City of Greenwood Village

Agenda – Final
Planning and Zoning Commission

6060 South Quebec Street
Greenwood Village, CO
80111

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Tuesday, June 16, 2026 | **6:00 PM** | **Council Chambers**

DINNER (5:00 PM)

REGULAR MEETING (6:00 PM)

1. CALL TO ORDER

2. ROLL CALL

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF MINUTES

A. Tentative Minutes April 7, 2026 (2026-167)

5. PUBLIC COMMENT

6. PUBLIC HEARINGS

A. PZ-25-00031 Brinkerhoff 5390 Greenwood Plaza Blvd (Continued to July 21, 2026) (2026-139)

B. PZ-25-00063 Orchard Station Park 5615 DTC Pkwy (2026-130)

7. DISCUSSION ITEMS

8. NEW BUSINESS

9. ADJOURNMENT

City of Greenwood Village

Minutes – Final
Planning and Zoning Commission

6060 South Quebec Street
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Please turn off all cellular phones and/or audible pagers
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Tuesday, April 7, 2026	6:00 PM	Council Chambers

DINNER (5:00 PM)

REGULAR MEETING (6:00 PM)

1. CALL TO ORDER

The Planning & Zoning Commission of the City of Greenwood Village met in a regular session in the Council Chambers at Greenwood Village City Hall, 6060 South Quebec Street, Greenwood Village, County of Arapahoe, State of Colorado, at 6 p.m.

Staff in Attendence- Derek Sterz, Planning Manager; Brandon Nehl, Planner I, Krista Ashford, Planning Technician.

2. ROLL CALL

Present: *6 - Richard Easton, Eric Montag, Tim Hascall, Jeffrey Litman, Steve Moran, Scott Sax*
Absent: *1 - Randy Davis*
Presiding: *Tim Hascall*

3. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance led by Commissioner Moran.

4. APPROVAL OF MINUTES

A motion was made by Commissioner Richard Easton, seconded by Commissioner Scott Sax; to Accept Approval of Minutes. The motion carried by unanimous voice vote.
Yes: *6 - Richard Easton, Eric Montag, Tim Hascall, Jeffrey Litman, Steve Moran, Scott Sax*

No: *0 - None*
Recused: *0 - None*

5. ELECTION OF CHAIR

A motion was made by Commissioner Richard Easton, seconded by Commissioner Steve Moran; to Adopt Election of Chair, Tim Hascall. The motion carried by unanimous voice vote.

Yes: *6 - Richard Easton, Eric Montag, Tim Hascall, Jeffrey Litman, Steve Moran, Scott Sax*
No: *0 - None*
Recused: *0 - None*

6. ELECTION OF VICE CHAIR

A motion was made by Commissioner Eric Montag, seconded by Commissioner Scott Sax; to Adopt the Election of Vice Chair, Steve Moran. The motion carried by unanimous voice vote.

Yes: *6 - Richard Easton, Eric Montag, Tim Hascall, Jeffrey Litman, Steve Moran, Scott Sax*
No: *0 - None*
Recused: *0 - None*

7. PUBLIC HEARINGS

A. PZ-25-00060 - Ionna EVCS - Site Development Plan - 6565 S Boston St (2026-72)

Planner Nehl stated that a notice of the date, time, and place of the hearing was published on the City website at least 15 days prior to the hearing, as required by the Greenwood Village Municipal Code. Notice of the hearing was also posted on the property for at least 15 days prior to the hearing, as required by the Greenwood Village Municipal Code. Notice of the hearing date, time, and place was also sent by mail to property owners as required by the Greenwood Village Municipal Code for this type of hearing at least 15 days prior to the hearing.

Planner Nehl presented his staff report.

Andres Villacres Dewberry 4822 Stirrup Creek Drive, Durham, NC 27703 did not have a report but was there to answer any questions.

Questions to staff
Commissioners asked to clarify if the majority of users were longer stay tenants from the neighborhood or guests of the hotel. Planning team clarified it would be up to state guidelines and policies from the hotel. Home rule city uses it as guidelines not direct mandate. Applicant responded that Marriott is aware that it is public parking, not just for hotel guests.

Discussed capacity Level three will charge from 0-80% in 30 minutes. Allowed to tow if non-guests are staying for longer than an hour. Non-EV vehicles towed would be to the discretion of Marriott

Verified disability accessable spaces are avilable.

Commission suggested policies from GV be enacted instead of the 26-page state document currently used as a guideline. Discussed design elements of this station versus previous.

Chair Hascall observed no public comment. Closed the case for comission discussion.

A motion was made by Commissioner Jeffrey Litman, seconded by Commissioner Eric Montag; to Approve PZ-25-00060 - Ionna EVCS - Site Development Plan - 6565 S Boston St. The motion carried by unanimous voice vote.

Yes: *6 - Richard Easton, Eric Montag, Tim Hascall, Jeffrey Litman, Steve Moran, Scott Sax*
No: *0 - None*
Recused: *0 - None*

B. PZ-26-00011 - The Orchard Second Amendment - 8081 E Orchard Rd (Applicant has withdrawn application.) (2026-54)

Planning Manager announced case withdrawn by applicant. No applicant no case no exhibit.

Commission confirmed previously approved case stands at this time, the 1st amendment is the authoritative approved document.

County Clerk and Recorder would have the registered Plat SDP and SUP. Vested rights would remain for three years after recording. They have currently not been recorded. City staff are focused on Code Enforcement issues, and demolition permits are only issued. Applicant spoke today to the staff about the May-June timeline.

8. PUBLIC COMMENT

No public comment was requested for this meeting.

9. NEW BUSINESS

Comission Chair had a discussion with commissioners and suggested his intent to speak with members of the city council, P&Z, and establish a series of planning sessions from 5pm to 6pm, similar to council study sessions.

The Planning Manager suggested he would also assist in organizing through the City Manager. They would be posted as study sessions.

10. DISCUSSION ITEMS

The Commission thanked Vice Chair Easton for his service. Appreciated his attention to detail and great affection for the Village. Thanked staff as well.

11. ADJOURNMENT

There being no further business, the meeting was adjourned.

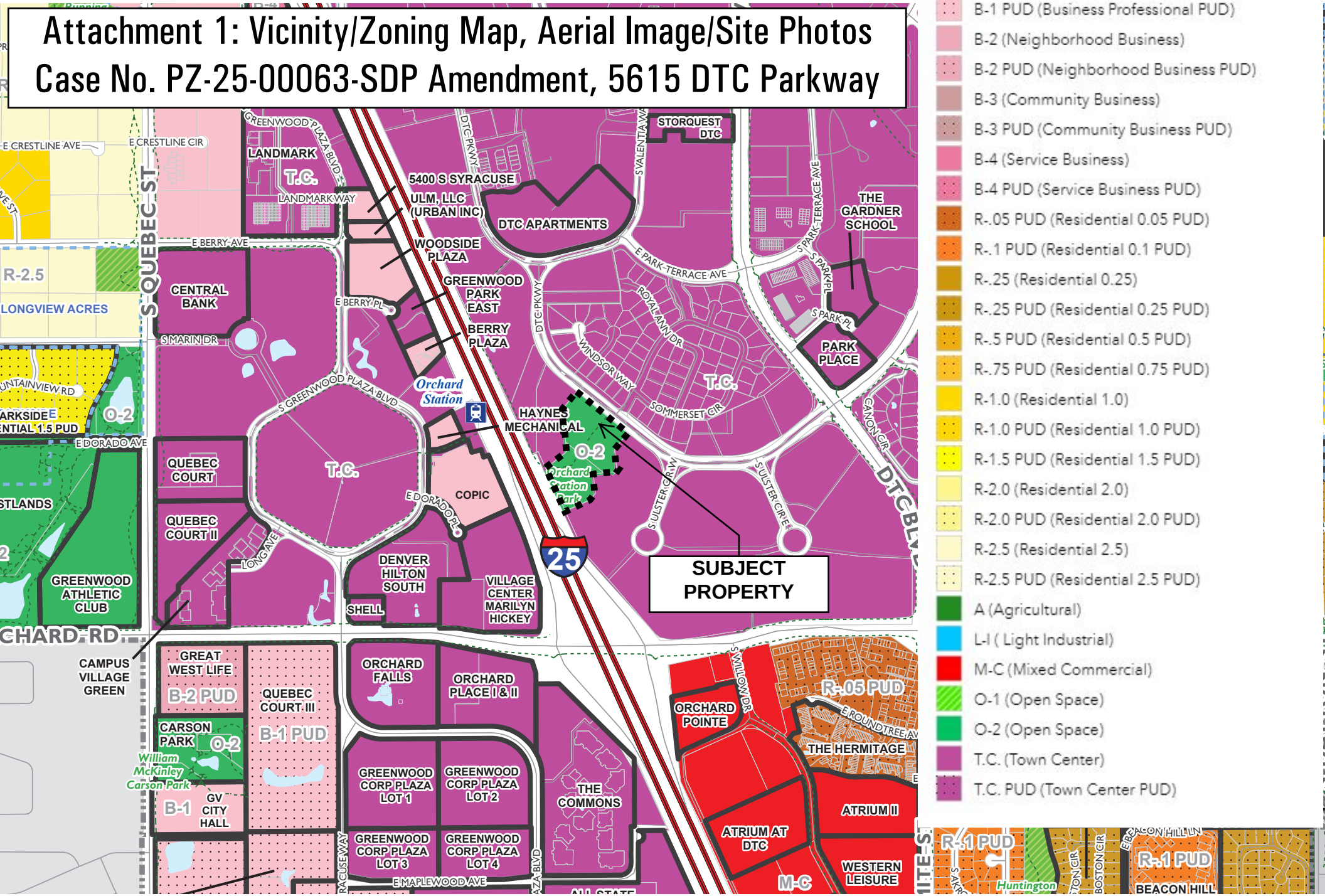
A motion was made by Commissioner Eric Montag; to Adjourn Adjournment. The motion carried by unanimous voice vote.

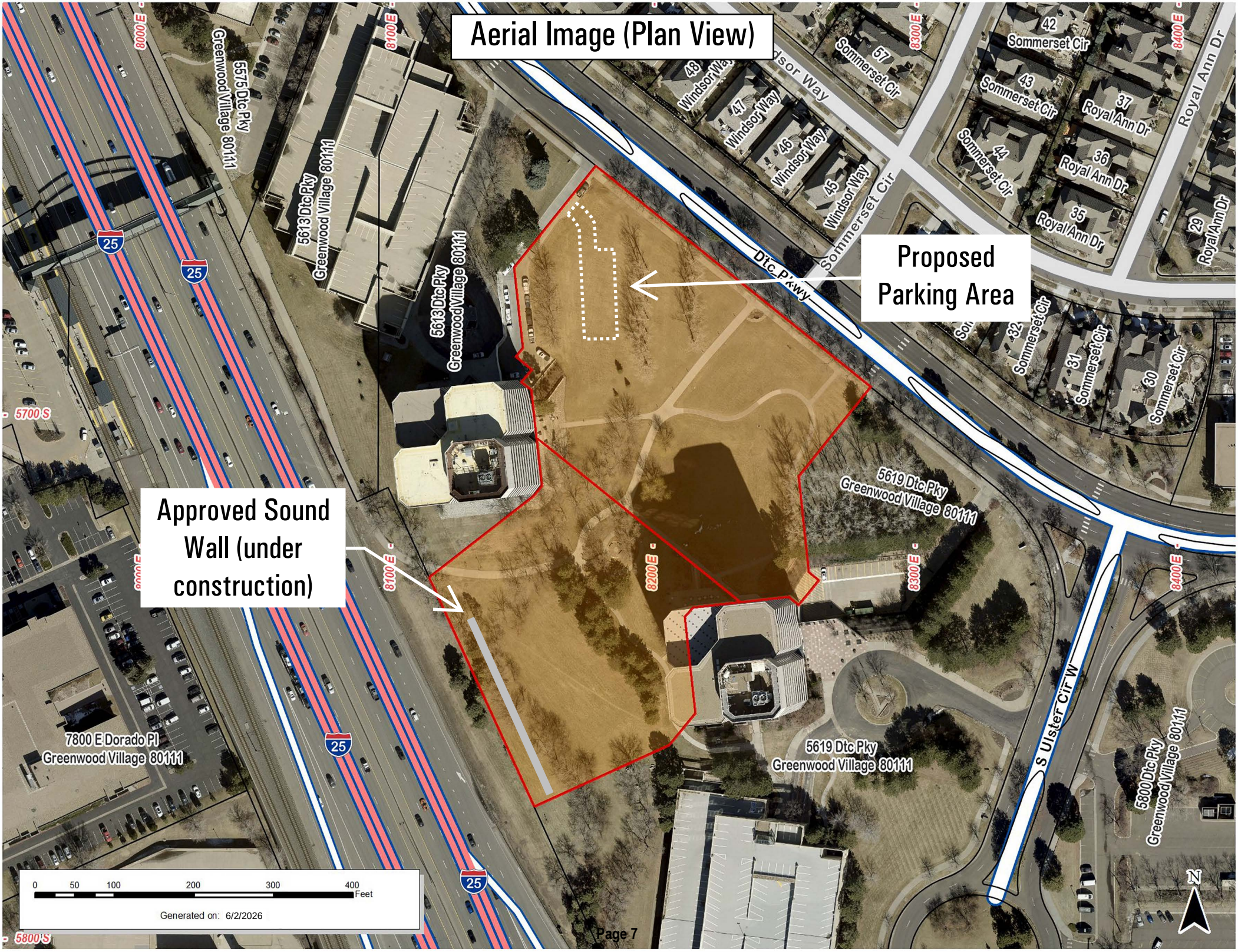
Yes: *6 - Richard Easton, Eric Montag, Tim Hascall, Jeffrey Litman, Steve Moran, Scott Sax*

No: *0 - None*

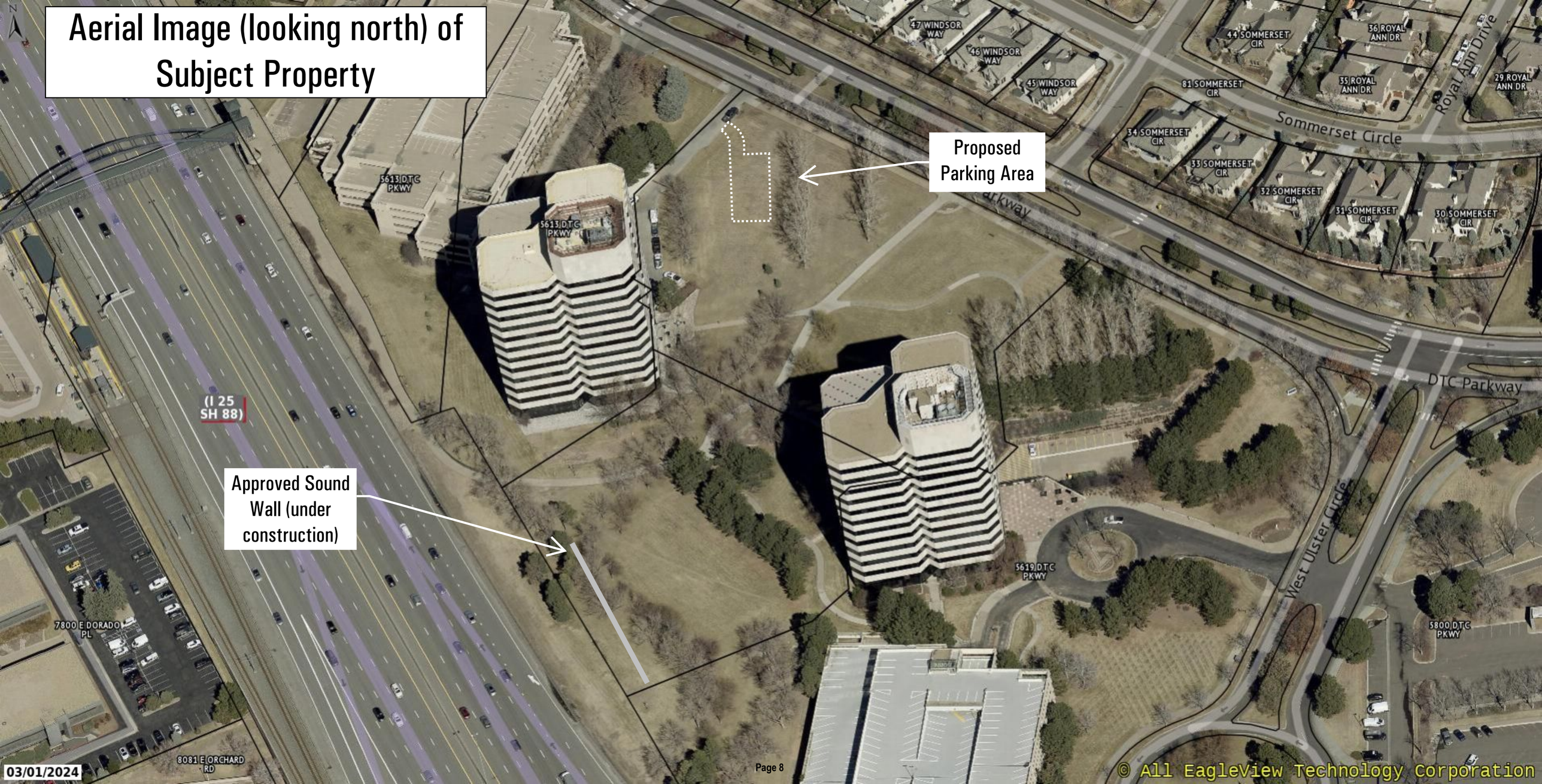
Recused: *0 - None*

Attachment 1: Vicinity/Zoning Map, Aerial Image/Site Photos
Case No. PZ-25-00063-SDP Amendment, 5615 DTC Parkway




Aerial Image (Plan View)
Proposed Parking Area
Approved Sound Wall (under construction)
5619 Dtc Pky Greenwood Village 80111
7800 E Dorado Pl Greenwood Village 80111
5613 Dtc Pky Greenwood Village 80111
5575 Dtc Pky Greenwood Village 80111
Dtc Pkwy
Sommerset Cir
Windsor Way
Royal Ann Dr
S Ulster Cir W
5800 Dtc Pky Greenwood Village 80111
8000 E
8100 E
8200 E
8300 E
8400 E
5700 S
5800 S
25
0 50 100 200 300 400 Feet
Generated on: 6/2/2026
N

Aerial Image (looking north) of Subject Property



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Street-view (looking west) of Subject Property

Street-view (looking east) of Subject Property from Interstate 25 Southbound Left Hand Lane

ORCHARD STATION PARK

SITE DEVELOPMENT PLAN - FIRST AMENDMENT

PART OF LOTS 4 AND 5, BLOCK 6, A RESUBDIVISION OF A PART OF BLOCK 1, DENVER TECHNOLOGICAL CENTER FILING NO. 3, LOCATED IN SECTION 6, TOWNSHIP 5 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN CITY OF GREENWOOD VILLAGE, COUNTY OF ARAPAHOE, STATE OF COLORADO

COVER SHEET

PZ-25-00063

PROJECT TEAM

OWNER / DEVELOPER

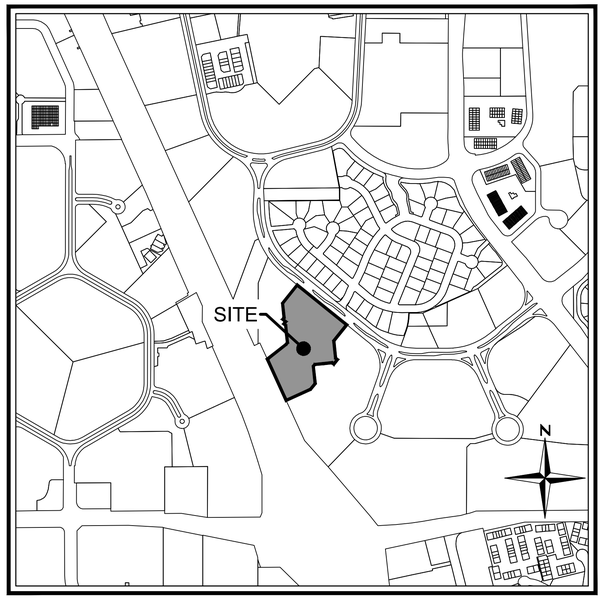
GOLDSMITH METRO DISTRICT
8351 EAST BELLEVIEW AVENUE
DENVER, CO 80237
TEL: 303.773.1700
CONTACT: LEE DEHMLOW

CIVIL ENGINEER

REDLAND
1500 W. CANAL CT.
LITTLETON, CO 80120
720.283.6783 voice
CONTACT: ROB OGLESBY, PE

LANDSCAPE ARCHITECT/PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET
SUITE 200
DENVER, CO 80210
720.358.9518 voice
CONTACT: JOSH FREEHLING, RLA



VICINITY MAP
SCALE: 1" = 500'

SHEET INDEX	
Sheet Number	Sheet Title
C1.0	COVER SHEET
C1.1	GENERAL NOTES
C2.0	SITE PLAN
C2.1	SITE PLAN DETAILS
C2.2	SITE PLAN DETAILS
C2.3	STORM SEWER DETAILS
C2.4	DEMO PLAN
C3.0	EROSION CONTROL PLAN
C3.1	EROSION CONTROL DETAILS
C3.2	EROSION CONTROL DETAILS
C3.3	GRADING & DRAINAGE PLAN
C3.4	GRADING & DRAINAGE PLAN
C3.5	EXISTING CONDITIONS GRADING PLAN
C4.0	UTILITY PLAN
C5.0	EMERGENCY ACCESS PLAN
C6.0	LANDSCAPE PLAN
C6.1	LANDSCAPE PLAN
C6.2	LANDSCAPE DETAILS
C6.3	LANDSCAPE DETAILS
C7.0	IRRIGATION COVER
C7.1	IRRIGATION PLAN
C7.2	IRRIGATION PLAN
C8.0	SITE LIGHTING PHOTOMETRICS
C8.1	LIGHTING FIXTURE CUT SHEETS
C9.0	SITE SECTIONS

DEVELOPMENT STANDARDS	EXISTING	PROPOSED
MINIMUM OPEN SPACE COVERAGE (PERCENT & SQUARE FEET)	237,446 SQ (5.451 ACRES)	237,446 SQ (5.451 ACRES)
MAXIMUM BUILDING GROUND COVERAGE (PERCENTAGE & SQAURE FEET)	N/A	N/A
MAXIMUM BUILDING HEIGHT	N/A	N/A
MAXIMUM NET FLOOR AREA (NFA)	N/A	N/A
MAXIMUM PARKING/ DRIVE AISLE COVERAGE (PERCENTAGE & SQUARE FEET)	4,503 SF (1.9%)	9,083 SF (3.8%)
MINIMUM LOT FRONTAGE	N/A	N/A
FRONT SETBACK	N/A	N/A
SIDE SETBACK	N/A	N/A
REAR SETBACK	N/A	N/A
STANDARD PARKING SPACES	0	10
ACCESSIBLE PARKING SPACES	0	1
BICYCLE PARKING SPACES	0	12

SITE DATA TABLE	
ZONING	OPEN SPACE 2 (0-2)
GOVERNING MASTER DEVELOPMENT PLAN	DENVER TECH CENTER MDP
SITE AREA (IN SQAURE FEET & ACRES)	237,446 SQ (5.451 ACRES)
LAND USE - IF MULTIPLE LAND USES ARE PROPOSED, PROVIDE A BREAKDOWN IN SQUARE FEET AND ACRES BY TYPE	OPEN SPACE
TOTAL NUMBER OF LOTS	N/A
TOTAL NUMBER OF BUILDINGS	N/A
NUMBER OF STORIES FOR EACH BUILDING	N/A
NET FLOOR AREA FOR EACH BUILDING AND FOR EACH PROPOSED USE	N/A
TOTAL NUMBER OF TRACTS	N/A
OWNERSHIP AND MAINTENANCE OF ALL TRACTS	OWNER: CITY OF GREENWOOD VILLAGE AND GOLDSMITH METRO DISTRICT MAINTENANCE: MERIDIAN METRO DISTRICT
BUILDING CONSTRUCTION TYPE	N/A
RIGHT-OF-WAY DEDICATION (IN SQUARE FEET & ACRES)	N/A
LOCATION AND ACREAGE OF ANY LAND TO BE DEDICATED TO PUBLIC USE	237,446 SQ (5.451 ACRES)

PROPERTY OWNER:
GOLDSMITH METRO DISTRICT

EXECUTED THIS___ DAY OF ____, 20___

BY: _____

AS: OWNER AND MANAGER

STATE OF COLORADO)
) SS.
COUNTY OF ARAPAHOE)

THE FOREGOING CERTIFICATE OF OWNERSHIP WAS

ACKNOWLEDGE BEFORE ME THIS _____ DAY OF _____, 20_____.

BY:_____

AS:_____

NOTARY PUBLIC

MY COMMISSION EXPIRES_____

CLERK AND RECORDER CERTIFICATE:
THIS PLAN WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF ARAPAHOE COUNTY.

AT____ .M. ON THE ____ DAY OF ____, 20___

IN BOOK, ____, PAGE ___, MAP ____, RECEPTION _____

COUNTY CLERK AND RECORDER

_____
BY: COUNTY CLERK DATE

_____
BY: COUNTY CLERK DATE

RECOMMENDED FOR APPROVAL BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF GREENWOOD VILLAGE.

THIS_____ DAY OF _____ , 20_____

_____
CHAIR

VESTING NOTE:

THIS PLAN CONSTITUTES A SITE SPECIFIC DEVELOPMENT PLAN PURSUANT TO THE GREENWOOD VILLAGE MUNICIPAL CODE AND C.R.S., SECTION 24-68-101, AND ESTABLISHES VESTED PROPERTY RIGHTS, FOR THREE (3) YEARS FROM ITS EFFECTIVE DATE, TO UNDERTAKE AND COMPLETE THE DEVELOPMENT AND USE OF THE PROPERTY IN ACCORDANCE WITH THIS PLAN.

PZ-25-00063

Redland
WHERE GREAT PLACES BEGIN
720.283.6783
REDLAND.COM
▪ Land Planning ▪ Civil Engineering ▪ Landscape Architecture ▪ Construction Management

NO.	DATE	NOTES

PROJECT NO: 23023

NO.	DATE	NOTES
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/13	ISSUED TO GREENWOOD VILLAGE
5	2025/12/05	FIRST AMENDMENT
6	2026/02/20	FIRST AMENDMENT
7	2026/04/03	FIRST AMENDMENT

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
COVER SHEET

SHEET
C1.0

I:\2023\23023 - Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 - Cover Sheet.dwg tdb: C1.0 COVER SHEET May 29, 2026 - 9:55am roglesby

ENGINEER'S NOTES

1. PROJECT CONTROL/BENCHMARK:

   LOCAL SITE BENCHMARK:

   UDFCD BENCHMARK NUMBER CC-9 BEING A 3-1/4" ALUMINUM ALLOY CAP STAMPED "UDFCD CC - 9" LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF S JOILET STREET AND INVERNESS DRIVE EAST, 46.5' NORTH OF THE CENTER LINE OF INVERNESS DRIVE EAST AND 59' EAST OF THE CENTERLINE OF SOUTH JOILET STREET.

   ELEVATION = 5732.89 FEET (NAVD88)

   ALL ELEVATIONS SHOWN ON THESE PLANS ARE REFERENCED TO THE PROJECT BENCHMARK. HORIZONTAL CONTROL, INCLUDING THE BASIS OF BEARING, SHALL BE IN ACCORDANCE WITH THE FINAL PLAT FOR THIS PROJECT.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFEGUARDING THE PROJECT BENCHMARK AND OTHER SURVEY MONUMENTS AND SHALL HAVE A REGISTERED LAND SURVEYOR TIE OUT AND RESET ANY PROPERTY CORNERS OR SECTION CORNERS PLANNED TO BE DISTURBED BY CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY INADVERTENTLY DISTURBED OR DAMAGED MONUMENTS AND SHALL HAVE THEM REESTABLISHED AND REPLACED BY A REGISTERED LAND SURVEYOR.
3. THE CONTRACTOR SHALL COMPLY, AND PERFORM WORK IN ACCORDANCE, WITH THE REQUIREMENTS OF THE GEOTECHNICAL (SOILS) REPORT(S) PREPARED FOR THIS PROJECT. GEOTECHNICAL INFORMATION FOR THIS PROJECT IS BASED ON THE REPORT GEOTECHNICAL ENGINEERING REPORT, ORCHARD STATION PARK IMPROVEMENTS, 5613-5619 DTC PARKWAY, DENVER, COLORADO, DECEMBER 20, 2024, COLE GARNER GEOTECHNICAL. IN THE EVENT OF A DISCREPANCY BETWEEN THE GEOTECHNICAL REQUIREMENTS AND JURISDICTIONAL REQUIREMENTS, THE MORE STRINGENT REQUIREMENT SHALL BE FOLLOWED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND GEOTECHNICAL ENGINEER IN THE EVENT THAT A DISCREPANCY OCCURS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE SERVICES OF A QUALIFIED TESTING LABORATORY TO PERFORM ALL COMPACTION TESTING, ASPHALT TESTING, CONCRETE TESTING, AND ANY OTHER TESTING AS MAY BE REQUIRED TO COMPLETE THE WORK. TESTING RESULTS MUST BE SUBMITTED FOR ALL PHASES OF THIS PROJECT PER THE APPLICABLE GOVERNING AGENCIES REQUIREMENTS.
5. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE (1) SET OF "REDLINED" PRINTS OF THE CONSTRUCTION PLANS. THE "REDLINED" PRINTS SHALL BE KEPT CURRENT TO ACCURATELY REPRESENT THE DIMENSIONS AND LOCATIONS OF ALL WORK PERFORMED BY THE CONTRACTOR. THE CONTRACTOR MUST PRESENT THE "REDLINED" PRINTS TO THE ENGINEER (REDLAND) TIMELY UPON COMPLETION OF EACH PHASE OF THE WORK.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPTLY NOTIFYING THE ENGINEER OF ANY PROBLEMS OR POTENTIAL PROBLEMS IN CONFORMING TO THE DESIGN LINE AND GRADE FOR ANY ELEMENT OF THE CONSTRUCTION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPTLY NOTIFYING THE ENGINEER OF SITE CONDITIONS THAT DIFFER FROM THOSE SHOWN ON THE APPROVED PLANS.
7. IN THE EVENT THE CONTRACTOR ALLOWS, AUTHORIZES, APPROVES OR CONSTRUCTS ITEMS THAT DIFFER FROM THE APPROVED PLANS, SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, WITHOUT WRITTEN APPROVAL BY THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY LIABILITY ARISING FROM SUCH CHANGES.
8. THE CONTRACTOR SHALL PERFORM ALL WORK ACCORDING TO ALL CITY, COUNTY, STATE AND FEDERAL SAFETY AND HEALTH REGULATIONS. IN PARTICULAR, THE TRENCHING AND OPEN EXCAVATION OPERATIONS SHALL COMPLY WITH ALL CURRENT O.S.H.A. REGULATORY REQUIREMENTS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, AND ANY OTHER NEEDED ACTION TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JOB SITE CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROTECTION OF PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED ONLY TO WORKING HOURS. THE CONTRACTOR SHALL DEFEND INDEMNIFY AND HOLD THE OWNER, THE ENGINEER AND THE GOVERNING JURISDICTION HARMLESS FOR ANY AND ALL LIABILITY, IN CONNECTION WITH THE PERFORMANCE OF WORK, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE ENGINEER OR THE GOVERNING JURISDICTION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE, PASSABLE ACCESS TO PRIVATE PROPERTIES ADJACENT TO THE WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
12. THE TYPE, SIZE, LOCATION, AND NUMBER OF UNDERGROUND UTILITIES ARE APPROXIMATE WHERE SHOWN ON THE PLANS AND WERE TAKEN FROM RECORDS OF THE CONTROLLING AGENCIES AND/OR FROM MARKINGS IN THE FIELD BY AN AGENCY AND/OR UTILITY LOCATING CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR COMPLETENESS OR ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK AND PARTICIPATE IN THE RESOLUTION OF ANY CONFLICTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

ENGINEER'S NOTES (CONTD)

13. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO FOR THE LOCATION OF UNDERGROUND GAS, ELECTRIC AND COMMUNICATION UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION (CALL 811 OR 1-800-922-1987). THE CONTRACTOR SHALL ALSO NOTIFY OTHER APPLICABLE UTILITY COMPANIES TO OBTAIN FIELD LOCATES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
14. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO COORDINATE SCHEDULES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANY.
15. TEMPORARY EROSION CONTROL MEASURES SHALL BE PROVIDED BY THE CONTRACTOR DURING CONSTRUCTION AS IDENTIFIED IN THE EROSION CONTROL AND/OR STORMWATER MANAGEMENT PLANS. MAINTENANCE OF ONSITE DRAINAGE AND EROSION CONTROL FACILITIES DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. HOWEVER, REMOVALS SHALL NOT OCCUR UNTIL THE GOVERNING JURISDICTION HAS GIVEN APPROVAL TO REMOVE ANY OF THE MEASURES.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING NEARBY PUBLIC OR PRIVATE STREETS OF MUD AND DEBRIS, DUE TO CONSTRUCTION ACTIVITIES, ON A DAILY BASIS OR AS DIRECTED BY GOVERNING JURISDICTION PERSONNEL.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT OF ANY DAMAGED EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, PAVEMENT, CURB AND GUTTER, SIDEWALK, LANDSCAPING, IRRIGATION, SIGNAGE, STRIPING, AND UTILITIES.
18. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY." FOR INFORMATION, CONTACT THE COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, WQCD-PE-B2, 4300 CHERRY DRIVE SOUTH, DENVER, COLORADO, 80246-1530, ATTENTION: PERMITS AND ENFORCEMENT SECTION. PHONE (303) 692-3590.
19. IF DEWATERING IS TO BE USED TO INSTALL UTILITIES OR CONSTRUCT IMPROVEMENTS, A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT IS REQUIRED IF DISCHARGE IS INTO A STORM SEWER, CHANNEL, IRRIGATION DITCH, OR ANY WATERS OF THE UNITED STATES.
20. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES THE APPROPRIATE EDITION OF THE GOVERNING JURISDICTION DESIGN AND CONSTRUCTION STANDARDS, ONE SET OF APPROVED CONSTRUCTION PLANS, THE STORMWATER MANAGEMENT PLAN, AND ALL REQUIRED PERMITS.
21. ALL STREET, SANITARY SEWER, STORM SEWER AND WATERLINE CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE APPLICABLE GOVERNING LOCAL AGENCY CURRENT AT THE DATE OF CONSTRUCTION PLAN APPROVAL. FOR ELEMENTS OF WORK NOT COVERED BY LOCAL AGENCY STANDARDS AND SPECIFICATIONS, ALL CONSTRUCTION SHALL CONFORM TO THE APPROPRIATE EDITION OF THE STANDARDS AND SPECIFICATIONS OF THE COLORADO DEPARTMENT OF TRANSPORTATION, THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, AND INDUSTRY STANDARDS AS APPLICABLE. REQUIREMENTS OF THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, THE ENVIRONMENTAL PROTECTION AGENCY AND THE U.S. ARMY CORPS OF ENGINEERS, SHALL ALSO BE FOLLOWED AS THEY RELATE TO THE WORK.
22. THE CONTRACTOR SHALL PROVIDE AND IMPLEMENT A "TRAFFIC CONTROL PLAN" RELATED TO ALL CONSTRUCTION ACTIVITIES FOR THIS PROJECT. ALL TRAFFIC CONTROL DEVICES, STRIPING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
23. ALL STATIONING IS ON CENTERLINE UNLESS OTHERWISE NOTED. CENTERLINE, RIGHTS-OF-WAY (R.O.W.), PROPERTY LINE, AND EASEMENT DIMENSIONS ARE FOR REFERENCE ONLY. REFER TO THE FINAL SUBDIVISION PLAT FOR PROJECT HORIZONTAL CONTROL.
24. ALL ELEVATIONS IN PLAN VIEW ARE ALONG FLOWLINE UNLESS OTHERWISE NOTED. WHERE SHOWN, 'TC' REPRESENTS TOP-OF-CURB ELEVATION ALONG CURB AND GUTTER OR BACK-OF-WALK ELEVATION ALONG COMBINATION CURB, GUTTER AND WALK.
25. CROSS PANS ARE 8-FEET IN WIDTH UNLESS OTHERWISE NOTED.
26. WATER MAIN LENGTHS ARE FROM CENTER OF FITTING (EXCLUDING GATE VALVES) TO CENTER OF FITTING UNLESS OTHERWISE NOTED.
27. STORM AND SANITARY SEWER MAIN LENGTHS ARE FROM CENTER OF STRUCTURE/MANHOLE TO CENTER OF STRUCTURE/MANHOLE. SANITARY SEWER AND STORM SEWER MANHOLES ARE 4-FOOT DIAMETER UNLESS OTHERWISE NOTED.
28. STORM INLET STATIONING/OFFSET REFERENCE IS AT THE INTERSECTION OF FLOWLINE AND THE CENTER OF STRUCTURE.
29. STORM INLETS LOCATED ALONG CURB SHALL BE CONSTRUCTED WITH TOP OF BOX AT SAME GRADE AS EXTENDED TOP-OF-CURB GRADE, UNLESS OTHERWISE NOTED.
30. THE CLIENT, CONTRACTOR AND SUBCONTRACTOR SHOULD IMMEDIATELY NOTIFY THE CONSULTANT OF ANY CONDITIONS OF THE PROJECT THAT THEY BELIEVE DO NOT COMPLY WITH THE CURRENT STATE OF THE ADA AND/OR FHAA.

PARK MAINTENANCE NOTE:

1. GOLDSMITH METROPOLITAN DISTRICT SHALL PROVIDE MAINTENANCE FOR ORCHARD STATION PARK PER ARTICLE 4 OF THE IGA / PURCHASE AGREEMENT DATED 5/5/2014.

EXISTING LEGEND

- PROPERTY LINE
- R.O.W.
- LOT LINE
- EASEMENT LINE
- SECTION LINE
- ROAD CENTERLINE
- EDGE OF PAVEMENT
- CURB AND GUTTER
- CONCRETE
- FENCE
- RETAINING WALL
- WATER LINE
- RAW WATER LINE
- NON-POTABLE WATER LINE
- IRRIGATION LINE
- SANITARY SEWER
- STORM SEWER
- ELECTRIC LINE
- GAS LINE
- TELEPHONE LINE
- FIBER OPTICS LINE
- OVERHEAD ELECTRIC LINE
- CABLE TELEVISION
- CONTOUR MAJOR
- CONTOUR MINOR
- 100YR FLOOD PLAIN
- FEMA FLOOD PLAIN
- FLOOD HAZARD AREA DELINEATION
- WATERS OF THE U.S.

