seeded and stabilized within 14 days after stockpile construction.
 - 4. Prevent sediment from leaving the project site by installing a silt fence or other BMPs as indicated on the plans. Protect existing storm inlets adjacent to the site by an approved inlet protection device.
 - 5. Excavate the future detention/water quality pond and construct the outlet structure/storm sewer such that the pond may function as a temporary sediment basin during development of the site. Construct the sediment basin in accordance with authority having jurisdiction's criteria. Provide temporary swales to convey site runoff to the pond.
 - 6. Locate vehicle tracking control at all points of vehicular ingress and egress to the construction site.
 - 7. Provide temporary erosion controls consisting of berms at the top of slopes and interceptor ditches at ends of berms and at those locations which will eliminate or minimize erosion during construction, along with temporary seeding, temporary diversion, chutes, and down pipes and lining of water courses.
 - 8. Temporary sedimentation controls shall consist of sediment traps, silt fence, and appurtenances at the top of spoil and borrow area slopes and where runoff water exits the site.
 - 9. Maintain the available silt holding capacity of silt fence and sediment traps until no longer needed. The sediment capacity of sediment retainage areas shall be at a minimum, the capacity shown on the plans in conformance with Urban Drainage Criteria Manual, Volume 3. Prior to removal, obtain concurrence of the Engineer.
 - 10. Remove accumulated sediment and debris from a BMP when the sediment level reaches one-half the height of the BMP, or at any time the sediment or debris adversely impacts the functioning of the BMP.
 - 11. The erosion/sediment control plan shows the minimum required for the project. If it becomes apparent that additional controls are necessary, the Engineer shall be notified and with approval of the Engineer, additional controls shall be installed.
- B. Chemicals and Pollutants:

1. Store construction materials and chemicals that could contribute pollutants to the runoff within an enclosure, container, or dike located around the perimeter of the storage area, to prevent discharge of these materials into runoff from the construction site.
2. Locate areas used for collection and temporary storage of solid and liquid waste away from the storm drainage system. Provide covering or fencing as required to prevent windblown materials; construct perimeter dike to contain liquid runoff. These measures may not be necessary if materials are immediately placed in covered waste containers.
3. Perform equipment maintenance in designated areas using measures such as drip pans to control petroleum products spillage.
4. Immediately clean up and properly dispose of spills of construction related materials such as paints, solvents, or other chemicals.

C. Final Stabilization and Long-Term Management:

1. Final stabilization shall be achieved through permanent vegetation and landscaping after construction of all buildings and paved surfaces.
2. With approval of the City of Aurora temporary erosion and sediment control measures may be removed within 30 days after final site stabilization is achieved or after temporary measures are no longer needed.
3. Inspection and Maintenance: Inspect erosion and sediment control measures weekly during construction. In addition, inspect all facilities immediately after any significant runoff or snowmelt which results in runoff. Repair or otherwise mitigate any damage to the erosion and sediment control facilities at no additional cost to the Engineer.

3.5 CLEANING

- A. Removal of Controls: Remove controls upon completion of that portion of the work for which controls were furnished. Leave the site and work area in a clean condition.

END OF SECTION 312270.01

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SECTION 321216 - ASPHALT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Hot-mix asphalt patching and paving shall conform to CDOT Construction Specifications, Division 400 Pavements, Section 403 Hot-Mix Asphalt.
- B. Related Requirements:
 - 1. Section 312000 "Earth Moving" for subgrade preparation, fill material, unbound-aggregate subbase and base courses, and aggregate pavement shoulders.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to hot-mix asphalt paving including, but not limited to, the following:
 - a. Review proposed sources of paving materials, including capabilities and location of plant that will manufacture hot-mix asphalt.
 - b. Review requirements for protecting paving work, including restriction of traffic during installation period and for remainder of construction period.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include technical data and tested physical and performance properties.
 - 2. Job-Mix Designs: For each job mix proposed for the Work.

1.6 INFORMATIONAL SUBMITTALS

- A. Record of Work: maintain record of time and date of placement, temperature, and weather conditions, retain until completion and furnish copy to engineer.
- B. Material Certificates: For each paving material. Include statement that mixes containing recycled materials will perform equal to mixes produced from all new materials.
- C. Material Test Reports: For each paving material, by a qualified testing agency.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Materials shall conform to CDOT Construction Specifications, Division 400 Pavements, Section 403 Hot-Mix Asphalt and related CDOT sections.

PART 3 - EXECUTION

3.1 GENERAL

- 1. Execution shall conform to CDOT Construction Specifications, Division 400 Pavements, Section 403 Hot-Mix Asphalt and related CDOT sections.

END OF SECTION

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SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Concrete paving shall conform to CDOT Construction Specifications, Division 400 Pavements, Section 412 Portland Cement Concrete Pavement.
- B. Concrete paving applications include but are not limited to:
 - 1. Vehicular Concrete Paving.
 - 2. Pedestrian Concrete Paving.
 - 3. Curbs and gutters.
 - 4. Mow bands.
 - 5. Concrete base slabs for other finish surfacing.
- C. Related Requirements:
 - 1. Section 312000 "Earth Moving" for subgrade preparation, fill material, unbound-aggregate subbase and base courses, and aggregate pavement shoulders.
 - 2. Section 321373 "Concrete Paving Joint Sealants".

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1.5 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Materials shall conform to CDOT Construction Specifications, Division 400 Pavements, Section 412 Portland Cement Concrete Pavement and related CDOT sections.

PART 3 - EXECUTION

3.1 GENERAL

- A. Execution shall conform to CDOT Construction Specifications, Division 400 Pavements, Section 412 Portland Cement Concrete Pavement and related CDOT sections.

END OF SECTION

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SECTION 321316 - DECORATIVE CONCRETE PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. **This section is supplemental to the most recent edition of the Colorado Department of Transportation (CDOT) Construction Specifications, Division 400 Pavements, Section 412 Portland Cement Concrete Pavement. The work performed for Decorative Concrete Paving shall be in accordance with CDOT Construction Specifications Section 412 Portland Cement Concrete and revisions or supplemental information herein.**

1.2 SUMMARY

- A. Section includes decorative concrete paving.
- B. Related Requirements:
 - 1. Section 033000 "Cast-in-Place Concrete" for general building applications of concrete.
 - 2. Section 321313 "Concrete Paving" for cast-in-place concrete paving with other finishes, curbs and gutters, and stamped detectable warnings.
 - 3. Section 321373 "Concrete Paving Joint Sealants" for joint sealants in expansion and contraction joints within decorative concrete paving and in joints between decorative concrete paving and other paving or adjacent construction.
 - 4. Portland Cement Concrete Pavement: CDOT Construction Specifications, Section 412.
 - 5. Fine Aggregates: CDOT Construction Specifications, Section 703.01.
 - 6. Coarse Aggregate: CDOT Construction Specifications, Section 703.02.
 - 7. Portland Cement: CDOT Construction Specifications, Section 701.01.
 - 8. Fly Ash: CDOT Construction Specifications, Section 701.02.
 - 9. Water: CDOT Construction Specifications, Section 712.01.
 - 10. Air-Entraining Admixtures: CDOT Construction Specifications, Section 711.02.
 - 11. Preformed Joint Filler: CDOT Construction Specifications, Section 705.01.
 - 12. Joint Sealant with Backer Rod: CDOT Construction Specifications, Section 705.01.
 - 13. Curing Materials: CDOT Construction Specifications, Section 711.01.
 - 14. Reinforcing Steel: CDOT Construction Specifications, Section 709.01.
 - 15. Chemical Admixtures: CDOT Construction Specifications, Section 711.03.
 - 16. Dowel Bars and Tie Bars: CDOT Construction Specifications, Section 709.03.
 - 17. Preparation of Design Mixes: CDOT Construction Specifications, Section 601.0

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.
- C. W/C Ratio: The ratio by weight of water to cementitious materials.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to decorative concrete paving, including but not limited to, the following:
 - a. Concrete mixture design.
 - b. Quality control of concrete materials and decorative concrete paving construction practices.
 - 2. Require representatives of each entity directly concerned with decorative concrete paving to attend, including the following:
 - a. Engineer.
 - b. Design Team Consultant.
 - c. Contractor's superintendent.
 - d. Independent testing agency responsible for concrete design mixtures.
 - e. Decorative concrete paving Installer.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Verification: For each type of exposed color, pattern, or texture indicated.
- C. Design Mixtures: For each decorative concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
- D. Jointing Plan: For all areas of work, provide plan drawn to scale indicating proposed construction, isolation, and contraction joints. Show interfacing work including but not limited to structures, walls, curbs, utility structures (manholes, etc), and site furnishings and amenities attached to work. Provide dimensions and indicate where jointing is intended to align with interfacing work. Denote joint types.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer ready-mix concrete manufacturer and testing agency.

B. Material Certificates: For the following, from manufacturer:

1. Cementitious materials.
2. Steel reinforcement and reinforcement accessories.
3. Fiber reinforcement.
4. Admixtures.
5. Curing compounds.
6. Applied finish materials.
7. Joint fillers.
8. Integral color.

1.7 QUALITY ASSURANCE

A. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Build mockups of full-thickness sections of decorative concrete paving to demonstrate typical joints; surface color, pattern, and texture; curing; and standard of workmanship.
2. Build mockups of decorative concrete paving in the location and of the size indicated or, if not indicated, build mockups where directed by Architect or Engineer and not less than 96 inches by 96 inches.
3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect or Engineer specifically approves such deviations in writing.
4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

A. Materials shall conform to CDOT Construction Specifications, Division 400 Pavements, Section 412 Portland Cement Concrete Pavement and supplemental information herein.

2.2 INSTALLER

A. Basis-of-Design Decorative Concrete System Installer:

1. Subject to compliance with requirements, provide installation by one of the following, or other as approved by Architect or Engineer:
 - a. Colorado Hardscapes, Inc. contact John Buteyn.303-750-8200, jbuteyn@coloradohardscapes.com
 - b. Art of Concrete, contact Karen Keyes, 303-750-8200, karen@theartofconcretellc.com.

2.3 COLOR PIGMENT

- A. Color Pigment: ASTM C 979/C 979M, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, free of carbon black, nonfading, and resistant to lime and other alkalis.
 - 1. Basis-of-Design Product for Concrete Aprons at Roadway Medians: Subject to compliance with requirements, provide the following or approved equivalent:
 - a. Davis Colors (mfr) "Rustic Brown" #6058. Liquid mix rate 2.46 pounds per 94 pound sack of cement. Powder mix rate 2 pounds per 94 pound sack of cement.
- B. Basis-of-Design Product for Decorative Concrete Paving (not including Concrete Aprons at Roadway Medians): Subject to compliance with requirements, provide products indicated on Drawings, or approved substitution by one of the following:
 - 1. Butterfield Color, Inc.
 - 2. Davis Colors.
 - 3. Scofield, a Business Unit of Sika Corporation.
 - 4. Solomon Colors, Inc

2.4 INTEGRAL COLOR FINISHING

- A. Curing and Sealing: Never use plastic sheeting or water spray to cure colored concrete, as it will mottle and streak the surface. Use manufacturer's liquid, membrane-forming compounds designed for use with approved integral color. Apply per manufacturer's written instructions.

2.5 EXPOSED AGGREGATE AND/OR SAND FINISH

- A. Surface Retarder (Surface Deactivator): Water-based, top-surface retarder designed to retard the set of fresh concrete at the surface to produce a consistent textured finish.
 - 1. Basis of Design Product: Subject to compliance with requirements, provide the following, or approved substitution:
 - a. GCP Top-Cast Top-Surface Retarder, GRADE 25 Beige.
- B. Finishing Aid: Typically applied finishing aid during concrete finishing that densifies the surface and reduces efflorescence.
 - 1. Basis of Design Product: Subject to compliance with requirements, provide the following, or approved substitution:
 - a. Solomon Colors, Inc. Day1 Finishing Aid.

PART 3 - EXECUTION

3.1 GENERAL

- A. Execution shall conform to CDOT Construction Specifications, Division 400 Pavements, Section 412 Portland Cement Concrete Pavement and supplemental information herein.

3.2 INTEGRAL COLOR MIX

- A. Mix at plant in accordance with manufacturer's written instructions for approved color selection and otherwise in accordance with CDOT Construction Specifications, Division 400 Pavements, Section 412 Portland Cement Concrete Pavement.

3.3 EXPOSED AGGREGATE AND/OR SAND FINISHING

- A. Spray-apply surface-retarder using manufacturer's recommended gun technique, proceeding progressively over the entire area being finished to produce a uniform texture that matches the approved mock-up.
- B. Per manufacturer's instructions, carefully remove the retarded surface material using pressurized equipment. Avoid creating inconsistencies in the overall finish.
- C. Remove exposed synthetic fiber reinforcing by method recommended by the fiber reinforcing manufacturer. If using torching, do not scorch concrete.

3.4 PAVING TOLERANCES

- A. Comply with tolerances in ACI 117 and as follows:
 - 1. Elevation: 3/4 inch.
 - 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 - 3. Surface: Gap below 10-foot- long, unlevelled straightedge not to exceed 1/2 inch.
 - 4. Lateral Alignment and Spacing of Dowels: 1 inch.
 - 5. Vertical Alignment of Dowels: 1/4 inch.
 - 6. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel.
 - 7. Joint Spacing: 3 inches.
 - 8. Contraction Joint Depth: Plus 1/4 inch, no minus.
 - 9. Joint Width: Plus 1/8 inch, no minus.

END OF SECTION 321316

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SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Joint sealants and backer materials shall conform to CDOT Construction Specifications, Division 700 Materials Details, Section 705.01 Joint Waterproofing and Bearing Material.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Materials shall conform to CDOT Construction Specifications, 700 Materials Details, Section 705.01 Joint Waterproofing and Bearing Material.
- B. Compatibility: Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Execution shall conform to CDOT Construction Specifications, 700 Materials Details, Section 705.01 Joint Waterproofing and Bearing Material.
- B. Examine joints to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.

- C. Proceed with installation only after unsatisfactory conditions have been corrected.

END OF SECTION

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SECTION 321400 - UNIT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Brick pavers set in aggregate setting beds.
 - 2. Concrete pavers set in aggregate setting beds.
 - 3. Stone pavers set in aggregate setting beds.
 - 4. Edge restraints.
 - 5. Cast-in-place concrete edge restraints.
 - 6. Stone curbs.

- B. Related Requirements:

- 1. Section 321313 "Concrete Paving" for concrete base under unit pavers and for cast-in-place concrete curbs and gutters serving as edge restraints for unit pavers.
 - 2. Section 321443 "Porous Unit Paving" for unit paving using grid pavers or pavers with openings between them.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For materials other than water and aggregates.
- B. Sieve Analyses: For aggregate setting-bed materials, according to ASTM C 136.
- C. Samples for Verification: For full-size units.. Include Samples of the following:

1. Unit pavers, each type.
2. Exposed edge restraints.
3. Granite curbs.

1.6 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For unit pavers. Include statements of material properties indicating compliance with requirements, including compliance with standards. Provide for each type and size of unit.

1.7 QUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 1. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store pavers on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.

1.9 FIELD CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.

PART 2 - PRODUCTS

2.1 BRICK PAVERS

- A. Brick Pavers: Light-traffic paving brick; ASTM C 902, Class SX, Type I, Application PX. Provide brick without frogs or cores in surfaces exposed to view in the completed Work.
 1. Thickness: 2-1/4 inches.
 2. Face Size: 3-5/8 by 7-5/8 inches.
 3. Color: As selected by Architect from manufacturer's full range.
- B. Efflorescence: Brick shall be rated "not effloresced" when tested according to ASTM C 67.

- C. Temporary Protective Coating: Precoat exposed surfaces of brick pavers with a continuous film of a temporary protective coating that is compatible with brick, mortar, and grout products and can be removed without damaging grout or brick. Do not coat unexposed brick surfaces; handle brick to prevent coated surfaces from contacting backs or edges of other units. If, despite these precautions, coating does contact bonding surfaces of brick, remove coating from bonding surfaces before setting brick.

2.2 CONCRETE PAVERS

- A. Concrete Pavers: Solid interlocking paving units complying with ASTM C 936/C 936M and resistant to freezing and thawing when tested according to ASTM C 67, made from normal-weight aggregates.
 - 1. Sizes and shapes as indicated on the Drawings.
 - 2. Color: As selected by Architect from manufacturer's full range.

2.3 STONE PAVERS

- A. Granite Pavers: Rectangular paving slabs made from granite complying with ASTM C 615/C 615M.
 - 1. Sizes and shapes as indicated on the Drawings.
 - 2. Match Architect's samples for stone type, color, finish, and other stone characteristics relating to aesthetic effects.

2.4 CURBS AND EDGE RESTRAINTS

- A. As indicated on the Drawings.
- B. Cast-in-place Concrete Edge Restraints: Comply with requirements in Section 033000 "Cast-in-Place Concrete" for normal-weight, air-entrained, ready-mixed concrete with minimum 28-day compressive strength of 3000 psi.

2.5 AGGREGATE SETTING-BED MATERIALS

- A. Graded Aggregate for Base: Sound, crushed stone or gravel complying with requirements in Section 312000 "Earth Moving" for base course.
- B. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C 33/C 33M for fine aggregate.
- C. Sand for Joints: Fine, sharp, washed, natural sand or crushed stone with 100 percent passing No. 16 sieve and no more than 10 percent passing No. 200 sieve.
 - 1. Provide sand of color needed to produce required joint color.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Where unit paving is to be installed over waterproofing, examine waterproofing installation, with waterproofing Installer present, for protection from paving operations, including areas where waterproofing system is turned up or flashed against vertical surfaces.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Sweep concrete substrates to remove dirt, dust, debris, and loose particles.
- B. Proof-roll prepared subgrade according to requirements in Section 312000 "Earth Moving" to identify soft pockets and areas of excess yielding. Proceed with unit paver installation only after deficient subgrades have been corrected and are ready to receive base course for unit pavers.

3.3 INSTALLATION, GENERAL

- A. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.
- B. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
- C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
 - 1. For concrete pavers, a block splitter may be used.
- D. Handle protective-coated brick pavers to prevent coated surfaces from contacting backs or edges of other units. If, despite these precautions, coating does contact bonding surfaces of brick, remove coating from bonding surfaces before setting brick.
- E. Joint Pattern: As indicated.
- F. Pavers over Waterproofing: Exercise care in placing pavers and setting materials over waterproofing so protection materials are not displaced and waterproofing is not punctured or otherwise damaged. Carefully replace protection materials that become displaced and arrange for repair of damaged waterproofing before covering with paving.
- G. Tolerances: Do not exceed 1/32-inch unit-to-unit offset from flush (lippage) or 1/8 inch in 10 feet from level, or indicated slope, for finished surface of paving.

- H. Tolerances: Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches and 1/4 inch in 10 feet from level, or indicated slope, for finished surface of paving.
- I. Provide edge restraints as indicated. Install edge restraints before placing unit pavers.
 - 1. Install job-built concrete edge restraints to comply with requirements in Section 033000 "Cast-in-Place Concrete."
 - 2. Where pavers set in mortar bed are indicated as edge restraints for pavers set in aggregate setting bed, install pavers set in mortar and allow mortar to cure before placing aggregate setting bed and remainder of pavers. Cut off mortar bed at a steep angle so it will not interfere with aggregate setting bed.
 - 3. Where pavers embedded in concrete are indicated as edge restraints for pavers set in aggregate setting bed, install pavers embedded in concrete and allow concrete to cure before placing aggregate setting bed and remainder of pavers. Hold top of concrete below aggregate setting bed.
- J. Provide steps made of pavers as indicated. Install paver steps before installing adjacent pavers.
 - 1. Where pavers set in mortar bed are indicated for steps constructed adjacent to pavers set in aggregate setting bed, install steps and allow mortar to cure before placing aggregate setting bed and remainder of pavers. Cut off mortar bed at a steep angle so it will not interfere with aggregate setting bed.

3.4 AGGREGATE SETTING-BED APPLICATIONS

- A. Compact soil subgrade uniformly to at least 95 percent of ASTM D 698 laboratory density.
- B. Proof-roll prepared subgrade to identify soft pockets and areas of excess yielding. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed.
- C. Where indicated or required, place separation geotextile over prepared subgrade, overlapping ends and edges at least 12 inches.
- D. Place aggregate base, compact by tamping with plate vibrator, and screed to depth indicated.
- E. Place aggregate base, compact to 100 percent of ASTM D 1557 maximum laboratory density, and screed to depth indicated.
- F. Place leveling course and screed to a thickness of 1 to 1-1/2 inches, taking care that moisture content remains constant and density is loose and uniform until pavers are set and compacted.
- G. Set pavers with a minimum joint width of 1/16 inch and a maximum of 1/8 inch, being careful not to disturb leveling base. If pavers have spacer bars, place pavers hand tight against spacer bars. Use string lines to keep straight lines. Fill gaps between units that exceed 3/8 inch with pieces cut to fit from full-size unit pavers.
 - 1. When installation is performed with mechanical equipment, use only unit pavers with spacer bars on sides of each unit.

- H. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000-lbf compaction force at 80 to 90 Hz. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.
 - 1. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches of uncompacted pavers adjacent to temporary edges.
 - 2. Before ending each day's work, compact installed concrete pavers except for 36-inch width of uncompacted pavers adjacent to temporary edges (laying faces).
 - 3. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches of laying face.
 - 4. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with nonstaining plastic sheets to protect them from rain.
- I. Spread dry sand and fill joints immediately after vibrating pavers into leveling course. Vibrate pavers and add sand until joints are completely filled, then remove excess sand. Leave a slight surplus of sand on the surface for joint filling.
- J. Do not allow traffic on installed pavers until sand has been vibrated into joints.
- K. Repeat joint-filling process 30 days later.

3.5 REPAIRING, AND CLEANING

- A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 321540.01 - CRUSHER FINES PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification sections, apply to this section.

1.2 SUMMARY

- A. Section Includes:

- 1. Geotextile Fabric
 - 2. Crusher Fines Paving

- B. Related Requirements:

- 1. Section 312000 "Earth Moving" for subgrade and base preparation.
 - 2. Section 329113 "Soil Preparation" for soil analysis and amendments.

- C. REFERENCES

- 1. ASTM C136 / C136M - 14, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates, ASTM International, West Conshohocken, PA, 2014, www.astm.org
 - 2. ASTM D2419 - 14, Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregates, ASTM International, West Conshohocken, PA, 2014, www.astm.org
 - 3. ASTM F1951 - 14, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment, ASTM International, West Conshohocken, PA, 2014, www.astm.org

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 ACTION SUBMITTALS

- A. Product Data: From the manufacturer, for each type of product, demonstrating compliance with the requirements.
 - 1. Crusher fines aggregate, including gradation (sieve analysis), color, and source of supply.
 - 2. Stabilizer additive.

3. Aggregate base, including gradation (sieve analysis), color, and source of supply.
 4. Geotextile soil separation fabric.
- B. Samples for Initial Selection: In sealed container, clearly labeled with project, date, submittal number, product source and description, and application.
1. Crusher fines material in proposed color, gradation and binder, (1) quart container.
- C. Samples for Verification: For each type of product listed.
1. Geotextile soil separation fabric, 8-inch by 8-inch.
- D. Design Mixtures: For stabilized crusher fines, in writing from the manufacturer, for the actual crusher fines aggregate being proposed.

1.5 INFORMATION SUBMITTALS

- A. Qualification Data: From the stabilizer additive manufacturer, for certification of the provider of pre-mixed, stabilized crusher fines.
- B. Material Certificates: Signed by material producer and Contractor, certifying that each material item complies with or exceeds specified requirements.
1. Crusher Fines Material: include gradation, sieve analysis, color and source.
 2. Geotextile Fabric: manufacturer's data
 3. Stabilizer: product data

1.6 QUALITY ASSURANCE

- A. Contractor Qualifications: Install work using skilled persons, proficient in the trades required, in a neat orderly and responsible manner with recognized standards of workmanship. Contractor shall have not less than 5 years successful experience with installation of similar work. Submit lists of three projects completed in the last two years of projects in similar complexity including, owner's name and telephone number, name of project, principal project consultant and telephone number.
- B. Pre-Mix Stabilized Crusher Fines Manufacturer Qualifications: A firm experienced in pre-mixed stabilized aggregate products and certified by the manufacturer of the specified stabilizer additive product.
- C. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
1. Prepare a sample finished crusher fines paving section, including base course aggregates and concrete edge restraint, using specified materials after approval of material samples. Build mockups of full-thickness sections of paving to demonstrate typical surface color, texture, curing, edge conditions, and standard of workmanship. Build additional mockups as necessary, as directed by Architect, until aesthetic effects and set quality standards for materials and execution are found to be acceptable by Architect, as indicated in writing.

2. Build mockups of crusher fines paving in the location and of the size indicated or, if not indicated, build mockups where directed by Architect and not less than 96 inches by 96 inches. Mockups shall remain in place and available for observation until acceptance of final crusher fines work.
3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

1.7 SITE CONDITIONS

- A. Subgrade and base: Ensure the subgrade and base are properly prepared, graded, and compacted in accordance with the specifications.
- B. Weather Limitations: Do not apply during rain events or when base is saturated. Rain within 3 to 5 days after installation will increase curing time.
- C. Grade control: Establish and maintain required lines and elevations.
- D. Protect Protect all nearby surfaces, plants, and structures from possible contamination from materials or damage by equipment.
- E. Do not install when temperature is below 40 degrees Fahrenheit.

1.8 DELIVERY, HANDLING, AND STORAGE

- A. Delivery: Delivery of Organic-Lock pre-blended with aggregate is available from select dealers. Contact your closest dealer or the manufacturer for more information.
- B. Handling: When dealing with un-blended Organic-Lock, wear appropriate respirator when ventilation is inadequate. Avoid contact with skin and eyes.
- C. Storage: Protect stabilized crushed aggregate mix from contamination. Store undercover. If the blended and hydrated aggregate is sitting for long periods of time (longer than 48 hours), or when subject to rainfall, it needs to be turned with a skid steerer or loader to ensure consistent moisture content throughout prior to installation. Verify hydration level with snowball test before installation. For any questions regarding storage, contact the manufacturer or local dealer.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Use locally available materials and gradations which exhibit a satisfactory record of previous installations.
- B. Crusher Fines Aggregate: Crushed aggregate material consisting of sound, angular, durable particles.
 1. Color: As selected by Architect or Engineer from full range of available aggregates..
- C. Gradation, in accordance with ASTM C136:

Optimal Gradation

Sieve	Sieve Size (mm)	Percent Passing
4	4.75	80 - 100 percent
8	2.36	65 - 90 percent
16	1.18	40 - 65 percent
30	0.6	25 - 55 percent
50	0.3	15 - 35 percent
100	0.15	10 - 20 percent
200	0.075	5 - 15 percent

- D. Geotextile Fabric, when indicated by the Drawings or required by Geotechnical Engineer:
1. Basis-of-Design: Subject to compliance with requirements, provide Mirafi 140n or approved substitution.
- E. Stabilizer Binder Paving Additive, when indicated by the Drawings: Stabilizer, a patented non-toxic, colorless, odorless, non-staining, concentrated organic powder that binds soil and crushed aggregate screenings, creating a natural-appearing, firm paving surface, or approved substitution.
1. Basis-of-Design: Subject to compliance with requirements, provide Envirobond "Organic-Lock" stabilizer binder; contact All-American Sports Materials, 301 Centennial Dr, Milliken, CO 80543, 970-587-7336, or approved substitution.

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

- A. As indicated in 312000 "Earth Moving" and amended below.
- B. Compact the subgrade to 95% Proctor Density.
- C. Prepare subgrade in accordance with 312000 "Earth Moving" for paving application.
- D. Excavate to subgrade elevations as required to meet finish grades indicated on the Drawings. Provide vertical clean edge to full depth of crusher fines material.
- E. Proof-roll prepared subgrade surface to check for unstable areas and areas requiring additional compaction or irregularities in the subgrade which shall be brought to a uniform grade and cross-section.
- F. When indicated on the Drawings or required by the Geotechnical Engineer, install geotextile fabric on prepared subgrade. Stake as per manufacturer's recommendations. Adhese fabric to faces of adjacent concrete edge restraints with top of fabric held below finish grade, Fabric edges exposed in finished work are not permitted and will require removal and repair or reinstallation of paving..
- G. Notify Engineer of unsatisfactory conditions. Do not begin paving work until deficient subgrade areas have been corrected and are ready to receive crusher fines material.

3.2 BASE PREPARATION

- A. Protect all work from erosion and runoff.
- B. Install aggregate base course, to depth as indicated on Drawings, in accordance with Colorado Department of Transportation (CDOT) Standard Specifications for Road and Bridge Construction.
- C. Construct the base course so that the finished surface reflects the the same slopes, cross-slopes, or crowns as intended for the finish grade condition.

3.3 BLENDING STABILIZER

- A. Thoroughly pre-blend Stabilizer with the crushed aggregate screenings, at the rate recommended by the manufacturer, prior to placing of Stabilized mix. It is essential that Stabilizer be mixed thoroughly and uniformly through crushed aggregate screenings to achieve a successful result. Crusher fines shall be pre-mixed by supplier utilizing a truck-mounted mixer prior to delivery to project site.

3.4 PLACING MIX

- A. General: Place the loose material on the prepared base and rake smooth using a steel tine rake to grade and cross section indicated. Apply in a single lift. A lift of 4-inches of loose, pre-wet stabilized crusher fines aggregate will typically compact to approximately three-inches. It is recommended to monitor and record the required lift depth during the construction of the mockup.
- B. Compaction: Compact to 95 percent Modified Proctor Density
 - 1. Make 4-6 passes using a 1-ton double or single static drum roller, or equivalent. A Foot-Traffic Pathway will typically require one lift, compacted to 3 inches.
 - 2. Compaction may vary with different aggregates due to particle shape and size. It will compact 20-25%, less if using paving machinery. The level of compaction should be monitored as early as possible (starting during the mockup) to determine the actual degree of compaction. It is better to put down too much material and to remove it from the top than to put down too little and add a layer later.
 - 3. Do not use vibratory equipment. Hand tamp with 8 or 10 inch tamp in areas adjacent to i edges inaccessible to equipment such as walls, mowbands, concrete flatwork, planting, and irrigation systems.
 - 4. Provided the moisture content of the Organic-Lock blended aggregate is adequate, additional hydration should not be necessary. On dry, sunny days, however, the surface layer may start to dry out while installing, in which case, a light misting would be appropriate to prevent surface cracks from appearing during compaction.
- C. Edges of the crusher fines paving shall be tamped to provide a straight and neat lines, or true radii where indicated.
- D. Finished crusher fines paving shall be true and even, free of low spots or humps. All areas must drain to established drainage points. No puddles will be permitted.

- E. Water: Apply a light spray to the surface of the material to give a clean, even appearance. Apply until water begins to run off of surface.
- F. Do not allow any traffic on the newly installed pathway until fully cured, a minimum of 24-72 hours.

3.5 INSPECTION

- A. Finished surface of paving shall be smooth, uniform, and solid, with no evidence of chipping or cracking. Cured and compacted paving shall be firm throughout with no spongy areas. Loose material shall not be present on the surface initially. Any significant irregularities in paving surface shall be repaired to the uniformity of entire installation.
- B. Loose gravel on the surface immediately after installation, or unconsolidated crushed aggregate screenings below the surface, is evidence of improper bonding due to poor mixing or insufficient watering. Test the loose material for adequate compaction and bonding.
- C. Repairs:
 - 1. Excavate the damaged, noncompacted, or unbonded area and scarify the adjacent aggregate. Pre-blend stabilizer additive and crusher fines aggregate at 28 to 34 lbs/ton, or as recommended by the stabilizer manufacturer. Apply the material and compact per specification. Thoroughly wet the material to achieve 8-10 percent moisture content.
 - 2. Allow newly installed aggregate surfacing to cure but not completely dry out.
 - 3. Re-compact the material per the specification, ensuring that final grade and slopes are maintained.

3.6 TOLERANCES

- A. Surface: Using a 10-foot straightedge, variation between and two contact points shall not exceed 1/4-inch.
 - 1. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowed variance from template is 1/4-inch.
- B. Width: Plan dimension, plus or minus 1 inch.
- C. Thickness: Plan dimension, plus or minus 1/2 inch.

3.7 PROTECTION

- A. Thoroughly clean all areas where work has occurred. Remove from site excess material, debris and rubbish.
- B. Protect and maintain crusher fines paving until Final Acceptance.

END OF SECTION

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SECTION 321723 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Pavement markings shall conform to CDOT Construction Specifications, Division 700 Materials Details, Section 708 Paints.
- B. Section Includes:
 - 1. Painted traffic markings applied to asphalt paving.
 - 2. Painted traffic markings applied to concrete surfaces.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to marking asphalt paving or concrete surfaces including, but not limited to, the following:
 - a. Asphalt-paving or concrete-surface aging period before application of pavement markings.
 - b. Review requirements for protecting pavement markings, including restriction of traffic during installation period.

1.5 ACTION SUBMITTALS

- A. Product Data: Include technical data and tested physical and performance properties.
 - 1. Pavement-marking paint, latex.
- B. Shop Drawings:

1. Indicate pavement markings, colors, lane separations, defined parking spaces, and dimensions to adjacent work.
2. Indicate, with international symbol of accessibility, spaces allocated for people with disabilities.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Materials shall conform to CDOT Construction Specifications, Division 700 Materials Details, Section 708 Paints.
- B. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design", the ABA standards of the Federal agency having jurisdiction ICC A117.1.

PART 3 - EXECUTION

3.1 GENERAL

- A. Materials shall conform to CDOT Construction Specifications, Division 700 Materials Details, Section 708 Paints.

3.2 EXAMINATION

- A. Verify that pavement-marking substrate is dry and in suitable condition to begin pavement marking in accordance with manufacturer's written instructions.
- B. Proceed with pavement marking only after unsatisfactory conditions have been corrected.

END OF SECTION

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SECTION 321726 - DETECTABLE WARNING SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Detectable Warnings Surfacing shall conform to CDOT Construction Specifications, Division 600 Miscellaneous Construction, Section 608 Detectable Warnings.
- B. Detectable Warning Surfacing applications include but are not limited to:
 - 1. Detectable warnings at curb ramps and other street crossings.
 - 2. Detectable warnings at passenger loading zones.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Verification: For each type of tactile warning surface, in manufacturer's standard sizes unless otherwise indicated, showing edge condition, truncated-dome pattern, texture, color, and cross section; with fasteners and anchors.

PART 2 - PRODUCTS

2.1 DETECTABLE WARNING SURFACING, GENERAL

- A. Materials shall conform to CDOT Construction Specifications, Division 600 Miscellaneous Construction, Section 608 Detectable Warnings.
- B. Accessibility Requirements: Comply with applicable provisions in The Americans with Disabilities Act (ADA) Standards for Accessible Design, latest edition, for tactile warning surfaces.

1. For tactile warning surfaces composed of multiple units, provide units that when installed provide consistent side-to-side and end-to-end dome spacing that complies with requirements.
- C. Source Limitations: Obtain each type of tactile warning surfacing from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

2.2 DETECTABLE WARNING TILES

- A. Cast-in-Place Detectable Warning Metal Tiles: Accessible truncated-dome detectable warning metal tiles configured for setting flush in new concrete walkway surfaces, with slip-resistant surface treatment on domes and field of tile.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Advantage Tactile Systems.
 - b. EJ (formerly known as East Jordan Iron Works).
 - c. Neenah Foundry Company.
 - d. ADA Solutions.
 - e. TufTile Inc.
 2. Material:
 - a. Cast Iron: Gray iron, ASTM A 48/A 48M, CL 35.
 3. Shapes and Sizes:
 - a. Rectangular panel, 24 by 24 inches or sizes as indicated on the Drawings.
 - b. Radius panel, nominal 24 inches deep by outside radius indicated on Drawings.
 4. Dome Spacing and Configuration: Complying with ADA Standards for Accessible Design, latest edition.
 5. Mounting:
 - a. Permanently embedded detectable warning tile wet-set into freshly poured concrete.

2.3 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of tactile warning surfaces, noncorrosive and compatible with each material joined, and complying with the following:
 1. Furnish Type 316 stainless-steel fasteners for exterior use.
 2. Fastener Heads: For nonstructural connections, use flathead or oval countersunk screws and bolts with tamper-resistant heads, colored to match tile.
- B. Sealant: As recommended by manufacturer for sealing perimeter of tactile warning surfacing unit.

PART 3 - EXECUTION

3.1 GENERAL

- A. Execution shall conform to CDOT Construction Specifications, Division 600 Miscellaneous Construction, Section 608 Detectable Warnings.

3.2 EXAMINATION

- A. Verify that pavement is in suitable condition to begin installation according to manufacturer's written instructions. Verify that installation of tactile warning surfacing will comply with accessibility requirements upon completion.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

END OF SECTION 321726

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SECTION 321800.01 - INFIELD SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Construction Contract, and Division – 01 Specification sections, apply to this section.

1.2 SUMMARY

- A. This section covers work necessary for baseball and softball infield and warning track areas.
- B. Related Sections:
 - 1. Section 310000 "Earthwork" for earthwork and drainage.
 - 2. Section 311000 "Site Clearing" for site clearing.
 - 3. Section 329113 "Soil Preparation" for soil analysis and amendments.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 SUBMITTALS

- A. Submit laboratory sieve analysis and plasticity index of proposed surface mix. Report to be labeled with source and description of material, and dated. Report shall be no older than 6-months preceding date of submittal. .
- B. Samples: Provide in [1-quart] [sealed container labeled with content, source, and date obtained. Sample shall be typical of the lot of material to be furnished; provide an accurate representation of composition, color, and texture.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Do not deliver surfacing materials to the site until finish grading is completed and surfacing may be immediately applied.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Infield Mix, Basis-of-Design: Subject to compliance with requirements, provide the following or approved equivalent.
1. Golf and Sport Solutions (mfr) Classic Infield Mix.
 - a. Color: Gold or Red, as approved by Engineer.
- B. Description: An engineered blend of 70-75% sand and 25-30% combined silt and clay, conforming to ASTM F2107 Standard Guide for Construction and Maintenance of Skinned Areas of on Baseball and Softball Fields, and within the following gradation ranges:

Sand Sieve Analysis (ASTM F-1632-03)	Percent Retained
Gravel (>2.0 mm)	≤3%
Very Coarse Sand (2.0 - 1.0 mm)	≤15%
Coarse Sand (1.0 - 0.5 mm)	>50% of coarse & medium sand total
Medium Sand (0.5 - 0.25 mm)	
Fine Sand (0.25 - 0.10 mm)	≤20% of fine & very fine sand total
Very Fine Sand (0.10 - 0.05 mm)	
Silt (0.05 - 0.002 mm)	
Clay (<0.002 mm)	≥13%
	25-30% combined
	Silt to clay ratio (SCR) 0.5-1.0

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify layout of areas to be covered as indicated on the drawings prior to start operations. Verify that fine grading is within tolerances specified in Section 31000 "Earthwork".
- B. Finish grade shall be reviewed by Engineer prior to installation.

3.2 PREPARATION

- A. Fine grade all areas to receive soil or rock cover. Remove all sticks, stones or clods over 1-inch in diameter and grade soil smoothly and evenly.
- B. Apply pre-emergent herbicide to areas to receive infield mix, following manufacturer's directions.

3.3 INSTALLATION

A. Infield Mix:

1. Delivery shall be in truck beds that have been completely cleaned of gravel or any other matter. Any loads of material delivered which contains gravel or contaminants will be rejected.
2. Subgrade shall have been prepared to a depth of 4 inches to receive the infield surfacing material. Compacted and laser graded according to plans and specifications. The cavity shall have vertical sides so not to "dilute" the surfacing material.
3. Surfacing Material to be pre-mixed off- site by supplying vendor. Surfacing Material shall be dumped and spread to the depth of 4 inches. Great care must be taken so not to allow contamination of the surfacing when it is delivered and spread.
4. Laser grading equipment will be used in order for the grade and elevation of the surfacing material to be true to line, grade and cross section. When tested with an eight foot straight edge, it shall have no deviation from the face of the straight edge in excess of one-fourth (1/4") inch at any point with a maximum slope of 2% for drainage, evenly across the field. Any point of the surface not meeting these requirements shall be corrected.
5. Compaction: Apply a light water spray to surfacing material. Follow with a heavy (1 ton minimum) small rider, after having initially used a lawn roller, to obtain the desired final dense smooth, uniform texture. Do not use rammer/jumping-jacks or vibratory rollers.

3.4 FIELD QUALITY CONTROL

- #### A.
- Provide Engineer with at least 48-hours advance notice for review and inspection of finished work. The Engineer reserves the right to reject work containing but not limited to the presence of excessive heavy aggregate forms at the surface, high or low spots of finish grade, pooling water, and unconsolidated material. Work shall be corrected, as directed by the Engineer, at the expense of the Contractor.

1. Rejection of work based on excessive presence of heavy aggregate forms at the surface of work or issues due to the the integrity or composition of the infield mix, as determined by the Engineer, must be removed and new material brought in at the expense of the Contractor.

3.5 CLEANING

- #### A.
- Sweep and wash paved and finished surface areas soiled as a result of this work. Remove debris and excess materials from project site.

END OF SECTION 321800.01

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SECTION 321813 - SYNTHETIC GRASS SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes synthetic grass surfacing.
- B. Related Requirements:
 - 1. Section 312000 "Earth Moving" for preparation, compaction, and grading of granular base.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For synthetic grass surfacing.
 - 1. Include sections and details.
 - 2. Show locations of seams and method of seaming.
 - 3. Show layout of game lines, numbers, and letters. Indicate application method of each line and marking.
 - 4. Show location and layout of team logo/graphics.
- C. Samples: For each type of synthetic grass surfacing indicated.
 - 1. Turf Fabric: 12 inches square.
 - 2. Game Line Turf Fabric: 12 inches long by actual width.

3. Infill Material: 4 oz. of each type.
4. Seam Sample: 24 inches square with seam centered in sample.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Test Reports: For each synthetic grass surfacing assembly.
- C. Field quality-control reports.
- D. Sample Warranties: For special warranties.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For synthetic grass surfacing, including maintenance cleaning instructions, to include in maintenance manuals.

1.8 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Turf Fabric: Minimum of 300 sq. ft. for each type indicated.
 2. Infill: Minimum of 5 percent of total infill installed provided on palletized 50lb. bags or bulk sacks, of each type.
 3. Seaming Tape and Adhesive: One roll of seaming tape and one gallon of adhesive.
 4. One new set of maintenance tools, of type recommended by synthetic grass surfacing manufacturer for installation.

1.9 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Store materials in location and manner to allow installation of synthetic grass surfacing without excess disturbance of granular base.

1.11 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace synthetic grass surfacing that fails in materials or workmanship within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Deterioration and excessive wear.
 - b. Deterioration from UV light.

- c. Excessive loss of shock attenuation.
 - d. Seam separation, including game lines and markings.
- 2. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Turf Fabric: Turf fabric tested according to the following methods, with additional test method conditions for each method according to ASTM F 1551.
 - 1. Tuft Bind: Not less than 10 lbf according to ASTM D 1335.
 - 2. Breaking Strength: Minimum 250 lbf in warp direction and minimum 250 lbf perpendicular to warp direction, according to ASTM D 5034.
- B. Synthetic Grass Surfacing: Assembly tested according to the following methods, with additional test method conditions for each method according to ASTM F 1551.
 - 1. Shock Attenuation: No greater than 120 G(max) at time of installation according to ASTM F 355. A range of 90 to 120 G(max) should be provided.
 - 2. Abrasiveness Index: 30 +/- 2 according to ASTM F 1015.
- C. Permeability: 10 in./h of rainfall capacity according to ASTM F 2898 or EN 15330-1.
- D. Durability: Minimum of 20,000 wear cycles according to EN 15306 (Lisport test).

2.2 SYNTHETIC GRASS SURFACING

- A. Synthetic Grass Surfacing: Complete surfacing system, consisting of synthetic yarns bound to water-permeable backing and infill indicated, suitable for multipurpose sport playing fields.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Shaw Sports Turf or approved substitution.
- B. Backing: Manufacturer's standard woven or nonwoven polypropylene primary backing with urethane-coated secondary backing; provide perforations or drainage channels sufficient to meet permeability indicated.
- C. Infill: Manufacturer's standard sand infill.
- D. Game Lines and Markings: Provide game lines and markers in widths and colors according to requirements indicated on Drawings.
 - 1. Application Method: Tufted in to the maximum extent practicable, with remaining lines inlaid.
 - 2. Team Logo/Graphic: Provide inlaid team logo/graphic in colors and design indicated.
- E. Seaming Method: Adhesive and Sewn.

2.3 MATERIALS

- A. Sand Infill: Uniformly sized latex-coated silica sand free of silts, clays, and contaminants, and of subangular or rounder shape according to ASTM F 1632; mesh size as recommended by synthetic grass surfacing manufacturer.
 - 1. Basis-of-Design: Subject to compliance with requirements, provide USGreentech "Envirofill", or approved substitution.
- B. Seam Adhesive: One- or two-part urethane, recommended or approved by synthetic grass surfacing manufacturer, and suitable for ambient conditions at time of installation.
- C. Seam Tape: Synthetic grass manufacturer's recommended seam tape, minimum 15 inches wide, or 18 inches wide for inlaid game lines.
- D. Seaming Cord: Seaming cord or thread, recommended by the synthetic grass surfacing manufacturer.
- E. Game Line Paint: Permanent paint as recommended or approved by synthetic grass surfacing manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine base and other conditions, with Installer present, for compliance with requirements for installation tolerances, permeability, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Avoid disturbance of base during installation of turf fabric.
- B. Shock-Attenuation Pad Installation: Roll out pad and allow to relax a minimum of six hours prior to final fit and trim. Stagger head seams between adjacent rows. Fit seams snugly without stretching or forcing.
- C. Roll out turf fabric and allow to relax at least four hours prior to seaming.
- D. Provide seams flat and snug, with no gaps or fraying. Remove yarns that are trapped within seams. Attach turf fabric to perimeter restraint system as recommended by the manufacturer.
- E. Install inlaid game lines and markings by cutting through turf fabric and installing snugly fitting game line turf fabric. Provide seaming tape that extends minimum 6 inches beyond seam.
- F. Repair loose seams and bubbles formed due to expansion of turf fabric prior to installation of infill.

- G. Evenly broadcast and groom infill by machine in proportions and depth after settling as recommended by the manufacturer, and to meet indicated performance requirements. Rake fibers trapped by infill to surface.
- H. Painted Game Lines: Apply lines and markings as recommended by the game line paint manufacturer.

3.3 FIELD QUALITY CONTROL

- A. Testing Agency: Engineer will engage a qualified testing agency to perform tests and inspections.
- B. Perform the following tests and inspections:
 - 1. Permeability: 10 in./h of rainfall capacity according to ASTM F 2898 or EN 15330-1.
 - 2. Shock Attenuation: No greater than 120 G(max) at time of installation according to ASTM F 1936.

3.4 DEMONSTRATION

- A. Train Owner's maintenance personnel in proper maintenance procedures for synthetic grass surfacing.

END OF SECTION 321813

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SECTION 321816.13 - PLAYGROUND PROTECTIVE SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Unitary, seamless surfacing.
- 2. Organic loose-fill surfacing.
- 3. Synthetic turf surfacing.

- B. Related Requirements:

- 1. Section 321813 - Synthetic Grass Surfacing.
- 2. Section 31200 - Earth Moving for excavating and subsurface drainage course.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Definitions in ASTM F 2223 apply to Work of this Section.
- C. Critical Height: Standard measure of shock attenuation according to ASTM F 2223; same as "critical fall height" in ASTM F 1292. According to ASTM F 1292, this approximates "the maximum fall height from which a life-threatening head injury would not be expected to occur."
- D. SBR: Styrene-butadiene rubber.
- E. Unitary Surfacing (Poured-in-Place Rubberized Surfacing): A protective surfacing of one or more material components bound together to form a continuous surface; same as "unitary system" in ASTM F 2223.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For each type of protective surfacing.

1. Include plans, sections, placement and penetration details, and attachment to substrates.
2. Include accessories and edge terminations.
3. Include patterns made by varying colors of surfacing and details of graphics.
4. Include fall heights and use zones for equipment and structures specified in Section 116800 "Play Field Equipment and Structures," coordinated with the critical heights for protective surfacing.
5. Include depths of safety surfacing and indicate transitions to varying depths, corresponding to required depth for play equipment fall heights and impact attenuation.
6. Include seaming plan for synthetic turf surfacing.

C. Samples for Initial Selection: For each type of exposed finish.

1. Include Samples of accessories involving color selection.

D. Samples for Verification: For each type of protective surfacing and exposed finish.

1. Include Samples of accessories to verify color and finish selection.
2. Unitary, Seamless Surfacing: Minimum 6 by 6 inches.
3. Loose-Fill Surfacing: Minimum 1 quart.
4. Stabilizing Mats: Minimum 12 by 12 inches
5. Drainage/Separation Geotextile: Minimum 12 by 12 inches.
6. Synthetic Turf Surfacing:
 - a. Turf Fabric: Minimum 12 by 12 inches.
 - b. Infill Material: 4 oz.
 - c. Shock-Attenuation Pad: 12 by 12 inches.
 - d. Seam Sample: 24 inches square with seam centered in sample.

E. Product Schedule: For protective surfacing. Use same designations indicated on Drawings.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and testing agency.
- B. Product Certificates: For each type of unitary surfacing product.
- C. Sample Warranty: For manufacturer's special warranty.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For playground protective surfacing to include in maintenance manuals.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
- B. Mockups: Build mockups to verify selections made under Sample submittals and to set quality standards for materials and execution.
 1. Build mockups for protective surfacing including accessories.

- a. Size: 48 inches by 48 inches.
 - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Engineer specifically approves such deviations in writing.
 - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- C. Synthetic Turf Grass Surfacing Certifications:
- 1. Synthetic Turf Grass shall meet impact attenuation requirements of ASTM F1292-99-Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
 - 2. For Synthetic Turf Grass:
 - a. G-max values less than 120G for 12" system at a 12' drop height.
 - b. HIC value less than 1,000 at eight feet height (CFH).
- D. Meet requirements of ASTM F1951, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
- E. Meet accessibility requirements of Access Board, Final Report.
- F. Synthetic Turf Grass surfacing shall meet ADA compaction requirements upon completion of work Contractor shall provide testing to comply with this requirement.

1.8 WARRANTY

- A. Special Warranty: Manufacturer and Installer agree to repair or replace components of protective surfacing that fail in materials or workmanship within specified warranty period.
- 1. Failures include, but are not limited to, the following:
 - a. Reduction in impact attenuation as measured by reduction of critical fall height.
 - b. Deterioration of protective surfacing and other materials beyond normal weathering.
 - 2. Warranty Period:
 - a. Two years from date of Substantial Completion for Loose-fill Surfacing
 - b. Ten years from date of Substantial Completion for unitary seamless surfacing.
 - c. Eight years from date of Substantial Completion for synthetic turf surfacing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain protective surfacing materials from single source from single manufacturer.

1. Provide geosynthetic accessories of each type from source recommended by manufacturer of protective surfacing materials.

2.2 PERFORMANCE REQUIREMENTS

- A. Impact Attenuation: Critical fall height tested according to ASTM F 1292.
- B. Accessibility Standard: Minimum surfacing performance according to ASTM F 1951.

2.3 UNITARY, DUAL-DENSITY, SEAMLESS SURFACING (POURED-IN-PLACE RUBBERIZED SURFACING)

- A. Description: Manufacturer's standard, site-mixed and applied, two-layer material with wearing layer over cushioning layer, with combined, overall thickness as required, tested for impact attenuation according to ASTM F 1292 and for accessibility according to ASTM F 1951.
 1. Basis-of-Design: Subject to compliance with requirements, provide products by the following. Equivalent product may only be used with written approval of the Town.
 - a. Surface America (manufacturer) "PlayBound Poured-in-Place" surfacing with "Extreme-10" aliphatic urethane binder.
 2. Recycled Content: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 85 percent.
 3. Wearing Layer: Formulation of EPDM rubber particles, binder, and other organic and inorganic components.
 4. Cushioning Layer: Formulation of recycled SBR particles and binder.
 5. Binder: Weather-resistant, aliphatic, UV-stabilized, flexible, nonhardening, 100 percent solids polyurethane, low odor, with no solvents.
 6. Critical Height: As indicated on Drawings.
 7. Overall Thickness: Not less than as required for critical height indicated.
 8. Primer/Adhesive: Manufacturer's standard primer and weather-resistant, moisture-cured polyurethane adhesive suitable for unit, substrate, and location.
 9. Wearing Layer Color(s): As selected by Engineer from manufacturer's full range.
 - a. Design: Where graphic design is required, provide as indicated on Drawings.
- B. Leveling and Patching Material: Portland cement-based grout or epoxy- or polyurethane-based formulation suitable for exterior use and approved by protective surfacing manufacturer.

2.4 ORGANIC LOOSE-FILL SURFACING

- A. Engineered Wood Fiber: ASTM F 2075; containing no bark, leaves, twigs, or foreign or toxic materials; tested for accessibility according to ASTM F 1951.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Fibar Group LLC (The).
 - b. GameTime; a PlayCore, Inc. company.

- c. Sof'Solutions Inc.
 - d. Supreme Forest Products.
 - e. Zeager Bros., Inc.
- 2. Recycled Content: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 95 percent.
- 3. Critical Height: As indicated on Drawings.
- 4. Uncompressed Material Depth: Not less than as required for critical height indicated.

2.5 LOOSE-FILL ACCESSORIES

- A. Stabilizing Mats: Water-permeable PVC or rubber mats tested for impact attenuation according to ASTM F 1292, with anchoring system designed to anchor mat securely to subgrade through loose fill, and rated for use in the following locations:
 - 1. Under and in Front of Slide Exits: Below surface of protective surfacing.
 - 2. Under and Around Swings: Below surface of protective surfacing.
 - 3. Around Transfer Stations at Accessible Perimeter: At finished grade of protective surfacing.
 - 4. At high-traffic areas and playground equipment where indicated on Drawings.
 - 5. Size: 48 by 48 inches.
 - 6. Color(s): As selected by Architect from manufacturer's full range.

2.6 GEOSYNTHETIC ACCESSORIES

- A. Drainage/Separation Geotextiles: Comply with Section 312000 "Earth Moving."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for subgrade elevations, slope, and drainage and for other conditions affecting performance of the Work.
 - 1. Verify that substrates are sound and without high spots, ridges, holes, and depressions.
- B. Hard-Surface Substrates: Verify that substrates are satisfactory for unitary, protective surfacing installation and that substrate surfaces are dry, cured, and uniformly level or sloped to drain as indicated on the Drawings, within recommended tolerances according to protective surfacing manufacturer's written requirements for cross-section profile.
 - 1. Concrete Substrates: Verify that substrates are dry and free from surface defects, laitance, glaze, efflorescence, curing compounds, form-release agents, hardeners, dust, dirt, loose particles, grease, oil, and other contaminants incompatible with protective surfacing or that may interfere with adhesive bond. Determine adhesion, dryness, and acidity characteristics by performing procedures recommended in writing by protective surfacing manufacturer.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates to receive surfacing products according to protective surfacing manufacturer's written instructions.
- B. Hard-Surface Substrates: Clean surface free of laitance, efflorescence, curing compounds, and other contaminants incompatible with protective surfacing.
 - 1. Repair: Fill holes and depressions in unsatisfactory surfaces with leveling and patching material.
 - 2. Treatment: Mechanically abrade or otherwise prepare concrete substrates according to protective surfacing manufacturer's written instructions to achieve adequate roughness.
 - 3. Terminal Edges: Saw cut concrete for terminal edges of protective surfacing.
 - 4. Treat control joints and other nonmoving substrate cracks to prevent telegraphing through protective surfacing.

3.3 INSTALLATION OF GEOSYNTHETIC ACCESSORIES

- A. Install geosynthetic accessories before edging and according to playground surface system manufacturer's and geosynthetic manufacturer's written instructions and in a manner that cannot become a tripping hazard.
 - 1. Drainage Geotextile: Completely cover area beneath protective surfacing, overlapping geotextile sides and edges a minimum of 8 inches with manufacturer's standard treatment for seams.

3.4 INSTALLATION OF SEAMLESS (POURED-IN-PLACE) SURFACING

- A. Mix and apply components of seamless surfacing according to manufacturer's written instructions to produce uniform, monolithic, and impact-attenuating protective surfacing of required overall thickness.
 - 1. Substrate Primer: Apply over prepared substrate at manufacturer's standard spreading rate for type of substrate.
 - 2. Poured Cushioning Layer: Spread evenly over primed substrate to form a uniform layer applied at manufacturer's standard spreading rate in one continuous operation, with a minimum of cold joints.
 - 3. Intercoat Primer: Over cured cushioning layer, apply primer at manufacturer's standard spreading rate.
 - 4. Wearing Layer: Spread over primed base course to form a uniform layer applied at manufacturer's standard spreading rate in one continuous operation and, except where color changes, with no cold joints. Finish surface to produce manufacturer's standard wearing-surface texture.
 - a. Design: Where graphic design is required, place colored, design material as soon as previously placed material is sufficiently cured, using primer or adhesive if required by manufacturer's written instructions.
 - 5. Edge Treatment: As indicated on Drawings. Fully adhere edges to substrate with full coverage of substrate. Maintain fully cushioned thickness required to comply with performance requirements.

3.5 INSTALLATION OF LOOSE-FILL SURFACING

- A. Apply components of loose-fill surfacing according to manufacturer's written instructions to produce a uniform surface.
- B. Loose Fill: Place loose-fill materials to required depth after installation of playground equipment support posts and foundations. Include manufacturer's recommended amount of additional material to offset natural compaction over time.
 - 1. Loose fill to be blown in unless otherwise approved by Engineer.
- C. Stabilizing Mats: Coordinate installation of mats and mat anchoring system with placing and compacting loose fill.
- D. Grading: Uniformly grade loose fill to an even surface free from irregularities.
- E. Finish Grading: Hand rake to a uniformly smooth finished surface and to required elevations.

3.6 INSTALLATION OF SYNTHETIC TURF SURFACING

- A. Avoid disturbance of base during installation of shock-attenuation pad and turf fabric.
- B. Shock-Attenuation Pad Installation: Roll out pad and allow to relax a minimum of six hours prior to final fit and trim. Stagger head seams between adjacent rows. Fit seams snugly without stretching or forcing.
- C. Provide seams flat and snug, with no gaps or fraying. Remove yarns that are trapped within seams. All Seams shall be flat, tight, and permanent with no separation or fraying. Seams shall be hot melt glued; two part glued or sewn in accordance with manufacturer's directions (minimum of 12 in. wide seaming tape). All sewn seams shall be sewn using double bagger stitches and polyester thread or cart sewer method with polyester thread. Remove fibers from the stitch line prior to sewing the carpet panels to avoid trapping fiber in the sewn seam. It is recommended that cart sewn seams also be reinforced with additional seaming tape and high-grade adhesive (per the manufacture's standard procedures). Seams shall be flat, tight, and permanent with no separation or fraying.
- D. Attach turf fabric to perimeter restraint system: Connection to the treated wood shall be done with industrial staples (non. depth embedment is one inch (1") at maximum 2 inch (2") on center staple spacing as recommended by the manufacturer.
- E. Repair loose seams and bubbles formed due to expansion of turf fabric prior to installation of infill.
- F. Evenly broadcast and groom infill by machine in proportions and depth after settling as recommended by the manufacturer, and to meet indicated performance requirements. Rake fibers trapped by infill to surface.
- G. Painted Game Lines: Apply lines and markings, where indicated on the Drawings, as recommended by the game line paint manufacturer.

3.7 PROTECTION

- A. Prevent traffic over seamless surfacing for not less than 48 hours after installation.

END OF SECTION

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SECTION 321823.03 - SPORTS COURT SURFACING

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Multi-purpose sport court surfacing and court markings/stripping.
- B. Related Requirements:
 - 1. Section 033800 "Post-Tensioned Concrete Paving" for paving substrate under tennis court surfacing.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 REFERENCES

- A. Post Tensioning Institute (PTI).
- B. American Concrete Institute (ACI).
- C. United States Tennis Association (USTA).
- D. American Sports Builders Association (ASBA).
- E. International Tennis Federation (ITF).

1.5 ACTION SUBMITTALS

- 1. Product Data: For all products and accessories.
 - a. Include current Material Safety Data Sheets (MSDS).

2. Shop Drawings: including Plans, details and court markings/stripping.
3. Samples: Color samples.

B. INFORMATIONAL SUBMITTALS

1. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
2. Qualification Data: For Installers.
 - a. Certificate: Authorized Applicator Certificate from the surface system manufacturer.
 - b. Project References: Submit applicator's list of successfully completed concrete basketball, tennis, & multi-purpose court surface color coating system projects, including project name, location, type and quantity of color coating system applied, and date of application.
3. ITF Pace Classification Certificate for the system to be installed.
4. Warranty Documentation: Submit manufacturer's standard warranty.
5. Weather Conditions Reports: For days that temperature or weather limitations prevent installation of scheduled work and within 24-hours of completed installation.
 - a. Note Contractor's name, product scheduled for installation and description of work, date, wind direction and speed, and temperature. Indicate whether work was completed or postponed.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery and Acceptance Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
 1. Store and handle materials in accordance with manufacturer's instructions.
 2. Keep materials in manufacturer's original, unopened containers and packaging until application.
 3. Store materials in clean, dry area indoors.
 4. Store materials out of direct sunlight.
 5. Keep materials from freezing.
 6. Protect materials during storage, handling, and application to prevent contamination or damage.
 7. Close containers when not in use.
 8. Retain manufacturer batch codes on each container and application dates, for warranty purposes.

1.7 LIMITATIONS

- A. Do not apply when air or surface temperatures are below 50°F during application or within 24 hours after application.
- B. Do not apply when air or surface temperatures are above 130°F during application or within 24 hours after application.

- C. Provide a weather conditions report for days that temperature or weather limitations prevent installation of scheduled work, and for date that work was completed. See Information Submittals requirements herein.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications:
 - 1. Member of the American Sports Builders Association.
 - 2. Certified Tennis Court Builder.
 - 3. A qualified installer that has been approved by the tennis or sport court surfacing manufacturer.
 - 4. A qualified installer that has successfully installed not less than five (5) tennis or multi-purpose sport court surfaces of size and scope comparable to this Project.

1.9 WARRANTY

- A. The contractor shall guaranty their respective work against defective materials or faulty workmanship for a period of one (1) year from the date of completion, and that the colored surface will not wear through for a period of two (2) years.

PART 2 - PRODUCTS

2.1 GENERAL

- 1. Provide 100 percent acrylic products. Asphalt emulsion products are not permitted.
- 2. Provide products for a single system from a single manufacturer.

2.2 INSTALLERS

- A. Subject to compliance with requirements, provide installation by one the following, or by a comparable installer that is also approved by the Product manufacturer.
 - 1. General Acrylics Inc., 22222 N 22nd Avenue, Phoenix, AZ 85027.
 - 2. Renner Sports Surfaces, 775 Canosa Court Denver, Colorado 80204 (303) 825-3435.

2.3 PRODUCTS

A. PRIMER

- 1. Prime coat if required shall consist of a mixture of 100 percent acrylic latex, diluted 1:4 with water.

B. CRACK SEALANT

- 1. 100 percent acrylic emulsion elastomeric crack sealant.
- 2. Seals cracks and expansion joints up to 1/2 inch wide in concrete pavement.
- 3. Weight per Gallon at 77 Degrees F: 8.8 lbs., plus or minus 0.5 lbs.

4. Non-Volatile Material: 61 percent, plus or minus 5 percent.

C. CRACK FILLER

1. 100 percent acrylic emulsion trowel-grade crack filler..
2. Fills cracks in concrete pavement up to 1 inch wide.
3. Chemical Characteristics, by Weight, Minimum:
 - a. Acrylic Emulsion: 10.0 percent.
 - b. Hiding Pigment: 0.2 percent.
 - c. Mineral Inert Fillers: 78.0 percent.
 - d. Film Formers, Additives: 1.8 percent.
 - e. Water: 8.5 percent.
 - f. Weight per Gallon at 77 Degrees F: 15.2 lbs., plus or minus 1.0 lbs.
 - g. Non-Volatile Material: 80 percent, plus or minus 5 percent.
 - h. Color: [Green] [Neutral] [Red] [Blue].
 - i. 100 percent acrylic emulsion liquid binder.

D. PATCH BINDER

1. 100 percent acrylic emulsion liquid binder.
2. Mix on-site with sand and cement.
3. Levels and repairs low spots and depressions up to 3/4 inch deep in concrete pavement.
4. Weight per Gallon at 77 Degrees F: 8.8 lbs., plus or minus 0.5 lbs.

E. FILLER COURSE

1. 100 percent acrylic emulsion resurfacer.
2. Mix on-site with silica sand.
3. Apply to adhesion promoter or previously colored acrylic surfaces in preparation of color coating system.
4. Chemical Characteristics, by Weight, Minimum:
 - a. Acrylic Emulsion: 44.0 percent.
 - b. Hiding Pigment: 2.0 percent.
 - c. Mineral Inert Fillers: 5.0 percent.
 - d. Film Formers, Additives: 0.2 percent.
 - e. Water: 45.0 percent.
 - f. Weight per Gallon at 77 Degrees F: 8.5 lbs., plus or minus 0.5 lbs.
 - g. Non-Volatile Material: 27.5 percent, plus or minus 5.0 percent.
 - h. Color: Black or Neutral.

F. ADHESION PROMOTER

1. Acrylic emulsion primer.
2. Primes concrete surface and promotes adhesion of color coating system materials.
3. Weight per Gallon at 77 Degrees F: 8.7 lbs., plus or minus 0.5 lbs.

G. COLOR COATING

1. 100 percent acrylic emulsion coating.

2. Mix on-site with silica sand and water.
3. Color coats basketball and multi-purpose courts.
4. Weight per Gallon at 77 Degrees F: 9.2 lbs., plus or minus 0.5 lbs.
5. Color: As selected by Engineer from manufacturer's full range of available colors.

H. LINE MARKINGS PRIMER

1. 100 percent acrylic emulsion primer, clear drying.
2. Primes line markings and prevents bleed-under for sharp lines.
3. Chemical Characteristics, by Weight, Nominal:
 - a. Acrylic Emulsion: 38.0 percent.
 - b. Hiding Pigment: 0.0 percent.
 - c. Mineral Inert Fillers: 7.0 percent.
 - d. Film Formers, Additives: 1.5 percent.
 - e. Water: 50.0 percent.
4. Weight per Gallon at 77 Degrees F: 8.9 lbs., plus or minus 0.5 lbs.
5. Non-Volatile Material: 29 percent, plus or minus 5 percent.

I. LINE PAINT

1. Pigmented, 100 percent acrylic emulsion line paint.
2. Line marking on concrete basketball and multi-purpose courts.
3. Chemical Characteristics, by Weight, Nominal:
 - a. Acrylic Emulsion: 25.89 percent.
 - b. Pigment: 14.90 percent.
 - c. Mineral Inert Fillers: 13.12 percent.
 - d. Additives: 4.73 percent.
 - e. Water: 41.36 percent.
4. Weight per Gallon at 77 Degrees F: 10.65 lbs., plus or minus 0.75 lbs.
5. Non-Volatile Material: 45.17 percent, plus or minus 5 percent.
6. Color: White.

2.4 ACRYLIC COLOR

- A. Provide two (2) coats of acrylic color, to be selected by Engineer from manufacturer's full range of standard colors.
 - a. Include washed silica sand in proportion required by manufacturer.
 - b. Include potable water, in proportion required by manufacturer.

2.5 PLAYING LINES

- 1. Paint playing lines using white, acrylic latex line paint recommended by the sport court surfacing manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Concrete Substrates: Allow not less than 28 days minimum curing time before the installation of surfacing. Concrete curing compounds are not permitted.
- B. Verify paving substrate for dimensional accuracy, strength, and surface preparation. Notify Engineer of any deficiencies.
 - 1. Finish Surface Tolerance: Finish and measure surface so gap at any point between concrete surface and an unlevelled, freestanding, 10-ft.-long straightedge resting on two high spots and placed anywhere on the surface does not exceed 1/4 inch.
 - 2. Slope for Drainage: Provide minimum 1 percent positive slope for drainage.
- C. Water flood the surface of the paving with the use of a water truck or other potable water source. If after 30 minutes on a 70 degree Fahrenheit day, ponding is evident to a depth more than 1/8 inch, prime and patch all affected areas.
 - 1. Prime area with acrylic primer and install patching material. Feather patch edges.
 - 2. After curing, water flood the court again to verify that no ponding remains. Grind patches flush.
- D. Notify Engineer of conditions that would adversely affect application or subsequent use.
- E. Do not begin surface preparation or application until unacceptable conditions are corrected

3.2 SURFACE PREPARATION

- A. Protection of In-Place Conditions: Protect adjacent surfaces and landscaping from contact with concrete basketball and multi-purpose court surface color coating system.
- B. Prepare surfaces in accordance with manufacturer's instructions.
 - 1. New Concrete:

- a. Cure new concrete surfaces a minimum of 28 days before application of concrete basketball and multi-purpose court surface color coating system.
 - b. Provide medium broom finish or similar roughened texture.
 - c. Do not steel trowel finish.
 - d. Acid etch with phosphoric or muriatic acid and rinse thoroughly prior to application of color coating system.
 - 2. Existing Concrete:
 - a. Sandblast, shotblast, or scarify smooth concrete surfaces to roughened texture similar to medium broom finish. If shot blasting, a shot blast profile of CSP3 or CSP4 is recommended.
 - b. If existing concrete is uncoated, acid etch with phosphoric or muriatic acid and rinse thoroughly prior to application of color coating system.
 - C. Remove dirt, dust, debris, oil, grease, sealers, curing compounds, vegetation, loose coatings, loose materials, and other surface contaminants which could adversely affect application of concrete sport court surface color coating system. Pressure wash entire surface.
 - D. Keep paving free of excess dirt, oil, grease or any other foreign matter.
 - E. Repair cracks, depressions, and surface defects in accordance with manufacturer's instructions before application of color coating.
 - F. Repair spalled areas and level depressions 1/8 inch and deeper with patch binder in accordance with manufacturer's instructions.
 - G. Apply adhesion promoter over entire concrete surface in accordance with manufacturer's instructions.
 - H. Apply 1 coat of filler course to provide smooth underlayment for application of color coating.
 - I. Ensure surface repairs are flush and smooth to adjoining surfaces.
- 3.3 APPLICATION
- A. Apply concrete sport court surface color coating system in accordance with manufacturer's instructions at locations indicated on the Drawings.
 - B. Mix materials in accordance with manufacturer's instructions.
 - C. Apply Filler Course and Color Coating with a 50-60 durometer, soft rubber squeegee.
 - D. Filler Course:
 - 1. Apply 1 coat on new concrete or existing acrylic surfaces with minimal repairs.
 - 2. Apply 2 coats on existing acrylic surfaces with extensive cracks or low spot repair.

- E. Apply a minimum of 2 coats of color coating to prepared surfaces in accordance with manufacturer's instructions.
- F. Allow material drying times in accordance with manufacturer's instructions before applying other materials or opening completed surface to foot traffic.

3.4 LINE MARKINGS

- A. Lay out court line markings in accordance with appropriate governing body:
 - 1. USTA Rules of Tennis unless shown otherwise on the Drawings.
 - 2. NBA Official Rules for professional basketball unless shown otherwise on the Drawings..
 - 3. NFHS Rules for high school basketball unless shown otherwise on the Drawings..
 - 4. NCAA Rules for college basketball unless shown otherwise on the Drawings..
 - 5. Other required game layout.
- B. Apply line markings primer, after masking tape has been laid, to seal voids between masking tape and court surface to prevent bleed-under when line paint is applied.
 - 1. Playing lines shall be two inches (2 inches) wide unless noted otherwise on the Drawings.
- C. Apply a minimum of 1 coat of line paint in accordance with manufacturer's instructions.
- D. Line paint will be applied to provide a uniform line. The lines shall have clear definition. Lines with bleeding or nonuniform geometry will not be accepted.

3.5 PROTECTION

- A. Allow a minimum of 24 hours curing time before opening courts for play.
- B. Protect applied concrete basketball and multi-purpose court surface color coating system to ensure that, except for normal weathering, coating system will be without damage or deterioration at time of Substantial Completion.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 323113 - CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Chain-link fences.
 - 2. Swing gates.
- B. Related Requirements:
 - 1. Section 033000 "Cast-in-Place Concrete" for cast-in-place concrete post footings.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Inspect and discuss electrical roughing-in, equipment bases, and other preparatory work specified elsewhere.
 - 2. Review sequence of operation for each type of gate operator.
 - 3. Review coordination of interlocked equipment specified in this Section and elsewhere.
 - 4. Review required testing, inspecting, and certifying procedures.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
 - a. Fence and gate posts, rails, and fittings.

- b. Chain-link fabric, reinforcements, and attachments.
 - c. Gates and hardware.
 - B. Shop Drawings: For each type of fence and gate assembly.
 - 1. Include plans, elevations, sections, details, and attachments to other work. Include foundations.
 - 2. Include accessories, hardware, gate operation, and operational clearances.
 - C. Delegated-Design Submittal: For structural performance of chain-link fence and gate frameworks, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- 1.6 INFORMATIONAL SUBMITTALS
 - A. Product Certificates: For each type of chain-link fence and gate.
 - B. Sample Warranty: For special warranty.
- 1.7 CLOSEOUT SUBMITTALS
 - A. Operation and Maintenance Data: For gate operators to include in emergency, operation, and maintenance manuals.
- 1.8 QUALITY ASSURANCE
 - A. Emergency Access Requirements: According to requirements of authorities having jurisdiction for gates with automatic gate operators serving as a required means of access.
- 1.9 FIELD CONDITIONS
 - A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.
- 1.10 WARRANTY
 - A. Special Warranty: Installer agrees to repair or replace components of chain-link fences and gates that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Failure to comply with performance requirements.
 - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - c. Faulty operation of gate operators and controls.
 - 2. Warranty Period: Ten years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design chain-link fence and gate frameworks.
- B. Structural Performance: Chain-link fence and gate frameworks shall withstand the design wind loads and stresses for fence height(s) and under exposure conditions indicated according to ASCE/SEI 7.
 - 1. Design Wind Load: [As indicated on Drawings] <As required by local jurisdiction>.
 - a. Minimum Post Size: Determine according to ASTM F 1043 for post spacing not to exceed 10 feet for Material Group IA, ASTM F 1043, Schedule 40 steel pipe.
- C. Lightning Protection System: Maximum resistance-to-ground value of 25 ohms at each grounding location along fence under normal dry conditions.

2.2 CHAIN-LINK FENCE FABRIC

- A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist according to "CLFMI Product Manual" and requirements indicated below:
 - 1. Fabric Height: As indicated on Drawings.
 - 2. Steel Wire for Fabric: Wire diameter of 0.148 inch (9 gauge) .
 - a. Mesh Size: 2 inches.
 - b. Zinc-Coated Fabric: ASTM A 392, Type II, Class 2, 2.0 oz./sq. ft. with zinc coating applied before weaving.
 - c. Coat selvage ends of metallic-coated fabric before the weaving process with manufacturer's standard clear protective coating.
 - d. Provide knuckle at both selvages, regardless of height.

2.3 FENCE FRAMEWORK

- A. Posts and Rails : ASTM F 1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 based on the following:
 - 1. Fence Height: As indicated on Drawings.
 - 2. Light-Industrial-Strength Material: Group IC-L, round steel pipe, electric-resistance-welded pipe.
 - a. Line Post: 2.375 inches in diameter.
 - b. End, Corner, and Pull Posts: 2.875 inches.

3. Horizontal Framework Members: Top and bottom , and intermediate rails according to ASTM F 1043.
 - a. Top Rail: 1.66 inches in diameter.
4. Metallic Coating for Steel Framework:
 - a. Type A: Not less than minimum 2.0-oz./sq. ft. average zinc coating according to ASTM A 123/A 123M or 4.0-oz./sq. ft. zinc coating according to ASTM A 653/A 653M.

2.4 SWING GATES

- A. General: ASTM F 900 for gate posts and single or double swing gate types.
 1. Gate Leaf Width: As indicated.
 2. Framework Member Sizes and Strength: Based on gate fabric height as indicated.
- B. Pipe and Tubing:
 1. Zinc-Coated Steel: ASTM F 1043 and ASTM F 1083; protective coating and finish to match fence framework.
- C. Frame Corner Construction: assembled with corner fittings.
- D. Hardware:
 1. Hinges: 360-degree inward and outwardwing.
 2. Latch: Permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.
 3. Padlock and Chain: Provided by Engineer.

2.5 FITTINGS

- A. Provide fittings according to ASTM F 626.
- B. Post Caps: Provide for each post.
 1. Provide line post caps with loop to receive tension wire or top rail.
- C. Rail and Brace Ends: For each gate, corner, pull, and end post.
- D. Rail Fittings: Provide the following:
 1. Top Rail Sleeves: Pressed-steel or round-steel tubing not less than 6 inches long.
 2. Rail Clamps: Line and corner boulevard clamps for connecting intermediate bottom rails to posts.
- E. Tension and Brace Bands: Pressed steel.

- F. Tension Bars: Steel, length not less than 2 inches shorter than full height of chain-link fabric. Provide one bar for each gate and end post, and two for each corner and pull post, unless fabric is integrally woven into post.
- G. Truss Rod Assemblies: Steel, hot-dip galvanized after threading rod and turnbuckle or other means of adjustment.
- H. Tie Wires, Clips, and Fasteners: According to ASTM F 626.
 - 1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, according to the following:
 - a. Hot-Dip Galvanized Steel: 0.148-inch- diameter wire; galvanized coating thickness matching coating thickness of chain-link fence fabric.
- I. Finish:
 - 1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz./sq. ft. of zinc.

2.6 GROUT AND ANCHORING CEMENT

- A. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout, recommended in writing by manufacturer, for exterior applications.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for a certified survey of property lines and legal boundaries, site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.
 - 1. Do not begin installation before final grading is completed unless otherwise permitted by Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 CHAIN-LINK FENCE INSTALLATION

- A. Install chain-link fencing according to ASTM F 567 and more stringent requirements specified.
 - 1. Install fencing on established boundary lines inside property line.

- B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- C. Post Setting: Set posts in concrete t indicated spacing into firm, undisturbed soil.
 - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - 2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
 - a. Exposed Concrete: Extend 2 inches above grade; shape and smooth to shed water.
 - b. Concealed Concrete: Place top of concrete elow grade as indicated on Drawings to allow covering with surface material.
- D. Terminal Posts: Install terminal end, corner, and gate posts according to ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of 30 degrees or more. For runs exceeding 500 feet, space pull posts an equal distance between corner or end posts.
- E. Line Posts: Space line posts uniformly at 10 feet .c. unless otherwise noted on the Drawings.
- F. Post Bracing and Intermediate Rails: Install according to ASTM F 567, maintaining plumb position and alignment of fence posts. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.
 - 1. Locate horizontal braces at midheight of fabric 72 inches or higher, on fences with top rail, and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.
- G. Top Rail: Install according to ASTM F 567, maintaining plumb position and alignment of fence posts. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.
- H. Intermediate and Bottom Rails: Secure to posts with fittings.
- I. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 2-inch bottom clearance between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.
- J. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts, with tension bands spaced not more than 15 inches o.c.
- K. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric according to ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing.
 - 1. Maximum Spacing: Tie fabric to line posts at 12 inches o.c. and to braces at 24 inches o.c.

- L. Fasteners: Install nuts for tension bands and carriage bolts on the side of fence opposite the fabric side. Peen ends of bolts or score threads to prevent removal of nuts.

3.4 GATE INSTALLATION

- A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation.

3.5 GROUNDING AND BONDING

- A. Comply with requirements in Section 260526 "Grounding and Bonding for Electrical Systems."
- B. Fence and Gate Grounding:
 - 1. Ground for fence and fence posts shall be a separate system from ground for gate and gate posts.
 - 2. Install ground rods and connections at maximum intervals of 1500 feet.
 - 3. Fences within 100 Feet of Buildings, Structures, Walkways, and Roadways: Ground at maximum intervals of 750 feet.
 - 4. Ground fence on each side of gates and other fence openings.
 - a. Bond metal gates to gate posts.
 - b. Bond across openings, with and without gates, except openings indicated as intentional fence discontinuities. Use No. 2 AWG wire and bury it at least 18 inches below finished grade.
- C. Protection at Crossings of Overhead Electrical Power Lines: Ground fence at location of crossing and at a ground rod located a maximum distance of 150 feet on each side of crossing.
- D. Fences Enclosing Electrical Power Distribution Equipment: Ground according to IEEE C2 unless otherwise indicated.
- E. Grounding Method: At each grounding location, drive a grounding rod vertically until the top is 6 inches below finished grade. Connect rod to fence with No. 6 AWG conductor. Connect conductor to each fence component at grounding location.
 - 1. Make grounding connections to each barbed wire strand with wire-to-wire connectors designed for this purpose.
 - 2. Make grounding connections to each barbed tape coil with connectors designed for this purpose.
- F. Connections:
 - 1. Make connections with clean, bare metal at points of contact.
 - 2. Make aluminum-to-steel connections with stainless-steel separators and mechanical clamps.
 - 3. Make aluminum-to-galvanized-steel connections with tin-plated copper jumpers and mechanical clamps.
 - 4. Make above-grade ground connections with mechanical fasteners.
 - 5. Make below-grade ground connections with exothermic welds.

- 6. Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.
- G. Bonding to Lightning Protection System: Ground fence and bond fence grounding conductor to lightning protection down conductor or lightning protection grounding conductor according to NFPA 780.
- H. Comply with requirements in Section 264113 "Lightning Protection for Structures."

3.6 ADJUSTING

- A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.
- B. Lubricate hardware and other moving parts.

END OF SECTION

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SECTION 323119 - DECORATIVE METAL FENCES AND GATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Decorative metallic-coated-steel tubular picket fences.
 - 2. Swing gates.
- B. Related Requirements:
 - 1. Section 033000 "Cast-in-Place Concrete" for concrete post foundations.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For gates. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Include diagrams for power, signal, and control wiring.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products.

1.7 WARRANTY

- A. Manufacturer's Special Warranty: 20 year Finish System warranty.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Design decorative metal fences and gates, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.
- B. Structural Performance: Fence and gate framework shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to ASCE/SEI 7 or latest edition.
- C. Minimum Post Size and Maximum Spacing: Provide as required to meet the following:
 - 1. Wind Loads: As indicated on Drawings.
 - 2. Fence Height: As indicated on Drawings.

2.2 DECORATIVE METALLIC-COATED-STEEL TUBULAR PICKET FENCES

- A. Decorative Metallic-Coated-Steel Tubular Picket Fences: Comply with ASTM F 2408 for commercial application (class) unless otherwise indicated.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings.
 - 2. Line Posts: As indicated on the Drawings.
 - 3. Terminal, Corner, and Gate Posts: As indicated on the Drawings.
- B. Post Caps: Aluminum castings.
- C. Rails: Square tubes.
 - 1. Size: As indicated on the Drawings.
- D. Pickets: Square tubes.
 - 1. Size: As indicated on the Drawings.
- E. Fasteners: Manufacturer's standard concealed fastening system.
- F. Interior surface of tubes formed from uncoated steel sheet shall be hot-dip zinc coated same as exterior.
- G. Galvanizing: For components indicated to be galvanized and for which galvanized coating is not specified in ASTM F 2408, hot-dip galvanize to comply with ASTM A 123/A 123M. For hardware items, hot-dip galvanize to comply with ASTM A 153/A 153M.

- H. Finish: Powder coating.

2.3 SWING GATES

- A. Gate Configuration: As indicated on the Drawings.
- B. Gate Frame Height: Matching adjacent fencing, or as indicated on the Drawings.
- C. Gate Opening Width: As indicated on the Drawings.
- D. Additional Rails: Provide as indicated, complying with requirements for fence rails.
- E. Infill: Comply with requirements for adjacent fence.
- F. Picket Size, Configuration, and Spacing: Comply with requirements for adjacent fence.
- G. Hardware: Latches permitting operation from both sides of gate, hinges, and keepers for each gate leaf more than 5 feet wide. Provide center gate stops and cane bolts for pairs of gates. Fabricate latches with integral eye openings for padlocking; padlock accessible from both sides of gate.
- H. Cane Bolts: Provide for inactive leaf of pairs of gates. Fabricated from 1/2-inch- diameter, round steel bars, hot-dip galvanized after fabrication. Finish to match gates. Provide galvanized-steel pipe strikes to receive cane bolts in both open and closed positions.
- I. Finish exposed welds to comply with NOMMA Guideline 1, Finish #2 - completely sanded joint, some undercutting and pinholes okay.
- J. Galvanizing: For items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A 123/A 123M. For hardware items, hot-dip galvanize to comply with ASTM A 153/A 153M.

2.4 STEEL AND IRON

- A. Plates, Shapes, and Bars: ASTM A 36/A 36M.
- B. Bars (Pickets): Hot-rolled, carbon steel complying with ASTM A 29/A 29M, Grade 1010.
- C. Tubing: ASTM A 500/A 500M, cold-formed steel tubing.
- D. Bar Grating: NAAMM MBG 531.
 - 1. Bars: Hot-rolled steel strip, ASTM A 1011/A 1011M, Commercial Steel, Type B.
 - 2. Wire Rods: ASTM A 510.
- E. Uncoated Steel Sheet: Hot-rolled steel sheet, ASTM A 1011/A 1011M, Structural Steel, Grade 45 or cold-rolled steel sheet, ASTM A 1008/A 1008M, Structural Steel, Grade 50.
- F. Galvanized-Steel Sheet: ASTM A 653/A 653M, structural quality, Grade 50, with G90 coating.
- G. Aluminum-Zinc, Alloy-Coated Steel Sheet: ASTM A 792/A 792M, structural quality, Grade 50, with AZ60 coating.

H. Castings: Either gray or malleable iron unless otherwise indicated.

1. Gray Iron: ASTM A 48/A 48M, Class 30.
2. Malleable Iron: ASTM A 47/A 47M.

2.5 MISCELLANEOUS MATERIALS

- A. Concrete: Normal-weight, air-entrained, ready-mix concrete complying with requirements in Section 033000 "Cast-in-Place Concrete" with a minimum 28-day compressive strength of 3000 psi, 3-inch slump, and 1-inch maximum aggregate size or dry, packaged, normal-weight concrete mix complying with ASTM C 387/C 387M mixed with potable water according to manufacturer's written instructions.
- B. Nonshrink Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M and specifically recommended by manufacturer for exterior applications.

2.6 METALLIC-COATED-STEEL FINISHES

- A. Surface Preparation: Clean surfaces with nonpetroleum solvent so surfaces are free of oil and other contaminants. After cleaning, apply a zinc-phosphate conversion coating suited to the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas, and repair galvanizing to comply with ASTM A 780/A 780M.
- B. Powder Coating: Immediately after cleaning and pretreating, apply two-coat finish consisting of zinc-rich epoxy prime coat and TGIC polyester topcoat, with a minimum dry film thickness of 2 mils for topcoat. Comply with coating manufacturer's written instructions to achieve a minimum total dry film thickness of 4 mils.
1. Color and Gloss: As selected by Architect from manufacturer's full range.
 2. Comply with surface finish testing requirements in ASTM F 2408.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, construction layout, and other conditions affecting performance of the Work.
- B. Do not begin installation before final grading is completed unless otherwise permitted by Architect.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.
 - 1. Construction layout and field engineering are specified in Section 017300 "Execution."

3.3 DECORATIVE FENCE INSTALLATION

- A. Install fences according to manufacturer's written instructions.
- B. Install fences by setting posts as indicated and fastening rails and infill panels to posts.
- C. Post Excavation: Drill or hand-excavate holes for posts in firm, undisturbed soil. Excavate holes to a diameter of not less than 4 times post size and a depth as indicated on the Drawings.
- D. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.
 - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - 2. Concrete Fill: Place concrete around posts and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
 - a. Exposed Concrete: Extend 2 inches above grade. Finish and slope top surface to drain water away from post.
 - b. Concealed Concrete: Top set below grade as indicated on Drawings to allow covering with surface material. Slope top surface of concrete to drain water away from post.
 - 3. Posts Set in Concrete: Extend post to within 6 inches of specified excavation depth, but not closer than 3 inches to bottom of concrete.
 - 4. Space posts uniformly at on center spacing as indicated on the Drawings.

3.4 GATE INSTALLATION

- A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

3.5 ADJUSTING

- A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.
- B. Lubricate hardware and other moving parts.

3.6 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's personnel to adjust, operate, and maintain gates.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 323129.01 - WOOD FENCES AND GATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Wood fences and gates.
- B. Related Requirements:
 - 1. Section 033000 "Cast-in-Place Concrete" for concrete used for fence post footings.
- C. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.3 REFERENCES

- A. National Lumber Grades Authority (NLGA).
- B. West Coast Lumber Inspection Bureau (WCLIB).
- C. WWPA – Western Wood Products Association

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
 - 1. Fence and gate posts, and rails. Include wood species, grade, finish, and actual dimensions.
 - 2. Fence hardware.
 - 3. Gate hardware.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work. Include foundations. Show accessories, hardware, gate operation, and operational clearances.
- C. Samples:

1. Finishes: For each type of exposed finish required, samples of manufacturer's standard size.

D. Product Schedule: Use same reference numbers as those on Drawings.

1.5 INFORMATIONAL SUBMITTALS

A. Qualifications: For installer.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver fence materials wrapped or crated to provide protection during transit and Project-site storage.

1. Store under cover in an enclosed environment at Project site.

1.7 PROJECT CONDITIONS

1. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

1.8 WARRANTY

A. Special Warranty: Manufacturer's standard form in which Installer agrees to repair or replace components of wood fences and gates that fail in materials or workmanship within specified warranty period.

PART 2 - PRODUCTS

2.1 POST AND RAIL FENCE (NATURAL AREA FENCING)

A. Line posts.

1. Species: Western Red Cedar.
2. Surface: Rough Sawn.
3. Size: 6 inches by 6 inches full sawn unless otherwise noted on the Drawings.
4. Grade: Appearance Knotty.
5. Grading Agency: NLGA 130c, WCLIB 130cc.
6. Moisture Content: Green.

B. Rails.

1. Species: Western Red Cedar.
2. Surface: Rough Sawn.
3. Size: 2 inches by 6 inches full sawn unless otherwise noted on the Drawings.
4. Grade: Appearance Knotty.
5. Grading Agency: NLGA 130c, WCLIB 130cc.
6. Moisture Content: Green.

2.2 FASTENERS

- A. General: Hot-dip zinc-coated (galvanized) steel fasteners complying with ASTM A 153/A 153M or ASTM F 2329 for zinc coating.
- B. Provide the following: Hot-dip galvanized steel carriage bolts, nuts, and washers in sizes as indicated on the Drawings or as necessary to achieve configuration shown on the Drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for a verified survey of property lines and legal boundaries, site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 INSTALLATION

- A. General: Set all fencing as indicated on Drawings. Notify Design Team and Engineer of any proposed deviations from the plan layout and obtain approval prior to construction. Provide fence that is plumb and straight, both in-line and transverse to the fence.
- B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- C. Post Setting: Set posts in concrete to indicated spacing into firm, undisturbed soil.
 - 1. Concrete: Set all posts in concrete designed to have a minimum compressive strength of not less than 3,000 psi at 28 days. Allow concrete footings to set not less than seven (7) days before rails and wire fabric are installed.
 - 2. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - 3. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect above ground portion of posts from concrete splatter.
 - a. Exposed Concrete, where indicated on the Drawings: Extend 2 inches above grade; shape and smooth to shed water.
 - b. Concealed Concrete, where indicated on the Drawings: Top set below grade, as indicated on Drawings, to allow covering with surface material.

- D. Line Posts: Space line posts uniformly at 6-feet on center unless otherwise noted on the Drawings.
- E. Rails: Set rails parallel to the finish grade, unless otherwise noted on the Drawings, and parallel to each other. Secure to posts with hardware.
 - 1. Drill posts and rails to receive hardware uniformly and perpendicular to face of lumber. Use a template or jig to ensure uniform pattern and relationship of drilled holes/hardware to edges of lumber.
 - 2. Use sharp bits and ensure holes are drilled cleanly. Use scrap wood set firmly against back of lumber being drilled to prevent blowout of lumber. Remove any splintering and ease exposed edges (nut side) of drilled holes.
 - 3. Tighten hardware for snug fit. Do not over-torque causing washer to bend or exposed head of carriage bolt to draw into face of lumber. Re-tighten periodically during course of work and as required accommodate wood shrinkage or thermal movements.

3.4 CLEANING AND PROTECTION

- A. During fence construction, keep adjacent paving and construction clean and work area in an orderly condition. .
- B. Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off Engineer's property.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 328400 - IRRIGATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Work of this section includes installation of temporary and permanent irrigation systems, including:
 - 1. Piping.
 - 2. Encasement for piping.
 - 3. Manual valves.
 - 4. Pressure-reducing valves.
 - 5. Automatic control valves.
 - 6. Manual drain valves.
 - 7. Transition fittings.
 - 8. Dielectric fittings.
 - 9. Miscellaneous piping specialties.
 - 10. Sprinklers.
 - 11. Quick couplers.
 - 12. Drip irrigation specialties.
 - 13. Controllers.
 - 14. Boxes for automatic control valves.
- B. Related Sections.
 - 1. Section 220519 "Meters and Gages for Plumbing Piping" for water metering requirements, where applicable.
 - 2. Section 221113 "Facility Water Distribution Piping" for water supply from exterior water service piping, water meters, protective enclosures, and backflow preventers; where applicable
 - 3. Section 230923.14 "Flow Instruments" for water metering equipment, where applicable.
 - 4. Section 312000 "Earth Moving" for excavating, trenching, and backfilling for irrigation lines and equipment.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.

1.4 REFERENCES

- A. Conform to requirements of reference information listed below except where more stringent requirements are shown or specified in Contract Documents.
 - 1. American Society for Testing and Materials (ASTM): Specifications and test methods referenced in this section.
 - 2. Underwritten Laboratories (UL): UL wires and cables.
 - 3. National Sanitation Foundation (NSF): Piping and backflow prevention.
 - 4. American Water Works Association: Piping and backflow prevention.

1.5 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Circuit Piping: Downstream from control valves to sprinklers, specialties, and drain valves. Piping is under pressure during flow.
- C. Drain Piping: Downstream from circuit-piping drain valves. Piping is not under pressure.
- D. ET Controllers: EvapoTranspiration Controllers. Irrigation controllers which use some method of weather based adjustment of irrigation. These adjusting methods include use of historical monthly averages of ET; broadcasting of ET measurements; or use of on-site sensors to track ET.
- E. Main Piping: Downstream from point of connection to water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.
- F. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control, signaling power-limited circuits.

1.6 PERFORMANCE REQUIREMENTS

- A. Irrigation zone control shall be automatic operation with controller and automatic control valves.
- B. Location of Sprinklers and Specialties: Design location is approximate. Make minor adjustments necessary to avoid plantings and obstructions such as signs and light standards. Maintain 100 percent irrigation coverage of areas indicated.

1.7 ACTION SUBMITTALS

- A. Product Data: For each type of product, material, and equipment to be used.
 - 1. Provide material summary list that include manufacturer, model name, and description.
 - 2. Provide manufacturer's product data sheets that include rated capacities, operating characteristics, electrical characteristics, dimensions, details, and furnished specialties and accessories.

1.8 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer demonstrating compliance with Quality Assurance requirements herein.
 - 1. List a minimum of three (3) projects completed within the previous three (3) years similar in scope and complexity to specified work. Include the following:
 - a. Name of project
 - b. Location.
 - c. Owner.
 - d. Brief description of work.
 - e. Project cost.
 - f. Date of completion.
 - 2. Associated Landscape Contractors Association of Colorado (ALCC), Certified Irrigation Technician certificate for one or more persons that will be on site for entirety of work.
- B. Controller Timing Schedule: Indicate timing settings for each automatic controller zone.
- C. Field quality-control reports.

1.9 CLOSEOUT SUBMITTALS

- A. Prepare and provide in accordance with requirements of Division 01 Closeout Procedures.
- B. Record Drawings (As-builts).
 - 1. At onset of irrigation installation, secure printed copy of original irrigation design drawings from Engineer. At the end of each day, revise prints for work accomplished that day in red ink. As-built drawings shall be brought up-to-date at the close of the working day each Friday by a qualified draftsman. A print of record plans shall be available at the Project Site. Indicate zoning changes and non-pressure pipe changes on weekly as-built drawings. At the completion of Project, prior to installation of water meters, secure digital copy of irrigation design drawings from Engineer and record as-built information in AutoCAD compatible format. Provide digital as-built drawings saved as PDF format files to Engineer. Dimension from (2) permanent points of reference (building corners, sidewalk, road intersections, permanent structures, etc.), location of following items:
 - a. Point of connection.
 - b. Routing of irrigation pressure lines. Provide dimensions for each 100 linear feet (maximum) along each routing and for each change of direction.
 - c. Irrigation control valves.
 - d. Quick coupling valves.
 - e. Drain valves.
 - f. Wire splice boxes.
 - g. Control wire routing if not with pressure mainline.
 - h. Gate valves.
 - i. Sleeves.
 - j. Flush valves.
 - k. Other related equipment as directed.

2. Make dimensions accurately at the same scale used in the original drawings, or larger. Notes and dimension lettering must be legible.
 3. The irrigation legend must be changed to accurately reflect the irrigation equipment installed, if such equipment is not the same as originally specified on the Contract Documents. This includes flow rates, effective spray diameter/radius, and operating pressure of all irrigation heads.
 4. Engineer will not certify any pay request submitted by the Contractor if the as-built drawings are not current, and processing of pay request will not occur until as-builts are updated.
- C. Products and Materials: Provide electronic set of complete list of products and materials indicating manufacturer, model number, and description. Use of manufacturer cut sheets and product data from approved submittals may be used.
- D. Operation and Maintenance Data: For sprinklers, controllers and automatic control valves to include in operation and maintenance manuals. Submit (3) copies.
1. Start-up procedures.
 2. Winterization procedures.
 3. Controller Charts:
 - a. Prepare controller charts based on reviewed as-built drawings, incorporating changes requested by Architect and Engineer.
 - b. Provide on controller chart for each automatic controller installed.
 - 1) Chart shall be a reproduction from Record Drawings. Scale as necessary and to maximize size feasible, to fit controller door and ensure legibility.
 - 2) Chart shall depict all areas covered by controller in which it is located.
 - c. Identify area of coverage of each remote control valve, using a distinctly different pastel color drawing over entire area of coverage.
 - d. Following review of charts by Consultant, they shall be hermetically sealed between two layers of (3)-mil thick plastic sheet.
 - e. Charts shall be completed and reviewed prior to final review of irrigation system.
 4. Coordinate and provide scheduling/precipitation instructions with Town's maintenance personnel.
- 1.10 MAINTENANCE MATERIAL SUBMITTALS (EXTRA STOCK)
- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents. Provide to the Town prior to Final Acceptance.
1. One (8) foot valve key for operation of manual drain valves.
 2. One key and one hose swivel compatible with quick couplers installed.
 3. Padlock and keys for controller enclosure.
- 1.11 MAINTENANCE SERVICES
- A. Start-Up Winterization: Include start-up and winterization of complete system during full term of warranty period.

1. Start-up: Reopen, operate, and adjust system accordingly following during April. Provide Town with at least (7) days notice of scheduled work, or perform within (3) days notification by Town.
2. Winterization: System shall be voided of water using compressed air or similar method reviewed and accepted by Engineer.

1.12 QUALITY ASSURANCE

A. Installer Qualifications:

1. An employer of workers that include a Professional Technical Class member of the American Society of Irrigation Consultants.
2. Installer to supply one or more persons on-site at all times of irrigation installation that is an Associated Landscape Contractors Association of Colorado (ALCC), Certified Irrigation Technician.
3. Installer shall have considerable and experience in the installation of commercial grade irrigation system(s) comparable in size, complexity, and scope of specified system in accordance with recognized standards for professional workmanship.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. Special Requirements:

1. Work involving substantial plumbing for installation of ductile iron or copper piping, backflow preventer(s), and related work shall be executed by licensed and bonded plumbers.
2. Tolerances: Specified depths of mains and laterals and pitches of pipes or minimums. Settlement of trenches is cause for removal of finish grade treatment, refilling, compaction, and repair of finish grade treatment.
3. Coordination with other Contractors: Protect, maintain, and coordinate work with work of other sections.
4. Damage to other improvements or work: Contractor shall replace or repair damage to grading, soil preparation, seeding, sodding, or planting done under other sections during work associated with installation of irrigation system at no cost to the Town.
5. Water delivery interruption: When working on an existing irrigation system, the Irrigation Contractor shall contact the Engineer and inform them at least (72) hours in advance of any water interruption that is required.
6. Work requiring high voltage electrical wiring, grounding, and related work shall be executed by licensed and bonded electrician(s). Contractor shall secure a permit for work at least (48) hours prior to start of installation.

D. Pre-construction Conference:

1. Contractor shall schedule and conduct a conference to review in detail, quality control and construction requirements for equipment and materials used to perform the Work. Conference shall be scheduled not less than (10) days prior to the commencement of Work. All parties required to be in attendance shall be notified not less than (7) days prior to the date of the conference. Contractor shall notify qualified representatives of each party concerned with Work, including but not limited to:
 - a. Engineer.
 - b. Contractor's Superintendent.

- c. Installing Contractor.
 - d. Other trades required to coordinate with work or may be impacted by work.
- 2. Minutes of conference shall be recorded and distributed by Contractor to all parties in attendance within (5) days of conference.

1.13 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, unload, store, and handle materials, packaging, bundling, and products in dry, weatherproof condition and in manner to prevent damage, breakage, deterioration, ignitio, and vandalism. Deliver in original, unopened packaging prominently displaying manufacturer's name, volume, quantity, contents, instructions, and conformance to local, state, and federal law. Remove and replace cracked, broken, or contaminated items or elements prematurely exposed to moisture, inclement weather, snow, ice, temperature extremes, fire, or jobsite damage.
- B. Piping: Exercise care in handling, loading, and storing of piping.
 - 1. All piping shall be transported in a vehicle that allows length of pipe to lie flat so as not to subject it to undue bending or concentrated external loads.
 - 2. Deliver piping with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe-end damage and to prevent entrance of dirt, debris, and moisture.
 - 3. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.
 - 4. All sections of pipe that have been damaged shall be discarded. Any damaged pipe that has been installed shall be replaced with new pipe.

1.14 PROJECT CONDITIONS

- A. Interruption of Existing Water or Electrical Services: Do not interrupt service to facilities occupied by Engineer or others unless permitted under the following conditions and then only after arranging to provide temporary water and/or electric service according to requirements indicated:
 - 1. Notify Engineer no fewer than seven (7) days in advance of proposed interruption of service.
 - 2. Do not proceed with interruption of service without Engineer's written permission.
 - 3. Temporary water and electrical service shall be provided at no cost to the Town and until permanent service is restored.
- B. Protection of Property:
 - 1. Preserve and protect all adjacent existing and new features including but not limited to trees, plants, monuments, and paved areas from damage due to work of this section. In the event damage does occur, all damage to inanimate items shall be completely repaired or replaced to satisfaction of the Town, and all injuries to living plants shall be repaired or replaced by the Town. All costs of such repairs shall be charged to and paid by the Contractor.

2. Protect buildings, walks, walls, and other property from damage. Erect and maintain barricades, warning signs and lights, and provide guards as necessary or required to protect all persons on the site. Damage to asphalt, concrete, or other building material surfaces shall be repaired or replaced at no cost to the Town. Restore disturbed areas to original condition.

C. Existing Trees:

1. All trenching or other work under limb spread of any and all evergreens or low-branching deciduous material shall be done by hand or by other methods so as to prevent damage to limbs or branches.
2. Where it is necessary to excavate adjacent to existing trees, use all possible care to avoid injury to trees and tree roots. Excavation in areas where 2-inch in diameter and larger roots occur shall be done by hand. Roots 2-inches and larger in diameter shall be tunneled under and heavily wrapped in water-soaked burlap to prevent scarring or excessive drying. Where a trenching machine is operated close to trees having roots smaller than 2-inches in diameter, roots exposed through the wall of trench adjacent to tree shall be hand-trimmed, using sterile and sharp pruning shears, making clean cuts through roots. Trenches adjacent to trees shall be closed within (24) hours, and when this is not possible, shall be kept shaded with moistened burlap or canvas. Open trenches shall be protected at all times from injury to persons.

D. Protection and Repair to Underground Lines:

1. Request proper utility company to stake exact location, including depth, of all underground utilities including but not limited to electric, gas, sewer, and telecom lines before proceeding with excavation. Take all precautions necessary to protect underground utilities from damage. If damage does occur, damage shall be repaired by utility owner. All costs of such repairs shall be paid by Contractor unless other arrangements have been made.
2. Request Town, in writing, to locate all private utilities (i.e. electrical service to outdoor lighting) before proceeding with excavation. If, after such request and necessary staking, private utilities which were not staked are encountered and damaged by installer, they shall be repaired by the Town at no cost to the installer. If Contractor damages staked or located private utilities, they shall be repaired by Utility Owner at Contractor's expense unless other arrangements have been made.

E. Replacement of Paving and Curbs: Where trenches and lines cross existing roadways, paths, curbing, etc., damage to these shall be kept to minimum and shall be restored to original condition.

1.15 WARRANTY/GUARANTY

A. Manufacturer shall warrant materials against defects for a period of (2) year from date of Substantial Completion. Installer(s) shall guarantee workmanship for same period.

1. The Contractor shall promptly furnish and install, at no cost to the Town, any and all parts which prove defective in material or workmanship.
2. Settling of backfilled trenches occurring during the warranty period shall be repaired at no cost to the Town, including complete restoration of damaged property and surface conditions.
3. Expenses due to vandalism before Substantial Completion shall be borne by the Contractor.

4. The Town reserves the right to make temporary repairs during the warranty period, as necessary to keep systems in operating condition, without voiding the Contractor's warranty, nor relieving the Contractor of their responsibilities.
5. The Contractor shall make repairs and replacements promptly when notified.
6. The Contractor shall provide hand-watering of any plant material that cannot be watered by the irrigation system. Hand-watering shall continue through winter season for plants unable to receive irrigation during system operation.

PART 2 - PRODUCTS

2.1 PIPES, TUBES, AND FITTINGS

- A. Comply with requirements in the piping schedule for applications of pipe, tube, and fitting materials, and for joining methods for specific services, service locations, and pipe sizes.
- B. General Piping.
 1. Pressure supply lines (downstream from backflow prevention units): ASTM D 2241, Class 200, PVC pressure pipe, BE (bell end), 2-inch and 2.5-inch diameter. Size as indicated on the Drawings.
 2. Non-pressure lines: ASTM D 2241, Class 200, SDR-21, PVC, 1-inch minimum diameter. Size as indicated on the Drawings.
 3. PVC sleeving:
 - a. Open trench applications: ASTM D 2241, Class 200, SDR-21, PVC. Size as indicated on the Drawings.
 - b. Direction boring applications: ASTM D-2239, HDPE, SDR-7, 200 psi.
- C. Brass Pipe and Fittings.
 1. Brass Pipe: 85% red brass, ANSI schedule 40, threaded pipe.
 2. Fittings: Medium brass, class 125 (125 pound), threaded.
- D. Copper
 1. Soft Copper Tube (below-grade applications): ASTM B88, Type K, water tube, annealed temper.
 - a. Copper Pressure Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper solder-joint fittings. Furnish wrought-copper fittings if indicated.
 2. Hard Copper Tube (above-grade applications such as backflow prevention device, etc.): ASTM B88, Type K, water tube, drawn temper.
 - a. Copper Pressure Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper solder-joint fittings. Furnish wrought-copper fittings if indicated.
- E. PVC Pipe and Fittings.
 1. Identify all pipe with the following indelible markings:
 - a. Manufacturer's name.
 - b. Nominal pipe size.

- c. Schedule of class.
 - d. Pressure rating.
 - e. National Sanitation Foundation (NSF) seal of approval.
 - f. Date of extrusion.
- 2. Bell end pipe: Manufactured from polyvinyl chloride compound in accordance with ASTM D2241 and ASTM D1784; cell classification 1254-B, Type 1, Grade 1.
 - a. All fittings and service tees: Schedule 40 PVC slip by slip, and schedule 80 PVC MIPT and FIPT.

2.2 PIPING JOINING MATERIALS

- A. Pipe-Flange Gasket Materials: AWWA C110, rubber, flat face, 1/8 inch thick unless otherwise indicated; full-face or ring type unless otherwise indicated.
- B. Metal, Pipe-Flange Bolts and Nuts: ASME B18.2.1, carbon steel unless otherwise indicated.
- C. Brazing Filler Metals: AWS A5.8/A5.8M, BCuP Series, copper-phosphorus alloys for general-duty brazing unless otherwise indicated.
- D. Solder Filler Metals: ASTM B 32, lead-free alloys. Include water-flushable flux according to ASTM B 813.
- E. Solvent Cements for Joining PVC Piping: ASTM D 2564. Include primer according to ASTM F 656.
- F. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer unless otherwise indicated.

2.3 QUICK COUPLING VALVES

- A. Brass two-piece body designed for working pressure of 125 psi; operable with quick coupler. Provide with rubber cover on quick coupler. Key size and type as indicated on the Drawings.

2.4 VALVE BOXES

- A. Isolation valves, quick coupling valves, drain valves, flush valves, wire splices, and ground rods: Carson Industries (mfr) 10-inch round valve box with bolt-down T-cover, as indicated on the Drawings.
- B. Electric control valves (1-inch and 1.5-inch): Carson Industries (mfr) Super Jumbo 1324-15 with bolt-down lid.
- C. Electric control valves (2-inch): Carson Industries (mfr) Super Jumbo XL 1730-18 with bolt-down lid.

2.5 ELECTRICAL CONTROL WIRING

- A. Low Voltage.

1. Electrical Control Wire: AWG, UFUL approved, No. 14, direct burial, solid conductor copper wire.
2. Common Wire: AWG, UFUL approved, No. 14, direct burial, solid copper wire.

B. Wire Colors:

1. Control/Hot Wires: Red.
2. Extra Control/Hot Wires: Black.
3. Common Wire: White.
4. Extra Common Wire: Yellow.
5. Data Wire: Shielded Cable.

C. High Voltage: Type required by local codes and ordinances, of proper size to accommodate needs of equipment being serviced.

2.6 ELECTRIC CONTROL VALVES

- A. Description: Brass body, normally closed, diaphragm type with manual-flow adjustment, manual bleed nut, and operated by 24-V ac solenoid.
- B. Valves with flows above 5 GPM: Rainbird (mfr.) EFB-CP-PRS-D.
- C. Valves with flows less than 5 GPM: Rainbird (mfr.) PED-PRS-D.

2.7 MANUAL DRAIN VALVES

- A. Manual Drain Valves: Manufacturers: Subject to compliance with requirements, provide products as indicated on the Drawings.
 1. Description:
 - a. Standard: AWWA C800.
 - b. NPS 1 and Smaller Pressure Rating: 100 psig minimum.
 - c. NPS 1-1/4 to NPS 2 Pressure Rating: 80 psig minimum.
 - d. Body Material: Brass with ground-key plug.
 - e. End Connections: Matching piping.
 - f. Stem: With wide-tee head.
- B. Shutoff Rods for Manual Drain Valve Casings: Furnish steel, tee-handle shutoff rod(s) with one pointed end, stem of length to operate deepest buried valve, and slotted end matching curb valve for Project.

2.8 PRESSURE-REDUCING VALVES

- A. Pressure Reducing Valves: Subject to compliance with requirements, provide products as indicated on the Drawings.
 1. Description:
 - a. Standard: ASSE 1003.
 - b. Body Material: Bronze for NPS 2 and smaller; cast iron for NPS 2-1/2 and NPS 3.

- c. Pressure Rating: Initial pressure of 175 psig.
- d. Temperature Rating: At least 140 deg. F.

- B. Water Control Valves: Subject to compliance with requirements, provide products as indicated on the Drawings.

2.9 AUTOMATIC CONTROL VALVES

- A. Manufacturers: Subject to compliance with requirements, provide products as indicated on the Drawings.
- B. Description: Brass body, normally closed, diaphragm type with manual-flow adjustment, and operated by 24-V ac solenoid

2.10 AUTOMATIC DRAIN VALVES

- A. Description: Spring-loaded-ball type of corrosion-resistant construction and designed to open for drainage if line pressure drops below 2-1/2 to 3 psig.

2.11 SPRINKLERS

- A. General Requirements: Designed for uniform coverage over entire spray area indicated at available water pressure. All heads of a particular function (i.e. spray vs rotor) shall be of the same manufacturer and marked with manufacturer's name and model in a such a way that components can be identified without removal from the system.

- 1. Pop-up Sprinkler Heads: Rainbird (mfr.) 1800 SAM PRS.
- 2. Rotary/Gear Drive Sprinkler Head: Hunter Industries (mfr.) I-20 SS and I-25 SS.

2.12 DRIP IRRIGATION

- A. Provide fabricated riser units as indicated on the Drawings, with riser nipples of the same size as riser opening in sprinkler body.

- 1. Drip Irrigation for Beds: Netafim (mfr.) CV Techline Dripline.
- 2. Drip Zone Indicator Heads: Rainbird (mfr.) 1800 SAM PRS.

2.13 CONTROLLERS

- 1. Toro (mfr.) Sentinel series, model as indicated on the Drawings.
- 2. Exterior Control Enclosure: Prefabricated, NEMA 250, Type 4, weatherproof, stainless steel pedestal enclosure with locking cover, as indicated on the Drawings.

2.14 RAIN SENSOR

- A. Hunter (mfr.) Wireless Rain Click.

PART 3 - EXECUTION

3.1 LANDSCAPE PLAN REVIEW AND COORDINATION

- A. Contractor will be held responsible for coordination between landscape and irrigation system installation. Landscape materials locations shown on the Drawings (i.e. Landscape Plan, Planting Plan, etc) shall take precedence over the irrigation system equipment locations. If irrigation equipment is installed in conflict with the landscape material locations shown on the Drawings, the Contractor will be required to relocate the irrigation equipment, as necessary, at the Contractor's expense.

3.2 STATIC PRESSURE VERIFICATION

- A. Contractor shall field verify the static pressure at the project site, prior to commencing work or ordering irrigation materials, and submit findings, in writing, to the Engineer. If Contractor fails to verify static water pressure prior to commencing work or ordering irrigation materials, Contractor shall assume responsibility for all costs required to make system operational and the costs required to replace any damaged landscape material. Damage shall include all required material costs, design costs, and plant replacement costs.

3.3 INSPECTION

- A. Examine areas and conditions under which work of this section is to be performed. Do not proceed with work until satisfactory conditions have been corrected.
 - 1. Grading operations with the exception of final grading, shall be completed and approved by Engineer before staking or installation of any irrigation system equipment begins.

3.4 EARTHWORK

- A. Excavating, trenching, and backfilling are specified in Section 312000 "Earth Moving."
- B. Install warning tape directly above pressure piping, 12 inches below finished grades, except 6 inches below subgrade under pavement and slabs.

3.5 PREPARATION

- A. Staking shall occur as follows:
 - 1. Mark, with paint, routing of pressure supply line and secondary feeder pipe. Contact Engineer (48) hours in advance and request review of staking. Engineer will advise installer as to the amount of staking to be prepared. Engineer will review staking and direct changes if required.
 - 2. If project has significant topography, free-form planting beds, or other amenities which could require alteration of irrigation equipment layout as deemed necessary by Engineer, do not install irrigation equipment in these areas until Engineer has reviewed equipment staking.

- B. Install sleeving under asphalt paving and concrete walks, prior to concrete and paving operations, to accommodate piping and wiring. Compact backfill around sleeves to 95% Standard Proctor Density within 2% of optimum moisture content in accordance with ASTM D698 under all pavement.
- C. Trenching: Trench excavation shall follow, to the extent possible, layout shown on the Drawings. Dig trenches straight and support pipes continuously on bottom of trench. Trench bottoms shall be clean and smooth with all rock and organic debris removed.
 - 1. Clearances:
 - a. Main Pressure Line: Make trenches of sufficient width, 6-inches minimum, to properly assemble and position pipe in trench.
 - b. Secondary Pipe: Trenches shall have a minimum width of 4-inches.
 - c. Line Clearance: Provide not less than 6-inches of clearance between each line, and not less than 12-inches of clearance between lines of other trades.
 - 2. Pipe and Wire Depth to Finish Grade:
 - a. Pressure Supply Piping: 24-inches minimum from top of pipe.
 - b. PVC Sleeving: At specified pipe or wire depth, or 18-inches minimum under pavement.
 - c. Non-pressure Piping (rotor): 18-inches minimum from top of pipe.
 - d. Non-pressure Piping (pop-up or drip): 12-inches minimum from top of pipe.
 - e. Control Wiring: Side of pressure mainline or 24-inches minimum from top of wire bundle where installed separately from mainline trench(es).
 - 3. Boring will be permitted only where pipe passes under obstruction(s) which cannot be removed. In backfilling bore, final density of backfill shall match that of surrounding soil. It is acceptable to use sleeves of suitable diameter installed by directional boring, with pipe installed through sleeve. No pipe joints are allowed within sleeves under 18 linear feet. Observe same precautions as though pipe were installed in open trench.
 - 4. Vibratory Plow: Not permitted unless authorized in writing by Engineer.

3.6 INSTALLATION

- A. Locate other equipment as near as possible to locations designated on the Drawings. Deviations shall be reviewed by Engineer prior to installation.
- B. PVC Piping: Snake pipe in trench to extent possible to allow for expansion and contraction. Do not install pipe when air temperature is below 40 degrees (F). Place manual drain valves at low points and dead ends of pressure supply piping to ensure complete drainage of system. When pipe laying is not in-progress, or at end of each day, close pipe ends with tight plug or cap. Perform work in accordance with best practices prevailing in piping trades.
 - 1. Solvent-weld PVC pipe: Lay pipe and make all plastic-to-plastic joints in accordance with manufacturer's recommendations.
 - 2. Gasketed end pipes:
 - a. RT pipe: None required.
 - b. Thrust blocking: Located, sized, and configured as indicated on the Drawings.

- c. Flexible Plastic (polyethylene) pipe: None required.

C. Joint Construction.

1. Ream ends of pipes and tubes and remove burrs.
2. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
3. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
 - a. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
 - b. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.
4. Flanged Joints: Select rubber gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.
5. Copper-Tubing Brazed Joints: Construct joints according to CDA's "Copper Tube Handbook," using copper-phosphorus brazing filler metal.
6. Copper-Tubing Soldered Joints: Apply ASTM B 813 water-flushable flux to tube end unless otherwise indicated. Construct joints according to ASTM B 828 or CDA's "Copper Tube Handbook," using lead-free solder alloy (0.20 percent maximum lead content) complying with ASTM B 32.
7. PVC Piping Solvent-Cemented Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:
 - a. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.
 - b. PVC Pressure Piping: Join schedule number, ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.
 - c. PVC Nonpressure Piping: Join according to ASTM D 2855.

D. Control Wiring.

1. Low Voltage Wiring:
 - a. Bury control wiring between controller and electric valves in pressure supply line trenches.
 - b. Bundle all 24 volt wires at 10-foot intervals and lay with pressure supply line pipe to one side of the trench.
 - c. Provide an expansion loop at every pressure pipe angle fitting, every electric control valve location (in valve box), and every 500 linear feet. Form expansion loop by wrapping wire at least (8) times around a 3/4-inch pipe and withdrawing pipe.
 - d. Make all splices and E.V.C. connections using 3M DBY and DBR connectors or similar UL listed dry-splice method.

- e. Install all control wire splices not occurring at a control valve in a separate Carson Industries (mfr) 10-inch round valve box with bolt-down T-cover. Brand lid with WS in 1-inch high letters minimum.
 - f. Install one control wire for each control valve.
 - g. Run (4) spare #14 AWG UFUL control wires and one spare common wire from controller pedestal to the end of each and every leg of mainline. Label spare wires at controller and wire stub box.
 - h. Cap all spare wire terminations with DBY dry-splice kits.
- 2. High Voltage Wiring for Automatic Controller:
 - a. See electrical drawings for complete requirements.
- E. Valves
 - 1. Pressure-Reducing Valves: Install as specified and indicated on the Drawings.
 - 2. Drain Valves: Install in underground piping in boxes for automatic control valves, and as indicated on the Drawings.
 - 3. Electrical Control Valves: Install as specified and indicated on the Drawings.
 - 4. Quick Coupling Valves: Install as specified and indicated on the Drawings.
 - 5. Gate/Isolation Valves: Install as specified and indicated on the Drawings.
 - 6. Air Release Valves: Install as specified and indicated on the Drawings.
 - 7. Valve boxes: Install one valve box for each valve required. Install gravel after compaction of subgrade and prior to setting of valve box.
- F. Sprinklers.
 - 1. Install as specified and indicated on the Drawings.
 - 2. Install sprinklers after hydrostatic test is completed.
 - 3. Install sprinklers at manufacturer's recommended heights.
- G. Drip Irrigation.
 - 1. Install as specified and indicated on the Drawings.
- H. Controller.
 - 1. Equipment Mounting: Install exterior freestanding controllers, where indicated on the Drawings, in prefabricated enclosure secured to concrete pad.
 - a. Verify in field with Engineer, final location for controller.
 - b. Place and secure anchorage devices. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - c. Install anchor bolts to elevations required for proper attachment to supported equipment.
- I. Install control cable in same trench as irrigation piping and at least 2 inches below piping. Provide conductors of size not smaller than recommended by controller manufacturer. Install cable in separate sleeve under paved areas.