PROPOSED LEGEND

- PROPERTY LINE
- R.O.W.
- LOT LINE
- SETBACK
- EASEMENT
- ROAD CENTERLINE
- CURB AND GUTTER (CATCH)
- CURB AND GUTTER (SPILL)
- SIDEWALK
- STORM SEWER
- SANITARY SEWER
- TRENCH DRAIN
- WATER LINE
- IRRIGATION LINE
- NONPOTABLE WATER LINE
- RAW WATER LINE
- MANHOLE w/ DIA. (FT.)
- INLET
- FLARED END SECTION
- WATER BEND
- WATER CROSS
- WATER TEE
- WATER REDUCER
- WATER VALVE
- FIRE HYDRANT
- PLUG/CAP
- SANITARY SEWER SERVICE (* INDICATES NON-TYPICAL LOCATION)
- WATER SERVICE (* INDICATES NON-TYPICAL LOCATION)
- UTILITY CROSSING
- UNDERDRAIN w/ SIZE (IN.)
- STREET LIGHT
- RETAINING WALL
- CONTOUR MAJOR
- CONTOUR MINOR
- SPOT ELEVATION
- SLOPE ARROW (4:1 MAX UNLESS NOTED OTHERWISE)
- LIMITS OF CONSTRUCTION / SAWCUT
- PEDESTRIAN ACCESSIBLE ROUTE
- LOT TYPE
- LINE OF SIGHT
- OVER FLOW ARROW

ABBREVIATIONS

ABC	AGGREGATE BASE COARSE
ARV	AIR RELEASE VALVE
BB MH	BOX BASE MANHOLE
BC	BUILDING CORNER
BFE	BASEMENT FLOOR ELEVATION
B.O.P.	BOTTOM OF PIPE (ELEVATION)
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
D.E.	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	DOMESTIC WATER
E	EAST
EC	END CURVE RETURN
EG	EXISTING GRADE/GROUND
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX.	EXISTING
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FL	FLOWLINE
FM	FORCE MAIN
FO	FIBER OPTIC
G.E.	GAS EASEMENT
GB	GRADE BREAK
GFE	GARAGE FINISH FLOOR
GM	GAS METER
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
IBV	INLINE BUTTERFLY VALVE
INV	INVERT (ELEVATION)
IRR	IRRIGATION
L	LEFT
LF	LINEAR FEET/FOOT
LP	LOW POINT
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
N	NORTH
PC	POINT ON CURVE
PCC	POINT OF COMPOUND CURVE
PCR	POINT OF CURVE RETURN
PL	PROPERTY LINE
PRC	POINT OF REVERSE CURVE
PROP.	PROPOSED
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
R	RADIUS OR RIGHT
R.O.W.	RIGHT OF WAY
RCP	REINFORCED CONCRETE PIPE
S	SOUTH
S.D.M.E.	SIDEWALK, DRAINAGE, AND MAINTENANCE EASEMENT
S.M.E.	SIDEWALK AND MAINTENANCE EASEMENT
S.W.E.	SIDEWALK EASEMENT
SD	STORM DRAIN
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STM	STORMWATER
STM MH	STORMWATER MANHOLE
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TC	TOP OF CURB
TOF	TOP OF FOUNDATION
T.O.P.	TOP OF PIPE (ELEVATION)
TW	TOP OF WALL
TYP	TYPICAL
U.E.	UTILITY EASEMENT
VC	VERTICAL CURVE
W	WEST
WL	WATERLINE
WM	WATER METER
WV	WATER VALVE

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NOTES

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2026/04/03	7	FIRST AMENDMENT

PROJECT NO: 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
GENERAL NOTES

SHEET
C1.1

PZ-25-00063

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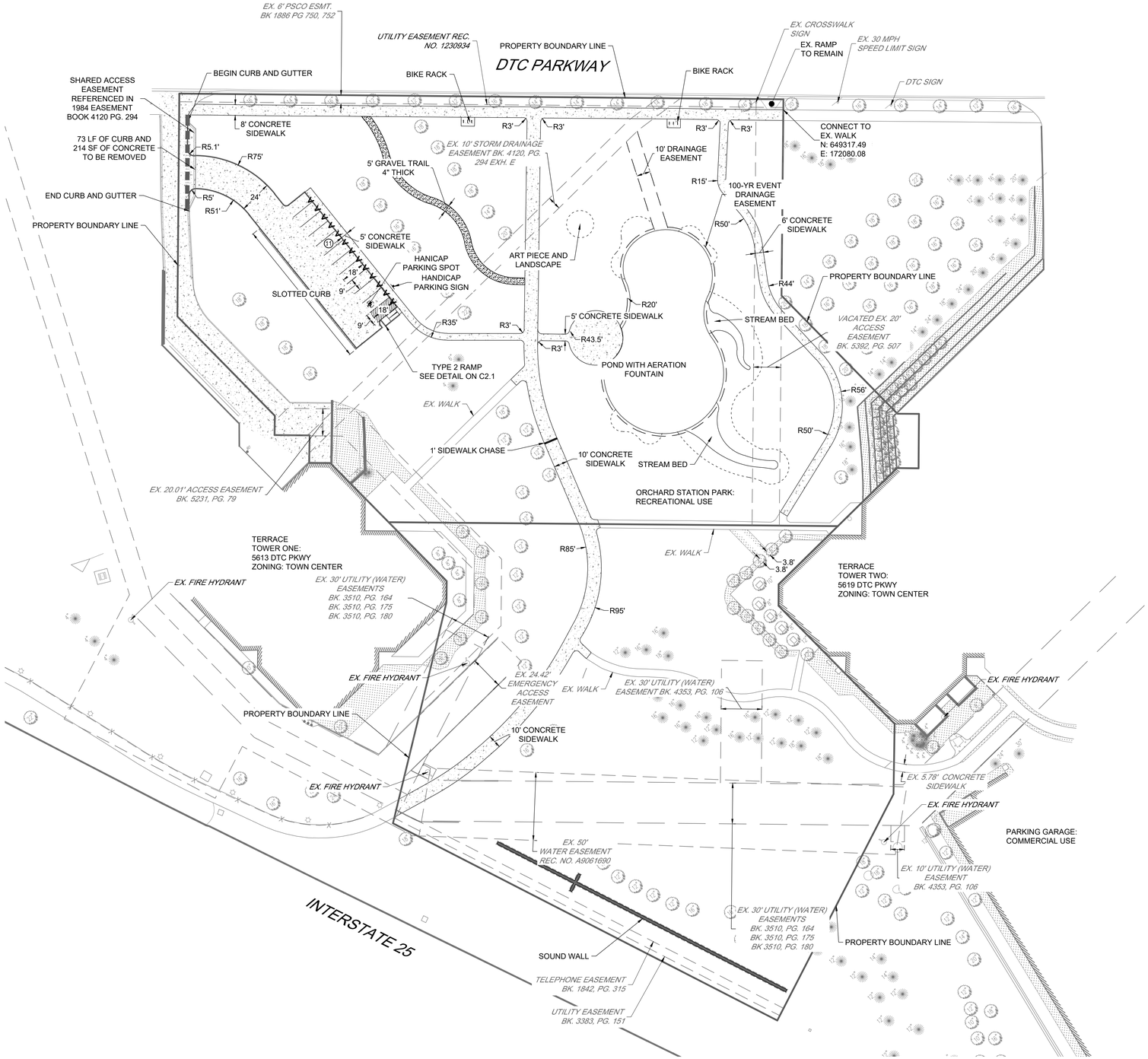


PROPOSED LEGEND

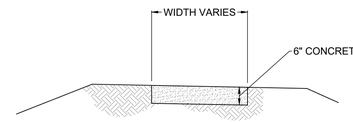
- LOT LINE
- EASEMENT
- ROAD CENTERLINE
- CURB AND GUTTER (CATCH)
- CURB AND GUTTER (SPILL)
- SIDEWALK
- SAW CUT LINE

EXISTING LEGEND

- PROPERTY LINE
- R.O.W.
- LOT LINE
- EASEMENT
- SECTION LINE
- ROAD CENTERLINE
- EDGE OF PAVEMENT
- CURB AND GUTTER
- CONCRETE
- FENCE
- RETAINING WALL

NOTES:

1. REFER TO SHEET C2.1 FOR SITE PLAN DETAILS.
2. ALL CURB DIMENSIONS ARE AT FLOWLINE UNLESS OTHERWISE NOTED.
3. REFER TO GEOTECHNICAL REPORT FOR PAVEMENT AND SIDEWALK THICKNESS RECOMMENDATIONS.
4. CONTRACTOR IS RESPONSIBLE FOR COORDINATION REGARDING RELOCATION OR ADJUSTMENT OF ANY EXISTING DRY UTILITIES OR IRRIGATION FACILITIES.
5. CONTRACTOR SHALL COORDINATE ALTERNATE ACCESS OR DETOUR WITH RTD AND GOLDSMITH METRO DISTRICT FOR ACCESS TO EXISTING ORCHARD STATION LIGHT RAIL PEDESTRIAN BRIDGE.



SIDEWALK SECTION
NTS

N

0 20 40 80

SCALE: 1" = 40'

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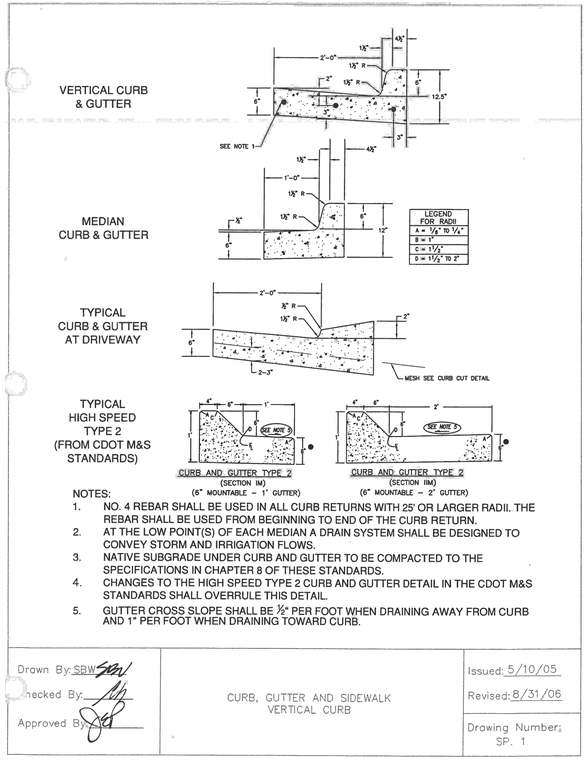
PROJECT NO. 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
SITE PLAN

SHEET
C2.0

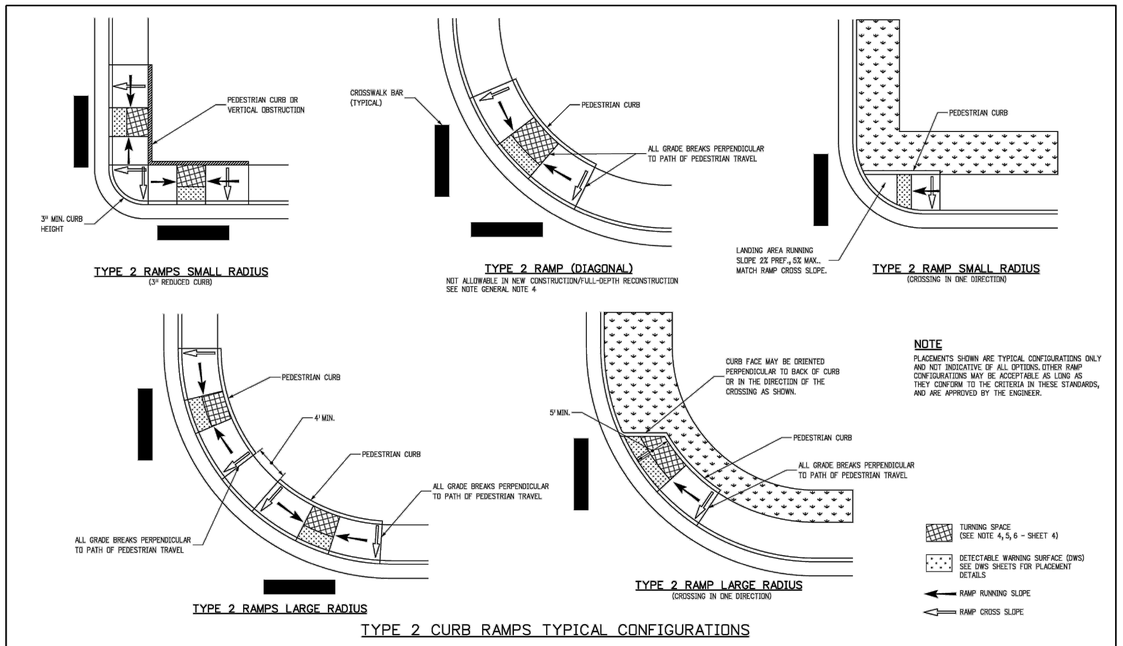
I:\2023\23023 - Orchard Station Park\CAD\Sheet Sets\SDP\P-23023 - Site Plan.dwg tab: C2.0 SITE PLAN May 29, 2026 - 9:55am rogiesby



NOTES:

1. NO. 4 REBAR SHALL BE USED IN ALL CURB RETURNS WITH 25' OR LARGER RADII. THE REBAR SHALL BE USED FROM BEGINNING TO END OF THE CURB RETURN.
2. AT THE LOW POINT(S) OF EACH MEDIAN A DRAIN SYSTEM SHALL BE DESIGNED TO CONVEY STORM AND IRRIGATION FLOWS.
3. NATIVE SUBGRADE UNDER CURB AND GUTTER TO BE COMPACTED TO THE SPECIFICATIONS IN CHAPTER 8 OF THESE STANDARDS.
4. CHANGES TO THE HIGH SPEED TYPE 2 CURB AND GUTTER DETAIL IN THE CDOT M&S STANDARDS SHALL OVERRULE THIS DETAIL.
5. GUTTER CROSS SLOPE SHALL BE ½" PER FOOT WHEN DRAINING AWAY FROM CURB AND 1" PER FOOT WHEN DRAINING TOWARD CURB.

Drawn By: SBW	CURB, GUTTER AND SIDEWALK VERTICAL CURB	Issued: 5/10/05
Checked By:		Revised: 8/31/06
Approved By:		Drawing Number: SP. 1



TYPE 2 CURB RAMPS TYPICAL CONFIGURATIONS

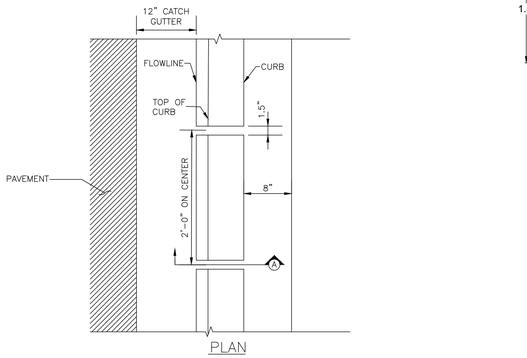
Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	REV		
Last Modification Date: 07/31/19	REV		
Detailer Initials: LTA	REV		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	REV		

Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Project Development Branch JBK

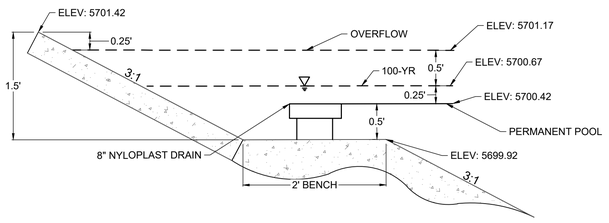
CURB RAMPS

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-608-1
Standard Sheet No. 5 of 10
Project Sheet Number:

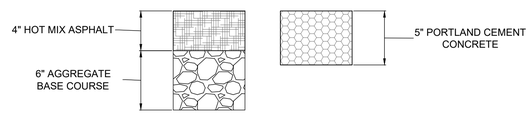


MHFD SLOTTED CURB DETAIL



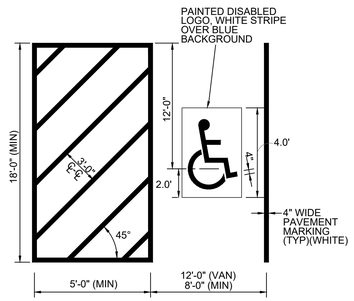
PERMANENT POOL POND SECTION

1" = 1'



TYPICAL ON-SITE CONCRETE PAVEMENT SECTIONS

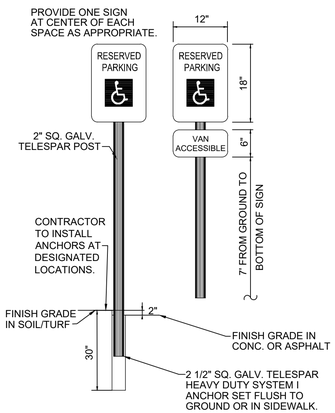
PLEASE REFER TO THE GEOTECHNICAL ENGINEERING REPORT, ORCHARD STATION PARK IMPROVEMENTS, 5613-5619 DTC PARKWAY, DENVER, COLORADO, PREPARED BY COLE GARNER GEOTECHNICAL DATED DECEMBER 20, 2024.



RE: SITE PLAN FOR STALL DIMENSIONS

TYPICAL PARKING STALL FOR THE DISABLED

N.T.S.



SIGN DETAIL

N.T.S.

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ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
SITE PLAN DETAILS

SHEET
C2.1

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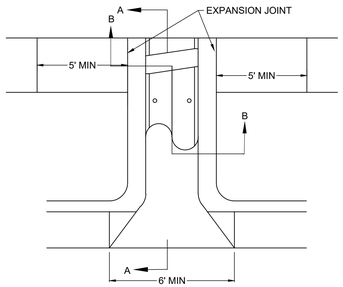
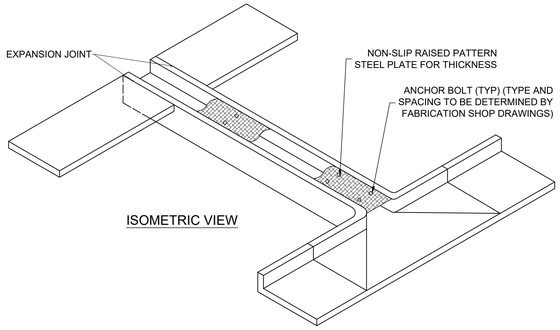
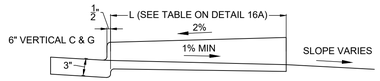


Plan View

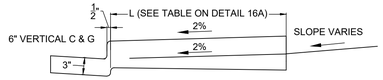
TYPE OF WALK	LENGTH OF PLATE
L ATTATCHED	L+3"
L DETATCHED	VARIES



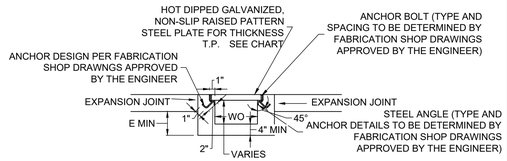
ISOMETRIC VIEW



SECTION A-A
FLOW FROM GUTTER



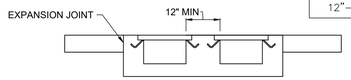
SECTION A-A
FLOW TO GUTTER



E=8" WHEN FLOW IS FROM GUTTER
E=6" WHEN FLOW IS TO GUTTER

SECTION B-B
SINGLE CHASE

W.O. WIDTH OF OPENING	TP THICKNESS OF PLATE
12"	½"
12"–18"	⅝"



SECTION B-B
MULTIPLE CHASE
WHEN OPENINGS ARE LARGER THAN 18"

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ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
SITE PLAN DETAILS

SHEET
C2.2

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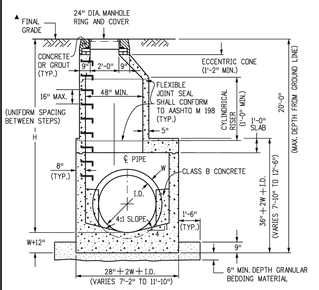
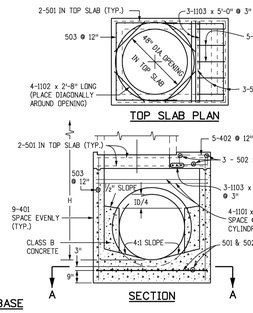


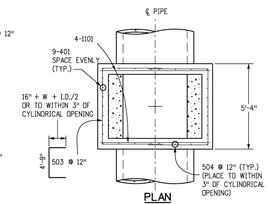
SECTION



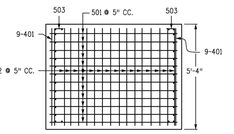
TOP SLAB PLAN

SECTION

MAHHOLE BOX BASE



PLAN



SECTION A-A
(STEEL IN BOTTOM OF BASE)

GENERAL NOTES

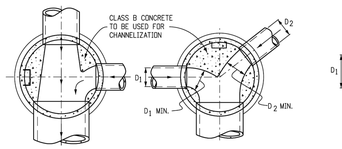
1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8 FT.
3. THE MANHOLE RING FRAME SHALL BE SET IN A BED OF GROUT. THE FRAME SHALL BE SURROUNDED WITH A CEMENT GROUT IN UNPAVED AREA, OR A CONCRETE COLLAR IN PAVED AREA. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF PIPE OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO AASHTO M 199 (ASTM C 478).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS B CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3 FT.-6 IN. AND SHALL CONFORM TO AASHTO M 199.
8. ALL REINFORCING STEEL SHALL BE GRADE 60 AND EPOXY COATED. VERTICAL STEEL SHALL BE PLACED AT CENTERLINE OF WALL. ALL BARS SHALL HAVE A 2 IN. MINIMUM CLEARANCE.
9. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
10. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE OR APPROVED GROUT.
11. STUB-OUTS SHALL EXTEND 2 FT. MINIMUM BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
12. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.

▲ WHEN FINAL GRADE IS PAVEMENT SURFACE, RECESS MANHOLE RING AND COVER ¼" MIN. TO ½" MAX.

MARK	SIZE	TYPE	WT. #/FT.	BARS	I.D. 54"	60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	(NO. REQ'D. \ LENGTH \ WEIGHT #	18 \ 8'-1" \ 97.2	18 \ 8'-8" \ 104.2	18 \ 9'-3" \ 111.2	18 \ 9'-10" \ 118.2	18 \ 11'-0" \ 132.3	18 \ 12'-2" \ 146.3	401 BAR LENGTH = 32" + 2W + I.D.
402	4	III	0.668	(NO. REQ'D. \ LENGTH \ WEIGHT #	5 \ 5'-5" \ 18.1	5 \ 6'-0" \ 20.0	5 \ 6'-7" \ 22.0	5 \ 7'-2" \ 23.9	5 \ 8'-4" \ 27.8	5 \ 9'-6" \ 31.7	402 BAR LENGTH = I.D. + 2W
501	5	I	1.043	(NO. REQ'D. \ LENGTH \ WEIGHT #	17 \ 7'-5" \ 131.5	17 \ 8'-0" \ 141.8	17 \ 8'-7" \ 152.2	17 \ 9'-2" \ 162.5	17 \ 10'-4" \ 183.2	17 \ 11'-6" \ 203.9	501 BAR LENGTH = 24" + I.D. + 2W
502	5	I	1.043	(NO. REQ'D. \ LENGTH \ WEIGHT #	22 \ 5'-0" \ 114.7	23 \ 5'-6" \ 119.9	24 \ 5'-0" \ 130.4	26 \ 5'-6" \ 135.6	29 \ 5'-0" \ 151.2	32 \ 5'-0" \ 166.9	502 NUMBER BARS REQ'D. = 3 + $\left(\frac{24+I.D.+2W}{@\ 5"}+1\right)$
503	5	II	1.043	(NO. REQ'D. \ LENGTH \ WEIGHT #	16 \ 12'-10" \ 214.2	16 \ 13'-5" \ 223.9	16 \ 14'-0" \ 262.8	18 \ 14'-7" \ 273.8	20 \ 15'-9" \ 328.5	24 \ 16'-11" \ 423.5	503 NUMBER BARS REQ'D. = $2\left(\frac{13+I.D.+2W}{@\ 12"}+1\right)$ BAR LENGTH = 4'-9"+2(D&H+W+I.D./2)
504	5	I	1.043	(NO. REQ'D. \ LENGTH \ WEIGHT #	12 \ 8'-1" \ 101.2	14 \ 8'-8" \ 126.6	14 \ 9'-3" \ 135.1	16 \ 9'-10" \ 164.1	18 \ 11'-0" \ 206.5	20 \ 12'-2" \ 253.8	504 NUMBER BARS REQ'D. = $2\left(\frac{2W+I.D.-4}{@\ 12"}+1\right)$ BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	(NO. REQ'D. \ LENGTH \ WEIGHT #	4 \ 7'-2" \ 152.3	4 \ 7'-9" \ 164.7	4 \ 8'-4" \ 177.1	4 \ 8'-11" \ 189.5	4 \ 10'-1" \ 214.3	4 \ 11'-3" \ 239.1	1101 BAR LENGTH = 21" + I.D. + 2W
1102	11	I	5.313	(NO. REQ'D. \ LENGTH \ WEIGHT #	4 \ 2'-8" \ 56.7	4 \ 2'-8" \ 56.7	4 \ 2'-8" \ 56.7	4 \ 2'-8" \ 56.7	4 \ 2'-8" \ 56.7	4 \ 2'-8" \ 56.7	BENDING TYPE I STRAIGHT
1103	11	I	5.313	(NO. REQ'D. \ LENGTH \ WEIGHT #	3 \ 5'-0" \ 79.7	3 \ 5'-0" \ 79.7	3 \ 5'-0" \ 79.7	3 \ 5'-0" \ 79.7	3 \ 5'-0" \ 79.7	3 \ 5'-0" \ 79.7	TYPE II 4'-9" 16"+W+I.D./2
* REINFORCING STEEL TOTAL					965.6	1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	TYPE III 12" 12" 7" I.D.+2W-38"
CONCRETE - CUBIC YARDS = TOTAL					6.0	8.6	7.3	8.0	9.5	11.1	

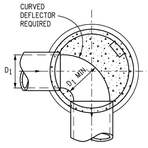
NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM, BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

QUANTITIES FOR CONCRETE MANHOLE BOX BASE



THROUGH PIPE ONE LATERAL

ANGLED LATERALS



SHARP ANGLE

TYPICAL CHANNELIZATION DETAILS

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	(R-X)		
Last Modification Date: 07/31/19	(R-X)		
Detailer Initials: LTA	(R-X)		
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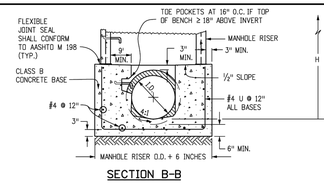
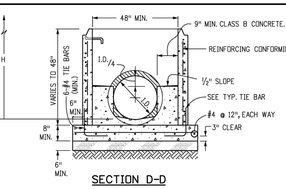
MANHOLES

Issued by the Project Development Branch: July 31, 2019

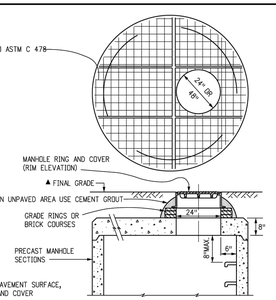
STANDARD PLAN NO. M-604-20
Standard Sheet No. 1 of 3
Project Sheet Number:



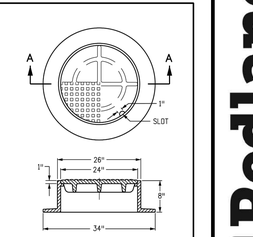
SECTION B-B



SECTION D-D

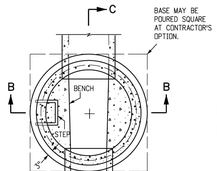


FLAT TOP SECTION DETAIL



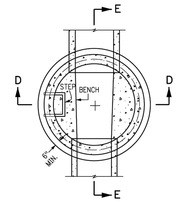
TOTAL WEIGHT: APPROXIMATELY 400 LBS. SHALL BE GRAY OR DUCTILE CAST IRON IN ACCORDANCE WITH SUBSECTION 712.06.

SECTION A-A
MANHOLE RING AND COVER

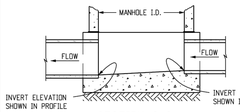


PLAN

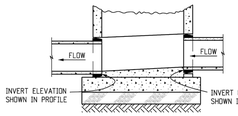
TYPICAL TIE BAR



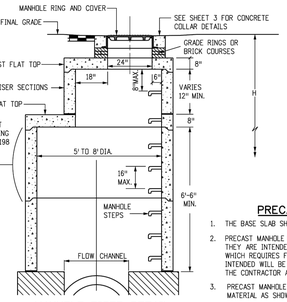
PLAN



SECTION C-C
CAST-IN-PLACE SLAB BASE



SECTION E-E
PRECAST SLAB BASE



MANHOLE RISER DETAIL

LEGEND

- SUITABLE SUBGRADE
- GRANULAR BEDDING MATERIAL
- CONCRETE

PRECAST MANHOLE BASES NOTES:

1. THE BASE SLAB SHALL BE POURED MONOLITHICALLY WITH BOTTOM RISER SECTION.
2. PRECAST MANHOLE BASES SHALL FIT THE CONDITIONS AND LOCATIONS FOR WHICH THEY ARE INTENDED WITHOUT ANY FIELD MODIFICATIONS. ANY MANHOLE BASE WHICH REQUIRES FIELD CUTTING OR MODIFICATION IN ORDER TO FIT THE LOCATIONS INTENDED WILL BE REJECTED BY THE ENGINEER AND REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE DEPARTMENT.
3. PRECAST MANHOLE BASES SHALL BE BEDDED ON AN APPROVED GRANULAR BEDDING MATERIAL AS SHOWN ABOVE.

Computer File Information		Sheet Revisions	
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Designer Initials: JBK	(R-X)		
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MANHOLES

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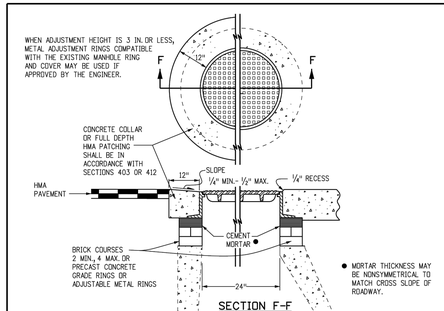
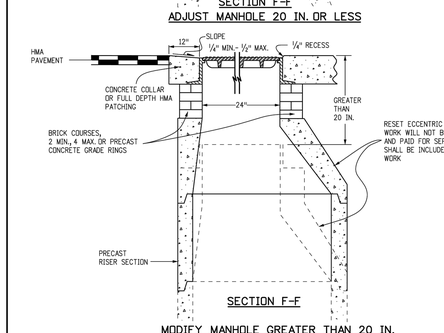
STANDARD PLAN NO. M-604-20
Standard Sheet No. 2 of 3
Project Sheet Number:



SECTION F-F
ADJUST MANHOLE 20 IN. OR LESS

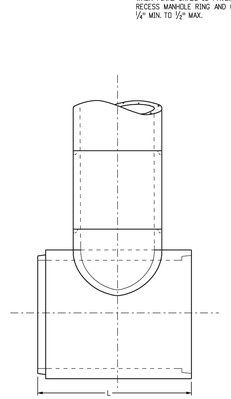


SECTION F-F
MODIFY MANHOLE GREATER THAN 20 IN.

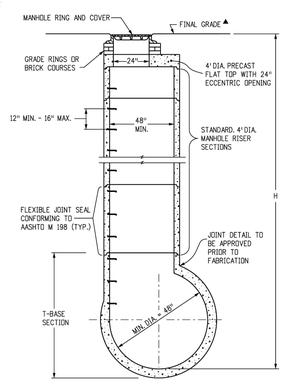
T-BASE MANHOLES NOTES

1. THE T-BASE SECTION SHALL BE SHOP-FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
2. THESE DETAILS SHOW ONLY THE CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR TYPE T-BASE MANHOLES. THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE DETAILS SHOWN HEREIN APPLY ONLY TO 48 IN. AND GREATER DIAMETER PIPES.
3. EXCEPT FOR CLASS OF PIPE, SPECIFICATIONS FOR THE MANHOLE SHALL BE THE SAME AS THOSE REQUIRED FOR THE ADJOINING PIPE.
4. THE T-BASE SECTION SHALL MAINTAIN ITS INTERNAL SHAPE AND FLOW AREA. GROUTING OR FILLING SHALL BE APPLIED SO AS TO NOT DISTURB THE NORMAL FLOW OR REDUCE THE AREA.

▲ WHEN FINAL GRADE IS PAVEMENT SURFACE, RECESS MANHOLE RING AND COVER ¼" MIN. TO ½" MAX.



CIRCULAR RIGID PIPE (LONGITUDINAL SECTION)



CIRCULAR RIGID PIPE (TRANSVERSE SECTION)

MANHOLE T-BASE

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Last Modification Date: 07/31/19	(R-X)		
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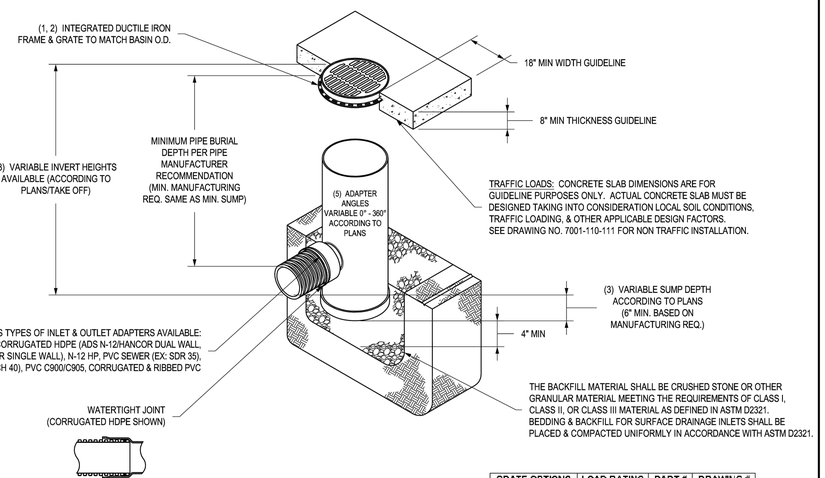
MANHOLES

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-604-20
Standard Sheet No. 3 of 3
Project Sheet Number:

NYLOPLAST 24" DRAIN BASIN: 2824AG _ _X



GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	2459CGP	7001-110-216
STANDARD	MEETS H-20	2499CGS	7001-110-217
SOLID COVER	MEETS H-20	2459CGC	7001-110-218
DOME	N/A	2459CDD	7001-110-219
DROP IN GRATE	LIGHT DUTY	2401DI	7001-110-075

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

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DRAWN BY	EBC	MATERIAL	
DATE	04-03-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-14-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE
24 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-192 REV E

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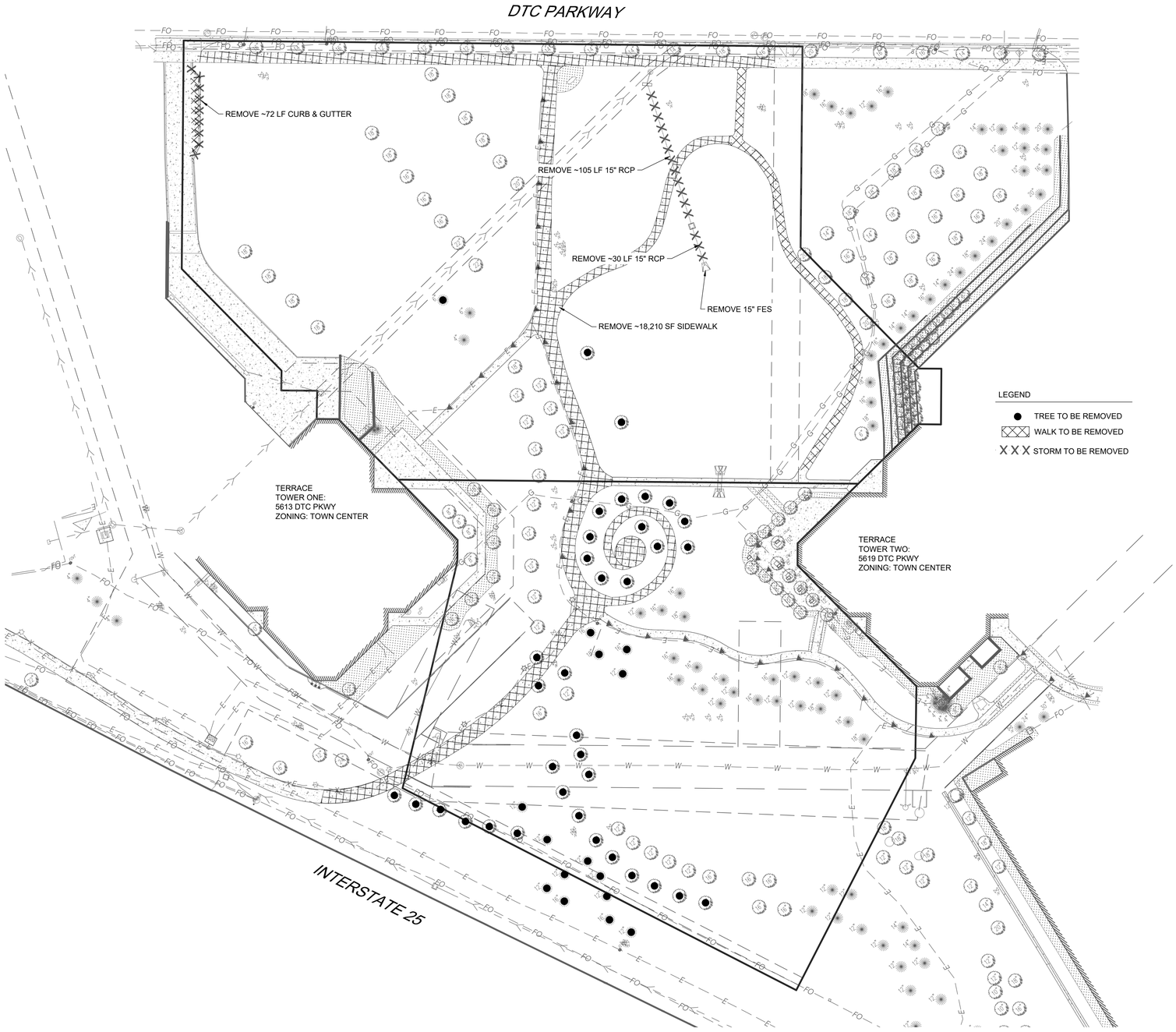
PROJECT NO	23023	NOTES
DATE	NO	
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE
2024/09/13	4	ISSUED TO GREENWOOD VILLAGE
2025/12/05	5	FIRST AMENDMENT
2026/02/20	6	FIRST AMENDMENT
2026/04/03	7	FIRST AMENDMENT

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
STORM SEWER DETAILS

SHEET
C2.3

PZ-25-00063

I:\2023\23023 — Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 - Site Plan Details.dwg tab: STORM SEWER DETAILS May 29, 2026 — 9:55am rogiesby



NOTES:

1. ALL LIGHTS AND ELECTRICAL ADJACENT TO SIDEWALKS TO BE REMOVED WILL ALSO BE REMOVED.
2. ALL IRRIGATION LINES AND STRUCTURES WITHIN THE PROPOSED GRADING WILL BE RELOCATED OR REMOVED.
3. CONTRACTOR SHALL COORDINATE ALTERNATE ACCESS OR DETOUR WITH RTD AND GOLDSMITH METRO DISTRICT FOR ACCESS TO EXISTING ORCHARD STATION LIGHT RAIL PEDESTRIAN BRIDGE.
4. TREE STUMPS TO BE GROUND DOWN TO A 12" DEPTH AND ROOTS REMOVED AT A 12" DEPTH AND 5' RADIUS FROM THE CENTER OF THE STUMP. CONTRACTOR TO CONFIRM UTILITY TREE STUMPS TO BE GROUND DOWN TO A 12" DEPTH BELOW GRADE AND ROOTS REMOVED AT A 12" DEPTH BELOW GRADE AND 5' RADIUS FROM THE CENTER OF THE STUMP. CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND DEPTH WITH DEVELOPER BEFORE STARTING TREE REMOVAL.

PZ-25-00063

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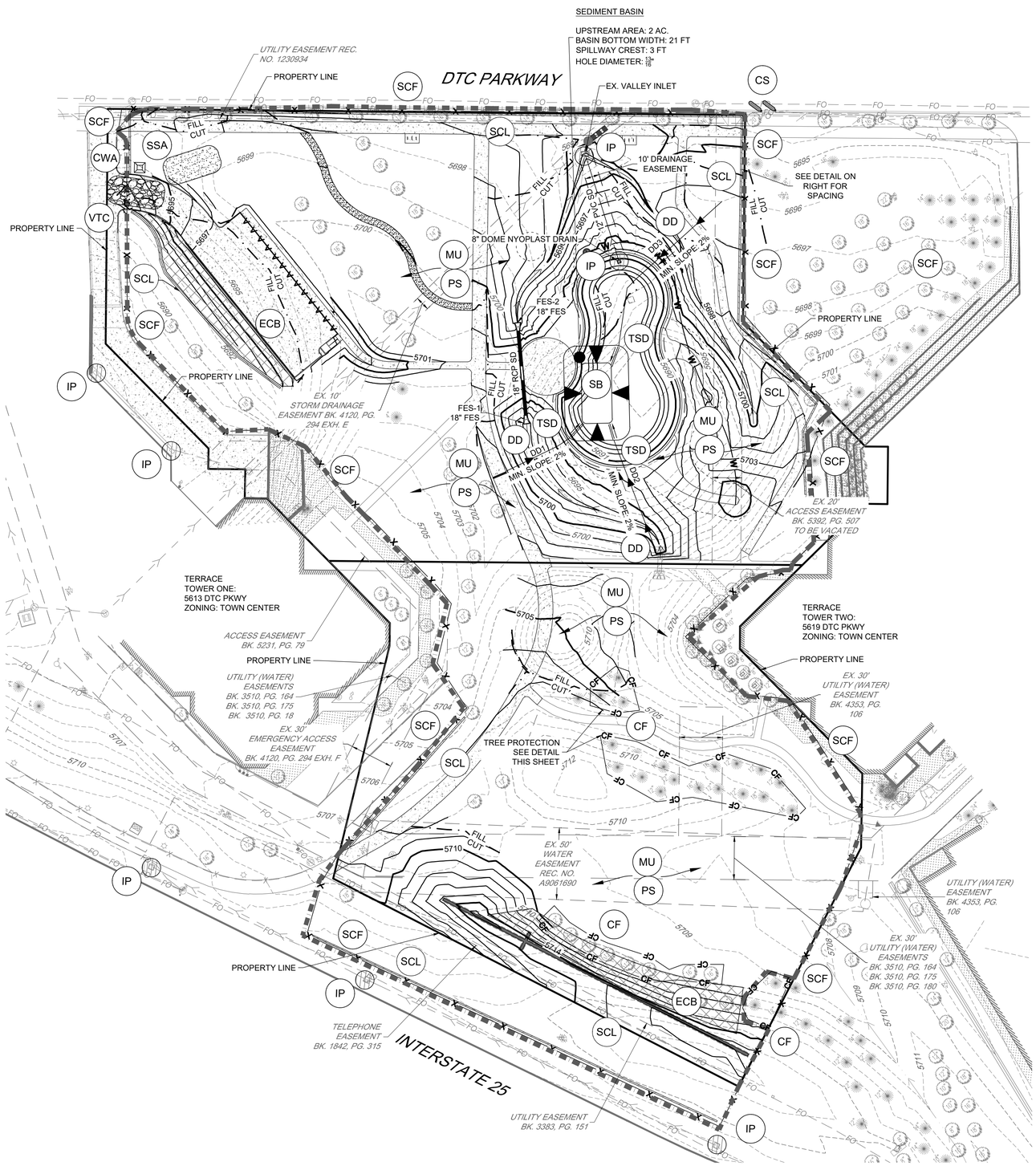
PROJECT NO 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
DEMO PLAN

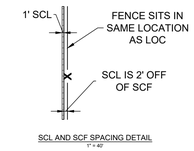
SHEET
C2.4

I:\2023\23023 - Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 - Demo Plan.dwg tab: C2.4 DEMO PLAN May 29, 2026 - 9:55am rogtesby



NOTES:

1. ALL INITIAL BMP'S TO BE INSTALLED PRIOR TO EARTH MOVING ACTIVITIES.
2. THE INTERIM EROSION CONTROL BMPS SHALL BE IN PLACE DURING CONSTRUCTION AND UNTIL VEGETATION IS ESTABLISHED UNLESS OTHERWISE NOTED.
3. STREET SWEEPING MAY BE REQUIRED IF MATERIAL IS TRACKED ONTO PAVED SURFACE OUTSIDE OF THE SITE.
4. CONCRETE WASHOUT MUST BE LOCATED A MINIMUM OF 100' FROM ANY DRAINAGE CONVEYANCE SYSTEM, WATER BODY, WELL AND/OR DRINKING WATER SOURCE. CONCRETE WASHOUT MUST BE LINED IF THIS IS NOT FEASIBLE.
5. THE SITE SHALL ONLY BE ACCESSED AT ENTRY POINTS WHERE VTC HAS BEEN INSTALLED. NO OTHER ACCESS POINTS SHALL BE PERMITTED.
6. REFER TO FINAL LANDSCAPE PLANS FOR PERMANENT SEEDING AND LANDSCAPING.
7. CONTRACTOR TO DETERMINE LOCATION AND SIZE OF STABILIZED STAGING AREA AND ADD TO THIS PLAN.
8. THE FINAL EROSION CONTROL ELEMENTS ARE REQUIRED FOR FINAL STABILIZATION AND SHALL BE IN PLACE WHEN ACTIVE CONSTRUCTION HAS CEASED.
9. CONTRACTOR TO DETERMINE LOCATION OF STOCKPILE AND INSTALL APPROPRIATE BMPS
10. CONTRACTOR TO DETERMINE LOCATION OF SIDEWALK CLOSED SIGNAGE AND DETOURS FOR WALKS IMPACTED BY SITE CONSTRUCTION.



SCL AND SCF SPACING DETAIL
1" = 40'

EROSION CONTROL BMP PHASING

BMP	INITIAL	INTERIM	FINAL
VTC	X		
INLET PROTECTION	X	X	
CONCRETE WASHOUT		X	
FINAL LANDSCAPING			X
SCL	X	X	
SF	X	X	
ECB	X	X	
SCF	X	X	

RAW EARTHWORK QUANTITIES:

ORCHARD STATION PARK (03/16/2026)

- TOTAL CUT - 1,100 CY
- TOTAL FILL - 7,400 CY
- NET IMPORT - 6,300 CY
- TOTAL DISTURBED AREA - 2.4 AC.

EARTHWORK QUANTITIES ARE APPROXIMATE IN NATURE ONLY AND DO NOT INCLUDE ADJUSTMENT FACTORS INCLUDING, BUT NOT LIMITED TO SHRINK OR SWELL. TOP SOIL STRIPPING OF 6" IS NOT INCLUDED IN THIS ESTIMATE.

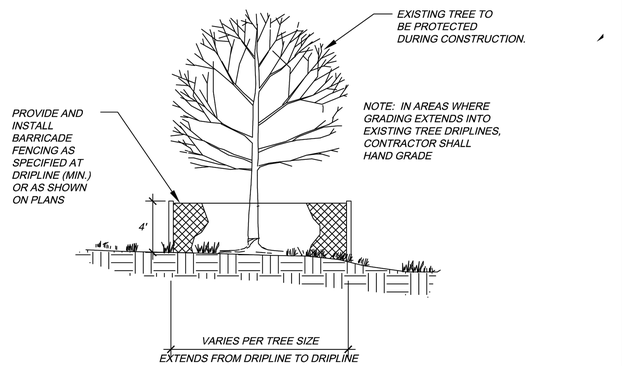
EROSION CONTROL LEGEND

CF	CONSTRUCTION FENCE
CS	CURB SOCK
CWA	CONCRETE WASHOUT AREA
ECB	EROSION CONTROL BLANKET
IP	INLET PROTECTION
LOC	LIMITS OF CONSTRUCTION
MU	MULCHING
PS	PERMANENT SEEDING
SB	SEDIMENT BASIN
SCL	SEDIMENT CONTROL LOG
SF	SILT FENCE
SM	SEEDING AND MULCHING
SR	SURFACE ROUGHENING
SSA	STABILIZED STAGING AREA
VTC	VEHICLE TRACKING CONTROL
SCF	SCREENED CHAIN LINK CONSTRUCTION FENCE
FILL / CUT	CUT-FILL LINE

811 Know what's **below.** **Call** before you dig.

0 20 40 80

SCALE: 1" = 40'



City of Aurora
PARKS & OPEN SPACE DEPARTMENT
Date: August 1, 2006

TREE PROTECTION FENCING

P&OS TP-3.0

PZ-25-00063

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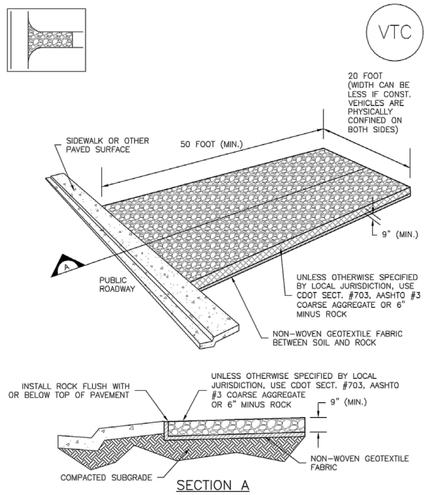
PROJECT NO

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
EROSION CONTROL PLAN

SHEET
C3.0

I:\2023\23023 — Orchard Station Park\CADD\Sheet Sets\SDP – 23023 – Erosion Control Plan.dwg tobh C3.0 EROSION CONTROL PLAN May 29, 2026 – 9:55am rogtesby



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   –TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

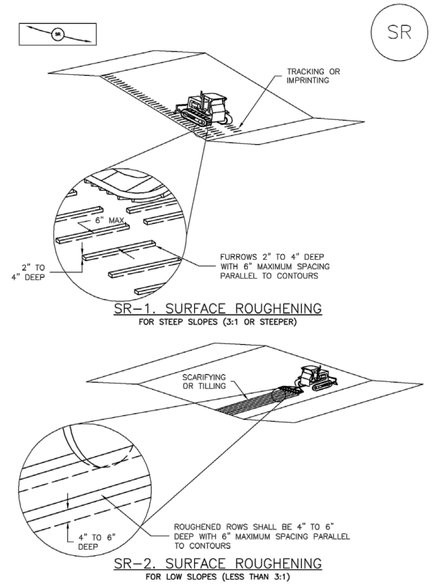
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)



SURFACE ROUGHENING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF SURFACE ROUGHENING.

2. SURFACE ROUGHENING SHALL BE PROVIDED PROMPTLY AFTER COMPLETION OF FINISHED GRADING (FOR AREAS NOT RECEIVING TOPSOIL) OR PRIOR TO TOPSOIL PLACEMENT OR ANY FORECASTED RAIN EVENT.

3. AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD WILL BE PLACED WITHOUT DELAY IN THE CONSTRUCTION SEQUENCE, SURFACE ROUGHENING IS NOT REQUIRED.

4. DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPING OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.

5. A FARMING DISK SHALL NOT BE USED FOR SURFACE ROUGHENING.

SURFACE ROUGHENING MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACE UPON DISCOVERY OF THE FAILURE.

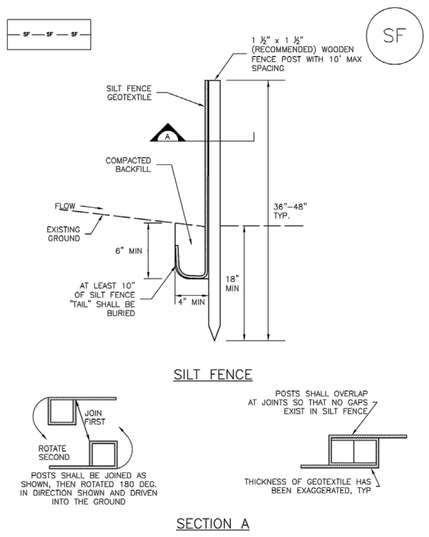
4. VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.

5. IN NON-TURF GRASS FINISHED AREAS, SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST SMOOTHING OUT THE SURFACE.

6. IN AREAS NOT SEEDED AND MULCHED AFTER SURFACE ROUGHENING, SURFACES SHALL BE RE-ROUGHENED AS NECESSARY TO MAINTAIN GROOVE DEPTH AND SMOOTH OVER RILL EROSION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SF-1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

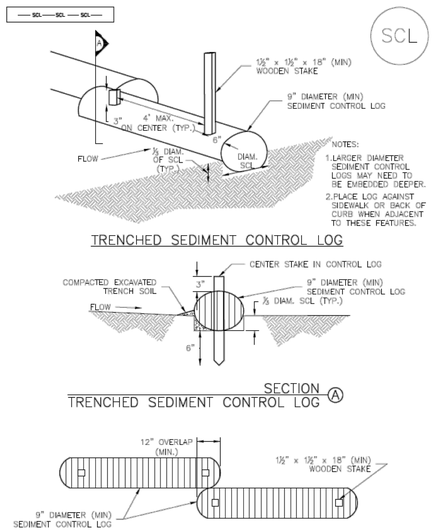
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SCL-1. TRENCHED SEDIMENT CONTROL LOG

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.

2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING ACTIVITIES.

3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.

4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.

7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION.COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BAGS ARE REMOVED AND THE AREA SEEDED. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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NO.	DATE	NOTES

PROJECT NO. 23023

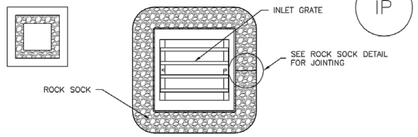
NO.	DATE	NOTES
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/08/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/13	ISSUED TO GREENWOOD VILLAGE
5	2025/12/05	FIRST AMENDMENT
6	2026/02/20	FIRST AMENDMENT
7	2026/04/03	FIRST AMENDMENT

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
EROSION CONTROL DETAILS

SHEET
C3.1

PZ-25-00063

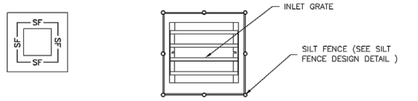
I:\2023\23023 - Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 - Erosion Control Details.dwg tab: C3.1 EROSION CONTROL DETAILS May 29, 2026 - 9:56am rogesby



IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP-4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF INLET PROTECTION.
   –TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

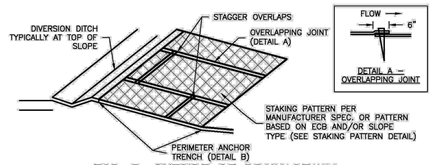
6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

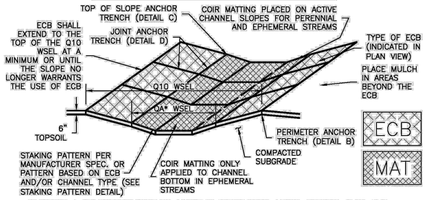
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.



ECB–3. OUTSIDE OF DRAINAGEWAY



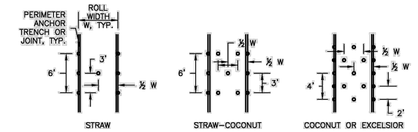
*CONSULT A GEOMORPHOLOGIST TO ASSIST IN DETERMINING ACTIVE CHANNEL FLOW (QA)

ECB–4. DRAINAGEWAY

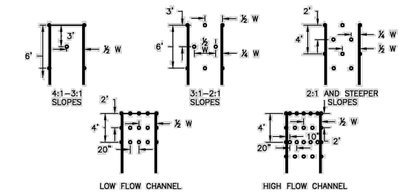
TABLE ECB–1. ECB MATERIAL SPECIFICATIONS

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	–	100%	–	DOUBLE/ NATURAL
STRAW–COCONUT	30% MIN	70% MAX	–	DOUBLE/ NATURAL
COIR MAT	100%	–	–	DOUBLE/ NATURAL
EXCELSIOR	–	–	100%	DOUBLE/ NATURAL

*STRAW ECBs MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL.
**ALTERNATE NETTING INCLUDING SINGLE NETTING AND SYNTHETIC PHOTODEGRADABLE FIBER MAY BE ACCEPTABLE IN SOME JURISDICTIONS

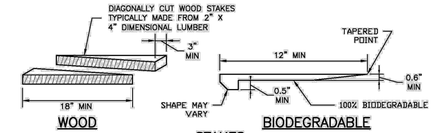


STAKING PATTERNS BY ECB TYPE

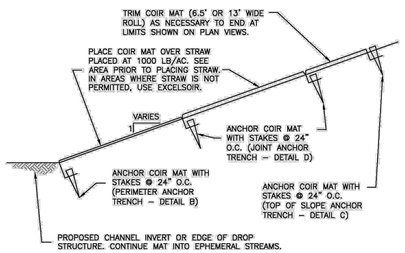


NOTE: IN ADDITION TO FLOW CONDITIONS, THE DESIGNER SHOULD CONSIDER THE PROPERTIES OF THE UNDERLYING SOIL. LESS COHESIVE SOILS MAY WARRANT A TIGHTER STAKING PATTERN.

STAKING PATTERNS BY SLOPE OR CHANNEL TYPE



NOTES
1. PLACE STAKES 18" O.C. TO 3' ABOVE WATER, THEN 24" O.C. TO UPPER LIMIT OF FABRIC OR AS RECOMMEND BY THE MANUFACTURER.
2. WHEN BLANKETING IS PLACED OVER RIPRAP, USE WOOD STAKES.



NOTE: USE WOODEN STAKES IN AREAS WHERE MAT IS PLACED OVER RIPRAP.

COIR MAT PLACEMENT DETAIL

EROSION CONTROL BLANKET MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ECBs SHALL BE LEFT IN PLACE TO BIODEGRADE UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.

5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND TOWN OF PARKER COLORADO, NOT AVAILABLE IN AUTOCAD)

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF ECB.
   –TYPE OF ECB (STRAW, STRAW–COCONUT, COCONUT/ COIR, OR EXCELSIOR).
   –AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.

2. ALL RECPs MUST BE 100% NATURAL AND BIODEGRADABLE MATERIALS.

3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.

4. FOR MATS THAT HAVE OPENINGS LARGER THAN THE SOIL, ADD STRAW UNDER (RATE OF 1000# PER ACRE) TO HOLD SOIL AND SEED FROM MIGRATING THROUGH OPENINGS.

5. INSTALL MATS AND BLANKETS PARALLEL TO THE DIRECTION OF STREAM FLOW.

6. PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.

7. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.

8. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE–HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.

9. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES AND WITHIN DRAINAGEWAYS. OVERLAP SEAMS SO THAT UPSTREAM RECPs IS ON TOP OF DOWNSTREAM RECPs SO THAT EXPOSED EDGE IS NOT LIFTED BY STREAM FLOWS.

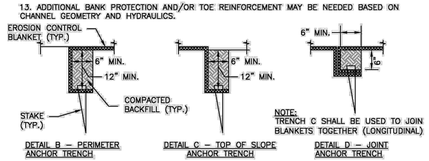
10. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB–1.

11. ALL EXPOSED ROOTS SHALL BE TRIMMED TO BELOW THE SOIL SURFACE. ECB/TRM SHALL NOT BE INSTALLED OVER ROCKS OR SOIL CLODS GREATER THAN 4 INCHES.

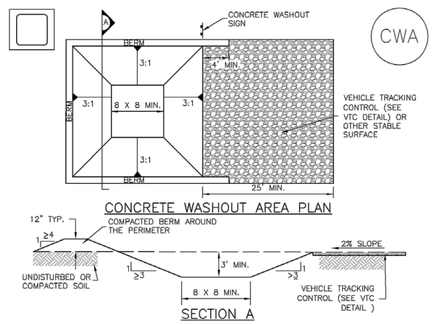
11. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBS SHALL BE RESEEDED AND MULCHED.

12. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

13. ADDITIONAL BANK PROTECTION AND/OR TOE REINFORCEMENT MAY BE NEEDED BASED ON CHANNEL GEOMETRY AND HYDRAULICS.



ANCHOR TRENCH DETAILS FOR EROSION CONTROL BLANKETS



CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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PROJECT NO.	23023	NOTES
DATE	NO.	
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE
2024/09/13	4	ISSUED TO GREENWOOD VILLAGE
2025/12/05	5	FIRST AMENDMENT
2026/02/20	6	FIRST AMENDMENT
2026/04/03	7	FIRST AMENDMENT

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
EROSION CONTROL DETAILS

SHEET
C3.2

PZ-25-00063

I:\2023\23023 – Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 – Erosion Control Details.dwg tab: C3.2 EROSION CONTROL DETAILS May 29, 2026 – 9:56am rogissby

RAW EARTHWORK QUANTITIES:

ORCHARD STATION PARK (PRE-IMPROVEMENTS TO PROPOSED 03/16/2026)

- TOTAL CUT - 1,100 CY
- TOTAL FILL - 7,400 CY
- NET IMPORT - 6,300 CY
- TOTAL DISTURBED AREA - 2.4 AC.

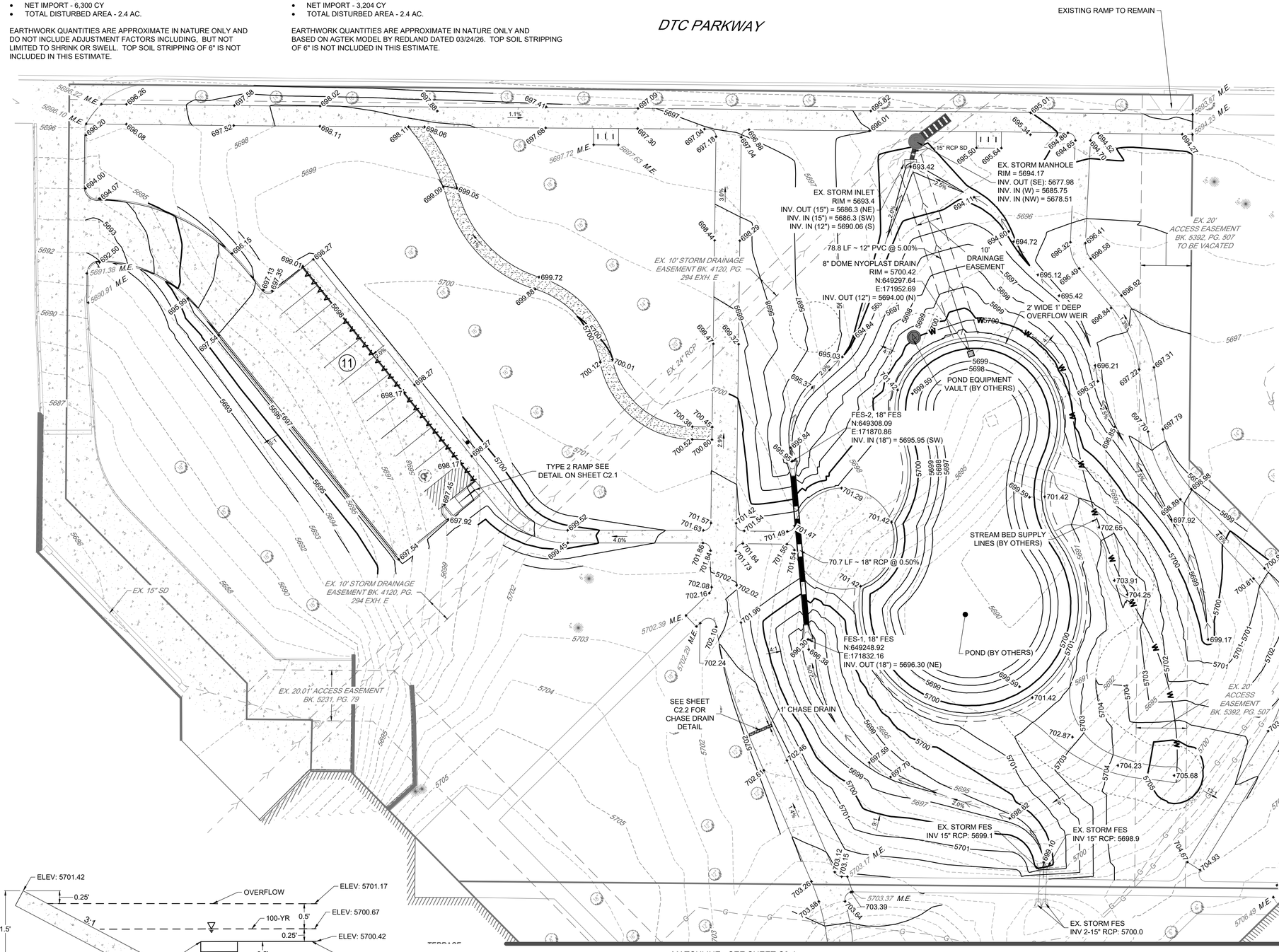
EARTHWORK QUANTITIES ARE APPROXIMATE IN NATURE ONLY AND DO NOT INCLUDE ADJUSTMENT FACTORS INCLUDING, BUT NOT LIMITED TO SHRINK OR SWELL. TOP SOIL STRIPPING OF 6" IS NOT INCLUDED IN THIS ESTIMATE.

RAW EARTHWORK QUANTITIES:

ORCHARD STATION PARK (WALL IMPROVEMENTS TO PROPOSED 03/24/2026)

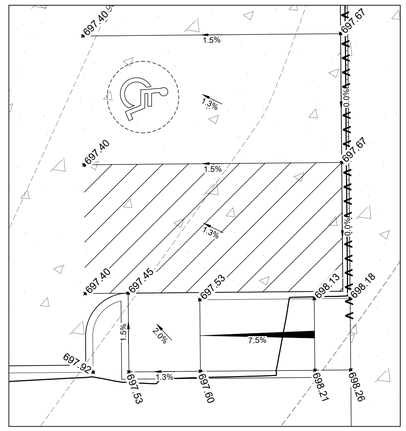
- TOTAL CUT - 2,133 CY
- TOTAL FILL - 5,337 CY
- NET IMPORT - 3,204 CY
- TOTAL DISTURBED AREA - 2.4 AC.

EARTHWORK QUANTITIES ARE APPROXIMATE IN NATURE ONLY AND BASED ON AGTEK MODEL BY REDLAND DATED 03/24/26. TOP SOIL STRIPPING OF 6" IS NOT INCLUDED IN THIS ESTIMATE.



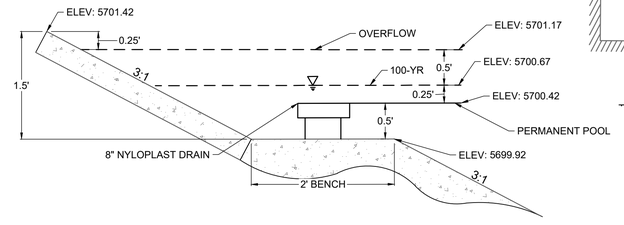
GRADING AND EROSION CONTROL LEGEND

5281	EXISTING MINOR CONTOUR
5280	EXISTING MAJOR CONTOUR
5281	PROPOSED MINOR CONTOUR
5280	PROPOSED MAJOR CONTOUR
	PROPOSED STORM SEWER LINE
	PROPOSED MANHOLE
	PROPOSED BOX BASE MANHOLE
	PROPOSED INLET
	PROPOSED FLARED END SECTION
0.00%	EXISTING SLOPE ARROW
0.00%	PROPOSED SLOPE ARROW
x80.55	EXISTING SPOT ELEVATION
x80.55	PROPOSED SPOT ELEVATION



ADA PARKING SPOT & RAMP PLAN

SCALE: 1" = 5'



PERMANENT POOL POND SECTION

1" = 1'

NOTES:

1. ALL SLOPES ARE MAXIMUM OF 4H:1V UNLESS OTHERWISE NOTED.
2. GRADES SHOWN REPRESENT FLOWLINE AND/OR FINISHED GRADE.
3. ALL SIDEWALKS HAVE A MAXIMUM CROSS SLOPE OF 2%.
4. ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
5. REFER TO SITE PLAN FOR HORIZONTAL LAYOUT.
6. REFER TO POND PLANS BY OTHERS FOR ADDITIONAL DETAILS.

BENCHMARK

UDFCD BENCHMARK NUMBER CC-9 BEING A 3-1/4" ALUMINUM ALLOY CAP STAMPED "UDFCD CC - 9" LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF S JOILET STREET AND INVERNESS DRIVE EAST, 46.5' NORTH OF THE CENTER LINE OF INVERNESS DRIVE EAST AND 59' EAST OF THE CENTERLINE OF SOUTH JOILET STREET.

ELEVATION = 5732.89 FEET (NAVD88)

PZ-25-00063

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NO.	DATE	NOTES

PROJECT NO. 23023

NO.	DATE	NOTES
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
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7	2026/04/03	FIRST AMENDMENT

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
GRADING & DRAINAGE PLAN

SHEET
C3.3

I:\2023\23023 – Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 – Grading Plan.dwg tdb: C3.3 GRADING & DRAINAGE PLAN May 29, 2026 – 9:56am rogleasby

MATCHLINE - SEE SHEET C3.3

TERRACE TOWER ONE

TERRACE TOWER TWO

EX. STORM FES
INV 2-15" RCP: 5700.0

EX. 30' UTILITY (WATER) EASEMENTS
BK. 3510, PG.164
BK. 3510, PG. 175
BK. 3510, PG. 180

EX. 24.42' EMERGENCY ACCESS EASEMENT

EX. 30' UTILITY (WATER) EASEMENT BK. 4353, PG. 106

EX. 50' WATER EASEMENT REC. NO. A9061690

EX. 30' UTILITY (WATER) EASEMENTS
BK. 3510, PG. 164
BK. 3510, PG. 175
BK 3510, PG. 180

EX. 10' UTILITY (WATER) EASEMENT
BK. 4353, PG. 106

TELEPHONE EASEMENT
BK. 1842, PG. 315

UTILITY EASEMENT
BK. 3383, PG. 151

INTERSTATE 25

GRADING AND EROSION CONTROL LEGEND

- 5281 — EXISTING MINOR CONTOUR
- 5280 — EXISTING MAJOR CONTOUR
- 5281 — PROPOSED MINOR CONTOUR
- 5280 — PROPOSED MAJOR CONTOUR
- PROPOSED STORM SEWER LINE
- PROPOSED MANHOLE
- PROPOSED BOX BASE MANHOLE
- PROPOSED INLET
- PROPOSED FLARED END SECTION
- 0.00% — EXISTING SLOPE ARROW
- 0.00% — PROPOSED SLOPE ARROW
- x80.58 — EXISTING SPOT ELEVATION
- x80.55 — PROPOSED SPOT ELEVATION

NOTES:

1. ALL SLOPES ARE MAXIMUM OF 4H:1V UNLESS OTHERWISE NOTED.
2. GRADES SHOWN REPRESENT FLOWLINE AND/OR FINISHED GRADE.
3. ALL SIDEWALKS HAVE A MAXIMUM CROSS SLOPE OF 2%.
4. ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
5. REFER TO SITE PLAN FOR HORIZONTAL LAYOUT.
6. REFER TO POND PLANS BY OTHERS FOR ADDITIONAL DETAILS.

RAW EARTHWORK QUANTITIES:

ORCHARD STATION PARK (PRE-IMPROVEMENTS TO PROPOSED 03/16/2026)

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RAW EARTHWORK QUANTITIES:

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- NET IMPORT - 3,204 CY
- TOTAL DISTURBED AREA - 2.4 AC.

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0 10 20 40
SCALE: 1" = 20'

BENCHMARK

UDFCD BENCHMARK NUMBER CC-9 BEING A 3-1/4" ALUMINUM ALLOY CAP STAMPED "UDFCD CC - 9" LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF S JOILET STREET AND INVERNESS DRIVE EAST, 46.5' NORTH OF THE CENTER LINE OF INVERNESS DRIVE EAST AND 59' EAST OF THE CENTERLINE OF SOUTH JOILET STREET.

ELEVATION = 5732.89 FEET (NAVD88)

PZ-25-00063

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NO.	DATE	NOTES

PROJECT NO. 23023

NO	DATE	NOTES
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/13	ISSUED TO GREENWOOD VILLAGE
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6	2026/02/20	FIRST AMENDMENT
7	2026/04/03	FIRST AMENDMENT

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
GRADING & DRAINAGE PLAN

SHEET
C3.4

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BENCHMARK

UDFCD BENCHMARK NUMBER CC-9 BEING A 3-1/4" ALUMINUM ALLOY CAP STAMPED "UDFCD CC - 9" LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF S JOLIET STREET AND INVERNESS DRIVE EAST, 46.5' NORTH OF THE CENTER LINE OF INVERNESS DRIVE EAST AND 59' EAST OF THE CENTERLINE OF SOUTH JOLIET STREET.

ELEVATION = 5732.89 FEET (NAVD88)

SCALE: 1" = 30'

SHEET C3.5

ORCHARD STATION PARK

SOUND WALL PACKAGE

EXISTING CONDITIONS GRADING PLAN

FOR REFERENCE ONLY

PROJECT NO:		23023
DATE	NO.	NOTES
2025/11/21	1	FIRST SUBMITTAL TO TEAM
2026/03/16	2	SECOND SUBMITTAL TO TEAM
2026/04/02	3	THIRD SUBMITTAL TO TEAM

DATE	NO.	NOTES

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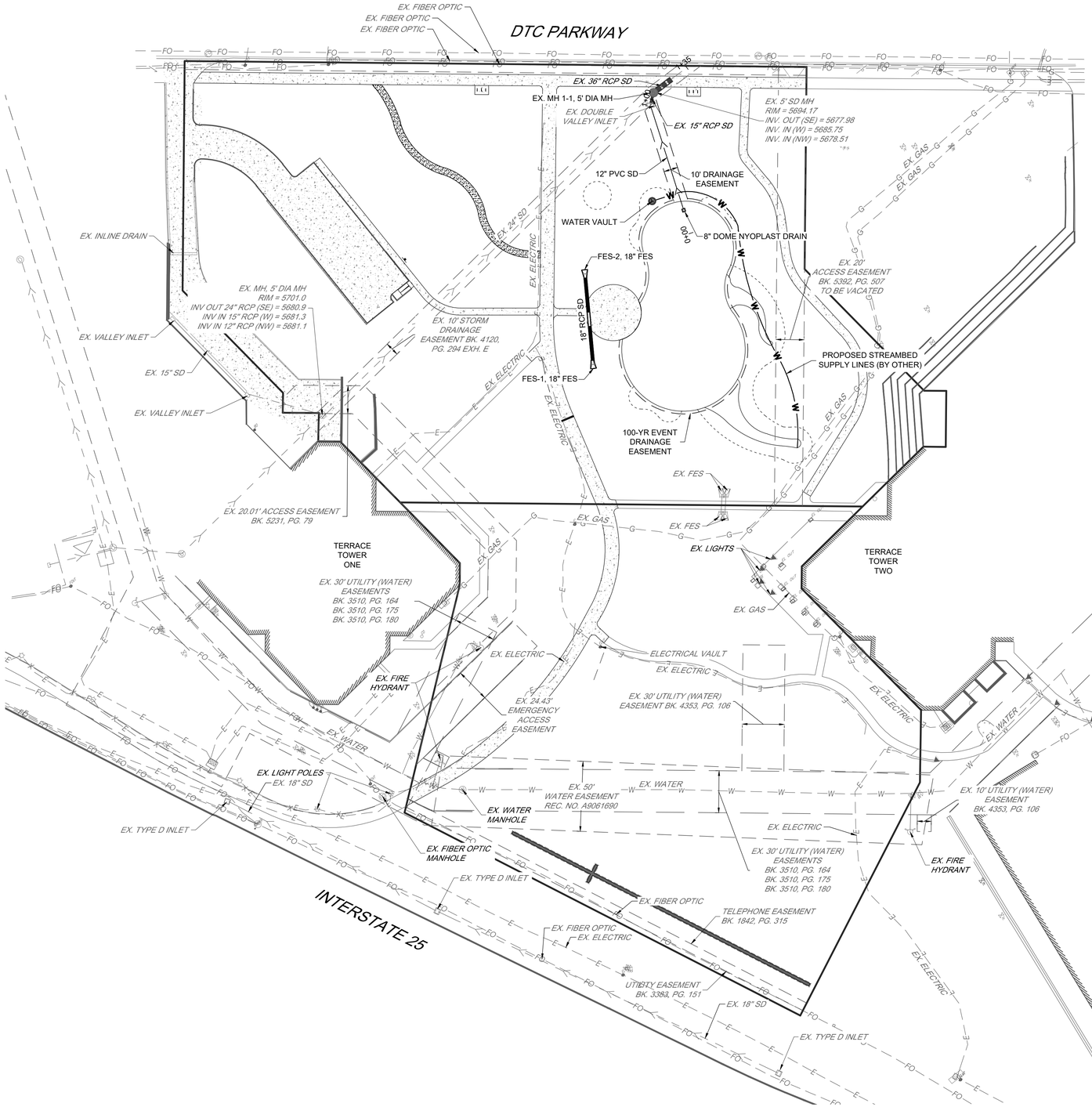
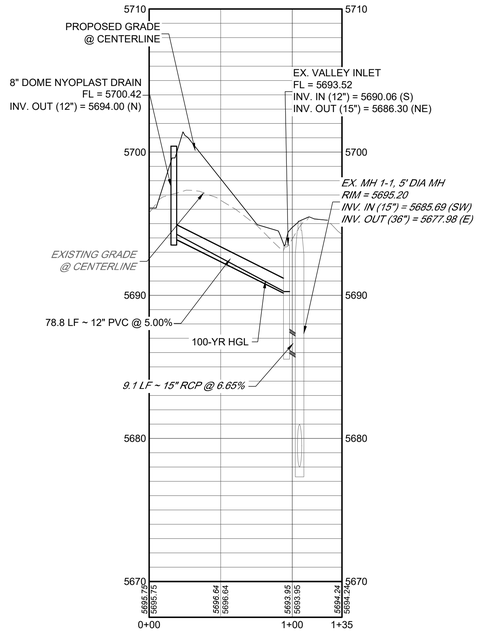


PERMANENT POOL POND PROFILE

H: 1" = 40'
V: 1" = 4'



PROPOSED LEGEND

- LOT LINE
- EASEMENT
- ROAD CENTERLINE
- CURB AND GUTTER (CATCH)
- CURB AND GUTTER (SPILL)
- SIDEWALK
- STORM SEWER
- SANITARY SEWER
- W W — WATER LINE
- IRR — IRRIGATION LINE
- MANHOLE
- INLET
- FLARED END SECTION
- WATER BEND
- WATER CROSS

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE LATEST EDITION OF THE GREENWOOD VILLAGE STANDARDS PRIOR TO CONSTRUCTION, AND KEEPING THE CONSTRUCTION PLANS AND THE STANDARDS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
2. CONTRACTOR TO VERIFY EXISTING UTILITY CONNECTIONS AND LOCATIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES FROM THESE PLANS.
3. DRY UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL FIELD-VERIFY LOCATION AND DEPTH, AND SHALL COORDINATE ANY NECESSARY ADJUSTMENTS WITH THE UTILITY PROVIDER.
4. CONTRACTOR TO COORDINATE ALL REMOVAL AND/OR RELOCATION OF EXISTING DRY UTILITIES WITH THE APPROPRIATE PUBLIC SERVICE PROVIDERS.
5. CONTRACTOR TO REMOVE AND DISPOSE OF ALL MATERIALS DEMOLISHED INCLUDING BUT NOT LIMITED TO ASPHALT, CONCRETE, PIPES, POLES AND ANY OTHER MATERIALS DUE TO THE INSTALLATION OF PROPOSED IMPROVEMENTS.
6. ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED. THE MAINTENANCE OF PRIVATE STORM SEWER IS THE RESPONSIBILITY OF GOLDSMITH METRO DISTRICT.
7. INLET NORTHING AND EASTINGS PROVIDED IS LOCATED AT THE CENTER OF THE INLET FLOWLINE.
8. ALL AREA DRAINS SHALL BE NYLOPLAST DRAIN BASINS OR APPROVED EQUIVALENT.
9. ALL AREA DRAINS SHALL BE 12" MINIMUM WITH A STANDARD GRATE.
10. ALL PRIVATE DRAIN SYSTEM PIPE TO BE PVC OR DUAL WALL HDPE.
11. POND FACILITIES ARE SCHEMATIC AND WILL BE MAINTAINED BY THE DISTRICT.