- J. Backfilling: Do not begin backfilling until required system tests have been completed. Backfilling shall not be done in freezing weather except with review and approval of Engineer. Leave trenches slightly mounded to allow for settlement after backfilling is completed. Trenches shall be finish graded prior to walk-through of system by Engineer.
 - 1. Material: Excavated material is generally considered satisfactory for backfill purposes. Backfill material shall be free of rubbish, vegetable matter, frozen materials, and stones larger than 1-inch in maximum dimensions. Do not mix subsoil with topsoil. Material not suitable for backfill shall be hauled away. Contractor shall be responsible for providing suitable backfill if excavated material is unacceptable or not sufficient to meet backfill, compaction, and final grade requirements.
 - 2. Do not leave trenches open for a period of more than (48) hours. Open excavations shall be protected in accordance with OSHA regulations.
 - 3. Compact backfill to 90% Standard Proctor Density, determined in accordance with ASTM D698 in landscape areas utilizing the following methods:
 - 4. Mainline pipe: Mechanical compaction only in 8-inch maxim lifts.
 - 5. Secondary pipe: Mechanical compaction or puddling.
- K. Water meter and all associated improvements are to be installed as specified and indicated on the Drawings, and in conformance with Town of Parker and Parker Water and Sanitation District standards and specifications.
- L. Sleeving Under Paving:
 - 1. Provide for a minimum cover of 18-inches between top of sleeve and the bottom of the aggregate subbase for all pressure and non-pressure piping installed under asphalt or concrete paving.
 - 2. Sleeving located under areas where asphalt or concrete paving will be installed shall be bedded with sand, a layer 6-inches below pipe and a layer 6-inches above pipe.
 - 3. Compact backfill material in 6-inch lifts at 95% Standard Proctor Density determined in accordance with ASTM D698 under pavement using mechanical compaction devices.
 - 4. Set in place, cap, and pressure test all piping under paving, in presence of Engineer prior to backfilling and paving operations.
 - 5. Sleeving under existing walks or pavements shall be done by directional boring. Where cutting or removal of pavements is necessary, it shall be done at no cost to the Town. Obtain permission to cut or remove pavement from Engineer.
- M. Identify system components. Comply with requirements for identification specified in Section 220553 "Identification for Plumbing Piping and Equipment."
- N. Equipment Nameplates and Signs: Install engraved plastic-laminate equipment nameplates and signs on each automatic controller.
 - 1. Text: In addition to identifying unit, distinguish between multiple units, inform operator of operational requirements, indicate safety and emergency precautions, and warn of hazards and improper operations.
- O. Warning Tapes: Arrange for installation of continuous, underground, detectable warning tapes over underground piping during backfilling of trenches. See Section 312000 "Earth Moving" for warning tapes.

3.7 FIELD QUALITY CONTROL

- A. Flushing: After piping, risers, and valves are in place and connected, but prior to installation of sprinkler heads, quick coupler assemblies, and hose valves, thoroughly flush piping system under full head of water pressure from dead-end fittings. Maintain flushing for (5) minutes through furthestmost valves. Cap risers after flushing.
- B. Testing: Conduct tests in presence of Engineer's Representative. Provide Engineer's Representative at least (48) hours advance notice of scheduled testing. Supply force pump and all other equipment. Conduct tests in presence of Engineer's Representative. Provide Engineer's Representative at least (48) hours advance notice of scheduled testing. Supply force pump and all other equipment.
 - 1. Leak Test: After backfilling and installation of all control valves, fill pressure supply line with water, and pressurize to 40 psi over the designated static pressure or 120 psi, whichever is greater, for a period of (2) hours.
 - 2. Test is acceptable if no loss of pressure is evident during the test period.
 - 3. Detect and repair leaks.
 - 4. Retest system until test pressure can be maintained for duration of test period.
 - 5. Before final acceptance, pressure supply line shall remain under pressure for a period of (48) hours.
 - 6. Prepare test and inspection reports.
- C. Walk-Through for Substantial Completion:
 - 1. Arrange for Engineer's Representative presence at least (48) hours in advance of scheduled walk-through.
 - 2. Entire system shall be completely installed and operational prior to scheduling of walk-through
 - 3. Operate each zone in its entirety in presence of Engineer's Representative and open all valve boxes if directed.
 - 4. Generate a punch-list of items to be corrected prior to Final Completion.
 - 5. Furnish all materials and perform all work required to correct all inadequacies of coverage due to deviations from Contract Documents.
- D. Walk-Through for Final Completion:
 - 1. Arrange for Engineer's Representative presence at least (48) hours in advance of scheduled walk-through.
 - 2. Show evidence to Engineer's Representative that the Town has received all accessories, charts, record drawings, and equipment as required prior to Walk-Through for Final Completion.
 - 3. Operate each zone in its entirety in presence of Engineer's Representative at time of walk-through to demonstrate correction of all incomplete or deficient items.
 - 4. Items deemed not acceptable by Engineer's Representative shall be reworked to complete satisfaction of Engineer's Representative.
 - 5. If after request to Engineer's Representative for walk-through for final completion of irrigation system, Engineer's Representative finds items during walk-through which have not been properly adjusted, reworked, or replaced as indicated on Punch-List, Contractor shall be charged for all subsequent walk-throughs. Funds will be withheld from final payment and/or retainage to Contractor, in amount equal to additional time and expenses required by Engineer's Representative to conduct and document further walk-throughs as deemed necessary to ensure compliance with Contract Documents.

3.8 ADJUSTING

- A. Adjust settings of controllers.
- B. Adjust automatic control valves to provide flow rate at rated operating pressure required for each sprinkler circuit.
- C. Adjust sprinklers and devices, except those intended to be mounted aboveground, so they will be flush with, or not more than 1/2 inch above, finish grade.
- D. All indicator heads shall be set perpendicular to finish grade unless otherwise indicated.
- E. If it is determined that irrigation adjustments will provide proper coverage and improved water distribution as determined by Engineer's Representative, Contractor shall make such adjustments prior to Final Acceptance, as directed, at no additional cost to the Town. Adjustments may also include changes in nozzle sizes, degrees of arc, and control valve throttling.
- F. Areas which do not conform to designate operational requirements due to unauthorized changes or poor installation practices shall be immediately corrected at no additional cost to the Town.

3.9 CLEANING

- A. Maintain continuous cleaning operation throughout duration of work. Dispose of, off-site, at no additional cost to the Town, all trash, excess soil, or debris generated by installation of irrigation system.

3.10 DEMONSTRATION

- A. Train Town maintenance personnel to adjust, operate, and maintain automatic control valves and controllers, if requested.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 329113 - SOIL PREPARATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes:
 - 1. Topsoil.
 - 2. Planting soils.
 - 3. Organic Soil Amendment (Compost).
 - 4. Inorganic Soil Amendments.
- B. Related Requirements:
 - 1. Section 312000 "Earth Moving" for rough grading requirements.
 - 2. Section 311000 "Site Clearing" for topsoil stripping and stockpiling.
 - 3. Section 328400 "Irrigation" for irrigation systems to be installed in soil.
 - 4. Section 329200 "Turf and Grasses" for placing planting soil for turf and grasses.
 - 5. Section 329300 "Plants" for placing planting soil for plantings.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. AAPFCO: Association of American Plant Food Control Officials.
- C. Backfill: The earth used to replace or the act of replacing earth in an excavation. This can be amended or unamended soil as indicated.
- D. CEC: Cation exchange capacity.
- E. Compost: The product resulting from the controlled biological decomposition of organic material that has been sanitized through the generation of heat and stabilized to the point that it is beneficial to plant growth.
- F. Duff Layer: A surface layer of soil, typical of forested areas, that is composed of mostly decayed leaves, twigs, and detritus.

- G. Imported Soil: Soil that is transported to Project site for use.
- H. Layered Soil Assembly: A designed series of planting soils, layered on each other, that together produce an environment for plant growth.
- I. Manufactured Soil: Soil produced by blending soils, sand, stabilized organic soil amendments, and other materials to produce planting soil.
- J. NAPT: North American Proficiency Testing Program. An SSSA program to assist soil-, plant-, and water-testing laboratories through interlaboratory sample exchanges and statistical evaluation of analytical data.
- K. Organic Matter: The total of organic materials in soil exclusive of undecayed plant and animal tissues, their partial decomposition products, and the soil biomass; also called "humus" or "soil organic matter."
- L. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified as specified with soil amendments, and fertilizers when recommended by soil analysis and directed or approved by Engineer, to produce a soil mixture best for plant growth.
- M. RCRA Metals: Hazardous metals identified by the EPA under the Resource Conservation and Recovery Act.
- N. SSSA: Soil Science Society of America.
- O. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- P. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- Q. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil"; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- R. USCC: U.S. Composting Council.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Schedule meeting with GC, landscape subcontractor, irrigation subcontractor, Engineer, and landscape architect not less than two (2) weeks prior to start of Project. Meeting agenda will include the following:
 - a. Review the Project site and document initial conditions with a written description, and photographs and/or videos.
 - b. Identify areas of restoration.
 - c. Identify responsibilities by Others (if any) within and outside the project site.
 - d. Distribute the written description and images to all attendees.

1.5 FINAL COMPLETION MEETINGS

- A. Final Completion Conference: Conduct conference at Project Site.
 - 1. Schedule meeting with GC, landscape subcontractor, irrigation subcontractor, Engineer, and landscape architect not less than two (2) weeks prior to anticipated date of Final Completion. Meeting agenda will include the following:
 - a. Confirm compliance with Contract Documents.
 - b. Confirm completion of restoration responsibilities including maintaining an active irrigation system, to avoid damage to turf and planted areas that could require additional restoration work at Contractor's expense.

1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include recommendations for application and use.
 - 2. Include test data substantiating that products comply with requirements.
 - 3. Include sieve analyses for aggregate materials.
 - 4. Material Certificates: For each type of imported soil before delivery to the site, according to the following:
 - a. Manufacturer's qualified testing agency's certified analysis of standard products.
 - b. Analysis of fertilizers, by a qualified testing agency, made according to AAPFCO methods for testing and labeling and according to AAPFCO's SUIP #25.
 - c. Analysis of nonstandard materials, by a qualified testing agency, made according to SSSA methods, where applicable.
- B. Samples: For each bulk-supplied material, provide in sealed containers labeled with content, source, and date obtained. Each Sample shall be typical of the lot of material to be furnished; provide an accurate representation of composition, color, and texture.
 - 1. Provide (5) gallon volume for sports field and multi-purpose field applications.
 - 2. Provide (1) gallon volume for all other applications.

1.7 INFORMATIONAL SUBMITTALS

- A. Preconstruction Test Reports: For preconstruction soil analyses specified in "Preconstruction Testing" Article.

1.8 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in types of tests to be performed.

1.9 SOIL-SAMPLING REQUIREMENTS

- A. General: Extract soil samples according to requirements in this article.
- B. A soil test of on-site topsoil is required.
- C. Sample Collection and Labeling: Have samples taken and labeled by Contractor in presence of Landscape Architect under the direction of the testing agency.
 - 1. Number and Location of Samples: Minimum of six representative soil samples where directed by Landscape Architect for each soil to be used or amended for landscaping purposes.
 - 2. Procedures and Depth of Samples: According to USDA-NRCS's "Field Book for Describing and Sampling Soils."
 - 3. Division of Samples: Split each sample into two, equal parts. Send half to the testing agency and half to Engineer for their records.
 - 4. Labeling: Label each sample with the date, location keyed to a site plan or other location system, visible soil condition, and sampling depth.

1.10 TESTING REQUIREMENTS

- A. General: Perform tests on soil samples according to requirements in this article.
- B. Physical Testing:
 - 1. Soil Texture: Soil-particle, size-distribution analysis by one of the following methods according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods":
 - a. Sieving Method: Report sand-gradation percentages for very coarse, coarse, medium, fine, and very fine sand; and fragment-gradation (gravel) percentages for fine, medium, and coarse fragments; according to USDA sand and fragment sizes.
 - b. Hydrometer Method: Report percentages of sand, silt, and clay.
 - 2. Total Porosity: Calculate using particle density and bulk density according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
 - 3. Water Retention: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
 - 4. Saturated Hydraulic Conductivity: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods"; at 85% compaction according to ASTM D 698 (Standard Proctor).
- C. Chemical Testing:
 - 1. CEC: Analysis by sodium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."
 - 2. Clay Mineralogy: Analysis and estimated percentage of expandable clay minerals using CEC by ammonium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 1- Physical and Mineralogical Methods."

3. Metals Hazardous to Human Health: Test for presence and quantities of RCRA metals including aluminum, arsenic, barium, copper, cadmium, chromium, cobalt, lead, lithium, and vanadium. If RCRA metals are present, include recommendations for corrective action.
 4. Phytotoxicity: Test for plant-available concentrations of phytotoxic minerals including aluminum, arsenic, barium, cadmium, chlorides, chromium, cobalt, copper, lead, lithium, mercury, nickel, selenium, silver, sodium, strontium, tin, titanium, vanadium, and zinc.
- D. Fertility Testing: Soil-fertility analysis according to standard laboratory protocol of SSSA NAPT WERA-103 (Western region), including the following:
1. Percentage of organic matter.
 2. CEC, calcium percent of CEC, and magnesium percent of CEC.
 3. Soil reaction (acidity/alkalinity pH value).
 4. Buffered acidity or alkalinity.
 5. Nitrogen ppm.
 6. Phosphorous ppm.
 7. Potassium ppm.
 8. Manganese ppm.
 9. Manganese-availability ppm.
 10. Zinc ppm.
 11. Zinc availability ppm.
 12. Copper ppm.
 13. Sodium ppm and sodium absorption ratio.
 14. Soluble-salts ppm.
 15. Presence and quantities of problem materials including salts and metals cited in the Standard protocol. If such problem materials are present, provide additional recommendations for corrective action.
 16. Other deleterious materials, including their characteristics and content of each.
- E. Organic-Matter Content: Analysis using loss-by-ignition method according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."
- F. Recommendations: Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated to produce satisfactory planting soil suitable for healthy, viable plants indicated. Include, at a minimum, recommendations for nitrogen, phosphorous, and potassium fertilization, and for micronutrients.
1. Fertilizers and Soil Amendment Rates: State recommendations in weight per 1000 sq. ft. for 6-inchdepth of soil.
 2. Soil Reaction: State the recommended liming rates for raising pH or sulfur for lowering pH according to the buffered acidity or buffered alkalinity in weight per 1000 sq. ft. for 6-inchdepth of soil.
- 1.11 DELIVERY, STORAGE, AND HANDLING
- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and compliance with state and Federal laws if applicable.
- B. Bulk Materials:
1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.

2. Stockpile material on site at a location approved by the Engineer.
3. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
4. Do not move or handle materials when they are wet or frozen.
5. Accompany each delivery of bulk fertilizers and soil amendments with appropriate certificates.

PART 2 - PRODUCT

2.1 GENERAL

- A. Provide the following depths of topsoil or amended topsoil (planting soil) as follows:
 1. Trees: Full depth of excavation, approximately 24-inches. Backfill with approved, on-site topsoil blended with organic amendment. If on-site topsoils are not approved for use, backfill with approved, imported topsoil blended with organic amendment.
 2. Native Seed: 4-inch depth. Approved, on-site stockpiled topsoil, no amendment.
 3. Planting Beds: 12 inch depth, amended topsoil. Approved, on-site stockpiled topsoil, blended with organic amendment to create planting soil, may be used.
 4. Turf Sod (non-athletic fields): 6 inch depth, amended topsoil. Approved, on-site stockpiled topsoil, blended with organic amendment to create planting soil, may be used.
 5. Turf Sod (athletic fields): 16-inch depth. Imported, pre-blended topsoil with organic amendment (planting soil).
- B. For all applications, if on-site topsoil is unacceptable as determined by Engineer, imported topsoil is required in necessary volumes to achieve specified depths.

2.2 TOPSOIL

- A. Stockpile clean topsoil on the site. Approved, stockpiled topsoils to be prioritized for use at native seed areas and amended (to create planting soil) for use at tree plantings and planting beds, as quantity allows. Following native seed, tree plantings, and planting bed applications, surplus stockpiled topsoil may be amended (to create planting soil) for use at non-athletic fields. Import supplemental topsoil as required to achieve volume necessary for depths indicated. Spread to depth as follows:
 1. Trees: Full depth of excavation, approximately 24-inches. Backfill with approved, on-site topsoil blended with amendment. If on-site topsoils are not approved for use, backfill with approved, imported topsoil blended with amendment.
 2. Native Seed: 4-inch depth. Approved, on-site stockpiled topsoil, no amendment.
 3. Planting Beds: 12 inch depth, amended topsoil. Approved, on-site stockpiled topsoil, amended to create planting soil, may be used.
 4. Turf Sod (non-athletic fields): 6 inch depth, amended topsoil. Approved, on-site stockpiled topsoil, amended to create planting soil, may be used.
 5. Turf Sod (athletic fields): 16-inch depth. Imported, amended topsoil (planting soil).
 6. For all applications, if on-site topsoil is unacceptable as determined by Engineer, imported topsoil is required in necessary volumes to achieve specified depths.
- B. Amended Topsoil:

1. Suggested Local Source: Submit preliminary sample for approval during submittal phase, followed by pre-application verification sample originating no more than two weeks before application. Suggested local source shall be A-1 Organic, Eaton, Colorado or an approved substitution.

2.3 PLANTING SOILS

- A. General: Soil amendments, fertilizers, and rates of application specified in this article are guidelines that may need revision based on testing laboratory's recommendations after preconstruction soil analyses are performed. Amendments, fertilizers and rates of applications shall be adjusted at Engineer's reasonable discretion.
 1. Mix three-quarters (3/4) approved on-site topsoil, or approved imported topsoil if on-site topsoil is not approved, with one-quarter (1/4) compost amendment by volume.
 2. Incorporate fertilizers as recommended by soil analysis and specific to planting application, and only when directed by Engineer.
- B. Planting-Soil Type, for TURF SOD (athletic fields):
 1. Basis-of-Design: Subject to compliance with requirements, provide the following or approved equivalent.
 - a. Golf and Sport Solutions (mfr) Sandy Loam Athletic Field Topsoil.
 2. Apply at 16-inch depth.
- C. Amending in-place topsoil, where indicated and approved by Engineer: 6 cubic yards of organic compost per 1000 s.f. of turf, seed, or planting area.

2.4 CU STRUCTURAL SOIL

- A. CU-Soil® is a proprietary load-bearing growing media material patented by Cornell University and marketed under the registered trademark, CU-Structural Soil®. Media consists of gap-graded gravels which are made up of crushed aggregate, clay loam, and a hydrogel stabilizing agent. The materials can be compacted to meet pavement design loading requirements and allow for sustainable root growth. Product must be obtained through a licensed producer. Licensed vendors may include but are not limited to:
 1. C&C Sand and Stone Co., 2715 Steel Drive, Colorado Springs, CO 80907, Ph: (719) 477-1000.

2.5 ORGANIC SOIL AMENDMENTS (COMPOST)

- A. Compost: Thoroughly rotted, decomposed, stable, weed free organic matter source derived from agricultural, food, or industrial residuals; yard trimmings, or source-separated or mixed solid waste. This product should contain no substances toxic to plants and shall be reasonably free (less than 1 percent by dry weight) of man-made foreign matter. The compost shall possess no objectionable odors and shall not resemble the raw material from which it derived. The compost parameters should be as follows: Well composted, stable, and weed-free organic matter produced by composting feedstock, and bearing USCC's "Seal of Testing Assurance," and as follows:

1. Basis of of Design Product: Subject to compliance with requirements, provide the following, or approved substitution.
 - a. A1-Organics BioComp - Class 1 Compost.
 2. Source materials: Limited to leaves, grass, source-separated food waste, and brewery residuals.
 3. Soluble-Salt Concentration: Less than 4 dS/m.
 4. Moisture Content: 35 to 55 percent by weight.
 5. Organic-Matter Content: Provide percent of dry weight as recommended by soil reports from a qualified testing agency.
 6. Particle Size: Minimum of 98 percent passing through a 1-inch sieve.
 7. Stability: Stable to highly stable, providing nutrients for plant growth.
 8. Maturity/Growth Screening: Demonstrate ability to enhance plant growth
 9. Suggested Local Source: Submit preliminary sample for approval during submittal phase, followed by pre-application verification sample originating no more than two weeks before application. Suggested local source shall be A-1 Organic, Eaton, Colorado or an approved equal.
- B. No Cyanamid compounds will be permitted in mixed fertilizers.
- C. Nutrient Composition: Per soil analysis.
- D. Fertilizer shall conform to applicable State and Federal laws.
- E. Application of fertilizer should follow rates specified by manufacturer using stand application equipment and installed during amendment and soil preparation.

2.6 INORGANIC SOIL AMENDMENTS

- A. Lime: ASTM C 602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:
1. Class: T, with a minimum of 99 percent passing through a No. 8 sieve and a minimum of 75 percent passing through a No. 60 sieve.
 2. Class: O, with a minimum of 95 percent passing through a No. 8 sieve and a minimum of 55 percent passing through a No. 60 sieve.
 3. Form: Provide lime in form of ground dolomitic limestone.
- B. Sulfur: Granular, biodegradable, and containing a minimum of 90 percent elemental sulfur, with a minimum of 99 percent passing through a No. 6 sieve and a maximum of 10 percent passing through a No. 40 sieve.
- C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
- D. Perlite: Horticultural perlite, soil amendment grade.
- E. Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through a No. 50 sieve.

- 2.7 Sand: Clean, washed, natural or manufactured, free of toxic materials, and according to

ASTM C 33/C 33M.

PART 3 - EXECUTION

3.1 GENERAL

- A. Place planting soil and fertilizers according to requirements in other Specification Sections.
- B. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil.
- C. Proceed with placement only after unsatisfactory conditions have been corrected.

3.2 PREPARATION OF UNAMENDED, ON-SITE SOIL BEFORE AMENDING

- A. Excavation: Excavate soil from designated area(s) to a depth of 6 inches and stockpile until amended.
- B. Unacceptable Materials: Clean soil of concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
- C. Unsuitable Materials: Clean soil to contain a maximum of 8 percent by dry weight of stones, roots, plants, sod, clay lumps, and pockets of coarse sand.
- D. Screening: Pass unamended soil through a teh following sieve to remove large materials.
 - 1. Planting bed: 3-inch sieve.
 - 2. Non-athletic field turf: 2-inch sieve.
 - 3. Athletic field turf: 1-inch sieve maximum.

3.3 PLACING PLANTING SOIL OVER EXPOSED SUBGRADE

- A. General.
 - 1. For mixing unamended topsoil with amendments on-site: Apply and mix unamended soil with amendments on-site to produce required planting soil.
 - 2. For applying manufactured (pre-mixed) planting soil: Apply manufactured soil on-site in its final, blended condition.
 - 3. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Subgrade Preparation: Till subgrade to a minimum depth of 8 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Engineer's property.

1. Apply, add soil amendments, and mix approximately half the thickness of unamended soil over prepared, loosened subgrade according to "Mixing" Paragraph below. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil.
 - C. Application, for mixing unamended topsoil with amendments on-site.
 1. Mixing: Spread unamended soil to total depth indicated on Drawings or herein for application, but not less than required to meet finish grades after mixing with amendments and natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
 - a. Amendments: Apply soil amendments, except compost, and fertilizer, if required, evenly on surface, and thoroughly blend them with unamended soil to produce planting soil.
 - 1) Mix lime sulfur with dry soil before mixing fertilizer.
 - 2) Mix fertilizer with planting soil no more than seven days before planting.
 - D. Application, for applying manufactured (pre-mixed) planting soil.
 1. Apply approximately half the thickness of planting soil over prepared, loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil.
 - E. Lifts: Apply in lifts not exceeding 8 inches in loose depth for material compacted by compaction equipment, and not more than 6 inches in loose depth for material compacted by hand-operated tampers.
 - F. Compaction: Compact each blended lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698 and tested in-place except where a different compaction value is indicated on Drawings.
 - G. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.
- 3.4 APPLYING COMPOST TO SURFACE OF PLANTING SOIL
- A. Application: Apply compost component of planting-soil mix, at rate as indicated herein, to surface of in-place planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
 - B. Finish Grading: Grade surface to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.
- 3.5 FIELD QUALITY CONTROL
- A. Testing Agency: a qualified testing agency to perform tests and inspections.
 - B. Perform the following tests and inspections:

1. Compaction: Test planting-soil compaction after placing each lift and at completion using a densitometer or soil-compaction meter calibrated to a reference test value based on laboratory testing according to ASTM D 698. Space tests at no less than one for each 2000 sq. ft. of in-place soil or part thereof.
- C. Soil will be considered defective if it does not pass tests and inspections.
 - D. Prepare test and inspection reports.
 - E. Label each sample and test report with the date, location keyed to a site plan or other location system, visible conditions when and where sample was taken, and sampling depth.
 - F. If planting soil or subgrade is overcompacted, disturbed, or contaminated by foreign or deleterious materials or liquids, remove the planting soil and contamination; restore the subgrade as directed by Landscape Architect and replace contaminated planting soil with new planting soil.
 - G. Upon completion of soil preparation work, the Contractor shall guaranty that no rock, concrete, construction materials or other rubble lie within the prepared areas, whether on the surface or below grade.
 - H. Contractor shall also guaranty against settlement of one full year after initial acceptance. Any corrections required to meet this specification, including repair/replacement of seed or sod shall be at the contractors' expense.

3.6 PROTECTION

- A. Protection Zone: Identify protection zones according to Section 015639 "Temporary Tree and Plant Protection."
- B. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:
 1. Storage of construction materials, debris, or excavated material.
 2. Parking vehicles or equipment.
 3. Vehicle traffic.
 4. Foot traffic.
 5. Erection of sheds or structures.
 6. Impoundment of water.
 7. Excavation or other digging unless otherwise indicated.

3.7 CLEANING

- A. Protect areas adjacent to planting-soil preparation and placement areas from contamination. Keep adjacent paving and construction clean and work area in an orderly condition.
- B. Remove surplus soil and waste material including excess subsoil, unsuitable materials, trash, and debris and legally dispose of them off Engineer's property unless otherwise indicated.

3.8 MAINTENANCE PERIOD

- A. Maintenance period: Shall begin immediately after site preparation of each area and shall continue in accordance with the following requirements:
 - 1. Protect prepared areas from erosion and traffic
 - 2. Repair and reestablish grades and reapply soil amendments in settled, eroded and disturbed areas to specified tolerances and requirements until final acceptance.
- B. Final Acceptance: Notify the Engineer for review and acceptance of soil preparation and fine grading prior to seeding or sodding.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 329200 - TURF AND GRASSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Hydroseeding.
 - 2. Turfgrass sodding.
 - 3. Native Seeding.
 - 4. Turf renovation.
 - 5. Turf Maintenance.
 - 6. Erosion-control material(s).
- B. Related Requirements:
 - 1. Section 329113 "Soil Preparation" for fertilizers.
 - 2. Section 329300 "Plants" for trees, shrubs, ground covers, and other plants as well as border edgings and mow strips.
 - 3. Turfgrass Producer's International (TPI) "Guideline Specifications to Turfgrass Sodding."

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Finish Grade: Elevation of finished surface of planting soil.
- C. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- D. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

- E. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 329113 "Soil Preparation" and drawing designations for planting soils.
- F. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review the Project site and document initial conditions with written description, photographs, and/or videos. Verify areas of restoration, if any.
 - 2. Conduct a Final Completion review at Project end to verify conformity with specifications and restoration responsibilities, including temporary repairs to maintain an active irrigation system.

1.5 INFORMATIONAL SUBMITTALS

- A. Certification of Seed: From seed vendor for each turf or native grass-seed monostand or mixture, or perennial/wildflower, stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
 - 1. Include identification of source and name and telephone number of supplier.
 - 2. Include proposed seeding schedule and locations for each type of seed.
- B. Bag Tags: If requested by Engineer or Landscape Architect, provide bag tags prior to or following installation.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful turf sod and turf or native seed establishment.
 - 1. Professional Membership: Installer shall be a member in good standing of either the National Association of Landscape Professionals or AmericanHort.
 - 2. Experience: Five years' experience in turf installation in addition to requirements in Section 014000 "Quality Requirements."
 - 3. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - 4. Personnel Certifications: Installer's field supervisor shall have certification in one of the following categories from the National Association of Landscape Professionals:
 - a. Landscape Industry Certified Technician - Exterior.
 - b. Landscape Industry Certified Lawn Care Manager.
 - c. Landscape Industry Certified Lawn Care Technician.
 - 5. Pesticide Applicator: State licensed, commercial.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.
- B. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.
- C. Bulk Materials:
 - 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 - 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 - 3. Accompany each delivery of bulk materials with appropriate certificates.

1.8 FIELD CONDITIONS

- A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of Substantial Completion.
 - 1. Sod
 - a. Spring Planting: After April 15.
 - b. Fall Planting: Before November 01.
 - c. Adjust for weather limitations, freezing conditions and availability of turfgrass sod.
 - 2. Native Seed
 - a. Spring Planting: April 1 - June 15.
 - b. Fall Planting: September 01 - October 15.
 - c. Adjust for weather conditions, freezing conditions, or as ground condition allows for drill seed penetration.
 - 3. Turfgrass Seeding: April 1 - September 15.
 - a. Adjust for weather conditions and freezing conditions.
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.
 - 1. No sodding shall take place when site is wet, or during freezing temperatures.

PART 2 - PRODUCTS

2.1 TURFGRASS SOD

- A. Turfgrass Sod: Certified, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.
- B. Sod shall be a healthy, thick turf having undergone a program of regular fertilization, mowing and weed control; free of objectionable weeds; uniform in green color, leaf texture and density; healthy, vigorous, strongly implanted root system; inspected and found free of disease, nematodes, pests and pest larvae. Each piece of sod shall be of a sandy loam that will not break, crumble or tear during installation.
- C. Turfgrass Species: Sod of grass species as follows, Colorado grown, a minimum of three cultivars per mix, with not less than 85 percent germination, not less than 95 percent pure seed, and not more than 0.5 percent weed seed:
 - 1. Full Sun: 100% Kentucky Bluegrass (*Poa pratensis*).
 - 2. Partial Shade: 100% shade-tolerant Kentucky Bluegrass (*Poa pratensis*).
 - 3. Shade: 100% Red fescue (*Festuca rubra*).

2.2 NATIVE SEED

- A. Seed furnished shall be free from noxious weed seeds. Seed which has become wet, moldy, or otherwise damaged in transit or in storage will not be acceptable. The seed shall have a minimum germination and maximum purity of ninety (90%) percent. Seed shall not exceed .1% weed content.
- B. Native Seed: Fresh, clean, dry new seed, of mixed native species as follows:
 - 1. Provide species as informed by soil analysis per specification section 329113 Soil Preparation and recommended by Design Team.
 - 2. Species mix should be informed by indigenous, desirable species of existing or adjacent sites, as acceptable to Engineer.
- C. All seed shall be furnished in bags or containers clearly labeled top include:
 - 1. Name and address of the supplier
 - 2. Seed name
 - 3. Lot number
 - 4. Net weight.
 - 5. Percent of weed seed content.
 - 6. Guaranteed percentage of purity and germination.

2.3 MULCHES

A. Mulch for Hydroseeding.

1. Fiber Mulch: Biodegradable, dyed-wood, cellulose-fiber mulch; nontoxic and free of plant-growth or germination inhibitors; with a maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.
2. Nonasphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application; nontoxic and free of plant-growth or germination inhibitors.

2.4 EROSION-CONTROL MATERIALS

- A. Erosion-Control Blankets: Biodegradable wood excelsior, straw, or coconut-fiber mat enclosed in a photodegradable plastic mesh. Include manufacturer's recommended steel wire staples, 6 inches long.
- B. Erosion-Control Fiber Mesh: Biodegradable burlap or spun-coir mesh, a minimum of Machine-printed, permanent, with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches long.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to be planted for compliance with requirements and other conditions affecting installation and performance of the Work.
 1. Sodding shall not begin until adjacent site improvements and pavements are substantially complete. No trucking or moving of equipment or materials will be permitted upon completed sodded areas.
 2. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
 3. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 4. Any areas that have been prepared and approved for sodding, that cannot be immediately sodded due to weather, or other unforeseen conditions are subject to re-inspection and acceptance by the Owner Representative. The Contractor shall notify the Owner Representative of his intent to sod following delays because of weather, allowing the Owner Representative sufficient time to inspect and approve the prepared areas. Any areas that in the opinion of the Owner Representative require re-grading or additional soil preparation because of wind and water erosion, or require additional tillage because of compaction, shall be done at the Contractors expense.
 5. Uniformly moisten excessively dry soil that is not workable or which is dusty.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

- C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Engineer and replace with new planting soil.

3.2 PREPARATION

- A. Protect structures; utilities; sidewalks; pavements; and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 - 1. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.
 - 2. Protect grade stakes set by others until directed to remove them.
- B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 TURF AREA PREPARATION

- A. General: Prepare planting area for soil placement and mix planting soil according to Section 329113 "Soil Preparation".
- B. Placing Planting Soil: Place and mix planting soil in place over exposed subgrade.
 - 1. Reduce elevation of planting soil to allow for soil thickness of sod.
- C. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- D. Before planting, obtain Engineer's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.4 PREPARATION FOR EROSION-CONTROL MATERIALS

- A. Prepare area as specified in "Turf Area Preparation" Article.
- B. For erosion-control blanket or mesh, install from top of slope, working downward, and as recommended by material manufacturer for site conditions. Fasten as recommended by material manufacturer.
- C. Moisten prepared area before planting if surface is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

3.5 HYDROSEEDING

- A. Hydroseeding: Mix specified seed, and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.
 - 1. Mix slurry with fiber-mulch manufacturer's recommended tackifier.

2. Spray-apply slurry uniformly to all areas to be seeded in a one-step process. Apply slurry at a rate so that mulch component is deposited at not less than 1500-lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate.

3.6 TURFGRASS SODDING

- A. Lay sod within 24 hours of harvesting unless a suitable preservation method is accepted by Engineer prior to delivery time. Do not lay sod if dormant or if ground is frozen or muddy.
- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
 1. Lay sod across slopes exceeding 1:3.
 2. Anchor sod on slopes exceeding 1:6 with wood pegs spaced as recommended by sod manufacturer but not less than two anchors per sod strip to prevent slippage.
- C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

3.7 TURF RENOVATION

- A. Renovate existing turf where indicated.
- B. Renovate turf damaged by Contractor's operations, such as storage of materials or equipment and movement of vehicles.
 1. Reestablish turf where settlement or washouts occur or where minor regrading is required.
 2. Install new planting soil as required.
- C. Remove sod and vegetation from diseased or unsatisfactory turf areas; do not bury in soil.
- D. Remove topsoil containing foreign materials, such as oil drippings, fuel spills, stones, gravel, and other construction materials resulting from Contractor's operations, and replace with new planting soil.
- E. Mow, dethatch, core aerate, and rake existing turf.
- F. Remove weeds before seeding. Where weeds are extensive, apply selective herbicides as required. Do not use pre-emergence herbicides.
- G. Remove waste and foreign materials, including weeds, soil cores, grass, vegetation, and turf, and legally dispose of them off Owner's property.
- H. Till stripped, bare, and compacted areas thoroughly to a soil depth of 6 inches.
- I. Apply soil amendments and initial fertilizer required for establishing new turf and mix thoroughly into top 4 inches of existing soil. Install new planting soil to fill low spots and meet finish grades.

1. Soil Amendment(s): Provide soil amendments according to requirements of Section 329113 "Soil Preparation".
 2. Initial Fertilizer: applied according to manufacturer's recommendations.
- J. Apply seed or sod, as indicated on the Drawings or herein.
- K. Protect seed with as required with mulch or erosion control blankets, as specified herein.
- L. Water newly planted areas and keep moist until new turf is established.

3.8 TURF MAINTENANCE

- A. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
1. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
 2. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.
 3. Apply treatments as required to keep turf and soil free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.
- B. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.
1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 2. Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.
- C. Reduce watering to allow for mowing of turf without rutting of soil. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than one-third of grass height. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
1. Mow Kentucky bluegrass to a height of 1-1/2 to 2 inches.

3.9 SATISFACTORY TURF

- A. Turf installations shall meet the following criteria, as determined to be acceptable by Engineer:
1. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.

- B. Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.

3.10 NATIVE SEED

- A. All seed is to be drilled. Drill at one-quarter (1/4) inch to one-half (1/2) inch into the soil at the specified pure live seed (PLS) per acre rate with a mechanical grass drill with depth bands and an agitator in the seed box.
- B. Rows shall be spaced not more than seven (7) inches apart.
- C. Drill one-half (1/2) of the required PLS per acre in one compass direction, and then drill the remaining half of the required PLS per acre in a direction ninety degrees (90°) to the first half.
- D. Areas which are too constrained to accommodate drill seeding equipment may be broadcast by hand. Apply at twice the rate of required PLS per acre used for drill seed operation.
- E. Protect seeded areas from hot, dry weather or drying winds by applying ydromulch within 24 hours after completing seeding operations. Do not apply excessive mulch which will lead to diminished germination.
 - 1. Apply hydromulch in accordance with Hydroseeding specifications herein, omitting seed from mix.
 - 2. Water newly planted areas and keep moist until seed is established.

3.11 NATIVE SEED MAINTENANCE

- A. Maintain and establish seed by watering, weeding, mowing, trimming, replanting, and performing other operations as required to establish a healthy, viable seed. Roll, regrade, and replant bare or eroded areas and remulch. Provide materials and installation the same as those used in the original installation.
 - 1. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and seed damaged or lost in areas of subsidence.
 - 2. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.
- B. Pest Maintenance: Apply treatments as required to keep seed and soil free of pests and pathogens or disease.
 - a. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.
 - b. Use chemical pesticide treatments when necessary and only upon approval of the Owner.
- C. Weed Control: Control noxious weed growth on the site during the construction period and until the Final Acceptance.

1. Control weeds by manual removal or spot application of herbicides which have been approved by the Owner. Apply detailed applications of only the targeted weed species by wand or wick with a backpack applicator. No herbicides shall be permitted for general application (broadcast) during a time when it would cause detrimental impact to germination or establishment of the seeded grasses.
 2. Herbicides or other chemicals, if required, shall be applied using well-maintained spraying equipment by individuals appropriately licensed by the State of Colorado for such applications. Herbicide application shall be conducted by trained weed control personnel who also can recognize the targeted weed species.
 3. Herbicides and other chemicals shall not be applied during periods when wind or other physical conditions cause the herbicides or chemicals to be transported a distance of more than five (5) feet from the immediate area where they are being placed.
 4. All herbicides shall be applied at a rate and strength, and by the method recommended by the manufacturer of the product being used.
 5. Failure to properly apply herbicides (spot treatment) and the loss of native seed species, shall result in Contractor reinstalling seed at no cost to the Owner.
- D. Watering: Install and maintain temporary piping, hoses, and seed-watering equipment to convey water from sources and to keep seed uniformly moist.
1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 2. Water seed with fine spray at a minimum rate of 1/2 inch per week for eight weeks after planting unless rainfall precipitation is adequate.

3.12 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.
- C. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.
- D. Remove nondegradable erosion-control measures after grass establishment period.

3.13 INSPECTION AND ACCEPTANCE

- A. Coordinate inspection and observation at specified points within the work. Provide 48 hours notice of inspections and observation. Inspection will include, but are not limited to:
 1. Prior to seeding and start-up, including visual observation of seed bags, on site, prior to loading the seeder.
 2. Substantial Completion Inspection: When seeding and mulching are complete, notify Owner and request a "Substantial Completion Inspection" for approval, to begin the Warranty Period. Reseed any areas that require additional seeding, including but not limited to washout areas, and areas tracked by construction vehicles.

- a. Reseed within 14 calendar days of Inspection.
 - 1) Comply with seeding requirements in this Section.
 - 2) The Contractor may reseed at a later date upon Owner's written approval.
 - b. Continue to maintain areas until they pass seed germination inspection.
3. Seed Progress Inspection: Conduct germination inspection at approximately mid-way through the maintenance period and within the allowed seeding period. Notify the Owner and request a "Seed Progress Inspection" for approval in order to identify areas of reseeding. Reseed and mulch any areas determined by the Owner to be lacking germination. Provide weed control manually or by chemical herbicide treatment as necessary and approved by Owner. Progress approval and the requirement to reseed areas will be as follows:
- a. If any seeded areas contain more than five percent weeds.
 - b. If any areas greater than 12 inches in diameter show no viable growth plants.
 - c. All washouts or areas tracked by construction vehicles.
 - d. Reseed within 14 calendar days of Inspection.
 - 1) Comply with seeding requirements in this Section.
 - 2) The Contractor may reseed at a later date upon Owner's written approval.
 - e. Continue to maintain areas until they pass seed germination inspection.
4. Final Seeding Inspection: At the conclusion of the warranty/maintenance period, notify Owner and request a "Final Seeding Inspection." Reseed any areas that require additional seeding. Final Seeding Inspection approval and the requirement to reseed are as follows:
- a. If any seeded areas contain more than five percent weeds.
 - b. If any areas greater than 12 inches in diameter show no viable growth plants.
 - c. Reseed within 14 calendar days of Inspection.
 - 1) Comply with seeding requirements in this Section.
 - 2) The Contractor may reseed at a later date upon Owner's written approval.
 - d. Continue to maintain areas until they pass seed germination inspection.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 329300 - PLANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Plants.
- 2. Mulch.
- 3. Tree stabilization.
- 4. Landscape edgings.
- 5. Weed-control barrier fabric.

- B. Related Requirements:

- 1. Section 015639 "Temporary Tree and Plant Protection" for protecting, trimming, pruning, repairing, and replacing existing trees to remain that interfere with, or are affected by, execution of the Work.
- 2. Section 329200 "Turf and Grasses" for turf (lawn) and meadow planting, hydroseeding, and erosion-control materials.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. Backfill: The earth used to replace or the act of replacing earth in an excavation.
- C. Balled and Burlapped Stock: Plants dug with firm, natural balls of earth in which they were grown, with a ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant required; wrapped with burlap, tied, rigidly supported, and drum laced with twine with the root flare visible at the surface of the ball as recommended by ANSI Z60.1.
- D. Container-Grown Stock: Healthy, vigorous, well-rooted plants grown in a container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for type and size of plant required.
- E. Finish Grade: Elevation of finished surface of planting soil.

- F. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant. Some sources classify herbicides separately from pesticides.
- G. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- H. Planting Area: Areas to be planted.
- I. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 329113 "Soil Preparation" for drawing designations for planting soils.
- J. Plant; Plants; Plant Material: These terms refer to vegetation in general, including trees, shrubs, vines, ground covers, ornamental grasses, bulbs, corms, tubers, or herbaceous vegetation.
- K. Root Flare: Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.
- L. Stem Girdling Roots: Roots that encircle the stems (trunks) of trees below the soil surface.
- M. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.4 COORDINATION

- A. Coordination with Turf Areas (Lawns): Plant trees, shrubs, and other plants after finish grades are established and before planting turf areas unless otherwise indicated.
 - 1. When planting trees, shrubs, and other plants after planting turf areas, protect turf areas, and promptly repair damage caused by planting operations.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Plant Materials: Include quantities, sizes, quality, and sources for plant materials.
 - 2. Mulch.
 - 3. Tree-stabilization materials.
 - 4. Landscape edgings.
 - 5. Weed-control barrier fabric.

1.6 INFORMATIONAL SUBMITTALS

- A. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Recommended procedures to be established by Engineer for maintenance of plants during a calendar year. Submit before expiration of required maintenance periods.

1.8 QUALITY ASSURANCE

- A. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1.
 - 1. Selection of plants is made by Landscape Architect and Owner, who tags plants at their place of growth before they are prepared for transplanting.
 - 2. Engineer will inspect all plants upon delivery to site and reserves the right to reject material the does not comply with requirements herein.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws if applicable.
- B. Bulk Materials:
 - 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 - 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 - 3. Accompany each delivery of bulk materials with appropriate certificates.
- C. Deliver bare-root stock plants within 24 hours of digging. Immediately after digging up bare-root stock, pack root system in wet straw, hay, or other suitable material to keep root system moist until planting. Transport in covered, temperature-controlled vehicles, and keep plants cool and protected from sun and wind at all times.
- D. Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.
- E. Handle planting stock by root ball.
- F. Store bulbs, corms, and tubers in a dry place at 60 to 65 deg F until planting.
- G. Apply antidesiccant to trees and shrubs using power spray to provide an adequate film over trunks (before wrapping), branches, stems, twigs, and foliage to protect during digging, handling, and transportation.
 - 1. Engineer to review and approve applications prior to performance of work.

2. If deciduous trees or shrubs are moved in full leaf, spray with antidesiccant at nursery before moving and again two weeks after planting.
- H. Wrap trees and shrubs with burlap fabric over trunks, branches, stems, twigs, and foliage to protect from wind and other damage during digging, handling, and transportation.
- I. Deliver plants after preparations for planting have been completed, and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.
 1. Set balled stock on ground and cover ball with wood mulch, or other acceptable material.
 2. Do not remove container-grown stock from containers before time of planting.
 3. Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Water as often as necessary to maintain root systems in a moist, but not overly wet condition.

1.10 FIELD CONDITIONS

- A. Field Measurements: Verify actual grade elevations, service and utility locations, irrigation system components, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.
- B. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
 1. Spring Planting: From March 15 to June 15.
 2. Fall Planting: From September 01 to October 15.
 3. Planting outside the noted Spring and Fall timeframes may be acceptable, when requested and approved by Engineer. Warranty shall still apply.
- C. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.

1.11 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner.
 - b. Structural failures including plantings falling or blowing over.
 - c. Faulty performance of tree stabilization.
 2. Warranty Periods: From date of Substantial Completion.
 - a. Trees, Shrubs, Vines, and Ornamental Grasses: 24 months.
 - b. Ground Covers, Biennials, Perennials, and Other Plants: 24 months.
 - c. Annuals: Three months.

3. Include the following remedial actions as a minimum:
 - a. Immediately remove dead plants and replace unless required to plant in the succeeding planting season.
 - b. Replace plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
 - c. A limit of one replacement of each plant is required except for losses or replacements due to failure to comply with requirements.
 - d. Provide extended warranty for period equal to original warranty period, for replaced plant material.

PART 2 - PRODUCTS

2.1 PLANT MATERIAL

- A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant List, Plant Schedule, or Plant Legend indicated on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
 1. Trees with damaged, crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs more than 3/4 inch in diameter; or with stem girdling roots are unacceptable.
 2. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless otherwise indicated.
- B. Provide plants of sizes, grades, and ball or container sizes complying with ANSI Z60.1 for types and form of plants required. Plants of a larger size may be used if acceptable to Landscape Architect, with a proportionate increase in size of roots or balls.
- C. Labeling: Label at least one plant of each variety, size, and caliper with a securely attached, waterproof tag bearing legible designation of common name and full scientific name, including genus and species. Include nomenclature for hybrid, variety, or cultivar, if applicable for the plant.
- D. If formal arrangements or consecutive order of plants is indicated on Drawings, select stock for uniform height and spread, and number the labels to assure symmetry in planting.

2.2 MULCHES

- A. Organic Mulch: Free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of one of the following:
 1. Type: Ground or shredded Cedar or hardwood bark, unless otherwise indicated on the Drawings.
 2. Depth: 4 inches.
 3. Color: Natural.
 4. Locations:

- a. Continuous layer at plant beds, held 6-inches clear of the crown of herbaceous plants and root flares of woody plants.
- b. Trees within turf area. A circular mulch ring, a minimum 36-inch diameter or a diameter 12-inches beyond rootball, whichever is greater, from the center of trunk.

2.3 TREE-STABILIZATION MATERIALS

A. Trunk-Stabilization Materials:

1. Upright and Guy Stakes: Rough-sawn, sound, new hardwood lodgepole, free of knots, holes, cross grain, and other defects, 2-by-2-inch nominal by length indicated, pointed at one end.

2.4 LANDSCAPE EDGINGS

A. Steel Edging: Commercial-grade steel edging, fabricated in sections of standard lengths, with loops stamped from or welded to face of sections to receive stakes.

1. Basis-of-Design Product: Green Valley (mfr) Green Pro Roll Top, 12 gauge steel edging.
2. Finish: Powdercoat, green.
3. Stakes: Tapered steel, a minimum of 15 inches long.

2.5 WEED-CONTROL BARRIERS

A. Nonwoven Geotextile Filter Fabric: Polypropylene or polyester fabric, 3 oz./sq. yd. minimum, composed of fibers formed into a stable network so that fibers retain their relative position. Fabric shall be inert to biological degradation and resist naturally encountered chemicals, alkalis, and acids.

1. Basis-of-Design Product: Mirafi (mfr) 140N, or approved equivalent.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive plants, with Installer present, for compliance with requirements and conditions affecting installation and performance of the Work.

1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
2. Verify that plants and vehicles loaded with plants can travel to planting locations with adequate overhead clearance.
3. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
4. Uniformly moisten excessively dry soil that is not workable or which is dusty.

- B. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Landscape Architect and replace with new planting soil.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities and turf areas and existing plants from damage caused by planting operations.
- B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Lay out individual tree and shrub locations, and areas for multiple plantings per the Drawings. Stake locations of trees and other balled and burlapped materials. Place actual containerized plants in place.
 - 1. Outline plant species or mixed species massings. Where there are massings of more than (5) of an individual species in a grouping, set a representative sample of (3) or more container plantings of each species in place, within outlined areas.
 - 2. Review layout of all plantings with Landscape Architect and adjust locations when requested. Provide Landscape Architect with at least (7) days notice and have lay out complete for scheduled review.
 - 3. Obtain Owner's acceptance of layout before excavating or planting. Provide Engineer with at least (7) days notice and coordinate so that it immediately follows layout review by Landscape Architect. Make adjustments as requested by Owner.

3.3 PLANTING AREA ESTABLISHMENT

- A. General: Prepare planting area for soil placement and mix planting soil according to Section 329113 "Soil Preparation."
- B. Before planting, obtain Landscape Architect's and Owner's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.4 EXCAVATION FOR TREES AND SHRUBS

- A. Planting Pits and Trenches: Excavate circular planting pits.
 - 1. Excavate planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are unacceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.
 - 2. Excavate approximately three times as wide as ball diameter for balled and burlapped stock.
 - 3. Excavate at least 12 inches wider than root spread and deep enough to accommodate vertical roots for bare-root stock.

4. Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball.
 5. If area under the plant was initially dug too deep, add soil to raise it to the correct level and thoroughly tamp the added soil to prevent settling.
 6. Maintain angles of repose of adjacent materials to ensure stability. Do not excavate subgrades of adjacent paving, structures, hardscapes, or other new or existing improvements.
 7. Maintain supervision of excavations during working hours.
 8. Keep excavations covered or otherwise protected when unattended by Installer's personnel.
 9. If drain tile is indicated on Drawings or required under planting areas, excavate to top of porous backfill over tile.
- B. Backfill Soil: Subsoil and topsoil removed from excavations may be used as backfill soil unless otherwise indicated.
- C. Obstructions: Notify Landscape Architect if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.
1. Hardpan Layer: Drill 6-inch- diameter holes, 24 inches apart, into free-draining strata or to a depth of 10 feet, whichever is less, and backfill with free-draining material.
- D. Drainage: Notify Landscape Architect if subsoil conditions evidence unexpected water seepage or retention in tree or shrub planting pits.
- E. Fill excavations with water and allow to percolate away before positioning trees and shrubs.

3.5 TREE, SHRUB, AND VINE PLANTING

- A. Inspection: At time of planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.
- B. Roots: Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.
- C. Balled and Burlapped Stock: Set each plant plumb and in center of planting pit or trench with root flare 1-inch to 2-inch above adjacent finish grades.
1. Backfill: For plant beds, use excavated and mixed planting and native subsoils soils for backfill. For trees, use excavated soil for backfill.
 2. After placing some backfill around base of root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from top 2/3 of root balls and from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
 3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 4. Continue backfilling process. Water again after placing and tamping final layer of soil.
- D. Container-Grown Stock: Set each plant plumb and in center of planting pit or trench with root flare 1 inch above adjacent finish grades.

1. Backfill: Excavated and mixed planting soil and native subsoil.
 2. Carefully remove root ball from container without damaging root ball or plant.
 3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 4. Continue backfilling process. Water again after placing and tamping final layer of soil.
- E. Slopes: When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

3.6 MECHANIZED TREE-SPADE PLANTING

- A. Trees may be planted with an approved mechanized tree spade at the designated locations. Do not use tree spade to move trees larger than the maximum size allowed for a similar field-grown, balled-and-burlapped root-ball diameter according to ANSI Z60.1, or larger than manufacturer's maximum size recommendation for the tree spade being used, whichever is smaller.
- B. Use the same tree spade to excavate the planting hole as will be used to extract and transport the tree.
- C. When extracting the tree, center the trunk within the tree spade and move tree with a solid ball of earth.
- D. Cut exposed roots cleanly during transplanting operations.
- E. Plant trees following procedures in "Tree, Shrub, and Vine Planting" Article.
- F. Scarify sides of tree spade excavation to depth of 4-inches prior to setting of tree.
- G. Where possible, orient the tree in the same direction as in its original location.

3.7 TREE, SHRUB, AND VINE PRUNING

- A. Remove only dead, dying, or broken branches. Do not prune for shape.
- B. Do not apply pruning paint to wounds.

3.8 TREE STABILIZATION

- A. Trunk Stabilization by Upright Staking and Tying: Install trunk stabilization as follows unless otherwise indicated:
 1. Upright Staking and Tying: Stake trees of 2- through 5-inch caliper. Stake trees of less than 2-inch caliper only as required to prevent wind tip out. Use a minimum of two stakes of length required to penetrate at least 24 inches below bottom of backfilled excavation and to extend to the dimension indicated on Drawings above grade. Set vertical stakes and space to avoid penetrating root balls or root masses.

2. Upright Staking and Tying: Stake trees with two stakes for trees up to 12 feet high and 2-1/2 inches or less in caliper; three stakes for trees less than 14 feet high and up to 4 inches in caliper. Space stakes equally around trees.
 3. Support trees with bands of flexible ties at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree.
 4. Support trees with two strands of tie wire, connected to the brass grommets of tree-tie webbing at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree.
- B. Trunk Stabilization by Staking and Guying: Install trunk stabilization as follows unless otherwise indicated on Drawings. Stake and guy trees more than 14 feet in height and more than 3 inches in caliper unless otherwise indicated.
1. Site-Fabricated, Staking-and-Guying Method: Install no fewer than three guys spaced equally around tree.
 - a. Securely attach guys to stakes 30 inches long, driven to grade. Adjust spacing to avoid penetrating root balls or root masses. Provide compression spring for each guy wire and tighten securely.
 - b. For trees more than 6 inches in caliper, anchor guys to wood deadmen buried at least 36 inches below grade. Provide compression spring for each guy wire and tighten securely.
 - c. Support trees with bands of flexible ties at contact points with tree trunk and reaching to compression spring. Allow enough slack to avoid rigid restraint of tree.
 - d. Support trees with guy cable, connected to the brass grommets of tree-tie webbing at contact points with tree trunk and reaching to compression spring. Allow enough slack to avoid rigid restraint of tree.
 - e. Attach flags to each guy wire, 30 inches above finish grade.
 - f. Paint compression springs with luminescent white paint.

3.9 GROUND COVER AND PLANT PLANTING

- A. Refer to and follow layout requirements noted herein for Landscape Architect's and Owner's review and approval. Proceed only after receiving approval.
- B. Set out and space ground cover and plants other than trees, shrubs, and vines as indicated on Drawings in even rows with triangular spacing.
- C. Use excavated planting soil for backfill.
- D. Dig holes large enough to allow spreading of roots.
- E. For rooted cutting plants supplied in flats, plant each in a manner that minimally disturbs the root system but to a depth not less than two nodes.
- F. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.
- G. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
- H. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

3.10 PLANTING AREA MULCHING

- A. Mulch backfilled surfaces of planting areas and other areas indicated.
 - 1. Trees and Treelike Shrubs in Turf Areas: Apply organic mulch ring of 4-inch average thickness, with 18-inch radius from center of trunks or stems. Do not place mulch within 6 inches of root flares.
 - 2. Organic Mulch in Planting Areas: Apply 4-inch average thickness of organic mulch over whole surface of planting area, and finish level with adjacent finish grades. Do not place mulch within 6 inches of trunks or stems.

3.11 EDGING INSTALLATION

- A. Steel Edging: Where indicated, install steel edging where indicated according to manufacturer's written instructions. Anchor with steel stakes spaced approximately 30 inches apart, driven below top elevation of edging.
 - 1. Provide and install edging cap along top of all edgings.

3.12 WEED CONTROL BARRIER INSTALLATION

- A. Install weed-control barriers fabric in areas of unplanted, inert mulch cover such as cobble/rock mulch. Install according to manufacturer's written instructions. Completely cover area to receive mulch, overlapping edges a minimum of 12 inches and secure seams with galvanized pins.
- B. No weed barrier fabric shall be exposed to view in completed work. Correct where necessary.

3.13 PLANT MAINTENANCE

- A. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, adjusting and repairing tree-stabilization devices, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings.
- B. Fill in, as necessary, soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
- C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices when possible, to minimize use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.

3.14 REPAIR AND REPLACEMENT

- A. General: Repair or replace existing or new trees and other plants that are damaged by construction operations, in a manner approved by Landscape Architect.
 - 1. Submit details of proposed pruning and repairs.
 - 2. Perform repairs of damaged trunks, branches, and roots within 24 hours, if approved.

3. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Landscape Architect.
- B. Remove and replace trees that are more than 25 percent dead or in an unhealthy condition before the end of the corrections period or are damaged during construction operations that Landscape Architect determines are incapable of restoring to normal growth pattern.
 1. Provide new trees of same size as those being replaced for each tree of 6 inches or smaller in caliper size.
 2. Provide new tree(s) of quantity and caliper size and required by the authority having jurisdiction for each tree being replaced that measures more than 6 inches in caliper size.
 3. Species of Replacement Trees: Species selected by Landscape Architect.

3.15 CLEANING AND PROTECTION

- A. During planting, keep adjacent paving and construction clean and work area in an orderly condition. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off Owner's property.
- C. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
- D. After installation and before Substantial Completion, remove nursery tags, nursery stakes, tie tape, labels, wire, burlap, and other debris from plant material, planting areas, and Project site.

3.16 MAINTENANCE SERVICE

- A. Provide as separate cost proposal to Owner, outlining detailed scope or services, frequency, and overall duration.
- B. Maintenance Service for Trees and Shrubs: Provide maintenance by skilled employees of landscape Installer. Maintain as required in "Plant Maintenance" Article. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established, but for not less than maintenance period below:
 1. Maintenance Period: 24 months from date of Substantial Completion.
- C. Maintenance Service for Ground Cover and Other Plants: Provide maintenance by skilled employees of landscape Installer. Maintain as required in "Plant Maintenance" Article. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established, but for not less than maintenance period below:
 1. Maintenance Period: 24 months from date of Substantial Completion.

END OF SECTION

NOTE: The specifications are provided for convenience only. It is the responsibility of the consultant (user) to edit to meet the requirements of the Project and all applicable codes. The Town is not responsible for errors, omissions, or regulatory non-conformance as a result of the use of these specifications.

SECTION 329600 - TRANSPLANTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes transplanting existing on-site, non-nursery-grown trees by tree spade or digging and boxing.
- B. Related Requirements:
 - 1. Section 015639 "Temporary Tree and Plant Protection" for protecting, trimming, pruning, repairing, and replacing existing trees to remain that interfere with, or are affected by, execution of the Work.
 - 2. Section 329300 "Plants" for new trees from nursery-grown sources.

1.3 DEFINITIONS

- A. Engineer: Town of Parker, acting directly or through its duly authorized representatives, who is responsible for the engineering supervision of the construction.
- B. General: See definitions in ANSI A300 (Part 6) and in ANSI Z60.1 pertaining to field-grown trees, except as otherwise defined in this Section.
- C. Caliper: Diameter of a trunk as measured by a diameter tape at a height 6 inches above the root flair for trees up to, and including, 4-inch size at this height; and as measured at a height of 12 inches above the root flair for trees larger than 4-inchsize.
- D. Caliper (DBH): Diameter breast height; diameter of a trunk as measured by a diameter tape at a height 54 inches above the ground line for trees with caliper of 8 inches or greater as measured at a height of 12 inches above the root flair.
- E. Root-Ball Depth: Measured from bottom of trunk flare to the bottom of root ball.
- F. Root-Ball Width: Measured horizontally across the root ball with an approximately circular form or the least dimension for non-round root balls, not necessarily centered on the tree trunk, but within tolerance according to ANSI Z60.1.