0 20 40 80

SCALE: 1" = 40'

PZ-25-00063

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NO.	DATE	NOTES

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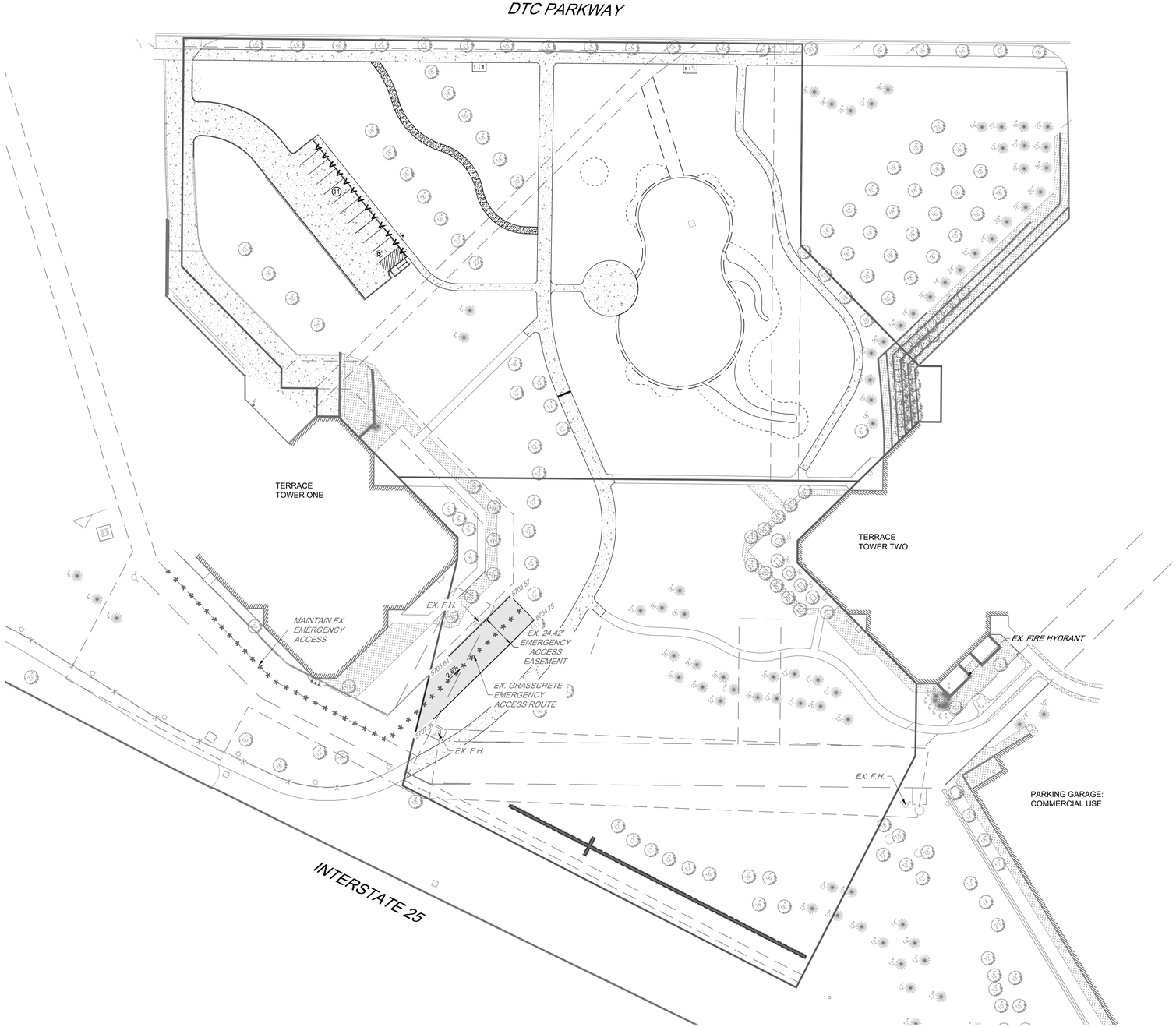
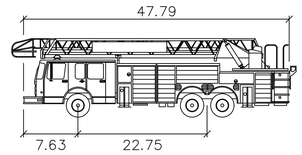
ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
UTILITY PLAN

SHEET
C4.0

I:\2023\23023 – Orchard Station Park\CAD\Sheet Sets\SDP\P-23023 – Utility Plan.dwg tab: C4.0 UTILITY PLAN May 29, 2026 – 9:56am rogtesby





South Metro Fire

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

PROPOSED LEGEND

- LOT LINE
- EASEMENT
- ROAD CENTERLINE
- CURB AND GUTTER (CATCH)
- CURB AND GUTTER (SPILL)
- SIDEWALK

EXISTING LEGEND

- PROPERTY LINE
- R.O.W.
- LOT LINE
- EASEMENT
- SECTION LINE
- ROAD CENTERLINE
- EDGE OF PAVEMENT
- CURB AND GUTTER
- CONCRETE
- FENCE
- RETAINING WALL

N

0 20 40 80

SCALE: 1" = 40'

PZ-25-00063

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NO.	DATE	NOTES

PROJECT NO.	23023	
NO.	DATE	NOTES
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6	2026/02/20	FIRST AMENDMENT
7	2026/04/03	FIRST AMENDMENT

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
EMERGENCY ACCESS PLAN

SHEET
C5.0

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DTC PARKWAY

PROPOSED BIKE RACKS, SEE DETAIL 4, SHEET C6.3

PROPOSED BIKE RACKS, SEE DETAIL 4, SHEET C6.3

SOD

BOULDERS

PROPOSED CRUSHER FINES, SEE DETAIL 7, SHEET C6.3

PROPOSED DOG WASTE STATION, SEE DETAIL 5, SHEET C6.3

PROPOSED 8' SIDEWALK

PROPOSED BOULDERS

10' D.E

PROPOSED EDGER,SEE DETAIL 6, SHEET C6.3

PROPOSED DOG WASTE STATION, SEE DETAIL 5, SHEET C6.3

PROPOSED KINETIC SCULPTURE, SEE DETAIL 8, SHEET C6.3

PROPOSED CATTAIL WIND CHIMES, SEE DETAIL 9, SHEET C6.3

EXISTING DECIDUOUS TREES

PROPOSED PARKING LOT (11 SPACES)

PROPOSED WASTE BIN TYP., SEE DETAIL 2, SHEET C6.3

POND

PROPOSED TABLE, SEE DETAIL 3, SHEET C6.3

PROPOSED SHADE SAIL SYSTEM, SEE DETAIL 11, SHEET C6.3

PROPOSED EDGER,SEE DETAIL 6, SHEET C6.3

EXISTING RETAINING WALLS

PROPOSED DOG WASTE STATION, SEE DETAIL 4, SHEET C6.3

PROPOSED WASTE BIN TYP., SEE DETAIL 2, SHEET C6.3

20' ACCESS EASEMENT

20' ACCESS EASEMENT TO BE VACATED

EXISTING RETAINIG WALLS

15' U.E

PROPOSED 5' SIDEWALK

PROPOSED 4' SIDEWALK

PROPOSED WASTE BIN TYP., SEE DETAIL 2, SHEET C6.3

PROPOSED DOG WASTE STATION, SEE DETAIL 5, SHEET C6.3

ALL LANDSCAPE AREAS WITH PLANTS, GROUNDCOVER, SOD, AND NATIVE SEED TO BE ON AUTOMATIC IRRIGATION SYSTEM. SHRUBS AND OTHER PLANTING TO BE ON DRIP IRRIGATION & SOD & NATIVE SEED TO BE ON SPRAYHEADS AND ROTORS.

MATCHLINE, SEE SHEET C6.1

UNCHANGED FROM PREVIOUSLY APPROVED PZ-24-02 SDP

LEGEND

- EDGER
- CONCRETE
- CRUSHER FINES
- SOD
- ANNUAL COLOR
- DECIDUOUS TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES
- PERENNIALS
- EXISTING DECIDUOUS TREES
- EXISTING ORNAMENTAL TREES
- EXISTING EVERGREEN TREES
- BOULDERS (2' X 3' TYP.)

DTC PARKWAY

C6.0

5613 DTC PKWY

5619 DTC PKWY

C6.1

INTERSTATE 25

KEYMAP

NORTH

0 10 20 40

SCALE: 1" = 20'

SAGE DESIGN GROUP

LANDSCAPE ARCHITECTURE SITE PLANNING ENTITLEMENT

1500 South Pearl St. Suite 200 Denver, Colorado 80210

303.470.2855 (p) 303.470.2894 (f) www.sagedesigngroup.com

NOTES	NO.	DATE

PROJECT NO: 23023

NOTES	NO.	DATE
ISSUED TO GREENWOOD VILLAGE	1	2024/01/10
ISSUED TO GREENWOOD VILLAGE	2	2024/04/24
ISSUED TO GREENWOOD VILLAGE	3	2024/09/14
ISSUED TO GREENWOOD VILLAGE	4	2024/09/13
FIRST AMENDMENT	5	2025/12/05
FIRST AMENDMENT	6	2026/02/20
FIRST AMENDMENT	7	2026/04/03

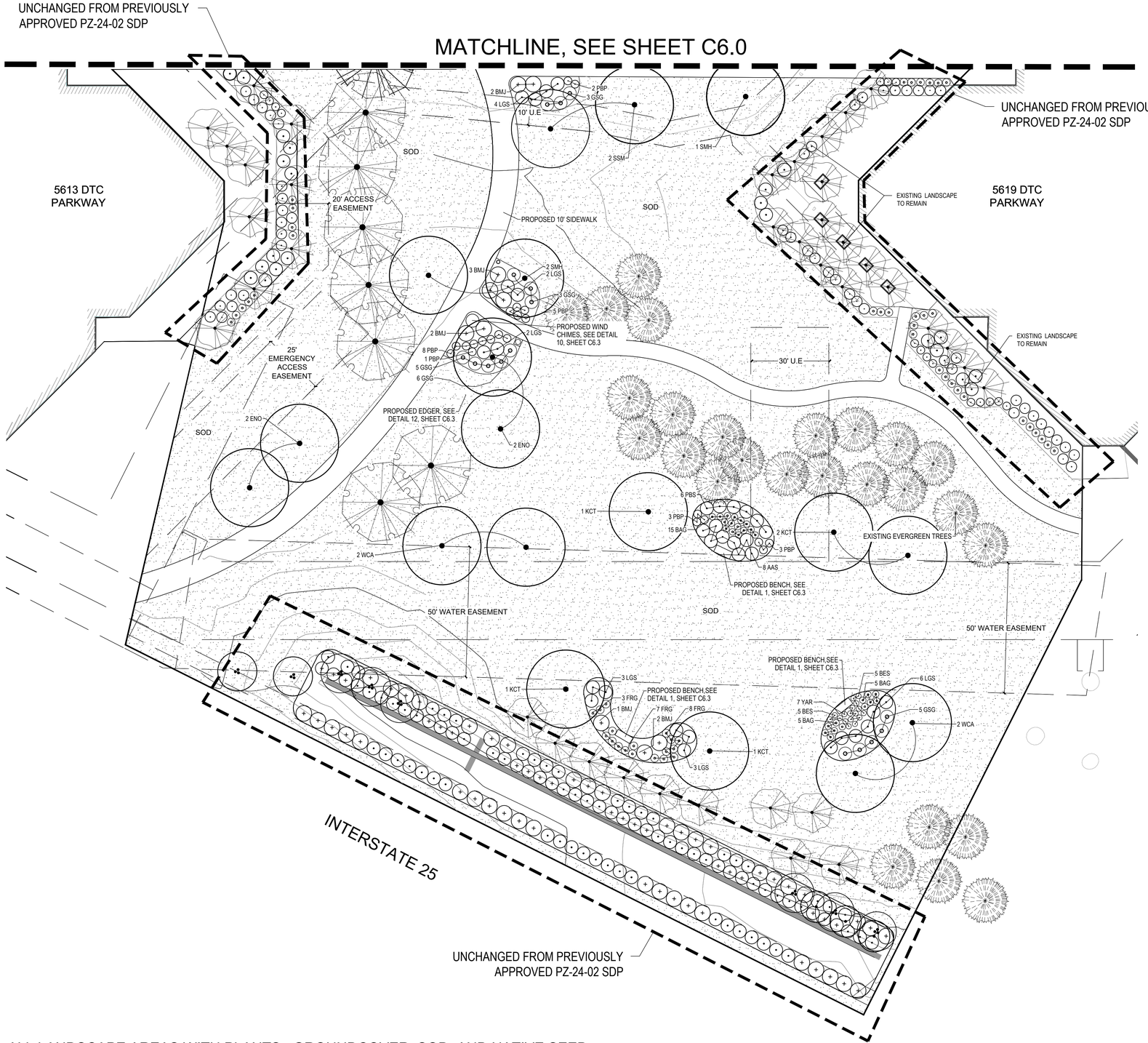
ORCHARD STATION PARK

SITE DEVELOPMENT PLAN

LANDSCAPE PLAN

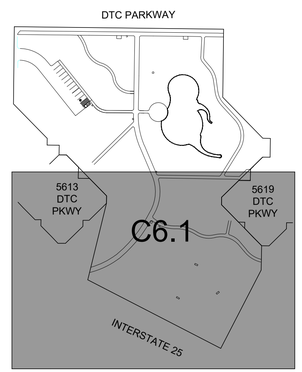
SHEET

C6.0



LEGEND

- EDGER
- CONCRETE
- CRUSHER FINES
- SOD
- ANNUAL COLOR
- DECIDUOUS TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES
- PERENNIALS
- EXISTING DECIDUOUS TREES
- EXISTING ORNAMENTAL TREES
- EXISTING EVERGREEN TREES
- BOULDERS (2' X 3' TYP.)



KEYMAP

ALL LANDSCAPE AREAS WITH PLANTS , GROUNDCOVER, SOD, AND NATIVE SEED TO BE ON AUTOMATIC IRRIGATION SYSTEM. SHRUBS AND OTHER PLANTING TO BE ON DRIP IRRIGATION & SOD & NATIVE SEED TO BE ON SPRAYHEADS AND ROTORS.

NORTH

0 10 20 40

SCALE: 1" = 20'

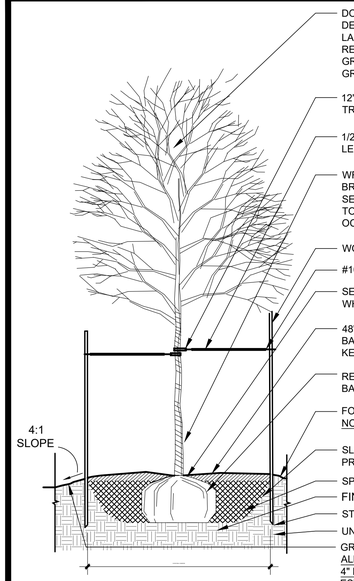
SAGE DESIGN GROUP
LANDSCAPE ARCHITECTURE SITE PLANNING ENTITLEMENT
1500 South Pearl St. Suite 200 Denver, Colorado 80210
303.470.2855 (p) 303.470.2894 (f) www.sagedesigngroup.com

NO	DATE	NOTES
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/13	ISSUED TO GREENWOOD VILLAGE
5	2025/12/05	FIRST AMENDMENT
6	2026/02/20	FIRST AMENDMENT
7	2026/04/03	FIRST AMENDMENT

PROJECT NO. 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
LANDSCAPE PLAN

SHEET
C6.1



DO NOT CUT SINGLE LEADER. PRUNE DAMAGED OR DEAD WOOD AND CO-DOMINANT LEADERS AT LANDSCAPE ARCHITECT'S DIRECTION ONLY. DO NOT REMOVE LOWER LIMBS AND SPROUTS FOR AT LEAST TWO GROWING SEASONS. DO NOT FERTILIZE FOR AT LEAST ONE GROWING SEASON.

12" NYLON TREE STRAP ON GUY WIRE AND AROUND TREE TRUNK.

1/2 " DIA. WHITE PVC PIPE SECTION ON ENTIRE LENGTH OF EACH WIRE.

WRAP ENTIRE SURFACE OF TRUNK TO SECOND BRANCH WITH SPECIFIED TREE WRAP MATERIAL SECURED WITH ELECTRICAL TAPE, NOT TWINE AT TOP AND BOTTOM & AT 2-FT. INTERVALS. WRAP OCT 15 AND REMOVE BY MARCH 31.

WOOD POSTS OR APPROVED EQUAL

#10 GUY WIRE, DOUBLE STRAND TWISTED.

SET ROOT COLLAR 4" HIGHER THAN GRADE AT WHICH TREE GREW.

48" CIRCLE OF SHREDDED BARK MULCH (4"-6" DEEP) AROUND BASE OF TREES IN GRASS AREAS.
KEEP MULCH BACK FROM TREE TRUNK.

REMOVE ALL TWINE, BURLAP AND TOP ⅔ OF WIRE BASKET AFTER THE TREE IS SET IN PLACE.

FORM SAUCER AROUND EDGE OF TREE PIT.
NO WATERING SAUCERS IN IRRIGATED TURF AREAS.

SLOPE SIDES OF PIT AS SHOWN. ROUGHEN SIDES PRIOR TO BACKFILLING.

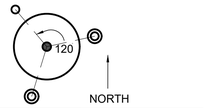
SPECIFIED BACKFILL MIXTURE

FINISH GRADE

STAKE TO EXTEND MIN. 24" INTO UNDISTURBED SOIL

UNDISTURBED SUBGRADE

GRASS MOUND, 4:1 SLOPE.
ALL TREES SHALL BE SET AT FINAL GRADE
4" HIGHER THEN SURROUNDING GRADE.
ESTABLISH ROOT COLLAR AS GROWN AT NURSERY.

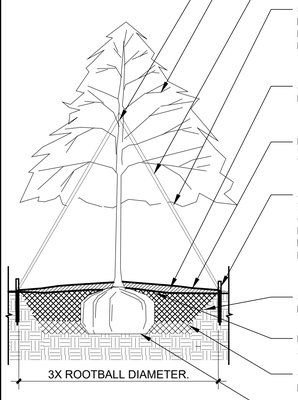


BRACE DETAIL

NOTES:
1. ANY BROKEN OR CRUMBLING ROOTBALL WILL BE REJECTED. REMOVING THE WIRE WILL NOT BE AN EXCUSE FOR DAMAGED ROOTBALLS. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING.
2. TREES SHOULD BE PLANTED THE SAME DAY AS DELIVERED TO THE SITE.
3. REPLACE ALL PIT EXCAVATION WITH THE FOLLOWING BACKFILL;
4. CLASS I, SUBMIT TESTING CERTIFICATE.
5. TOPSOIL TO BE CLEAN, NEUTRAL PH AND HAVE NO FOREIGN MATERIALS OR CONTAMINATES.
6. 50% PLANTER MIX / 50% COMPOST OR PREPARED PLANTER MIX OR 75% IMPORTED TOPSOIL / 25% PREPARED PLANTER MIX. SUBMIT PROPOSED BACKFILL TO OWNERS REPRESENTATIVE FOR APPROVAL BEFORE PLANTING.
7. DO NOT INCLUDE FERTILIZER FOR NEWLY PLANTED TREES UNLESS DIRECTED BY OWNERS REPRESENTATIVE.
8. COORDINATE IRRIGATION AND TREE PLANTINGS IN SOD AREAS. IRRIGATE IN MORE APPLICATIONS IN LESSER AMOUNTS. PREVENT OVER WATERING. CONTACT OWNERS REPRESENTATIVE IF NEEDED.
9. NO WATERING SAUCERS IN IRRIGATED TURF AREAS
10. SUPPLEMENTAL HAND WATERING WILL BE REQUIRED DURING ESTABLISHMENT PERIOD AND PERSONNEL MUST BE ONSITE TO INSURE NEWLY PLANTED TREES GET ENOUGH WATER WERE NEEDED. COORDINATE WITH OWNERS REPRESENTATIVE TO MEET ALL WATERING ISSUES AND ESTABLISH BEST MAINTENANCE PRACTICES. CONSTANT VIGILANCE WILL BE NEEDED FOR SUCCESSFUL TREE PLANTING.

1 DECIDUOUS TREE DETAIL

SCALE: N.T.S.



SPECIFIED TRUNK COLLAR ATTACHMENT, HEAVY DUTY. DO NOT TWIST.

DO NOT PRUNE LEADER. PRUNE ALL BROKEN AND DEAD BRANCHES AFTER PLANTING AND MULCHING. PRUNE TO TYPICAL FORM OF SPECIES. DO NOT PRUNE LOWER BRANCHES.

PLACE ½" DIA. WHITE PVC PIPE, 36" LENGTH ON ALL GUY WIRES.

#10 GUY WIRE PROVIDE 3 AT EQUIDISTANT AROUND TREE. KEEP CLEAR OF BRANCHES TO PREVENT RUB DAMAGE. ON PLANTS 6" HT. AND BELOW STAKE WITH 2 EACH, STAKE AS PER DECIDUOUS TREES.

SPECIFIED MULCH, 0" DEPTH AT TRUNK, 4" THK. AT EDGE OF RING.

FORM SAUCER AROUND EDGE OF TREE PIT. NO WATERING SAUCERS IN IRRIGATED TURF AREAS.

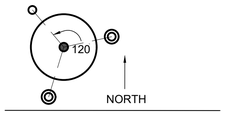
SPECIFIED STAKES INSIDE 4" WATERING SAUCER DRIVEN FLUSH WITH GRADE, 24", 3 PER TREE. REMOVE SAUCER UPON SEEDING OR SODDING IN IRRIGATED AREAS. NO WATERING SAUCERS IN IRRIGATED TURF AREAS. WATERING SAUCER LOCATED AT DRIP LINE OF
EVERGREEN TREES.

SLOPE SIDES OF PIT AS SHOWN. ROUGHEN SIDES PRIOR TO BACKFILLING.

ELEVATE THE ROOT BALL 4" ABOVE FINAL GRADE IN IRRIGATED AREAS.

SPECIFIED BACKFILL MIXTURE. AMENDMENTS AS SPECIFIED.
INITIAL STABILIZING BACKFILL, ⅓ DEPTH, COMPACTED.

SET ROOT BALL ON EXISTING UNDISTURBED SOIL. DIG PLANT PIT 24" WIDER THAN ROOTBALL. REMOVE ALL TWINE, BURLAP AND TOP ⅔ OF WIRE AFTER THE TREE IS SET IN PLACE.

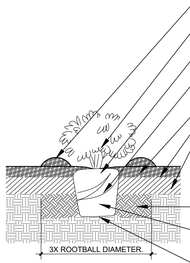


BRACE DETAIL

NOTES:
1. ANY BROKEN OR CRUMBLING ROOTBALL WILL BE REJECTED. REMOVING THE WIRE WILL NOT BE AN EXCUSE FOR DAMAGED ROOTBALLS. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING.
2. TREES SHOULD BE PLANTED THE SAME DAY AS DELIVERED TO THE SITE. KEEP PLANTS MOST AND SHADED UNTIL PLANTING.
3. REPLACE ALL PIT EXCAVATION WITH THE FOLLOWING BACKFILL:
- CLASS I, SUBMIT TESTING CERTIFICATE.
- TOPSOIL TO BE CLEAN, NEUTRAL PH AND HAVE NO FOREIGN MATERIALS OR CONTAMINATES.
- 50% PLANTER MIX / 50% COMPOST OR PREPARED PLANTER MIX OR 75% IMPORTED TOPSOIL / 25% PREPARED PLANTER MIX. SUBMIT PROPOSED BACKFILL TO OWNERS REPRESENTATIVE FOR APPROVAL BEFORE PLANTING.
- DO NOT INCLUDE FERTILIZER FOR NEWLY PLANTED TREES UNLESS DIRECTED BY OWNERS REPRESENTATIVE.
4. COORDINATE IRRIGATION AND TREE PLANTINGS IN SOD AREAS. IRRIGATE IN MORE APPLICATIONS IN LESSER AMOUNTS. PREVENT OVER WATERING. CONTACT OWNERS REPRESENTATIVE IF NEEDED.
5. NO WATERING SAUCERS IN IRRIGATED TURF AREAS
6. SUPPLEMENTAL HAND WATERING WILL BE REQUIRED DURING ESTABLISHMENT PERIOD AND PERSONNEL MUST BE ONSITE TO INSURE NEWLY PLANTED TREES GET ENOUGH WATER WERE NEEDED. COORDINATE WITH OWNERS REPRESENTATIVE TO MEET ALL WATERING ISSUES AND ESTABLISH BEST MAINTENANCE PRACTICES. CONSTANT VIGILANCE WILL BE NEEDED FOR SUCCESSFUL TREE PLANTING.

2 EVERGREEN TREE DETAIL

SCALE: N.T.S.



INSTALL WOOD MULCH AROUND THE BASE OF SHRUBS IN OPEN SPACE AREAS.

PRUNE ALL DAMAGED OR DEAD WOOD AFTER PLANTING AND MULCHING.

PLACE TOP OF ROOT BALL 2" ABOVE FINISH GRADE

SCORE CONTAINER ROOTBALLS WITH ENCIRCLING ROOTS

4" DEPTH SPECIFIED MULCH.

FINISH GRADE

AMEND SOIL TO A DEPTH OF 6" TO 8" BELOW FINISH GRADE IN ALL SHRUB AREAS NOTE: SEE SPECS., NOTES AND PLANT LIST FOR FURTHER INFORMATION

EXISTING SOIL BACKFILL (DO NOT USE AMENDED SOIL)

REMOVE CONTAINER, PLACE ON UNDISTURBED SOIL.

UNDISTURBED PIT BOTTOM FOR ROOT BALL BASE

NOTE:
1. DO NOT PLANT ANY PLANT WITH ROOTBALL NOT IN CONFORMANCE WITH COLORADO NURSERY ACT REQUIREMENTS
2. HOLD MULCH TOP GRADE 1" BELOW EDGE OF WALK, EDGING OR CURB.
3. DO NOT PUT ANY ORGANIC AMENDMENT BELOW 12 INCHES IN THE SOIL PROFILE.
4. INSTALL WOOD MULCH AROUND THE BASE OF ALL SHRUBS IN OPEN SPACE AREAS TO PROVIDE SEPARATION BETWEEN NATIVE GRASS AND THE SHRUB.

3 SHRUB PLANTING DETAIL

SCALE: N.T.S.

PLANTING NOTES

Minimum Plant size Requirements and Soil Preparation:

1. ALL PLANT MATERIALS SHALL MEET OR EXCEED SIZE IN SCHEDULES. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REFUSE PLANT MATERIALS WHICH DO NOT MEET THE QUALITY REQUIRED FOR THE PROJECT. ALL DECIDUOUS TREES SHALL HAVE FULL, WELL SHAPED HEADS, ALL EVERGREEN TREES SHALL BE UNSHEARED AND FULL TO THE GROUND. PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1.
2. ALL TREES TO BE STAKED OR GUYED PER DETAILS ON SHEET L-301.
3. ALL TREE LOCATIONS ARE TO BE STAKED FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION..
4. SOD AND SHRUB BEDS AREAS SHALL BE AMENDED WITH: CLASS II COMPOST AT A RATE OF 5 CUBIC YARDS PER 1000 S.F.; AMMONIUM SULFATE (20-0-0) AT A RATE OF 5 LBS PER 1000 S.F.; AND SOIL SULFUR (90% -100% ELEMENTAL) AT A RATE OF 10 LBS PER 1000 S.F. AMENDMENTS SHALL BE THOROUGHLY BLENDED TO HOMOGENOUS CONDITION TO A DEPTH OF NO LESS THAN 6" AND NO MORE THAN 12" BELOW FINISH GRADE.
5. ALL NATIVE SEED AREAS SHALL BE AMENDED WITH: BIOSOL AT A RATE OF 1000 LBS/ACRE AND BE THOROUGHLY BLENDED TO A HOMOGENOUS CONDITION TO A DEPTH OF NO LESS THAN 6" AND NO MORE THAN 12" BELOW FINISH GRADE.
6. ALL BACKFILL MATERIAL PER DETAILS ON SHEET L-202.
7. PRIOR TO PLANTING ANY TREES ON SITE, THE LANDSCAPE CONTRACTOR SHALL PERFORM A SOIL PERCOLATION TEST TO DETERMINE IF THERE ARE ANY DRAINAGE PROBLEMS. THE LANDSCAPE CONTRACTOR IS REQUIRED TO DIG 3 HOLES AT DIFFERENT LOCATIONS AS DIRECTED BY OWNERS REPRESENTATIVE. THE HOLE SHALL BE EQUAL IN SIZE TO THE LARGEST TREE PIT REQUIRED FOR EACH PARTICULAR LOCATION. ADDITIONAL LOCATIONS WILL BE REQUIRED IF VARIOUS SOIL TYPES ARE FOUND AROUND THE SITE AND/OR IF THE OWNER'S REPRESENTATIVE FINDS IT NECESSARY. THE LANDSCAPE CONTRACTOR SHALL VERIFY TEST PIT LOCATIONS WITH OWNER'S REPRESENTATIVE AND FILL EACH HOLE WITH WATER AND MONITOR HOW MUCH WATER IS REMAINING IN THE HOLE AFTER 24 HOURS. MAKE A WRITTEN REPORT TO THE OWNER'S REPRESENTATIVE. IF IT IS DETERMINED THAT SOIL DRAINAGE IS A PROBLEM, A RESOLUTION WILL BE WORKED OUT BY THE OWNER AND IF NECESSARY A CHANGE ORDER WILL BE INITIATED.
8. ALL TREES, SHRUBS, PERENNIALS, SOD AREAS SHALL BE GUARANTEED TO REMAIN ALIVE AND HEALTHY FOR A 1-YEAR PERIOD AFTER INITIAL ACCEPTANCE. ALL REPLACEMENT COSTS SHALL BE BORN BY THE CONTRACTOR.
9. TREE WRAPPING MATERIAL SHALL BE FOUR INCHES WIDE, BITUMINOUS IMPREGNATED TAPE, CORRUGATED OR CREPE PAPER, BROWN IN COLOR, SPECIFICALLY MANUFACTURED FOR TREE WRAPPING. TREES SHALL BE WRAPPED BETWEEN OCTOBER 15 AND NOVEMBER 1 OF THE YEAR THEY ARE PLANTED. NO TREE WRAPPING SHALL BE PERMITTED UNTIL A LICENSED LANDSCAPE CONTRACTOR OR CERTIFIED ARBORIST HAS INSPECTED THE TREE. IT IS THE DUTY OF THE CONTRACTOR TO WRAP DECIDUOUS TREES DURING THE ONE-YEAR WARRANTY PERIOD.
10. ALL TREES TO BE PLANTED A MINIMUM OF (3) THREE FEET FROM ALL EDGER, (5) FIVE FEET FROM ALL CONCRETE WALKS AND (8) EIGHT FEET AWAY FROM BUILDINGS.
11. DO NOT PLANT ANY PLANT MATERIAL IN THE BOTTOM OF ANY DRAINAGE SWALE. RELOCATE AS NEEDED. CONTACT OWNERS REPRESENTATIVE IF MORE INFORMATION IS NEEDED BEFORE PLANTING.
12. CONTRACTOR TO REMOVE ALL TREE STAKING AND GUYING AFTER ONE YEAR.

Edging:

1. FURNISH AND INSTALL GREEN DURA EDGE (WITH ROLLED TOP) MODEL - EDT 144010 (14 GA X 4" X 10') WITH RUST FREE STAKES BETWEEN ALL PLANTING BEDS AND TURF AREAS AS SHOWN ON PLANS. INSTALL QUANTITY AND SPACING OF STAKES PER MANUFACTURER'S SPECIFICATIONS. THE TOP OF ALL EDGING MATERIAL SHALL BE 1/2 INCH ABOVE THE FINISHED GRADE OF ADJACENT LAWN OR MULCH AREAS.
2. CONTRACTOR SHALL SUBMIT SAMPLES OF EDGER AND STAKES TO OWNER FOR APPROVAL BEFORE ORDERING OR INSTALLATION.

Weed Barrier and Shrub Bed Mulch:

1. WHERE SHOWN ON PLANS, SHRUB BEDS MULCHED WITH - CASCADE CEDAR ("GORILLA HAIR") TO BE A MINIMUM DEPTH OF 4 INCHES WITH NO LANDSCAPE FABRIC. ROCK MULCH SHALL BE 1.5"-2" DIAMETER TAN LOCAL WASHED RIVER ROCK TO BE A MINIMUM DEPTH OF 3". AND ALL COBBLE AREAS TO BE 5"-12" TAN HORIZON COBBLE. BOTH ROCK MULCH AND COBBLE TO BE PLACED OVER MIRAFI LANDSCAPE FABRIC. SEE PLANT LIST, LANDSCAPE PLANS FOR MORE INFORMATION. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER FABRIC AND MULCH HAVE BEEN INSTALLED.
2. CONTRACTOR SHALL SUBMIT SAMPLES OF ALL MULCH TYPES & FABRIC TO OWNER FOR APPROVAL BEFORE ORDERING OR INSTALLATION.

Irrigation System:

1. COORDINATE IRRIGATION INSTALLATION WITH PROPOSED TREE LOCATIONS TO ENSURE PROPER FINAL PLACEMENT OF TREES
2. CONTRACTOR TO LOCATE AND INSTALL IRRIGATION MATERIALS AWAY FROM ALL RETAINING WALLS AS TO NOT COMPROMISE THE WALLS STRUCTURAL INTEGRITY.
3. LANDSCAPE CONTRACTOR TO INSTALL IRRIGATION SYSTEM PER PLANS.
4. NO SPRAY IRRIGATION SHALL BE INSTALLED WITHIN 5 FEET OF BUILDING FOUNDATIONS.

NATIVE SEED NOTES

Preparation:

1. GRADES: VERIFY THAT FINISH GRADES ARE CONSISTENT WITH THE SLOPES AND GRADES INDICATED ON THE DRAWINGS.
2. SCHEDULE: COORDINATE SOD AND SEEDING SCHEDULE WITH INSTALLATION OF IRRIGATION SYSTEM TO ENSURE THAT NEITHER OPERATION WILL DAMAGE THE OTHER. INSURE SYSTEM IS OPERATING TO PROVIDE ADEQUATE WATER.
3. SOIL: ALL NATIVE GRASS SHOULD HAVE A MINIMUM OF 6 INCHES OF TOPSOIL, PH RANGE OF 5.5 TO 7, A MINIMUM OF 3-5 PERCENT ORGANIC MATERIAL CONTENT. ACCEPTABLE TOPSOIL SHALL CONSIST OF LOOSE FRIABLE LOAM, FREE OF HEAVY CLAY, REFUSE, STUMPS AND LARGE ROOTS, ROCKS OVER 2 INCHES (50 MM) IN DIAMETER, BRUSH, WEEDS AND WEED SEEDS, OR OTHER MATERIAL WHICH WOULD BE DETRIMENTAL TO THE PROPER DEVELOPMENT OF VEGETATIVE GROWTH.
   a. TOPSOIL SOURCE: REUSE SURFACE SOIL STOCKPILED ON-SITE. VERIFY SUITABILITY OF STOCKPILED SURFACE SOIL TO PRODUCE TOPSOIL. CLEAN SURFACE SOIL OF ROOTS, PLANTS, SOD, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH.
4. ORGANIC AMENDMENT: COMPOST IS A WIDELY USED BULK ORGANIC SOIL AMENDMENT AND A RECYCLED PRODUCT. BECAUSE IT IS APPLIED AT MUCH GREATER RATES THAN FERTILIZER, COMPOST HAS A SIGNIFICANT CUMULATIVE EFFECT ON NUTRIENT AVAILABILITY AND MAY REDUCE OR ELIMINATE INITIAL FERTILIZATION. CONSIDER EACH PLANT'S PH AND SOLUBLE SALT REQUIREMENTS AND HOW THEY RELATE TO THE COMPOST BEING USED AND THE RESULTING SOIL-COMPOST MIX.
   a. COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, PH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4 INCH SIEVE; SOLUBLE SALT CONTENT OF 5-10 DECISIEMENS/M; NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS AND FREE OF SUBSTANCES TOXIC TO PLANTINGS; AND AS FOLLOWS:

-ORGANIC MATTER CONTENT: 50 TO 60 PERCENT OF DRY WEIGHT.

-MANURE: WELL-ROTTED, UNLEACHED, STABLE OR CATTLE MANURE CONTAINING NOT MORE THAN 25 PERCENT BY VOLUME OF STRAW, SAWDUST, OR OTHER BEDDING MATERIALS; FREE OF TOXIC SUBSTANCES, STONES, STICKS, SOIL, WEED SEED, AND MATERIAL HARMFUL TO PLANT GROWTH.

5. WEED CONTROL: IF WEEDS ARE PRESENT IN THE AREA TO BE PLANTED, PERFORM HERBICIDE TREATMENT OVER THE ENTIRE AREA TO BE PLANTED. ALLOW SUFFICIENT TIME TO SUCCESSFULLY COMPLETE THE ENTIRE HERBICIDE TREATMENT PROCESS BEFORE PROCEEDING WITH PLANTING. REPEAT PROCEDURE AS NEEDED AS WEED GROWTH BECOMES EVIDENT THROUGHOUT THE DURATION OF LANDSCAPE CONSTRUCTION. SUBMIT HERBICIDE TREATMENT PLAN TO OWNER FOR APPROVAL.
6. FERTILIZERS - DO NOT FERTILIZE GRASSES.

Installation:

1. CONTRACTOR TO SUBMIT INSTALLATION METHOD TO OWNER FOR APPROVAL.
2. SEE PLANT SCHEDULE FOR NATIVE SEED VARIETIES.
3. SEEDING NATIVE GRASS: INSTALL SEED FOR METHOD AGREED UPON WITH OWNER.
   a. DO NOT USE WET SEED OR SEED THAT IS MOLDY OR OTHERWISE DAMAGED.
   b. INSTALL SEED ONLY WHEN SOIL MOISTURE IS APPROPRIATE.
   c. RESTORE GRADE IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.
   d. SOWING RATES VARY WITH GRASS SPECIES AND MIXTURES, SOW SEED AT RATES SPECIFIED PER MANUFACTURER RECOMMENDATIONS.
   e. PROTECT SEEDED AREAS WITH SLOPES EXCEEDING 4:1 WITH EROSION-CONTROL BLANKETS INSTALLED AND STAPLED ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. COORDINATE EROSION-CONTROL MATERIALS WITH SLOPE RATIOS.
   f. PROTECT SEEDED AREAS WITH SLOPES LESS THAN 6:1 BY SPREADING STRAW MULCH. SPREAD UNIFORMLY AT A MINIMUM RATE OF 2 TONS/ACRE (42 KG/92.9 SQ. M) TO FORM A CONTINUOUS BLANKET 1-1/2 INCHES (38 MM) IN LOOSE THICKNESS OVER SEEDED AREAS. SPREAD BY HAND, BLOWER, OR OTHER SUITABLE EQUIPMENT.
   g. PROTECT SEEDED AREAS FROM HOT, DRY WEATHER OR DRYING WINDS BY APPLYING COMPOST MULCH WITHIN 24 HOURS AFTER COMPLETING SEEDING OPERATIONS. SOAK AREAS, SCATTER MULCH UNIFORMLY TO A THICKNESS OF 3/16 INCH (4.8 MM), AND ROLL SURFACE SMOOTH.

Warranty:

4. GROWING SEASONS:
   a. WHEN REMEDIAL SEEDING IS REQUIRED, THE NATIVE PLANT SEEDING CONTRACTOR SHALL PERFORM ADDITIONAL REMEDIAL SEEDING IN THE SAME AREA FOR A MINIMUM OF TWO FULL GROWING SEASONS.
   b. IF AFTER TWO FULL GROWING SEASONS THE REMEDIAL SEEDING PERFORMANCE IS UNACCEPTABLE TO THE OWNER, ADDITIONAL REMEDIAL ACTION IS REQUIRED.
   c. THE REMEDIAL ACTIONS OUTLINED ABOVE WILL REMAIN IN EFFECT UNTIL ALL RESTORATION SEEDING ZONES MEET THE THIRD GROWING SEASON CRITERIA.
2. IF SEEDED AREAS GREATER THAN 10 SQUARE FEET FAIL TO MEET THE TERMS OF THE GUARANTEE, THE NATIVE PLANT SEEDING CONTRACTOR WILL DEVELOP AND SUBMIT TO THE OWNER A REMEDIAL ACTION PLAN THAT TAKES INTO CONSIDERATION THE SITE GOALS AND SPECIFIC DEFICIENCIES CAUSING THE REMEDIAL ACTION.

MAINTENANCE SCHEDULE

1. START UP AND CHECK IRRIGATION SYSTEM IN MARCH. MONITOR THROUGHOUT THE SUMMER.
2. PLANT ANNUAL FLOWERS IN SPRINGTIME AND MAINTAIN THROUGHOUT THE SUMMER.
3. MOW TURF AND STRING TRIM AROUND BEDS AND TREES WEEKLY DURING GROWING SEASON.
4. EDGE SIDEWALKS MONTHLY.
5. APPLY FERTILIZER THREE TIMES DURING GROWING SEASON.
6. MONITOR FOR TRASH AND EMPTY CONTAINERS WEEKLY.
7. TREAT FOR BROAD LEAF WEEDS AS NEEDED DURING GROWING SEASON.
8. BLOWOUT IRRIGATION SYSTEM IN OCTOBER.
9. ROUTINE MONITORING OF STORMWATER STRUCTURES AND AFTER EACH RAIN EVENT.
10. FERTILIZE TREES YEARLY, PERFORM MAINTENANCE PRUNING AND REMOVE HAZARDOUS BRANCHES AS NEEDED.
11. CLEAR WALKWAYS AND PARKING STALLS OF SNOW AS NEEDED.

LANDSCAPE PLANT LIST

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE	SIZE AT INSTALLATION	(5-7 YEAR SIZE)	QUANTITY
DECIDUOUS TREES						
ENO	HERITAGE OAK	QUERCUS X MACDANIELII 'CLEMONS'	3" CAL. B&B	12'H X 4'W	13'H X 6'W	8
KCT	KENTUCKY COFFEE TREE (SEEDLESS)	GYMNOCLADUS DIOICA 'ESPRESSO'	3" CAL. B&B	12'H X 5'W	15'H X 7'W	5
HBY	HACKBERRY	CELTIS OCCIDENTALIS	3" CAL. B&B	12'H X 5'W	15'H X 7'W	3
SMH	SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'	3" CAL. B&B	12'H X 5'W	15'H X 7'W	7
SSM	STATESTREET MAPLE	ACER MIYABEI 'MORTON'	3" CAL. B&B	12'H X 5'W	15'H X 7'W	2
WCA	WESTERN CATALPA	CATALPA SPECIOSA	3" CAL. B&B	12'H X 5'W	15'H X 7'W	6
WCO	COYOTE WILLOW	SALIX EXIGUA	3" CAL. B&B	12'H X 5'W	15'H X 7'W	3
			SUBTOTAL:			34
ORNAMENTAL TREES						
SSC	SPRING SNOW CRABAPPLE	MALUS X 'SPRING SNOW'	2" CAL. B&B	8'H X 4'W	10'H X 6'W	9
RHA	RUSSIAN HAWTHORNE	CRATAEGUS AMBIGUA	8' CLUMP	8'H X 4'W	10'H X 6'W	3
			SUBTOTAL:			12
DECIDUOUS SHRUBS						
AAS	AUTUMN AMBER SUMAC	RHUS TRILOBATA 'AUTUMN AMBER'	5 GAL. CONT.	1'H X 1'W	3'H X 3'W	8
AWS	ANTHONY WATERER SPIREA	SPIRAEA JAPONICA 'ANTHONY WATERER'	5 GAL CONT.	1'H X 1'W	3'H X 3'W	19
BMS	BLUE MIST SPIREA	SPIRAEA CARYOPTERIS INCANA	5 GAL CONT.	1'H X 1'W	3'H X 3'W	19
BUR	DWARF BURNING BUSH	EUONYMUS ALATUS 'COMPACTA'	5 GAL CONT.	1.5'H X 1.5'W	4'H X 3'W	4
CBC	CORAL BEAUTY COTONEASTER	COTONEASTER DAMMERI 'CORAL BEAUTY'	5 GAL CONT.	.5'H X 1.5'W	2' H X 5'W	42
DCB	DWARF CRIMSON BARBERRY	BERBERIS THUNBERGII ATROPURPUREA 'CRIMSON PYGMY'	5 GAL CONT.	1'H X 1'W	2'H X 3'W	29
DKL	DWARF KOREAN LILAC	SYRINGA MEYERI 'PALIBIN'	5 GAL CONT.	1'H X 1'W	5'H X 5'W	26
GDP	GOLD DROP POTENTILLA	POTENILLA FRUTICOSA 'GOLD DROP'	5 GAL CONT.	1'H X 1'W	3'H X 3'W	61
ISD	ISANTI DOGWOOD	CORNUS SERICEA 'ISANTI'	5 GAL CONT.	1'H X 1'W	4'H X 4'W	8
KOR	KNOCK OUT ROSE	ROSA 'RADRAZZ'	5 GAL CONT.	1'H X 1'W	4'H X 4'W	60
LGS	LOW GROW SUMAC	RHUS AROMATICA 'GROW-LOW'	5 GAL CONT.	1'H X 1'W	3'H X 5'W	48
PBP	PINK BEAUTY POTENTILLA	POTENILLA FRUTICOSA 'PINK BEAUTY'	5 GAL CONT.	1'H X 1'W	3'H X 3'W	59
PBS	PAWNEE BUTTES SAND CHERRY	PRUNUS BESSEYI 'PAWNEE BUTTES'	5 GAL CONT.	1'H X 1'W	1.5'H X 6'W	59
RGB	ROSY GLOW BARBERRY	BERBERIS THUNBERGII 'ROSY GLOW'	5 GAL CONT.	1'H X 1'W	4'H X 4'W	59
RUS	RUSSIAN SAGE	PEROVSKIA ARTIPLICIFOLIA	5 GAL CONT.	1'H X 1'W	4'H X 4'W	62
TLS	THREELEAF SUMAC	RHUS TRILOBATA	5 GAL CONT.	1'H X 1'W	8'H X 8'W	5
VIB	MOHICAN VIBURNUM	VIBURNUM LANTANA 'MOHICAN'	5 GAL CONT.	1'H X 1'W	8'H X 8'W	9
			SUBTOTAL:			577
EVERGREEN AND BROADLEAF SHRUBS						
ADJ	ANDORRA JUNIPER	JUNIPERUS HORIZONTALIS 'YOUNGSTOWN'	5 GAL CONT.	0.25'H X 1'W	1.5'H X 6'W	16
BCJ	BLUE CHIP JUNIPER	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	5 GAL CONT.	0.25'H X 1'W	.75'H X 6'W	30
BMJ	BROADMOOR JUNIPER	JUNIPERUS SABINA 'BROADMOOR'	5 GAL CONT.	0.25'H X 1'W	1.5'H X 5'W	32
DGS	DWARF GLOBE SPRUCE	PICEA PUNGENS 'GLAUCA GLOBOSA'	5 GAL CONT.	1.5'H X 1'W	2.5'H X 4'W	11
TAM	TAMMY JUNIPER	JUNIPERUS SABINA 'TAMARISCIFOLIA'	5 GAL CONT.	1.5'H X 1'W	2.5'H X 4'W	20
YUC	IVORY TOWER YUCCA	YUCCA FILAMENTOSA 'IVORY TOWER'	5 GAL CONT.	1'H X 1'W	3'H X 3'W	22
			SUBTOTAL:			131
ORNAMENTAL GRASSES						
BAG	BLONDE AMBITION GRASS	BOUTELOUA GRACILIS	1 GAL CONT.	1'H X 0.5'W	2.5'H X 2.5'W	64
FRG	FEATHERED REED GRASS	CALAMAROSTIS X ACUTIFLORA 'KARL FORESTER'	1 GAL CONT.	1'H X 0.5'W	3'H X 2'W	126
GSG	GIANT SACATON GRASS	SPOROBOLUS WRIGHTII	1 GAL CONT.	1'H X 0.5'W	4'H X 2'W	23
			SUBTOTAL:			213
GROUND COVERS, VINES, ANNUALS & PERENNIALS						
BES	BLACK EYED SUSAN	RUDBECKIA FULGIDA 'GOLDSTRUM'	1 GAL. CONT.	0.5'H X 0.5'W	2.5'H X 2'W	73
DGD	DWARF GOLD DAYLILY	HEMEROCALLIS 'STELLA DORO'	1 GAL. CONT.	0.5'H X 0.5'W	1.5'H X 1.5'W	37
PRA	PRAIRIE CONEFLOWER	ECHINACEA PURPUREA 'NANA'	1 GAL. CONT.	0.5'H X 0.5'W	2'H X 1.5'W	18
SAL	MAY NIGHT SALVIA	SALVIA SYLVESTRIS X 'MAINACHT'	1 GAL. CONT.	0.5'H X 0.5'W	2'H X 1.5'W	6
YAR	YARROW, MOONSHINE	ACHILLEA 'MOONSHINE'	1 GAL. CONT.	0.5'H X 0.5'W	2'H X 2'W	26
			SUBTOTAL:			160

SOD AND NATIVE SEED

SOD * (ALL SOD AREAS TO BE FULLY IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM)	100% IMPROVED BLUEGRASS SOD BY: GREEN VALLEY TURF COMPANY - THERMAL BLUE BLEND. LOCATE PER PLANS.	INSTALL PER MANUFACTURES INSTRUCTIONS	155,000 SF	

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PROJECT NO: 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
LANDSCAPE DETAILS

SHEET
C6.2

MODEL : STAY BENCH 22" X 60" X 32
MANF : LANDSCAPE FORMS
COLOR :
CONTACT :NATALIE CALIGARIS (269-276-4451)

1 STAY BENCH - 6'
SCALE: N.T.S.

MODEL : AUSTIN BIN 24" X 35" X 34 GAL
MANF : LANDSCAPE FORMS
COLOR :
CONTACT :NATALIE CALIGARIS (269-276-4451)

2 WASTE BIN
SCALE: N.T.S.

MODEL : CHARLIE TABLE 6'
MANF : LANDSCAPE FORMS
COLOR :
CONTACT :NATALIE CALIGARIS (269-276-4451)

3 TABLE
SCALE: N.T.S.

MODEL : EMERSON BIKE RACK
MANF : LANDSCAPE FORMS
COLOR :
CONTACT :NATALIE CALIGARIS (269-276-4451)

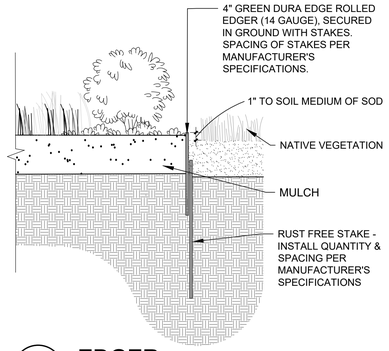
4 BIKE RACK
SCALE: N.T.S.

MANUFACTURER: ULINE
PACKAGE: 1003-L DOGIPOT STATION W/10GAL TRASH RECEPTACLE & LID, ALUMINUM SIGN, BAG DISPENSER, MOUNTING POST, BAGS FOR TRASH & PET WASTE.
COLOR: AS PROVIDED IN PACKAGE

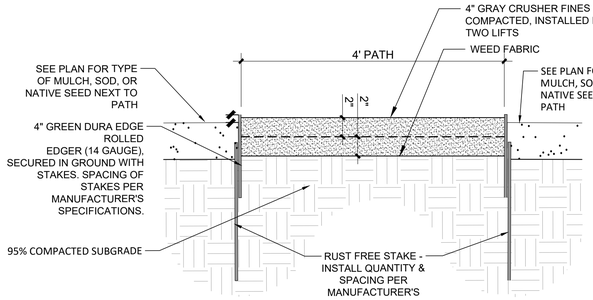
CONTACT: HTTP://WWW.ULINE.COM/BL_8262/DOG-WASTE-SYSTEM
1-800-295-5510
INSTALL PER MANUFACTURER'S SPECIFICATION.

COORDINATE WITH OWNER FOR ALL LOCATIONS.

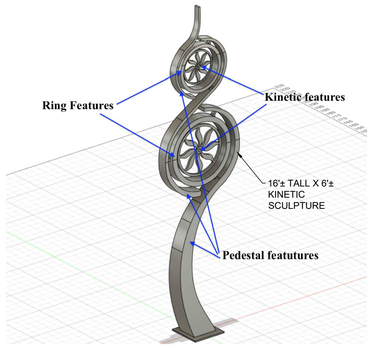
5 DOG WASTE STATION
N.T.S.



6 EDGER
N.T.S.



7 CRUSHER FINES WITH EDGING
N.T.S.



8 KINETIC SCULPTURE
SCALE: N.T.S.

MANUFACTURER: NOAH'S PARK & PLAYGROUNDS
SKU: PPCATTS3MIGR

CONTACT: 1-877-248-3444
INSTALL PER MANUFACTURER'S SPECIFICATION.

DIMENSIONS:
15.5"W X 64"H

9 CATTAIL WIND CHIMES
SCALE: N.T.S.

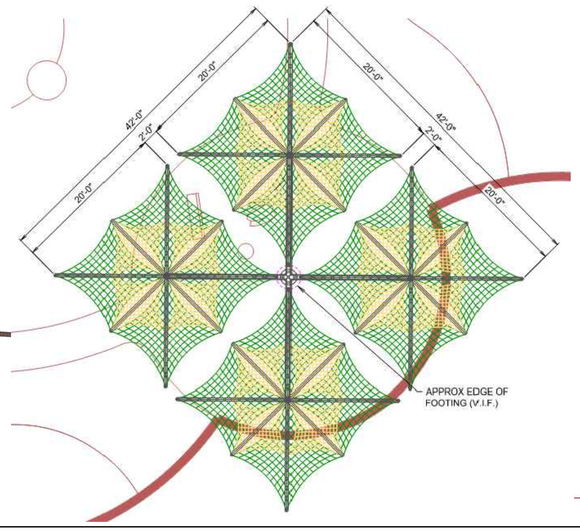
MANUFACTURER:
FREENOTES HARMONY PARK

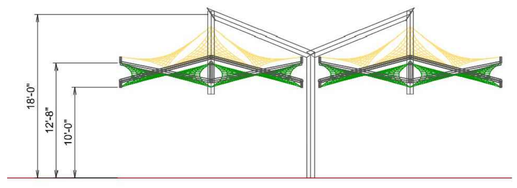
MODEL #: CONTRABASS

CONTACT: JESSE NIEDING
303-278-1455

DIMENSIONS:
4" IN DIAMETER PER CHIME
HEIGHTS: BETWEEN 88" AND 104"

10 WIND CHIMES
SCALE: N.T.S.





MODEL: MARINER DOUBLE
MANUFACTURER: USA SHADE
COLOR: TBD
CONTACT: JESSE NEIDING
303-278-1455

11 SHADE SAIL SYSTEM
SCALE: N.T.S.

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PROJECT NO.

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
LANDSCAPE DETAILS

SHEET
C6.3

Irrigation Construction Notes

1. ALL BASE INFORMATION HAS BEEN TAKEN FROM DRAWINGS PREPARED BY SAGE DESIGN GROUP.
2. REFER TO TECHNICAL SPECIFICATIONS AND CONSTRUCTION DETAILS FOR INSTALLATION PROCEDURES.
3. CONTRACTOR SHALL FIELD VERIFY PRESSURE AT BACKFLOW PREVENTER LOCATION FOR EACH TAP PRIOR TO ORDERING MATERIALS OR STARTING ANY IRRIGATION INSTALLATION AND NOTIFY CONSULTANT OF ANY DIFFERENCES FROM STATED PRESSURE. IF CONTRACTOR FAILS TO NOTIFY CONSULTANT HE ASSUMES FULL RESPONSIBILITY FOR ANY SYSTEM ALTERATIONS. SYSTEM HAS BEEN DESIGNED FOR A STATIC PRESSURE OF 75 PSI (PER DTC MAINT.).

TAP LOCATION/NUMBER	REQUIRED PRESSURE
1	64 PSI

4. CONTRACTOR SHALL COORDINATE INSTALLATION OF SLEEVING WITH INSTALLATION OF CONCRETE FLATWORK AND PAVING. ALL SLEEVING IS BY CONTRACTOR UNLESS OTHERWISE NOTED. UNLESS NOTED OTHERWISE ON IRRIGATION PLANS INSTALL SLEEVING BASED ON SLEEVE SIZING GUIDE BELOW:

PIPE SIZE OR WIRE QUANTITY	REQUIRED SLEEVE
3/4" - 1" PIPING	1-2" PVC SLEEVE
1-1/2" - 2" PIPING	1-4" PVC SLEEVE
2-1/2" - 3" PIPING	1-6" PVC SLEEVE
TWO-WIRE CABLE	1-2" PVC SLEEVE

NOTE: EACH LENGTH OF SLEEVED PIPE SHOWN SHALL BE ROUTED THROUGH SEPARATE SLEEVE. IRRIGATION WIRE BUNDLE SHALL BE ROUTED IN SEPARATE SLEEVE/CONDUIT WITHOUT IRRIGATION PIPING

5. WHERE NOT NOTED ON IRRIGATION PLANS CONTRACTOR TO INSTALL PLASTIC 15 SERIES NOZZLES ON POP-UP SPRAY HEADS SPACED GREATER THAN 12 FEET. INSTALL 12 SERIES NOZZLES ON POP-UP SPRAY HEADS SPACED 10-12 FEET. INSTALL 10 SERIES NOZZLES ON ALL POP-UP SPRAY HEADS SPACED 8-10 FEET. INSTALL 8 SERIES NOZZLES ON POP-UP SPRAY HEADS SPACED 8 FEET AND LESS.
6. REFER TO PLANTING PLAN FOR EXACT TREE LOCATIONS AND QUANTITIES, TREES SHOWN ON IRRIGATION PLANS ARE APPROXIMATE.
7. CONTRACTOR SHALL REPAIR OF REPLACE ANY EXISTING IRRIGATION EQUIPMENT, TURF, PLANT MATERIAL OR SITE FEATURES DAMAGED DURING NEW INSTALLATION. REPLACEMENT OR REPAIR OF DAMAGED EQUIPMENT OR MATERIAL SHALL BE DETERMINED BY THE OWNER AND THE CONSULTANT.
8. VALVE BOXES SHALL BE LOCATED 36" MINIMUM FROM CENTERLINE OF ALL SWALES, 36" MINIMUM FROM EDGES OF ALL WALKS, CURBS, DRIVES AND OTHER HARD SURFACE AREAS.
9. REFER TO IRRIGATION TECHNICAL SPECIFICATIONS FOR PLANTING AND IRRIGATION LAY-OUT REQUIREMENTS, COORDINATION AND PRIORITIES.
10. LATERAL PIPING DIAMETERS SHALL INCLUDE 1", 1 1/2" AND 2". 3/4" AND 1 1/4" DIAMETER LATERAL PIPE IS NOT ACCEPTABLE.
11. ALL REQUIRED HDPE FITTINGS TO BE BUTT-FUSION OR ELECTRO-FUSION TYPE.

Irrigation Equipment and Materials Schedule

SYMBOL	MANUFACTURER	MODEL NO.	DESCRIPTION	DETAIL NO.	COMMENTS
● V.	RAIN BIRD	1806 SAM P30 W/ SPEC'D. NOZZ.	POP-UP SPRAY HEAD	1	
▲■▬■ V.	RAIN BIRD	1812 SAM P30 W/ SPEC'D. NOZZ.	HI-POP SPRAY HEAD	2	
● .07	HUNTER	I-20-06 W/ #07 NOZZLE	GEAR DRIVEN ROTOR	3	
● .10	HUNTER	I-25-06 W/ #10 NOZZLE	GEAR DRIVEN ROTOR	3	
● 1.3	HUNTER	I-25-06 W/ #103NOZZLE	GEAR DRIVEN ROTOR	3	
● 25H ● 25Q ● 25F	HUNTER	I-20-06-SS W/ MPR-25 SERIES NOZZLE	GEAR DRIVEN ROTOR	3	RED NOZZLE
● 30H ● 30Q ● 30F	HUNTER	I-20-06-SS W/ MPR-30 SERIES NOZZLE	GEAR DRIVEN ROTOR	3	GREEN NOZZLE
● 35H ● 35Q ● 35F	HUNTER	I-20-06-SS W/ MPR-35 SERIES NOZZLE	GEAR DRIVEN ROTOR	3	TAN NOZZLE
● 2.5LA	HUNTER	I-20-06 W/ #2.5LA NOZZLE	GEAR DRIVEN ROTOR	3	
● 3.5LA	HUNTER	I-20-06 W/ #3.5LA NOZZLE	GEAR DRIVEN ROTOR	3	
● 3.0	HUNTER	I-20-06 W/ #3.0 NOZZLE	GEAR DRIVEN ROTOR	3	
● 4.0	HUNTER	I-20-06 W/ #4.0 NOZZLE	GEAR DRIVEN ROTOR	3	
● 5.0	HUNTER	I-20-06 W/ #5.0 NOZZLE	GEAR DRIVEN ROTOR	3	
	RAIN BIRD	PES-B SERIES	ELECTRIC CONTROL VALVE	5	W/ DECODER
⬡		EXISTING	BASELINE 3200 CONTROLLER	-	TWO-WIRE SYSTEM
	MATCO-NORCA	10RS SERIES - LINE SIZE	GATE VALVE	10	PVC INSTALL.
	LEEMCO	LMV-xxBBHDSS SERIES - LINE SIZE	GATE VALVE	23	HDPE INSTALL.
		CLASS 200 SOLVENT WELD	PVC MAINLINE	12	
	CENTENNIAL PLASTICS	3/4" I.D.	POLY DRIP TUBING	16	
		CLASS 200 SOLVENT WELD	PVC SLEEVING		
HDPE		DR11 (200 PSI)	HDPE DISTRIBUTION MAIN (NEW)		
		CLASS 200 SOLVENT WELD - 1" DIA. UNLESS NOTED OTHERWISE	PVC LATERAL	12	
▼	RAIN BIRD	44 NP	QUICK COUPLING VALVE	7	
⊙	RAIN BIRD	PES-B SERIES - 2" DIA.	MASTER VALVE	6	W/ DECODER
◇	BASELINE	BL-LA01	SURGE ARRESTOR	18	
⊕	RAIN BIRD	XCZ-100-PRB-COM	DRIP VALVE ASSEMBLY	14	W/ DECODER
◯	NETAFIM	TLCV-9-18	IN-LINE DRIP TREE RING	17	
(F)	FLO-MEC	QS-200 - 2" DIA.	FLOW SENSOR	11	W/ DECODER
▽		LINE SIZE	DRIP LINE BLOW-OUT STUB	15	
(R)	HUNTER	WRF-CLIK	WIRELESS RAIN/FREEZE SENSOR	13	
♦	A.Y. McDONALD	76101 SERIES - 3/4" DIA.	MANUAL DRAIN VALVE	8	

CONTROLLER & STATION NO.
CONTROL VALVE SIZE

2W BLUE / 2W BLUE — 2W RED / 2W RED — COLOR AND DIRECTION OF TWO-WIRE CABLE

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PROJECT NO: 23023

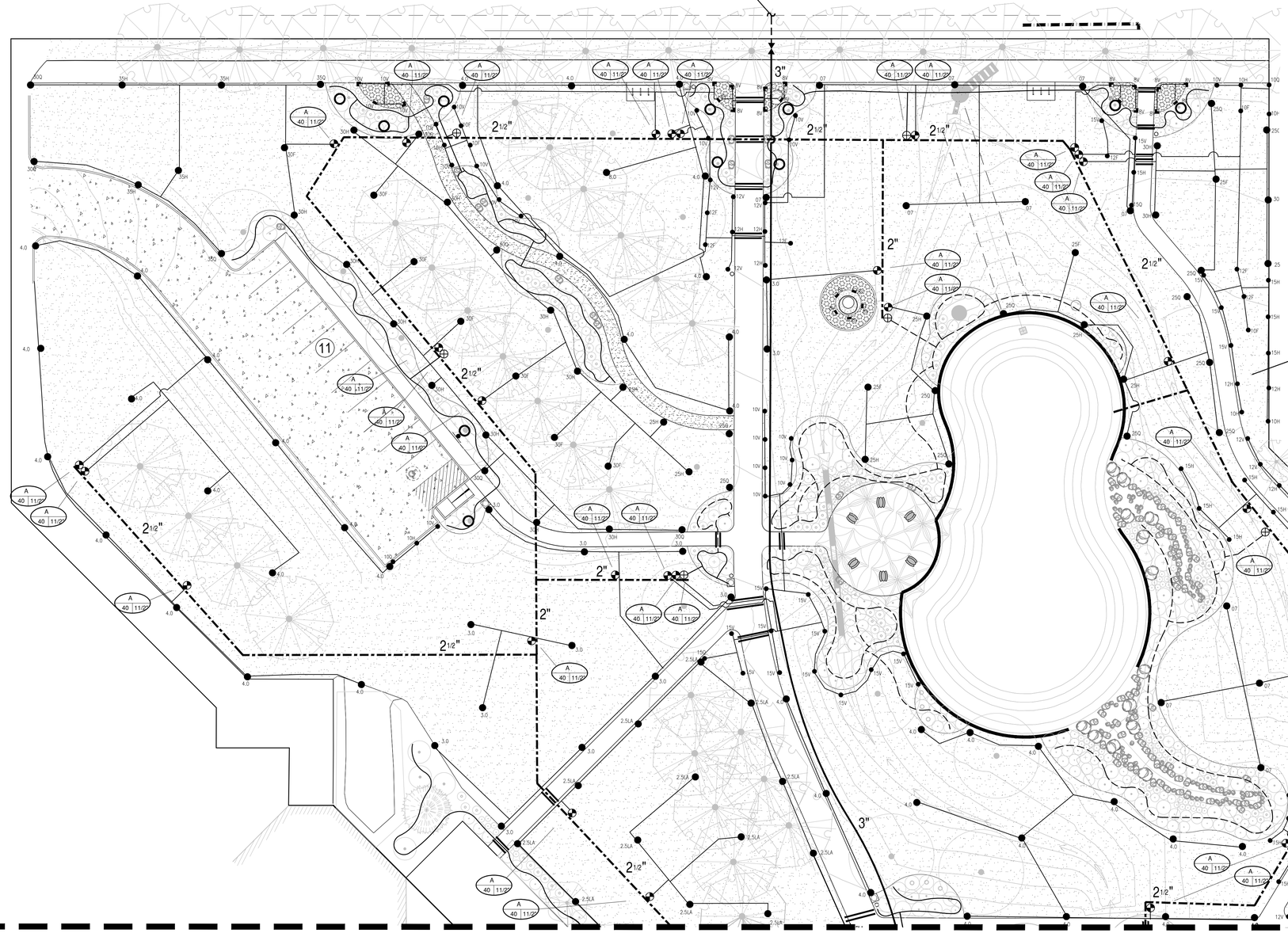
ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
IRRIGATION COVER

SHEET
C7.0

POINT OF CONNECTION #3

TIE ONTO EXISTING 3" HDPE DISTRIBUTION MAINLINE AT APPROXIMATE LOCATION SHOWN. INSTALL 3" GATE VALVE (LEEMCO LMV-33BBHDSS W/ STIFFENERS) AND EXTEND 3" DR11 HDPE DISTRIBUTION MAINLINE AS SHOWN. INSTALL 12 GA. GREEN TRACER WIRE IN TRENCH AT 12" DEPTH. INSTALL END OF TRACER WIRE IN 10" RD. VALVE BOX. COORDINATE CONNECTION WITH MAINT. STAFF.

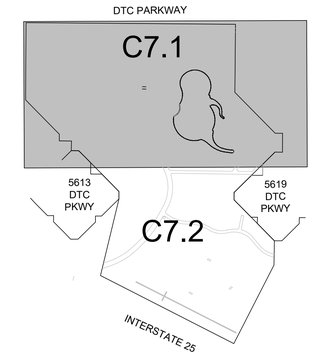
DTC PARKWAY



MATCHLINE, SEE SHEET C7.2

PROVIDE 2" STUB-OUT FOR FUTURE VALVE. REFER

HANG-DIG IRRIGATION TRENCHES WITH DRIP LINES OF EXISTING TREES. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION FOR WORK IN TREE AREAS. TYPICAL ALL LOCATIONS.



KEYMAP

NORTH

0 10 20 40

SCALE: 1" = 20'

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ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
IRRIGATION PLAN

SHEET
C7.1

MATCHLINE, SEE SHEET C7.1

REPLACE FOUR EXISTING VALVES WITH THREE 1" ELECTRIC CONTROL VALVES AND ONE 1" DRIP VALVE AT SAME LOCATION. NEW VALVES TO BE EQUIPPED WITH BASELINE DECODERS. CONNECT NEW VALVES TO EXISTING DRIP TUBING AND LATERAL PIPING.

EXISTING CONTROLLER

SALVAGE EXISTING BASELINE CONTROLLER AT INDICATED LOCATION. RELOCATE CONTROLLER TO LOCATION SHOWN BELOW.
TERMINATE 120V ELECTRICAL POWER PER CODE.

HEADS AND LATERAL PIPING SHOWN WITHIN GRASSCRETE AREA FOR GRAPHIC CLARITY PURPOSES. CONTRACTOR SHALL INSTALL HEADS AND LATERAL PIPING AT OUTER EDGES OF GRASSCRETE (TYP.)

PROVIDE 5 FT. HORIZONTAL SEPARATION BETWEEN PARALLEL HDPE AND PVC MAINLINES.

POINT OF CONNECTION #2

TIE ONTO NEW 3" HDPE DISTRIBUTION MAINLINE AT APPROXIMATE LOCATION SHOWN. INSTALL ONE 2" GATE VALVE, ONE 3/4" MANUAL DRAIN VALVE, 2" FLOW SENSOR, ONE 2" MASTER VALVE, ONE QUICK COUPLING VALVE AND EXTEND 2-1/2" CLASS 200 SOLVENT WELD MAINLINE AS SHOWN. COORDINATE WORK WITH DTC STAFF.

HANG-DIG IRRIGATION TRENCHES WITH DRIP LINES OF EXISTING TREES. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION FOR WORK IN TREE AREAS. TYPICAL ALL LOCATIONS.

I-25 NORTHBOUND

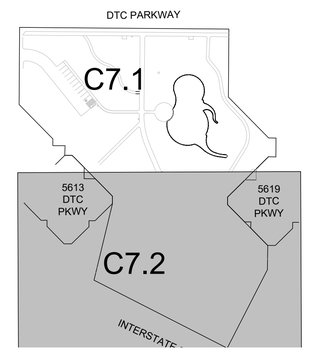
POINT OF CONNECTION #1

TIE ONTO EXISTING 3" HDPE DISTRIBUTION MAINLINE AT APPROXIMATE LOCATION SHOWN. INSTALL 3" GATE VALVE (LEEMCO LMV-33BBHDSS W/ STIFFENERS) AND EXTEND 3" DR11 HDPE DISTRIBUTION MAINLINE AS SHOWN. INSTALL 12 GA. GREEN TRACER WIRE IN TRENCH AT 12" DEPTH. INSTALL END OF TRACER WIRE IN 10" RD. VALVE BOX. COORDINATE CONNECTION WITH MAINT. STAFF.

INSTALL NEW TWO-WIRE CABLE AT 18" DEPTH. SEED TRENCH AND REPAIR ANY/ALL DAMAGE TO EXISTING IRRIGATION SYSTEM.

NEW CONTROLLER LOCATION

INSTALL SALVAGED CONTROLLER WITHIN EXISTING FREE-STANDING ELECTRICAL PANEL AT INDICATED LOCATION. COORDINATE WORK WITH DTC STAFF. INSTALL NEW 1-1/2" CONDUIT IN BOTTOM OF ENCLOSURE FOR TWO RUNS OF TWO-WIRE CABLE



KEYMAP

NORTH

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SCALE: 1" = 20'

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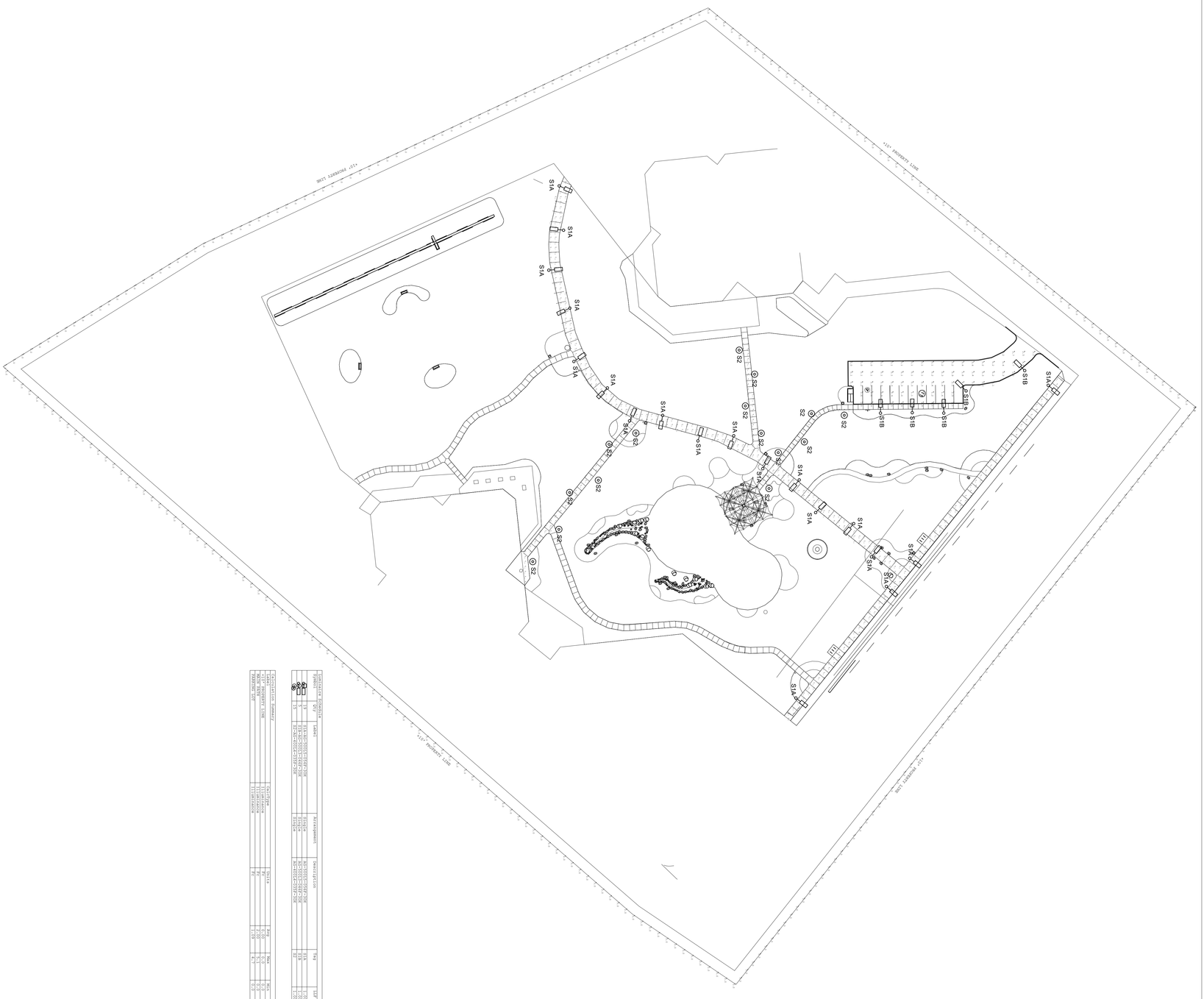
ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
IRRIGATION PLAN

SHEET
C7.2



Symbol	Qty	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
S1A	15	Lithonia Lighting	DSXW1 LED 30C 1000 40K T3M MVOLT	DSXW1 LED 30C 1000 40K T3M MVOLT	1	3000	1	30
S1B	3	Lithonia Lighting	DSXW1 LED 30C 1000 40K T3M MVOLT	DSXW1 LED 30C 1000 40K T3M MVOLT	1	3000	1	30
S2	19	Lithonia Lighting	DSXW1 LED 30C 1000 40K T3M MVOLT	DSXW1 LED 30C 1000 40K T3M MVOLT	1	3000	1	30

Label	Avg	Max	Min	Avg/Min	Max/Min
Calculation Zone 1	0.9 fc	4.7 fc	0.0 fc	N.A.	N.A.
Parking Area	1.3 fc	4.7 fc	0.2 fc	6.5:1	23.5:1
Plaza	1.0 fc	2.7 fc	0.2 fc	5.0:1	13.5:1
Property Line	0.1 fc	0.5 fc	0.0 fc	N.A.	N.A.