- G. Root Flare: Also called "trunk flare." The area at the base of the tree's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to transplanting work include, but are not limited to, the following:
 - a. Construction schedule. Verify availability of materials, personnel, equipment, and unimpeded access needed to make progress and avoid delays.
 - b. Tree and plant protection.
 - c. Tree maintenance.
 - d. Arborist's responsibilities.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Verification: For each of the following:
 - 1. Proprietary Root-Ball-Stabilization Device: One unit.
 - 2. Slow-Release Watering Device: One unit of each size required.
- C. Pruning Schedule: Written schedule prepared by arborist detailing scope and extent of pruning each tree in preparation for and subsequent to transplanting.
 - 1. Species and size of plant.
 - 2. Location on site plan. Include unique identifier for each.
 - 3. Reason for pruning.
 - 4. Seasonal limitations on pruning.
 - 5. Preparatory Pruning: Time schedule and description of preparatory pruning to be performed.
 - a. Indicate time in months preceding the extraction of the tree.
 - b. Indicate diameter of root ball and depth of root pruning for each tree.
 - 6. Description of root and crown pruning during and subsequent to transplanting.
 - 7. Description of maintenance following pruning.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified tree-service firm and arborist.
- B. Certification: From arborist, certifying that transplanted trees have been protected during construction and that trees were promptly and properly treated and repaired when damaged.
- C. Maintenance Recommendations: From arborist, recommended procedures to be established by Owner for care and protection of trees after completing the Work.

1. Submit before completing the Work.

- D. Existing Conditions: Documentation of existing trees indicated to be transplanted, which establishes preconstruction conditions that might be misconstrued as damage caused by construction activities.

1. Use sufficiently detailed color photographs or video recordings. Color shall accurately depict hue condition of foliage and bark.
2. Include drawings and notations to indicate specific wounds and damage conditions of each tree designated to be transplanted.

- E. Tree-maintenance reports.

1.7 QUALITY ASSURANCE

- A. Tree-Service Firm Qualifications: An experienced landscaping contractor or tree-moving firm that has successfully completed transplanting work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of the Work.

1. Arborist Qualifications: Certified Arborist as certified by ISA.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws if applicable.

- B. Bulk Materials:

1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or trees.
2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
3. Accompany each delivery with appropriate certificates.

- C. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees in such a manner as to destroy their natural shape.

- D. Completely cover foliage when transporting trees while they are in foliage.

- E. Handle trees by root ball. Do not drop trees.

- F. Move trees after preparations for planting have been completed, and install immediately. If planting is delayed more than six hours after moving, set trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.

1.9 FIELD CONDITIONS

- A. Field Measurements: Verify final grade elevations and final locations of trees and construction contiguous with trees by field measurements before proceeding with transplanting work. Perform transplanting only after finish grades are established.
- B. Seasonal Restrictions: Transplant trees during the following in-season periods:
 - 1. Spring: From March 15 to June 15. Fall dig hazard species shall only be planted in Spring.
 - 2. Fall: From September 01 to October 15. Fall dig hazard species shall not be planted in Fall.
- C. Weather Limitations: Proceed with transplanting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Do not transplant during excessively wet or frozen conditions. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.
- D. Coordination with Turf Areas (Lawns): Perform transplanting before planting turf areas unless otherwise indicated.
 - 1. When transplanting after planting turf areas, protect turf areas, and promptly repair damage caused by transplanting operations.
- E. Coordination with Planting Beds: Perform transplanting before planting bedded areas unless otherwise indicated.
 - 1. When transplanting after planting bedded areas, protect bedding plants, and promptly repair damage caused by transplanting operations.

1.10 WARRANTY

- A. Installer's Special Warranty: Tree-service firm agrees to repair or replace trees and related materials that fail within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Death and unsatisfactory growth except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner, or incidents that are beyond Contractor's control.
 - b. Death and unsatisfactory growth is defined as more than 25 percent dead or in an unhealthy condition or failure to meet general performance requirements at end of warranty period.
 - c. Structural failures including trees falling or blowing over.
 - d. Faulty performance of materials and devices related to tree plantings including tree stabilization and watering devices.
 - 2. Warranty Periods from Date of Substantial Completion:
 - a. Trees: 12 months.

3. Include the following remedial actions as a minimum:
 - a. Remove dead trees and trees with unsatisfactory growth at end of warranty period; replace when directed.
 - b. A limit of one replacement of each tree will be required except for losses or replacements due to failure to comply with requirements.
 - c. Replace materials and devices related to tree plantings.
 - d. Provide extended warranty for period equal to original warranty period, for replaced trees.

1.11 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Provide tree maintenance by skilled employees of tree-service firm and as required in Part 3. Begin maintenance immediately after trees are installed and continue until plantings are healthy and well established but for not less than maintenance period below.
 1. Maintenance Period: 12 months from date of Substantial Completion.
- B. Continuing Maintenance Proposal: From tree-service firm to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General Performance: Transplanted trees shall be healthy and resume vigorous growth within one year of transplanting without dieback due to defective extracting, handling, planting, maintenance, or other defects in the Work.

2.2 PLANTING MATERIALS

- A. Backfill Soil: Excavated soil of suitable moisture content and granular texture for placing and compacting in planting pit around tree, and free of stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth.

2.3 TREE-STABILIZATION MATERIALS

- A. Trunk-Stabilization Materials:
 1. Upright and Guy Stakes: Rough-sawn, sound, new hardwood, free of knots, holes, cross grain, and other defects, 2-by-2-inch nominal by length indicated, pointed at one end.
 2. Wood Deadmen: Timbers measuring 8 inches in diameter and 48 inches long, treated with specified wood preservative treatment by pressure process.
 3. Flexible Ties: Wide rubber or elastic bands or straps.

4. Guys and Tie Wires: ASTM A 641/A 641M, Class 1, galvanized-steel wire, two-strand, twisted, 0.106 inch in diameter.
5. Tree-Tie Webbing: UV-resistant polypropylene or nylon webbing with brass grommets.
6. Guy Cable: Five-strand, 3/16-inch- diameter, galvanized-steel cable, fitted with zinc-coated 3/8-inch galvanized eyebolts at ends.
7. Flags: Standard surveyor's plastic flagging tape, white, 6 inches long.
8. Proprietary Staking-and-Guying Devices: Proprietary stake and adjustable tie systems to secure each new planting by tree stem; sized as indicated and according to manufacturer's written instructions.

a. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

- 1) Anchor Tie Down Systems, Inc; Twister Tie Down.
- 2) Arborbrace; Arborbrace Tree Guying System.
- 3) Deep Root Partners, L.P; ArborTie.
- 4) J. R. Partners; Mega Stake R2 Stake U-Stake.

B. Root-Ball-Stabilization Materials:

1. Upright Stakes and Horizontal Hold-Down: Rough-sawn, sound, new hardwood or softwood, free of knots, holes, cross grain, and other defects, 2-by-2-inch nominal by length indicated; stakes pointed at one end.
2. Wood Screws: Hot-dip galvanized or stainless steel.
3. Proprietary Root-Ball-Stabilization Devices: Proprietary at- or below-grade stabilization systems to secure each new planting by root ball; sized according to manufacturer's written instructions unless otherwise indicated.

a. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

- 1) Border Concepts, Inc; Tomahawk Tree Stabilizers.
- 2) Foresight Products, LLC; Duckbill Rootball Fixing System.
- 3) Tree Staple, Inc; Tree Staples.

2.4 WATERING DEVICES

A. Slow-Release Watering Device: Standard product manufactured for drip-irrigation of plants and emptying its water contents over a period of 2 to 9 hours; manufactured from UV-light stabilized nylon-reinforced polyethylene sheet, PVC, or HDPE plastic.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

- a. Spectrum Products, Inc; Treegator (Original) Treegator Jr. Pro.
- b. Turf Chemicals Plus, Inc; Tree Ring (Regular) Tree Ring Jr.

2.5 MISCELLANEOUS PRODUCTS

A. Organic Mulch: Shredded hardwood as specified in Section 329300 "Plants."

- B. Antidesiccant: Water-insoluble emulsion, permeable moisture retarder, film forming, for trees. Deliver in original, sealed, and fully labeled containers and mix according to manufacturer's written instructions.
- C. Burlap: Non-synthetic, biodegradable.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Erosion and Sedimentation Control: Examine the site to verify that temporary erosion- and sedimentation-control measures are in place. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross transplanting areas.
- B. For the record, prepare written report, endorsed by arborist, listing conditions detrimental to transplanting work and tree protection and health.
- C. Proceed with transplanting only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, other facilities, turf areas, and other plants and planting areas from damage caused by transplanting operations.
- B. Utility Locator Service: Notify utility locator service for area where Project is located before beginning excavation.
- C. Locate and clearly identify trees for transplanting. Flag each tree at 54 inches above the ground.
- D. Lay out individual transplant locations and areas for multiple plantings. Stake locations, outline areas, adjust locations when requested, and obtain Architect's and Engineer's acceptance of layout before transplanting. Make minor adjustments as required.
- E. Apply antidesiccant to trees uniformly, using power spray to provide an adequate film over trunks (before wrapping), branches, stems, twigs, and foliage to protect during extracting, handling, and transportation.
 - 1. If deciduous trees are moved in full leaf, spray with antidesiccant before extracting and again two weeks after transplanting.
- F. Wrap trees with burlap fabric over trunks, branches, stems, twigs, and foliage to protect from wind and other damage during extracting, handling, and transporting.

3.3 PREPARATORY PRUNING

- A. Root Pruning: Perform preparatory root pruning under direction of arborist as far in advance of extracting each tree as the Project Schedule allows.

1. Dig exploratory pits or trench by hand or with air spade around perimeter of tree at indicated root-ball width to determine locations of main lateral roots.
2. Root-Ball Width: Minimum 9 inches of root-ball diameter, or least dimension for non-round root balls, for each inch of tree caliper being transplanted.
3. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking.
4. Use narrow-tine spading forks to comb soil to expose roots with minimal damage to root system.
5. Cut exposed roots manually with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
6. Do not paint or apply sealants on cut root ends.
7. Backfill trench with excavated soil.

B. Crown Pruning (Tip Pruning):

1. Do not perform preparatory crown pruning (tip pruning).

3.4 EXCAVATION AND PLANTING EQUIPMENT

- A. Tree Spade: Track-mounted mechanized tree mover; sized according to manufacturer's size recommendation for each tree being transplanted.

3.5 EXCAVATING PLANTING PITS

- A. General: Excavate under supervision of the arborist.

1. Excavate planting pits or trenches with sides sloping. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil. Scarify sides of planting pit smeared or smoothed during excavation.
2. Excavate approximately three times as wide as root ball.
3. Keep excavations covered or otherwise protected until replanting trees.

- B. Subsoil and topsoil removed from excavations may be used as planting soil.

- C. Obstructions: Notify Architect and Engineer if unexpected rock or obstructions detrimental to trees are encountered in excavations.

1. Hardpan Layer: Drill 6-inch- diameter holes, 24 inches apart, into free-draining strata or to a depth of 10 feet, whichever is less, and backfill with free-draining material.

- D. Seepage: Notify Architect and Engineer if subsoil conditions evidence unexpected water seepage into tree-planting pits.

- E. Drainage: Fill planting pit or trench with 6 inches of water and time the infiltration rate of the soil. If the drainage rate is less than 0.25 inch per hour, notify Architect and Engineer to determine need for subsurface drainage.

- F. Saline or Sodic Soils: Completely fill excavations with water and allow to percolate away before positioning trees.

3.6 EXTRACTING TREES

- A. General: Extract trees under supervision of the arborist.
- B. Orientation Marking: Mark the north side of each tree with non-permanent paint before extracting.
- C. Root-Ball Width: Minimum 9 inches of root-ball diameter, or least dimension for non-round root balls, for each inch of tree caliper being transplanted.
- D. Root-Ball Depth: As determined by the arborist for each species and size of tree and for site conditions at original and planting locations.
- E. Digging:
 - 1. Dig and clear a pit by hand or with tree spade to the depth of the root system. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
 - 2. Use narrow-tine spading forks to comb soil to expose roots with minimal damage to root system.
 - 3. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking.
 - 4. Cut exposed roots manually with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not paint or apply sealants on cut root ends.
 - 5. Construct box tight against root system sides and bottom as pit is dug. Brace and support box to prevent breaking of root ball.
 - 6. Temporarily support and protect exposed roots from damage until they are permanently redirected and covered with soil. Cover roots with burlap and keep them moist until planted.
- F. Extracting with Tree Spade: Use the same tree spade to extract the tree as will be used to transport and plant the tree.
 - 1. Do not use tree spade to move trees larger than the manufacturer's maximum size recommendation for the tree spade being used.
 - 2. When extracting the tree, center the trunk within the tree spade and move tree with a solid ball of earth.

3.7 PLANTING

- A. Planting Standard: Perform planting according to ANSI A300 (Part 6) unless otherwise indicated.
- B. Before planting, verify that root flare is visible at top of root ball. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.
- C. Ensure that root flare is visible after planting.
- D. Remove injured roots by cutting cleanly; do not break. Do not paint or apply sealants on cut root ends.

- E. Orientation: Position the tree so that its north side, marked before extracting, is facing north in its new location.
- F. Set tree plumb and in center of planting pit with bottom of root flare 1 inch above adjacent finish grades.
 - 1. Use specified backfill soil for backfill.
 - 2. If area under the tree was initially dug too deep, add backfill to raise it to the correct level and thoroughly tamp the added soil to prevent settling.
 - 3. After placing some backfill around root ball to stabilize plant, begin backfilling.
 - 4. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 - 5. Redirect exposed root ends downward in backfill areas where possible. Hand-expose roots as required to bend and redirect them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches back from new construction and as required for root pruning.
 - 6. Place planting tablets in each planting pit when pit is approximately one-half filled; in amounts recommended by arborist. Place tablets beside the root ball about 1 inch (25 mm) from root tips; do not place tablets in bottom of the hole.
 - 7. Continue backfilling process. Water again after placing and tamping final layer of soil.
- G. Watering Pipe: During backfilling, install watering pipe 4 feet deep into the planting pit outside the root ball with top of pipe 1 inch above the mulched surface.
- H. Planting with Tree Spade: Use the same tree spade for planting as was used to extract and transport the tree. Do not use tree spade for trees larger than the manufacturer's maximum size recommendation for the tree spade being used.
- I. Slopes: When planting on slopes, set the tree so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

3.8 TREE STABILIZATION

- A. Trunk Stabilization by Upright Staking and Tying: Install trunk stabilization as follows unless otherwise indicated on Drawings or directed by arborist.
 - 1. Upright Staking and Tying: Stake only as required to prevent wind tip out. Use a minimum of three stakes of length required to penetrate at least 18 inches below bottom of backfilled excavation and to extend one-third of trunk height above grade. Set stakes vertical and space to avoid penetrating root balls or root masses.
 - 2. Support trees with bands of flexible ties at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree.
 - 3. Support trees with two strands of tie wire, connected to the brass grommets of tree-tie webbing at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree.
- B. Trunk Stabilization by Staking and Guying: Install trunk stabilization as follows unless otherwise indicated on Drawings or directed by arborist.

1. Site-Fabricated Staking-and-Guying Method: Install no fewer than three guys spaced equally around tree.
 - a. Securely attach guys to stakes 30 inches long, driven to grade. Adjust spacing to avoid penetrating root balls or root masses. Provide compression spring for each guy wire and tighten securely.
 - b. For trees more than 6 inches in caliper, anchor guys to wood deadmen buried at least 36 inches below grade. Provide compression spring for each guy wire and tighten securely.
 - c. Support trees with guy cable, connected to the brass grommets of tree-tie webbing at contact points with tree trunk and reaching to a compression spring. Allow enough slack to avoid rigid restraint of tree.
 - d. Attach flags to each guy wire, 30 inches above finish grade.
 - e. Paint compression springs with luminescent white paint.
 2. Proprietary Staking and Guying Device: Install staking and guying system sized and positioned as recommended by manufacturer unless otherwise indicated and according to manufacturer's written instructions.
- C. Root-Ball Stabilization: Install at- or below-grade stabilization system to secure each new planting by the root ball unless otherwise indicated on Drawings or directed by arborist.
1. Wood Hold-Down Method: Place vertical stakes against side of root ball and drive them into subsoil; place horizontal wood hold-down stake across top of root ball and screw at each end to one of the vertical stakes.
 - a. Install stakes of length required to penetrate at least 18 inches below bottom of backfilled excavation. Saw stakes off at horizontal stake.
 - b. Install screws through horizontal hold-down and penetrating at least 1 inch into stakes. Predrill holes if necessary to prevent splitting wood.
 - c. Install second set of stakes on other side of root trunk for larger trees as indicated.
 2. Proprietary Root-Ball-Stabilization Device: Install root-ball-stabilization system sized and positioned as recommended by manufacturer unless otherwise indicated and according to manufacturer's written instructions.

3.9 MULCHING

- A. Organic Mulch: Apply 4-inch average thickness of organic mulch extending 12 inches beyond edge of individual planting pit and over whole surface of planting area, and finish level with adjacent finish grades. Do not place mulch within 6 inches of trunks or stems.

3.10 INSTALLING SLOW-RELEASE WATERING DEVICE

- A. Provide one device for each tree.
- B. Place device on top of the mulch at base of tree and fill with water according to manufacturer's written instructions.

3.11 TREE MAINTENANCE

- A. Perform tree maintenance as recommended by arborist. Maintain arborist observation of transplanting work.
- B. Maintain trees by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, adjusting and repairing tree-stabilization devices, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings. Treat as required to keep trees free of insects and disease.
- C. From time of preparatory root pruning tree extraction measure soil moisture adjacent to edge of each root ball weekly. Record findings and weather conditions.
- D. Fill areas of soil subsidence with backfill soil. Replenish mulch materials damaged or lost in areas of subsidence.
- E. Apply treatments as required to keep tree materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.
- F. Reports: Have arborist prepare monthly inspection reports.

3.12 REPAIR AND REPLACEMENT

- A. General: Repair or replace transplanted trees and other plants indicated to remain or be relocated that are damaged by construction operations, in a manner recommended by the arborist and approved by Engineer.
 - 1. Submit details of proposed pruning and repairs.
 - 2. Perform repairs of damaged trunks, branches, and roots within 24 hours according to arborist's written instructions.
 - 3. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Engineer.
- B. Remove and replace trees that are more than 25 percent dead or in an unhealthy condition before the end of the corrections period or are damaged during construction operations that Architect or Engineer determines are incapable of restoring to normal growth pattern.
 - 1. Provide new trees of same size as those being replaced for each tree of 6 inches or smaller in caliper size.
 - 2. Provide new tree(s) at least 2-inch caliper in sufficient quantity so that sum of tree calipers equals or exceeds caliper size for each tree being replaced that measures more than 6 inches in caliper size.
 - 3. Species of Replacement Trees: Species selected by Architect or Engineer.

3.13 CLEANUP AND PROTECTION

- A. During transplanting, keep adjacent paving and construction clean and work area in an orderly condition.

- B. Protect trees from damage due to transplanting operations and operations of other contractors and trades. Maintain protection during transplanting and maintenance periods. Treat, repair, or replace damaged plantings.
- C. After planting and before Substantial Completion, remove tags, markings, tie tape, labels, wire, burlap, and other debris from transplanted trees, planting areas, and Project site.

3.14 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Except for materials indicated to be recycled, remove surplus soil, excess excavated material, waste materials, displaced plants, trash, and debris, and legally dispose of them off Engineer's property.
- B. Transport surplus satisfactory soil to designated storage areas on Engineer's property. Stockpile or spread soil as directed by Engineer.
 - 1. Except for materials indicated to be retained on Engineer's property or recycled, remove excess excavated material, waste materials, displaced plants, trash, and debris, and legally dispose of them off Engineer's property.

END OF SECTION 329600

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ORDINANCE NO. 4.52.4, Series of 2023

TITLE: A BILL FOR AN ORDINANCE TO AMEND ORDINANCE NOS. 4.52.1, SERIES OF 2004, 4.52.2, SERIES OF 2006, AND 4.52.3, SERIES OF 2008, TO AMEND THE TITLE TO CHAPTER 10.10, SUBSECTION 10.10.010(a), AND SECTIONS 13.06.070, 13.07.080, 13.07.140 AND 13.10.110 OF THE PARKER MUNICIPAL CODE CONCERNING THE PARKS, TRAILS, OPEN SPACE & STREETScape DESIGN AND CONSTRUCTION MANUAL

NOW, THEREFORE, THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, ORDAINS:

Section 1. Section 10.10.010, Subsections (a) and (b), of the Parker Municipal Code is amended to read as follows:

CHAPTER 10.10

Construction Specifications and Design Considerations for Parks, Trails and Streetscapes Parks, Trails, Open Space & Streetscape Design and Construction Manual

10.10.010 Adoption of standards by reference.

(a) The Town of Parker, Colorado, Parks, Trails, Open Space & Streetscape Design and Construction Manual ~~Construction Specifications and Design Considerations for Parks, Trails and Streetscapes~~ dated ~~August, 2004, and amended on August 21, 2006, and August 18, 2008~~ July 17, 2023 ("Standards"), and prepared by the Planning Department of Public Works and Parks, Recreation and Open Space Department, ~~are~~ is hereby adopted by reference as if set forth herein. ~~Copies of those Standards are on file with the Public Works Department and may be inspected by any person and are available for sale between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.~~ The Standards are available to review on the Town's website.

(b) The technical methodology may be administratively amended from time to time by the Parks, Recreation and Open Space Director in order to meet the Standards set forth herein. The Parks, Recreation and Open Space Director may also adopt rules and regulations that are in conformity with this Chapter.

* * *

Section 2. Section 13.06.070 of the Parker Municipal Code is amended to read as follows:

13.06.070 Landscape regulations.

* * *

(m) Streetscape landscaping.

* * *

(3) Streetscape plantings.

a. Streetscape and median landscaping shall be in compliance with the Town's ~~Construction Specifications and Design Considerations for Parks, Trails and Streetscapes~~ Parks, Trails, Open Space & Streetscape Design and Construction Manual, as amended.

* * *

g. Other arterial or collector streets. For other arterial or collector streets, streetscape landscaping shall be in compliance with the Town's ~~Construction Specifications and Design Considerations for Parks, Trails and Streetscapes~~ Parks, Trails, Open Space & Streetscape Design and Construction Manual, as amended.

* * *

Section 3. Section 13.07.080 of the Parker Municipal Code is amended to read as follows:

13.07.080 Final plat.

* * *

(f) Final development reports and plans. The applicant shall submit the supporting materials necessary for the review of the final plat which address the following items. As determined by the Planning Department, the applicant may be required to provide other documentation not listed in this Section to aid in the review of the plat.

* * *

(10) A final landscape plan for the subdivision prepared in accordance with the Town of Parker ~~Construction Specifications and Design Considerations for Parks, Trails and Streetscapes~~ Parks, Trails, Open Space & Streetscape Design and Construction Manual that includes road rights-of-way, landscaped tracts and common areas.

* * *

Section 4. Section 13.07.140 of the Parker Municipal Code is amended to read as follows:

13.07.140 Dedications for parks, trails, open space and schools.

* * *

(b) General requirements. The developer shall provide for the construction of, at no cost to the Town or special district, all roads adjacent to the area being platted in conformance with the Town Master Plan, all roads adjacent to publicly dedicated sites, traffic signalization to serve the site, extensions of all utilities to the site and other public infrastructure as required by the Town Council. Security needed to ensure such improvements shall be required at the time of final platting as requested by the Town Council. All park facilities shall conform to the standards set forth in the Town's ~~*Construction Specifications and Design Considerations for Parks, Trails and Streetscapes*~~ *Parks, Trails, Open Space & Streetscape Design and Construction Manual*. All trails development shall conform to the criteria as outlined in the *Open Space, Trails and Greenways Master Plan* and the standards set forth in the Town's ~~*Construction Specifications and Design Considerations for Parks, Trails and Streetscapes*~~ *Parks, Trails, Open Space & Streetscape Design and Construction Manual*.

Section 5. Section 13.10.110 of the Parker Municipal Code is amended to read as follows:

13.10.110 Tree and shrub conservation and replacement.

* * *

(f) Replacement of trees and shrubs.

* * *

(3) The adequacy of the tree conservation plan with regard to replacement and relocated trees and shrubs shall be determined based upon the following criteria:

a. Positive criteria:

* * *

12. A species that is listed as a preferred species in the Town's Preferred Plant List, as adopted in the ~~*Construction Specifications and Design Considerations for Parks, Trails and Streetscapes*~~ *Parks, Trails, Open Space & Streetscape Design and Construction Manual*, as amended.

* * *

b. Negative criteria:

* * *

1. Susceptibility to insect and disease problems, or sensitivity to air or water pollution.

2. A species that is listed as an excluded species in the Town's Excluded Species List, as adopted in the ~~Construction Specifications and Design Considerations for Parks, Trails and Streetscapes~~ Parks, Trails, Open Space & Streetscape Design and Construction Manual, as amended.

* * *

Section 6. Safety Clause. The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 7. Severability. If any clause, sentence, paragraph or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 8. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney



Request for Town Council Action

Date: June 20, 2023

Submitted By: John Fussa, Community Development Director
Julia Duncan, Associate Planner

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 3.36.5 - First Reading**
A Bill for an Ordinance to Amend the Stroh Ranch Planned Development Master Plan 2nd Amendment - PD Development Guide Pursuant to the Parker Land Development Ordinance
Department: Community Development, Julia Duncan
Trakit No.: Z22-016
Second July 17, 2023
Reading:

EXECUTIVE SUMMARY

The applicant is proposing a PD Amendment to add 275 units to the Stroh Ranch PD and allocate them to the Mixed Use Planning Area for Filings 14 and 15. The site is located on vacant land north of Stroh Road and west of Parker Road.

LDO Criteria for Review and Decision

The LDO requires that the Town Council shall consider the following factors in making its decision on the proposed zoning:

1. A need exists for the proposal;
2. The particular parcel of ground is indeed the correct site for the proposed development;
3. There has been an error in the original zoning; or
4. There have been significant changes in the area to warrant a zone change;
5. Adequate circulation exists and traffic movement would not be impeded by development;
6. Additional municipal service costs will not be incurred which the Town is not prepared to meet;
7. There are minimal environmental impacts or impacts can be mitigated;
8. The proposal is consistent with the Town Master Plan maps, goals and policies;
9. There is adequate waste and sewage disposal, water, schools, parks and recreation, and other services to the proportional degree necessary due to the impacts created by the proposed land uses.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

Located west of Parker Road, south of Hess Road, north of Stroh Road and east of Motsenbocker Road, the Stroh Ranch Planned Development was annexed to the Town in 1984 and amended by ordinance in 2004. The PD was subsequently amended in 2013. The second amendment modified permitted uses in the C2-Neighborhood Commercial and C1-Convenience Commercial land uses within Stroh Ranch. The only property affected by the Second Amendment was the "Peppy Blue Dot" property, located at the southwest corner of Parker Road and Hess Road. The Amendment removed "assembly" type uses which included uses such as private clubs, schools, churches, theaters, and bowling alleys. The Second Amendment left both the C1 and C2 land use areas as pure commercial and office in terms of permitted uses.

The request for the Planned Development (PD) Third Amendment is to modify the residential dwelling unit maximum within a mixed-use development on approximately 23 acres of vacant land. There are several undeveloped parcels which were previously platted under Stroh Ranch Filings 14 and 15 and are designated as "Mixed Use" (MU) within the PD. The project proposes a mix of residential uses, commercial uses, as well as parks and open space. If the amendment is approved, a future site plan submittal will be required. The proposed project includes 275 market-rate residential dwelling units for a density of 8.68 dwelling units per acre across the overall Mixed-Use area (11.96 du/ac on the developable area) and the proposed zoning requires the project to accommodate a minimum of 39,500 square feet of non-residential floor area. Not required by the existing zoning, the conceptual site plan, which is an administrative process, proposes approximately 11.5 acres of open space for the project, 3.8 acres of which is planned to be activated park and recreation space in accordance with the Town of Parker Land Development Ordinance.

The amendment proposes an increase in the total number of dwelling units from 2,817 dwelling units, currently allowed under the PD, to 3,092 dwelling units, an increase of less than 10%. The Stroh Ranch PD currently allows for a maximum of 2,817 dwelling units. However, only 2,596 of those dwelling units were built, 221 dwelling units less than the maximum (2,817). Therefore, the proposed amendment amounts to a 1.9% density increase compared to the current PD. The existing PD allows a density of up to 22 du/ac in the MU area. The proposed amendment would result in 8.7 dwelling units per acre across the overall MU Filing 14 & 15 areas, a reduction in density of approximately 13.3 DU/Acre.

Summary:

Stroh Ranch PD Total Units Permitted – 2,817
Stroh Ranch PD Total Units Built – 2,596
Stroh Ranch PD Units Proposed – 3,092
Stroh Ranch PD Proposed Increase in Units Built – 54
Stroh Ranch PD MU Density Permitted – 22 DU/Acre
Stroh Ranch PD MU Density Proposed – 8.7 DU/Acre

The proposal would also create new Mixed-Use Commercial areas designated on the Plan which would limit the development to only commercial uses. These areas are located along Stroh Road

and a parcel on the northeast portion of the site. The amendment eliminates several high-intensity commercial land uses which include automotive service uses, gasoline stations, and car washes. These uses are currently permitted under the PD. In addition, 39,500 square feet of commercial/ retail space is required:

1. A minimum of 9,500 square feet of commercial/retail space shall be constructed as a ground-floor component of vertical mixed-use buildings.
2. An additional 30,000 square feet of commercial/retail uses is contemplated in three designated outparcels, including two parcels along Stroh Road and a separate parcel near the northeast corner of the site.

Community Engagement

The applicant began engagement efforts in December 2021 by reaching out to leadership with the Stroh Ranch, Ironstone and Village on the Green HOAs. In addition, since then the applicant:

1. Engaged in meetings with leadership from each of these HOAs, representatives from the Stroh Business Circle, Regency Centers (operators of the adjacent commercial center), and individual contact with area residents through door-to-door canvassing.
2. Held an all-day community open house on Wednesday, May 11, 2022, with two sessions (10:30am to 1:30pm and 4:30pm to 8:00pm). The sessions were intended to provide residents with the opportunity to review the proposal, provide feedback and interact with the project team. Approximately 19 community members attended the morning session and 21 members at the evening session. Community feedback included concerns and questions about adequate parking, traffic, density, height and setbacks, land use, and parks and open space. Refer to a detailed meeting summary which is included as a supplement to this PD amendment application.
3. In November and December of 2022, the project representatives met one-on-one with residents of the Stroh, Ironstone, and Village on the Green neighborhoods to share information about the proposed mixed-use community and invite questions and feedback. These efforts resulted in 36 letters of support from residents.
4. Regency Centers has provided a letter of support of the proposed development, stating that a mixed-use project at this location will increase the viability of the shopping center and will expand opportunities for nearby residents to access services within the center.

Public Comment

The Planning Commission Staff Report for the project was posted on June 1, 2023, on the Town's website. Town staff subsequently received a number of public comments via email and letters. These comments were uploaded to the publicly accessible website, TRACKit and include both written correspondence and emails. Staff received a letter dated July 21, 2022, from the Stroh Ranch Community Association (HOA), Ironstone Condos Association (HOA), Village On The Green Association (HOA), and Stroh Ranch Business Circle Board of Directors expressing appreciation for the applicant's outreach but opposition to the project. The letter has been included in the file. A letter was also received by Regency, the adjacent commercial

development's owner, indicating support for the project. A number of public speakers attended the June 8, 2023 Planning Commission meeting speaking on the project. Areas of concern include perceived increased traffic impacts and density.

Planning Commission

On June 8, 2023, the Planning Commission voted four to one to recommend approval of the zoning application to Town Council.

FINANCIAL IMPACT

None

STRATEGIC GOAL(S)



ENHANCE ECONOMIC
VITALITY



DEVELOP A VISIONARY
COMMUNITY THROUGH
BALANCED GROWTH

ATTACHMENTS

1. Z22-016 PC Staff Report
2. Vicinity Map
3. 230407-Mill Creek Parker-PD Guide_redlines
4. HOA's Zoning Submittal Z22-016 Comments
5. Mill Creek - Stroh - Support Letters #1
6. Mill Creek - Stroh - Support Letters #2
7. Mill Creek - Stroh - Support Letters #3
8. Mill Creek - Stroh - Support Letters #4
9. Public Comments
10. Ordinance No. 3.36.5

RECOMMENDED MOTION

I move to approve Ordinance No. 3.36.5 on first reading and to schedule second reading for July 17, 2023, as part of the consent agenda.



Planning Commission Staff Report

Planning Commission Date: 6/8/2023

Town Council Date: 7/17/2023

Hearing Type: Public Hearing
Stroh Ranch Planned Development 3rd Amendment.
TRAKiT No: Z22-016

Location: The site is located on vacant land north of Stroh Road and west of Parker Road.

Project Planner: Julia Duncan, Associate Planner

Applicant: MCRT Investments LLC

Executive Summary: The applicant is proposing a PD Amendment to add 275 units to the Stroh Ranch PD and allocate them to the Mixed-Use Planning Area for Filings 14 and 15 and amend the commercial uses permitted within the same Planning Area.

Staff Recommendation: Approval

RECOMMENDED MOTION

"I move the Planning Commission recommend Town Council approve the zoning."

ALTERNATIVE MOTIONS

"I move the Planning Commission recommend Town Council approve the zoning request, subject to the following conditions:"

-List proposed conditions

"I move the Planning Commission recommend Town Council deny the zoning as the request does not meet the following approval criteria:"

-List criteria not met (either by staff or Planning Commission)

"I move the Planning Commission vote to continue the zoning to a future date."

I. BACKGROUND/DISCUSSION

Located west of Parker Road, south of Hess Road, north of Stroh Road and east of Motsenbocker Road, the Stroh Ranch Planned Development was annexed to the Town in 1984 and amended by ordinance in 2004. The PD was subsequently amended, the second amendment, in 2013 which modified permitted uses in the C2-Neighborhood Commercial and C1-Convenience Commercial land uses within Stroh Ranch. The only property affected by the Second Amendment was the "Peppy Blue Dot" property, located at the southwest corner of Parker Road and Hess Road. The Amendment removed "assembly" type uses which included uses such as private clubs, schools, churches, theaters, and bowling alleys. The Second Amendment left both the C1 and C2 land use areas as pure commercial and office in terms of permitted uses.

The request for the Planned Development (PD) Third Amendment is seeking to modify the residential dwelling unit maximum within a mixed-use development on approximately 23 acres of vacant land. There are several undeveloped parcels which were previously platted under Stroh Ranch Filings 14 and 15 and are designated as "Mixed Use" (MU) within the PD. The project proposes a mix of residential uses, commercial uses, as well as parks and open space. If the Amendment is approved a future site plan replat submittal will be required. The proposed project includes 275 market-rate residential dwelling units for a density of 8.68 dwelling units per acre across the overall Mixed-Use area (11.96 du/ac on the developable area) and the proposed zoning requires the project to accommodate a minimum of 39,500 square feet of non-residential floor area. Not required by the existing zoning, the conceptual site plan, which is an administrative process, proposes approximately 11.5 acres of open space for the project, 3.8 acres of which is planned to be activated park and recreation space in accordance with the Town of Parker Land Development Ordinance.

The Amendment proposes an increase in the total number of dwelling units from 2,817 dwelling units, currently allowed under the PD, to 3,092 dwelling units, an increase of less than 10%. The Stroh Ranch PD currently allows for a maximum of 2,817 dwelling units, however, only 2,596 of those dwelling units were built, 221 dwelling units less than the maximum (2,817). Therefore, the proposed amendment amounts to a 1.9% density increase compared to the current PD. The existing PD allows a density of up to 22 du/ac in the MU area, the proposed amendment would result in 8.7 dwelling units per acre across the overall MU Filing 14 & 15 areas a reduction in density of approximately 13.3 DU/Acre.

Summary:

Stroh Ranch PD Total Units Permitted – 2,817

Stroh Ranch PD Total Units Built – 2,596

Stroh Ranch PD Units Proposed – 3,092

Stroh Ranch PD Proposed Increase in Units Built – 54

Stroh Ranch PD MU Density Permitted – 22 DU/Acre

Stroh Ranch PD MU Density Proposed – 8.7 DU/Acre

The proposal would also create new Mixed-Use Commercial areas designated on the Plan which would limit the development to only commercial uses. These areas are located along Stroh Road and a parcel on the northeast portion of the site. The Amendment eliminates several high-intensity commercial land uses which include automotive service uses, gasoline stations, and car washes. These uses are currently permitted under the PD. In addition, 39,500 square feet of commercial/ retail space is required:

- A minimum of 9,500 square feet of commercial/retail space shall be constructed as a ground-floor component of vertical mixed-use buildings.
- An additional 30,000 square feet of commercial/retail uses is contemplated in three designated outparcels, including two parcels along Stroh Road and a separate parcel near the northeast corner of the site.

Community Engagement

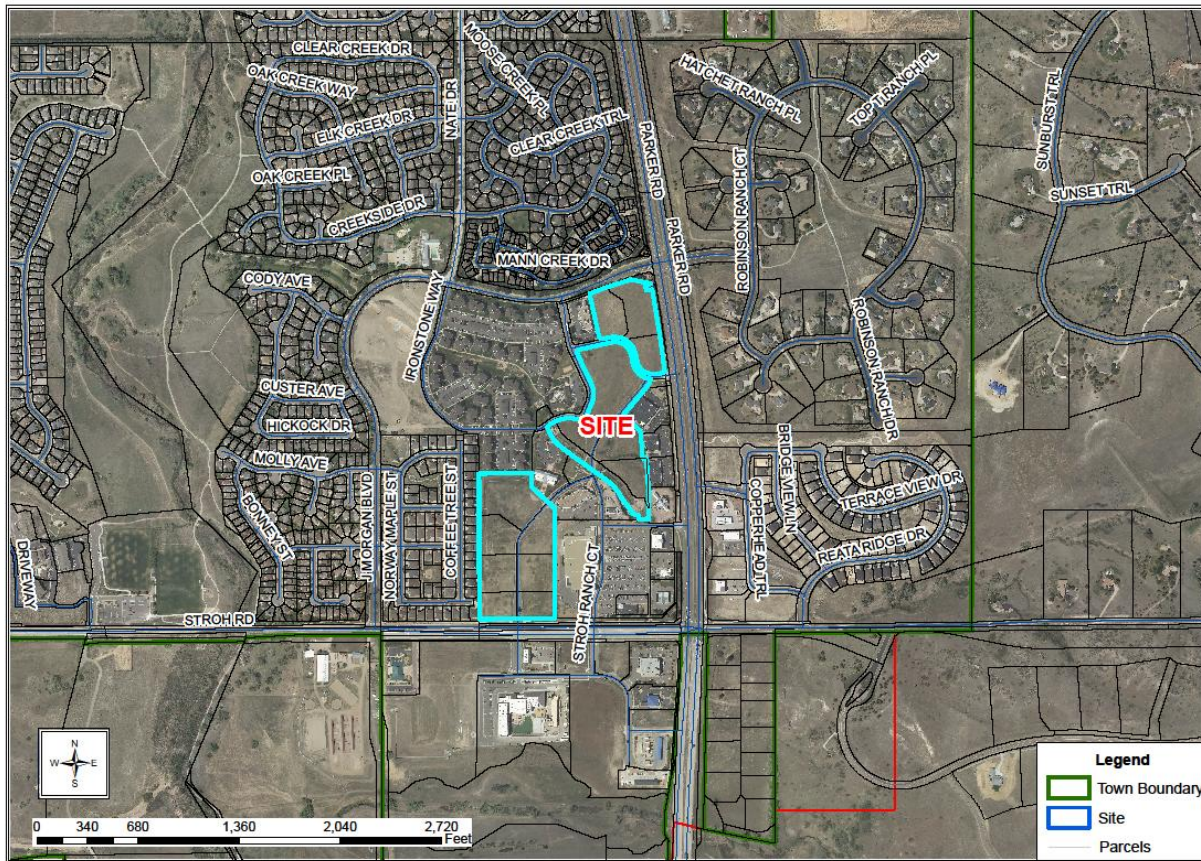
The applicant began engagement efforts in December 2021 by reaching out to leadership with the Stroh Ranch, Ironstone and Village on the Green HOAs. In addition, since then the applicant:

- Engaged in meetings with leadership from each of these HOAs, representatives from the Stroh Business Circle, Regency Centers (operators of the adjacent commercial center), and individual contact with area residents through door-to-door canvassing.
- Held an all-day community open house on Wednesday, May 11, 2022, with two sessions (10:30am to 1:30pm and 4:30pm to 8:00pm). The sessions were intended to provide residents with the opportunity to review the proposal, provide feedback and interact with the project team. Approximately 19 community members attended the morning session and 21 members at the evening session. Community feedback included concerns and questions about adequate parking, traffic, density, height and setbacks, land use, and parks and open space. Refer to a detailed meeting summary which is included as a supplement to this PD amendment application.
- In November and December of 2022, the project representatives met one-on-one with residents of the Stroh, Ironstone, and Village on the Green neighborhoods to share information about the proposed mixed-use community and invite questions and feedback. These efforts resulted in 36 letters of support from residents.
- Regency Centers has provided a letter of support of the proposed development, stating that a mixed-use project at this location will increase the viability of the shopping center and will expand opportunities for nearby residents to access services within the center.

Public Comment

Staff received a letter dated July 21, 2022, from the Stroh Ranch Community Association (HOA), Ironstone Condos Association (HOA), Village On The Green Association (HOA), Stroh Ranch Business Circle Board of Directors expressing appreciation for the applicant's outreach but opposition to the project. The letter has been included in the file.

Vicinity Map



Stroh Ranch PD 3rd Amd. Vicinity Map
Zoning

II. PRIOR ACTIONS

Date	Action
1984	Town Council approved the Annexation and Zoning
2004	Town Council adopted the Stroh Ranch Planned Development Guide 1 st Amendment
2013	Town Council adopted the Stroh Ranch Planned Development Guide 2 nd Amendment

III. CURRENT SITE DATA

Existing Zoning	PD - Planned Development
Overlay District	N/A
PD & Plan Area	Stroh Ranch Planned Development Master Plan 2 nd Amendment
Master Plan Area	Community Center
	Medium Density Residential
Site Acreage	727.7 Acres
Subdivision	Stroh Ranch

Existing Use		The areas affected by the proposed Amendment are vacant. The developed parcels within the PD are developed with a mix of Single-family and multi-family residential, and commercial development.	
Surrounding Uses			
	Master Plan Land Use	Zoning	Existing Use
North	Medium Density Residential	PD – Planned Development	Multifamily and Single-Family residential
South	Community Center	PD - Planned Development -	Commercial development; dental office, Walgreens, Leman Academy of Excellence
	Medium Density Residential		
East	Community Center	PD - Planned Development	Commercial development; bank, dentists
West	Medium Density Residential	PD - Planned Development	Single-Family residential

IV. PARKER 2035 MASTER PLAN

[Parker 2035 Master Plan | Town of Parker - Official Website](#)

MASTER PLAN CONSISTENCY	
Master Plan Designation	Choose an item. ☒ Consistent ☐ Inconsistent
Master Plan Character Discussion	<u>Neighborhood Centers and Community Centers</u> are located within Medium Density and Low-Density Residential Character Areas and are generally situated at major intersections. These Centers must be carefully planned and coordinated to avoid negative impacts to traffic capacity and adjacent land uses. Development within these Centers should transition into the surrounding neighborhood, both in terms of land use and design features. These Centers, created to protect and serve residential neighborhoods, are defined below. The physical characteristics of Community and Neighborhood Centers includes the concentration of commercial development near the intersections of major arterials or collector streets. Preserving key commercial corners of these intersections is necessary to ensure adequate locations for commercial development to serve visitors and residents of the Town. Important commercial/retail corners should be accessible to transit, are walkable, have good automobile access, are visible from the roadway and have the potential to connect to a neighborhood.

	It is important that Neighborhood Centers and Community Centers incorporate multi-modal access to existing residential neighborhoods and, where planned, higher density residential use is integrated into the Center design as a secondary element. Mixed-Use Planning Areas within Neighborhood Centers and Community Centers shall have no less than 33 percent of their total land area developed for commercial use. Limited exceptions may be made for vertical mixed-use development, clustering to address environmentally sensitive areas or improve urban design. <u>Community Centers</u> Community Centers are areas that are larger than Neighborhood Centers and have a larger market area, serving multiple neighborhoods. Typical uses within Community Centers include retail and personal/business services. Other compatible uses such as small offices, recreational and restaurants are also permitted. Generally, the total Gross Leasable Area (GLA) for the commercial/office components within an entire Community Center should range from 250,000 to 500,000 square feet combined. In general, a Community Center shall have no less than 33 percent or 20 acres, whichever is greater of its total land area zoned and developed for commercial use with corner located parcels zoned and developed principally for commercial retail, service, and restaurant use. Residential use shall be a secondary element unless part of a vertical mixed-use development. <u>Medium Density Residential</u> The Medium Density Residential Character Area will consist of an overall gross density of 3.5 dwelling units per acre. Higher densities for housing for older adults may be considered as long as impacts are comparable to other uses permitted within this Character Area. Higher densities are also appropriate in Neighborhood and Community Centers as described in the Master Plan.
Consistent Goals/Strategies	Land Strategy 1Use 1. A Land Use 1.C Land Use 1. E Land Use 1. H Land Use 1. I Housing and Neighborhoods 3.A and 3. B Jobs and Economic Vitality I.2 Jobs and Economic Vitality I.2.A

	Jobs and Economic Vitality I.2.B Jobs and Economic Vitality I.2. E
Staff Analysis	The Stroh Ranch Planned Development Master Plan is located on vacant land north of Stroh Road and west of Parker Road and is part of a Community Center as designated by the Parker 2035 Master Plan. The proposed PD Amendment impacts the area designated as “Mixed-Use” on the Development Plan. This area allows for both commercial uses and multifamily residential uses up to a maximum density of 22 dwelling units per acre. The impacted lots are currently undeveloped. Multi-family Residential and commercial uses have always been permitted in the Mixed -Use Zone. For parcels zoned Mixed Use (MU), the zoning allows dwelling units to be transferred from undeveloped sites at the Site Plan stage up to a maximum density of 22 dwelling units per acre through an administrative minor amendment. Because Stroh Ranch is built out with the exception of this parcel, the applicant cannot take advantage of this element of the zoning which is part of the request for this rezoning. The Amendment proposes an increase in the total number of dwelling units from 2,817 dwelling units, currently allowed under the PD, to 3,092 dwelling units, an increase of less than 10%. The Stroh Ranch PD currently allows for a maximum of 2,817 dwelling units, however, only 2,596 of those dwelling units were built, 221 dwelling units less than the maximum (2,817). The remaining 221 dwelling units were not transferred to the Mixed-Use Planning area through the administrative minor amendment at the Site Plan stage and are therefore not available for the mixed-use areas unless the zoning is amended. The proposed amendment amounts to a 1.9% density increase compared to the original intent of the PD, which allows the development and feasibility of the development of the commercial areas. The existing PD allows a density of up to 22 du/ac in the MU area, the proposed amendment would result in 8.7 dwelling units per acre across the overall MU Filing 14 & 15 areas.

	Existing PD	2,817 DU
	Built	2,596 DU
	Difference (Not Built/Utilized)	221 DU
	Proposed Additional Units	275 DU
	Difference (275-221=)	54 DU
	Percentage Difference between what is currently allowed under the Existing PD (2,817) and what will actually be built out if approved (2,817+54= 2,871)	1.88%
	Percentage Difference Calculation: (2871-2,817)/(2,871)=	
The Amendment eliminates several high-intensity commercial land uses which include automotive services, gasoline stations, and car washes. These uses are currently permitted under the PD and their elimination will encourage higher end retail and commercial uses that are neighborhood serving to the adjacent existing multi-family and single -family residential. Based on this analysis, staff has determined that the request is consistent with the Parker 2035 Master Plan.		

V. LAND DEVELOPMENT ORDINANCE

DEVELOPMENT POTENTIAL (Rezoning)			
Provisions	As recommended by the Master Plan	Proposed	Analysis
Units Per Acre	Community Center: Higher Densities Permitted when Integrated into the Center Medium Density Residential: 3.5 DU/Acre PD: 22 DU/Acre	No proposed changes to PD density maximum	☐ Consistent ☐ Inconsistent ☒ No Change ☐ N/A

Allowed Uses	a. Multifamily residential b. Commercial c. Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units, Single Family Attached, Semi-detached, Clustered Single Family Dwelling Units, Manor Home Dwelling Units, Duplex Dwelling Units, Townhome Dwelling Units and Accessory Uses.	Eliminates several high-intensity commercial land uses which include automotive services, gasoline stations, and car washes. No changes proposed to the type of residential.	☒ Consistent ☐ Inconsistent ☐ No Change
Height/Stories	No building or structures shall exceed forty (40) feet in height, except by Special Review, in which case no Buildings or Structures shall exceed fifty (50) feet.	No proposed changes	☒ Consistent ☐ Inconsistent ☐ No Change
Staff Analysis	As detailed in the analysis above, the requested rezoning is consistent with the Parker 2035 Master Plan.		

VI. APPROVAL CRITERIA REZONING

Title 13.04.240.f. Approval Considerations for Rezoning Requests:

1. A need exists for the proposal.

Applicant analysis and findings:

As noted in the Parker 2035 Master Plan, single-family detached homes account for 75% of the housing stock in the Town, while the demand for rental housing is increasing. In addition, a need exists to provide an appropriate amount of neighborhood-scale commercial/retail development to expand business opportunities and retail options for

existing and future residents. The proposed development considers the Town's need for strong commercial offerings together with the emerging residential needs of the population, resulting in a well-integrated and balanced community with emphasis on small-town livability. Thus, there is a strong need to expand and diversify housing options in the Town of Parker while maintaining a healthy balance of non-residential development. Land identified for housing development in the Town of Parker is limited, particularly for multifamily rental housing.

The proposed PD amendment will accomplish these goals and support both the residential and non-residential needs that currently exist in the community. This PD amendment will also allow development to occur in accordance with the Town's vision for the property as identified within the Parker 2035 Master Plan and envisioned by the Stroh Ranch PD.

Staff analysis and findings:

The project location is the remaining infill lots in the Stroh Ranch PD. The vacant lots occupy the space between residential developments containing both single-family and multi-family and the commercial developments at the corner of Stroh and Parker roads. The proposed changes are consistent with the intent of the original PD. The proposed zoning amendment continues to allow for both residential and commercial uses, but preserves the lots more appropriate for commercial development, adjacent to the rights-of-way and the corner of J. Morgan and Parker Road, for commercial development. The residential development makes commercial development more feasible, and the commercial will provide additional needed services to the adjacent and proposed residential communities. The proposed elimination of the intense auto uses more compatible with the existing and proposed residential areas. Allowing for the change in units as opposed to purely commercial will allow residential development that creates a transition and buffer between the commercial development and single-family to the east and multi-family to the north. The prohibition of auto related uses will encourage higher end retail and commercial uses that are neighborhood serving. The proposed amendment will encourage development of the undeveloped infill parcels, serving commuters, the residents of the adjacent single-family and multi-family, and the Town of Parker community at large.

2. The parcel of ground is indeed the correct site for the proposed development.

Applicant analysis and findings:

The property's location, market conditions, existing infrastructure and development in the area, and the existing land use designation make the subject parcels the ideal site for mixed-use development as proposed. As previously stated, demand exists for both multifamily housing and neighborhood-scale commercial, particularly in compact, walkable, mixed-use arrangements. Public facilities and services exist in this location to support development of the property, and existing infrastructure is adequate to serve development of the property as proposed. A mixed-use development at this location will be fully compatible and well-integrated with existing uses and will provide the ideal

transition from commercial uses along the adjacent roadways to residential uses to the north and west of the property.

The Project Site is located in the Mixed-Use planning area within the existing Stroh Ranch PD which is intended “to provide for the integration of a broad range” of both commercial/retail and/or multi-family residential land uses. The Stroh Ranch PD also considers residential densities within the Mixed-Use planning areas up to a maximum of 22 du/ac. Land within the filings 14 and 15 Mixed Use area has been partially developed with non-residential uses, indicating the need for supporting residential uses on the vacant parcels to contribute to a healthy and desirable balance of uses as well as an appropriate transition from a major intersection to existing residential neighborhoods. The Project Site is the last remaining undeveloped parcel within the Stroh Ranch PD. The Stroh Ranch PD was originally approved in 2004, and, although it has been updated as recently as 2013, both market demand and planning best practices have changed considerably over that period of time. With the subject parcels remaining undeveloped, and the market in this area having matured, the applicant believes that the proposed mix of uses represents the best opportunity to develop the remaining vacant parcels in a way that is both supported by the market and adheres to the underlying principles, vision, and intent of the PD. The proposed mixed-use community also provides a perfect opportunity to achieve a project that is well integrated with the existing residential development on one side and the commercial area on the other side.

With respect to the PD zoning specifically, the proposed increase in density represents a modest increase of less than 10%. While Stroh Ranch is considered fully built out, a total of only 2,596 dwelling units have been approved, which is 221 less than the 2,817 units currently allowed. Therefore, the proposed PD amendment equates to only a 1.9% increase in density in the context of the currently approved and platted neighborhoods. The proposed density of the Project, at less than 12 du/acre (and 8.7 du/acre within the overall 31.7-acre MU area), is significantly less than the maximum allowed density of 22 du/ac.

Furthermore, the property is within a designated “Community Center” within the Parker 2035 Master Plan, which envisions a concentration of commercial uses at major intersections with thoughtful transitions to surrounding neighborhoods. The proposed plan achieves this transition and integrates seamlessly with existing residential and non-residential uses adjacent to the property. The proposed PD Amendment supports the provision of high quality, medium density residential uses while providing commercial/retail opportunities, thereby directly achieving the Town’s overall vision for the property.

For these reasons, the proposed development fulfills the purpose and intent of the Mixed-Use planning area, the overall vision of the Stroh Ranch PD, and the vision set forth in the Parker 2035 Master Plan.

Staff analysis and findings:

The current zoning allows for mixed use including both residential and commercial uses. The proposed changes within the Mixed-Use area of the PD allow for the addition of

275 units (54 net new units in the Stroh Ranch PD) and 39,500 square feet of commercial development in an area intended for both residential and commercial uses. Because only 2,596 dwelling units have been built, 221 less than the 2,817 units currently allowed under the PD, the request results in a true increase of 54 units from what was initially allowed through the PD. The proposed maximum allowed density of less than 12 DU/AC is less than the 22 DU/AC allowed by the current PD. The proposed elimination of the intense auto uses is more compatible with the existing and proposed residential areas. The uses, required commercial development, and densities are consistent with the intent of the Master Plan.

Based on this analysis, staff has determined that this criterion has been met.

3. There has been an error in the original zoning; or

Applicant analysis and findings:

The purpose of this application is not to correct an error in the original zoning; therefore, this factor is not applicable.

Staff analysis and findings:

N/A

4. There have been significant changes in the area to warrant a zone change.

Applicant analysis and findings:

The need to diversify and expand housing options, expand neighborhood-scale commercial options, and the desire for compact, walkable, mixed-use development warrants this PD amendment. Furthermore, the commercial/retail market has seen a shift away from reliance on storefronts in recent years, with the ever-increasing desire and technological flexibility for home offices and other remote working environments. The amount of land subject to this PD amendment is not suitable for exclusively commercial/retail land uses. The above items demonstrate that significant changes have occurred in the area, particularly since the original Stroh Ranch PD was adopted in 2004, and even since the 2nd Amendment in 2013.

Staff analysis and findings:

Several previously vacant parcels within the PD have been developed with multi-family residential buildings and commercial development, however, a large portion of the Mixed-Use area remains undeveloped, and the market is not responding to develop these infill sites with exclusively commercial uses. As Parker's population has continued to grow the need for a range of housing types has increased. The intersection of Parker Road and Stroh Road has seen multiple commercial sites developed in the past few years, allowing for better access and visibility. Multi-family residential units provide market-rate supply to the housing market. The zone change addresses the significant population growth that has occurred, increases market rate housing supply, sets aside

lots for commercial development, and is consistent with the original intent of the PD and Master Plan.

5. Adequate circulation exists and traffic movement would not be impeded by development.

Applicant analysis and findings:

Primary access to the property will be provided from existing access on Parker Road and Stroh Road. Existing internal roadways will be utilized for access to the individual development parcels. The existing circulation network is adequate to serve the development as demonstrated in further detail in the Traffic Impact Analysis included with this application.

Staff analysis and findings:

A Traffic Impact Study (TIS), prepared by Kimley-Horn and Associates, Inc., was submitted with the PD zoning application. The report has been evaluated by Engineering staff and will also be subsequently evaluated through the Site Plan process. Traffic mitigation measures will be based on impacts determined through the analysis.

Regional access to the development will be provided by E-470, Interstate 25 (I-25) and Parker Road. Primary access will be provided by Parker Road (SH-83) and Stroh Road. Direct access will be provided by six proposed full movement access intersections from existing roads. The existing roadway system of Stroh Ranch Place, Stroh Ranch Drive and Stroh Ranch Court are proposed to stay in place at this time and access to future development will be taken from these roads. The project is expected to generate approximately 3,188 weekday daily trips, with 181 of these trips occurring during the morning peak hour and 305 of these trips occurring during the afternoon peak hour. Based on the analysis presented in this report, Kimley-Horn believes the project will be successfully incorporated into the existing and future roadway network. A number of traffic improvements are recommended in the report that will be further analyzed and implemented during a future replat and Site Plans.

Because the proposed zone change would allow for residential in lieu of an entirely commercial development the traffic impacts would be reduced. Commercial developments have a higher trip count than residential uses. Therefore, the zone change would reduce daily trips than what would be expected with a purely commercial development, and the analysis shows a 30 percent reduction.

Existing and proposed roadway and circulation infrastructure are adequate to serve the development as proposed, and intersections will continue to operate at acceptable levels of service. Based on this analysis, staff has determined that this criterion has been met.

6. Additional municipal service costs will not be incurred which the Town is not prepared to meet.

Applicant analysis and findings:

Existing facilities and services are in place to serve development on the property, and development of the property will not result in undue financial burden. Existing internal roadways are privately maintained, and any new roads, utilities, and infrastructure will also be privately constructed and maintained. The proposed mix of residential and commercial uses will strengthen and diversify the Town's employment base, increase sales tax revenues, and expand opportunities for residents to live and work in the Town. Residential and commercial uses in a compact and well-connected form will allow residents to live in close proximity to places of work and provide options to walk and bike to access goods and services. This reduces traffic congestion, noise, and air pollution, resulting in a more sustainable and environmentally conscious community. Adding 275 market-rate homes will increase viability and sustainability of the existing shopping center adjacent to the property (as affirmed by a letter of support from this shopping center) as well as the commercially zoned land on the adjacent corners of Stroh Road and Parker Road. A unique and innovative mixed-use community will expand opportunities for high-quality retail and service options with the supporting customer base, thereby bolstering the Town's sales-tax revenue and overall economic viability.

Staff analysis and findings:

The Town does not anticipate significant municipal service costs with the proposed zoning that it is not prepared to meet. The proposed additional use will be consistent with existing adjacent uses and within Planning Areas originally intended for both residential and commercial uses.

Based on this analysis, staff has determined that this criterion has been met.

7. There are minimal environmental impacts or impacts can be mitigated.

Applicant analysis and findings:

The property consists of platted parcels of land within an existing development, thereby constituting an infill property where development will result in minimal to no impacts to vegetation or wildlife. Infrastructure exists in the areas immediately surrounding the property and no environmentally sensitive features exist on the property. The proposed development will enhance the existing built environment by expanding the pedestrian and open space network, strengthening connections to nature and existing recreational amenities, and by improving vacant and underutilized land in a manner and style that is complementary to that of adjacent developments.

Staff analysis and findings:

The Town does not anticipate significant environmental impacts.

Based on this analysis, staff has determined that this criterion has been met.

8. The proposal is consistent with the Town Master Plan, maps, goals, and policies.

Applicant analysis and findings:

The proposed PD amendment directly advances many strategies stated within the Parker 2035 Master Plan as described below.

Land Use

Strategy 1.A: Strengthen the identity of Parker by encouraging a balance of land uses that supports a high quality of life and contributes to the hometown character of our community.

The proposed PD amendment will facilitate a one-of-a-kind mixed-use community in the Town of Parker. A strong balance will be provided among the proposed mix of uses while respecting existing uses through several site design characteristics as described earlier. Through a healthy balance of residential, commercial, and recreational uses, residents will have the opportunity to live, work, and play in close proximity, appealing to a wider range of lifestyles, thereby advancing Parker's vision to "be a full-service community with a hometown feel."

Strategy 1.C: Ensure adequate opportunities for future expansion of our economic base in appropriate locations in the community.

Diversifying and expanding the Town's housing mix will increase opportunities for expansion of employment base. With the simultaneous provision of non-residential uses, the proposed PD amendment will ensure opportunities for existing and future Town residents to live and work in the same area.

Strategy 1.D: Increase the amount of open space using the criteria set forth in the Open Space, Trails and Greenways Master Plan which emphasizes supporting a regional greenway network that provides a community separation buffer from development in neighboring jurisdictions while maintaining the viability and connectivity of the natural ecosystem.

The proposed development will increase open space and recreational offerings for future and existing residents, supporting more active and healthier lifestyles and a stronger connection to nature. A total of approximately 11.5 acres of parks, open space, landscaping, and site amenities are proposed throughout the site, or half of the total developable land area. Of this, approximately 3.8 acres will be dedicated as an improved public park and the plan will include sidewalks and trails that will connect to the established trail network, including connections to the Cherry Creek Regional Trail.

Strategy 1.E: Encourage transitions between different land uses and intensities.

The proposed PD amendment will facilitate a development that is well integrated into surrounding land use and provide an effective and appropriate transition of uses. Mixed-use development consisting of residential, commercial, and recreational uses at this location will provide a seamless transition between existing commercial uses along the perimeter roadways and various residential uses to the north and west of the property.

In addition to a balanced transition of land uses, site design characteristics are implemented to achieve compatibility with surrounding uses and to minimize potential impacts to adjacent properties. Buildings are strategically situated to limit heights to two-stories adjacent to existing two-story residences, and three-story buildings are placed next to commercial uses or existing three-story residences. Building design, materials, and colors will be selected to complement existing buildings and structures. Wide landscape buffers and internal landscaping areas provide additional separation and natural, attractive screening to minimize visual impacts. The transition is further enhanced through the provision of an approximate 3.8-acre neighborhood park and the expansion of trails and sidewalks connecting to the broader pedestrian network.

Strategy 1.F: Develop land use patterns that are compatible with and support a variety of transportation opportunities and/or choices.

The subject property is located at the intersection of major roadways with a variety of surrounding land use and transportation options. RTD operates two bus routes along Parker Road, including limited stop service (Route P). Pedestrian and bicycle infrastructure currently exist along these roadways, and sidewalk connections exist internal to the site. Additional sidewalks will be provided by the proposed development to further reinforce walkability and a safe, pedestrian-scale environment. Providing an integrated mix of residential and commercial/retail uses will activate vacant, underutilized land and support local and regional transportation options.

Strategy 1.H: Encourage land uses that create a sense of community among those who work, live and play within appropriate neighborhoods.

The proposed PD amendment will provide an integrated mix of land uses and will exemplify orderly and compact growth. The amendment will also afford residents to live, work, and play in the same neighborhood – particularly through the proposed 3.8-acre dedicated public park – while integrating seamlessly with existing neighborhoods, thereby encouraging and promoting social integration and strengthening the overall sense of community.

Community Appearance and Design

Strategy 2.B: Use architecture, building design, public spaces and massing to create neighborhoods that are desirable places to live.

The site plan is thoughtfully planned to encourage a walkable, pedestrian-focused environment. Proposed building location and scale are complementary to adjacent uses and structures, and setbacks, buffers, and heights provide an effective transition. Buildings will feature a high degree of architectural variation, high-quality and durable building materials and colors that are complementary to the Town's built and natural setting. A centrally located, approximately 3.8-acre park offers a public gathering space and encourages recreation, socialization, and wellness. The PD zoning will achieve these characteristics, preserving and promoting a strong sense of community, social interaction, and livability in the Town.

Strategy 5.C: Where appropriate, locate buildings adjacent to the street to either block or break up the view of parking lots.

As demonstrated by the site plan, buildings are oriented toward the streets, framing the edges of the site to enhance the pedestrian experience and create an attractive streetscape. Parking lots are planned to be internal to their respective sites where applicable to help minimize the presence of surface parking on the site. Landscape areas are also planned to provide natural screening and separation to minimize view of parking areas.

Housing and Neighborhoods

Strategy 1.A: When reviewing development proposals adjacent to and within existing neighborhoods, ensure that the development demonstrates compatibility with, and sensitivity to, existing neighborhood characteristics in terms of housing, quality, density, building height, placement, scale and architectural character.

The proposed PD amendment and associated development will achieve compatibility with existing land uses in all areas including housing, quality, density, building massing and placement, and architectural character. The site plan is designed to maximize perimeter buffers, minimize the presence of on-site parking, preserve views, and encourage a walkable and pedestrian-scale environment. Building design and architecture will feature durable, high-quality materials that will complement the existing built and natural environment. Additionally, although the proposed PD includes both two-story and three-story buildings, the buildings are intentionally distributed throughout the site in a way that transitions height away from the neighborhood and towards Parker Road. Where the proposed development is adjacent to single or two-story residential development, building height is limited to two stories. Three-story buildings are to be located adjacent to commercial uses or existing three-story buildings.

Strategy 3.B: Encourage multi-family housing units within mixed-use buildings, where appropriate.

As described throughout, the proposed development consists of multifamily residential and commercial/retail uses in integrated vertical and horizontal configuration. The proposed PD amendment is also supportive of the intent of the MU land use designation stated within the Stroh Ranch PD: “To provide for the integration of a broad range of retail goods and services, business and professional services with Single Family, Manor Home, Townhome, and/or Multifamily residential development.”

Jobs and Economic Vitality

Strategy 2.A: Nurture and support established businesses and ensure adequate opportunities for future and expanded commercial activity within designated areas of Town, as specified in the General Land Use Plan.

The General Land Use Plan designates the subject property within a designated “Community Center” which envisions a concentration of commercial uses at major

intersections with thoughtful transitions to surrounding neighborhoods. The proposed plan achieves this transition and integrates seamlessly with existing residential and non-residential uses adjacent to the property. Furthermore, the inclusion of residential uses as part of the mixed-use community will expand the employment base and support existing and future commercial business in the area.

Strategy 2.B: Balance Parker's business and retail community includes a variety and diversity of business types as well as a variety of business scales and sizes.

Providing a new, vibrant mixed-use development will increase and diversify the Town's businesses, with types and scales that are well integrated into the existing neighborhood context and provide desirable transitions from major roadways and existing uses. The proposed PD amendment will allow a wider variety of commercial/retail offerings to complement existing commercial uses in the area.

Strategy 6.A: Encourage and support the quality renovation and reuse of under-utilized parcels and buildings. The proposed PD amendment will facilitate desirable development on otherwise underutilized vacant land. The existing parcel arrangement demands creative land use and site plan solutions, and the PD amendment will afford the flexibility to achieve a high-quality development and fill missing gaps in both the housing and commercial/ retail markets.

Staff analysis and findings:

The proposal is consistent with the Town Master Plan, maps, goals, and policies. As part of the Community Center Character Area, the allowance of additional units is consistent with the intent of the original Mixed-Use designation. As detailed in Section IV. of this staff report, the proposed rezoning to allow for the additional use is consistent with the Parker 2035 Master Plan.

Based on this analysis, staff has determined that this criterion has been met.

9. There is adequate waste and sewage disposal, water, schools, parks and recreation, and other services to the proportional degree necessary due to the impacts created by the proposed land uses.

Applicant analysis and findings:

Public facilities and services exist to serve the proposed development including water and sewer utilities, water resources, fire and emergency response, schools, and parks and recreation. The property is currently within the Parker Water & Sanitation District. Additionally, in accordance with the Town of Parker LDO the proposed development will provide 3.8 acres of additional improved park and recreation areas for the enjoyment of existing and future residents.

Staff analysis and findings:

The property is located within Parker Water and Sanitation District and infrastructure exists serving adjoining properties.

Based on this analysis, staff has determined that this criterion has been met.

VII. CONCLUSION

This zoning request is being processed to allow for 275 additional residential units and 39,500 square feet of commercial space. The proposed rezoning allows for a use, residential dwelling units, consistent with original intention of the PD for the Mixed-Use Planning area while requiring specific commercial requirements and eliminating auto related commercial uses. The application has been determined to meet the zoning approval criteria of the Parker Land Development Ordinance.

Based on the analysis contained in this staff report, staff recommends that Planning Commission recommends Town Council approve the zoning request.

VIII. RECOMMENDED CONDITIONS

Staff recommends that the Planning Commission recommend that the Town Council approve the Stroh Ranch Planned Development Master Plan 3rd Amendment.

IX. ATTACHMENTS

1. Vicinity Map
2. Stroh Ranch Planned Development Master Plan 3rd Amendment Development Guide
3. Stroh Ranch Planned Development Master Plan 3rd Amendment Development Plan
4. Public Comment

Report Approved By: Bryce Matthews, Assistant Director-Planning

Stroh Ranch PD 3rd Amd. Vicinity Map

Zoning

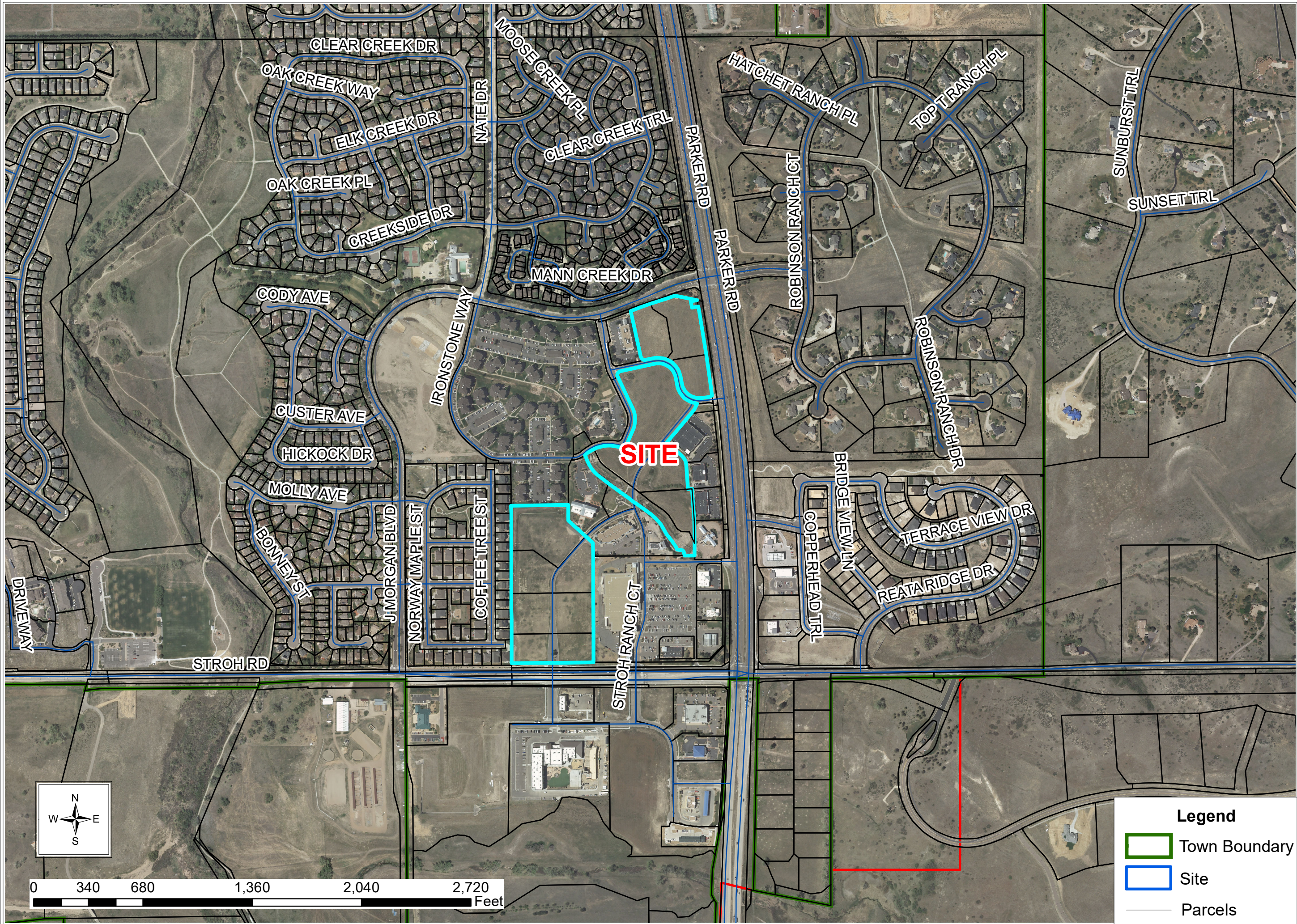


Exhibit B

Stroh Ranch Planned Development Master Plan
~~2nd~~-3rd Amendment

Town of Parker, Colorado

PD Development Guide
~~08/19/2013~~04/05/2023

I. GENERAL PROVISIONS

II. DEFINITIONS

III. LAND USE REGULATIONS

- A. Residential (SFa and SFb)
- B. Residential (SFc)
- C. Residential (THa, THb and THc)
- D. Multi-Family (MF)
- E. Convenience Commercial (C1)
- F. Neighborhood Commercial (C2)
- G. Business Center (C3)
- H. Residential (SFd)
- I. Residential (SFe)
- J. Residential (THd)
- K. Mixed Use (MU)
- L. Parks
- M. Open Space (OS)
- N. Floodplains/Stream Buffer Areas
- O. All Land Use Areas

IV. ENFORCMENT AND ADMINISTRATION

- A. Incorporation of Planned Development Master Plan
- B. Effect of Recorded Plan

I. GENERAL PROVISIONS

A. Application

The standards outlined in the Development Guide shall apply to all property contained within the “STROH RANCH DEVELOPMENT PLAN” except as provided herein. The standards outlined in the Development Guide may be divergent from the zoning regulations contained in Chapter 13.04 of the Land Development Code, but not any other chapter of the Land Development Code. In the event there is a conflict between the standards contained in the Development Guide and the Land Development Code (excluding Chapter 13.04) then the Land Development Code shall control.

B. Density Standards

The Dwelling Unit Density permitted in any residential Planning Area is an Average Density that shall apply to the entire residential Planning Area and shall not be specifically applicable to any portion thereof. The Average Density of any residential Planning Area shall be computed by dividing the total number of Dwelling Units in the residential Planning Area by the gross acres in the residential Planning Area.

C. Density Variations

In no event shall the total number of ~~2817~~3092 residential Dwelling Units within all Planning Areas as set forth on the “STROH RANCH DEVELOPMENT PLAN”, be exceeded. The total number of Dwelling Units actually developed in a Planning Area may be less than the number established on the Planned Development Master Plan. Remaining units may be transferred to other parcels in whole or in part, in support of the mixed-use concept. Any residential Planning Area may contain up to an additional ten percent (10%) of the total number of Dwelling Units set forth in the “STROH RANCH DEVELOPMENT PLAN”, for such Planning Area, as determined by the Developer. For parcels zoning Mixed Use (MU), dwelling units may be transferred at the Site Plan stage up to a maximum density of 22 Du/Ac. An increase in the number of permitted Dwelling Units within any such Planning Area may be accomplished through a transfer of Dwelling Units from any other Planning Area with an administrative minor amendment, to create an updated map of the “STROH RANCH DEVELOPMENT PLAN” and PD Development Guide except as otherwise provided in Section 13.07.160 of the Town of Parker Land Development Code.

D. Planning Area Boundaries

Wherever a Planning Area abuts a street as shown on the “STROH RANCH DEVELOPMENT PLAN”, the Planning Area boundary is the centerline of the abutting right-of-way of such street. Wherever a Planning Area does not so abut a street, the Planning Area boundary shall be as shown on the “STROH RANCH DEVELOPMENT PLAN”. Modifications in Planning Area boundaries and streets may be accomplished by the Developer by final road alignments or engineering refinements shown on a Site Plan or Plat, without any amendment to the “STROH RANCH DEVELOPMENT PLAN” provided the changes in the Planning Area does not exceed ten percent (10%).

E. Underground Utility Requirements

All electrical and communications distribution lines shall be placed underground. All

transmissions lines shall be underground unless same cannot be accomplished by direct burial.

F. Soil Tests

Soil tests for building sites shall be provided at the time of building permit application for the purpose of establishing engineering criteria for building foundation design.

G. Homeowners Associations

Homeowner Associations composed of property owners in residential areas may be created for the following purposes: a) to provide for the continued development, improvement and maintenance of properties and facilities which it owns or administers, and b) to protect the investment, enhance the value, and control the use of property owned by its members.

Homeowner's Associations shall be created in residential areas where common lands or facilities are to be owned and maintained by the Homeowner's Association, but shall not be required in residential areas where common land or facilities are not so owned and maintained.

II. DEFINITIONS

A. Purposes: It is the purpose of this Article to define words, terms and phrases contained within this PD Development Guide. See the Town of Parker Land Development Code for other definitions not defined herein.

B. Word Usage: In the interpretation of this Guide, the provisions and rules of this section shall be observed and applied, except when the context requires otherwise.

1. The particular controls the general.
2. In the case of any difference of meaning or implication between the text of this Guide and any caption or table, the text shall control.
3. Words used or defined in one tense or form shall include other tenses and derivative forms.
4. Words in the singular number shall include the plural number and words in the plural number shall include the singular number.
5. The masculine gender shall include the feminine and the feminine gender shall include the masculine.
6. The word “shall” is mandatory.
7. The word “may” is permissive.

C. Definitions:

1. Abut. To have a common border with.
2. Accessory Buildings. Detached subordinate building(s) or Structure(s), the use of which is customarily incidental to that of the Principal Building or to the main use of the land and which is located on the same lot with the Main Building or use, including carriage house units located above detached and semi-detached garages, designated for and occupied by not more than one family, and with a maximum size of 600 square feet.
3. Building, Principal or Main. A building or buildings which may contain one or more Dwelling Unit(s) in which is conducted one or more of the permitted Principal Uses of the Lot or project in which is it situated and including areas such as garages, carports, storage sheds which are attached to or architecturally integrated with the principal building.
4. Building Front. That exterior wall of a Building which faces a Front Lot Line of a Lot.
5. Building Ground Coverage. The amount of land covered or permitted to be covered by a Building.

6. Building Height. The vertical distance from the average finished grade to the highest point of the coping of a flat roof or to the deck line of a mansard roof or to the average height of the highest gable of a pitched or hipped roof. A weighted average of the finished grade on the perimeter of the building may be utilized.
7. Building Setback. The distance between the Building and the adjacent street right-of-way, property line, Private Street Easement line, or external parcel boundary.
8. Building Side. That exterior wall of a Building which faces a Side Lot Line of a Lot.
9. Building Rear. That exterior wall of a Building which faces a Rear Lot Line of a Lot.
10. Car Care Center. An establishment providing sales of a vehicle fuel and such services as lubrication, oil and tire changes, and minor repairs. This use does not include Paint spraying or body repair.
11. Density, Gross or Average. A ratio of number of Dwelling Units per acre calculated by dividing the number of Dwelling Units within the boundary of one or more residential Planning Areas or portion thereof by the number of acres contained within the Planning Area(s) or portions thereof; including all land within said Planning Area(s) or portion thereof reserved or dedicated for Open Space, recreation, educational, community, and public use, including Public Street rights-of-way and Easements.
12. Density, Net. A ratio of number of Dwelling units per acre calculated by dividing the number of Dwelling Units within the boundary of one or more residential Planning Areas or portion thereof by the number of acres contained within the Planning Area(s) or portion thereof; excluding all land within said Planning Area(s) or portion thereof reserved or dedicated for Open Space, recreation, educational, community or public use, included Public Street rights-of-ways.
13. Dwelling Unit, Atrium. An alternative type of Single Family Detached or Attached Dwelling Unit in which the private individual Open Space associated with each Dwelling Unit is consolidated into a private yard surrounded by buildings or walls forming an atria. This atria replaces the conventional front, side and rear yards associated with traditional Single Family Detached Dwelling Units.
14. Dwelling Unit, Clustered Single Family. A type of Single Family Detached or Attached Dwelling Unit development which combines reduced lot size with compensating amounts of Open Space within the proposed development.
15. Dwelling Unit, Patio. An alternative type of Single Family Detached or Attached Dwelling Unit in which the private individual Open Space associated with each Dwelling Unit is consolidated into a garden or patio area commonly located toward the side or rear of the Lot. This patio area replaces the conventional front, side and rear yards associated with traditional Single Family Detached Dwelling Units.
16. Dwelling Unit, Single Family. A Dwelling Unit Type which includes both Single Family Detached or Attached Dwelling Units.

17. Dwelling Unit, Single Family Attached. A Building designated for and containing more than one Dwelling Unit and occupied by not more than four (4) families within one Structure each of which is separated from the others by one (1) or more unpierced walls from ground to roof.
18. Dwelling Unit, Single Family Detached. A type of Dwelling Unit designated for and occupied by not more than one family and having no roof, wall or floor in common with any other Dwelling Unit.
19. Dwelling Unit, Townhome. A type of Single Family Attached or Multi-Family Dwelling Unit in which each single Dwelling Unit goes from ground to roof and is separated from other Townhome Dwelling Units by a common wall. Each Townhome Dwelling Unit has individual outside access. Although Townhome Dwelling Units have no side yards, front and rear yards can exist.
20. Dwelling Unit, Zero Lot Line. An alternative type of Single Family Detached Dwelling Unit which is situated on a Lot so that one or more sides rest directly on the boundary line of the Lot.
21. Dwelling Unit, Manor Home. A Building designated for and containing more than one Dwelling Unit and occupied by not more than eight (8) families within one Structure each of which is separated from the others by one (1) or more unpierced walls from ground to roof.
22. Dwelling Unit, Live/Work. An alternative type of Townhome Dwelling Unit in which a range of retail goods and services, consistent with the Mixed Use (MU) designation are permitted, in combination with residential use, and where residential setbacks apply.
23. Easement, Private Street. An acquired right of use, interest or privilege in land owned by another containing a privately owned access way constructed to the specifications of the Town of Parker but not maintained by the Town of Parker. Town of Parker approved fire access shall be provided in all cases.
24. Exterior Storage. Outdoor storage of fuel, raw materials, products and equipment. In the case of lumberyards, exterior storage includes all impervious materials stored outdoors.
25. Floor Area Ratio. A measurement of Development intensity expressed as a ratio derived by dividing the total Floor Area of a Building by the actual area of the Lot.
26. Garage, Parallel. A garage, attached or detached, which is oriented so that the axis which corresponds with the garage opening is substantially parallel to the adjacent street from which the Lot derives access.
27. Garage, Perpendicular. A garage, attached or detached, which is oriented so that the axis which corresponds with the garage opening is substantially perpendicular to the adjacent street from which the Lot derives access.
28. Group Care Facilities. A facility where three or more persons are provided

supervision and a planned treatment of counseling, therapy or other rehabilitative social services in a family environment. Such residence must be licensed by or operated by a federal, state, county or local/judicial/health/welfare agency or serve only referrals from such agencies. Examples of group care facilities are: group foster care, children's homes, halfway houses, rehabilitative centers, assisted living, maternity or senior citizen homes.

29. Land Use Category. A set of permitted land use types which are aggregated to form a land use classification similar in nature to zoning districts. Each Land Use Category is identified on the PD Master Plan and in Section III. Land Use Regulations of this PD Development Guide.
30. Nursery. An enterprise which conducts the retail and wholesale sale of plants grown on the site, as well as accessory items (but not farm implements) directly related to their care and maintenance. The accessory items normally sold are clay pots, potting soil, fertilizers, insecticides, hanging baskets, rakes and shovels.
31. Open Space/Golf. The area of land, located by convention, within the golf course safety corridor and held within private ownership, but which may be available for private or public use. Generally, this area will provide passive and active recreation opportunities, buffering for environmental and view-shed protection, aesthetic benefits, opportunities to enhance and widen open space corridors, and shape the patterns of urban development.
32. Parking Coverage. The amount of land covered or permitted to be covered by parking. Parking shall include all areas used for the display or parking of any and all types of vehicles, and all land upon which vehicles traverse the property as a function of the Principal Use.
33. Parking, Shared. Shared parking is a concept intended to alleviate parking spaces through coordination of land uses with parking requirements that have different demand patterns or times of peak usage. It is most effective when the associated land uses include some combination of peak parking characteristics that vary by time of day, day of the week, and/or season of the year. Areas of mixed-use zoning are often appropriate for the utilization of shared parking, due the complimentary land uses involved. Land banking of parking requirements is another form of limiting the paved surface of the ground. Areas designed for future parking facilities are "land banked" and landscaped and or hardscaped until the future need arises for the additional parking.
34. Planning Area. Parcels of land delineated on the PD Master Plan identified with a phrase or symbol which designates a specific set of permitted land use types according to the Land Use Categories provided in Section III. - Land Use Regulations of this PD Development Guide. Planning Area boundaries are as illustrated on the PD Master Plan.
35. Planning Commission. The Planning Commission of the Town of Parker.
36. Principal Use. The specific primary purpose or activity for which land or any building thereon is designed, arranged or intended, or for which it is occupied or maintained.

37. Recreational Vehicle. A vehicle or unit that is mounted on or drawn by another vehicle primarily designed for recreation or temporary living. Recreational vehicles include travel trailers, camping trailers, truck campers, motor homes, boats, snowmobiles and other similar recreation equipment.
38. Restaurant, Conventional. An establishment whose principal business is the sale of food and/or beverages to customers whose principal method of operation includes one or both of the following characteristics: (1) customers, normally provided with an individual menu, are served their foods and beverages by a restaurant employee at the same table or counter at which food and beverages are consumed. And (2) cafeteria type operation where food and beverages generally are consumed within the restaurant building.
39. Restaurant, Fast Food. An establishment whose principal business is the sale of food and/or beverages in a “ready to consume” state: (1) within the restaurant building; (2) within a motor vehicle parking on the premises; or (3) off the premises as carry out orders and whose principal method of operation includes the following characteristics: food and/or beverages are usually served in edible containers or in paper, plastic or other disposable containers.
40. Ridgeline: Major. Any substantial ridgeline on site, that when viewed from the site’s periphery forms the horizon against the sky or is not backed by land of higher elevation within the property.
41. Setback. The distance between the Building Line and the adjacent street right-of-way line or Lot Boundary.
42. Structure. Anything constructed or erected, which requires permanent location on the ground or is attached to something having a permanent location on the ground, but not including fences or walls less than six (6) feet, poles, lines, cables, or other transmission or distribution facilities or public utilities.
43. Town Council. The Town Council for the Town of Parker.
44. Traditional Neighborhood Design (TND). Traditional Neighborhood Design standards are intended to provide flexibility allowing land use patterns representative of those that were planned earlier in the 20th century. Traditional neighborhoods generally have a broad mix of uses including Single Family and Multi-Family land use patterns that help to create more pedestrian friendly streetscapes, in neighborhoods where homes and other uses orient toward the street.
45. Transit Oriented Design (TOD). Transit Oriented Design neighborhoods contain a broad mix of uses including: Single Family and Multi-Family residential combined with commercial and retail opportunities in land use patterns that help to create a pedestrian friendly environment, with convenient access to public transit.

III. LAND USE REGULATIONS

A. Single Family (SFa and SFb)

1. Intent

Provide for residential Development allowing for Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. Single Family Detached Dwelling Units.
- b. Zero Lot Line Dwelling Units.
- c. Attached or detached private garages (3 cars maximum).
- d. Commonly associated Accessory Uses, incidental to the Principal Use or Building, including but not limited to: storage sheds, private greenhouses, home occupations, radio or t.v. antennas, t.v., satellite dishes, private tennis courts, private swimming pools, and private facilities for the keeping of common household pets according to the regulations and standards contained within the Town of Parker zoning Ordinance.
- e. Private and/or public Open Space.
- f. Churches, church schools, and synagogues. A Site Plan according to the standards provided in Section V shall be required.
- g. Public and private schools and related administrative facilities for elementary and secondary education. A Site Plan according to the standards provided in Section V shall be required.
- h. Private recreational and park uses, country clubs, golf courses, recreational facilities, including but not limited to: tennis courts, swimming pools and jogging, riding, hiking and biking trails.
- i. Signs as permitted in this Land Use Category.
- j. Fences, hedges and walls as permitted in this Land Use Category.
- k. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Commission.
- l. Utility services facilities, including but not limited to water wells, water well pump stations, stormwater control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities.

3. Uses Permitted by Special Review¹

- a. Clustered Single Family Dwelling Units, including but not limited to Zero Lot Line Dwelling Units, Patio Dwelling Units and Atrium Dwelling Units.
- b. Major utility service facilities, including but not limited to telephone exchanges, electric substations, and gas regulator stations.
- c. Group Homes.
- d. Common recreation vehicle storage area.
- e. Buildings, garages and utility stations related to emergency services, such as ambulance, fire, police and rescue.
- f. Neighborhood public service, health and education facilities, such as community centers, libraries and museums.
- g. Public parks, playgrounds and other recreational areas.
- h. Child Care Centers.

4. Development Standards

- a. Average Density. The Average Density shall be three and two-tenths (3.2) Dwelling Units per acre, for each SFa Land Use Parcel and shall be four and five-tenths (4.5) Dwelling Units per acre for each SFb Land Use Parcel, These Average Densities are set forth on the PD Master Plan.
- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each SFa and SFb residential Land Use Parcel shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Land Use Parcel.
- c. Building Setback: Land Use Parcel Boundary. The minimum Building Setback from the external boundary of any SFa and SFb Land Use Parcel not abutting a non-residential land Use Parcel shall be twenty (20) feet.
- d. Building Setback: Street/Other Property Lines.

(1) **Street.** The minimum Building Setback from any Public Street right-of-way or Private Street Easement Line shall be:

Building Front – 20 feet (Principal Building or Dwelling Unit)
18 feet (Garage-perpendicular)
12 feet (Garage-parallel)
Building Sides - 10 feet
Building Rear - 25 feet

¹ According to the requirements and procedures contained in the Town of Parker Zoning Ordinance. As part of Special Review, a Site Plan shall be required for consideration of these uses.

(2) Other property lines – the minimum Setback requirements from other property lines shall be:

Building Front – 0 feet

Building Sides – 0 feet (either side, 10 feet total both sides)

Building Rear – 0 feet

- e. Building Separation. The minimum building separation shall be either (8) feet for all residential Buildings and twenty (20) feet for other Principal Buildings located within each SFa or SFb Land Use Parcels, or shall be governed by the applicable fire code.
- f. Building Height. No residential Buildings within either SFa or SFb Land Use Parcels shall exceed thirty-five (35) feet in height.
- g. Off-Street Parking. A minimum of (2) off-street parking spaces shall be provided for each Dwelling Unit located within SFa or SFb Land Use Parcels.

B. Single Family Clusters (SFc)

1. Intent

Provide for residential Development allowing a variety of Single Family Detached, Single Family Attached, Semi-detached, and Clustered Single Family Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. All uses permitted by right within the Single Family (SFa and SFb) Land Use Category.
- b. Semi-detached Dwelling Units, including two family Dwelling Units and Patio Dwelling Units.
- c. Attached Single Family Dwelling Units (four attached units maximum).
- d. Attached or detached private garages.
- e. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Commission.

3. Uses Permitted by Special Review

- a. All uses permitted by Special Review within the Single Family (SFa and SFb) Land Use category.

4. Development Standards

- a. Average Density. The Average Density shall be six (6.0) Dwelling Units per

acre for each SFc Land Use Parcel, as set forth in the PD Master Plan.

- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each SFc Land Use Parcel shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Land Use Parcel.
- c. Building Setback: Land Use Parcel Boundary. The minimum Building Setback from the external boundary of any SFc Land Use Parcel not abutting a non-residential land Use Parcel shall be twenty-five (25) feet.
- d. Building Setback: Street/Other Property Lines.
 - (1) Street. The minimum Building Setback from any Public Street right-of-way line:
 - Building Front - 20 feet (Principal Building or Dwelling Unit)
 - 18 feet (Garage-perpendicular)
 - 12 feet (Garage-parallel)
 - Building Sides - 10 feet
 - Building Rear - 25 feet

To encourage innovative design, minimum setbacks from Private Street Easement Lines shall be as determined on the Site Plan.
 - (2) Other property lines – the minimum Setback requirements from other property lines shall be:
 - Building Front - 0 feet
 - Building Sides - 0 feet (either side, 10 feet total both sides)
 - Building Rear - 0 feet
- e. Building Separation. The minimum building separation shall be either (8) feet for Single Family Detached Dwelling Units, ten (10) feet for Buildings containing Single Family Attached Dwelling Units, and twenty (20) feet for other Principal Buildings located within each SFc Lands Use Parcel, or shall be governed by the applicable fire code.
- f. Building Height. No residential Buildings within either SFc Land Use Parcels shall exceed thirty-five (35) feet in height.
- g. Off-Street Parking. A minimum of (2) off-street parking spaces shall be provided for each Dwelling Unit.
- h. Open Space. A minimum of thirty-five (35) percent of the land area of each SFc Land Use Parcel shall be provided as private individual or Common Open Space or some combination of both.

C. Townhome/Patio Home (THa, THb, THc)

- 1. Intent

- a. Provide for residential Development allowing for a variety of Single Family and Townhome Dwelling Units and Accessory Uses.
2. Uses Permitted by Right
 - a. Townhome Dwelling Units
 - b. All uses permitted by right within Single Family Cluster (SFc) Land Use Category, Development standards contained within the Single Family Cluster (SFc) Land Use Section shall apply, as required.
 - c. Attached or detached garages.
 - d. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Commission.
3. Uses Permitted by Special Review
 - a. All Uses permitted by Special Review within the Single Family Cluster (SFc) Land Use Category
4. Development Standards
 - a. Average Density. The Average Density shall be six (6) Dwelling Units per acre for each THa Land Use Parcel, ten (10) Dwelling Units per acre for each THb Land Use Parcel, and twelve (12) Dwelling Units per acre for each THc Land Use Parcel. These average densities are set forth on the PD Master Plan.
 - b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each THa, THb, and THc residential Land Use Parcel shall not exceed the 1.1 times the maximum number set forth on the PD Master Plan for each individual Land Use Parcel.
 - c. Building Setback: Land Use Parcel Boundary. The minimum Building Setback from the external boundary of any THa, THb, or THc Land Use Parcel not abutting a street and abutting a non-residential Land Use Parcel shall be twenty-five (25) feet.
 - d. Building Setback: Street/Other Property Lines.
 - (1) Street. The minimum Building Setback from any Public Street right-of-way line:

Building Front - 20 feet
Building Sides - 10 feet
Building Rear - 25 feet
 - (2) Other property lines – the minimum Setback requirements from other property lines shall be:

Building Front - 0 feet
Building Sides - 0 feet
Building Rear - 0 feet

- e. Building Separation. The minimum building separation shall be fifteen (15) feet for all residential Buildings and twenty (20) feet for other Principal Buildings located within each THa, THb or THc Land Use Parcels, or shall be governed by the applicable fire code.
- f. Building Height. No residential Building within THa, THb or THc Land Use Parcels shall exceed thirty-five (35) feet in height.
- g. Off-Street Parking. The minimum number of off-street parking spaces per Dwelling Unit shall be the following:

One Bedroom Units:	1.5 spaces per unit
Two Bedroom Units:	2.0 spaces per unit
Three Bedroom Units:	2.0 spaces per unit
Four Bedroom Units or greater:	2.5 spaces per unit
- h. Attached Dwelling Units. The maximum number of attached Dwelling Units per Building shall be eight (8) units when arranged with a linear building front; twelve (12) units when arranged with an angled, broken or curvilinear building front; or sixteen (16) units when arranged around a central courtyard.
- i. Open Space. A minimum of twenty-five (25) percent of the land area of each THa, THb or THc Land Use Parcels shall be provided as private individual or Common Open Space or some combination of both.

D. Multi-Family (MF)

1. Intent

Provide for residential development allowing a variety of Single Family, Townhome and Multi-family Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. Multi-family Dwelling Units.
- b. All uses permitted by right within Townhome/Patio Home (THa, THb or THc) Land Use Category. Development standards contained within the Townhome/Patio Home (THa, THb or THc) Land Use Section shall apply, as required.
- c. Attached or detached private garages.
- d. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Commission.

3. Uses Permitted by Special Review

- b. All uses permitted by Special Review within the Single Family Cluster (SFc) Land Use Category.

4. Development Standards

- a. Average Density. The Average Density shall be twenty-two (22) Dwelling Units per acre for each MF Land Use Parcel, as set forth in the PD Master Plan.
- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each residential Land Use Parcel shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Land Use Parcel.
- c. Building Setback: Land Use Parcel Boundary. The minimum Building Setback from the external boundary of any MF Land Use Parcel not abutting a street and abutting non-residential land Use Parcel shall be thirty (30) feet.
- d. Building Setback: Street/Other Property Lines.
 - (1) Street. The minimum Building Setback from any Public Street right-of-way line:

Building Front - 25 feet
Building Sides - 15 feet
Building Rear - 25 feet
 - (2) Other property lines – the minimum Setback requirements from other property lines shall be:

Building Front - 0 feet
Building Sides - 0 feet
Building Rear - 0 feet
- e. Building Separation. The minimum building separation shall be twenty (20) feet for all residential Buildings and other Principal Buildings located within each MF Land Use Parcel, or shall be governed by the applicable fire code.
- f. Building Height. No residential Buildings shall exceed thirty-five (35) feet in height, except by Special Review, in which case no residential Building shall exceed forty-five (45) feet.
- g. Dwelling Units Per Building. The maximum number of Dwelling Units per Building shall be forty-eight (48).
- h. Off-Street Parking. The minimum number of off-street parking spaces per Dwelling Unit shall be the following:

- studio units 1.0 spaces per unit.
- one Bedroom Units: 1.5 spaces per unit
- two Bedroom Units: 2.0 spaces per unit
- three Bedroom Units: 2.0 spaces per unit
- four Bedroom Units or greater: 2.5 spaces per unit

- i. Open Space. A minimum of twenty-five (25) percent of the land area of each THa, THb or THc Land Use Parcels shall be provided as private individual or Common Open Space or some combination of both.

E. Convenience Commercial (C1)

1. Intent

To provide for the sale of limited convenience goods and personal services to satisfy the needs of neighborhood residents.

2. Uses Permitted by Right

- a. Convenience grocery.
- b. Convenience retail shopping facilities, including but not limited to: drug stores, liquor stores, florists, book and stationery stores, hardware stores, auto supply stores, record and tape stores, and retail food specialty shops which sell food products not intended to be consumed on the premises, such as (but not limited to) butcher shops, candy stores, bakeries, doughnut shops, dairy product shops, ice cream parlors and delicatessens.
- c. Convenience service establishments, including but not limited to: barber and beauty shops, cleaners, shoe repair shops, laundries, watch or jewelry repair, and travel service.
- d. Low intensity specialty goods and services establishments, including but not limited to: art gallery, antiques, artisan shops, photo studio, gift shop, plant store or nursery, pet shops, furniture store, home furnishings, newspaper office, apparel, and appliances.
- e. Conventional restaurants.
- f. Fast food, drive-in or carryout restaurants.
- g. Electric funds transfer facilities.
- h. Photo service facilities.
- i. Utility service facilities, including but not limited to water wells, water well pump stations, stormwater control facilities and water supply reservoirs or tanks, provided that no public offices repair facilities or storage yards are maintained on the site.

j. Medical and dental offices and clinics.

k. Business and professional offices.

3. Uses Permitted by Special Review¹

a. Car care center.

b. Small animal veterinary clinics with no outside facilities.

c. Major utility service facilities including but not limited to telephone exchanges, electric substations, gas regulator stations.

4. Development Standards

a. Floor/Area Ratio. The maximum floor-area ratio for each development parcel within the convenience commercial Land Use parcel shall be three tenths (.3) to one (1).

b. Building Ground Coverage. The maximum building coverage at ground level for the convenience commercial Land Use parcel, or portion thereof shall be thirty (30) percent.

c. Parking Coverage. The maximum parking coverage for the convenience commercial Land Use parcel, or portion thereof shall be fifty-five (55) percent.

d. Open Space. A minimum of twenty (20) percent of the development parcel area designated for convenience commercial Land Use shall be provided as landscaped open space.

e. Building Setback: Street. The minimum building setback from any public street right-of-way shall be:

Building front-	25 feet
Building side-	25 feet
Building rear-	25 feet

f. Building Separation. The minimum building or structure separation shall be twenty (20) feet or shall be governed by the applicable fire code.

g. Building Height. No buildings or structures shall exceed thirty-five (35) feet in height.

¹ According to the requirements and procedures contained in the Town of Parker Zoning Ordinance. As part of Special Review, a Site Plan shall be required for consideration of these uses.

F. Neighborhood Commercial (C2)

1. Intent

To provide a broad range of retail goods and services, business and professional services, which support residential uses; and a complimentary public community services and facilities within a community activity center complex.

2. Uses Permitted by Right

- a. All those uses permitted within the convenience commercial (C1) Land Use Category.
- b. Retail food and food service establishments, including but not limited to: groceries and supermarkets, and cafeterias.
- c. General retail merchandise and apparel shops, including but not limited to: junior department stores; variety stores; discount department stores; clothing; accessory and specialty stores; shoe stores; furriers and fur stores; furniture stores; home furnishing stores; home furnishing stores; household appliance stores; floor covering, drapery and upholstery stores; and radio, television, stereo and video stores.
- d. Personal service establishments
- e. General retail business establishments, including but not limited to: card and gift stores; tobacco shops; cosmetic store; toy and game stores; automotive tire, battery and accessory stores, garden plant and floral shops; and bicycle stores.
- f. Car care centers.
- g. Banks, savings and loan and other financial service establishments.
- h. Fences, hedges and walls as permitted in the Land Use category.
- i. Buildings, garages and utility stations related to emergency services, such as ambulance, fire, police and rescue.
- j. Utility service facilities including but not limited to water wells, water well pump stations, stormwater control facilities and water supply reservoirs or tanks, provided that no repair facilities or storage yards are maintained on site.

3. Uses Permitted by Special Review

- a. Major utility services facilities including but not limited to telephone exchanges, electric substations and gas regulator facilities.

4. Development Standards

- a. Floor/Area Ratio. The maximum floor-area ratio for each development tract within the Neighborhood Commercial Land Use parcel shall be thirty-five hundredths (.35) to one (1).
- b. Building Ground Coverage. The maximum building coverage for each development tract within the Neighborhood Commercial Land Use parcels shall be thirty-five (35) percent.
- c. Parking Coverage. The maximum parking coverage for each development tract within the Neighborhood Commercial Land Use parcels shall be sixty-five (65) percent.
- d. Open Space. A minimum of twenty (20) percent of the development parcel area designated for Neighborhood Commercial Land Uses shall be provided as landscaped Open Space.
- e. Building Setback: Street. The minimum building setback from any public street right-of-way line shall be:

Building front-	40 feet
Building side-	20 feet
Building rear-	25 feet
- f. Building Separation. The minimum building or structure separation shall be twenty (20) feet or shall be governed by the applicable fire code.
- g. Building Height. No buildings or structures shall exceed thirty-five (35) feet in height, except by Special Review, in which case no Building or Structure shall exceed fifty (50) feet.

G. Business Center (C3)

1. Intent

To provide a broad range of retail goods and services, business and professional services which support residential uses; and complementary public community services and facilities within an activity center.

2. Uses permitted by Right

- a. All those uses permitted within the neighborhood commercial (C2) Land Use category.
- b. Establishments for conduction any retail commercial, wholesale commercial, or service activities, not of industrial nature, including but not limited to the following uses:
 - i. Automobile and other motor vehicle sales, leasing, rental and service.
 - ii. Building materials.

- iii. Carpentry and woodworking.
 - iv. Contractor's offices.
 - v. Printing and publishing.
 - vi. Radio and television offices.
 - vii. Mortuaries.
 - viii. Car Washes.
- c. Signs as permitted within this Land Use category.
 - d. Fences, hedges, and walls as permitted within this Land Use category.
3. Uses permitted by Special Review
- a. All uses permitted by Special Review in Neighborhood Commercial (C2) Land Use areas.
4. Development Standards
- a. Floor/Area Ratio. The maximum floor-area ratio for each development tract within Business Center Land Use parcel shall be six-tenths (.60) to one (1).
 - b. Building Ground Coverage. The maximum building overage for each development tract within the Business Center Land Use parcel shall be thirty (30) percent.
 - c. Parking Coverage. The maximum parking coverage for each development tract within the Business Center Land Use parcels shall be sixty-five (65) percent.
 - d. Open Space. A minimum of twenty (20) percent of the development parcel designated for Business Center Land Uses shall be provided and landscaped open space.
 - e. Building Setback: Street. The minimum building setback from any public street right-of-way shall be:

Building front-	40 feet
Building side-	20 feet
Building rear-	25 feet
 - f. Building Separation. The minimum building or structure separation shall be twenty (20) feet or shall be governed by the applicable fire code.
 - g. Building Height. No buildings or structures shall exceed thirty-five (35)

feet in height, except by Special Review, in which case no Buildings or Structures shall exceed fifty (50) feet.

H. Residential (SFd)

1. Intent

Provide for residential Development allowing for a variety of Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units, Single Family Attached, Semi-detached, Clustered Single Family Dwelling Units, Manor Home Dwelling Units, Duplex Dwelling Units, Townhome Dwelling Units and Accessory Uses.

2. Uses Permitted by Right.

- a. Single Family Detached Dwelling Units.
- b. Zero Lot Line Dwelling Units.
- c. Manor Home Dwelling Units.
- d. Duplex Dwelling Units.
- e. Townhome Dwelling Units including Single Family Attached, Semi-detached Dwelling Units and Live/Work Dwelling Units.
- f. Clustered Single Family Dwelling Units, including but not limited to Zero Lot Line Dwelling Units, Patio Dwelling Units, Two Family Dwelling Units and Atrium Dwelling Units.
- g. Attached or detached private garages (3 cars maximum).
- h. Commonly associated Accessory Uses, incidental to the Principal Use or Building, including but not limited to: carriage house units, storage sheds, private greenhouses, home occupations, radio or T.V. antennas, satellite dishes, private tennis courts, private swimming pools, and private facilities for the keeping of common household pets according the regulations and standards contained within the Town of Parker Zoning Ordinance.
- i. Private and/or public Open Space.
- j. Public and private schools and related administrative facilities for elementary and secondary education.
- k. Private recreational and park uses, country clubs, golf courses, recreational facilities, including but not limited to: tennis courts, swimming pools and jobbing, riding, hiking and biking trails.
- l. Public parks, playgrounds and other recreational areas.
- m. Signs as permitted by Town of Parker code.

- n. Fences, hedges and walls as permitted by the Town of Parker code.
 - o. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Director.
3. Uses permitted by Special Review
- a. Utility service facilities, including but not limited to water wells, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to the telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.
 - b. Group Homes.
 - c. Common recreation vehicle storage area.
 - d. Buildings, garages, and utility stations related to emergency services, such as ambulance, fire, police and rescue.
 - e. Places of religious assembly, religious schools.
 - f. Neighborhood public service, health and education facilities, such as community centers, libraries and museums.
 - g. Child Care Centers.
4. Development Standards
- a. Average Density. The Average Density shall be up to four and five-tenths (4.5) Dwelling Units per acre for each SFd Planning Area. These Average Densities are set forth on the PD Master Plan, and reflect the number of units over the entire acreage for the parcel. Densities within portions of the parcel will vary depending on product type.
 - b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each SFd residential Planning Area shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Planning Area.
 - c. Building Setback. The minimum Building Setbacks in SFd residential Planning Areas will vary depending upon the product type in any given portion of the Planning Area. The following setbacks will be associated with the different product types defined as a User Permitted by Right.

Single Family Detached Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)

	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Zero Lot Line Dwelling Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Manor Home Dwelling Unit

Building Front	-18 feet (Principal Building)
	-20 feet (Garage perpendicular)
	-15 feet (Garage parallel)
Building Sides -	18 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley
Building Rear-	5 feet from other property lines

Duplex Dwelling Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Townhome Dwelling Unit (including Live/Work Townhomes)

Building Front	-4 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	4 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Patio Dwelling Unit

Building Front	-8 feet (Principal Building)
	-10 feet (Garage perpendicular)
	-6 feet (Garage parallel)
Building Sides -	8 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley

Building Rear- 0 feet from other property lines

- d. Building Separation. The minimum building separation shall be the greater of:
 - i) eight (8) feet for Single Family Detached residential Buildings, ten (10) feet for Buildings containing Single Family Attached Dwelling Units and twenty (20) feet for other Principal Buildings located within SFd Lands Use Parcels, or
 - ii) shall be governed by the applicable building code.
- e. Building Height. No residential Buildings within SFd Planning Areas shall exceed thirty-five (35) feet in height.
- f. Minimum Lot Sizes. The minimum lot sizes in SFd residential Planning Areas shall be thirty five hundred (3500) square feet.

I. Residential (SFe)

1. Intent

Provide for residential Development allowing for a variety of Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units, Dwelling Units, Single Family Attached, Semi-detached, Clustered Single Family Dwelling Units, Manor Home Dwelling Units, Duplex Dwelling Units, Townhome Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. All uses permitted by right within in the Residential (SFd) Land Use Category.
- b. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Director.

3. Uses Permitted by Special Review

- a. All uses permitted by Special Review within the Residential (SFd) Land Use Category.

4. Development Standards

- a. Average Density. The Average Density shall be up to six (6.0) Dwelling Units per acre for each SFe Planning Area, as set forth in the PD Master Plan, and reflect the number of units over the entire acreage for the parcel. Densities within portions of the parcel will vary depending on the product type.
- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each SFe residential Planning Area shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Planning Area.

- c. **Building Setbacks.** The minimum Building Setback in SFe residential Planning Areas will vary depending upon the product type in any given portion of the Planning area. The following setbacks will be associated with the different product types defined as a Use Permitted by Right.

Single Family Detached Unit

Building Front	-10 feet (Principal Building) -12 feet (Garage perpendicular) -8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Zero Lot Line Dwelling Unit

Building Front	-10 feet (Principal Building) -12 feet (Garage perpendicular) -8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Manor Home Dwelling Unit

Building Front	-18 feet (Principal Building) -20 feet (Garage perpendicular) -15 feet (Garage parallel)
Building Sides -	18 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley
Building Rear-	5 feet from other property lines

Duplex Dwelling Unit

Building Front	-10 feet (Principal Building) -12 feet (Garage perpendicular) -8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Townhome Dwelling Unit (including Live/Work Townhomes)

Building Front	-4 feet (Principal Building) -12 feet (Garage perpendicular) -8 feet (Garage parallel)
Building Sides -	4 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley

Building Rear- 0 feet from other property lines

Patio Dwelling Unit

Building Front -8 feet (Principal Building)
-10 feet (Garage perpendicular)
-6 feet (Garage parallel)
Building Sides - 8 feet from corner street
Building Sides- 0 feet from other property lines
Building Rear- 4 feet from alley
Building Rear- 0 feet from other property lines

- g. Building Separation. The minimum building separation shall be the greater of:
i) eight (8) feet for Single Family Detached Dwelling Units, ten (10) feet for Buildings containing Single Family Attached Dwelling Units and twenty (20) feet or other Principal Buildings located within SFe Lands Use Parcels, or
ii) shall be governed by the applicable building code.
- h. Building Height. No residential Buildings within SFe Planning Area shall exceed thirty-five (35) feet in height except by special review.
- i. Minimum Lot Sizes. The minimum lot sizes in SFe residential Planning Areas shall be thirty five hundred (3500) square feet.

J. Residential (THd)

1. Intent

Provide for residential Development allowing for a variety of Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units, Single Family Attached, Semi-detached, Clustered Single Family Dwelling Units, Manor Home Dwelling Units, Duplex Dwelling Units, Townhome Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. All uses permitted by right within Residential (SFe) Land Use Category, Development standards contained within the Residential (SFe) Land Use Section shall apply, as required.
- b. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Director.

3. Uses Permitted by Special Review

- a. All uses permitted by Special Review within the Residential (SFe) Land Use Category.

4. Development Standards.

- a. Average Density. The Average Density shall be up to ten (10) Dwelling Units per acre for each THd Planning Area. These average densities are set forth on the PD Master Plan, and reflect the number of units over the entire acreage for the parcel. Densities within portions of the parcel will vary depending on product type.
- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each THd residential Planning Area shall not exceed the 1.1 times the maximum number set forth on the PD Master Plan for each individual Planning Area.
- c. Building Setback. The minimum Building Setbacks in THD residential Planning Areas will vary depending upon the project type in any given portion of the Planning Area. The following setbacks will be associated with the different product types defined as a Use Permitted by Right.

Single Family Detached Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Zero Lot Line Dwelling Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Manor Home Dwelling Unit

Building Front	-18 feet (Principal Building)
	-20 feet (Garage perpendicular)
	-15 feet (Garage parallel)
Building Sides -	18 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley
Building Rear-	5 feet from other property lines

Duplex Dwelling Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley

Building Rear- 0 feet from other property lines

Townhome Dwelling Unit (including Live/Work Townhomes)

Building Front -4 feet (Principal Building)
-12 feet (Garage perpendicular)
-8 feet (Garage parallel)

Building Sides - 4 feet from corner street

Building Sides- 0 feet from other property lines & lots with common walls

Building Rear- 4 feet from alley

Building Rear- 0 feet from other property lines

Patio Dwelling Unit

Building Front -8 feet (Principal Building)
-10 feet (Garage perpendicular)
-6 feet (Garage parallel)

Building Sides - 8 feet from corner street

Building Sides- 0 feet from other property lines

Building Rear- 4 feet from alley

Building Rear- 0 feet from other property lines

- d. Building Separation. The minimum building separation shall be the greater of:
- iii) eight (8) feet for Single Family Detached residential Buildings, ten (10) feet for Buildings containing Single Family Attached Dwelling Units and twenty (20) feet or other Principal Buildings located within THd Lands Use Parcels, or
 - iv) shall be governed by the applicable building code.
- e. Building Height. No residential Buildings within THd Planning Areas shall exceed forty (40) feet in height except by Special Review.
- f. Minimum Lot Sizes. The minimum lot sizes in THd residential Planning Areas shall be thirty five hundred (3500) square feet.

K. Mixed Use (MU) and Mixed-Use Commercial (MU-C)

1. Intent

To provide for the integration of a broad range of retail goods and services, business and professional services with Single Family, Manor Home, Townhome, and/or Multi-family residential development.

2. Commercial Requirements

- a. A minimum of 9,500 square feet of ground floor commercial floor area shall be constructed in the Mixed-Use (MU) Filing 14 and 15 Planning Area as a component of new vertical mixed-use buildings.
- b. The Mixed-Use Commercial Areas designated on the Stroh Ranch PD Master Plan shall accommodate a minimum of an additional 30,000 square feet of commercial floor area.
- a. The Mixed-Use Commercial Areas designated on the Stroh Ranch PD

Master Plan shall be limited to the commercial uses listed in this section.

2.3. Uses Permitted by Right

a. Commercial

1. Convenience grocery.
2. Convenience retail shopping facilities, including but not limited to: drug stores, liquor stores, florists, book and stationery stores, hardware stores, ~~auto-supply stores~~, record and tape stores, and retail food specialty shops which sell food products not intended to be consumed on the premises, such as (but not limited to) butcher shops, candy stores, bakeries, doughnut shops, dairy product shops, ice cream parlors and delicatessens.
3. Convenience service establishments, including but not limited to: barber and beauty shops, cleaners, shoe repair shops, laundries, watch or jewelry repair, and travel service.
4. Low intensity specialty goods and service establishments, including but not limited to: art gallery, antiques, artisan shops, photo studio, gift shop, plant store or nursery, pet shops, furniture store, home furnishings, newspaper office, apparel, and appliances.
5. Conventional restaurants.
6. Fast food, drive-in or carryout restaurants.
7. Electronic funds transfer facilities.
8. Photo service facilities.
9. Places of religious assembly, religious schools.
10. Medical and dental offices and clinics.
11. Business and professional offices.
12. Public and private recreational and park uses, country clubs, golf courses, recreational facilities, including but not limited to: open space, tennis courts, swimming pools and jogging, riding, hiking and biking trails.
13. Neighborhood public service, health and education facilities, such as community centers, libraries and museums.
14. Nursery schools and day/child care centers.
15. Retail food and service establishments, including but not limited to: groceries and supermarkets, and cafeterias.

16. General retail merchandise and apparel shops, including but not limited to: junior department store; variety stores; discount department stores; clothing; accessory and specialty stores; shoe stores; furriers and fur stores; furniture stores; home furnishing stores; household appliance stores; floor covering, drapery and upholstery stores; and radio, television, stereo and video stores.

17. Personal service establishment.

18. General retail business establishments, including but not limited to: card and gift stores; tobacco shops; cosmetic store; toy and game stores; ~~automotive tire, battery and accessory stores,~~ garden, plant and floral shops; and bicycle stores.

~~19. Car care centers, gasoline services/stations, tire sales and service, car wash.~~

~~20.~~19. Commercial entertainment businesses, including but not limited to: indoor movie theaters, performance arts, bowling alleys, skating rinks (both ice and roller), pool halls, and arcade amusement centers.

~~21.~~20. Banks, saving and loan and other financial service establishments.

~~22.~~21. Public utility administrative and business offices.

~~23.~~22. Buildings, garages and utility stations related to emergency services, such as ambulance, fire, police and rescue.

~~24.~~23. Motel, Hotels, including detached guest units, restaurants, gift shops and other incidental accessory uses located within the principal building.

~~25. Establishments for conducting any retail commercial, wholesale commercial, or service activities, not of an industrial nature, including but not limited to: automobile and other motor vehicle sales, leasing, rental and service, building materials, carpentry and woodworking, contractor's offices, printing and publishing, radio and television offices, mortuaries and car washes.~~

~~26.~~24. Signs as permitted by the Town of Parker code.

~~27.~~25. Fences, hedges and walls as permitted by the Town of Parker code.

~~28.~~26. Transit facilities.

~~29.~~27. Universities, Colleges, or high educational type uses.

~~30.~~28. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Director.

- b. Residential
 - 1. All those permitted by right within the Residential (THd) Land Use Category.
 - 2. All those uses permitted within the Parks, Open Space and Gold Land Use categories.
 - 3. Multi-family Dwelling Units.
- 3. Uses Permitted by Special Review.
 - a. All uses permitted by Special Review in the in Residential (THd) Land Use category.
 - b. Stadiums for athletic events.
 - c. Small animal veterinary clinics with no outside facilities.
 - d. Utility services facilities, including but not limited to water wells, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.
- 4. Development Standards
 - a. Floor/Area Ratio. The maximum floor-area ratio for each development tract within the Mixed Use Planning Area shall be six tenths (.60) to one (1).
 - b. Maximum Number of Dwelling Units. For parcels zoned Mixed Use (MU), dwelling units may be transferred at the Site Plan stage up to a maximum density of 22 Du/Ac. An increase in the number of permitted Dwelling Units within any such Planning Area may be accomplished through a transfer of Dwelling Units from any other Planning Area with an administrative minor amendment, to create an updated map of the Planned Development Master Plan and PD Development Guide.
 - c. Building Setback: Non-Residential. The minimum building setback from any public street right-of-way shall be:
 - Building front- 4 feet
 - Building side- 4 feet
 - Building rear- 20 feet
 - d. Building Setback: Residential. For residential components within Mixed Use (MU) zoning, the building setback standards

outlined in the Townhome/Patio Home (THd) Land Use Category shall apply. For multi-family Dwelling Units the setbacks shall be:

Building front- 4 feet
Building side- 4 feet
Building rear- 4 feet from alley
Building rear- 0 feet

- e. Building separation. The minimum building or structure separation shall be the greater of:
 - 1. ten (10) feet or
 - 2. shall be governed by the applicable building code.
- f. Building Height. No building or structures shall exceed forty (40) feet in height, except by Special Review, in which case no Buildings or Structures shall exceed fifty (50) feet.
- g. Off-street Parking. The following off-street parking space requirements shall apply to those uses allowed within the Mixed Use Land Use area until such a time as the Town of Parker Land Development Code allows for shared parking and land banking of parking at which time the Land Development Code will prevail:
 - 1. Wherever possible within mixed use area, the concept of shared parking will be utilized to minimize the amount of impervious surface present, and to maximize the efficiency and operation of all parking layouts.
 - 2. Land banking of parking requirements shall be permitted. Areas designed for future parking facilities may be landscaped and or hardscaped until the future need arises for the additional parking.

L. Parks

Intent

To provide for park use which compliment residential neighborhoods.

- 1. Uses Permitted by right
 - a. Public schools of all types and associated uses.
 - b. Passive recreation uses and open space.
 - c. Active recreation uses, including but not limited to the following facilities: baseball diamonds, softball diamonds, soccer fields, tennis courts, volleyball courts, basketball courts, swimming pools, play apparatus, picnic areas, recreation center, and jogging, hiking and/or bicycling trails.
 - d. Signs as permitted by the Town of Parker code.