SHEET
C8.0

ORCHARD STATION PARK

SITE DEVELOPMENT PLAN - MINOR AMENDMENT

SITE LIGHTING PHOTOMETRICS

PROJECT NO:			DATE	NO.	NOTES
DATE	NO.	NOTES			
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE			
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE			
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE			
2024/09/20	4	ISSUED TO GREENWOOD VILLAGE			
2025/12/05	5	ISSUED TO GREENWOOD VILLAGE			
2026/02/20	6	ISSUED TO GREENWOOD VILLAGE			
2026/04/03	7	ISSUED TO GREENWOOD VILLAGE			

NOT FOR CONSTRUCTION

me | engineers
14143 Denver West Pkwy, Suite 300, Golden, CO 80401
303.421.6655
www.me-engineers.com

TYPE S1A & S1B

FGP Area Light

landscapeforms

Product Data Sheet

FGP has a pleasing flower-like organic form created by three stems that rise from the connection with the pole. The soft, triangular head holds LEDs in triangular arrays that cast illumination between the verticals in a clean footprint. The area light is ideal for pedestrain spaces such as campuses, parks and plazas, helping to create public spaces that are usable 24 hours a day. LED light sources are energy efficient. Light is finished using Landscape Forms' proprietary Pangard II powdercoat finish.

LED Technology

The area light employs solid state LED technology that provides exceptional energy efficiency and very long life. Designed to maximize this potential by managing the thermal properties of LEDs, the FGP area light's cast aluminum heatsink and housing efficiently dissipate heat. FGP uses full spectrum LED light engines that provide outstanding color rendering ability. The thermoformed integrated diffuser lens reduces glare, improving the visual experience.

Electrical

Surge protected 100V-277V 50/60 Hz, Class 2 integrated dimmable driver. LED cartridge with weatherproof quick disconnect provides ease of installation and serviceability. FGP Pedestrian ships prewired.

FGP Area Type 3

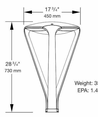
Type 3 Distribution

Fixture: Cast Aluminum
CCT: 2700K, 3000K, 3500K, 4000K
Drive Current: 460mA
Optic: LEDIL® STRATA
Lens: Impact Modified Acrylite®
Power Supply: 100V-277V
LED Driver: 50W
Dimmable: 0-10V
BUG Rating: B1 U2 G1
IP Rating: IP66

FGP Area Type 5

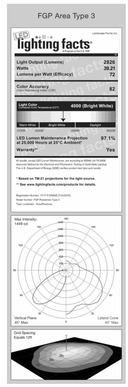
Type 5 Distribution

Fixture: Cast Aluminum
CCT: 2700K, 3000K, 3500K, 4000K
Drive Current: 560mA
Optic: LEDIL® STRATA
Lens: Impact Modified Acrylite®
Power Supply: 100V-277V
LED Driver: 60W
Dimmable: 0-10V
BUG Rating: B2 U2 G1
IP Rating: IP66

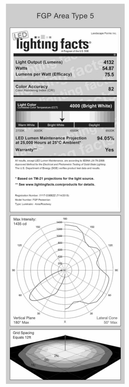


Weight: 35 lbs
EPA: 1.49ft²

FGP Area Type 3



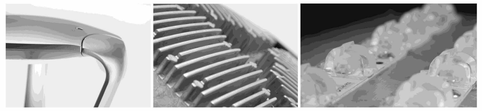
FGP Area Type 5



FGP Area Light

landscapeforms

Product Data Sheet



Finish

Pangard II®, offered exclusively by Landscape Forms, is a 19 step program of cleaning, priming, and powdercoating that resists rusting, chipping, peeling and fading to produce the finest metal finish available for site furniture and outdoor lighting. In addition, Pangard II® contains no heavy metals and is free of Hazardous Air Pollutants.

To Order

Specify: Product, Lamp, Drive Current, Color Temperature, Input Voltage, Height, optional 7-pin (ANSI 136.41) Twist Lock receptacle, and Powdercoat Color.

Product	Lamp	Drive Current	Color Temp.	Input Voltage	Height	Twist Lock
AG FGP	500L3 (30 LED Type 3)	046F (460 mA)	40K (4000K) 35K (3500K) 30K (3000K) 27K (2700K)	UV1 (100-277VAC)	12 (144in) 14 (168in) 16 (192in)	NTW (No Twist Lock) TW1 (Twist Lock)
	500L5 (30 LED Type 5)	056F (560 mA)				

EXAMPLE: AG – 500L3 – 046F – 35K / UV1 – 12 – TW1 – Powdercoat Color

Product Modifications

Don't see what you are looking for? Our goal is to partner with you as the designer to manufacture solutions needed for the space you are creating. We offer the option to modify our standard product to meet certain design specifications or needs. Contact your local Landscape Forms representative to learn more about these offerings.

Warranty

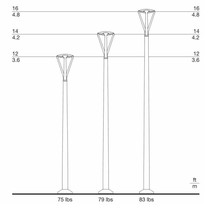
LED lighting products are warranted for six years.

Other

UL Listed, RoHS Compliant, Next Generation Luminaires Winner

Designed by Francisco Gomez Paz

Click here for patent information related to this product.



Visit our landscapeforms.com for more information. Specifications are subject to change without notice. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level.
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TYPE S2

FGP Path Light

landscapeforms

Product Data Sheet

The FGP path light has a pleasing flower-like organic form created by three stems that rise from the connection with the base. The soft, triangular head holds LEDs in triangular arrays that cast illumination between the verticals in a clean footprint.

High-design surface mounted LED path light uses aiming angles, color rendering and glare reduction to shape and enhance lighting performance. Aluminum cartridge houses energy efficient LEDs and provides excellent thermal management. Fixture is made of durable cast aluminum with galvanized steel base plate. Mounting hardware and template included for ease of installation.

Lighting Facts®

Landscape Forms is committed to the development of energy efficient lighting. We participate in the Department of Energy Lighting Facts® label program. This activity is voluntary but helps consumers evaluate the multitude of products on the market today. The Lighting Facts® label provides a quick but comprehensive summary of luminaire performance as measured by the IESNA LM-79 photometric test standard for solid state lighting.

Electrical

Surge protected 100V-277V 50/60 Hz, Class 2 driver. LED cartridge with weatherproof quick disconnect provides ease of installation and serviceability. Internal wiring completed at the factory.

FGP Path Light Type 4

Type 4 Distribution

CCT: 2700K, 3000K, 3500K, 4000K
Drive Current: 250mA
Optic: 6 Khatod Collimators
Lens: Diffused Acrylite®
Power Supply: 100V-277V
LED Driver: 7W
BUG Rating: B0-U1-G1
IP Rating: IP66 for LED Cartridge
Weight: 31lbs

FGP Path Light Type 5

Type 5 Distribution

CCT: 2700K, 3000K, 3500K, 4000K
Drive Current: 250mA
Optic: 9 Khatod Collimators
Lens: Diffused Acrylite®
Power Supply: 100V-277V **LED Driver:** 11W
BUG Rating: B0-U1-G1
IP Rating: IP66 for LED Cartridge
Weight: 31lbs

FGP Path Light Type 4

FGP Path Light Type 5

FGP Path Light

landscapeforms

Product Data Sheet

Finish

Pangard II®, offered exclusively by Landscape Forms, is a 19 step program of cleaning, priming, and powdercoating that resists rusting, chipping, peeling and fading to produce the finest metal finish available for site furniture and outdoor lighting. In addition, Pangard II® contains no heavy metals and is free of Hazardous Air Pollutants.

To Order

Specify: Product, Lamp, Drive Current, Color Temperature, Input Voltage, and Powdercoat Color.

Product	Lamp	Drive Current	Color Temp.	Input Voltage
AG FGP	400L4 (6 LED, Type 4) 400L5 (9 LED, Type 5)	025F (250mA)	40K (4000K) 35K (3500K) 30K (3000K) 27K (2700K)	UV1 (100-277VAC)

EXAMPLE: AG – 400L4 – 025F – 35K – UV1 – Powdercoat Color

Product Modifications

Don't see what you are looking for? Our goal is to partner with you as the designer to manufacture solutions needed for the space you are creating. We offer the option to modify our standard product to meet certain design specifications or needs. Contact your local Landscape Forms representative to learn more about these offerings.

Warranty

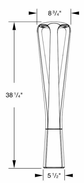
LED lighting products are warranted for six years.

Certifications

UL Listed, RoHS Compliant, Next Generation Luminaires Winner

Designed by Francisco Gomez Paz

Click here for patent information related to this product.



Visit landscapeforms.com for more information. Specifications are subject to change without notice. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level.
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landscapeforms.com | specify@landscapeforms.com

me | engineers
14143 Denver West Pkwy, Suite 300, Golden, CO 80401
303.421.6655
www.me-engineers.com

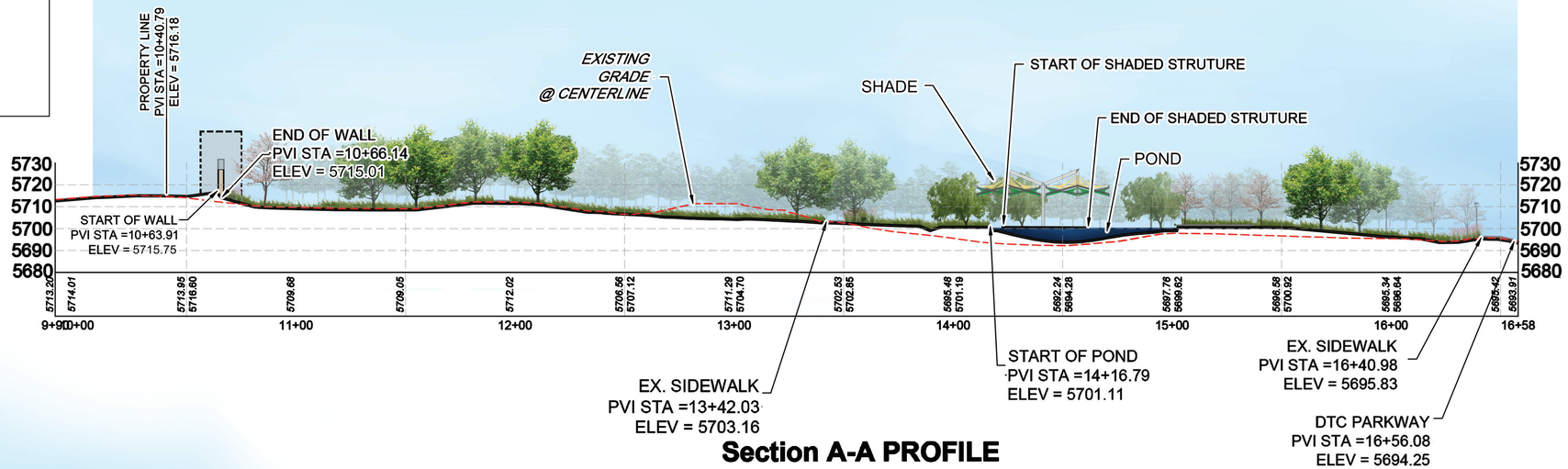
NOT FOR CONSTRUCTION

NOTES	NO.	DATE
ISSUED TO GREENWOOD VILLAGE	1	2024/01/10
ISSUED TO GREENWOOD VILLAGE	2	2024/04/24
ISSUED TO GREENWOOD VILLAGE	3	2024/06/14
ISSUED TO GREENWOOD VILLAGE	4	2024/09/20
ISSUED TO GREENWOOD VILLAGE	5	2025/12/05
ISSUED TO GREENWOOD VILLAGE	6	2026/02/20
ISSUED TO GREENWOOD VILLAGE	7	2026/04/03

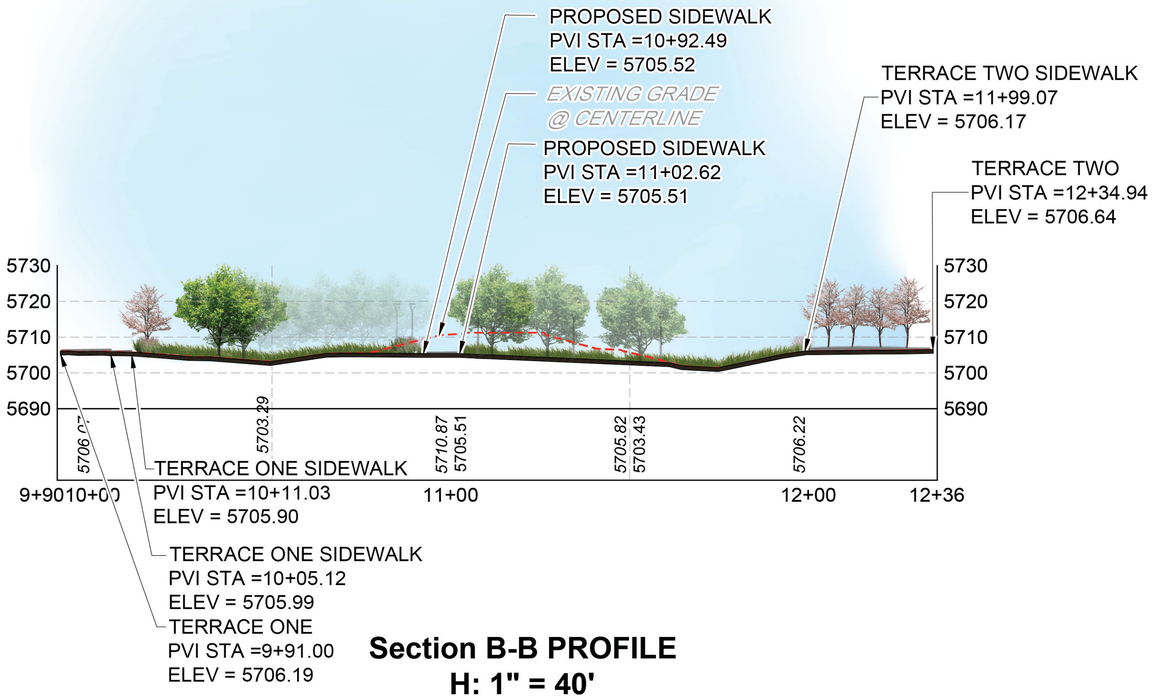
PROJECT NO.

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN - MINOR AMENDMENT
LIGHT FIXTURE CUTSHEETS

SHEET
C8.1



Section A-A PROFILE
H: 1" = 40'
V: 1" = 40



Section B-B PROFILE
H: 1" = 40'
V: 1" = 40

SAGE DESIGN GROUP
LANDSCAPE ARCHITECTURE SITE PLANNING ENTITLEMENT
1500 South Pearl St. Suite 200 Denver, Colorado 80210
303.470.2855 (p) 303.470.2894 (f) www.sagedesigngroup.com

NO.	DATE	NOTES
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/13	ISSUED TO GREENWOOD VILLAGE
5	2025/12/05	FIRST AMENDMENT
6	2026/02/20	FIRST AMENDMENT

PROJECT NO. 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
SITE SECTIONS

SHEET
C9.0

ORCHARD STATION PARK

SITE DEVELOPMENT PLAN

PART OF LOTS 4 AND 5, BLOCK 6, A RESUBDIVISION OF A PART OF BLOCK 1, DENVER TECHNOLOGICAL CENTER FILING NO. 3, LOCATED IN SECTION 6, TOWNSHIP 5 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN CITY OF GREENWOOD VILLAGE, COUNTY OF ARAPAHOE, STATE OF COLORADO

COVER SHEET

PROJECT TEAM

OWNER / DEVELOPER

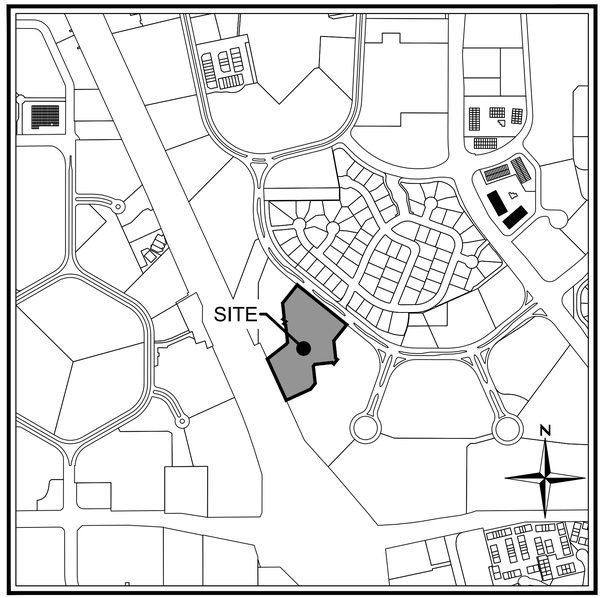
GOLDSMITH METRO DISTRICT
8351 EAST BELLEVIEW AVENUE
DENVER, CO 80237
TEL: 303.773.1700
CONTACT: LEE DEHMLOW

CIVIL ENGINEER

REDLAND
1500 W. CANAL CT.
LITTLETON, CO 80120
720.283.6783 voice
CONTACT: ROB OGLESBY, PE

LANDSCAPE ARCHITECT/PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET
SUITE 200
DENVER, CO 80210
720.358.9518 voice
CONTACT: JOSH FREEHLING, RLA



VICINITY MAP
SCALE: 1" = 500'

INDEX OF SHEETS	
Sheet Number	Sheet Title
C1.0	COVER SHEET
C1.1	GENERAL NOTES
C2.0	SITE PLAN
C2.1	SITE PLAN DETAILS
C2.2	STORM SEWER DETAILS
C2.3	STORM SEWER DETAILS
C2.4	DEMO PLAN
C3.0	EROSION CONTROL PLAN
C3.1	EROSION CONTROL DETAILS
C3.2	EROSION CONTROL DETAILS
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C7.1	LIGHT FIXTURE CUT SHEETS
C8.0	SITE SECTIONS
C8.1	SITE SECTIONS
C8.2	WALL ELEVATIONS

DEVELOPMENT STANDARDS	EXISTING	PROPOSED
MINIMUM OPEN SPACE COVERAGE (PERCENT & SQUARE FEET)	237,446 SQ (5.451 ACRES)	237,446 SQ (5.451 ACRES)
MAXIMUM BUILDING GROUND COVERAGE (PERCENTAGE & SQAURE FEET)	N/A	N/A
MAXIMUM BUILDING HEIGHT	N/A	N/A
MAXIMUM NET FLOOR AREA (NFA)	N/A	N/A
MAXIMUM PARKING/ DRIVE AISLE COVERAGE (PERCENTAGE & SQUARE FEET)	4,503 SF (1.9%)	9,083 SF (3.8%)
MINIMUM LOT FRONTAGE	N/A	N/A
FRONT SETBACK	N/A	N/A
SIDE SETBACK	N/A	N/A
REAR SETBACK	N/A	N/A
STANDARD PARKING SPACES	0	10
ACCESSIBLE PARKING SPACES	0	1
BICYCLE PARKING SPACES	0	12

SITE DATA TABLE	
ZONING	OPEN SPACE 2 (0-2)
GOVERNING MASTER DEVELOPMENT PLAN	DENVER TECH CENTER MDP
SITE AREA (IN SQAURE FEET & ACRES)	237,446 SQ (5.451 ACRES)
LAND USE - IF MULTIPLE LAND USES ARE PROPOSED, PROVIDE A BREAKDOWN IN SQUARE FEET AND ACRES BY TYPE	OPEN SPACE
TOTAL NUMBER OF LOTS	N/A
TOTAL NUMBER OF BUILDINGS	N/A
NUMBER OF STORIES FOR EACH BUILDING	N/A
NET FLOOR AREA FOR EACH BUILDING AND FOR EACH PROPOSED USE	N/A
TOTAL NUMBER OF TRACTS	N/A
OWNERSHIP AND MAINTENANCE OF ALL TRACTS	OWNER: CITY OF GREENWOOD VILLAGE AND GOLDSMITH METRO DISTRICT MAINTENANCE: MERIDIAN METRO DISTRICT
BUILDING CONSTRUCTION TYPE	N/A
RIGHT-OF-WAY DEDICATION (IN SQUARE FEET & ACRES)	N/A
LOCATION AND ACREAGE OF ANY LAND TO BE DEDICATED TO PUBLIC USE	237,446 SQ (5.451 ACRES)

PROPERTY OWNER:
GOLDSMITH METRO DISTRICT

EXECUTED THIS___ DAY OF ____, 20___

BY: _____

AS: OWNER AND MANAGER

STATE OF COLORADO)
) SS.
COUNTY OF ARAPAHOE)

THE FOREGOING CERTIFICATE OF OWNERSHIP WAS

ACKNOWLEDGE BEFORE ME THIS _____ DAY OF _____, 20_____.

BY:_____

AS:_____

NOTARY PUBLIC

MY COMMISSION EXPIRES_____

CLERK AND RECORDER CERTIFICATE:
THIS PLAN WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF ARAPAHOE COUNTY.

AT____ .M. ON THE ____ DAY OF ____, 20___

IN BOOK, ____, PAGE ___, MAP ____, RECEPTION _____

COUNTY CLERK AND RECORDER

BY: COUNTY CLERK DATE

BY: COUNTY CLERK DATE

RECOMMENDED FOR APPROVAL BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF GREENWOOD VILLAGE.

THIS_____ DAY OF _____ , 20_____

CHAIR

APPROVED BY THE CITY COUNCIL OF THE CITY OF GREENWOOD VILLAGE.
WITNESS MY HAND AND THE COPORATE SEAL OF THE CITY OF GREENWOOD VILLAGE THIS

____ DAY OF _____, 20___.

MAYOR DATE

ATTEST: CITY CLERK DATE

Redland
WHERE GREAT PLACES BEGIN
720.283.6783
REDLAND.COM
▪ Land Planning ▪ Civil Engineering ▪ Landscape Architecture ▪ Construction Management

NO.	DATE	NOTES

PROJECT NO: 23023

NO.	DATE	NOTES
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/20	ISSUED TO GREENWOOD VILLAGE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
COVER SHEET

SHEET
C1.0

I:\2023\23023 - Orchard Station Park\CAD\Sheet Sets\SDP\P-23023 - Cover Sheet.dwg tab: C1.0 COVER SHEET Sep 11, 2024 - 8:37am roglesby

ENGINEER'S NOTES

1. PROJECT CONTROL/BENCHMARK:

   LOCAL SITE BENCHMARK:

   UDFCD BENCHMARK NUMBER CC-9 BEING A 3-1/4" ALUMINUM ALLOY CAP STAMPED "UDFCD CC - 9" LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF S JOILET STREET AND INVERNESS DRIVE EAST, 46.5' NORTH OF THE CENTER LINE OF INVERNESS DRIVE EAST AND 59' EAST OF THE CENTERLINE OF SOUTH JOILET STREET.

   ELEVATION = 5732.89 FEET (NAVD88)

   ALL ELEVATIONS SHOWN ON THESE PLANS ARE REFERENCED TO THE PROJECT BENCHMARK. HORIZONTAL CONTROL, INCLUDING THE BASIS OF BEARING, SHALL BE IN ACCORDANCE WITH THE FINAL PLAT FOR THIS PROJECT.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFEGUARDING THE PROJECT BENCHMARK AND OTHER SURVEY MONUMENTS AND SHALL HAVE A REGISTERED LAND SURVEYOR TIE OUT AND RESET ANY PROPERTY CORNERS OR SECTION CORNERS PLANNED TO BE DISTURBED BY CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY INADVERTENTLY DISTURBED OR DAMAGED MONUMENTS AND SHALL HAVE THEM REESTABLISHED AND REPLACED BY A REGISTERED LAND SURVEYOR.
3. THE CONTRACTOR SHALL COMPLY, AND PERFORM WORK IN ACCORDANCE, WITH THE REQUIREMENTS OF THE GEOTECHNICAL (SOILS) REPORT(S) PREPARED FOR THIS PROJECT. GEOTECHNICAL INFORMATION FOR THIS PROJECT IS BASED ON THE REPORT GEOTECHNICAL INVESTIGATION ORCHARD STATION PARK GARAGE FACILITY, 5613 DTC PARKWAY, GREENWOOD VILLAGE, COLORADO, JULY 24, 2018, CTL THOMPSON. IN THE EVENT OF A DISCREPANCY BETWEEN THE GEOTECHNICAL REQUIREMENTS AND JURISDICTIONAL REQUIREMENTS, THE MORE STRINGENT REQUIREMENT SHALL BE FOLLOWED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND GEOTECHNICAL ENGINEER IN THE EVENT THAT A DISCREPANCY OCCURS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE SERVICES OF A QUALIFIED TESTING LABORATORY TO PERFORM ALL COMPACTION TESTING, ASPHALT TESTING, CONCRETE TESTING, AND ANY OTHER TESTING AS MAY BE REQUIRED TO COMPLETE THE WORK. TESTING RESULTS MUST BE SUBMITTED FOR ALL PHASES OF THIS PROJECT PER THE APPLICABLE GOVERNING AGENCIES REQUIREMENTS.
5. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE (1) SET OF "REDLINED" PRINTS OF THE CONSTRUCTION PLANS. THE "REDLINED" PRINTS SHALL BE KEPT CURRENT TO ACCURATELY REPRESENT THE DIMENSIONS AND LOCATIONS OF ALL WORK PERFORMED BY THE CONTRACTOR. THE CONTRACTOR MUST PRESENT THE "REDLINED" PRINTS TO THE ENGINEER (REDLAND) TIMELY UPON COMPLETION OF EACH PHASE OF THE WORK.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPTLY NOTIFYING THE ENGINEER OF ANY PROBLEMS OR POTENTIAL PROBLEMS IN CONFORMING TO THE DESIGN LINE AND GRADE FOR ANY ELEMENT OF THE CONSTRUCTION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPTLY NOTIFYING THE ENGINEER OF SITE CONDITIONS THAT DIFFER FROM THOSE SHOWN ON THE APPROVED PLANS.
7. IN THE EVENT THE CONTRACTOR ALLOWS, AUTHORIZES, APPROVES OR CONSTRUCTS ITEMS THAT DIFFER FROM THE APPROVED PLANS, SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, WITHOUT WRITTEN APPROVAL BY THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY LIABILITY ARISING FROM SUCH CHANGES.
8. THE CONTRACTOR SHALL PERFORM ALL WORK ACCORDING TO ALL CITY, COUNTY, STATE AND FEDERAL SAFETY AND HEALTH REGULATIONS. IN PARTICULAR, THE TRENCHING AND OPEN EXCAVATION OPERATIONS SHALL COMPLY WITH ALL CURRENT O.S.H.A. REGULATORY REQUIREMENTS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, AND ANY OTHER NEEDED ACTION TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JOB SITE CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROTECTION OF PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED ONLY TO WORKING HOURS. THE CONTRACTOR SHALL DEFEND INDEMNIFY AND HOLD THE OWNER, THE ENGINEER AND THE GOVERNING JURISDICTION HARMLESS FOR ANY AND ALL LIABILITY, IN CONNECTION WITH THE PERFORMANCE OF WORK, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE ENGINEER OR THE GOVERNING JURISDICTION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE, PASSABLE ACCESS TO PRIVATE PROPERTIES ADJACENT TO THE WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
12. THE TYPE, SIZE, LOCATION, AND NUMBER OF UNDERGROUND UTILITIES ARE APPROXIMATE WHERE SHOWN ON THE PLANS AND WERE TAKEN FROM RECORDS OF THE CONTROLLING AGENCIES AND/OR FROM MARKINGS IN THE FIELD BY AN AGENCY AND/OR UTILITY LOCATING CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR COMPLETENESS OR ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK AND PARTICIPATE IN THE RESOLUTION OF ANY CONFLICTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

ENGINEER'S NOTES (CONTD)

13. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO FOR THE LOCATION OF UNDERGROUND GAS, ELECTRIC AND COMMUNICATION UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION (CALL 811 OR 1-800-922-1987). THE CONTRACTOR SHALL ALSO NOTIFY OTHER APPLICABLE UTILITY COMPANIES TO OBTAIN FIELD LOCATES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
14. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO COORDINATE SCHEDULES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANY.
15. TEMPORARY EROSION CONTROL MEASURES SHALL BE PROVIDED BY THE CONTRACTOR DURING CONSTRUCTION AS IDENTIFIED IN THE EROSION CONTROL AND/OR STORMWATER MANAGEMENT PLANS. MAINTENANCE OF ONSITE DRAINAGE AND EROSION CONTROL FACILITIES DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. HOWEVER, REMOVALS SHALL NOT OCCUR UNTIL THE GOVERNING JURISDICTION HAS GIVEN APPROVAL TO REMOVE ANY OF THE MEASURES.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING NEARBY PUBLIC OR PRIVATE STREETS OF MUD AND DEBRIS, DUE TO CONSTRUCTION ACTIVITIES, ON A DAILY BASIS OR AS DIRECTED BY GOVERNING JURISDICTION PERSONNEL.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT OF ANY DAMAGED EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, PAVEMENT, CURB AND GUTTER, SIDEWALK, LANDSCAPING, IRRIGATION, SIGNAGE, STRIPING, AND UTILITIES.
18. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY." FOR INFORMATION, CONTACT THE COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, WQCD-PE-B2, 4300 CHERRY DRIVE SOUTH, DENVER, COLORADO, 80246-1530, ATTENTION: PERMITS AND ENFORCEMENT SECTION. PHONE (303) 692-3590.
19. IF DEWATERING IS TO BE USED TO INSTALL UTILITIES OR CONSTRUCT IMPROVEMENTS, A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT IS REQUIRED IF DISCHARGE IS INTO A STORM SEWER, CHANNEL, IRRIGATION DITCH, OR ANY WATERS OF THE UNITED STATES.
20. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES THE APPROPRIATE EDITION OF THE GOVERNING JURISDICTION DESIGN AND CONSTRUCTION STANDARDS, ONE SET OF APPROVED CONSTRUCTION PLANS, THE STORMWATER MANAGEMENT PLAN, AND ALL REQUIRED PERMITS.
21. ALL STREET, SANITARY SEWER, STORM SEWER AND WATERLINE CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE APPLICABLE GOVERNING LOCAL AGENCY CURRENT AT THE DATE OF CONSTRUCTION PLAN APPROVAL. FOR ELEMENTS OF WORK NOT COVERED BY LOCAL AGENCY STANDARDS AND SPECIFICATIONS, ALL CONSTRUCTION SHALL CONFORM TO THE APPROPRIATE EDITION OF THE STANDARDS AND SPECIFICATIONS OF THE COLORADO DEPARTMENT OF TRANSPORTATION, THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, AND INDUSTRY STANDARDS AS APPLICABLE. REQUIREMENTS OF THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, THE ENVIRONMENTAL PROTECTION AGENCY AND THE U.S. ARMY CORPS OF ENGINEERS, SHALL ALSO BE FOLLOWED AS THEY RELATE TO THE WORK.
22. THE CONTRACTOR SHALL PROVIDE AND IMPLEMENT A "TRAFFIC CONTROL PLAN" RELATED TO ALL CONSTRUCTION ACTIVITIES FOR THIS PROJECT. ALL TRAFFIC CONTROL DEVICES, STRIPING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
23. ALL STATIONING IS ON CENTERLINE UNLESS OTHERWISE NOTED. CENTERLINE, RIGHTS-OF-WAY (R.O.W.), PROPERTY LINE, AND EASEMENT DIMENSIONS ARE FOR REFERENCE ONLY. REFER TO THE FINAL SUBDIVISION PLAT FOR PROJECT HORIZONTAL CONTROL.
24. ALL ELEVATIONS IN PLAN VIEW ARE ALONG FLOWLINE UNLESS OTHERWISE NOTED. WHERE SHOWN, 'TC' REPRESENTS TOP-OF-CURB ELEVATION ALONG CURB AND GUTTER OR BACK-OF-WALK ELEVATION ALONG COMBINATION CURB, GUTTER AND WALK.
25. CROSS PANS ARE 8-FEET IN WIDTH UNLESS OTHERWISE NOTED.
26. WATER MAIN LENGTHS ARE FROM CENTER OF FITTING (EXCLUDING GATE VALVES) TO CENTER OF FITTING UNLESS OTHERWISE NOTED.
27. STORM AND SANITARY SEWER MAIN LENGTHS ARE FROM CENTER OF STRUCTURE/MANHOLE TO CENTER OF STRUCTURE/MANHOLE. SANITARY SEWER AND STORM SEWER MANHOLES ARE 4-FOOT DIAMETER UNLESS OTHERWISE NOTED.
28. STORM INLET STATIONING/OFFSET REFERENCE IS AT THE INTERSECTION OF FLOWLINE AND THE CENTER OF STRUCTURE.
29. STORM INLETS LOCATED ALONG CURB SHALL BE CONSTRUCTED WITH TOP OF BOX AT SAME GRADE AS EXTENDED TOP-OF-CURB GRADE, UNLESS OTHERWISE NOTED.
30. THE CLIENT, CONTRACTOR AND SUBCONTRACTOR SHOULD IMMEDIATELY NOTIFY THE CONSULTANT OF ANY CONDITIONS OF THE PROJECT THAT THEY BELIEVE DO NOT COMPLY WITH THE CURRENT STATE OF THE ADA AND/OR FHAA.

EXISTING LEGEND

- PROPERTY LINE
- R.O.W.
- LOT LINE
- EASEMENT LINE
- SECTION LINE
- ROAD CENTERLINE
- EDGE OF PAVEMENT
- CURB AND GUTTER
- CONCRETE
- FENCE
- RETAINING WALL
- WATER LINE
- RAW WATER LINE
- NON-POTABLE WATER LINE
- IRRIGATION LINE
- SANITARY SEWER
- STORM SEWER
- ELECTRIC LINE
- GAS LINE
- TELEPHONE LINE
- FIBER OPTICS LINE
- OVERHEAD ELECTRIC LINE
- CABLE TELEVISION
- CONTOUR MAJOR
- CONTOUR MINOR
- 100YR FLOOD PLAIN
- FEMA FLOOD PLAIN
- FLOOD HAZARD AREA DELINEATION
- WATERS OF THE U.S.

PROPOSED LEGEND

- PROPERTY LINE
- R.O.W.
- LOT LINE
- SETBACK
- EASEMENT
- ROAD CENTERLINE
- CURB AND GUTTER (CATCH)
- CURB AND GUTTER (SPILL)
- SIDEWALK
- STORM SEWER
- SANITARY SEWER
- TRENCH DRAIN
- WATER LINE
- IRRIGATION LINE
- NONPOTABLE WATER LINE
- RAW WATER LINE
- MANHOLE w/ DIA. (FT.)
- INLET
- FLARED END SECTION
- WATER BEND
- WATER CROSS
- WATER TEE
- WATER REDUCER
- WATER VALVE
- FIRE HYDRANT
- PLUG/CAP
- SANITARY SEWER SERVICE (* INDICATES NON-TYPICAL LOCATION)
- WATER SERVICE (* INDICATES NON-TYPICAL LOCATION)
- UTILITY CROSSING
- UNDERDRAIN w/ SIZE (IN.)
- STREET LIGHT
- RETAINING WALL
- CONTOUR MAJOR
- CONTOUR MINOR
- SPOT ELEVATION
- SLOPE ARROW (4:1 MAX UNLESS NOTED OTHERWISE)
- LIMITS OF CONSTRUCTION / SAWCUT
- PEDESTRIAN ACCESSIBLE ROUTE
- LOT TYPE
- LINE OF SIGHT
- OVER FLOW ARROW

ABBREVIATIONS

ABC	AGGREGATE BASE COARSE
ARV	AIR RELEASE VALVE
BB MH	BOX BASE MANHOLE
BC	BUILDING CORNER
BFE	BASEMENT FLOOR ELEVATION
B.O.P.	BOTTOM OF PIPE (ELEVATION)
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
D.E.	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	DOMESTIC WATER
E	EAST
EC	END CURVE RETURN
EG	EXISTING GRADE/GROUND
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX.	EXISTING
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FL	FLOWLINE
FM	FORCE MAIN
FO	FIBER OPTIC
G.E.	GAS EASEMENT
GB	GRADE BREAK
GFE	GARAGE FINISH FLOOR
GM	GAS METER
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
IBV	INLINE BUTTERFLY VALVE
INV	INVERT (ELEVATION)
IRR	IRRIGATION
L	LEFT
LF	LINEAR FEET/FOOT
LP	LOW POINT
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
N	NORTH
PC	POINT ON CURVE
PCC	POINT OF COMPOUND CURVE
PCR	POINT OF CURVE RETURN
PL	PROPERTY LINE
PRC	POINT OF REVERSE CURVE
PROP.	PROPOSED
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
R	RADIUS OR RIGHT
R.O.W.	RIGHT OF WAY
RCP	REINFORCED CONCRETE PIPE
S	SOUTH
S.D.M.E.	SIDEWALK, DRAINAGE, AND MAINTENANCE EASEMENT
S.M.E.	SIDEWALK AND MAINTENANCE EASEMENT
S.W.E.	SIDEWALK EASEMENT
SD	STORM DRAIN
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STM	STORMWATER
STM MH	STORMWATER MANHOLE
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TC	TOP OF CURB
TOF	TOP OF FOUNDATION
T.O.P.	TOP OF PIPE (ELEVATION)
TW	TOP OF WALL
TYP	TYPICAL
U.E.	UTILITY EASEMENT
VC	VERTICAL CURVE
W	WEST
WL	WATERLINE
WM	WATER METER
WV	WATER VALVE

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NO.	DATE	NOTES

PROJECT NO: 23023

NO	DATE	NOTES
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/20	ISSUED TO GREENWOOD VILLAGE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
GENERAL NOTES

SHEET
C1.1

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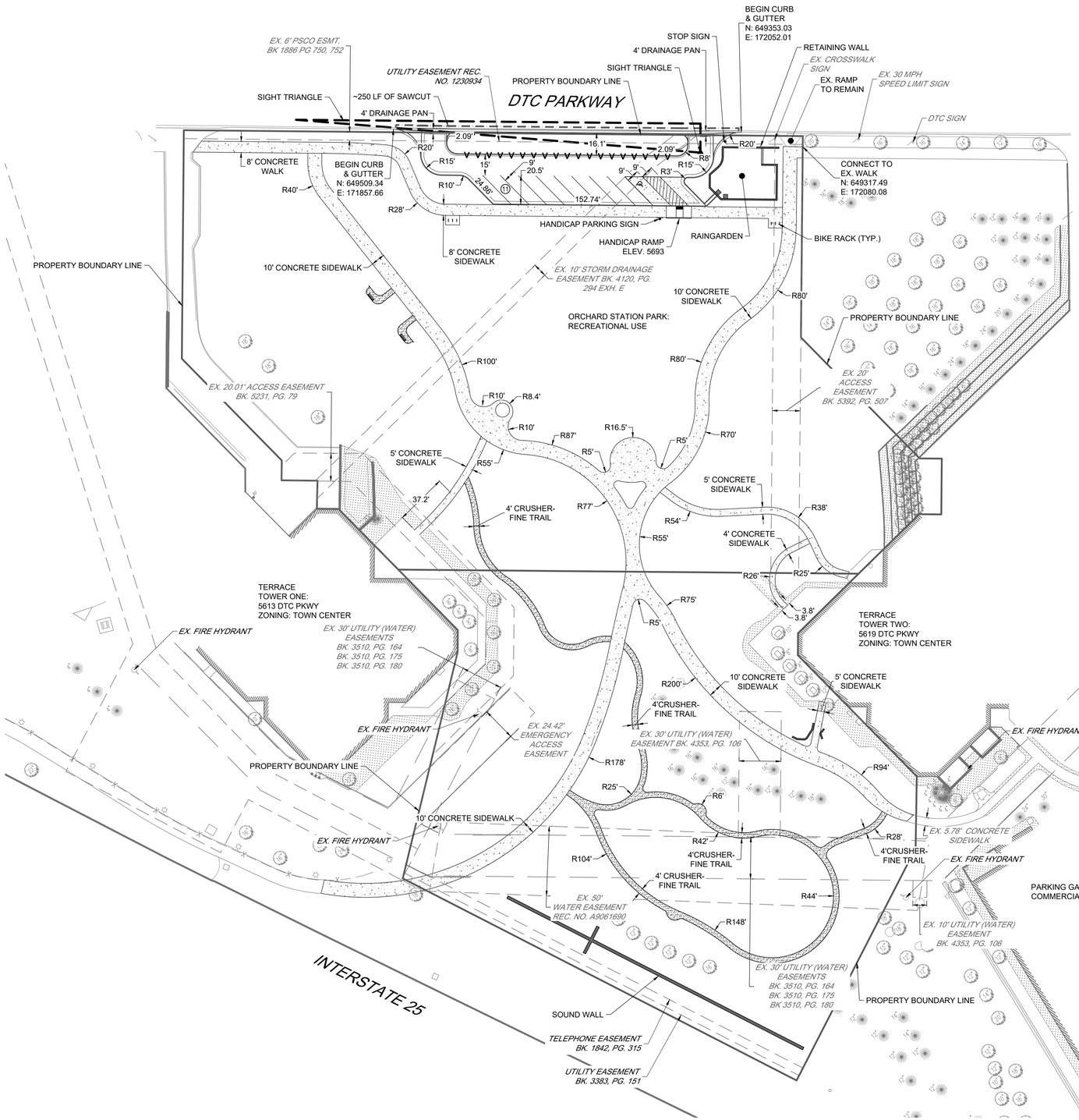

PROPOSED LEGEND

- LOT LINE
- EASEMENT
- ROAD CENTERLINE
- CURB AND GUTTER (CATCH)
- CURB AND GUTTER (SPILL)
- SIDEWALK

EXISTING LEGEND

- PROPERTY LINE
- R.O.W.
- LOT LINE
- EASEMENT
- SECTION LINE
- ROAD CENTERLINE
- EDGE OF PAVEMENT
- CURB AND GUTTER
- CONCRETE
- FENCE
- RETAINING WALL

NOTES:

1. SEE LANDSCAPE PLANS FOR RAINGARDEN HANDRAIL DETAILS.
2. REFER TO SHEET C2.1 FOR SITE PLAN DETAILS.
3. ALL CURB DIMENSIONS ARE AT FLOWLINE UNLESS OTHERWISE NOTED.
4. REFER TO GEOTECHNICAL REPORT FOR PAVEMENT AND SIDEWALK THICKNESS RECOMMENDATIONS.
5. CONTRACTOR IS RESPONSIBLE FOR COORDINATION REGARDING RELOCATION OR ADJUSTMENT OF ANY EXISTING DRY UTILITIES OR IRRIGATION FACILITIES.