- e. Fences, hedges and walls as permitted by the Town of Parker code.
 - f. Community protection services and facilities including but not limited to: police stations, fire stations, ambulance services and rescue services.
2. Uses permitted by Special Review
- a. Stadiums for athletic events.
 - b. Cultural activities and facilities, including but not limited to: libraries, museums, and performance center.
 - c. Utility service facilities, including but not limited to water well, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.
 - d. Limited low intensity specialty goods and service establishment uses intended to support the concept of community park facilities including but not limited to: art gallery, artisan shops, gift shop, conventional restaurants, specialty food service, general park concessions, camps, Neighborhood public service, etc.
3. Development Standards
- a. Building Setback: Street. The minimum building setback from any public street right-of-way line shall be:
 - Building front- 25 feet
 - Building side- 20 feet
 - Building rear- 25 feet
 - b. Building Separation. The minimum building separation shall be the greater of:
 - i) Twenty (20) feet or
 - ii) Shall be governed by the applicable building code.
 - c. Building Height. No buildings or structures shall exceed thirty-five (35) feet in height, except by Special Review, in which case no Buildings or Structures shall exceed forty-five (45) feet.

M. Open Space (OS)

1. Intent

To provide passive open space uses which will separate, define and protect the development parcels contained within this Planned Development.

2. Uses Permitted by Right

- a. Passive recreation uses and open space.
- b. Jogging, hiking and/or bicycle trails.
- c. Signs as permitted by the Town of Parker code.
- d. Fences, hedges and walls as permitted by the Town of Parker code.

3. Uses Permitted by Special Review

- a. Active recreation uses, including but not limited to the following facilities: golf courses, country clubs, baseball diamonds, softball diamonds, soccer fields, tennis courts, volley ball courts, basketball courts, swimming pools, stadiums, play apparatus, picnic areas, and recreation centers.
- b. Utility service facilities, including but not limited to water wells, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.
- c. Recreation maintenance facilities.

4. Development Standards

- a. Building Setback: Street. The minimum building setback from any public street right-of-way line shall be:
 - Building front- 25 feet
 - Building side- 15 feet
 - Building rear- 25 feet
- b. Building Separation. The minimum building or structure separation shall be twenty (20) feet or shall be governed by the applicable building code.
- c. Building Height. No buildings or structures shall exceed thirty-five (35) feet in height.

N. Floodplains/Stream Buffer Areas

The use of floodplains and stream buffer areas designated within this Planned Development and more specifically defined by approved final plats shall include, but not limited to:

1. Uses Permitted by Right

- a. All uses permitted by right within Section 13.10.220 of the Town of Parker Land Development Code.
 - b. Golf courses.
 - c. Golf and recreation maintenance and operational facilities.
2. Uses Permitted by Special Review
- a. All uses permitted by special review within Section 13.10.220 of the Town of Parker Land Development Code.
 - b. Active recreation uses, including but not limited to the following facilities: golf courses, country clubs, baseball diamonds, softball diamonds, soccer fields, tennis courts, volley ball courts, basketball courts, swimming pools, stadiums, play apparatus, picnic areas, and recreation centers.
 - c. Utility service facilities, including but not limited to water wells, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.

O. All Land Use Areas

- 1. The following uses shall be permitted by Special Review within all Land Use Areas:
 - a. Storage of wastewater effluent pursuant to Section 13.04.205 of the Town of Parker Land Development Code.
- 2. In any portion of a parcel where Zero Lot Line Dwelling Unit products is used to architecturally define a corner, special corner vision clearance standards intended to accomplish the goals of the Planned Development may be developed specifically for the intersection in concert with the Town of Parker.

IV. ENFORCEMENT AND ADMINISTRATION

A. Incorporation of Planning Development Master Plan

The plan of development for Stroh Ranch, including the location and boundaries of Planning Areas, the circulation elements, and the densities established by this PD Development Guide, is shown upon the “STROH RANCH DEVELOPMENT PLAN”, which is hereby incorporated by reference into this PD Development Guide with everything shown thereon and all amendments hereto.

B. Effect of Recorded Plan

The approval of the “STROH RANCH DEVELOPMENT PLAN” by the Town

Council and the filing of such a Master Plan with the Town Clerk shall be deemed to be rezoning to a PD-Planned Development District of Stroh Ranch. All future development of the property will be governed by the provisions included in the approved "STROH RANCH DEVELOPMENT PLAN" and Development Guide. Detailed Site Plans and/or subdivision Plats submitted for all or any part of the area covered by the "STROH RANCH DEVELOPMENT PLAN" and Development Guide shall conform to the approved regulations adopted as a part of the approved "STROH RANCH DEVELOPMENT PLAN" and Development Guide.

TO: TOWN OF PARKER PLANNING DEPARTMENT

TO: TOWN OF PARKER COUNCIL

RE: MILL CREEK PARKER DEVELOPMENT PROPOSAL / Z22-016

DATE: JULY 21, 2022

Dear Town Of Parker,

The following letter is the response to the zoning submittal Z22-016 by the developers of Mill Creek Parker. This letter is a cooperative response from the following entities that are in the referral area of the project. The entities are:

- 1: Stroh Ranch Community Association (HOA)
- 2: Ironstone Condos Association (HOA)
- 3: Village On The Green Association (HOA)
- 4: Stroh Ranch Business Circle Board of Directors

First, we want to express our appreciation to the developers leading the Mill Creek Parker project. They reached out to us with their vision and ideas for the property, they've been honest and straight forward about their plans and have had an open line of communication from the beginning. While our four entities are opposed to this project at this location, which we detail below, we appreciate the respectful manner that Mill Creek Parker has taken with us. It's a nice change from how other developers have handled their entry into our community.

Our opposition to this project begins with what we believe is a significant deviation from the Density designations the Town of Parker has had for this space and general area for decades. This project is asking Town Planning and the Town Council to

punch a serious hole in the Density limits that have long directed what has been allowed in the past for the development of the Stroh Ranch area.

ISSUE 1: DENSITY

According to the Town's planning/zoning, Stroh Ranch falls into its Medium Density/Community Center designation. In that, the Town's own Master Plan defines this as:

Medium Density Residential: The Medium Density Residential Character Area will consist of an overall gross density of 3.5 dwelling units per acre. Higher densities for housing for older adults may be considered as long as impacts are comparable to other uses permitted within this Character Area.

If this is the guide for this area, 3.5 dwelling units per acre, on this 23 acre lot should be capped at 80.5 units. Mill Creek's plan put 275 units on this land. This proposal and the Town's Master Plan appear to already be in conflict with each other.

As the majority of the area in Stroh Ranch has been developed by the existing standards and ordinances, this significant density deviation would stress and overwhelm the existing infrastructure, which was never designed, built or able to accommodate such a large scale variance.

In addition to these issues, our "Community Center" status by the Town also places limits on this type of mixed use proposals.

"In general, a Community Center shall have no less than 33 percent or 20 acres, whichever is greater of its total land area zoned and developed for commercial use with corner located parcels zoned and developed principally for commercial retail, service and restaurant use. Residential use shall be a secondary element unless part of a vertical mixed-use development."

The town, at one time used the 80/20 mix for single family / multi-family residential, meaning the town's goal was the keep 80% of the housing as single family and 20% multi-family. During a Planning Commission meeting for the Dominion project in Stroh Ranch (South Range Crossing) in (2017), Commissioner Rich Forrester questioned town planning on this issue. Planner Stacy Nерger stated the latest information at that time (2016) had the town near or exceeding that mix. When pressed to answer the question on what the Dominion project would do to that mix, Ms. Nерger avoided giving a direct answer. Until the town can prove that mix is at or under 80-percent, this project cannot move forward.

Here again, we already built the existing developments based on a reliance on what was expected to be developed around us. This development puts some of the existing buildings in strange company. We have a couple of office buildings that would be sandwiched in the middle of all this residential. There is a reasonable expectation for existing owners that the city/town will abide by its rules that were relied upon by those owners at the time of purchasing these buildings. Zoning exists in part for this very reason.

ISSUE 2: ZONING

We were told in 2016 that Town Planning had to follow the rules, and where residential was in the zoning, they relied upon that to allow that project. Now they would be doing the opposite. How are we supposed to rely on them when they don't follow their own rules. None of the existing infrastructure was put in with this type of density in mind.

The Mill Creek proposal effectively overloads the road infrastructure in that area and also the overall Stroh Ranch Community.

ISSUE 3: TRAFFIC

Mill Creek Traffic Study: There appears to be nothing in this study that takes into account the traffic flow increases that will happen once the Dominion development opens for business (later this year). The Dominion project adds 204 units, at least

600 residents and hundreds of additional car trips per day to our roadways and the Mill Creek Project will only add additional and dangerous stress on J. Morgan Blvd and Nate Drive... taking the situation from worse to catastrophic.

Just Saturday night (7/16/22), a man was killed after his vehicle slammed into a tree at very high speed on J. Morgan Blvd. Thankfully, mature trees in Stroh Ranch prevented that vehicle slamming into homes. Witnesses claim he was going approximately 90-mph as he entered the curve of J. Morgan Boulevard. The driver of that vehicle also nearly took the life of a 14-year old girl who was out walking her dog. Her quick action prevented her from being part of the carnage.

We have warned for more than a decade about the dangers of these two streets. It was only a matter of time before someone was killed. It's now a reality. Our kids should not have to live in those kind of conditions in this kind of a community. It's completely unacceptable. How is the situation on JMB and Nate going to improve by adding hundreds of more car trips per day? It's not. In fact, it will become extraordinarily dangerous on those roads and the children of this community will likely pay the highest price.

On the issue of traffic, the roads inside the area in question were never intended to handle the higher loads of traffic that will take place with 275 additional multi-family units. King Soopers executives say our store is already beyond capacity, not only for traffic, but parking and the number of people utilizing that store.

Bottom line, the Mill Creek developers have a nice idea, but the highly negative impact all of the added traffic and overall density will make Stroh Ranch an unlivable area. The Town's Master Plan stated goal of: Our 'hometown feel' was described in a number of ways, from the friendly atmosphere of our Town, to the importance of our downtown, to the appearance of our buildings. ***As we grow, we will strive to preserve the attributes of our unique, hometown character and community identity, the beauty of our natural environment, and the strengths of our neighborhoods, while lessening the adverse effects of growth. We will preserve our single-family neighborhoods while providing choices that will allow people to live in Parker throughout their lives.***

The Mill Creek proposal, in this location, is antithetical to the core of the Town of Parker Master Plan, It requires a significant change in Zoning, which historically has been something previous councils and town leadership have told us is something that doesn't get changed simply because someone doesn't like what's being proposed. This proposal directly conflicts with the Stroh Ranch planned development plat dating back to the 1980's.

By allowing this development, the town would be ignoring its own actions previously.

- It would be contradicting the existing zoning.

- It would be dismissing the significant concerns of the residents who currently live in the area.

- It would be disregarding growing problems it has already had to deal with along Parker road for other residential neighborhoods.

- It would be failing to fulfill the obligations the Town agreed to perform and failing its existing homeowners and town members.

This is not an issue of NIMBY, it's an issue of public safety, it's an issue of major zoning changes, it's an issue of sidelining the Town's Master Plan (once again). It's an issue of oversizing the long standing density limits for this area. We encourage the Town to work with Mill Creek to find a location more suited for this development, but we cannot support this project in the Stroh Ranch Community.

Regards,

Stroh Ranch Community Association Board of Directors

Ironstone Condos Association Board of Directors

Village on The Green HOA Board of Directors

Stroh Ranch Business Circle Board of Directors.

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Brooklyn Myles

Address:

19480 J Morgan Blvd 2-248

Email:

Date: 11.21.22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Kiera Fisher

Address:

19180 J Morgan Blvd

Email:

kierab8@yahoo.com

Date: 11/13/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

As a resident of Village on the Green, I'd like to express my support for Mill Creek's proposed mix-use project for the undeveloped land in Stroh Ranch. Per the request of our HOA leadership, the developer has agreed to increased landscaping and a height limit of 2-stories for all buildings along the eastern boundary of our community. They've also committed to ongoing coordination with our HOA to ensure improved drainage conditions along the boundary of VOTG. I'd much rather have two-story residences next to our neighborhood than less compatible three-story office buildings and the additional traffic associated with more office/commercial development. I hope you'll take our thoughts into consideration and support Mill Creek's proposal.

Sincerely,

Name:

Shawn Jones 

Address:

12961 Coffee Tree St

Email:

NA

Date: 11/13/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

As a resident of Village on the Green, I'd like to express my support for Mill Creek's proposed mix-use project for the undeveloped land in Stroh Ranch. Per the request of our HOA leadership, the developer has agreed to increased landscaping and a height limit of 2-stories for all buildings along the eastern boundary of our community. They've also committed to ongoing coordination with our HOA to ensure improved drainage conditions along the boundary of VOTG. I'd much rather have two-story residences next to our neighborhood than less compatible three-story office buildings and the additional traffic associated with more office/commercial development. I hope you'll take our thoughts into consideration and support Mill Creek's proposal.

Sincerely,

Name:

John Worley

Address:

19427 Dunraven St. Parker, CO

Email:

Date: 11/13/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

As a resident of Village on the Green, I'd like to express my support for Mill Creek's proposed mix-use project for the undeveloped land in Stroh Ranch. Per the request of our HOA leadership, the developer has agreed to increased landscaping and a height limit of 2-stories for all buildings along the eastern boundary of our community. They've also committed to ongoing coordination with our HOA to ensure improved drainage conditions along the boundary of VOTG. I'd much rather have two-story residences next to our neighborhood than less compatible three-story office buildings and the additional traffic associated with more office/commercial development. I hope you'll take our thoughts into consideration and support Mill Creek's proposal.

Sincerely,

Name:

Judy Poulson

Address:

1596 2 Norway Maple St.

Email:

Judy.poulson@comcast.net

Date: 11/13/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

As a resident of Village on the Green, I'd like to express my support for Mill Creek's proposed mix-use project for the undeveloped land in Stroh Ranch. Per the request of our HOA leadership, the developer has agreed to increased landscaping and a height limit of 2-stories for all buildings along the eastern boundary of our community. They've also committed to ongoing coordination with our HOA to ensure improved drainage conditions along the boundary of VOTG. I'd much rather have two-story residences next to our neighborhood than less compatible three-story office buildings and the additional traffic associated with more office/commercial development. I hope you'll take our thoughts into consideration and support Mill Creek's proposal.

Sincerely,

Name:

Karthi Hoar

Address:

12983 Norway Maple St

Email:

Date: 11-16-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programmed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

Morgan Reinos

Address:

13047 S Bonney St

Email:

h

Date: 11/14/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programmed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

Will Reas

Address:

130417 S. bunny st

Email:

Date: 11/16/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programmed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

JELENA SANCIC

Address:

13039 S Bonney St

Email:

andjelkovic.jeca@gmail.com

Date: 11-14-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programmed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

GORAN SAVCIC

Address:

13039 S Bonney St

Email:

gogesha84@gmail.com

Date: 11-14-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

Mimi Davis

Address:

13031 S. Bonney St.

Email:

Date: 11-16-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

Mia Kuybura

Address:

13965 S. Emily St

Email:

Date: 11/16/20

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programmed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

Chase Huckley

Address:

19270 E Second Ave.

Email:

ChaseHuckley@702@gmail.com

Date: 11/16/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programmed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

Judith Crune

Address:

13043 S. Stuart Way, Parker, 80134

Email:

Date: 11/16/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I'm writing as a Stroh Ranch resident to express my support for Mill Creek's proposal for the undeveloped land within Stroh Ranch. After taking the opportunity to learn more about the project, I believe Mill Creek's proposal will be less impactful than what's currently allowed by-right on the land today. I appreciate Mill Creek's willingness to lower building heights closer to less dense residential areas and their commitment to build a well-programmed 4-acre park which will serve as amenity for all residents in the area. Development on this land is inevitable, but it can be done thoughtfully with all stakeholders in mind. I believe their proposal accomplishes that task and I hope you'll support it.

Thank you for your time and consideration.

Sincerely,

Name:

Andy J. Searcy

Address:

13029 S. Storer, WY

Email:

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Jennifer Quidachay

Address:

19100 J Morgan Blvd #211

Email:

jennifer.qin73@gmail.com

Date: 11-11-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:



Address:

7-107
14110 J Morgan Blvd Parker CO 80134

Email:

m92791@gmail.com

Date: 11.21.22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

VACERY LUGO

Address:

19110 J Morgan Blvd 7-106
Park CO 80134

Email:

valugo09@gmail.com

Date: 11.21.22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Landi Lionberger

Address:

14110 J Morgan Blvd. #205

Email:

landilionberger@gmail.com

Date: 12-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Felisha DeRicco

Address:

19110 S Morgan Blvd #7-103

Email:

FelishaabiDeR15@outlook.com

Date: 11-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Zachary Walker

Address:

19120 J Morgan Unit 6-201

Email:

ZacharyJWalker8@gmail.com

Date: 11.21.22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Jenifer Ferreira

Address:

19140 J Morgan Boulevard #5-107

Email:

Date: 11.21.22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Usa marie Huerta

Address:

19140 J Morgan blvd 5-201

Email:

Date: 11/21/22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Allison Engler

Address:

12912 Ironstone Way #201
Parker CO 80134

Email:

Date: 11/21/12

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

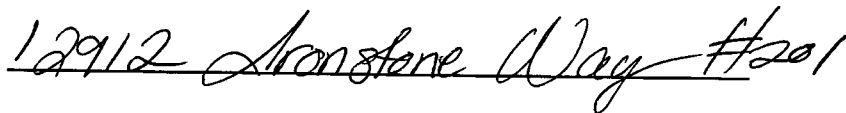
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Sincerely,

Name:

A handwritten signature in cursive script, reading "Sam J. Malley", written over a horizontal line.

Address:

A handwritten address in cursive script, reading "12912 Ironstone Way #201", written over a horizontal line.

Email:

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Olha Tymoshchuk

Address:

12920 Ironestone Way, Apt 202, P

Email:

0

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Sergiy Tymoshchuk

Address:

12920 Ironstone Way, Apt 202

Email:

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Larry Colditz

Address:

12908 Ironstone Wy 104

Email:

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Karen Goldstone

Address:

12928 Ironstone Wy 104

Email:

Date: 11-4-22

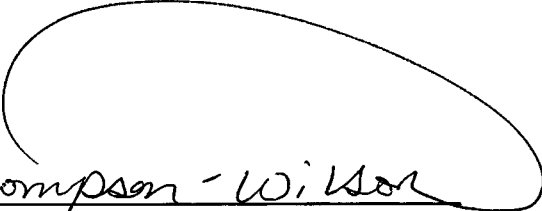
Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:


Krissi Thompson-Wilson

Address:

12928 Ironstone Way apt. 201 Parker, CO 80134

Email:

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Alexis Khalefeh

Address:

12922 Ironstone Way #104 Parker, CO 80134

Email:

al

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Phil Ieshman

Address:

12922 Ironstone Way #109

Email:

Date: 11-21-22

Mayor Toborg
Parker Town Councilmembers
20120 E Mainstreet
Parker, CO 80138

Dear Mayor Toborg and Parker Town Councilmembers:

I wanted to take the opportunity as an Ironstone Condominium resident to express my support for Mill Creek's proposal for the undeveloped land next to our community. While change is difficult, I would rather have a project with a 4-acre park near our condominiums than large office buildings. I appreciate the developer's willingness to include this significant open space as I believe it will be a great community amenity that all area residents can enjoy. It's good to have a developer who is willing to listen to our feedback and make meaningful changes in the pursuit of a project that can be a win/win for everyone. I hope you'll carefully consider and support this thoughtful proposal.

Sincerely,

Name:

Sudy Enoters

Address:

12896 Ironstone Wy 104

Email:

From: Joy Overbeck <joyoverbeck@gmail.com>

Sent: Friday, June 2, 2023 1:08 PM

To: Mayor, Council, and TM <Elected@parkeronline.org>; Planning <Planning@parkeronline.org>; Matthews, Bryce <bmatthews@parkeronline.org>; Fussa, John <jfussa@parkeronline.org>

Subject: Please DO NOT approve zoning change for Mill Creek Development's 275 apartments near Stroh King Soopers!

Hello -

This would be an alarming violation of the Town's Master Plan, the Town's consistent position that Parker zoning is fixed, and also a terrible traffic and congestion mess in this longtime established single-family residential community.

The current zoning permits only about 80-something such units; to change it after 30 years to such high density AND to allow buildings up to 45 feet in height is a violation of your duty as responsible decision-makers in our town.

We voters need to see the commitment our local government has made in its planning documents to our peaceful residential neighborhoods followed, not discarded. We also have many apartments that are not occupied and hundreds more recently approved by Douglas County Commissioners. Please vote NO on this zoning change.

Sincerely,
Joy Overbeck
Parker

"You're betraying your whole life if you don't say what you think and say it honestly and bluntly."
Charles Krauthammer

From: Linda Metcalf <metcalflinda@yahoo.com>

Sent: Sunday, June 4, 2023 3:12 AM

To: Planning <Planning@parkeronline.org>

Subject: PLEASE STOP BUILDING APARTMENTS IN STROH RANCH - ENOUGH IS ENOUGH

PLEASE STOP RUINING STROH RANCH!!!

I have lived in Stroh Ranch for more than 25 years. It was a wonderful neighborhood, safe and family oriented.

You are destroying my neighborhood with all of your section 8 housing and commercial strip malls and EXCEL power stations all in my neighborhood!! WHY us? People call my area the ghetto of Parker. Why must you continue this destruction?!

Can you PLEASE leave my neighborhood alone. Parker PD is in my neighborhood every day with issues from the new apartments. Please stop!! Cars are stolen, cars are broken in to, the rec center is vandalized and children are bullied. Traffic is dangerous in my once quiet neighborhood!

You're destroying Stroh Ranch, and I am begging you to spare my area any more negative building! PLEASE! Please stop building in and around Stroh Ranch!!

Linda Metcalf

From: Linda Metcalf <metcalflinda@yahoo.com>

Sent: Sunday, June 4, 2023 3:11 AM

To: Matthews, Bryce <bmatthews@parkeronline.org>

Subject: Please STOP BUILDING IN AND AROUND STROH RANCH -- ENOUGH IS ENOUGH-

PLEASE STOP RUINING STROH RANCH!!!

I have lived in Stroh Ranch for more than 25 years. It was a wonderful neighborhood, safe and family oriented.

You are destroying my neighborhood with all of your section 8 housing and commercial strip malls and EXCEL power stations all in my neighborhood!! WHY us? People call my area the ghetto of Parker. Why must you continue this destruction?!

Can you PLEASE leave my neighborhood alone. Parker PD is in my neighborhood every day with issues from the new apartments. Please stop!! Cars are stolen, cars are broken in to, the rec center is vandalized and children are bullied. Traffic is dangerous in my once quiet neighborhood!

You're destroying Stroh Ranch, and I am begging you to spare my area any more negative building! PLEASE! Please stop building in and around Stroh Ranch!!

Linda Metcal

-----Original Message-----

From: Megan DiMaria <mdimaria3@comcast.net>

Sent: Friday, June 2, 2023 12:37 PM

To: Mayor, Council, and TM <Elected@parkeronline.org>; Planning

<Planning@parkeronline.org>; Matthews, Bryce <bmatthews@parkeronline.org>; Fussa, John <jfussa@parkeronline.org>

Subject: Mill Creek

No more apartments in Stroh Ranch, PLEASE. It's too congested already. Town council and the planning commission FAILED the Stroh Ranch once already, don't do this again.

Regards,

Megan DiMaria

-----Original Message-----

From: Carl DiMaria <carldimaria@comcast.net>

Sent: Friday, June 2, 2023 12:35 PM

To: Planning <Planning@parkeronline.org>

Subject: No More Apartments In Stroh Ranch

No More Apartments in Stroh Ranch. Stop Already.

Carl DiMaria

From: Chris Adams <cmadams77@gmail.com>

Sent: Friday, June 2, 2023 11:17 AM

To: Mayor, Council, and TM <Elected@parkeronline.org>; Planning <Planning@parkeronline.org>; Matthews, Bryce <bmatthews@parkeronline.org>; Fussa, John <jfussa@parkeronline.org>

Subject: Mill Creek Development - Agenda Item 6

All,

I am out of town for business on June 8 for the town council meeting and I would like to voice my **SUPPORT** for the proposed development. I feel that Parker needs a wider range of living spaces and the combination of commercial/living would be in that goal and help Parker in both markets. The south end of Parker is lacking in commercial (other than car shops) and needs this development to assist in the growth of the town.

Thanks,

Chris Adams

From: Hudson Bob <bobhudson777@yahoo.com>

Sent: Friday, June 2, 2023 11:00 AM

To: Mayor, Council, and TM <Elected@parkeronline.org>; Planning <Planning@parkeronline.org>; Matthews, Bryce <bmatthews@parkeronline.org>; Fussa, John <jfussa@parkeronline.org>

Subject: Regarding Mill Creek Development in Stroh Ranch

WHEN: Thursday, June 8, 2023

TIME: 7:00PM

WHERE: Parker Town Hall

AGENDA ITEM: 6

LINK: <https://parkerco.portal.civicclerk.com/event/2019/files>

(click on Agenda Packet)

I would like to express my opposition to this development in the Stroh Ranch neighborhood. It would be disruptive to the community by adding a far greater density of development than has been allowable and acceptable for many years.

Please vote no to this new development.

Sincerely,

Bob Hudson
18969 E Elk Creek Dr
Parker, CO 80134

303-249-8462

From: Austin Canaday <adcanaday16@gmail.com>

Sent: Tuesday, June 6, 2023 7:00 AM

To: Planning <Planning@parkeronline.org>

Subject: Mill Creek Development Proposal

Good Morning,

I am reaching out today to voice a strong opposition to this proposal. The Mill Creek Development seeks to add apartments to an already residentially saturated area of our great town of Parker. As it stands, a massive apartment complex was just completed not two blocks away from where this new development is being proposed.

The town of Parker has yet to be able to provide the infrastructure needed to support the homes/residential units already built/being built. Our Grocery stores are strained, gas stations running out regularly. Local businesses are overwhelmed by customer base and unable to provide. The people moving into these homes are not contributing to the local businesses, rather most are stay at home workers for massive corporations, or they are traveling further North to the DTC and Denver commercial districts.

The Town of Parker Police, Fire and Medical have been strained for some time. Crime is EXPLODING in our neighborhoods with theft, vandalism and violent encounters increasing at an alarming pace. Adding more people to this will only make this effect on our first responders worse.

The greed of home developers should not be suffered by the residents of this town. As they increase prices on residential units, it increases taxes and home costs for those living around them. This madness must not continue.

Please, vote against this proposal and help keep Parker a function family town, not a continuation of failed Aurora.

Sincerely a concerned resident,

Austin Canaday

From: Nick Zimmerman <nzimmerman71@gmail.com>

Sent: Friday, June 2, 2023 10:49 AM

To: Mayor, Council, and TM <Elected@parkeronline.org>; Planning

<Planning@parkeronline.org>; Matthews, Bryce <bmatthews@parkeronline.org>; Fussa, John <jfussa@parkeronline.org>

Subject: Mill Creek Development

Hi,

I am a homeowner in Village on the Green (my home there backs to this land in question) and in Stroh Ranch. I am writing to express my concern about the proposed zoning change of the land between village on the green and King Soopers. I do not support this change, as when we all purchased our homes we did with the expectation and understanding of what the zoning was and understood that commercial, similar to the King Soopers shopping center, is what could be allowed there, NOT 3-4 story apartments. Since the south range crossing apartments were approved years ago and now have been moved into, we have had increased speed on J Morgan blvd as well as graffiti and children physically assaulted at the Stroh Ranch park (Stroh ranch sent us an email with all of this information). We were all assured that rezoning the land to accommodate the south range crossing apartments would not have any negative impact on our neighborhood and community and that has not been the case. It is also my understanding that the land in question with this proposal was attempted to be rezoned then and it was denied. I would kindly ask you guys to not approve this rezoning as all of the homeowners will be negatively affected and that is not what we signed up for when we purchased our properties. We can dive into the statistics as well and see that there was a home in village on the green that backs to the ironstone condos and it sold for much less than other homes with similar finish quality and square footage, the only difference being the 3 story condo building right behind it. If these apartments are allowed to proceed and be constructed it will financially harm anyone whose property currently backs to this land, which is unacceptable. I hope you guys take this into consideration in your decision, I will see everyone at the meeting on June 8.

Best wishes,

Nick Zimmerman

Homeowner in Stroh Ranch & Village on the Green

(224) 234-0131

From: Jack Serr <jacklserr@gmail.com>
Sent: Tuesday, June 6, 2023 8:23 PM
To: Planning <Planning@parkeronline.org>
Subject: Mill Creek Development

June 6, 2023

Hello,

Thank you for taking a moment to read our letter regarding the Mill Creek Development.

My wife and I, homeowners in Stroh Ranch for 23 years, would like to voice to you that we OPPOSE the Mill Creek Development. Here are a few reasons:

1. Stroh Ranch got hit recently with South Range Crossings. We have no idea the total impact of those apartments that are crowding our community. It has only been open a few months.
2. We'd like to encourage our town council and planning commission to enforce our existing zoning and cause the developers to find other land options that are not so developed to refrain from bringing too much congestion and traffic concerns that put our children at risk. Our understanding is the MCD would like to add 275 apartments on top of a commercial building. That may be nice for downtown Denver, but here in Parker, when will we decide there are enough apartments for a while? 84 units in that space is too many, let alone the proposal of 275. Yes, apartments bring in more revenue, but there has to come a time where a community has to balance its housing. People do not have to live in Parker.
3. We are concerned about the growth and an infrastructure that is trying to play catch up. It's just getting too crowded in the Stroh Ranch Community. People have moved away due to the crowdedness. We believe the Parker Town Leaders can make a difference. It's time to bring balance to our community. Developers generally don't live where the homeowner lives, so they are not as sensitive as we hope our town council and planning commission is.

Again, thank you for reading our thoughts!

Jack and Lynnett Serr
19030 E Creekside Dr
Stroh Ranch

ORDINANCE NO. 3.36.5, Series of 2023

TITLE: A BILL FOR AN ORDINANCE TO AMEND THE STROH RANCH PLANNED DEVELOPMENT MASTER PLAN 2nd AMENDMENT - PD DEVELOPMENT GUIDE PURSUANT TO THE PARKER LAND DEVELOPMENT ORDINANCE

NOW, THEREFORE, THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, ORDAINS:

Section 1. Finding of Fact.

a. Application has been made for amending the Planned Development zoning for the “Stroh Ranch Planned Development Master Plan 2nd Amendment - PD Development Guide,” approved by the Town Council on August 19, 2013, and recorded in the Office of the Douglas County Clerk and Records Office on August 26, 2013, at Reception No. 2013071245, for the property described in attached **Exhibit A**, which is attached hereto and incorporated by this reference, pursuant to the Parker Land Development Ordinance (the “2013 Stroh Ranch Development Guide”).

b. Public notice has been given by publication on the Town’s website at least fifteen (15) days prior to the public hearing of such zoning.

c. Written notice was sent by first class mail to all owners of property that abut the Property, at least fifteen (15) days prior to the public hearing.

d. Notice of such proposed hearing was posted on the property for fifteen (15) consecutive days prior to said hearing.

e. The requirements contained in Section 13.04.240(f) of the Parker Municipal Code for approving the amendment to the 2013 Stroh Ranch Development Guide have been satisfied.

Section 2. The 2013 Stroh Ranch Development Guide approved by the Town Council on August 19, 2013, for the property identified in Exhibit A, is hereby amended by the “Stroh Ranch Planned Development Master Plan 3rd Amendment – PD Development Guide” as set forth in **Exhibit B**, which is attached hereto and incorporated by this reference.

Section 3. Approval of this Ordinance does not create a vested property right. Vested property rights may arise and accrue, pursuant to the provisions of Ordinance No. 3.65.1, as amended, of the Town of Parker.

Section 4. Safety Clause. The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title

to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 5. Severability. If any clause, sentence, paragraph or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 6. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2013.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2013.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney

EXHIBIT A

Legal Description

A parcel of land being a portion of Sections 33 and 34, Township 6 South, Range 66 West of the Sixth Principal Meridian, County of Douglas, State of Colorado, more particularly described as follows: Stroh Ranch Filing Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18.

Containing 727.7 acres more or less.

EXHIBIT B

**Stroh Ranch Planned Development Master Plan
3rd Amendment**

Town of Parker, Colorado

PD Development Guide

I. GENERAL PROVISIONS

II. DEFINITIONS

III. LAND USE REGULATIONS

- A. Residential (SFa and SFb)
- B. Residential (SFc)
- C. Residential (THa, THb and THc)
- D. Multi-Family (MF)
- E. Convenience Commercial (C1)
- F. Neighborhood Commercial (C2)
- G. Business Center (C3)
- H. Residential (SFd)
- I. Residential (SFe)
- J. Residential (THd)
- K. Mixed Use (MU)
- L. Parks
- M. Open Space (OS)
- N. Floodplains/Stream Buffer Areas
- O. All Land Use Areas

IV. ENFORCMENT AND ADMINISTRATION

- A. Incorporation of Planned Development Master Plan
- B. Effect of Recorded Plan

I. GENERAL PROVISIONS

A. Application

The standards outlined in the Development Guide shall apply to all property contained within the “STROH RANCH DEVELOPMENT PLAN” except as provided herein. The standards outlined in the Development Guide may be divergent from the zoning regulations contained in Chapter 13.04 of the Land Development Code, but not any other chapter of the Land Development Code. In the event there is a conflict between the standards contained in the Development Guide and the Land Development Code (excluding Chapter 13.04) then the Land Development Code shall control.

B. Density Standards

The Dwelling Unit Density permitted in any residential Planning Area is an Average Density that shall apply to the entire residential Planning Area and shall not be specifically applicable to any portion thereof. The Average Density of any residential Planning Area shall be computed by dividing the total number of Dwelling Units in the residential Planning Area by the gross acres in the residential Planning Area.

C. Density Variations

In no event shall the total number of 3092 residential Dwelling Units within all Planning Areas as set forth on the “STROH RANCH DEVELOPMENT PLAN”, be exceeded. The total number of Dwelling Units actually developed in a Planning Area may be less than the number established on the Planned Development Master Plan. Remaining units may be transferred to other parcels in whole or in part, in support of the mixed-use concept. Any residential Planning Area may contain up to an additional ten percent (10%) of the total number of Dwelling Units set forth in the “STROH RANCH DEVELOPMENT PLAN”, for such Planning Area, as determined by the Developer. For parcels zoning Mixed Use (MU), dwelling units may be transferred at the Site Plan stage up to a maximum density of 22 Du/Ac. An increase in the number of permitted Dwelling Units within any such Planning Area may be accomplished through a transfer of Dwelling Units from any other Planning Area with an administrative minor amendment, to create an updated map of the “STROH RANCH DEVELOPMENT PLAN” and PD Development Guide except as otherwise provided in Section 13.07.160 of the Town of Parker Land Development Code.

D. Planning Area Boundaries

Wherever a Planning Area abuts a street as shown on the “STROH RANCH DEVELOPMENT PLAN”, the Planning Area boundary is the centerline of the abutting right-of-way of such street. Wherever a Planning Area does not so abut a street, the Planning Area boundary shall be as shown on the “STROH RANCH DEVELOPMENT PLAN”. Modifications in Planning Area boundaries and streets may be accomplished by the Developer by final road alignments or engineering refinements shown on a Site Plan or Plat, without any amendment to the “STROH RANCH DEVELOPMENT PLAN” provided the changes in the Planning Area does not exceed ten percent (10%).

E. Underground Utility Requirements

All electrical and communications distribution lines shall be placed underground. All

transmissions lines shall be underground unless same cannot be accomplished by direct burial.

F. Soil Tests

Soil tests for building sites shall be provided at the time of building permit application for the purpose of establishing engineering criteria for building foundation design.

G. Homeowners Associations

Homeowner Associations composed of property owners in residential areas may be created for the following purposes: a) to provide for the continued development, improvement and maintenance of properties and facilities which it owns or administers, and b) to protect the investment, enhance the value, and control the use of property owned by its members.

Homeowner's Associations shall be created in residential areas where common lands or facilities are to be owned and maintained by the Homeowner's Association but shall not be required in residential areas where common land or facilities are not so owned and maintained.

II. DEFINITIONS

A. Purposes: It is the purpose of this Article to define words, terms and phrases contained within this PD Development Guide. See the Town of Parker Land Development Code for other definitions not defined herein.

B. Word Usage: In the interpretation of this Guide, the provisions and rules of this section shall be observed and applied, except when the context requires otherwise.

1. The particular controls the general.
2. In the case of any difference of meaning or implication between the text of this Guide and any caption or table, the text shall control.
3. Words used or defined in one tense or form shall include other tenses and derivative forms.
4. Words in the singular number shall include the plural number and words in the plural number shall include the singular number.
5. The masculine gender shall include the feminine and the feminine gender shall include the masculine.
6. The word “shall” is mandatory.
7. The word “may” is permissive.

C. Definitions:

1. Abut. To have a common border with.
2. Accessory Buildings. Detached subordinate building(s) or Structure(s), the use of which is customarily incidental to that of the Principal Building or to the main use of the land and which is located on the same lot with the Main Building or use, including carriage house units located above detached and semi-detached garages, designated for and occupied by not more than one family, and with a maximum size of 600 square feet.
3. Building, Principal or Main. A building or buildings which may contain one or more Dwelling Unit(s) in which is conducted one or more of the permitted Principal Uses of the Lot or project in which is it situated and including areas such as garages, carports, storage sheds which are attached to or architecturally integrated with the principal building.
4. Building Front. That exterior wall of a Building which faces a Front Lot Line of a Lot.
5. Building Ground Coverage. The amount of land covered or permitted to be covered by a Building.

6. Building Height. The vertical distance from the average finished grade to the highest point of the coping of a flat roof or to the deck line of a mansard roof or to the average height of the highest gable of a pitched or hipped roof. A weighted average of the finished grade on the perimeter of the building may be utilized.
7. Building Setback. The distance between the Building and the adjacent street right-of-way, property line, Private Street Easement line, or external parcel boundary.
8. Building Side. That exterior wall of a Building which faces a Side Lot Line of a Lot.
9. Building Rear. That exterior wall of a Building which faces a Rear Lot Line of a Lot.
10. Car Care Center. An establishment providing sales of a vehicle fuel and such services as lubrication, oil and tire changes, and minor repairs. This use does not include Paint spraying or body repair.
11. Density, Gross or Average. A ratio of number of Dwelling Units per acre calculated by dividing the number of Dwelling Units within the boundary of one or more residential Planning Areas or portion thereof by the number of acres contained within the Planning Area(s) or portions thereof; including all land within said Planning Area(s) or portion thereof reserved or dedicated for Open Space, recreation, educational, community, and public use, including Public Street rights-of-way and Easements.
12. Density, Net. A ratio of number of Dwelling units per acre calculated by dividing the number of Dwelling Units within the boundary of one or more residential Planning Areas or portion thereof by the number of acres contained within the Planning Area(s) or portion thereof; excluding all land within said Planning Area(s) or portion thereof reserved or dedicated for Open Space, recreation, educational, community or public use, included Public Street rights-of-ways.
13. Dwelling Unit, Atrium. An alternative type of Single Family Detached or Attached Dwelling Unit in which the private individual Open Space associated with each Dwelling Unit is consolidated into a private yard surrounded by buildings or walls forming an atria. This atria replaces the conventional front, side and rear yards associated with traditional Single Family Detached Dwelling Units.
14. Dwelling Unit, Clustered Single Family. A type of Single Family Detached or Attached Dwelling Unit development which combines reduced lot size with compensating amounts of Open Space within the proposed development.
15. Dwelling Unit, Patio. An alternative type of Single Family Detached or Attached Dwelling Unit in which the private individual Open Space associated with each Dwelling Unit is consolidated into a garden or patio area commonly located toward the side or rear of the Lot. This patio area replaces the conventional front, side and rear yards associated with traditional Single Family Detached Dwelling Units.
16. Dwelling Unit, Single Family. A Dwelling Unit Type which includes both Single Family Detached or Attached Dwelling Units.

17. Dwelling Unit, Single Family Attached. A Building designated for and containing more than one Dwelling Unit and occupied by not more than four (4) families within one Structure each of which is separated from the others by one (1) or more unpierced walls from ground to roof.
18. Dwelling Unit, Single Family Detached. A type of Dwelling Unit designated for and occupied by not more than one family and having no roof, wall or floor in common with any other Dwelling Unit.
19. Dwelling Unit, Townhome. A type of Single Family Attached or Multi-Family Dwelling Unit in which each single Dwelling Unit goes from ground to roof and is separated from other Townhome Dwelling Units by a common wall. Each Townhome Dwelling Unit has individual outside access. Although Townhome Dwelling Units have no side yards, front and rear yards can exist.
20. Dwelling Unit, Zero Lot Line. An alternative type of Single Family Detached Dwelling Unit which is situated on a Lot so that one or more sides rest directly on the boundary line of the Lot.
21. Dwelling Unit, Manor Home. A Building designated for and containing more than one Dwelling Unit and occupied by not more than eight (8) families within one Structure each of which is separated from the others by one (1) or more unpierced walls from ground to roof.
22. Dwelling Unit, Live/Work. An alternative type of Townhome Dwelling Unit in which a range of retail goods and services, consistent with the Mixed Use (MU) designation are permitted, in combination with residential use, and where residential setbacks apply.
23. Easement, Private Street. An acquired right of use, interest or privilege in land owned by another containing a privately owned access way constructed to the specifications of the Town of Parker but not maintained by the Town of Parker. Town of Parker approved fire access shall be provided in all cases.
24. Exterior Storage. Outdoor storage of fuel, raw materials, products and equipment. In the case of lumberyards, exterior storage includes all impervious materials stored outdoors.
25. Floor Area Ratio. A measurement of Development intensity expressed as a ratio derived by dividing the total Floor Area of a Building by the actual area of the Lot.
26. Garage, Parallel. A garage, attached or detached, which is oriented so that the axis which corresponds with the garage opening is substantially parallel to the adjacent street from which the Lot derives access.
27. Garage, Perpendicular. A garage, attached or detached, which is oriented so that the axis which corresponds with the garage opening is substantially perpendicular to the adjacent street from which the Lot derives access.
28. Group Care Facilities. A facility where three or more persons are provided

supervision and a planned treatment of counseling, therapy or other rehabilitative social services in a family environment. Such residence must be licensed by or operated by a federal, state, county or local/judicial/health/welfare agency or serve only referrals from such agencies. Examples of group care facilities are: group foster care, children's homes, halfway houses, rehabilitative centers, assisted living, maternity or senior citizen homes.

29. Land Use Category. A set of permitted land use types which are aggregated to form a land use classification similar in nature to zoning districts. Each Land Use Category is identified on the PD Master Plan and in Section III. Land Use Regulations of this PD Development Guide.
30. Nursery. An enterprise which conducts the retail and wholesale sale of plants grown on the site, as well as accessory items (but not farm implements) directly related to their care and maintenance. The accessory items normally sold are clay pots, potting soil, fertilizers, insecticides, hanging baskets, rakes and shovels.
31. Open Space/Golf. The area of land, located by convention, within the golf course safety corridor and held within private ownership, but which may be available for private or public use. Generally, this area will provide passive and active recreation opportunities, buffering for environmental and view-shed protection, aesthetic benefits, opportunities to enhance and widen open space corridors, and shape the patterns of urban development.
32. Parking Coverage. The amount of land covered or permitted to be covered by parking. Parking shall include all areas used for the display or parking of any and all types of vehicles, and all land upon which vehicles traverse the property as a function of the Principal Use.
33. Parking, Shared. Shared parking is a concept intended to alleviate parking spaces through coordination of land uses with parking requirements that have different demand patterns or times of peak usage. It is most effective when the associated land uses include some combination of peak parking characteristics that vary by time of day, day of the week, and/or season of the year. Areas of mixed-use zoning are often appropriate for the utilization of shared parking, due the complimentary land uses involved. Land banking of parking requirements is another form of limiting the paved surface of the ground. Areas designed for future parking facilities are "land banked" and landscaped and or hardscaped until the future need arises for the additional parking.
34. Planning Area. Parcels of land delineated on the PD Master Plan identified with a phrase or symbol which designates a specific set of permitted land use types according to the Land Use Categories provided in Section III. - Land Use Regulations of this PD Development Guide. Planning Area boundaries are as illustrated on the PD Master Plan.
35. Planning Commission. The Planning Commission of the Town of Parker.
36. Principal Use. The specific primary purpose or activity for which land or any building thereon is designed, arranged or intended, or for which it is occupied or maintained.

37. Recreational Vehicle. A vehicle or unit that is mounted on or drawn by another vehicle primarily designed for recreation or temporary living. Recreational vehicles include travel trailers, camping trailers, truck campers, motor homes, boats, snowmobiles and other similar recreation equipment.
38. Restaurant, Conventional. An establishment whose principal business is the sale of food and/or beverages to customers whose principal method of operation includes one or both of the following characteristics: (1) customers, normally provided with an individual menu, are served their foods and beverages by a restaurant employee at the same table or counter at which food and beverages are consumed. And (2) cafeteria type operation where food and beverages generally are consumed within the restaurant building.
39. Restaurant, Fast Food. An establishment whose principal business is the sale of food and/or beverages in a “ready to consume” state: (1) within the restaurant building; (2) within a motor vehicle parking on the premises; or (3) off the premises as carry out orders and whose principal method of operation includes the following characteristics: food and/or beverages are usually served in edible containers or in paper, plastic or other disposable containers.
40. Ridgeline: Major. Any substantial ridgeline on site, that when viewed from the site’s periphery forms the horizon against the sky or is not backed by land of higher elevation within the property.
41. Setback. The distance between the Building Line and the adjacent street right-of-way line or Lot Boundary.
42. Structure. Anything constructed or erected, which requires permanent location on the ground or is attached to something having a permanent location on the ground, but not including fences or walls less than six (6) feet, poles, lines, cables, or other transmission or distribution facilities or public utilities.
43. Town Council. The Town Council for the Town of Parker.
44. Traditional Neighborhood Design (TND). Traditional Neighborhood Design standards are intended to provide flexibility allowing land use patterns representative of those that were planned earlier in the 20th century. Traditional neighborhoods generally have a broad mix of uses including Single Family and Multi-Family land use patterns that help to create more pedestrian friendly streetscapes, in neighborhoods where homes and other uses orient toward the street.
45. Transit Oriented Design (TOD). Transit Oriented Design neighborhoods contain a broad mix of uses including: Single Family and Multi-Family residential combined with commercial and retail opportunities in land use patterns that help to create a pedestrian friendly environment, with convenient access to public transit.

III. LAND USE REGULATIONS

A. Single Family (SFa and SFb)

1. Intent

Provide for residential Development allowing for Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. Single Family Detached Dwelling Units.
- b. Zero Lot Line Dwelling Units.
- c. Attached or detached private garages (3 cars maximum).
- d. Commonly associated Accessory Uses, incidental to the Principal Use or Building, including but not limited to: storage sheds, private greenhouses, home occupations, radio or t.v. antennas, t.v., satellite dishes, private tennis courts, private swimming pools, and private facilities for the keeping of common household pets according to the regulations and standards contained within the Town of Parker zoning Ordinance.
- e. Private and/or public Open Space.
- f. Churches, church schools, and synagogues. A Site Plan according to the standards provided in Section V shall be required.
- g. Public and private schools and related administrative facilities for elementary and secondary education. A Site Plan according to the standards provided in Section V shall be required.
- h. Private recreational and park uses, country clubs, golf courses, recreational facilities, including but not limited to: tennis courts, swimming pools and jogging, riding, hiking and biking trails.
- i. Signs as permitted in this Land Use Category.
- j. Fences, hedges and walls as permitted in this Land Use Category.
- k. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Commission.
- l. Utility services facilities, including but not limited to water wells, water well pump stations, stormwater control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities.

3. Uses Permitted by Special Review¹

- a. Clustered Single Family Dwelling Units, including but not limited to Zero Lot Line Dwelling Units, Patio Dwelling Units and Atrium Dwelling Units.
- b. Major utility service facilities, including but not limited to telephone exchanges, electric substations, and gas regulator stations.
- c. Group Homes.
- d. Common recreation vehicle storage area.
- e. Buildings, garages and utility stations related to emergency services, such as ambulance, fire, police and rescue.
- f. Neighborhood public service, health and education facilities, such as community centers, libraries and museums.
- g. Public parks, playgrounds and other recreational areas.
- h. Child Care Centers.

4. Development Standards

- a. Average Density. The Average Density shall be three and two-tenths (3.2) Dwelling Units per acre, for each SFa Land Use Parcel and shall be four and five-tenths (4.5) Dwelling Units per acre for each SFb Land Use Parcel, These Average Densities are set forth on the PD Master Plan.
- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each SFa and SFb residential Land Use Parcel shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Land Use Parcel.
- c. Building Setback: Land Use Parcel Boundary. The minimum Building Setback from the external boundary of any SFa and SFb Land Use Parcel not abutting a non-residential land Use Parcel shall be twenty (20) feet.
- d. Building Setback: Street/Other Property Lines.

(1) **Street.** The minimum Building Setback from any Public Street right-of-way or Private Street Easement Line shall be:

Building Front – 20 feet (Principal Building or Dwelling Unit)
18 feet (Garage-perpendicular)
12 feet (Garage-parallel)
Building Sides - 10 feet
Building Rear - 25 feet

¹ According to the requirements and procedures contained in the Town of Parker Zoning Ordinance. As part of Special Review, a Site Plan shall be required for consideration of these uses.

(2) Other property lines – the minimum Setback requirements from other property lines shall be:

Building Front – 0 feet

Building Sides – 0 feet (either side, 10 feet total both sides)

Building Rear – 0 feet

- e. Building Separation. The minimum building separation shall be either (8) feet for all residential Buildings and twenty (20) feet for other Principal Buildings located within each SFa or SFb Land Use Parcels, or shall be governed by the applicable fire code.
- f. Building Height. No residential Buildings within either SFa or SFb Land Use Parcels shall exceed thirty-five (35) feet in height.
- g. Off-Street Parking. A minimum of (2) off-street parking spaces shall be provided for each Dwelling Unit located within SFa or SFb Land Use Parcels.

B. Single Family Clusters (SFc)

1. Intent

Provide for residential Development allowing a variety of Single Family Detached, Single Family Attached, Semi-detached, and Clustered Single Family Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. All uses permitted by right within the Single Family (SFa and SFb) Land Use Category.
- b. Semi-detached Dwelling Units, including two family Dwelling Units and Patio Dwelling Units.
- c. Attached Single Family Dwelling Units (four attached units maximum).
- d. Attached or detached private garages.
- e. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Commission.

3. Uses Permitted by Special Review

- a. All uses permitted by Special Review within the Single Family (SFa and SFb) Land Use category.

4. Development Standards

- a. Average Density. The Average Density shall be six (6.0) Dwelling Units per

acre for each SFC Land Use Parcel, as set forth in the PD Master Plan.

- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each SFC Land Use Parcel shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Land Use Parcel.
- c. Building Setback: Land Use Parcel Boundary. The minimum Building Setback from the external boundary of any SFC Land Use Parcel not abutting a non-residential land Use Parcel shall be twenty-five (25) feet.
- d. Building Setback: Street/Other Property Lines.
 - (1) Street. The minimum Building Setback from any Public Street right-of-way line:
 - Building Front - 20 feet (Principal Building or Dwelling Unit)
 - 18 feet (Garage-perpendicular)
 - 12 feet (Garage-parallel)
 - Building Sides - 10 feet
 - Building Rear - 25 feet

To encourage innovative design, minimum setbacks from Private Street Easement Lines shall be as determined on the Site Plan.
 - (2) Other property lines – the minimum Setback requirements from other property lines shall be:
 - Building Front - 0 feet
 - Building Sides - 0 feet (either side, 10 feet total both sides)
 - Building Rear - 0 feet
- e. Building Separation. The minimum building separation shall be either (8) feet for Single Family Detached Dwelling Units, ten (10) feet for Buildings containing Single Family Attached Dwelling Units, and twenty (20) feet for other Principal Buildings located within each SFC Lands Use Parcel, or shall be governed by the applicable fire code.
- f. Building Height. No residential Buildings within either SFC Land Use Parcels shall exceed thirty-five (35) feet in height.
- g. Off-Street Parking. A minimum of (2) off-street parking spaces shall be provided for each Dwelling Unit.
- h. Open Space. A minimum of thirty-five (35) percent of the land area of each SFC Land Use Parcel shall be provided as private individual or Common Open Space or some combination of both.

C. Townhome/Patio Home (THa, THb, THc)

- 1. Intent

- a. Provide for residential Development allowing for a variety of Single Family and Townhome Dwelling Units and Accessory Uses.
2. Uses Permitted by Right
 - a. Townhome Dwelling Units
 - b. All uses permitted by right within Single Family Cluster (SFc) Land Use Category, Development standards contained within the Single Family Cluster (SFc) Land Use Section shall apply, as required.
 - c. Attached or detached garages.
 - d. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Commission.
3. Uses Permitted by Special Review
 - a. All Uses permitted by Special Review within the Single Family Cluster (SFc) Land Use Category
4. Development Standards
 - a. Average Density. The Average Density shall be six (6) Dwelling Units per acre for each THa Land Use Parcel, ten (10) Dwelling Units per acre for each THb Land Use Parcel, and twelve (12) Dwelling Units per acre for each THc Land Use Parcel. These average densities are set forth on the PD Master Plan.
 - b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each THa, THb, and THc residential Land Use Parcel shall not exceed the 1.1 times the maximum number set forth on the PD Master Plan for each individual Land Use Parcel.
 - c. Building Setback: Land Use Parcel Boundary. The minimum Building Setback from the external boundary of any THa, THb, or THc Land Use Parcel not abutting a street and abutting a non-residential Land Use Parcel shall be twenty-five (25) feet.
 - d. Building Setback: Street/Other Property Lines.
 - (1) Street. The minimum Building Setback from any Public Street right-of-way line:

Building Front - 20 feet
Building Sides - 10 feet
Building Rear - 25 feet
 - (2) Other property lines – the minimum Setback requirements from other property lines shall be:

Building Front - 0 feet
Building Sides - 0 feet
Building Rear - 0 feet

- e. Building Separation. The minimum building separation shall be fifteen (15) feet for all residential Buildings and twenty (20) feet for other Principal Buildings located within each THa, THb or THc Land Use Parcels, or shall be governed by the applicable fire code.
- f. Building Height. No residential Building within THa, THb or THc Land Use Parcels shall exceed thirty-five (35) feet in height.
- g. Off-Street Parking. The minimum number of off-street parking spaces per Dwelling Unit shall be the following:

One Bedroom Units:	1.5 spaces per unit
Two Bedroom Units:	2.0 spaces per unit
Three Bedroom Units:	2.0 spaces per unit
Four Bedroom Units or greater:	2.5 spaces per unit
- h. Attached Dwelling Units. The maximum number of attached Dwelling Units per Building shall be eight (8) units when arranged with a linear building front; twelve (12) units when arranged with an angled, broken or curvilinear building front; or sixteen (16) units when arranged around a central courtyard.
- i. Open Space. A minimum of twenty-five (25) percent of the land area of each THa, THb or THc Land Use Parcels shall be provided as private individual or Common Open Space or some combination of both.

D. Multi-Family (MF)

1. Intent

Provide for residential development allowing a variety of Single Family, Townhome and Multi-family Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. Multi-family Dwelling Units.
- b. All uses permitted by right within Townhome/Patio Home (THa, THb or THc) Land Use Category. Development standards contained within the Townhome/Patio Home (THa, THb or THc) Land Use Section shall apply, as required.
- c. Attached or detached private garages.
- d. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Commission.

3. Uses Permitted by Special Review

- b. All uses permitted by Special Review within the Single Family Cluster (SFC) Land Use Category.

4. Development Standards

- a. Average Density. The Average Density shall be twenty-two (22) Dwelling Units per acre for each MF Land Use Parcel, as set forth in the PD Master Plan.
- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each residential Land Use Parcel shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Land Use Parcel.
- c. Building Setback: Land Use Parcel Boundary. The minimum Building Setback from the external boundary of any MF Land Use Parcel not abutting a street and abutting non-residential land Use Parcel shall be thirty (30) feet.
- d. Building Setback: Street/Other Property Lines.
 - (1) Street. The minimum Building Setback from any Public Street right-of-way line:

Building Front - 25 feet
Building Sides - 15 feet
Building Rear - 25 feet
 - (2) Other property lines – the minimum Setback requirements from other property lines shall be:

Building Front - 0 feet
Building Sides - 0 feet
Building Rear - 0 feet
- e. Building Separation. The minimum building separation shall be twenty (20) feet for all residential Buildings and other Principal Buildings located within each MF Land Use Parcel, or shall be governed by the applicable fire code.
- f. Building Height. No residential Buildings shall exceed thirty-five (35) feet in height, except by Special Review, in which case no residential Building shall exceed forty-five (45) feet.
- g. Dwelling Units Per Building. The maximum number of Dwelling Units per Building shall be forty-eight (48).
- h. Off-Street Parking. The minimum number of off-street parking spaces per Dwelling Unit shall be the following:

- studio units 1.0 spaces per unit.
- one Bedroom Units: 1.5 spaces per unit
- two Bedroom Units: 2.0 spaces per unit
- three Bedroom Units: 2.0 spaces per unit
- four Bedroom Units or greater: 2.5 spaces per unit

- i. Open Space. A minimum of twenty-five (25) percent of the land area of each THa, THb or THc Land Use Parcels shall be provided as private individual or Common Open Space or some combination of both.

E. Convenience Commercial (C1)

1. Intent

To provide for the sale of limited convenience goods and personal services to satisfy the needs of neighborhood residents.

2. Uses Permitted by Right

- a. Convenience grocery.
- b. Convenience retail shopping facilities, including but not limited to: drug stores, liquor stores, florists, book and stationery stores, hardware stores, auto supply stores, record and tape stores, and retail food specialty shops which sell food products not intended to be consumed on the premises, such as (but not limited to) butcher shops, candy stores, bakeries, doughnut shops, dairy product shops, ice cream parlors and delicatessens.
- c. Convenience service establishments, including but not limited to: barber and beauty shops, cleaners, shoe repair shops, laundries, watch or jewelry repair, and travel service.
- d. Low intensity specialty goods and services establishments, including but not limited to: art gallery, antiques, artisan shops, photo studio, gift shop, plant store or nursery, pet shops, furniture store, home furnishings, newspaper office, apparel, and appliances.
- e. Conventional restaurants.
- f. Fast food, drive-in or carryout restaurants.
- g. Electric funds transfer facilities.
- h. Photo service facilities.
- i. Utility service facilities, including but not limited to water wells, water well pump stations, stormwater control facilities and water supply reservoirs or tanks, provided that no public offices repair facilities or storage yards are maintained on the site.

- j. Medical and dental offices and clinics.
 - k. Business and professional offices.
3. Uses Permitted by Special Review¹
- a. Car care center.
 - b. Small animal veterinary clinics with no outside facilities.
 - c. Major utility service facilities including but not limited to telephone exchanges, electric substations, gas regulator stations.
4. Development Standards
- a. Floor/Area Ratio. The maximum floor-area ratio for each development parcel within the convenience commercial Land Use parcel shall be three tenths (.3) to one (1).
 - b. Building Ground Coverage. The maximum building coverage at ground level for the convenience commercial Land Use parcel, or portion thereof shall be thirty (30) percent.
 - c. Parking Coverage. The maximum parking coverage for the convenience commercial Land Use parcel, or portion thereof shall be fifty-five (55) percent.
 - d. Open Space. A minimum of twenty (20) percent of the development parcel area designated for convenience commercial Land Use shall be provided as landscaped open space.
 - e. Building Setback: Street. The minimum building setback from any public street right-of-way shall be:

Building front-	25 feet
Building side-	25 feet
Building rear-	25 feet
 - f. Building Separation. The minimum building or structure separation shall be twenty (20) feet or shall be governed by the applicable fire code.
 - g. Building Height. No buildings or structures shall exceed thirty-five (35) feet in height.

¹ According to the requirements and procedures contained in the Town of Parker Zoning Ordinance. As part of Special Review, a Site Plan shall be required for consideration of these uses.

F. Neighborhood Commercial (C2)

1. Intent

To provide a broad range of retail goods and services, business and professional services, which support residential uses; and a complimentary public community services and facilities within a community activity center complex.