SCALE: 1" = 40'

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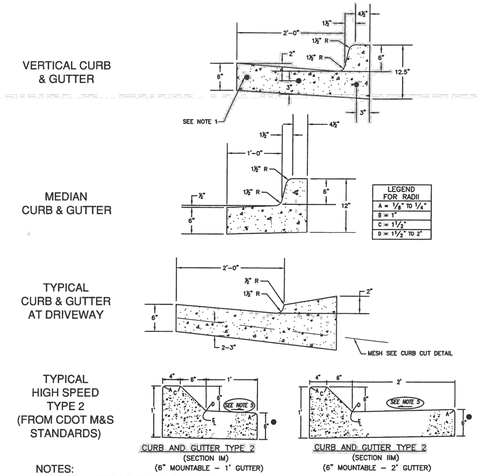
ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
SITE PLAN

SHEET
C2.0

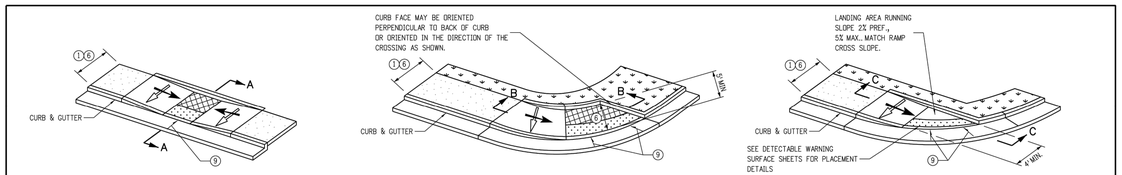
I:\2023\23023 - Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 - Site Plan.dwg tab: C2.0 SITE PLAN Sep 11, 2024 - 8:37am rogletsky



NOTES:

1. NO. 4 REBAR SHALL BE USED IN ALL CURB RETURNS WITH 25' OR LARGER RADII. THE REBAR SHALL BE USED FROM BEGINNING TO END OF THE CURB RETURN.
2. AT THE LOW POINT(S) OF EACH MEDIAN A DRAIN SYSTEM SHALL BE DESIGNED TO CONVEY STORM AND IRRIGATION FLOWS.
3. NATIVE SUBGRADE UNDER CURB AND GUTTER TO BE COMPACTED TO THE SPECIFICATIONS IN CHAPTER 8 OF THESE STANDARDS.
4. CHANGES TO THE HIGH SPEED TYPE 2 CURB AND GUTTER DETAIL IN THE CDOT M&S STANDARDS SHALL OVERRULE THIS DETAIL.
5. GUTTER CROSS SLOPE SHALL BE ½" PER FOOT WHEN DRAINING AWAY FROM CURB AND 1" PER FOOT WHEN DRAINING TOWARD CURB.

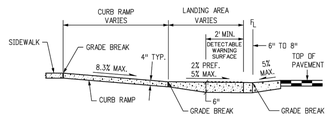
Drawn By: SBW	CURB, GUTTER AND SIDEWALK VERTICAL CURB	Issued: 5/10/05
Checked By:		Revised: 8/31/06
Approved By:		Drawing Number: SP. 1



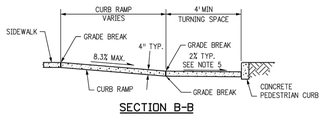
PARALLEL RAMP (TYPICAL)

PARALLEL RAMP (SIDEWALK ENDS)

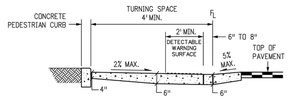
PARALLEL RAMP (DIRECTIONAL – CROSSING IN ONE DIRECTION ONLY)



SECTION C-C



SECTION B-B

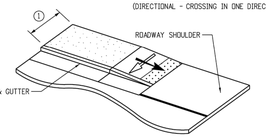


SECTION A-A

SIDEWALK

TURNING SPACE ④ ⑤ ⑥

DETECTABLE WARNING SURFACE (DWS)



SIDEWALK TO SHOULDER TRANSITION

PARALLEL RAMP NOTES

① RAMP WIDTH – PROVIDE A RAMP WIDTH EQUAL TO THE ADJOINING SIDEWALK, PROVIDE 4 FT. WIDTH MINIMUM. RAMPS SERVICING SHARED USE PATHS SHALL MATCH THE WIDTH OF THE PATH.

② RAMP RUNNING SLOPE – 8.3% MAX.

③ RAMP CROSS SLOPE – 2.0% MAX.

④ TURNING SPACE RUNNING SLOPE – 2.0% MAX. TURNING SPACE RUNNING SLOPE IS MEASURED PERPENDICULAR TO THE BACK OF CURB.

⑤ TURNING SPACE CROSS SLOPE – 2.0% TYPICAL, AT CROSSINGS WITHOUT YIELD OR STOP CONTROL, OR WITH A SIGNAL WHERE VEHICLES CAN PROCEED THROUGH THE INTERSECTION WITHOUT SLOWING OR STOPPING, THE CROSS SLOPE OF THE TURNING SPACE MAY EQUAL THE HIGHWAY GRADE. AT MIDBLOCK PEDESTRIAN STREET CROSSINGS THE TURNING SPACE CROSS SLOPE MAY EQUAL THE HIGHWAY GRADE. TURNING SPACE CROSS SLOPE IS MEASURED IN THE DIRECTION OF THE RAMP RUN.

⑥ TURNING SPACE DIMENSIONS – PROVIDE A TURNING SPACE AT THE BOTTOM OF PARALLEL RAMPS WITH A WIDTH EQUAL TO THE WIDTH OF THE CURB RAMP. PROVIDE 4 FT. MINIMUM, MEASURED IN THE DIRECTION OF THE RAMP RUN. IF THE TURNING SPACE IS CONSTRAINED ON TWO SIDES, PROVIDE 5 FT. MEASURED IN THE DIRECTION OF PEDESTRIAN STREET CROSSING. THE TURNING SPACE MAY CONTAIN THE DETECTABLE WARNING SURFACE.

⑦ RAMP ALIGNMENT – RAMPS SHALL BE ALIGNED SO THE TURNING SPACE IS FULLY CONTAINED WITHIN THE CROSSWALK OR STREET CROSSING THEY SERVE. PROVIDE ONE RAMP FOR EACH STREET CROSSING DIRECTION. IN ALTERATIONS, WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT PROVIDING ONE CURB RAMP FOR EACH CROSSING DIRECTION, A SINGLE DIAGONAL CURB RAMP (ON THE APEX OF A CORNER) SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS. DIAGONAL RAMPS ARE NOT ACCEPTABLE IN NEW CONSTRUCTION, OR FULL-DEPTH RECONSTRUCTION.

⑧ RAMP LENGTH – PARALLEL RAMP LENGTH IS DEPENDENT UPON THE RAMP SLOPE AND THE CHANGE OF ELEVATION FROM THE TURNING SPACE TO THE SIDEWALK. WHERE TERRAIN IS SLOPING A RAMP IS NOT REQUIRED TO CHASE GRADE MORE THAN 15 FT. REGARDLESS OF THE RESULTING RAMP SLOPE.

⑨ GUTTER COUNTER SLOPE – 5.0% MAX.

TYPE 2 PARALLEL CURB RAMPS

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	R=X		
Last Modification Date: 07/31/19	R=X		
Detailer Initials: LTA	R=X		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	R=X		

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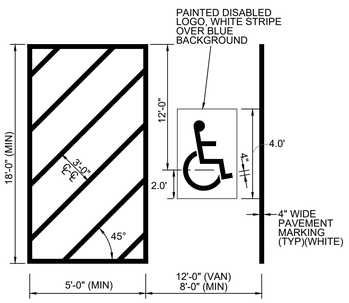
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Project Development Branch JBK

CURB RAMPS

Issued by the Project Development Branch: July 31, 2019

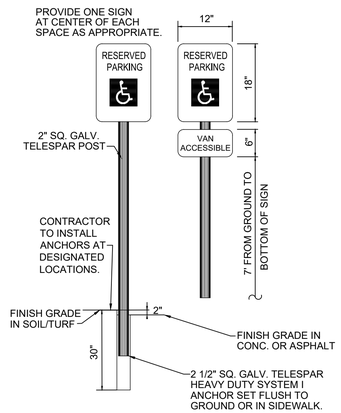
STANDARD PLAN NO. M-608-1
Standard Sheet No. 4 of 10
Project Sheet Number:



RE: SITE PLAN FOR STALL DIMENSIONS

TYPICAL PARKING STALL FOR THE DISABLED

N.T.S.



SIGN DETAIL

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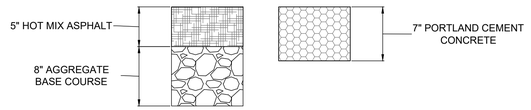

TYPICAL ON-SITE CONCRETE PAVEMENT SECTIONS

THESE SECTIONS ARE PRELIMINARY. PLEASE REFER TO THE GEOTECHNICAL INVESTIGATION FOR ORCHARD STATION PARK GARAGE FACILITY PREPARED BY CTL|THOMPSON DATED JULY 24, 2018. A FINAL PAVEMENT DESIGN REPORT WILL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER PRIOR TO PAVING OPERATIONS, WHICH COULD ALTER THE PAVEMENT SECTION REQUIRED.

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ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
SITE PLAN DETAILS

SHEET
C2.1

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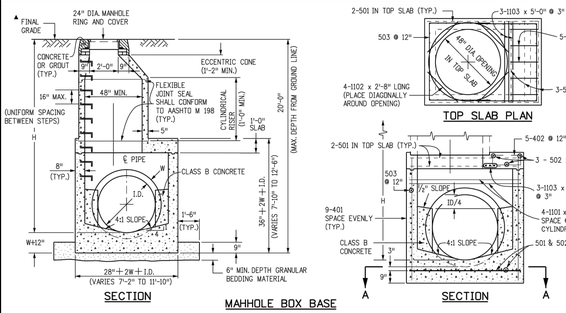
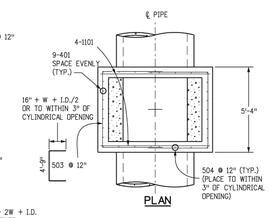


SECTION

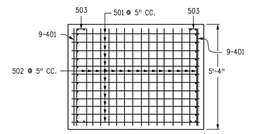
TOP SLAB PLAN

SECTION

MAHHOLE BOX BASE



PLAN



SECTION A-A
(STEEL IN BOTTOM OF BASE)

GENERAL NOTES

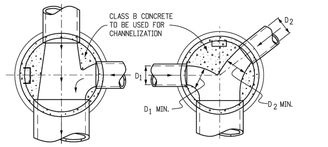
1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8 FT.
3. THE MANHOLE RING FRAME SHALL BE SET IN A BED OF GROUT. THE FRAME SHALL BE SURROUNDED WITH A CEMENT GROUT IN UNPAVED AREA, OR A CONCRETE COLLAR IN PAVED AREA. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF PIPE OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO AASHTO M 199 (ASTM C 478).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS B CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3 FT.-6 IN. AND SHALL CONFORM TO AASHTO M 199.
8. ALL REINFORCING STEEL SHALL BE GRADE 60 AND EPOXY COATED. VERTICAL STEEL SHALL BE PLACED AT CENTERLINE OF WALL. ALL BARS SHALL HAVE A 2 IN. MINIMUM CLEARANCE.
9. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
10. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE OR APPROVED GROUT.
11. STUB-OUTS SHALL EXTEND 2 FT. MINIMUM BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
12. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.

▲ WHEN FINAL GRADE IS PAVEMENT SURFACE, RECESS MANHOLE RING AND COVER ¼" MIN. TO ½" MAX.

MARK	SIZE	TYPE	WT. #/FT.	BARS	I.D. 54"	60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	(NO. REQ'D. | LENGTH | WEIGHT *	18 | 8'-1" | 97.2	18 | 8'-8" | 104.2	18 | 9'-3" | 111.2	18 | 9'-10" | 118.2	18 | 11'-0" | 132.3	18 | 12'-2" | 146.3	401 BAR LENGTH = 32" + 2W + I.D.
402	4	III	0.668	(NO. REQ'D. | LENGTH | WEIGHT *	5 | 5'-5" | 18.1	5 | 6'-0" | 20.0	5 | 6'-7" | 22.0	5 | 7'-2" | 23.9	5 | 8'-4" | 27.8	5 | 9'-6" | 31.7	402 BAR LENGTH = I.D. + 2W
501	5	I	1.043	(NO. REQ'D. | LENGTH | WEIGHT *	17 | 7'-5" | 131.5	17 | 8'-0" | 141.8	17 | 8'-7" | 152.2	17 | 9'-2" | 162.5	17 | 10'-4" | 183.2	17 | 11'-6" | 203.9	501 BAR LENGTH = 24" + I.D. + 2W
502	5	I	1.043	(NO. REQ'D. | LENGTH | WEIGHT *	22 | 5'-0" | 114.7	23 | 5'-0" | 119.9	25 | 5'-0" | 130.4	26 | 5'-0" | 135.6	29 | 5'-0" | 151.2	32 | 5'-0" | 166.9	502 NUMBER BARS REQ'D. = 3 + $\left(\frac{24+I.D.+2W}{@\ 5"}+1\right)$
503	5	II	1.043	(NO. REQ'D. | LENGTH | WEIGHT *	16 | 12'-10" | 214.2	18 | 13'-5" | 223.9	18 | 14'-0" | 262.8	18 | 14'-7" | 273.8	20 | 15'-9" | 328.5	24 | 16'-11" | 423.5	503 NUMBER BARS REQ'D. = 2 $\left(\frac{134+I.D.+2W}{@\ 12"}+1\right)$ BAR LENGTH = 4'-9"+2(16+W+I.D./2)
504	5	I	1.043	(NO. REQ'D. | LENGTH | WEIGHT *	12 | 8'-1" | 101.2	14 | 8'-8" | 126.6	14 | 9'-3" | 135.1	16 | 9'-10" | 164.1	18 | 11'-0" | 206.3	20 | 12'-2" | 253.8	504 NUMBER BARS REQ'D. = 2 $\left(\frac{2W+I.D.-4}{@\ 12"}+1\right)$ BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	(NO. REQ'D. | LENGTH | WEIGHT *	4 | 7'-2" | 152.3	4 | 7'-9" | 164.7	4 | 8'-4" | 177.1	4 | 8'-9" | 189.5	4 | 9'-11" | 214.3	4 | 11'-3" | 239.1	1101 BAR LENGTH = 21" + I.D. + 2W
1102	11	I	5.313	(NO. REQ'D. | LENGTH | WEIGHT *	4 | 2'-8" | 56.7	4 | 2'-8" | 56.7	4 | 2'-8" | 56.7	4 | 2'-8" | 56.7	4 | 2'-8" | 56.7	4 | 2'-8" | 56.7	BENDING TYPE I STRAIGHT
1103	11	I	5.313	(NO. REQ'D. | LENGTH | WEIGHT *	3 | 5'-0" | 79.7	3 | 5'-0" | 79.7	3 | 5'-0" | 79.7	3 | 5'-0" | 79.7	3 | 5'-0" | 79.7	3 | 5'-0" | 79.7	TYPE II 4'-9" 16"+W+I.D./2
* REINFORCING STEEL TOTAL					965.6	1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	TYPE III 12" 12" 7" I.D.+2W-38"
CONCRETE - CUBIC YARDS - TOTAL					6.0	8.6	7.3	8.0	9.5	11.1	

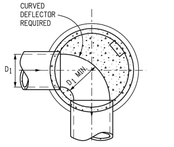
NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM, BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

QUANTITIES FOR CONCRETE MANHOLE BOX BASE



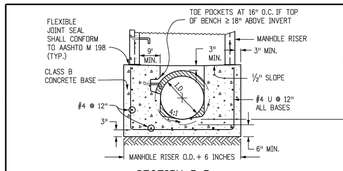
THROUGH PIPE ONE LATERAL

ANGLED LATERALS

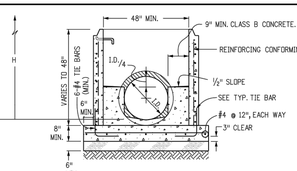


SHARP ANGLE

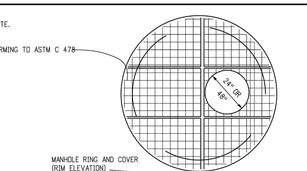
TYPICAL CHANNELIZATION DETAILS



SECTION B-B

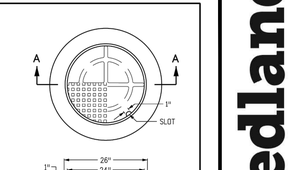


SECTION D-D



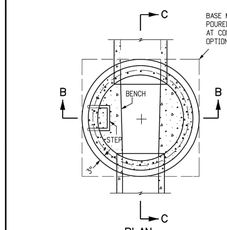
▲ WHEN FINAL GRADE IS PAVEMENT SURFACE, RECESS MANHOLE RING AND COVER ¼" MIN. TO ½" MAX.

FLAT TOP SECTION DETAIL



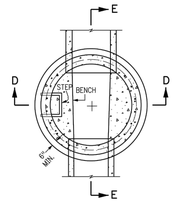
TOTAL WEIGHT: APPROXIMATELY 400 LBS. SHALL BE GRAY OR DUCTILE CAST IRON IN ACCORDANCE WITH SUBSECTION 712.06.

SECTION A-A
MANHOLE RING AND COVER

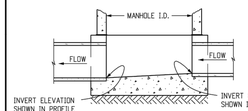


PLAN

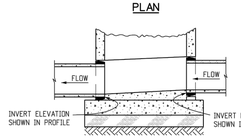
TYPICAL TIE BAR



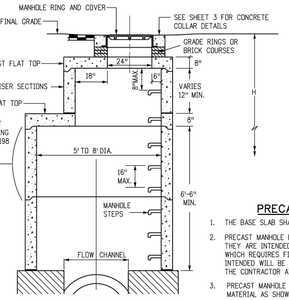
PLAN



SECTION C-C
CAST-IN-PLACE SLAB BASE



SECTION E-E
PRECAST SLAB BASE



MANHOLE RISER DETAIL

LEGEND

- SUITABLE SUBGRADE
- GRANULAR BEDDING MATERIAL
- CONCRETE

PRECAST MANHOLE BASES NOTES:

1. THE BASE SLAB SHALL BE POURED MONOLITHICALLY WITH BOTTOM RISER SECTION.
2. PRECAST MANHOLE BASES SHALL FIT THE CONDITIONS AND LOCATIONS FOR WHICH THEY ARE INTENDED WITHOUT ANY FIELD MODIFICATIONS. ANY PRECAST MANHOLE BASE WHICH REQUIRES FIELD CUTTING OR MODIFICATION IN ORDER TO FIT THE LOCATIONS INTENDED WILL BE REJECTED BY THE ENGINEER AND REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE DEPARTMENT.
3. PRECAST MANHOLE BASES SHALL BE BEDDED ON AN APPROVED GRANULAR BEDDING MATERIAL AS SHOWN ABOVE.

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	(R-X)		
Last Modification Date: 07/31/19	(R-X)		
Detailer Initials: LTA	(R-X)		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)		

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2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
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MANHOLES

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-604-20

Standard Sheet No. 1 of 3

Project Sheet Number:

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	(R-X)		
Last Modification Date: 07/31/19	(R-X)		
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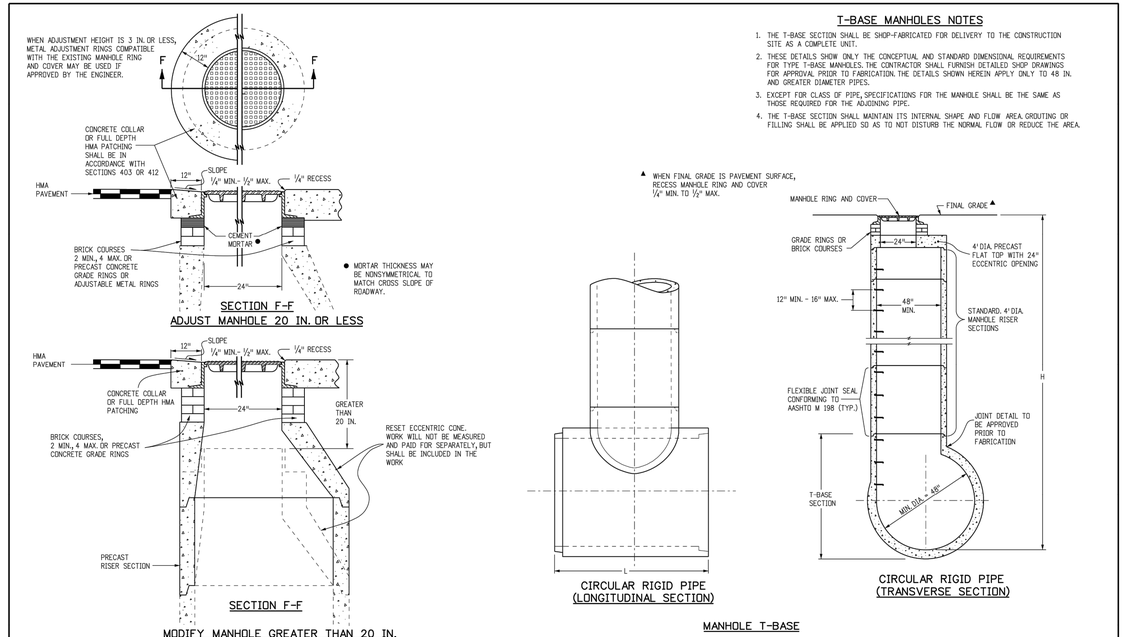
MANHOLES

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-604-20

Standard Sheet No. 2 of 3

Project Sheet Number:



SECTION F-F
ADJUST MANHOLE 20 IN. OR LESS

SECTION F-F
MODIFY MANHOLE GREATER THAN 20 IN.

T-BASE MANHOLES NOTES

1. THE T-BASE SECTION SHALL BE SHOP-FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
2. THESE DETAILS SHOW ONLY THE CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR TYPE T-BASE MANHOLES. THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE DETAILS SHOWN HEREIN APPLY ONLY TO 48 IN. AND GREATER DIAMETER PIPES.
3. EXCEPT FOR CLASS OF PIPE, SPECIFICATIONS FOR THE MANHOLE SHALL BE THE SAME AS THOSE REQUIRED FOR THE ADJOINING PIPE.
4. THE T-BASE SECTION SHALL MAINTAIN ITS INTERNAL SHAPE AND FLOW AREA. GROUTING OR FILLING SHALL BE APPLIED SO AS TO NOT DISTURB THE NORMAL FLOW OR REDUCE THE AREA.

▲ WHEN FINAL GRADE IS PAVEMENT SURFACE, RECESS MANHOLE RING AND COVER ¼" MIN. TO ½" MAX.

CIRCULAR RIGID PIPE (LONGITUDINAL SECTION)

CIRCULAR RIGID PIPE (TRANSVERSE SECTION)

MANHOLE T-BASE

Computer File Information		Sheet Revisions	
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Designer Initials: JBK	(R-X)		
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MANHOLES

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STANDARD PLAN NO. M-604-20

Standard Sheet No. 3 of 3

Project Sheet Number:

Redland
WHERE GREAT PLACES BEGIN
720.283.6783 REDLAND.COM
▪ Land Planning ▪ Civil Engineering ▪ Landscape Architecture ▪ Construction Management

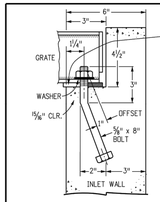
DATE	NO.	NOTES
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE
2024/09/20	4	ISSUED TO GREENWOOD VILLAGE

PROJECT NO: 23023

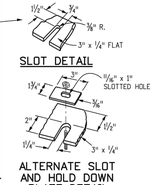
ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
STORM SEWER DETAILS

SHEET
C2.2

I:\2023\23023 - Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 - Site Plan Details.dwg tab: C2.2 STORM SEWER DETAILS Sep 11, 2024 - 8:37am rogtesby

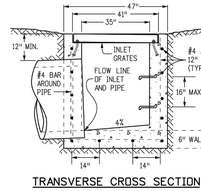


GRATE INSTALLATION DETAIL

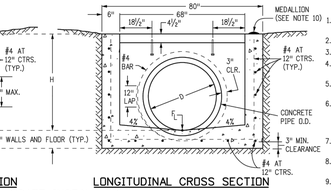


SLOT DETAIL

ALTERNATE SLOT AND HOLD DOWN PLATE DETAIL

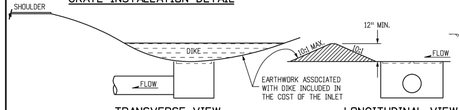


TRANSVERSE CROSS SECTION



LONGITUDINAL CROSS SECTION

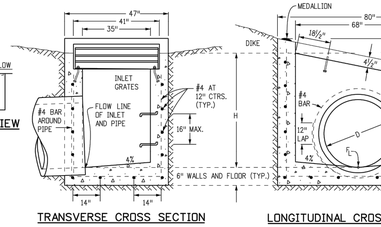
LEVEL GRADE INSTALLATION



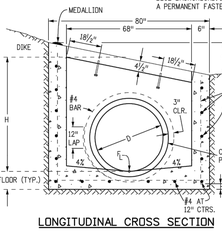
TRANSVERSE VIEW

DIKE

LONGITUDINAL VIEW

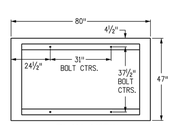


TRANSVERSE CROSS SECTION

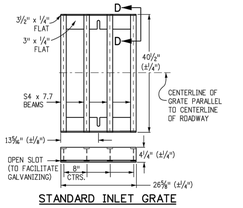


LONGITUDINAL CROSS SECTION

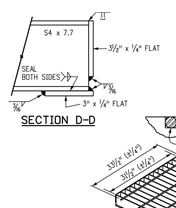
SLOPING GRADE INSTALLATION



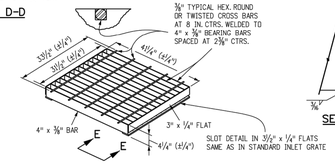
PLAN VIEW
(SHOWING ANCHOR BOLT LAYOUT)



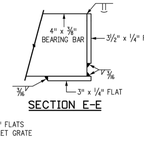
STANDARD INLET GRATE



SECTION D-D



CLOSE MESH GRATE



SECTION E-E

TWO STEEL GRATE PER INLET QUANTITIES

NO. PIECES	DESCRIPTION	LENGTH	LBS PER FT.	WEIGHT (LBS.)
8	S4 x 7.7 BEAM	40"	7.70	206
4	3½" x ¼" FLAT	26⅝"	2.98	26
4	3" x ¼" FLAT	26⅝"	2.55	24

TOTAL LBS. = 256

OUTLET PIPE INSIDE DIA. FT. - "D"	MIN. "H" FT.
1.5	3.0
2.0	3.5
2.5	4.0
3.0	4.5
3.5	5.0

"H" FT.	CONCRETE CU. YDS.	STEEL LBS.	CIRCULAR PIPE RANGE INSIDE DIA., IN. - "D"
3.0	1.5	127	18
3.5	1.7	149	18-24
4.0	1.9	157	18-30
4.5	2.0	179	18-36
5.0	2.2	187	18-42
5.5	2.4	208	18-42
6.0	2.6	215	18-42
6.5	2.8	236	18-42
7.0	2.9	243	18-42
7.5	3.1	264	18-42
8.0	3.3	271	18-42
8.5	3.5	292	18-42
9.0	3.6	299	18-42
9.5	3.8	320	18-42
10.0	4.0	327	18-42

▼ CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

QUANTITIES FOR ONE INLET

GENERAL NOTES

1. INLET TYPE D IS NOT HS-20 RATED AND SHALL NOT BE PLACED IN PAVED ROADWAYS. THIS INLET SHALL BE USED ONLY OUTSIDE PAVED ROADWAYS.
2. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
3. SEE PLANS FOR SIZE AND LOCATION OF PIPE.
4. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
5. STANDARD INLET GRATES SHALL BE USED ON ALL TYPE D INLETS UNLESS CLOSE MESH GRATES ARE SPECIFIED ON THE PLANS.
6. CLOSE MESH GRATES ARE RECOMMENDED WHERE FOOT TRAFFIC OR BICYCLE ROUTES ARE IN CLOSE PROXIMITY TO GRATE. THIS GRATE IS NOT ADA COMPLIANT OR BICYCLE FRIENDLY AND SHALL NOT BE PLACED DIRECTLY IN SIDEWALKS, CROSSWALKS OR BIKE PATHS.
7. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FEET - 6 INCHES AND SHALL CONFORM TO AASHTO M 199.
8. REINFORCING BARS SHALL BE GRADE 60, EPOXY COATED, AND DEFORMED #4, AND SHALL HAVE A 2 INCH MIN. CLEARANCE. CUT OR BEND BARS AROUND PIPE AS REQUIRED.
9. ALL INLETS SHALL HAVE A 4 INCH DIA. METAL MEDALLION WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE ON IT. THE MEDALLION SHALL HAVE A FISH SYMBOL WITH A BLUE BACKGROUND. IT SHALL BE FIRMLY ATTACHED TO THE INLET'S SURFACE WITH A PERMANENT FASTENER.

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
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Colorado Department of Transportation
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INLET, TYPE D

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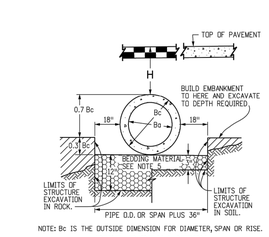
M-604-11
Standard Sheet No. 1 of 1
Project Sheet Number:



NOTE: Bc IS THE OUTSIDE DIMENSION FOR DIAMETER, SPAN OR RISE.

PIPE INSTALLATION
(WITH 0.7 PROJECTION RATIO)

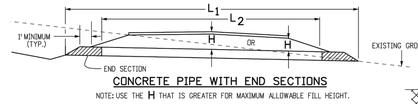
CIRCULAR (CIR) PIPE SIZE - Ba (INSIDE DIA)	WALL THICKNESS	0.3 Bc (OUTSIDE DIA)
IN.		FT.
12	2	0.40
15	2-¼	0.49
18	2-½	0.58
21	2-¾	0.66
24	3	0.75
27	3-¼	0.84
30	3-½	0.92
33	3-¾	1.01
36	4	1.10
42	4-½	1.28
48	5	1.45
54	5-½	1.62
60	6	1.80
66	6-½	1.97
72	7	2.15
78	7-½	2.32
84	8	2.50
90	8-½	2.68
96	9	2.85
102	9-½	3.02
108	10	3.20

VERTICAL ELLIPTICAL (VE) SPAN	RISE	WALL THICKNESS	0.3 OUTSIDE RISE
IN.			FT.
29	45	4-½	1.35
34	53	5	1.58
38	60	5-½	1.78
43	68	6	2.00
48	76	6-½	2.23
53	83	7	2.43
58	91	7-½	2.65
63	98	8	2.85
68	106	8-½	3.08
72	113	9	3.28
77	121	9-½	3.50
82	128	9-¾	3.69
87	136	10	3.90

HORIZONTAL ELLIPTICAL (HE) SPAN	RISE	WALL THICKNESS	0.3 OUTSIDE RISE
IN.			FT.
23	14	2-¾	0.49
30	19	3-½	0.66
34	22	3-½	0.73
38	24	3-¾	0.79
45	29	4-½	0.95
53	34	5	1.10
60	38	5-½	1.23
68	43	6	1.38
76	48	6-½	1.53
83	53	7	1.68
91	58	7-½	1.83
98	63	8	1.98
106	68	8-½	2.13
113	72	9	2.25
121	77	9-½	2.40
128	82	9-¾	2.54
136	87	10	2.68

△ ALSO EQUIVALENT ROUND DIMENSION FOR ELLIPTICAL PIPE.

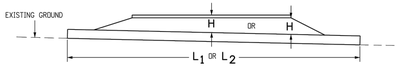
DIMENSIONS FOR REINFORCED CONCRETE PIPE
(FOR INFORMATION ONLY)



CONCRETE PIPE WITH END SECTIONS

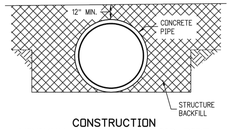
NOTE: USE THE H THAT IS GREATER FOR MAXIMUM ALLOWABLE FILL HEIGHT.

H = HEIGHT OF FILL OVER TOP OF PIPE, INCLUDING PAVEMENT THICKNESS.
L_1 = LENGTH OF PIPE TO BE MEASURED WHEN PLACED IN ACCORDANCE WITH SECTION 624.
L_2 = LENGTH OF PIPE TO BE MEASURED WHEN PLACED IN ACCORDANCE WITH SECTION 603.



CONCRETE PIPE WITHOUT END SECTIONS

NOTE: USE THE H THAT IS GREATER FOR MAXIMUM ALLOWABLE FILL HEIGHT.



CONSTRUCTION
MINIMUM COVER FOR RIGID PIPE

GENERAL NOTES

REINFORCED CONCRETE PIPE

1. FILL HEIGHTS GREATER THAN MAXIMUM ALLOWED IN THE HEIGHTS OF FILL TABLE ON THIS SHEET REQUIRE SPECIAL DESIGN OF STRUCTURE.
2. PIPE DESIGN IS BASED ON SAFETY FACTOR OF 1.33 ON ULTIMATE STRENGTH.
3. THE HEIGHTS OF FILL OVER TOP OF PIPE ARE BASED ON UNIT WEIGHT OF SOIL AT 135 LBS. PER CUBIC FT.
4. PIPE CLASS IS DETERMINED FROM 0.01 IN. CRACK D-LOAD.
5. BEDDING IS CLASS B (MODIFIED) (FROM CONCRETE PIPE DESIGN MANUAL-AMERICAN CONCRETE PIPE ASSOCIATION) WITH SETTLEMENT RATIO R = 0.0 ρg (YIELDING BED). BEDDING MATERIAL FOR RIGID PIPE IN SOIL SHALL BE 3 IN. LOOSE THICKNESS STRUCTURE BACKFILL CLASS 2. BEDDING MATERIAL FOR RIGID PIPE IN ROCK SHALL BE 12 IN. LOOSE THICKNESS STRUCTURE BACKFILL CLASS 1.
6. CHANGES IN DESIGN FACTORS REQUIRE COMPENSATING CHANGES IN PIPE DESIGN.
7. MINIMUM WALL THICKNESS DIMENSIONS ARE BASED ON AASHTO M 170 (WALL B) FOR CIRCULAR PIPE, AND AASHTO M 207 FOR ELLIPTICAL PIPE.
8. SPACING FOR MULTIPLE PIPE INSTALLATIONS SHALL CONFORM TO THE DETAILS SHOWN ON STANDARD PLAN M-206-1.
9. WHEN A PIPE IS TO BE EXTENDED, THE SAME PIPE MATERIAL AND SIZE AS IN THE ORIGINAL PIPE INSTALLATION SHALL BE USED.