2. Uses Permitted by Right

- a. All those uses permitted within the convenience commercial (C1) Land Use Category.
- b. Retail food and food service establishments, including but not limited to: groceries and supermarkets, and cafeterias.
- c. General retail merchandise and apparel shops, including but not limited to: junior department stores; variety stores; discount department stores; clothing; accessory and specialty stores; shoe stores; furriers and fur stores; furniture stores; home furnishing stores; home furnishing stores; household appliance stores; floor covering, drapery and upholstery stores; and radio, television, stereo and video stores.
- d. Personal service establishments
- e. General retail business establishments, including but not limited to: card and gift stores; tobacco shops; cosmetic store; toy and game stores; automotive tire, battery and accessory stores, garden plant and floral shops; and bicycle stores.
- f. Car care centers.
- g. Banks, savings and loan and other financial service establishments.
- h. Fences, hedges and walls as permitted in the Land Use category.
- i. Buildings, garages and utility stations related to emergency services, such as ambulance, fire, police and rescue.
- j. Utility service facilities including but not limited to water wells, water well pump stations, stormwater control facilities and water supply reservoirs or tanks, provided that no repair facilities or storage yards are maintained on site.

3. Uses Permitted by Special Review

- a. Major utility services facilities including but not limited to telephone exchanges, electric substations and gas regulator facilities.

4. Development Standards

- a. Floor/Area Ratio. The maximum floor-area ratio for each development tract within the Neighborhood Commercial Land Use parcel shall be thirty-five hundredths (.35) to one (1).
- b. Building Ground Coverage. The maximum building coverage for each development tract within the Neighborhood Commercial Land Use parcels shall be thirty-five (35) percent.
- c. Parking Coverage. The maximum parking coverage for each development tract within the Neighborhood Commercial Land Use parcels shall be sixty-five (65) percent.
- d. Open Space. A minimum of twenty (20) percent of the development parcel area designated for Neighborhood Commercial Land Uses shall be provided as landscaped Open Space.
- e. Building Setback: Street. The minimum building setback from any public street right-of-way line shall be:

Building front-	40 feet
Building side-	20 feet
Building rear-	25 feet
- f. Building Separation. The minimum building or structure separation shall be twenty (20) feet or shall be governed by the applicable fire code.
- g. Building Height. No buildings or structures shall exceed thirty-five (35) feet in height, except by Special Review, in which case no Building or Structure shall exceed fifty (50) feet.

G. Business Center (C3)

1. Intent

To provide a broad range of retail goods and services, business and professional services which support residential uses; and complementary public community services and facilities within an activity center.

2. Uses permitted by Right

- a. All those uses permitted within the neighborhood commercial (C2) Land Use category.
- b. Establishments for conduction any retail commercial, wholesale commercial, or service activities, not of industrial nature, including but not limited to the following uses:
 - i. Automobile and other motor vehicle sales, leasing, rental and service.
 - ii. Building materials.

- iii. Carpentry and woodworking.
 - iv. Contractor's offices.
 - v. Printing and publishing.
 - vi. Radio and television offices.
 - vii. Mortuaries.
 - viii. Car Washes.
- c. Signs as permitted within this Land Use category.
 - d. Fences, hedges, and walls as permitted within this Land Use category.
3. Uses permitted by Special Review
- a. All uses permitted by Special Review in Neighborhood Commercial (C2) Land Use areas.
4. Development Standards
- a. Floor/Area Ratio. The maximum floor-area ratio for each development tract within Business Center Land Use parcel shall be six-tenths (.60) to one (1).
 - b. Building Ground Coverage. The maximum building overage for each development tract within the Business Center Land Use parcel shall be thirty (30) percent.
 - c. Parking Coverage. The maximum parking coverage for each development tract within the Business Center Land Use parcels shall be sixty-five (65) percent.
 - d. Open Space. A minimum of twenty (20) percent of the development parcel designated for Business Center Land Uses shall be provided and landscaped open space.
 - e. Building Setback: Street. The minimum building setback from any public street right-of-way shall be:

Building front-	40 feet
Building side-	20 feet
Building rear-	25 feet
 - f. Building Separation. The minimum building or structure separation shall be twenty (20) feet or shall be governed by the applicable fire code.
 - g. Building Height. No buildings or structures shall exceed thirty-five (35)

feet in height, except by Special Review, in which case no Buildings or Structures shall exceed fifty (50) feet.

H. Residential (SFd)

1. Intent

Provide for residential Development allowing for a variety of Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units, Single Family Attached, Semi-detached, Clustered Single Family Dwelling Units, Manor Home Dwelling Units, Duplex Dwelling Units, Townhome Dwelling Units and Accessory Uses.

2. Uses Permitted by Right.

- a. Single Family Detached Dwelling Units.
- b. Zero Lot Line Dwelling Units.
- c. Manor Home Dwelling Units.
- d. Duplex Dwelling Units.
- e. Townhome Dwelling Units including Single Family Attached, Semi-detached Dwelling Units and Live/Work Dwelling Units.
- f. Clustered Single Family Dwelling Units, including but not limited to Zero Lot Line Dwelling Units, Patio Dwelling Units, Two Family Dwelling Units and Atrium Dwelling Units.
- g. Attached or detached private garages (3 cars maximum).
- h. Commonly associated Accessory Uses, incidental to the Principal Use or Building, including but not limited to: carriage house units, storage sheds, private greenhouses, home occupations, radio or T.V. antennas, satellite dishes, private tennis courts, private swimming pools, and private facilities for the keeping of common household pets according the regulations and standards contained within the Town of Parker Zoning Ordinance.
- i. Private and/or public Open Space.
- j. Public and private schools and related administrative facilities for elementary and secondary education.
- k. Private recreational and park uses, country clubs, golf courses, recreational facilities, including but not limited to: tennis courts, swimming pools and jobbing, riding, hiking and biking trails.
- l. Public parks, playgrounds and other recreational areas.
- m. Signs as permitted by Town of Parker code.

- n. Fences, hedges and walls as permitted by the Town of Parker code.
 - o. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Director.
3. Uses permitted by Special Review
- a. Utility service facilities, including but not limited to water wells, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to the telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.
 - b. Group Homes.
 - c. Common recreation vehicle storage area.
 - d. Buildings, garages, and utility stations related to emergency services, such as ambulance, fire, police and rescue.
 - e. Places of religious assembly, religious schools.
 - f. Neighborhood public service, health and education facilities, such as community centers, libraries and museums.
 - g. Child Care Centers.
4. Development Standards
- a. Average Density. The Average Density shall be up to four and five-tenths (4.5) Dwelling Units per acre for each SFd Planning Area. These Average Densities are set forth on the PD Master Plan, and reflect the number of units over the entire acreage for the parcel. Densities within portions of the parcel will vary depending on product type.
 - b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each SFd residential Planning Area shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Planning Area.
 - c. Building Setback. The minimum Building Setbacks in SFd residential Planning Areas will vary depending upon the product type in any given portion of the Planning Area. The following setbacks will be associated with the different product types defined as a User Permitted by Right.

Single Family Detached Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)

	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Zero Lot Line Dwelling Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Manor Home Dwelling Unit

Building Front	-18 feet (Principal Building)
	-20 feet (Garage perpendicular)
	-15 feet (Garage parallel)
Building Sides -	18 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley
Building Rear-	5 feet from other property lines

Duplex Dwelling Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Townhome Dwelling Unit (including Live/Work Townhomes)

Building Front	-4 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	4 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Patio Dwelling Unit

Building Front	-8 feet (Principal Building)
	-10 feet (Garage perpendicular)
	-6 feet (Garage parallel)
Building Sides -	8 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley

Building Rear- 0 feet from other property lines

- d. Building Separation. The minimum building separation shall be the greater of:
 - i) eight (8) feet for Single Family Detached residential Buildings, ten (10) feet for Buildings containing Single Family Attached Dwelling Units and twenty (20) feet for other Principal Buildings located within SFd Lands Use Parcels, or
 - ii) shall be governed by the applicable building code.
- e. Building Height. No residential Buildings within SFd Planning Areas shall exceed thirty-five (35) feet in height.
- f. Minimum Lot Sizes. The minimum lot sizes in SFd residential Planning Areas shall be thirty five hundred (3500) square feet.

I. Residential (SFe)

1. Intent

Provide for residential Development allowing for a variety of Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units, Dwelling Units, Single Family Attached, Semi-detached, Clustered Single Family Dwelling Units, Manor Home Dwelling Units, Duplex Dwelling Units, Townhome Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. All uses permitted by right within in the Residential (SFd) Land Use Category.
- b. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Director.

3. Uses Permitted by Special Review

- a. All uses permitted by Special Review within the Residential (SFd) Land Use Category.

4. Development Standards

- a. Average Density. The Average Density shall be up to six (6.0) Dwelling Units per acre for each SFe Planning Area, as set forth in the PD Master Plan, and reflect the number of units over the entire acreage for the parcel. Densities within portions of the parcel will vary depending on the product type.
- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each SFe residential Planning Area shall not exceed 1.1 times the maximum number set forth on the PD Master Plan for each individual Planning Area.

- c. **Building Setbacks.** The minimum Building Setback in SFe residential Planning Areas will vary depending upon the product type in any given portion of the Planning area. The following setbacks will be associated with the different product types defined as a Use Permitted by Right.

Single Family Detached Unit

Building Front	-10 feet (Principal Building) -12 feet (Garage perpendicular) -8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Zero Lot Line Dwelling Unit

Building Front	-10 feet (Principal Building) -12 feet (Garage perpendicular) -8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Manor Home Dwelling Unit

Building Front	-18 feet (Principal Building) -20 feet (Garage perpendicular) -15 feet (Garage parallel)
Building Sides -	18 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley
Building Rear-	5 feet from other property lines

Duplex Dwelling Unit

Building Front	-10 feet (Principal Building) -12 feet (Garage perpendicular) -8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Townhome Dwelling Unit (including Live/Work Townhomes)

Building Front	-4 feet (Principal Building) -12 feet (Garage perpendicular) -8 feet (Garage parallel)
Building Sides -	4 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley

Building Rear- 0 feet from other property lines

Patio Dwelling Unit

Building Front -8 feet (Principal Building)
-10 feet (Garage perpendicular)
-6 feet (Garage parallel)
Building Sides - 8 feet from corner street
Building Sides- 0 feet from other property lines
Building Rear- 4 feet from alley
Building Rear- 0 feet from other property lines

- g. Building Separation. The minimum building separation shall be the greater of:
- i) eight (8) feet for Single Family Detached Dwelling Units, ten (10) feet for Buildings containing Single Family Attached Dwelling Units and twenty (20) feet or other Principal Buildings located within SFe Lands Use Parcels, or
 - ii) shall be governed by the applicable building code.
- h. Building Height. No residential Buildings within SFe Planning Area shall exceed thirty-five (35) feet in height except by special review.
- i. Minimum Lot Sizes. The minimum lot sizes in SFe residential Planning Areas shall be thirty five hundred (3500) square feet.

J. Residential (THd)

1. Intent

Provide for residential Development allowing for a variety of Single Family Detached Dwelling Units, Zero Lot Line Dwelling Units, Single Family Attached, Semi-detached, Clustered Single Family Dwelling Units, Manor Home Dwelling Units, Duplex Dwelling Units, Townhome Dwelling Units and Accessory Uses.

2. Uses Permitted by Right

- a. All uses permitted by right within Residential (SFe) Land Use Category, Development standards contained within the Residential (SFe) Land Use Section shall apply, as required.
- b. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Director.

3. Uses Permitted by Special Review

- a. All uses permitted by Special Review within the Residential (SFe) Land Use Category.

4. Development Standards.

- a. Average Density. The Average Density shall be up to ten (10) Dwelling Units per acre for each THd Planning Area. These average densities are set forth on the PD Master Plan, and reflect the number of units over the entire acreage for the parcel. Densities within portions of the parcel will vary depending on product type.
- b. Maximum Number of Dwelling Units. The maximum number of Dwelling Units permitted within each THd residential Planning Area shall not exceed the 1.1 times the maximum number set forth on the PD Master Plan for each individual Planning Area.
- c. Building Setback. The minimum Building Setbacks in THD residential Planning Areas will vary depending upon the project type in any given portion of the Planning Area. The following setbacks will be associated with the different product types defined as a Use Permitted by Right.

Single Family Detached Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Zero Lot Line Dwelling Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley
Building Rear-	0 feet from other property lines

Manor Home Dwelling Unit

Building Front	-18 feet (Principal Building)
	-20 feet (Garage perpendicular)
	-15 feet (Garage parallel)
Building Sides -	18 feet from corner street
Building Sides-	0 feet from other property lines & lots with common walls
Building Rear-	4 feet from alley
Building Rear-	5 feet from other property lines

Duplex Dwelling Unit

Building Front	-10 feet (Principal Building)
	-12 feet (Garage perpendicular)
	-8 feet (Garage parallel)
Building Sides -	10 feet from corner street
Building Sides-	0 feet from other property lines
Building Rear-	4 feet from alley

Building Rear- 0 feet from other property lines

Townhome Dwelling Unit (including Live/Work Townhomes)

Building Front -4 feet (Principal Building)
-12 feet (Garage perpendicular)
-8 feet (Garage parallel)

Building Sides - 4 feet from corner street

Building Sides- 0 feet from other property lines & lots with common walls

Building Rear- 4 feet from alley

Building Rear- 0 feet from other property lines

Patio Dwelling Unit

Building Front -8 feet (Principal Building)
-10 feet (Garage perpendicular)
-6 feet (Garage parallel)

Building Sides - 8 feet from corner street

Building Sides- 0 feet from other property lines

Building Rear- 4 feet from alley

Building Rear- 0 feet from other property lines

- d. Building Separation. The minimum building separation shall be the greater of:
- iii) eight (8) feet for Single Family Detached residential Buildings, ten (10) feet for Buildings containing Single Family Attached Dwelling Units and twenty (20) feet or other Principal Buildings located within THd Lands Use Parcels, or
 - iv) shall be governed by the applicable building code.
- e. Building Height. No residential Buildings within THd Planning Areas shall exceed forty (40) feet in height except by Special Review.
- f. Minimum Lot Sizes. The minimum lot sizes in THd residential Planning Areas shall be thirty five hundred (3500) square feet.

K. Mixed Use (MU) and Mixed-Use Commercial (MU-C)

1. Intent

To provide for the integration of a broad range of retail goods and services, business and professional services with Single Family, Manor Home, Townhome, and/or Multi-family residential development.

2. Commercial Requirements

- a. A minimum of 9,500 square feet of ground floor commercial floor area shall be constructed in the Mixed-Use (MU) Filing 14 and 15 Planning Area as a component of new vertical mixed-use buildings.
- b. The Mixed-Use Commercial Areas designated on the Stroh Ranch PD Master Plan shall accommodate a minimum of an additional 30,000 square feet of commercial floor area.

The Mixed-Use Commercial Areas designated on the Stroh Ranch PD Master

Plan shall be limited to the commercial uses listed in this section.

3. Uses Permitted by Right

a. Commercial

1. Convenience grocery.
2. Convenience retail shopping facilities, including but not limited to: drug stores, liquor stores, florists, book and stationery stores, hardware stores, record and tape stores, and retail food specialty shops which sell food products not intended to be consumed on the premises, such as (but not limited to) butcher shops, candy stores, bakeries, doughnut shops, dairy product shops, ice cream parlors and delicatessens.
3. Convenience service establishments, including but not limited to: barber and beauty shops, cleaners, shoe repair shops, laundries, watch or jewelry repair, and travel service.
4. Low intensity specialty goods and service establishments, including but not limited to: art gallery, antiques, artisan shops, photo studio, gift shop, plant store or nursery, pet shops, furniture store, home furnishings, newspaper office, apparel, and appliances.
5. Conventional restaurants.
6. Fast food, drive-in or carryout restaurants.
7. Electronic funds transfer facilities.
8. Photo service facilities.
9. Places of religious assembly, religious schools.
10. Medical and dental offices and clinics.
11. Business and professional offices.
12. Public and private recreational and park uses, country clubs, golf courses, recreational facilities, including but not limited to: open space, tennis courts, swimming pools and jogging, riding, hiking and biking trails.
13. Neighborhood public service, health and education facilities, such as community centers, libraries and museums.
14. Nursery schools and day/child care centers.
15. Retail food and service establishments, including but not limited to: groceries and supermarkets, and cafeterias.
16. General retail merchandise and apparel shops, including but not limited

to: junior department store; variety stores; discount department stores; clothing; accessory and specialty stores; shoe stores; furriers and fur stores; furniture stores; home furnishing stores; household appliance stores; floor covering, drapery and upholstery stores; and radio, television, stereo and video stores.

17. Personal service establishment.
 18. General retail business establishments, including but not limited to: card and gift stores; tobacco shops; cosmetic store; toy and game stores; garden, plant and floral shops; and bicycle stores.
 19. Commercial entertainment businesses, including but not limited to: indoor movie theaters, performance arts, bowling alleys, skating rinks (both ice and roller), pool halls, and arcade amusement centers.
 20. Banks, saving and loan and other financial service establishments.
 21. Public utility administrative and business offices.
 22. Buildings, garages and utility stations related to emergency services, such as ambulance, fire, police and rescue.
 23. Motel, Hotels, including detached guest units, restaurants, gift shops and other incidental accessory uses located within the principal building.
 24. Signs as permitted by the Town of Parker code.
 25. Fences, hedges and walls as permitted by the Town of Parker code.
 26. Transit facilities.
 27. Universities, Colleges, or high educational type uses.
 28. Any other uses consistent with the purposes of this Section and compatible with the uses set forth herein, as determined by the Planning Director.
- b. Residential
1. All those permitted by right within the Residential (THd) Land Use Category.
 2. All those uses permitted within the Parks, Open Space and Gold Land Use categories.
 3. Multi-family Dwelling Units.
3. Uses Permitted by Special Review.

- a. All uses permitted by Special Review in the in Residential (THd) Land Use category.
- b. Stadiums for athletic events.
- c. Small animal veterinary clinics with no outside facilities.
- d. Utility services facilities, including but not limited to water wells, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.

4. Development Standards

- a. Floor/Area Ratio. The maximum floor-area ratio for each development tract within the Mixed Use Planning Area shall be six tenths (.60) to one (1).
- b. Maximum Number of Dwelling Units. For parcels zoned Mixed Use (MU), dwelling units may be transferred at the Site Plan stage up to a maximum density of 22 Du/Ac. An increase in the number of permitted Dwelling Units within any such Planning Area may be accomplished through a transfer of Dwelling Units from any other Planning Area with an administrative minor amendment, to create an updated map of the Planned Development Master Plan and PD Development Guide.
- c. Building Setback: Non-Residential. The minimum building setback from any public street right-of-way shall be:
 - Building front- 4 feet
 - Building side- 4 feet
 - Building rear- 20 feet
- d. Building Setback: Residential. For residential components within Mixed Use (MU) zoning, the building setback standards outlined in the Townhome/Patio Home (THd) Land Use Category shall apply. For multi-family Dwelling Units the setbacks shall be:
 - Building front- 4 feet
 - Building side- 4 feet
 - Building rear- 4 feet from alley
 - Building rear- 0 feet
- e. Building separation. The minimum building or structure separation shall be the greater of:
 - 1. ten (10) feet or

2. shall be governed by the applicable building code.
- f. Building Height. No building or structures shall exceed forty (40) feet in height, except by Special Review, in which case no Buildings or Structures shall exceed fifty (50) feet.
- g. Off-street Parking. The following off-street parking space requirements shall apply to those uses allowed within the Mixed Use Land Use area until such a time as the Town of Parker Land Development Code allows for shared parking and land banking of parking at which time the Land Development Code will prevail:
 1. Wherever possible within mixed use area, the concept of shared parking will be utilized to minimize the amount of impervious surface present, and to maximize the efficiency and operation of all parking layouts.
 2. Land banking of parking requirements shall be permitted. Areas designed for future parking facilities may be landscaped and or hardscaped until the future need arises for the additional parking.

L. Parks

Intent

To provide for park use which compliment residential neighborhoods.

1. Uses Permitted by right
 - a. Public schools of all types and associated uses.
 - b. Passive recreation uses and open space.
 - c. Active recreation uses, including but not limited to the following facilities: baseball diamonds, softball diamonds, soccer fields, tennis courts, volleyball courts, basketball courts, swimming pools, play apparatus, picnic areas, recreation center, and jogging, hiking and/or bicycling trails.
 - d. Signs as permitted by the Town of Parker code.
 - e. Fences, hedges and walls as permitted by the Town of Parker code.
 - f. Community protection services and facilities including but not limited to: police stations, fire stations, ambulance services and rescue services.
2. Uses permitted by Special Review
 - a. Stadiums for athletic events.
 - b. Cultural activities and facilities, including but not limited to: libraries, museums, and performance center.

- c. Utility service facilities, including but not limited to water well, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.
- d. Limited low intensity specialty goods and service establishment uses intended to support the concept of community park facilities including but not limited to: art gallery, artisan shops, gift shop, conventional restaurants, specialty food service, general park concessions, camps, Neighborhood public service, etc.

3. Development Standards

- a. Building Setback: Street. The minimum building setback from any public street right-of-way line shall be:

Building front- 25 feet
 Building side- 20 feet
 Building rear- 25 feet

- b. Building Separation. The minimum building separation shall be the greater of:

- i) Twenty (20) feet or
- ii) Shall be governed by the applicable building code.

- c. Building Height. No buildings or structures shall exceed thirty-five (35) feet in height, except by Special Review, in which case no Buildings or Structures shall exceed forty-five (45) feet.

M. Open Space (OS)

1. Intent

To provide passive open space uses which will separate, define and protect the development parcels contained within this Planned Development.

2. Uses Permitted by Right

- a. Passive recreation uses and open space.
- b. Jogging, hiking and/or bicycle trails.
- c. Signs as permitted by the Town of Parker code.
- d. Fences, hedges and walls as permitted by the Town of Parker code.

3. Uses Permitted by Special Review

- a. Active recreation uses, including but not limited to the following facilities: golf courses, country clubs, baseball diamonds, softball diamonds, soccer fields, tennis courts, volley ball courts, basketball courts, swimming pools, stadiums, play apparatus, picnic areas, and recreation centers.
 - b. Utility service facilities, including but not limited to water wells, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.
 - c. Recreation maintenance facilities.
4. Development Standards
- a. Building Setback: Street. The minimum building setback from any public street right-of-way line shall be:
 - Building front- 25 feet
 - Building side- 15 feet
 - Building rear- 25 feet
 - b. Building Separation. The minimum building or structure separation shall be twenty (20) feet or shall be governed by the applicable building code.
 - c. Building Height. No buildings or structures shall exceed thirty-five (35) feet in height.

N. Floodplains/Stream Buffer Areas

The use of floodplains and stream buffer areas designated within this Planned Development and more specifically defined by approved final plats shall include, but not limited to:

- 1. Uses Permitted by Right
 - a. All uses permitted by right within Section 13.10.220 of the Town of Parker Land Development Code.
 - b. Golf courses.
 - c. Golf and recreation maintenance and operational facilities.
- 2. Uses Permitted by Special Review
 - a. All uses permitted by special review within Section 13.10.220 of the Town of Parker Land Development Code.

- b. Active recreation uses, including but not limited to the following facilities: golf courses, country clubs, baseball diamonds, softball diamonds, soccer fields, tennis courts, volley ball courts, basketball courts, swimming pools, stadiums, play apparatus, picnic areas, and recreation centers.
- c. Utility service facilities, including but not limited to water wells, water well pump stations, storm water control facilities, and water supply reservoirs or tanks provided that no public offices, repair facilities or storage yards are located in conjunction with these facilities, major utility service facilities, including but not limited to telephone exchanges, electric substations, gas regulator stations, subject to the provisions of Section 13.04.205 of the Town of Parker Land Development Code.

O. All Land Use Areas

- 1. The following uses shall be permitted by Special Review within all Land Use Areas:
 - a. Storage of wastewater effluent pursuant to Section 13.04.205 of the Town of Parker Land Development Code.
- 2. In any portion of a parcel where Zero Lot Line Dwelling Unit products is used to architecturally define a corner, special corner vision clearance standards intended to accomplish the goals of the Planned Development may be developed specifically for the intersection in concert with the Town of Parker.

IV. ENFORCEMENT AND ADMINISTRATION

A. Incorporation of Planning Development Master Plan

The plan of development for Stroh Ranch, including the location and boundaries of Planning Areas, the circulation elements, and the densities established by this PD Development Guide, is shown upon the “STROH RANCH DEVELOPMENT PLAN”, which is hereby incorporated by reference into this PD Development Guide with everything shown thereon and all amendments hereto.

B. Effect of Recorded Plan

The approval of the “STROH RANCH DEVELOPMENT PLAN” by the Town Council and the filing of such a Master Plan with the Town Clerk shall be deemed to be rezoning to a PD-Planned Development District of Stroh Ranch. All future development of the property will be governed by the provisions included in the approved “STROH RANCH DEVELOPMENT PLAN” and Development Guide. Detailed Site Plans and/or subdivision Plats submitted for all or any part of the area covered by the “STROH RANCH DEVELOPMENT PLAN” and Development Guide shall conform to the approved regulations adopted as a part of the approved “STROH RANCH DEVELOPMENT PLAN” and Development Guide.

STROH RANCH PLANNED DEVELOPMENT MASTER PLAN 3RD AMENDMENT

A PARCEL OF LAND BEING A PORTION OF SECTIONS 33 & 34, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH
PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO
727.7 ACRES - 3092 UNITS

LAND USE TABLE

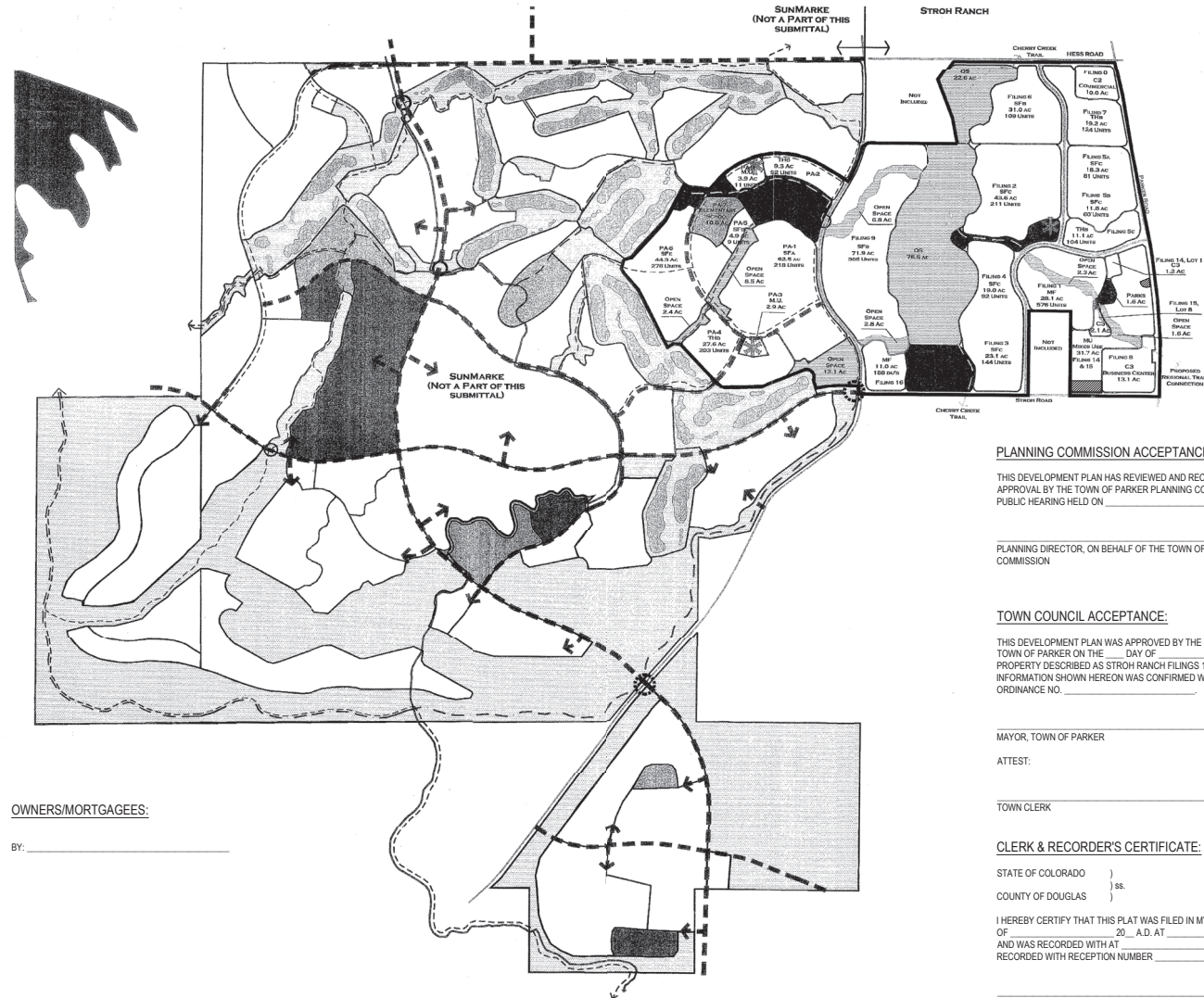
Parcel	Land Use Category	Acres	% of Site	Avg Gross Density	Units
Filing 0	C2	10.0	1.4%		
Filing 1	MF	28.1	3.9%	20.5	576
Filing 2	SFc	43.6	6.0%	4.8	211
Filing 3	SFc	23.1	3.2%	6.2	144
Filing 4	SFc	19.0	2.6%	4.8	92
Filing 5a	SFc	18.3	2.5%	4.4	81
Filing 5b	SFc	11.8	1.6%	5.1	60
Filing 5c	Thb	11.1	1.5%	9.4	104
Filing 6	SFb	31.0	4.3%	3.5	109
Filing 7	Thb	19.2	2.6%	6.5	124
Filing 8	C3	13.1	0.2%		
Filing 9	SFb	71.9	9.9%	4.2	305
Filing 14, Lot 1	C3	1.2	0.2%		
Filing 14, 15	MU	31.7	4.4%	8.7	275
Filing 15 Lot 8	C3	2.1	0.3%		
Filing 16	MF	11.0	1.5%	17.1	188
Parks		26.5	3.7%		
PA-1	Sfa	62.5	8.6%	3.5	218
PA-2	THd	9.3	1.3%	9.9	92
PA-3	MU	2.9	0.4%		
PA-4	THd	27.6	3.8%	7.4	203
PA-5	SFd	4.9	0.7%	1.8	9
PA-6	SFe	44.3	6.1%	6.2	276
PA-7	School	10.0	1.4%		
PA-8	Parks	25.5	3.5%		
PA-9	MU	3.9	0.5%	2.8	11
Open Space (Dedicated)		135.6	18.6%		
Road ROW		28.4	3.9%		
Unallocated Units					14
TOTAL		727.7	100%		3092

LEGEND

	ARTERIAL ROADS
	RESIDENTIAL COLLECTOR ROADS
	PROPOSED NEWLIN GULCH TRAIL (8' HAWK SURFACED)
	PROPOSED COMMUNITY TRAIL
	DEDICATED OPEN SPACE
	PROPOSED REGIONAL PARK
	PROPOSED SCHOOL SITE
	PROPOSED COMMUNITY FACILITY
	MIXED-USE COMMERCIAL

OWNERS/MORTGAGEES:

BY: _____



PLANNING COMMISSION ACCEPTANCE:

THIS DEVELOPMENT PLAN HAS REVIEWED AND RECOMMENDED FOR APPROVAL BY THE TOWN OF PARKER PLANNING COMMISSION FOLLOWING A PUBLIC HEARING HELD ON _____

PLANNING DIRECTOR, ON BEHALF OF THE TOWN OF PARKER PLANNING COMMISSION

TOWN COUNCIL ACCEPTANCE:

THIS DEVELOPMENT PLAN WAS APPROVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER ON THE _____ DAY OF _____, 20____, FOR THE PROPERTY DESCRIBED AS STROH RANCH FILINGS 14 AND 15. THE ZONING INFORMATION SHOWN HEREON WAS CONFIRMED WITH THE ADOPTION OF ORDINANCE NO. _____

MAYOR, TOWN OF PARKER

ATTEST:

TOWN CLERK

CLERK & RECORDER'S CERTIFICATE:

STATE OF COLORADO)
COUNTY OF DOUGLAS) ss.

I HEREBY CERTIFY THAT THIS PLAT WAS FILED IN MY OFFICE ON THIS _____ DAY OF _____, 20____ A.D. AT _____ O'CLOCK, _____ M., AND WAS RECORDED WITH AT _____ O'CLOCK, _____ M. AND WAS RECORDED WITH RECEPTION NUMBER _____

DOUGLAS COUNTY CLERK AND RECORDER



Request for Town Council Action

Date: June 20, 2023
Submitted By: Chris Vanderpool, Town Clerk
Reviewed By: Michelle Kivela, Town Manager
Title: **RESOLUTION NO. 23-050**
A Resolution to Amend Resolution No. 14-027, Series of 2014, to Adopt the Town of Parker, Colorado, Policy for Access to Public Records
Department: Town Clerk, Chris Vanderpool

EXECUTIVE SUMMARY

If approved, Resolution No. 23-050 will amend Resolution No. 14-027 to adopt the Town of Parker's Policy for Access to Public Records to modify the fees charged to fulfill open records requests.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Town's current "Policy for Access to Public Records," specifies the amount of the research and retrieval fee of \$30 per hour with the first hour being free. Approval of Resolution No. 23-050 would amend the Town's current policy to be in accordance with C.R.S. § 24-72-205(6)(b), which states that the amount of the fee for research and retrieval shall be the maximum hourly rate determined by the director of research of the legislative council. On July 1, 2019, and by July 1 of every five-year period thereafter, the director of research of the legislative council shall adjust the maximum hourly fee in accordance with the percentage change over the period in the United States Department of Labor, Bureau of Labor Statistics, consumer price index for Denver-Aurora-Lakewood, all items, all urban consumers, or its successor index. Currently, that rate is \$33.58 per hour with there being no charge for the first hour expended in connection with the research and retrieval services. Modifying the Policy will enable the Town to charge the fees permitted by statute as they change over time.

Prior Actions: Town Council originally adopted a written policy on December 13, 2004, pursuant to Resolution No. 2004-093, Series of 2004, which was amended by Resolution No. 07-080, Series of 2007, on August 20, 2007, and which was amended again by Resolution No. 14-027, Series of 2014.

FINANCIAL IMPACT

The collection of the research and retrieval fee offsets the cost to the Town in responding to requests for records.

STRATEGIC GOAL(S)



INNOVATE WITH
COLLABORATIVE
GOVERNANCE

ATTACHMENTS

1. Resolution No. 23-050

RECOMMENDED MOTION

I move to approve Resolution No. 23-050, as part of the consent agenda.

RESOLUTION NO. 23-050, Series of 2023

TITLE: A RESOLUTION TO AMEND RESOLUTION NO. 14-027, SERIES OF 2014, TO ADOPT THE TOWN OF PARKER, COLORADO, POLICY FOR ACCESS TO PUBLIC RECORDS

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, AS FOLLOWS:

Section 1. The Town Council of the Town of Parker hereby adopts the Town of Parker, Colorado, Policy for Access to Public Records, which is attached hereto as **Exhibit 1** and incorporated by this reference.

RESOLVED AND PASSED this _____ day of _____, 2023.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

EXHIBIT 1

TOWN OF PARKER COLORADO POLICY FOR ACCESS TO PUBLIC RECORDS

This policy is to protect and control Town of Parker records, as allowed by the Colorado Public Records Law at C.R.S. §§ 24-72-203 – 205, and to define the method by which the legal obligation of the Town to provide public access to its records and requests for information will be handled. The following guidelines will dictate the answering of all public information requests:

1. Requests for information must be in writing, on the form provided by the Town, and must be specific as to the information desired.
2. All requests for information must be directed to the Town Clerk.
3. Records must be viewed under the supervision of the Town Clerk or designee at Town Hall and may not be removed from Town Hall.
4. Records will be retrieved and refiled only by the Town Clerk or designee.
5. Records may be removed from file folders or places of storage for photocopying only by the Town Clerk or designee.
6. Photocopies of records will be provided \$.25 per page for documents not to exceed 11 inches by 17 inches. The Town Clerk may charge a fee for the actual cost of providing a copy, printout or photograph of a public record in a format other than a standard page.
7. Information requests will not take priority over previously scheduled work activities of the Town.
8. The Town reserves the right to levy a reasonable fee for research, retrieval and copying services, including time spent segregating confidential information and privileged materials (the "Services"). The amount of the fee for research and retrieval ~~is thirty dollars (\$30.00) per hour~~ shall be the maximum hourly rate determined by the director of research of the legislative council in accordance with C.R.S. § 24-72-205(6)(b), but there will be no charge for the first hour expended in connection with the research and retrieval Services. The fee, as estimated by the Town Clerk or designee, shall be paid prior to commencement of any Services.
9. Records are available for public inspection during normal working hours, provided that an appointment has been made with the Town Clerk or designee at least three (3) business days in advance, subject to compliance with this policy.
10. The Town may withhold records which contain confidential information, privileged materials, or that are protected from disclosure by any other statute or rule of any court.

The foregoing Policy for Access to Public Records was approved by the Town Council of the Town of Parker at a regular Town Council meeting held on June 20, 2023, by Resolution No. 23-050.



Request for Town Council Action

Date: June 20, 2023

Submitted By: Kelsey Hall, Assistant Town Attorney

Reviewed By: Michelle Kivela, Town Manager

Title: **RESOLUTION NO. 23-051**
A Resolution to Amend Resolution No. 19-090, Series of 2019,
Concerning the Town of Parker, Colorado, Policy for Access to
Criminal Justice Records

Department: Town Attorney, Kelsey Hall

EXECUTIVE SUMMARY

If approved, Resolution No. 23-051 will amend Resolution No. 19-090 to adopt the Town of Parker, Colorado, Policy for Access to Criminal Justice Records, to update the fees charged to fulfill requests for criminal justice records.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Town's current "Policy for Access to Criminal Justice Records," specifies certain amounts related to the research and retrieval fees for the production of requests for criminal justice records, including, when applicable, the charge of thirty dollars (\$30.00) per hour. Approval of Resolution No. 23-051 would amend the Town's current policy to be in accordance with C.R.S. § 24-72-205(6)(b), which states that the amount of the fee for research and retrieval under the Colorado Open Records Act ("CORA") shall be the maximum hourly rate determined by the director of research of the legislative council. On July 1, 2019, and by July 1 of every five-year period thereafter, the director of research of the legislative council shall adjust the maximum hourly fee in accordance with the percentage change over the period in the United States Department of Labor, Bureau of Labor Statistics, consumer price index for Denver-Aurora-Lakewood, all items, all urban consumers, or its successor index. Currently, that rate is \$33.58 per hour. Historically, the Town has used the same hourly charge established under CORA to determine a reasonable hourly charge for the research and retrieval of criminal justice records. Modifying the Policy will enable the Town to charge the same hourly fee permitted by statute for CORA as well as updating that amount as it changes over time. The modified Policy will also allow for reasonable updates to other costs associated with the production of criminal justice records, including removing fees that are no longer applicable.

FINANCIAL IMPACT

The collection of the research and retrieval fee offsets the cost to the Town in responding to requests for records.

STRATEGIC GOAL(S)



INNOVATE WITH
COLLABORATIVE
GOVERNANCE

ATTACHMENTS

1. Resolution No. 23-051

RECOMMENDED MOTION

I move to approve Resolution No. 23-051, as part of the consent agenda.

RESOLUTION NO. 23-051, Series of 2023

TITLE: A RESOLUTION TO AMEND RESOLUTION NO. 19-090, SERIES OF 2019, CONCERNING THE TOWN OF PARKER, COLORADO, POLICY FOR ACCESS TO CRIMINAL JUSTICE RECORDS

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, AS FOLLOWS:

Section 1. The Town Council of the Town of Parker hereby amends the Town of Parker, Colorado, Policy for Access to Criminal Justice Records, which is attached hereto as **Exhibit 1** and incorporated by this reference.

RESOLVED AND PASSED this _____ day of _____, 2023.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

EXHIBIT 1

TOWN OF PARKER COLORADO POLICY FOR ACCESS TO CRIMINAL JUSTICE RECORDS

This policy is to protect and control Town of Parker Criminal Justice records, as allowed by C.R.S. § 24-72-306, and to define the method by which the legal obligation of the Town to provide public access to its records and requests for information will be handled. The following guidelines will dictate the answering of all public information requests:

1. Requests for information must be in writing and must be specific as to the information desired.
2. All requests for information must be directed to the Chief of Police or designee.
3. Records must be viewed under the supervision of the Chief of Police or designee at the Police Department and may not be removed from the Police Department.
4. Records will be retrieved and refiled only by the Chief of Police or designee.
5. Records may be removed from file folders or places of storage for photocopying only by the Chief of Police or designee.
6. ~~Photocopies of records will be provided at \$.25 per page for documents not to exceed 8½ x 11 inches; \$2.00 for each photograph; \$10.00 for each photo disk; and \$10.00 for each video/audio recording.~~
7. Information requests will not take priority over previously scheduled work activities of the Town.
8. The Town reserves the right to levy a reasonable fee for personnel and equipment, for research and retrieval, including time spent segregating confidential information and privileged materials, and copying services (the "Services"). ~~The~~ In accordance with C.R.S. § 24-72-306(1), the amount of the fee for research and retrieval is shall be thirty-three dollars and fifty-eight cents (\$30.00) (\$33.58) per hour or a reasonable hourly rate determined by the Town Council not to exceed actual costs, including, but not limited to, personnel and equipment, and subject to review from time to time. Other fees related to the production of criminal justice records will be as determined by the Town Council and posted on the Parker Police Department website in the Records Fee Schedule or, if not specifically designated on the Parker Police Department Records Fee Schedule, fees will be as provided for on the Town Clerk's website. The total estimated fees related to the production of specific records requests, as estimated by the Chief of Police or designee, shall be paid prior to commencement of any Services.
9. Records are available for public inspection during normal working hours, provided that an appointment has been made with the Chief of Police or designee at least three (3) business days in advance, subject to compliance with paragraph 1 above.
10. The Town may withhold records which contain confidential information, privileged materials, or that are protected from disclosure by any other statute or rule of any court.

The foregoing Policy for Access to Criminal Justice Records was approved by the Town Council of the Town of Parker at a regular Town Council meeting held on June 20, 2023, by Resolution No. 23-051.



Request for Town Council Action

Date: June 20, 2023

Submitted By: Kristin Hoffmann, Town Attorney
Chris Vanderpool, Town Clerk

Reviewed By: Michelle Kivela, Town Manager

Title: **RESOLUTION NO. 23-052**
A Resolution to Amend Resolution No. 16-073, Series of 2016, by the Adoption of Supplement 13 of the Town of Parker Records Retention Schedule, and to Amend Supplement 13 with Certain Exceptions

Department: Town Clerk, Chris Vanderpool

EXECUTIVE SUMMARY

The Town's retention schedule for Town records is based upon the "Colorado Municipal Records Retention Schedule (the "Retention Schedule). Supplement 13 was recently approved by the State Archivist.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Town Council originally adopted the Parker Records Retention Schedule in 2002 with the most recent update of the Retention Schedule in 2016. The Retention Schedule identifies how long Town records will be retained. Periodically, the State prepares supplements to the Retention Schedule. The purpose of the resolution is to approve Supplement 13.

Items that have been updated or added since Supplement 12 are as follows:

- 100.080.AA - Police body worn camera footage
- 15.100 - Mail ballot election records regarding municipal mail ballot elections operated under C.R.S. Title 31
- 75.020 - Marijuana Licensing Records
- Appendix I - Social Media

There are also items that staff believes should be maintained differently than what the Retention Schedule states. A list of these exceptions is noted below:

- 55.080A - Access Reports - Web Pages - reports tracking hits on the website and intranet. Retention: one year.
- 55.080B - Development and Evolution Records - Web Pages - Documentation of development and changes to the website or intranet web pages.

- Web Pages and Related Scripts - Internet and Extranet - Home Pages and Indexes - Retention: Until superseded or no longer useful
- Intranet Web Pages Designed for Internal Access to Information - Retention: Until superseded, no longer useful, or deleted by third parties
- 90.130 Job Recruitment Records - Advertisement of Job Opportunities - Retention: Three years
- 100.080 Police Records - Arrest Records - Juvenile Offender Arrest Records - As specified by crime type and the retention period set forth pursuant to details outlined under Subsection 100.080B., Case Records

There were two legislative changes in 2023 that require a change in the Colorado Municipal Retention Schedule, which are not codified in Supplement 13 of the Colorado Municipal Records Retention Schedule but have been approved by the State Archivist and will be included in Supplement 14:

- Municipal Fair Campaign Practices Financial Report forms (HB-23-1245): Reports for candidates that **are not** elected must be kept for ten (10) years. This requirement applies to issue committees, political committees and small donor committees filing reports. Reports from candidates that **are** elected must be kept for six years after the elected candidate leaves office. This change becomes effective on January 1, 2024.
- Body Worn Cameras: There were also several additional requirements made to the Body Worn Camera area of the Retention Schedule since the codification of Supplement 13, which are noted in the attached resolution.

FINANCIAL IMPACT

None.

STRATEGIC GOAL(S)



ATTACHMENTS

1. Resolution No. 23-052

RECOMMENDED MOTION

I move to approve Resolution No. 23-052, as part of the consent agenda.

RESOLUTION NO. 23-052, Series of 2023

TITLE: A RESOLUTION TO AMEND RESOLUTION NO. 16-073, SERIES OF 2016, BY THE ADOPTION OF SUPPLEMENT 13 OF THE TOWN OF PARKER RECORDS RETENTION SCHEDULE, AND TO AMEND SUPPLEMENT 13 WITH CERTAIN EXCEPTIONS

WHEREAS, the Town Council of the Town of Parker adopted the Colorado Municipal Records Retention Schedule ("CMRRS") as the records retention schedule for the Town of Parker, with certain exceptions ("Parker Records Retention Schedule");

WHEREAS, the Town Council adopted Supplements 11 and 12 of the Parker Retention Schedule by Resolution No. 16-073, Series of 2016, on December 5, 2016;

WHEREAS, the Town Council of the Town of Parker desires to amend Resolution No. 16-073, Series of 2016, to adopt "Supplement No. 13" to the Colorado Model Municipal Records Retention Schedule, as the Town of Parker records retention schedule, with the exceptions identified in this Resolution, and supersedes all prior supplements; and

WHEREAS, the Town Council of the Town of Parker desires to adopt the Colorado State Archives Body Camera Policy dated February 1, 2023, which is attached hereto as **Exhibit A** and incorporated herein by reference.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, AS FOLLOWS:

Section 1. The Town Council of the Town of Parker hereby adopts Supplement No. 13 of the Parker Records Retention Schedule, dated November 2022, with the exceptions identified in Sections 3 through 8 of this Resolution, along with its subsequent versions and amendments.

Section 2. The Town Council of the Town of Parker hereby adopts the Colorado State Archives Body Camera Policy, dated February 1, 2023, attached hereto as Exhibit A, which has not yet been codified.

Section 3. The Town Council hereby amends Schedule 15.040 of the Parker Records Retention Schedule, which exception is made a part of the Parker Records Retention Schedule, effective January 1, 2024, in accordance with HB23-1245, to provide as follows:

15.040 CAMPAIGN REPORTS AND STATEMENTS

A. Candidates

Affidavits of familiarity with the Fair Campaign Practices Act, candidate committee statements of organization, and campaign contributions and expenditure reports.

1. Elected Candidates

Retention: 6 years after elected candidate leaves office (CRS 1-45-112(1)(B))

2. *Unsuccessful Candidates*

Retention: 10 years after the date of filing (CRS 1-45-112(1)(B))

B. *Independent Expenditures*

Statements required for persons making independent expenditures in support of or in opposition to a candidate or to convey and political message.

Retention: 10 years from the date of filing of statement (CRS 1-45-112(1)(B))

C. *Issues Committees*

Committee statements of organization and campaign contribution and expenditure reports.

Retention: 10 years from the date of filing of report (CRS 1-45-112(1)(B))

Section 4. The Town Council hereby amends Schedule 55.080 of the Parker Records Retention Schedule, which exception is made a part of the Parker Records Retention Schedule, to provide as follows:

55.080 WEBSITE, INTRANET AND SOCIAL MEDIA RECORDS

A group of World Wide Web, internal web pages, or social networking websites containing hyperlinks to each other and made available online for responding to public inquiries, providing information, and for third-party comments.

A. *Access Reports and Use Tracking Logs – Website and Intranet*

Reports tracking hits to the website or intranet by internal and external sources.

Retention: 1 year

B. *Development and Evolution Records – Web Pages*

Documentation of development and changes to the website or intranet web pages.

1. *Web Pages and Related Scripts – Internet and Extranet – Home Pages and Indexes*

Retention: Until superseded or no longer useful

2. *Intranet Web Pages Designed for Internal Access to Information*

Retention: Until superseded or no longer useful

C. Social Media Records

Retention: Until superseded, no longer useful, or deleted by third parties

Section 5. The Town Council hereby amends Section 90.130 of the Parker Records Retention Schedule, which exception is made a part of the Parker Records Retention Schedule, to provide as follows:

90.130 JOB RECRUITMENT RECORDS

A. Advertisements of Job Opportunities

* * *

Retention: 3 years

Section 6. The Town Council hereby amends Paragraph 100.080A.4. of the Parker Records Retention Schedule, which exception is made a part of the Parker Records Retention Schedule, to provide as follows:

100.080 POLICE RECORDS

A. Arrest Records

* * *

4. Juvenile Offender Arrest Records

Retention: As specified by crime type and the retention period set forth pursuant to details outlined under Subsection 100.080B., Case Records

Section 7. The Town Council hereby amends Exhibit E, Methods of Destruction, of the Parker Records Retention Schedule, which exception is made a part of the Parker Records Retention Schedule, by the addition of a new paragraph after subparagraph 4 of the Appendix's first paragraph to provide as follows:

“‘Personal Identifying Information,’ which means a social security number, a personal identification number, a password, a pass code, an official state or government-issued driver’s license or identification car number, a government passport number, biometric data as defined in C.R.S. § 24-73-103(1)(a), an employer, student, or military identification number, or a financial transaction device, as defined in C.R.S. § 18-5-701(3), shall be destroyed by shredding, erasing, or otherwise modifying the personal identifying information in the paper or electronic documents to make the personal identifying information unreadable or indecipherable through any means.”

Section 8. The Town Council hereby amends Exhibit E, Methods of Destruction, of the Parker Records Retention Schedule, which exception is made a part of the Parker Records Retention Schedule, by the addition of subparagraph 7 of the Appendix's last paragraph to provide as follows:

“7. Where the destruction of records is performed by a third-party service provider, the Town shall ensure that the provider maintain reasonable security procedures and practices that are appropriate for the records subject to destruction and are reasonably designed to protect the records from unauthorized access, use, modification, disclosure, or destruction.”

Section 9. The Town Council of the Town of Parker hereby directs the Town Clerk of the Town of Parker to file a copy of this Resolution with the Colorado State Archivist.

RESOLVED AND PASSED this _____ day of _____, 2023.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

Colorado State Archives Body Camera Policy

During the 2020 legislative session the Colorado General Assembly passed Senate Bill 20-217, better known as the “Police Accountability Act.” Within this act is the mandate that all political subdivisions of the State which includes local law enforcement Peace Officers (defined below) and the Colorado State Patrol Officers to wear body worn cameras for each Peace Officer who interacts with members of the public by July 1, 2023, unless exempted by statute. Also stated within the statute is all law enforcement agencies and Colorado State Patrol shall establish a records retention schedule in accordance and guidance of the Colorado State Archives, § 24-31-902(1)(b), C.R.S.

In an effort for consistency and to streamline the process for law enforcement agencies, the Colorado State Archives, in collaboration with subject matter experts, has created the following records retention guidelines for body worn camera recordings. A big thank you to Sarah Albaugh, City of Ft. Collins Police Department; Cherokee Blake, Gilpin County Sheriff’s Office; Erica Gallegos, City of Arvada Police Department; and John Lynkiewicz, Colorado State Patrol.

Pursuant to the Colorado Open Records Act (“CORA”) and the legislative declaration, it is the public policy of the State that all public records shall be open for inspection by any person at reasonable times, except as provided by exception to CORA. As such, the definition of “Public Records” is set forth at § 24-72-202(6)(a)(I), C.R.S. However, Public Records do not include “recordings.” It is important to note that “recordings” fall under the definition of a criminal justice record pursuant to § 24-72-302(4), C.R.S. as set forth below and is an exception to the disclosure of Public Records.

The following guidance for body worn camera recordings has been divided into two categories, non-evidentiary and evidentiary recordings. While the retention periods were created specifically for body camera recordings it is highly recommended that guidance be applied to all video and audio recordings potentially captured by local enforcement agencies and the Colorado State Patrol. Examples may be dashboard cameras, drone footage, firearm camera, and taser cameras. The retention periods provided are the minimum any recordings should be held. An office may choose to keep recordings longer if it is in their best interest. Recordings that have been redacted for CORA requests or for other reasons should follow the same retention periods as the original recordings.

Colorado law enforcement agencies should familiarize themselves with state law and industry standards in regards to the creation, storage, maintenance and destruction of electronic records. This includes but not limited to § 24-73-101, C.R.S. and Criminal Justice Information Services (CJIS) Security Policy, Version 5.9.1 – 10/01/2022.

Colorado State Archives Body Camera Policy

If your office currently has an approved retention schedule on file within the Colorado State Archives that covers body worn camera recordings, it is advisable to compare your current retention schedule with the retention periods below.

While Senate Bill 20-217 specifically addresses local law enforcement and Colorado State Patrol it is highly recommended that any and all political subdivisions and Peace Officer agencies and offices follow the guidelines as well. This is especially the case if your officers undergo P.O.S.T. certifications and training.

DEFINITIONS

“Criminal Justice Records” means all books, papers, cards, photographs, tapes, recordings, or other documentary materials, regardless of form or characteristics, that are made, maintained, or kept by any criminal justice agency in the state for use in the exercise of functions required or authorized by law or administrative rule, including but not limited to the results of chemical biological substance testing to determine genetic markers conducted pursuant to sections 16-11-102.4 and 16-23-104, C.R.S.

“Peace Officer” means any person employed by a political subdivision of the State required to be certified by the P.O.S.T. Board pursuant to section 16-2.5-102, C.R.S., a Colorado State Patrol Officer as described in section 16-2.5-114, C.R.S., and any noncertified deputy sheriff as described in section 16-2.5-103(2), C.R.S.

“P.O.S.T. Board” means the peace officers standards and training board created in § 24-31-302, C.R.S.

NON-EVIDENTIARY RECORDINGS

1. Accidental Activations – 30 calendar days
2. Testing Before Shift Starts – 30 calendar days
Camera activations to verify equipment is operating accordingly.
3. Training Recordings – 1 year
Recordings used or captured by officers and supervisors in the initial and ongoing training on how to use a body worn camera device.
4. Citizen Interactions – 2 years
Traffic incidents with no summons issued, non-criminal incidences, any routine contact that does not result in enforcement action or a case report or summons.
5. Uncategorized or Unclassified Video Recordings – 181 calendar days



Colorado State Archives Body Camera Policy

EVIDENTIARY RECORDINGS

Recordings should be retained according to case record retention.

1. Death Case Records: Noncriminal – 10 years
2. Felony Case Records (Major Felonies and Violent Crimes): Cases such as arson with fatalities, forgery, unrecovered firearms, homicides, kidnapping, deaths, and officers killed – **Permanent**
3. Felony Case Records (Other): Other felony cases, special investigations related to aggravated assault, arson without fatalities and similar cases – 10 years
4. Misdemeanor Case Records: Misdemeanor cases, petty offenses, traffic offenses and similar cases – 3 years
5. Missing Person Records Including Runaways: Until located
6. Sex Offender and Sexual Assault Case Records: Includes case files related to sex offenders, investigations of sexual assault crimes including on a child. – **Permanent**
7. Traffic Accident Case Records: Fatal Traffic Accidents -10 years
8. Traffic Accident Case Records: Non-Fatal Traffic Accidents – 3 years

PLEASE NOTE: NO RECORDING(S) SHALL BE DESTROYED SO LONG AS IT PERTAINS TO ANY LEGAL CASE, CLAIM, ACTION OR AUDIT.



Request for Town Council Action

Date: June 20, 2023

Submitted By: Mary Lou Brown, Finance Director

Reviewed By: Michelle Kivela, Town Manager

Title: **RESOLUTION NO. 23-053**
A Resolution to Appoint a Member to the Investment Advisory Committee

Department: Finance, Mary Lou Brown

EXECUTIVE SUMMARY

The Investment Advisory Committee consists of a Councilmember, Town Finance Director, Town Manager and two community financial professionals. One community financial professional's term is set to expire December 31, 2023.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Town of Parker's Investment Policy (the "Investment Policy") was adopted by the Town Council on July 7, 2015, through Resolution No. 15-031 and amended and readopted on April 17, 2023, through Resolution No. 23-038. Pursuant to the Investment Policy the Town maintains an Investment Advisory Committee (the "Committee") which consists of "the Mayor or a Councilmember appointed by the Mayor and ratified by Town Council, the Town Finance Director, the Town Manager and two financial professionals." The Investment Policy states the financial professionals shall be appointed for four-year staggered terms and that reappointment of members shall be considered.

Rufat Garalov was reappointed for a term up to and including December 31, 2025 and Bob Agan is being recommended for reappointment for a term up to and including December 31, 2027. Bob's current term ends on December 31, 2023. The recommendation for reappointment is being made due to Bob's outstanding qualifications and experience that he brings to the Committee, along with his commitment to serving the Town.

FINANCIAL IMPACT

There is no direct financial impact of this action. The Committee provides an oversight function related to the working capital investments of the Town.

STRATEGIC GOAL(S)



INNOVATE WITH
COLLABORATIVE
GOVERNANCE



FOSTER COMMUNITY
CREATIVITY AND
ENGAGEMENT

ATTACHMENTS

1. Resolution No. 23-053

RECOMMENDED MOTION

I move to approve Resolution No. 23-053, as part of the consent agenda.

RESOLUTION NO. 23-053, Series of 2023

TITLE: A RESOLUTION TO APPOINT A MEMBER TO THE INVESTMENT ADVISORY COMMITTEE

WHEREAS, the term of one (1) regular member expires on December 31, 2023; and

WHEREAS, the Town Council desires to appoint one (1) regular member for the 4-year term that begins January 1, 2024, to the Committee.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, AS FOLLOWS:

Section 1. The Town Council of the Town of Parker hereby appoints one (1) regular member to the Committee for the term ending December 31, 2027, as described in **Exhibit A**, which is attached hereto and incorporated by this reference.

RESOLVED AND PASSED this _____ day of _____, 2023.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

EXHIBIT A

1. One (1) Regular Investment Advisory Commission Member for a term up to and including December 31, 2025.

Rufat Garalov

2. One (1) Regular Investment Advisory Commission Member for a term up to and including December 31, 2027.

Robert Agan

3. Town Councilmember for a term up to and including December 31, 2023.

John Diak



Request for Town Council Action

Date: June 20, 2023

Submitted By: Michael Grabczyk, Project Engineer

Reviewed By: Michelle Kivela, Town Manager

Title: **RESOLUTION NO. 23-054**
A Resolution to Determine, Upon Recommendation of the Town Manager, that the Public Interest will be Served by a Single Source Contract Concerning the Hilltop Road and Canterbury Parkway Area Improvements Project

Department: Engineering and Public Works, Michael Grabczyk

EXECUTIVE SUMMARY

Due to substantial rises in construction costs and estimates during the design phase of the Hilltop Road and Canterbury Parkway Area Improvements project, staff had budget concerns which triggered a change in the project approach and resulted in the delay of the detention pond work. However, the competitive bid results were less than the engineering estimate and the capital budget for the project has sufficient funding available to construct the detention pond that was delayed as a future project.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

On May 1, 2023, Town Council approved the award of the Hilltop Road/Canterbury Parkway Area Improvements (CIP 22-039) for \$989,915.50 to 53 Corporation, LLC. This capital improvement project consists of turn lane improvements at/near the Hilltop/Canterbury intersection. This project was competitively bid with 53 Corporation being the lowest responsible bidder. During the final design process for this project in late-2022/early-2023, recent construction cost escalations were concerning to staff such that the decision was made to delay the associated detention pond work needed for this section of roadway. In April, the competitive bid results were not as high as originally estimated, which resulted in potential funding to complete the detention pond work in 2023. 53 Corporation has completed several Town capital improvement projects with good results, including the Cimarron Middle School detention pond in 2022. Due to this past history, which includes detention pond work, Town staff began discussion with 53 Corporation about the detention pond and their interest in constructing the improvements.

On April 5, 2005, the Town of Parker voters approved an amendment to Section 15.8 of the Parker Charter to allow the Town Council to award public works construction contracts in the

manner established by ordinance. Following the amendment, Parker Town Council, through ordinance, established the procedures for awarding public works construction contracts. The ordinance provides that public works construction contracts in excess of \$100,000 shall be by bid "unless the Town Council determines, upon recommendation of the Town Administrator, that the public interest will be best served by competitive proposal or by negotiating a contract with a single contractor." The Engineering/Public Works Director and the Town Manager recommend that the public interest will be best served by negotiating a contract with a single contractor for the construction of the detention pond associated with the Hilltop Road/Canterberry Parkway Area improvements project. This resolution (if approved) will allow Town staff to negotiate with 53 Corporation for the detention pond infrastructure capital improvements.

FINANCIAL IMPACT

Funding for this project's construction has been appropriated in the Highway and Streets Capital Projects fund (301-4310).

STRATEGIC GOAL(S)



PROMOTE A SAFE AND
HEALTHY COMMUNITY



DEVELOP A VISIONARY
COMMUNITY THROUGH
BALANCED GROWTH

ATTACHMENTS

1. Resolution No. 23-054
2. Memo to Town Manager dated May 4, 2023

RECOMMENDED MOTION

I move to approve Resolution No. 23-054, as part of the consent agenda.

RESOLUTION NO. 23-054, Series of 2023

TITLE: A RESOLUTION TO DETERMINE, UPON RECOMMENDATION OF THE TOWN MANAGER, THAT THE PUBLIC INTEREST WILL BE SERVED BY A SINGLE SOURCE CONTRACT CONCERNING THE HILLTOP ROAD AND CANTERBERRY PARKWAY AREA IMPROVEMENTS PROJECT

WHEREAS, on April 5, 2005, the voters of the Town of Parker approved an amendment to Section 15.8 of the Town of Parker Home Rule Charter (the "Amendment");

WHEREAS, the Amendment allows the Town Council to award contracts for the construction of public works in the manner established by ordinance;

WHEREAS, on April 18, 2005, the Town Council, pursuant to the Amendment, established by ordinance the procedure for awarding contracts for the construction of public works (the "Public Works Ordinance");

WHEREAS the Public Works Ordinance provides that public works projects in excess of \$100,000 shall be by bid "unless the Town Council determines, upon recommendation of the Town Manager, that the public interest will be best served by competitive proposal or by negotiating a contract with a single contractor;"

WHEREAS, the Town Manager recommends that the public interest will be best served by negotiating a contract with a single contractor for the construction of additional drainage improvements related to roadway work of the Hilltop Road and Canterbury Parkway Area Improvements project (the "Project"), because of the reasons specified in the memorandum dated May 4, 2023, to the Town Manager from the Director of Engineering/Public Works; and

WHEREAS, the Town Council of the Town of Parker believes that the public interest will be best served by negotiating a contract with a single contractor for the construction of the Project.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, AS FOLLOWS:

Section 1. The Town Council determines, upon recommendation of the Town Manager, that the public interest will be best served by negotiating a contract with a single contractor to complete the work, as provided by Chapter 11.13 of the Parker Municipal Code, as amended, for the construction of the Project.

RESOLVED AND PASSED this _____ day of _____, 2023.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

MEMORANDUM

TO: Michelle Kivela, Town Manager

FROM: Tom Williams, Director of Engineer/Public Works

DATE: May 4, 2023

SUBJECT: Hilltop and Canterbury Turn Lanes – Additional Drainage Improvements

The purpose of this memo is to inform the Town Manager of the Engineering/Public Works Department's recommendation for contracting methods concerning the Hilltop Road and Canterbury Parkway Area Improvements project.

Consistent with Chapter 11.13 of the "Town of Parker Municipal Code" – Section 11.13.030, the Engineering/Public Works Department is advising the Town Manager to make a recommendation to Mayor and Town Council that the public interest will be best served by delivering and procuring general construction services for additional drainage improvements related to the roadway work. Specifically, the Engineering/Public Works Department is proposing to utilize a contract modification of the Town of Parker Trade Contractor agreement that was approved on May 1, 2023, with a not to exceed price. The contract modification is anticipated to be presented to Council for approval on June 20, 2023.

The contract that was awarded by Town Council includes the construction of turn lane improvements at/near to the intersection of Hilltop Road and Canterbury Parkway, adjacent to Legend High School. In accordance with Town criteria, the increase in runoff from the new roadway pavement that will be constructed must be attenuated and treated for water quality. Due to economy of scale and to improve overall stormwater management, a detention pond was designed to attenuate and treat the roadway runoff for both the existing and proposed pavement in this area. This detention pond was to be constructed as part of the roadway improvement project.

Due to substantial rises in construction costs and higher than expected engineering estimates, staff had budget concerns which triggered a change in the project approach. The stormwater detention pond plans were broken out as a separate project which would be constructed later, once funding was available. In the interim, the roadway project was bid out with a water quality manhole designed to treat only the project's additional pavement, which was less than desirable from an overall stormwater management perspective but meet minimum water quality standards. However, due to advantageous bid results that were less than the engineering estimate, the

project CIP budget now has funding available to construct the drainage detention pond that was removed from the project plans.

The use of a single source contracting method for this work is due to the advantageous cost proposal offered by 53 Corporation who was the lowest responsible bidder for the roadway project. Town Council awarded the roadway contract to 53 Corporation on May 1, 2023. 53 Corporation has experience and a proven track record with pond construction having completed several competitively bid capital improvement projects for the Town of Parker. 53 Corporation is a Mile High Flood District Category 1 pre-qualified contractor and specializes in drainage construction. They have also recently completed (in 2022) a Town CIP detention pond project near the Cimarron Middle School, which included a public bid and award process.

The Engineering/Public Works Director hereby recommends that the Town Manager advise the Mayor and Town Council of our request to negotiate pricing with 53 Corporation to include the construction of the detention pond in the previously awarded roadway contract through a contract amendment. This proposal will require Town Council approve a resolution in accordance with Section 11.13.050 of the Town of Parker Municipal Code, authorizing the single source contracting method.



Request for Town Council Action

Date: June 20, 2023

Submitted By: Meagan Nakashima, Deputy Recreation Manager

Reviewed By: Michelle Kivela, Town Manager

Title: **Purchase of Recreation Accessible Bus**

Amount: **\$110,000**

Contractor: **Creative Bus Sales**

Department: **Parks, Recreation and Open Space, Mary Colton**

EXECUTIVE SUMMARY

Currently, the inventory of Fieldhouse Day Camp buses does not include an accessible lift. In order to create a more inclusive and accessible program and experience for participants, a bus containing an accessibility feature is necessary. The Metropolitan Football Stadium District Sharing Funds (sale of the Broncos) will fund this purchase.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The current inventory of Fieldhouse Day Camp buses does not include an accessible lift. In order to create a more accessible and inclusive program, a bus containing an accessible feature is necessary. Additionally, the purchase of the bus would allow us to expand our offerings within our Therapeutic Recreation Division due to improved accessible transportation to offsite destinations.

In September of 2022, the Town received funds from the Metropolitan Football Stadium District Sharing Funds (sale of the Broncos). The sharing amount was based on the respective agencies' proportionate percentage of sales tax revenue collected. Parker's portion was determined to be 1.489940% and our dollar share is \$611,440.85.

The Metropolitan Football Stadium District Act and Article 33 of the Lease and Management Agreement require that funds be used for "youth activity programs". A discussion between Finance and the Parks, Recreation and Open Space Department determined that the purchase of an accessible bus would qualify as an acceptable use of the funds we received.

FINANCIAL IMPACT

The cost of the purchase would be covered by the funds received from the Metropolitan Football Stadium District Sharing Funds.

STRATEGIC GOAL(S)



SUPPORT AN
ACTIVE COMMUNITY



PROMOTE A SAFE AND
HEALTHY COMMUNITY

ATTACHMENTS

None

RECOMMENDED MOTION

I move to approve the staff recommendation, as a part of consent agenda.



Request for Town Council Action

Date: June 20, 2023

Submitted By: Nathan Klass, Engineering Service Manager

Reviewed By: Michelle Kivela, Town Manager

Title: **Jordan Road/Parkerhouse Road Traffic Signal (CIP 19-009) and Chambers Road/Red Sky Drive Traffic Signal (CIP 22-040) Contract Modification**

Amount: **\$20,000 Addition to Original Contract of \$932,988.20 for a Revised Total of \$952,988.20**

Contractor: **Interface Communications Co.**

Department: **Engineering & Public Works, Nathan Klass**

EXECUTIVE SUMMARY

This item is to grant a contract modification to Interface Communications Company for the combined Jordan Road-Parkerhouse Road traffic signal (CIP19-009) and Chambers Road-Red Sky Drive traffic signal (CIP22-040) project for a new contract amount of \$952,988.20.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Town issued a "Notice to Bidders" for proposals for the combined Jordan Road-Parkerhouse Road traffic signal (CIP19-009) and the Chambers Road-Red Sky Drive traffic signal (CIP22-040) on October 18, 2022, with the proposals (bids) publicly opened on November 10, 2022. The project consists of the installation of a mast arm traffic signal at the Jordan Road/Parkerhouse Road intersection and at the Chambers Road/Red Sky Drive intersection. Interface was the lowest responsible bidder with a total bid of \$932,988.20 and the contract was awarded by the Town Council on December 5, 2022. This contract modification is for \$20,000.00 to increase Interface's total contract amount to \$952,988.20.

During construction of each traffic signal, there were unexpected conditions that arose. At the Jordan Road/Parkerhouse Road intersection, additional potholing was required to locate utilities onsite. At the Chambers Road/Red Sky Drive intersection, additional unanticipated utilities needed to be relocated in order to get proper placement of the signal pole caisson foundations. There was also additional sidewalk work needed due to the adjusted caisson locations. Lastly, the fiber optic interconnect scope for both projects to connect to the Town's existing system was slightly more than originally anticipated in order to meet Town standards.

FINANCIAL IMPACT

Funding for this project is part of the approved 2023 Capital Improvement Fund and there are sufficient funds to cover this contract modification.

STRATEGIC GOAL(S)



PROMOTE A SAFE AND
HEALTHY COMMUNITY

ATTACHMENTS

None

RECOMMENDED MOTION

I move to approve the staff recommendation, as a part of the consent agenda.



Request for Town Council Action

Date: June 20, 2023

Submitted By: Alex Mestdagh, Engineering Service Manager

Reviewed By: Michelle Kivela, Town Manager

Title: **Tanterra Development Bridge Inspections - Chambers Road and Tammy Lane (Chargeback to Developer)**

Amount: \$221,745

Contractor: Alfred Benesch & Company

Department: Engineering and Public Works, Alex Mestdagh

EXECUTIVE SUMMARY

A contract is proposed with Alfred Benesch & Company to provide inspection services for the proposed bridges to be constructed with the Tanterra Filing No. 1 development.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Tanterra Filing No. 1 development has received all necessary approvals and has begun construction. The project consists of extensive infrastructure improvements to the area, including several bridges over Oak Gulch. Twin bridge structures will be constructed for Chambers Road over Oak Gulch, and a single bridge will be constructed for Tammy Lane over Oak Gulch. When bridges are proposed with development projects, the Town has historically employed a consultant inspector with expertise in bridge construction to oversee that work on behalf of the Town. In this case, staff proposes to employ Alfred Benesch & Company to perform the bridge inspections. Benesch is one of the Town's selected Construction Management firms, and their staff has a long track record of successfully overseeing bridge construction.

Because this inspection work is necessary due to a development project, the cost of this third-party inspection will be the responsibility of the developer through a charge-back agreement. The Town will contract directly with Benesch for the work, but all invoices will be charged to the developer as part of the development. This contract will be funded 100% by the Tanterra developer.

FINANCIAL IMPACT

This contract is proposed to be charged back to the Tanterra developer, who will be responsible for 100% of the cost of this work.

STRATEGIC GOAL(S)



DEVELOP A VISIONARY
COMMUNITY THROUGH
BALANCED GROWTH

ATTACHMENTS

None

RECOMMENDED MOTION

I move to approve the staff recommendation, as a part of the consent agenda.



Request for Town Council Action

Date: June 20, 2023

Submitted By: Amber Moreno, Human Resources Director

Reviewed By: Michelle Kivela, Town Manager

Title: **RESOLUTION NO. 23-046**
A Resolution to Appoint the Presiding Municipal Court Judge and
Approve the Presiding Municipal Court Judge Employment
Agreement

Department: Town Council

EXECUTIVE SUMMARY

The purpose of this resolution is to appoint the Presiding Municipal Court Judge and approve the Presiding Municipal Court Judge Employment Agreement.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The attached resolution provides for the appointment of the Presiding Municipal Judge and approves an associated employment agreement.

FINANCIAL IMPACT

This position was included in the 2023 budget process.

STRATEGIC GOAL(S)



**FOSTER COMMUNITY
CREATIVITY AND
ENGAGEMENT**



**INNOVATE WITH
COLLABORATIVE
GOVERNANCE**



**PROMOTE A SAFE AND
HEALTHY COMMUNITY**



**DEVELOP A VISIONARY
COMMUNITY THROUGH
BALANCED GROWTH**

ATTACHMENTS

1. Resolution No. 23-046

RECOMMENDED MOTION

I move to approve Resolution No. 23-046.

RESOLUTION NO. 23-046, Series of 2023

TITLE: A RESOLUTION TO APPOINT THE PRESIDING MUNICIPAL COURT JUDGE AND APPROVE THE PRESIDING MUNICIPAL COURT JUDGE EMPLOYMENT AGREEMENT

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, AS FOLLOWS:

Section 1. The Town Council of the Town of Parker hereby appoints Vincent White as the Presiding Municipal Court Judge for the Town of Parker.

Section 2. The Town Council of the Town of Parker hereby approves the Presiding Municipal Court Judge Employment Agreement, which is attached hereto as **Exhibit A** and incorporated herein.

RESOLVED AND PASSED this _____ day of _____, 2023.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

EXHIBIT A

PRESIDING MUNICIPAL COURT JUDGE EMPLOYMENT AGREEMENT

THIS PRESIDING MUNICIPAL COURT JUDGE EMPLOYMENT AGREEMENT (the “Agreement”) is made and entered into this ____ day of June, 2023, by and between the Town of Parker, a Colorado home rule municipality (the “Town”), and Vincent White (“Judge White”).

RECITALS:

A. The Town Council has determined to appoint Judge White as the Municipal Judge of the Town of Parker pursuant to Town of Parker Municipal Code § 3.02.030, and desires to set the salary of Judge White pursuant to Town of Parker Municipal Code § 3.02.090.

B. Judge White desires to accept the appointment as Municipal Judge, and the salary contained herein.

NOW, THEREFORE, it is hereby agreed that, for the consideration hereinafter set forth, Judge White shall be appointed as Municipal Judge of the Town of Parker.

I. TERM

Judge White is hereby appointed for an initial two-year term; provided, however, Judge White's initial two-year term may be deemed to expire, at the Town Council's sole discretion, on the date of the next regular election, or immediately following the next regular election.

II. COMPENSATION

Pursuant to Town of Parker Municipal Code § 3.02.080, the annual salary for Judge White shall be Forty-Five Thousand Dollars (\$45,000.00) per year. In the event Judge White is absent more than six percent (6%) of the scheduled municipal court sessions during any calendar year in which this Agreement is in effect, the Town may reduce the compensation described herein by the percentage of the municipal court sessions missed by Judge White.

III. COMPLIANCE WITH LAW

Nothing herein shall be deemed to create any additional terms, conditions or obligations of employment in addition to those provided for in the Town of Parker Home Rule Charter and the Town of Parker Municipal Code, nor is anything herein intended to change the nature of the Municipal Judge position as an appointed position under the Town of Parker Home Rule Charter and the Town of Parker Municipal Code; rather, this Agreement is simply intended to memorialize the term and salary of the Municipal Judge as required by the applicable law.

IN WITNESS WHEREOF, this Agreement is executed by the parties hereto as of the date first written above.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

VINCENT WHITE:



Request for Town Council Action

Date: June 20, 2023

Submitted By: John Fussa, Community Development Director
Bryce Matthews, Assistant Director - Planning
Jeff Miller, Community Development Coordinator

Reviewed By: Michelle Kivela, Town Manager

Title: **RESOLUTION NO. 23-055**
A Resolution to Appoint the Chair and to Appoint Members and Alternates to the Town of Parker Planning Commission

Department: Community Development, Bryce Matthews

EXECUTIVE SUMMARY

The Planning Commission has a total of 10 members, seven (7) regular and three (3) alternates, with terms of varying length. The Commission currently has openings for three (3) regular and three (3) alternate members because of term expirations and resignations. The purpose of this Resolution is to appoint the recommended applicants to fill the openings prior to June 30, 2023, so the Planning Commission may continue to operate without interruption. In addition, this Resolution will appoint the Chair of the Planning Commission.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The duties of the Planning Commission as defined by the Town Charter and the Parker Land Development Ordinance are to prepare the Master Plan, review applications for certain development proposals and make recommendations on land use matters to the Town Council. The Charter also requires the appointment of Planning Commission members satisfying the following requirements:

1. Each person appointed to the Planning Commission shall reside within the Town limits for at least one (1) year immediately preceding the date of appointment.
2. Each person appointed to the Planning Commission shall be registered to vote.

The Town Council is charged with appointing Regular Planning Commission members to three (3) year overlapping terms. Alternates are appointed to one (1) year terms. The Council will need to appoint three (3) Regular and three (3) Alternate Planning Commission members to fill positions with expiring terms.

Commissioner Roxy Colette has requested reappointment as a Regular Planning Commission member. Commissioner Richard Foerster will be resigning/retiring at the end of his current

term. Commissioner Kim Rodell will be resigning at the end of her current term because she is moving from the Town of Parker. Alternate Nick Metz has requested reappointment as a Regular or Alternate Planning Commission member. Alternate Jane Lane has requested reappointment as an Alternate Planning Commission member. Alternate Ira Shapiro is not recommended to be re-appointed due to lack of consistent attendance.

Four (4) candidates meeting the requirements for service applied for appointment to the Planning Commission, and they were interviewed on May 9, 2023. The review committee consisted of Town Councilmembers Brandi Wilks and Todd Hendreks, Planning Commission Chairman Gary Poole, Community Development Director John Fussa, Assistant Director - Planning Bryce Matthews, and Planning Coordinator Jeff Miller.

The review committee recommends the Town Council:

1. Appoint the following three (3) regular members to the Planning Commission:

- Roxy Colette – June 30, 2026
- Leland Sloan – June 30, 2026
- Nick Metz – June 30, 2026

2. Appoint the following three (3) alternate members for a 1-year term to the Planning Commission:

- Angela Lindstrom
- Jane Lane
- Erik Rieger

3. Reappoint Gary Poole as Chair of the Planning Commission.

FINANCIAL IMPACT

None

STRATEGIC GOAL(S)



DEVELOP A VISIONARY
COMMUNITY THROUGH
BALANCED GROWTH

ATTACHMENTS

1. Resolution No. 23-055

RECOMMENDED MOTION

I move to approve Resolution No. 23-055, as part of the consent agenda.

RESOLUTION NO. 23-055, Series of 2023

TITLE: A RESOLUTION TO APPOINT THE CHAIR AND TO APPOINT MEMBERS AND ALTERNATES TO THE TOWN OF PARKER PLANNING COMMISSION

WHEREAS, the terms for three (3) regular members of the Planning Commission expire June 30, 2023;

WHEREAS, the terms for three (3) alternate members of the Planning Commission expire June 30, 2023;

WHEREAS, the Town Council of the Town of Parker desires to appoint new regular and alternate members, as described herein; and

WHEREAS, the Town Council of the Town of Parker desires to appoint the Chair of Planning Commission, as described herein.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, AS FOLLOWS:

Section 1. The Town Council of the Town of Parker hereby appoints Gary Poole as Chairperson of the Planning Commission.

Section 2. The Town Council of the Town of Parker hereby appoints the following regular members to the Planning Commission for the term ending June 30, 2025, as described in **Exhibit A**, which is attached hereto and incorporated by this reference.

Section 3. The Town Council of the Town of Parker hereby appoints the following alternate members to the Planning Commission for the term ending June 30, 2023, as described in Exhibit A.

RESOLVED AND PASSED this _____ day of _____, 2023.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

EXHIBIT A

1. Appointment of two (2) regular member to the Parker Planning Commission, for a term up to and including June 30, 2024.

- a. Eliana Burke
- b. Erik Frandsen

2. Appointment of two (2) regular members to the Parker Planning Commission, for a term up to and including June 30, 2025.

- a. Ruth Ann Nelson
- b. Gary Poole

3. Appointment of three (3) regular members to the Parker Planning Commission, for a term up to and including June 30, 2026.

- a. Roxy Colette
- b. Nick Metz
- c. Leland Sloan

4. Appointment of three (3) alternates to the Parker Planning Commission, for a term up to and including June 30, 2024.

- a. Jane Lane
- b. Angela Linstrom
- c. Erik Rieger



Request for Town Council Action

Date: June 20, 2023

Submitted By: Chris Hudson, Deputy Director of Engineering

Reviewed By: Michelle Kivela, Town Manager

Title: **RESOLUTION NO. 23-057**
A Resolution Approving the Waiver of Bidding Requirements and Ratifying a Contract Related to Emergency Storm Drainage and Roadway Repairs for Bradbury Ranch Drive

Department: **Town Manager, Michelle Kivela**
Engineering and Public Works, Chris Hudson

EXECUTIVE SUMMARY

Due to an emergency closure of Bradbury Ranch Drive due to a sink hole caused by a failed drainage culvert, the Town of Parker needs to engage a contractor to expedite the needed drainage and roadway repairs. This resolution would approve a waiver of bidding requirements and ratify a contract related to these emergency repairs.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

On Sunday, June 11, 2023, an existing sixty-six (66) inch corrugated metal culvert pipe under Bradbury Ranch Drive between the Independence Drive intersection and the McClellan Road intersection failed during a rain event. This failure resulted in a sink hole that caused Bradbury Ranch Drive to be closed for use by the public. Bradbury Ranch Drive is a primary roadway for ingress/egress into the Bradbury Ranch subdivision located at the northwest corner of Jordan Road and Mainstreet.

The Town of Parker mobilized an emergency contractor on Sunday to temporarily stabilize the area as the sinkhole was continuing to grow. The contractor and Town staff continued to work overnight and into the morning of Monday, June 12th. The emergency contractor was able to temporarily stabilize the sink hole, but a hole of approximately fifteen (15) feet in depth spanning nearly the entire roadway still exists. Engineering/Public Works staff has engaged an on-call prequalified engineering consultant to complete a design of the necessary replacement drainage infrastructure but a drainage contractor is needed to complete the work. The Engineering/Public Works Department has successfully completed numerous large drainage infrastructure capital improvement projects with Naranjo Civil Constructors (NCC) and they were contacted about the needed emergency repairs. NCC has the necessary qualifications, experience, equipment and labor available to undertake these repairs.

On April 5, 2005, the Town of Parker voters approved an amendment to Section 15.8 of the Parker Charter to allow the Town Council to award public works construction contracts in the manner established by ordinance. Following the amendment, Parker Town Council, through ordinance, established the procedures for awarding public works construction contracts, which is reflected in Chapter 11.13 of the Code. Section 11.13.030(a) of the Code provides that public works construction contracts in excess of \$100,000 shall be by bid "unless the Town Council determines, upon recommendation of the Town Administrator, that the public interest will be best served by competitive proposal or by negotiating a contract with a single contractor." Furthermore, subsection (d) provides that "in case of emergency affecting the public peace, health or safety, the Town Council may waive all requirements for bidding or competitive proposals for an expenditure of more than one hundred thousand dollars (\$100,000.00). In such cases, the Town Administrator may direct the appropriate department head to procure emergency needs by informal, open-market procedures, at no more than commercial prices, as expeditiously as possible." The closure of Bradbury Ranch Drive is an emergency that affects the public peace, health and safety and the Town Manager has directed the Engineering/Public Works Director to procure the emergency repairs. The Engineering/Public Works Director and the Town Manager recommend that the public interest will be best served by negotiating a contract with a single contractor for the construction of the emergency storm drainage and roadway repairs for Bradbury Ranch Drive. This resolution would ratify a contract entered into with Naranjo Civil Constructors for the emergency repairs with a maximum value of \$300,000.

It is likely the total repair costs will exceed this initial contract dollar amount. Once staff receives the final material and labor costs, a contract amendment will be provided for Town Council approval.

FINANCIAL IMPACT

Funding for this emergency repair will be paid for by the Stormwater Utility Fund and Capital Improvement Fund.

STRATEGIC GOAL(S)



PROMOTE A SAFE AND
HEALTHY COMMUNITY



DEVELOP A VISIONARY
COMMUNITY THROUGH
BALANCED GROWTH

ATTACHMENTS

1. Resolution No. 23-057

RECOMMENDED MOTION

I move to approve Resolution No. 23-057.

RESOLUTION NO. 23-057, Series of 2023

TITLE: A RESOLUTION APPROVING THE WAIVER OF BIDDING REQUIREMENTS AND RATIFYING A CONTRACT RELATED TO EMERGENCY STORM DRAINAGE AND ROADWAY REPAIRS FOR BRADBURY RANCH DRIVE

WHEREAS, the Town of Parker Municipal Code, Section 11.13.030, provides a procedure where in the event of an emergency affecting the public peace, health or safety, the Town Council may waive all requirements for bidding or competitive proposals for an expenditure of more than one hundred thousand dollars (\$100,000.00);

WHEREAS, pursuant to a waiver approved by the Town Council, the Town Manager may direct the appropriate department head to procure emergency needs by informal, open-market procedures, at no more than commercial prices, as expeditiously as possible;

WHEREAS, on June 11, 2023, a culvert pipe failed under Bradbury Ranch Drive creating a large sink hole requiring the roadway to be closed;

WHEREAS, the damage to the roadway has an impact on public peace, health and safety, and the need to repair the damage is of an emergent nature;

WHEREAS, the Town Council recognizes the need for repairs to commence forthwith;

WHEREAS, the Town Council hereby finds, determines and declares that this Resolution is necessary for the preservation of the health, safety, and welfare of the Town of Parker;

WHEREAS, the Town Council hereby determines that it is in the best interest of the Town and its inhabitants that the Town Manager had the authority to allow the Engineering and Public Works Department Director to procure emergency repairs by informal, open-market procedures, at no more than commercial prices, as expeditiously as possible;

WHEREAS, the Public Works Ordinance provides that public works projects in excess of one hundred thousand dollars (\$100,000.00) shall be by bid “unless Town Council determines, upon recommendation of the Town Administrator, that the public interest will be best served by competitive proposal or by negotiating a contract with a single contractor;”

WHEREAS, the Town Manager recommends that the public interest will be best served by negotiating a contract with a single contractor for the construction project performing the repairs to the Bradbury Ranch Drive project;

WHEREAS, the Town Council believes that the public interest will be best served by negotiating a contract with a single contractor for the construction project performing the repairs to the Bradbury Ranch Drive project;

WHEREAS, the Town has entered into a contract with Naranjo Civil Constructors for the emergency repair work to Bradbury Ranch Drive in the amount of three hundred thousand dollars (\$300,000.00); and

WHEREAS, the Town Council has determined that it is in the best interest of the Town and its inhabitants that the Town has entered into a contract with Naranjo Civil Constructors for the emergency repair work to Bradbury Ranch Drive.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, AS FOLLOWS:

Section 1. The Town Council of the Town of Parker hereby waives the requirements for bidding or competitive proposals for a contract between the Town of Parker and Naranjo Civil Constructors in the amount of three hundred thousand dollars (\$300,000.00) for emergency repair work to Bradbury Ranch Drive and hereby ratifies the contract executed by the Town Manager and entered into for the same, based upon an emergency affecting the public peace, health and safety of the inhabitants of the Town of Parker and, as such, serving the best interests of the Town of Parker and its inhabitants.

RESOLVED AND PASSED this _____ day of _____, 2023.

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk



Request for Town Council Action

Date: June 20, 2023

Submitted By: Kristin Hoffmann, Town Attorney

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 5.28.32 – Second Reading**
A Bill for an Ordinance to Amend Chapter 5.02 of the Parker Municipal Code to Conform to Recent Changes to State Law Regarding the Sale of Wine and Allowing for Administrative Approval of Temporary Sales Rooms
Department: Town Attorney, Kristin Hoffmann
Town Clerk, Chris Vanderpool

EXECUTIVE SUMMARY

This ordinance makes revisions to the Parker Municipal Code regarding liquor licensing matters related to Proposition 125 and administrative approval of temporary liquor sales rooms.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

At the February and March Special Licensing Authority meetings, the Licensing Authority made two recommendations to the Town Council for revisions to the Parker Municipal Code regarding liquor licensing matters.

The first recommendation of the Authority is to revise the Parker Municipal Code to conform to the language approved in November of 2022 by the statewide approval of Proposition 125. The effect of Proposition 125 was to automatically convert fermented malt beverage off-premise retail licenses to fermented malt beverage and wine retailer licenses (allowing the sale of wine by licensees that previously were only authorized to sell fermented malt beverages). The Authority is recommending a change to reference this new nomenclature of fermented malt beverage and wine retailer license, consistent with the new language originating from the approval of Proposition 125.

The second recommendation of the Authority is to add the approval of temporary liquor sales rooms to those categories of licensing functions that may be administratively approved by the Town Clerk's Office. Pursuant to state liquor regulation, an entity seeking approval of a temporary salesroom (which is a State of Colorado approval/permit) is still required to seek the consent of the local licensing authority.

However, this consent by the Town as the local licensing authority is limited to the following:

1. Whether the temporary sales room "...would impact traffic, noise, or other neighborhood concerns...";
2. Whether the temporary sales room would result in a violation of the Colorado liquor code or the laws of the local government; or
3. Issuance of the permit would violate local zoning laws.

The form provided for the Town's consideration merely contains a space for a "Licensing Authority Signature" that provides that the Town either objects or does not object to the temporary sales room. In addition, the time for seeking consent of a temporary sales room is ten (10) business days for events lasting three (3) consecutive days or less.

Therefore, the Authority recommends this category of permit be added to Section 5.02.180 of the Parker Municipal Code, allowing for administrative approval by the Town Clerk's Office. The authorization for administrative approval still allows the Town Clerk to place the matter on the agenda for Authority approval if the Town Clerk's Office has any concerns with the application.

This ordinance makes the above-recommended revisions to the Parker Municipal Code.

FINANCIAL IMPACT

None.

STRATEGIC GOAL(S)

ATTACHMENTS

1. Ordinance No. 5.28.32

RECOMMENDED MOTION

I move to approve Ordinance No. 5.28.32 on second reading.

ORDINANCE NO. 5.28.32, Series of 2023

TITLE: A BILL FOR AN ORDINANCE TO AMEND CHAPTER 5.02 OF THE PARKER MUNICIPAL CODE TO CONFORM TO RECENT CHANGES TO STATE LAW REGARDING THE SALE OF WINE AND ALLOWING FOR ADMINISTRATIVE APPROVAL OF TEMPORARY SALES ROOMS

NOW, THEREFORE, THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, ORDAINS:

Section 1. Section 5.02.180, Subsection (b), of the Parker Municipal Code is hereby amended by the addition thereto of a new Subsection (6) as follows:

5.02.180 Administrative approval of certain applications.

* * *

(b) The Town Clerk is further authorized to administratively approve the following applications:

* * *

(4) Communal outdoor dining area applications; ~~and~~

(5) Festival permits; and

(6) Temporary Liquor Sales Rooms.

Section 2. The preamble to Division 2 and Section 5.02.360, Subsections (a) and (b), of the Parker Municipal Code are hereby amended as follows:

Division 2

Fermented Malt Beverage and Wine Retailer License

5.02.360 Application required; filing.

(a) An application for a fermented malt beverage and wine retailer license shall be required for the following:

(1) Sales for consumption off the premises of the licensee; and

(2) Sales for consumption on the premises of the licensee;

(b) All new applications for fermented malt beverage and wine retailer licenses shall be filed, in duplicate, on forms made available by the office of the Secretary of the State, with the Town Clerk and shall be accompanied by the following:

* * *

Section 3. Section 5.02.370 of the Parker Municipal Code are hereby amended as follows:

5.02.370 Fee.

An application fee and a license fee in the amount authorized by the Colorado Department of Revenue of five hundred dollars (\$500.00) and a license fee of three dollars and seventy-five cents (\$3.75) shall be paid to the Town at the time of making an application for a fermented malt beverage and wine retailer license, and a renewal fee as authorized by the Colorado Department of Revenue of twenty-five dollars (\$25.00) shall also be imposed by the Town for renewals. This fee shall be used by the Town to defray the expenses incurred by the Town in investigating the applicant and conducting the hearing. In addition, the Town shall impose those fees authorized by the Colorado Department of Revenue a fee of seventy-five dollars (\$75.00) for the registration of a manager if the manager is different from the licensed person, and shall also impose a fee as authorized by the Colorado Department of Revenue of seventy-five dollars (\$75.00) for a change of managers in accordance with Section 5.02.365. No part of this fee shall be refundable to the applicant for any reason.

Section 4. Section 5.02.380, Subsection (a), of the Parker Municipal Code is hereby amended as follows:

5.02.380 Establishing neighborhood and public hearing dates.

(a) The Town Clerk shall cause the application for a fermented malt beverage and wine retailer license to be placed on the agenda of a Special Licensing Authority meeting to be held not less than four (4) days nor more than thirty (30) days after the Clerk has received the application. The date of presentation of the application to the Special Licensing Authority shall be deemed the date of filing of the application.

* * *

Section 5. Section 5.02.390, Subsections (a) and (c), of the Parker Municipal Code are hereby amended as follows:

5.02.390 Public notice.

(a) The applicant for a fermented malt beverage and wine retailer license shall cause to be posted and published a public notice of hearing thereon. The sign used for posting such notice shall be of cardboard material, not less than twenty-two (22) inches wide and twenty-six (26) inches high, composed of letters not less than one (1) inch in height and stating the type of license applied for, the date of the application, the date of hearing, the name and address of the applicant, and such other information as may be required to fully apprise the public of the nature of the

application. If the applicant is a partnership, the sign shall contain the names and addresses of all partners. If the applicant is a corporation, association or other organization, the sign shall contain the names and addresses of the president, vice-president, secretary and manager or other managing officers.

* * *

(c) Where the building in which the fermented malt beverage and wine is to be sold is in existence at the time of the application for the license therefor, the sign shall be placed on the premises so as to be conspicuous and plainly visible to the general public from the exterior of the building. If the building is not in existence at the time of such application, the sign shall be posted upon the premises upon which the building is to be constructed in such manner that it shall be conspicuous and plainly visible to the general public.

Section 6. Section 5.02.400, Subsection (a), of the Parker Municipal Code is hereby amended as follows:

5.02.400 Investigation of applicant.

(a) The Police Department shall make an investigation of the applicant for a fermented malt beverage and wine retailer license, and, in the case of a corporation, the board of directors of the applicant, and, in the case of a partnership, the partners of the applicant. Such investigation shall include the fingerprinting and photographing of the applicant and the obtaining from the Colorado Bureau of Investigation a report on the applicant. A written report of the finding of such investigation shall be delivered by the Chief of Police to the Town Clerk at least ten (10) days prior to the hearing on the application.

* * *

Section 7. Section 5.02.410 of the Parker Municipal Code is hereby amended as follows:

5.02.410 Procedure at hearing.

The rules of procedure to be followed in the conducting of the public hearing upon an application for a fermented malt beverage and wine retailer license shall be established by the Special Licensing Authority.

Section 8. The first paragraph of Section 5.02.420 of the Parker Municipal Code is hereby amended as follows:

5.02.420 Considerations for approving or denying application.

Before entering any decision approving or denying the application for a fermented malt beverage and wine retailer license, the Special Licensing Authority shall consider the following:

* * *

Section 9. The first paragraph of Section 5.02.430 of the Parker Municipal Code is hereby amended as follows:

5.02.430 Approval or disapproval.

The decision of the Special Licensing Authority approving or disapproving the application for a fermented malt beverage **and wine retailer** license shall be in writing stating the reasons therefor and shall be issued within thirty (30) days after the date of the public hearing on the application. A copy of such decision shall be sent by mail to the applicant to the address shown in the application.

Section 10. Section 5.02.440 of the Parker Municipal Code is hereby amended as follows:

5.02.440 Business premises prerequisite.

In the case of buildings not yet in existence, where the Special Licensing Authority votes in favor of the issuance of a fermented malt beverage **and wine retailer** license, the license shall not be issued until the building in which the business is to be conducted is ready for occupancy, and then only after inspection of the premises has been made to determine that the applicant has complied substantially with the architect's drawings and plans and specifications submitted with the application for such license.

Section 11. Section 5.02.450 of the Parker Municipal Code is hereby amended as follows:

5.02.450 Change of location.

All of the procedures outlined in this Division shall be applicable to a change of location of an existing fermented malt beverage **and wine retailer** license.

Section 12. Section 5.02.460 of the Parker Municipal Code is hereby amended as follows:

5.02.460 Rehearing limitation.

No application for the issuance of fermented malt beverage **and wine retailer** license shall be considered by the Special Licensing Authority if an application for a similar type license has been denied for the same location within the two (2) years immediately preceding the date of such new application.

Section 13. Section 5.02.790, Subsection (a), of the Parker Municipal Code is hereby amended as follows:

5.02.790 Tastings authorized.

(a) Authorization. In accordance with Section 44-3-301(10)(a), C.R.S., the Town hereby authorizes "tastings," as that term is defined in Section 44-3-103(56), C.R.S., thereby allowing retail liquor store licensees, ~~and~~ liquor-licensed drug store licensees, and fermented malt beverage and wine retailer to conduct tastings subject to all of the limitations set forth in Section 44-3-301(10), C.R.S.

* * *

Section 14. Safety Clause. The Town Council hereby finds, determines, and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety, and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 15. Severability. If any clause, sentence, paragraph, or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 16. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney



Request for Town Council Action

Date: June 20, 2023

Submitted By: Brett Collins, Projects Administrator

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 9.260.1 – Second Reading**
A Bill for an Ordinance to Approve the First Amendment to the Intergovernmental Agreement By and Between the E-470 Public Highway Authority and the Town of Parker Regarding the Extension of the Existing E-470 Trail

Department: Parks, Recreation, and Open Space, Brett Collins

EXECUTIVE SUMMARY

The High Plains Trail project is a regional partnership between the Town of Parker, Douglas County, Arapahoe County, and the City of Aurora (The Partners Group) to design, construct and maintain a one-mile trail gap. The trail will connect the Cherry Creek Regional Trail to the High Plains Regional Trail at the Douglas/Arapahoe county line near Highway E-470 and East Cottonwood Drive. Please see the attached location map.

The E-470 Public Highway Authority is providing a portion of the funding to construct the High Plains Trail through an Intergovernmental Agreement (IGA) with the Town of Parker. On November 21, 2023, the current IGA will expire. The funding is still needed for the construction project, and staff recommends extending the IGA to December 31, 2025.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

The Partners Group was formed to raise funding, plan, design, engineer and construct the High Plains Trail project. Project funding was committed by the Partners Group, Denver Regional Council of Governments, Great Outdoors Colorado, E-470 Highway Authority, and the City of Centennial.

The project is currently under construction and has extended past the initially anticipated completion date, but funding from all agencies is still needed to complete the project. The IGA between the Town and E-470 Highway Authority restricts the transfer of their funds to the project until it is entirely constructed. In order to secure the funds, the IGA needs to be amended to extend the time.

FINANCIAL IMPACT

The E-470 Authority originally committed \$438,000 to construct the High Plains Trail, which is held in an interest-bearing account and is now approximately \$483,205.16.

STRATEGIC GOAL(S)



SUPPORT AN
ACTIVE COMMUNITY

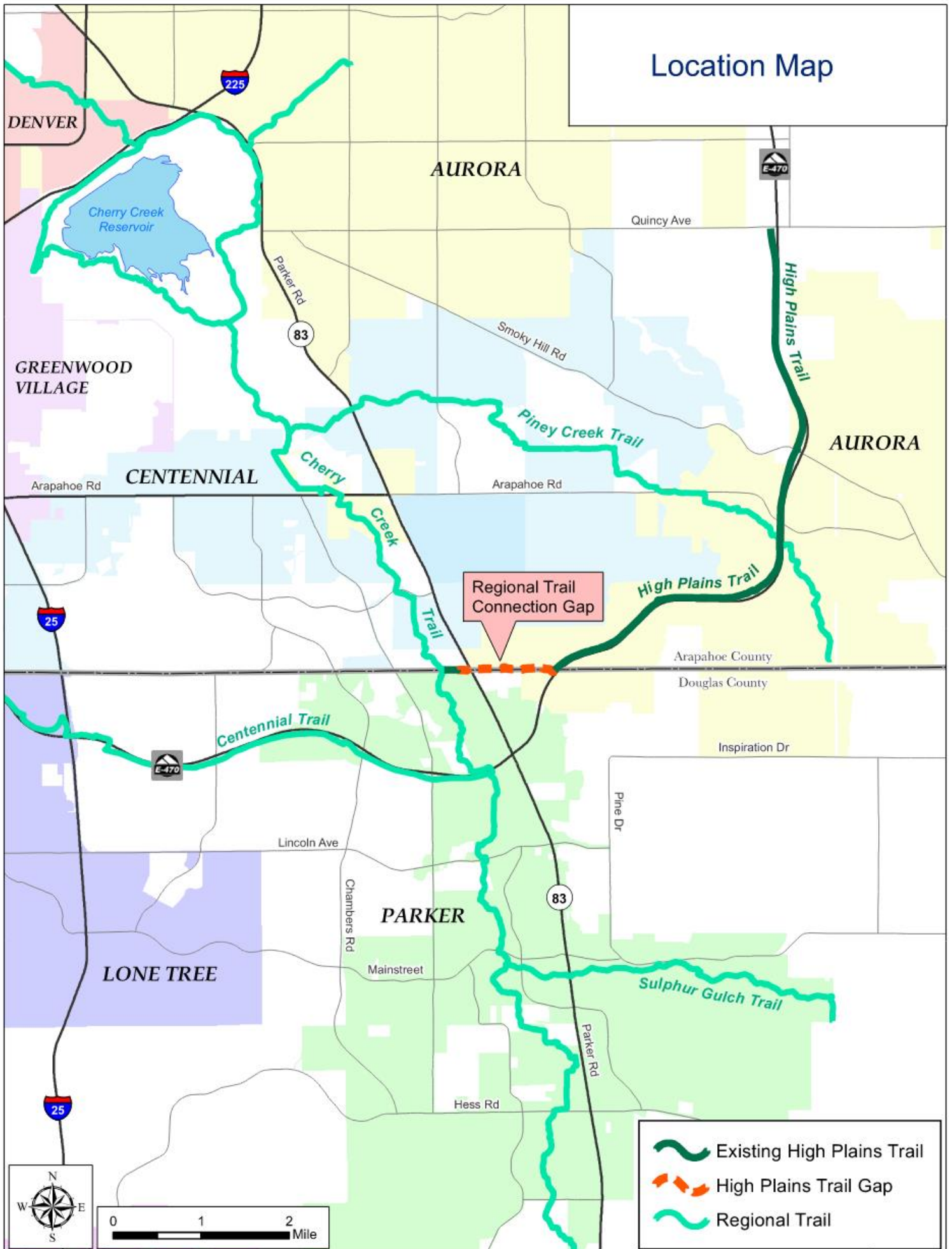
ATTACHMENTS

1. Location Map
2. Ordinance No. 9.260.1

RECOMMENDED MOTION

I move to approve Ordinance No. 9.260.1 on second reading.

Location Map



ORDINANCE NO. 9.260.1, Series of 2023

TITLE: A BILL FOR AN ORDINANCE TO APPROVE THE FIRST AMENDMENT TO THE INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN THE E-470 PUBLIC HIGHWAY AUTHORITY AND THE TOWN OF PARKER REGARDING THE EXTENSION OF THE EXISTING E-470 TRAIL

NOW, THEREFORE, THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, ORDAINS:

Section 1. The Town Council of the Town of Parker hereby approves the First Amendment to the Intergovernmental Agreement by and between the E-470 Public Highway Authority and the Town of Parker Regarding the Extension of the Existing E-470 Trail, which is attached hereto as **Exhibit 1** and incorporated herein by this reference, and authorizes the Mayor of the Town to enter into the Agreement on behalf of the Town.

Section 2. Safety Clause. The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 3. Severability. If any clause, sentence, paragraph or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 4. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney

EXHIBIT 1

**FIRST AMENDMENT TO
INTERGOVERNMENTAL AGREEMENT
BETWEEN
THE E-470 PUBLIC HIGHWAY AUTHORITY
AND
THE TOWN OF PARKER
REGARDING THE EXTENSION OF THE EXISTING E-470 TRAIL**

THIS FIRST AMENDMENT TO INTERGOVERNMENTAL AGREEMENT (the “First Amendment”) is made and entered into effective this _____ day of _____ 2023, by and between the E-470 PUBLIC HIGHWAY AUTHORITY, a body corporate and political subdivision of the State of Colorado (the “Authority”) and, the TOWN OF PARKER, a Colorado home rule municipality (the “Town”). The Authority and the Town may be collectively referred to herein as the “Parties” or individually as a “Party.”

RECITALS

WHEREAS, the Authority and the Town, as Colorado governments, are constitutionally and statutorily empowered pursuant to Colo. Const., Article XIV, §18 and Sections 29-1-201, *et seq.*, C.R.S., to cooperate or contract via intergovernmental agreement with one another to provide functions, services or facilities authorized to each cooperating government; and

WHEREAS, the Town and Authority are parties to that certain Intergovernmental Agreement Regarding the Extension of the Existing E-470 Trail, dated November 21, 2016, as extended by that certain Letter to Grant of Town of Parker Extension Request Per June 28, 2021 Letter, dated August 20, 2021, relating to the construction of portions of the recreational trail within the multi-use easement owned by the Authority from South Ireland Way to Cottonwood Drive (the “Agreement”); and

WHEREAS, in accordance with the Agreement, the Authority paid \$438,000 (the “Funds”) to be held by the Town in an interest-bearing account, to be returned on November 21, 2021, as extended to November 21, 2023, if certain Agreement conditions are not satisfied; and

WHEREAS, the Town has determined to undertake the design and construction of the privately owned portion of the recreational trail to ensure timely completion of the same; and

WHEREAS, to accommodate this additional work by the Town, the Town has requested that the Authority approve an additional extension of the term under the Agreement; and

WHEREAS, pursuant to Section VI.B. of the Agreement, the Agreement may not be amended, altered, or otherwise changed except by a written agreement between the Parties; and

WHEREAS, the Parties desire to enter into this First Amendment to extend the term of the Agreement for an additional two (2) years, through December 31, 2025; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties covenant and agree as follows:

AGREEMENT

1. **EXTENSION OF TERM.** Section I.C.5. of the Agreement, Authority Obligations, is hereby amended and restated in its entirety as follows:

5. The Construction Contribution shall be returned to the Authority, including any and all accrued interest (the “Funds”) by December 31, 2025 (the “Term”) if the conditions specified in Section (C)(2)(i) and (C)(2)(ii) have not been fulfilled.

2. **FULL FORCE AND EFFECT.** Except as expressly modified by this First Amendment, all other provisions of the Agreement shall remain in full force and effect.

3. **COUNTERPART EXECUTION.** This First Amendment may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

[The remainder of this page left intentionally blank. Signatures on following pages.]

TOWN OF PARKER, COLORADO

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM AND SUFFICIENCY:

Kristin Hoffman, Town Attorney



Request for Town Council Action

Date: June 20, 2023

Submitted By: Kelsey Hall, Assistant Town Attorney

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 1.583 – Second Reading**
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 3.1 Titled Town Council
Department: Town Attorney, Kelsey Hall

EXECUTIVE SUMMARY

This ballot question would amend Section 3.1 of the Charter to enable Town Council to set fines and imprisonment by ordinance in accordance with the limits authorized by state law.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

Section 3.1 of the Charter currently permits Town Council to enforce ordinances and regulations by ordaining fines up to \$1,000.00, imprisonment up to one (1) year, or both, for each offense. However, under a 2013 statutory amendment, a municipal court of record is authorized to impose a fine of up to \$2,650.00 (which was to be adjusted for inflation commencing on January 1, 2014) and imprisonment up to only 364 days. If approved, this Charter amendment would allow the Town's municipal court to operate consistently within the limits established by state law. The language of the amendment would enable Town Council to establish by ordinance the amount of fines and length of imprisonment that may be imposed by the municipal court, which would provide a greater ability to modify the same should state law change.

FINANCIAL IMPACT

\$45,000 has been appropriated for the 2023 election. The Douglas County Clerk and Recorder estimated that the total cost of the 2023 coordinated election is \$75,000.

STRATEGIC GOAL(S)



ATTACHMENTS

1. Ordinance No. 1.583

RECOMMENDED MOTION

I move to approve Ordinance No. 1.583 on second reading.

ORDINANCE NO. 1.583, Series of 2023

TITLE: A BILL FOR AN ORDINANCE SUBMITTING A BALLOT QUESTION TO THE REGISTERED ELECTORS OF THE TOWN OF PARKER AT THE NOVEMBER 7, 2023, SPECIAL ELECTION TO AMEND TOWN OF PARKER HOME RULE CHARTER SECTION 3.1 TITLED TOWN COUNCIL

WHEREAS, the Town of Parker shall hold a special election on November 7, 2023; and

WHEREAS, the Town Council desires to present to the electors of the Town of Parker a ballot question to amend the Home Rule Charter.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, THAT:

Section 1. The following ballot question shall be placed on the ballot of the November 7, 2023, special election of the Town of Parker for consideration by the registered electors:

Shall the Home Rule Charter of the Town of Parker be amended by amending and readopting Section 3.1 Town Council, as follows?

Section 3.1 Town Council

The Council shall have the power to enact and provide for the enforcement of all ordinances necessary to protect life, health, safety, welfare and property; to declare, prevent and summarily abate and remove nuisances; to preserve and enforce good government, general welfare, order and security of the Town and the inhabitants thereof; to enforce ordinances and regulations, by ordaining fines, ~~not exceeding one thousand (\$1000) dollars~~ or imprisonment, or both fine and imprisonment ~~not exceeding one (1) year~~ for each and every offense, **with such fines and length of imprisonment to be established by ordinance**; to provide for the granting of probation and the conditional suspension of sentences by the Municipal Court; and to delegate to boards and commissions, within limitations of the Constitution and this Charter, such functions, powers and authority of the Town as it deems proper and advisable. No enumeration or particular powers granted to the Council shall be construed to impair any general grant of power herein contained or granted by the State Constitution, nor to limit any such grant of powers of the same class or classes as those so enumerated.

YES _____ NO _____

Section 2. **Safety Clause.** The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to

the proper legislative object sought to be obtained. The Town Council further finds that the title to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 3. Severability. If any clause, sentence, paragraph or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 4. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney



Request for Town Council Action

Date: June 20, 2023

Submitted By: Kelsey Hall, Assistant Town Attorney

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 1.584 – Second Reading**
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 4.6 Titled Departments Created
Department: Town Attorney, Kelsey Hall

EXECUTIVE SUMMARY

This ballot question would amend Section 4.6 of the Charter to clean up the language for consistency with the 2019 amendment to Section 15.19 of the Charter, which authorized the Town Manager to prepare the Personnel Manual for the Town.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

Section 4.6 of the Charter currently provides that the Town Council may provide for the manner in which the department heads supervise, control, and discipline employees of departments created by the Charter or by ordinance. However, in 2019, the voters approved an amendment to Section 15.19 of the Charter, which now allows the Town Manager to prepare the Personnel Manual for the Town instead of Council. If approved, this Charter amendment would ensure consistency with the amended Section 15.19.

FINANCIAL IMPACT

\$45,000 has been appropriated for the 2023 election. The Douglas County Clerk and Recorder estimated that the total cost of the 2023 coordinated election is \$75,000.

STRATEGIC GOAL(S)



ATTACHMENTS

1. Ordinance No. 1.584

RECOMMENDED MOTION

I move to approve Ordinance No. 1.584 on second reading.

ORDINANCE NO. 1.584, Series of 2023

TITLE: A BILL FOR AN ORDINANCE SUBMITTING A BALLOT QUESTION TO THE REGISTERED ELECTORS OF THE TOWN OF PARKER AT THE NOVEMBER 7, 2023, SPECIAL ELECTION TO AMEND TOWN OF PARKER HOME RULE CHARTER SECTION 4.6 TITLED DEPARTMENTS CREATED

WHEREAS, the Town of Parker shall hold a special election on November 7, 2023; and

WHEREAS, the Town Council desires to present to the electors of the Town of Parker a ballot question to amend the Home Rule Charter.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, THAT:

Section 1. The following ballot question shall be placed on the ballot of the November 7, 2023, special election of the Town of Parker for consideration by the registered electors:

Shall the Home Rule Charter of the Town of Parker be amended by amending and readopting Section 4.6 Departments Created, as follows?

Section 4.6 Departments Created.

The administrative functions of the Town may be performed by including but not limited to the following departments: Water and Sanitation, Fire, Streets, Police, Finance, Executive, Parks and such other departments as are or may be established by this Charter or by ordinances of the Town. The Town, within a reasonable time, shall provide policies and procedures for such departments created. The Council may by ordinance create, consolidate or merge any of the departments, whether set forth in the Charter or created by ordinance, in order to achieve more efficient operation or administration. All departments of the Town, except as otherwise provided in this Charter, shall be under the supervision and control of the Town Administrator. ~~The Council may by ordinance or personnel regulations provide for the manner in which the department heads supervise, control and discipline employees of departments that are created by this Charter or by ordinance.~~

YES _____ NO _____

Section 2. **Safety Clause.** The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title

to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 3. Severability. If any clause, sentence, paragraph or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 4. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney



Request for Town Council Action

Date: June 20, 2023

Submitted By: Kelsey Hall, Assistant Town Attorney

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 1.585 – Second Reading**
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 8.3, Entitled Department of Police, Subsection c., Concerning the Oath of Office
Department: Town Attorney, Kelsey Hall

EXECUTIVE SUMMARY

This ballot question would amend Section 8.3 of the Charter to authorize the Chief of Police to administer the required oath or affirmation to new police officers.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

Section 8.3 of the Charter requires new police officers to take an oath or affirmation before the Town Clerk or a judge that they will support the Constitution and the laws of the United States, the State of Colorado, the Charter, and the Town's ordinances, and will faithfully perform the duties of the office upon which the officer is about to enter. If approved, this Charter Amendment would additionally authorize the Chief of Police to administer the oath.

FINANCIAL IMPACT

\$45,000 has been appropriated for the 2023 election. The Douglas County Clerk and Recorder estimated that the total cost of the 2023 coordinated election is \$75,000.

STRATEGIC GOAL(S)



ATTACHMENTS

1. Ordinance No. 1.585

RECOMMENDED MOTION

I move to approve Ordinance No. 1.585 on second reading.

ORDINANCE NO. 1.585, Series of 2023

TITLE: A BILL FOR AN ORDINANCE SUBMITTING A BALLOT QUESTION TO THE REGISTERED ELECTORS OF THE TOWN OF PARKER AT THE NOVEMBER 7, 2023, SPECIAL ELECTION TO AMEND TOWN OF PARKER HOME RULE CHARTER SECTION 8.3, ENTITLED DEPARTMENT OF POLICE, SUBSECTION c., CONCERNING THE OATH OF OFFICE

WHEREAS, the Town of Parker shall hold a special election on November 7, 2023; and

WHEREAS, the Town Council desires to present to the electors of the Town of Parker a ballot question to amend the Home Rule Charter.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, THAT:

Section 1. The following ballot question shall be placed on the ballot of the November 7, 2023, special election of the Town of Parker for consideration by the registered electors:

Shall the Home Rule Charter of the Town of Parker be amended by amending and readopting Section 8.3 Department of Police, Subsection c., as follows?

Section 8.3 Department of Police.

* * *

c. Before entering upon the duties of ~~his~~ the office of police officer for the Town of Parker, every police officer, ~~including the Chief of Police~~ shall take and subscribe before a judge, ~~or~~ the Town Clerk, or the Chief of Police, an oath or affirmation that the officer ~~he~~ will support the Constitution and the laws of the United States and of the State of Colorado, the Charter and ordinances of the Town, and will faithfully perform the duties of the office upon which ~~he~~ the officer is about to enter. Before entering upon the duties of the office of the Chief of Police, such individual shall take and subscribe before a judge or the Town Clerk, an oath or affirmation that the individual will support the Constitution and the laws of the United States and of the State of Colorado, the Charter and ordinances of the Town, and will faithfully perform the duties of the office of the Chief of Police.

YES _____ NO _____

Section 2. Safety Clause. The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience

and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 3. Severability. If any clause, sentence, paragraph or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 4. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney



Request for Town Council Action

Date: June 20, 2023

Submitted By: Kelsey Hall, Assistant Town Attorney

Reviewed By: Michelle Kivela, Town Manager

Title: **ORDINANCE NO. 1.586 – Second Reading**
A Bill for an Ordinance Submitting a Ballot Question to the Registered Electors of the Town of Parker at the November 7, 2023, Special Election to Amend Town of Parker Home Rule Charter Section 15.7 Titled Bequests, Gifts and Donations
Department: Town Attorney, Kelsey Hall

EXECUTIVE SUMMARY

This ballot question would amend Section 15.7 of the Charter to authorize Town Council to delegate its authority to receive or refuse gifts and donations and to make donations of personal property on behalf of the Town by ordinance.

STAFF RECOMMENDATION

Approve

BACKGROUND/DISCUSSION

Section 15.7 of the Charter authorizes Town Council to receive or refuse bequests, gifts, and donations of all kinds of property, and to make gifts or donations on behalf of the Town. As the Town has grown, it more frequently has instances of individuals who would like to make donations of personal property to the Town, in particular artwork. Additionally, the Town occasionally replaces personal property, such as chairs or office furniture, which do not have sufficient value to be auctioned or sold, but which could be donated to local organizations with a need for such property. If approved, this Charter amendment would give Town Council the ability to determine if there are circumstances when it is in the best interests of the Town to delegate Council's authority to receive or make gifts, and to pass an ordinance setting forth the specific delegation and parameters. This could help the Town more efficiently manage donations of artwork, for example, or of excess personal property.

FINANCIAL IMPACT

\$45,000 has been appropriated for the 2023 election. The Douglas County Clerk and Recorder estimated that the total cost of the 2023 coordinated election is \$75,000.

STRATEGIC GOAL(S)



ATTACHMENTS

1. Ordinance No. 1.586

RECOMMENDED MOTION

I move to approve Ordinance No. 1.586 on second reading.

ORDINANCE NO. 1.586, Series of 2023

TITLE: A BILL FOR AN ORDINANCE SUBMITTING A BALLOT QUESTION TO THE REGISTERED ELECTORS OF THE TOWN OF PARKER AT THE NOVEMBER 7, 2023, SPECIAL ELECTION TO AMEND TOWN OF PARKER HOME RULE CHARTER SECTION 15.7 TITLED BEQUESTS, GIFTS AND DONATIONS

WHEREAS, the Town of Parker shall hold a special election on November 7, 2023; and

WHEREAS, the Town Council desires to present to the electors of the Town of Parker a ballot question to amend the Home Rule Charter.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF PARKER, COLORADO, THAT:

Section 1. The following ballot question shall be placed on the ballot of the November 7, 2023, special election of the Town of Parker for consideration by the registered electors:

Shall the Home Rule Charter of the Town of Parker be amended by amending and readopting Section 15.7 Bequests, Gifts and Donations, as follows?

Section 15.7 Bequests, Gifts and Donations.

The Council, on behalf of the Town, may receive or refuse bequests, gifts and donations of all kinds or property in fee simple or in trust, for public, charitable or other purposes, and do all things and acts necessary to carry out the purposes of such bequests, gifts and donations, with the power to manage, lease, sell or otherwise dispose of the same in accordance with the terms of the bequests, gifts or trust. Council may delegate the responsibility for such bequests, gifts and donations to such persons as the Council may deem advisable.

The Council shall provide in each annual budget for the amount, if any, of money and Council may have available to donate for public charitable or other purposes. Any gift or donation the Council, on behalf of the Town, may make shall be by ordinance.

The Council may, by ordinance, delegate its authority, in whole or in part, to receive or refuse bequests, gifts and donations, including the power to manage, lease, sell or otherwise dispose of the same, and to make gifts or donations of personal property on behalf of the Town.

YES _____ NO _____

Section 2. **Safety Clause.** The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Parker, that it

is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained. The Town Council further finds that the title to this Ordinance was posted in two public places two days before the Town Council meeting, as provided by Section 7.5e. of the Town of Parker Home Rule Charter.

Section 3. **Severability.** If any clause, sentence, paragraph or part of this Ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

Section 4. This Ordinance shall become effective ten (10) days after final publication.

INTRODUCED AND PASSED ON FIRST READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

ADOPTED ON SECOND AND FINAL READING this ____ day of _____, 2023.

Jeff Toborg, Mayor

ATTEST:

Chris Vanderpool, Town Clerk

APPROVED AS TO FORM:

Kristin Hoffmann, Town Attorney