NONREINFORCED CONCRETE PIPE

1. AT THE OPTION OF THE CONTRACTOR, NONREINFORCED CONCRETE PIPE CONFORMING TO AASHTO M 86 MAY BE USED IN LIEU OF REINFORCED CONCRETE PIPE FOR ALL SIZES 36 INCHES IN DIAMETER AND SMALLER. THE NONREINFORCED CONCRETE PIPE SHALL MEET THE SAME D-LOAD TO PRODUCE THE ULTIMATE LOAD UNDER THE THREE-EDGE BEARING METHOD AS SPECIFIED FOR REINFORCED CONCRETE PIPE IN CONFORMANCE WITH AASHTO M 170. THE CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATION OF CONFORMANCE. THE WALL THICKNESS OF THE NONREINFORCED PIPE MAY BE INCREASED AS REQUIRED TO MEET D-LOAD REQUIREMENT.
2. ALL REQUIREMENTS FOR REINFORCED CONCRETE PIPE, EXCEPT THOSE REFERRING TO REINFORCEMENT, SHALL APPLY TO NONREINFORCED CONCRETE PIPE.

TYPE OF PIPE	HEIGHT OF FILL OVER TOP OF PIPE, H (FEET)				
	CLASS OF PIPE		(0.01 IN. CRACK D-LOAD)		
	CLASS CIR II CLASS VE II CLASS HE II 1000 D	CLASS CIR III CLASS VE III CLASS HE III 1350 D	CLASS CIR IV CLASS VE IV CLASS HE IV 2000 D	CLASS CIR V CLASS VE V 3000 D	CLASS VE VI 4000 D
CIRCULAR (CIR)	1 TO 18	1 TO 25	± 25 TO 37	± 37 TO 45	
VERTICAL ELLIPTICAL (VE)	1 TO 18	1 TO 25	± 25 TO 37	± 37 TO 45	± 45 TO 62
HORIZONTAL ELLIPTICAL (HE)	1 TO 18	1 TO 25	± 25 TO 37		

ALLOWABLE RANGE OF HEIGHTS FOR FILL OVER REINFORCED CONCRETE PIPE
(ALL SIZES)

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	R-X		
Last Modification Date: 07/31/19	R-X		
Detailer Initials: LTA	R-X		
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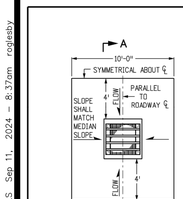
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Project Development Branch JBK

REINFORCED CONCRETE PIPE

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
M-603-2
Standard Sheet No. 1 of 1
Project Sheet Number:

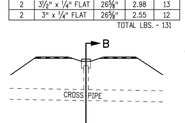


INLET WITH DITCH PAVING

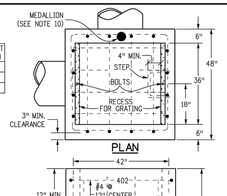
STEEL GRATE QUANTITIES

NO. PIECES	DESCRIPTION	LENGTH	LBS PER FT.	(LBS.)
4	S4 x 7.7 BEAM	41"	7.90	106
2	3½" x ¼" FLAT	26⅝"	2.98	13
2	3" x ¼" FLAT	26⅝"	2.55	12

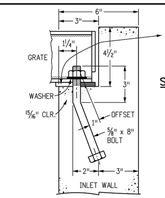
TOTAL LBS. = 131



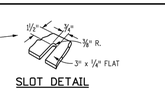
SECTION VIEW



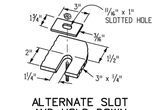
PLAN



GRATE INSTALLATION DETAIL



SLOT DETAIL



ALTERNATE SLOT AND HOLD DOWN PLATE DETAIL

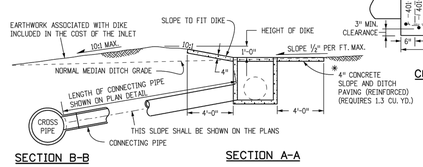
QUANTITIES FOR ONE INLET

H	CONCRETE (CU. YDS.)	STEEL (LBS.)	NO. STEPS REQ'D.
2'-6"	1.0	76	0
3'-0"	1.1	81	0
3'-6"	1.2	97	0
4'-0"	1.3	102	1
4'-6"	1.5	117	2
5'-0"	1.6	123	2
5'-6"	1.7	138	2
6'-0"	1.9	143	3
6'-6"	2.0	159	3
7'-0"	2.1	164	3
7'-6"	2.2	180	4
8'-0"	2.4	185	4
8'-6"	2.5	200	4
9'-0"	2.6	206	5
9'-6"	2.8	221	5
10'-0"	2.9	236	6
11'-6"	3.3	252	6

▼ PIPE INSIDE DIAMETER SHALL BE 30 IN. OR LESS. CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

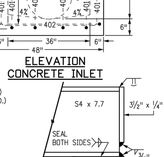
GENERAL NOTES

1. INLET TYPE C IS NOT HS-20 RATED AND SHALL NOT BE PLACED IN PAVED ROADWAYS. THIS INLET SHALL BE USED ONLY OUTSIDE PAVED ROADWAYS.
2. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
3. REINFORCING BARS SHALL BE GRADE 60, EPOXY COATED, AND DEFORMED #4, AND SHALL HAVE A MIN. 2 INCH CLEARANCE. CUT OR BEND AROUND PIPES AS REQUIRED.
4. CONCRETE SLOPE AND DITCH PAVING SHALL BE IN ACCORDANCE WITH SECTION 607. REINFORCEMENT FOR CONCRETE SLOPE PAVING SHALL BE 6 X 6 - W1.4 X W1.4 OR 6 X 6 - W2.1 X W2.1.
5. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED, AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
6. THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS CLOSE MESH INLET GRATES ARE SPECIFIED ON THE PLANS.
7. CLOSE MESH GRATES ARE RECOMMENDED WHERE FOOT TRAFFIC OR BICYCLE ROUTES ARE IN CLOSE PROXIMITY TO GRATE. THIS GRATE IS NOT ADA COMPLIANT OR BICYCLE FRIENDLY AND SHALL NOT BE PLACED DIRECTLY IN SIDEWALKS, CROSSWALKS OR BIKE PATHS.
8. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FEET - 6 INCHES AND SHALL CONFORM TO AASHTO M 199.
9. SEE STANDARD PLAN M-604-11, FOR REINFORCEMENT AROUND THE PIPE OPENING.
10. ALL INLETS SHALL HAVE A 4 INCH DIA. METAL MEDALLION WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE ON IT. THE MEDALLION SHALL HAVE A FISH SYMBOL WITH A BLUE BACKGROUND. IT SHALL BE FIRMLY ATTACHED TO THE TOP OF THE INLET WITH A PERMANENT FASTENER.



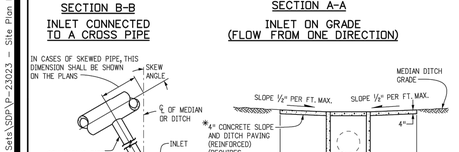
SECTION B-B
INLET CONNECTED TO A CROSS PIPE

SECTION A-A
INLET ON GRADE (FLOW FROM ONE DIRECTION)



SECTION D-D

ELEVATION
CONCRETE INLET

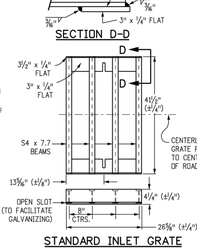


INLET CONNECTED TO A SKEWED CROSS PIPE

SECTION A-A

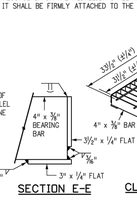
*CONCRETE SLOPE AND DITCH PAVING WILL BE REQUIRED WHEN SHOWN ON THE PLANS.

INLET AT BOTTOM OF VERTICAL CURVE (FLOW FROM TWO DIRECTIONS)



STANDARD INLET GRATE

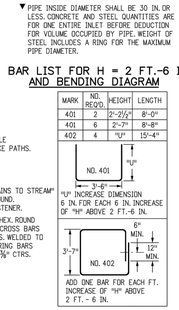
CLOSE MESH INLET GRATE



SECTION E-E

BAR LIST FOR H = 2 FT.-6 IN. AND BENDING DIAGRAM

MARK	NO. REQ'D.	HEIGHT	LENGTH
401	2	2'-2½"	8'-0"
401	6	2'-7"	8'-8"
402	4	"H"	15'-4"



402 BARS SHALL BE EQUALLY SPACED FROM EACH OTHER.

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	R-X		
Last Modification Date: 07/31/19	R-X		
Detailer Initials: LTA	R-X		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	R-X		

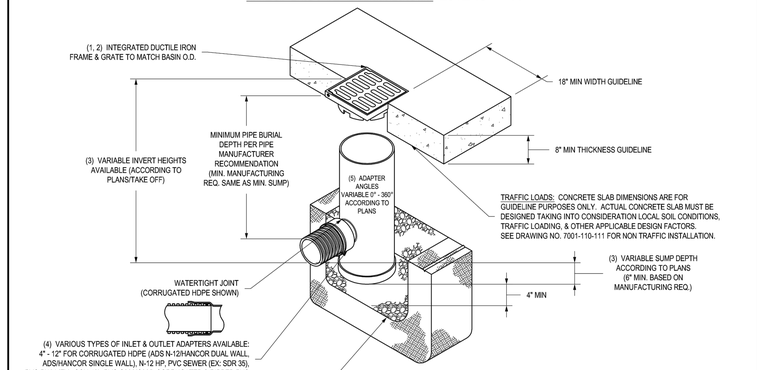
Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Project Development Branch JBK

INLET, TYPE C

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
M-604-10
Standard Sheet No. 1 of 1
Project Sheet Number:

NYLOPLAST 12" DRAIN BASIN: 2812AG _ _ X



GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	1299CGP	7001-110-202
STANDARD	MEETS H-20	1299CGS	7001-110-203
SOLID COVER	MEETS H-20	1299CGC	7001-110-204
PEDESTRIAN BRONZE	N/A	1299CGPB	7001-110-205
DOME	N/A	1299CGD	7001-110-206
DROP IN GRATE	LIGHT DUTY	1201DI	7001-110-021

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-60-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

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DRAWN BY	EBC	MATERIAL	
DATE	03-29-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-11-16		
DWG SIZE	A	SCALE 1:20	SHEET 1 OF 1

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2440
FAX (770) 932-2490
www.nyloplast-us.com

TITLE
12 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-189 REV E

PROJECT NO	23023	NOTES
DATE	NO	
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE
2024/09/20	4	ISSUED TO GREENWOOD VILLAGE

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ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
STORM SEWER DETAILS

SHEET
C2.3

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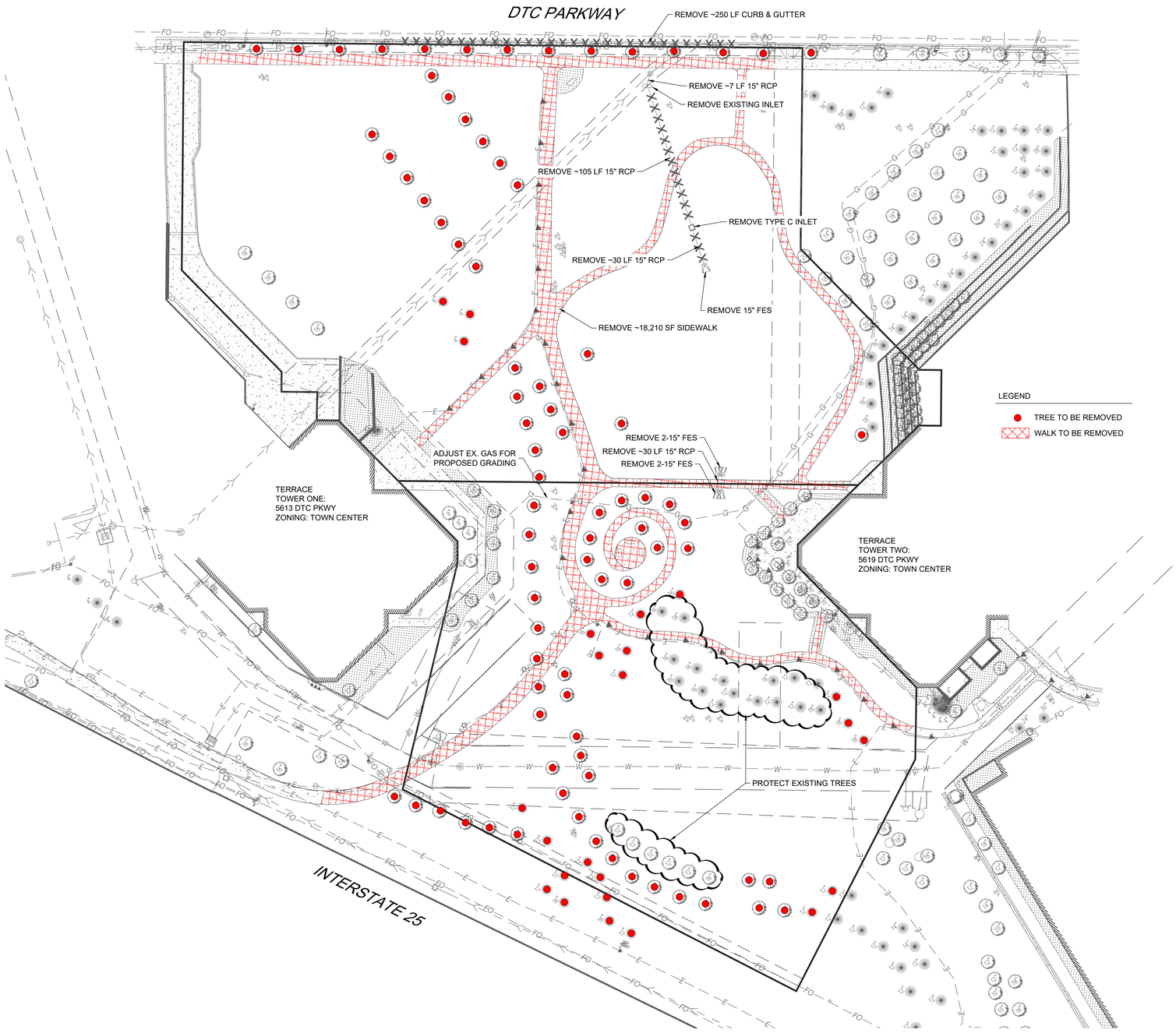

NOTES:

1. ALL LIGHTS AND ELECTRICAL ADJACENT TO SIDEWALKS TO BE REMOVED WILL ALSO BE REMOVED.
2. ALL IRRIGATION LINES AND STRUCTURES WITHIN THE PROPOSED GRADING WILL BE RELOCATED OR REMOVED.

N

0 25 50 100

SCALE: 1" = 50'

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DATE	NO.	NOTES
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE
2024/09/20	4	ISSUED TO GREENWOOD VILLAGE

PROJECT NO. 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
DEMO PLAN

SHEET
C2.4

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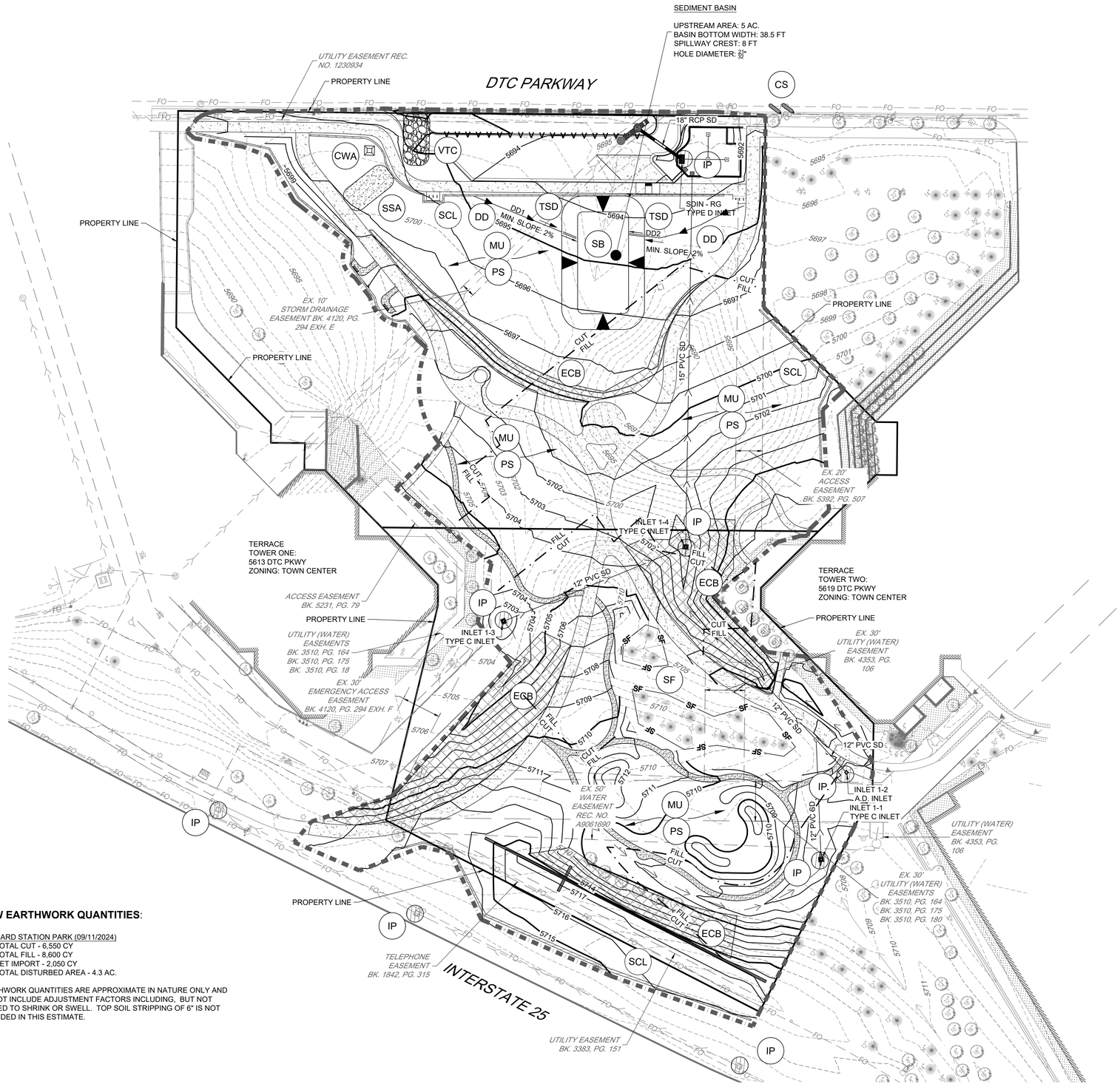

EROSION CONTROL LEGEND

- CS — CURB SOCK
- CWA — CONCRETE WASHOUT AREA
- ECB — EROSION CONTROL BLANKET
- IP — INLET PROTECTION
- LOC — LIMITS OF CONSTRUCTION
- MU — MULCHING
- PS — PERMANENT SEEDING
- SB — SEDIMENT BASIN
- SCL — SEDIMENT CONTROL LOG
- SF — SILT FENCE
- SM — SEEDING AND MULCHING
- SR — SURFACE ROUGHENING
- SSA — STABILIZED STAGING AREA
- VTC — VEHICLE TRACKING CONTROL

EROSION CONTROL BMP PHASING

BMP	INITIAL	INTERIM	FINAL
VTC	X		
INLET PROTECTION	X	X	
CONCRETE WASHOUT		X	
FINAL LANDSCAPING			X
SCL	X	X	
SF	X	X	
ECB	X	X	

NOTES:

1. ALL INITIAL BMP'S TO BE INSTALLED PRIOR TO EARTH MOVING ACTIVITIES.
2. THE INTERIM EROSION CONTROL BMPS SHALL BE IN PLACE DURING CONSTRUCTION AND UNTIL VEGETATION IS ESTABLISHED UNLESS OTHERWISE NOTED.
3. STREET SWEEPING MAY BE REQUIRED IF MATERIAL IS TRACKED ONTO PAVED SURFACE OUTSIDE OF THE SITE.
4. CONCRETE WASHOUT MUST BE LOCATED A MINIMUM OF 100' FROM ANY DRAINAGE CONVEYANCE SYSTEM, WATER BODY, WELL AND/OR DRINKING WATER SOURCE. CONCRETE WASHOUT MUST BE LINED IF THIS IS NOT FEASIBLE.
5. THE SITE SHALL ONLY BE ACCESSED AT ENTRY POINTS WHERE VTC HAS BEEN INSTALLED. NO OTHER ACCESS POINTS SHALL BE PERMITTED.
6. REFER TO FINAL LANDSCAPE PLANS FOR PERMANENT SEEDING AND LANDSCAPING.
7. CONTRACTOR TO DETERMINE LOCATION AND SIZE OF STABILIZED STAGING AREA AND ADD TO THIS PLAN.
8. THE FINAL EROSION CONTROL ELEMENTS ARE REQUIRED FOR FINAL STABILIZATION AND SHALL BE IN PLACE WHEN ACTIVE CONSTRUCTION HAS CEASED.
9. CONTRACTOR TO DETERMINE LOCATION OF STOCKPILE AND INSTALL APPROPRIATE BMPS

RAW EARTHWORK QUANTITIES:

ORCHARD STATION PARK (09/11/2024)

- TOTAL CUT - 6,550 CY
- TOTAL FILL - 8,600 CY
- NET IMPORT - 2,050 CY
- TOTAL DISTURBED AREA - 4.3 AC.

EARTHWORK QUANTITIES ARE APPROXIMATE IN NATURE ONLY AND DO NOT INCLUDE ADJUSTMENT FACTORS INCLUDING, BUT NOT LIMITED TO SHRINK OR SWELL. TOP SOIL STRIPPING OF 6" IS NOT INCLUDED IN THIS ESTIMATE.

Know what's **below.** **Call** before you dig.

0 20 40 80

SCALE: 1" = 40'

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DATE	NO	NOTES
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE
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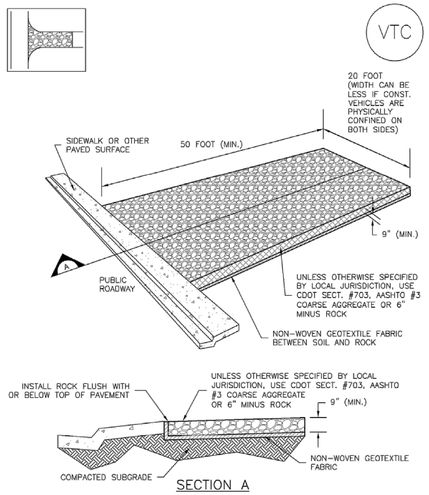
PROJECT NO 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
EROSION CONTROL PLAN

SHEET C3.0

I:\2023\23023 - Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 - Erosion Control Plan.dwg tdb: C3.0 EROSION CONTROL PLAN Sep 11, 2024 - 8:38am rogtesby



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   –TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT–OF–WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON–WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

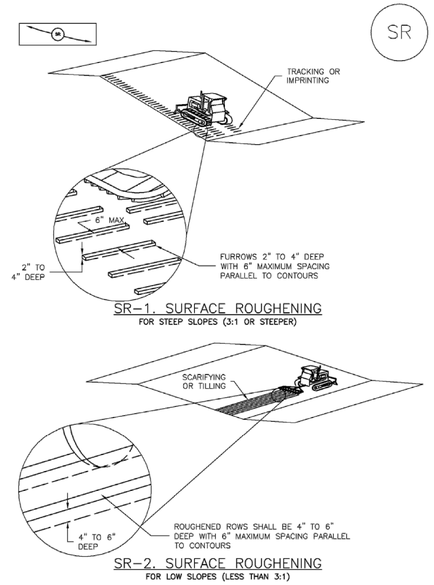
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)



SURFACE ROUGHENING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF SURFACE ROUGHENING.

2. SURFACE ROUGHENING SHALL BE PROVIDED PROMPTLY AFTER COMPLETION OF FINISHED GRADING (FOR AREAS NOT RECEIVING TOPSOIL) OR PRIOR TO TOPSOIL PLACEMENT OR ANY FORECASTED RAIN EVENT.

3. AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD WILL BE PLACED WITHOUT DELAY IN THE CONSTRUCTION SEQUENCE, SURFACE ROUGHENING IS NOT REQUIRED.

4. DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPING OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.

5. A FARMING DISK SHALL NOT BE USED FOR SURFACE ROUGHENING.

SURFACE ROUGHENING MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACE UPON DISCOVERY OF THE FAILURE.

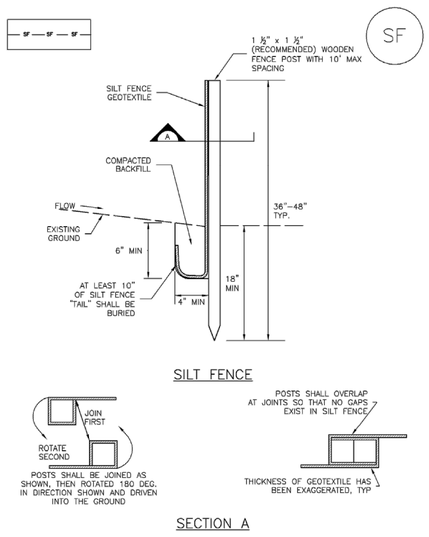
4. VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.

5. IN NON–TURF GRASS FINISHED AREAS, SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST SMOOTHING OUT THE SURFACE.

6. IN AREAS NOT SEEDED AND MULCHED AFTER SURFACE ROUGHENING, SURFACES SHALL BE RE–ROUGHENED AS NECESSARY TO MAINTAIN GROOVE DEPTH AND SMOOTH OVER RILL EROSION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SF–1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J–HOOK." THE "J–HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

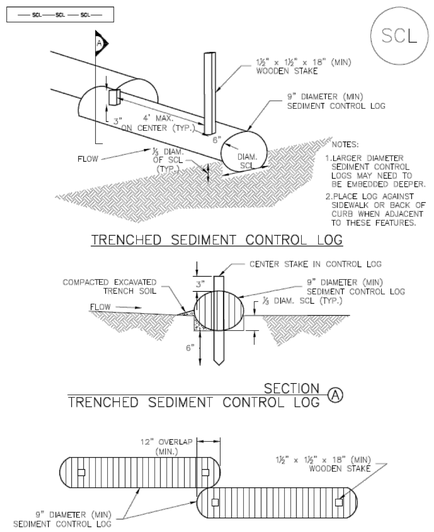
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SCL–1. TRENCHED SEDIMENT CONTROL LOG

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.

2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND–DISTURBING ACTIVITIES.

3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.

4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.

7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION.COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BAGS ARE REMOVED AND THE AREA SEEDED. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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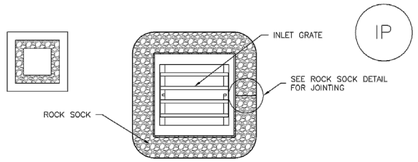
PROJECT NO.	23023	NOTES
DATE	NO.	
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE
2024/09/20	4	ISSUED TO GREENWOOD VILLAGE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
EROSION CONTROL DETAILS

SHEET
C3.1

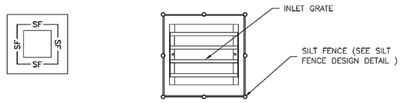
I:\2023\23023 – Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 – Erosion Control Details.dwg tab: C3.1 EROSION CONTROL DETAILS Sep 11, 2024 – 8:38am rogiesby



IP–3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP–4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF INLET PROTECTION.
   –TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

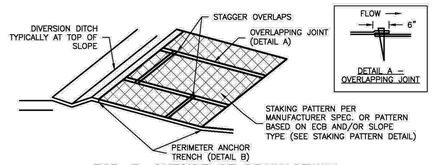
6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

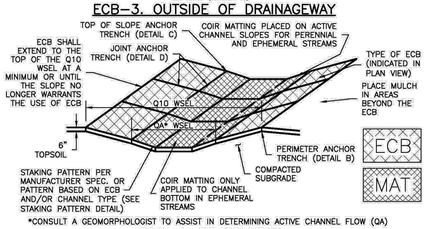
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.



ECB–3. OUTSIDE OF DRAINAGEWAY



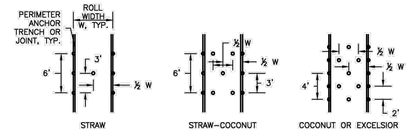
*CONSULT A GEOMORPHOLOGIST TO ASSIST IN DETERMINING ACTIVE CHANNEL FLOW (QA)

ECB–4. DRAINAGEWAY

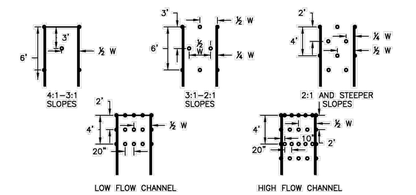
TABLE ECB–1. ECB MATERIAL SPECIFICATIONS

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	–	100%	–	DOUBLE/ NATURAL
STRAW–COCONUT	30% MIN.	70% MAX	–	DOUBLE/ NATURAL
COIR MAT	100%	–	–	DOUBLE/ NATURAL
EXCELSIOR	–	–	100%	DOUBLE/ NATURAL

*STRAW ECBs MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL.
**ALTERNATE NETTING INCLUDING SINGLE NETTING AND SYNTHETIC PHOTODEGRADABLE FIBER MAY BE ACCEPTABLE IN SOME JURISDICTIONS

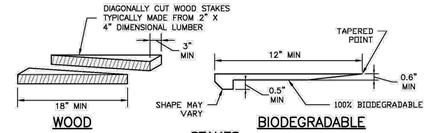


STAKING PATTERNS BY ECB TYPE

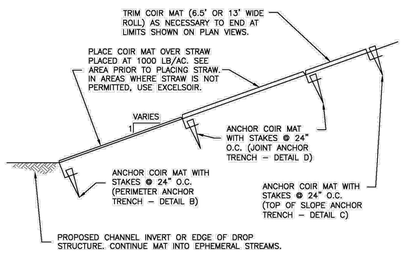


NOTE: IN ADDITION TO FLOW CONDITIONS, THE DESIGNER SHOULD CONSIDER THE PROPERTIES OF THE UNDERLYING SOIL. LESS COHESIVE SOILS MAY WARRANT A TIGHTER STAKING PATTERN.

STAKING PATTERNS BY SLOPE OR CHANNEL TYPE



NOTES
1. PLACE STAKES 18" O.C. TO 3' ABOVE WATER, THEN 24" O.C. TO UPPER LIMIT OF FABRIC OR AS RECOMMEND BY THE MANUFACTURER.
2. WHEN BLANKETING IS PLACED OVER RIPRAP, USE WOOD STAKES.



NOTE: USE WOODEN STAKES IN AREAS WHERE MAT IS PLACED OVER RIPRAP.

COIR MAT PLACEMENT DETAIL

EROSION CONTROL BLANKET MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ECBs SHALL BE LEFT IN PLACE TO BIODEGRADE UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.

5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND TOWN OF PARKER COLORADO, NOT AVAILABLE IN AUTOCAD)

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF ECB.
   –TYPE OF ECB (STRAW, STRAW–COCONUT, COCONUT/ COIR, OR EXCELSIOR).
   –AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.

2. ALL RECPs MUST BE 100% NATURAL AND BIODEGRADABLE MATERIALS.

3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.

4. FOR MATS THAT HAVE OPENINGS LARGER THAN THE SOIL, ADD STRAW UNDER (RATE OF 1000# PER ACRE) TO HOLD SOIL AND SEED FROM MIGRATING THROUGH OPENINGS.

5. INSTALL MATS AND BLANKETS PARALLEL TO THE DIRECTION OF STREAM FLOW.

6. PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.

7. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.

8. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE–HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.

9. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES AND WITHIN DRAINAGEWAYS. OVERLAP SEAMS SO THAT UPSTREAM RECPs IS ON TOP OF DOWNSTREAM RECPs SO THAT EXPOSED EDGE IS NOT LIFTED BY STREAM FLOWS.

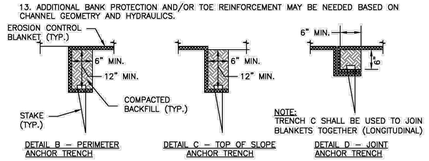
10. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB–1.

11. ALL EXPOSED ROOTS SHALL BE TRIMMED TO BELOW THE SOIL SURFACE. ECB/TRM SHALL NOT BE INSTALLED OVER ROCKS OR SOIL CLODS GREATER THAN 4 INCHES.

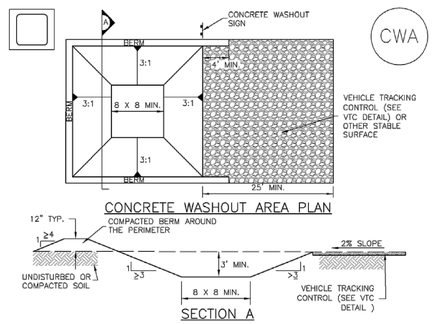
11. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBS SHALL BE RESEEDED AND MULCHED.

12. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

13. ADDITIONAL BANK PROTECTION AND/OR TOE REINFORCEMENT MAY BE NEEDED BASED ON CHANNEL GEOMETRY AND HYDRAULICS.



ANCHOR TRENCH DETAILS FOR EROSION CONTROL BLANKETS



CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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NOTES	NO.	DATE
PROJECT NO. 23023		
ISSUED TO GREENWOOD VILLAGE	1	20240110
ISSUED TO GREENWOOD VILLAGE	2	20240424
ISSUED TO GREENWOOD VILLAGE	3	20240614
ISSUED TO GREENWOOD VILLAGE	4	20240920

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
EROSION CONTROL DETAILS

SHEET
C3.2

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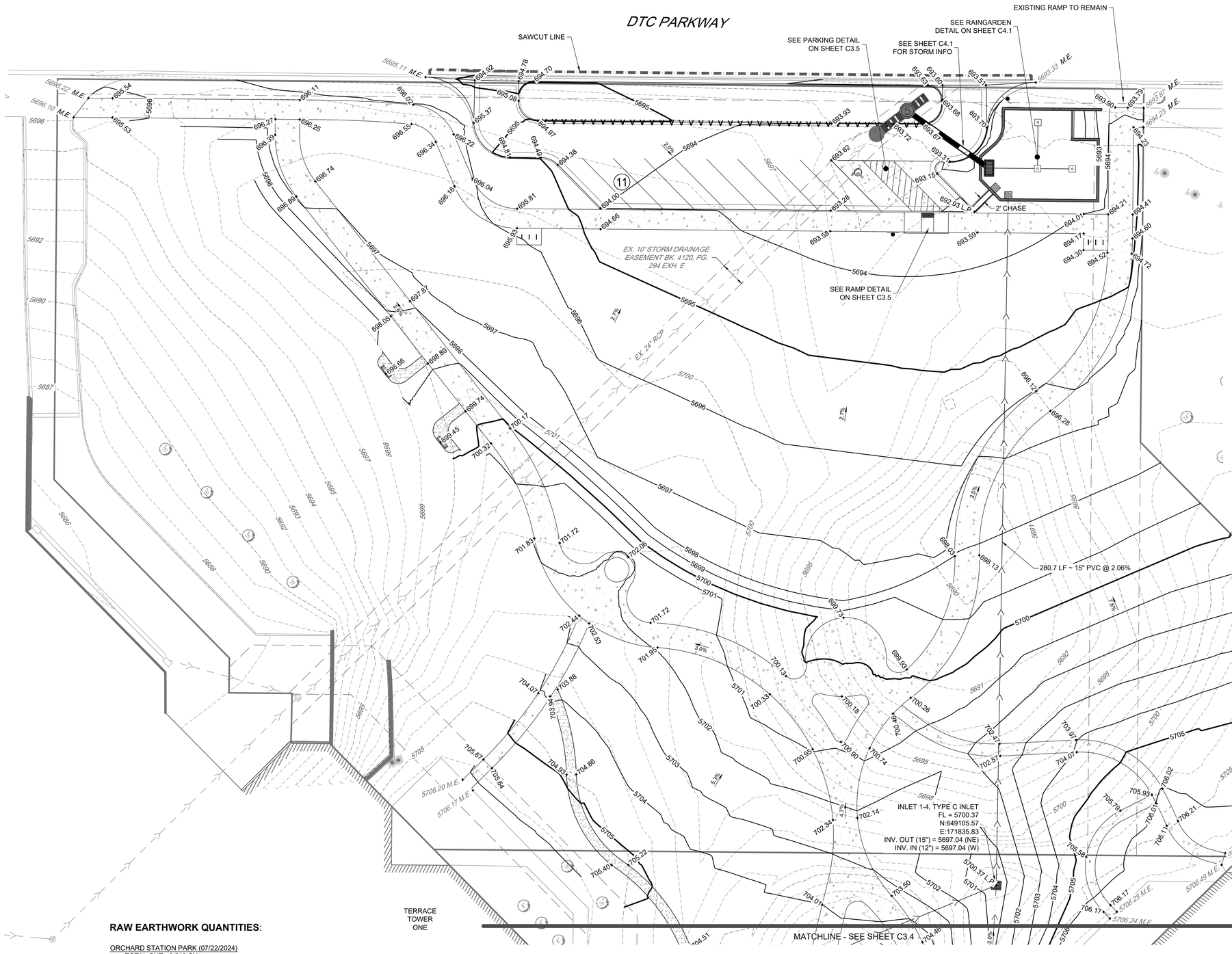

GRADING AND EROSION CONTROL LEGEND

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED STORM SEWER LINE
- PROPOSED MANHOLE
- PROPOSED BOX BASE MANHOLE
- PROPOSED INLET
- PROPOSED FLARED END SECTION
- EXISTING SLOPE ARROW
- PROPOSED SLOPE ARROW
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION

NOTES:

1. ALL SLOPES ARE MAXIMUM OF 4H:1V UNLESS OTHERWISE NOTED.
2. GRADES SHOWN REPRESENT FLOWLINE AND/OR FINISHED GRADE.
3. ALL SIDEWALKS HAVE A MAXIMUM CROSS SLOPE OF 2%.
4. ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
5. REFER TO SITE PLAN FOR HORIZONTAL LAYOUT.

RAW EARTHWORK QUANTITIES:

ORCHARD STATION PARK (07/22/2024)

- TOTAL CUT - 6,540 CY
- TOTAL FILL - 8,600 CY
- NET IMPORT - 2,060 CY
- TOTAL DISTURBED AREA - 4.3 AC.

EARTHWORK QUANTITIES ARE APPROXIMATE IN NATURE ONLY AND DO NOT INCLUDE ADJUSTMENT FACTORS INCLUDING, BUT NOT LIMITED TO SHRINK OR SWELL. TOP SOIL STRIPPING OF 6" IS NOT INCLUDED IN THIS ESTIMATE.

BENCHMARK

UDFCD BENCHMARK NUMBER CC-9 BEING A 3-1/4" ALUMINUM ALLOY CAP STAMPED "UDFCD CC - 9" LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF S JOILET STREET AND INVERNESS DRIVE EAST, 46.5' NORTH OF THE CENTER LINE OF INVERNESS DRIVE EAST AND 59' EAST OF THE CENTERLINE OF SOUTH JOILET STREET.

ELEVATION = 5732.89 FEET (NAVD88)

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NO.	DATE	NOTES

PROJECT NO.	23023	NOTES
NO.	DATE	
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/08/20	ISSUED TO GREENWOOD VILLAGE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
GRADING & DRAINAGE PLAN

SHEET
C3.3

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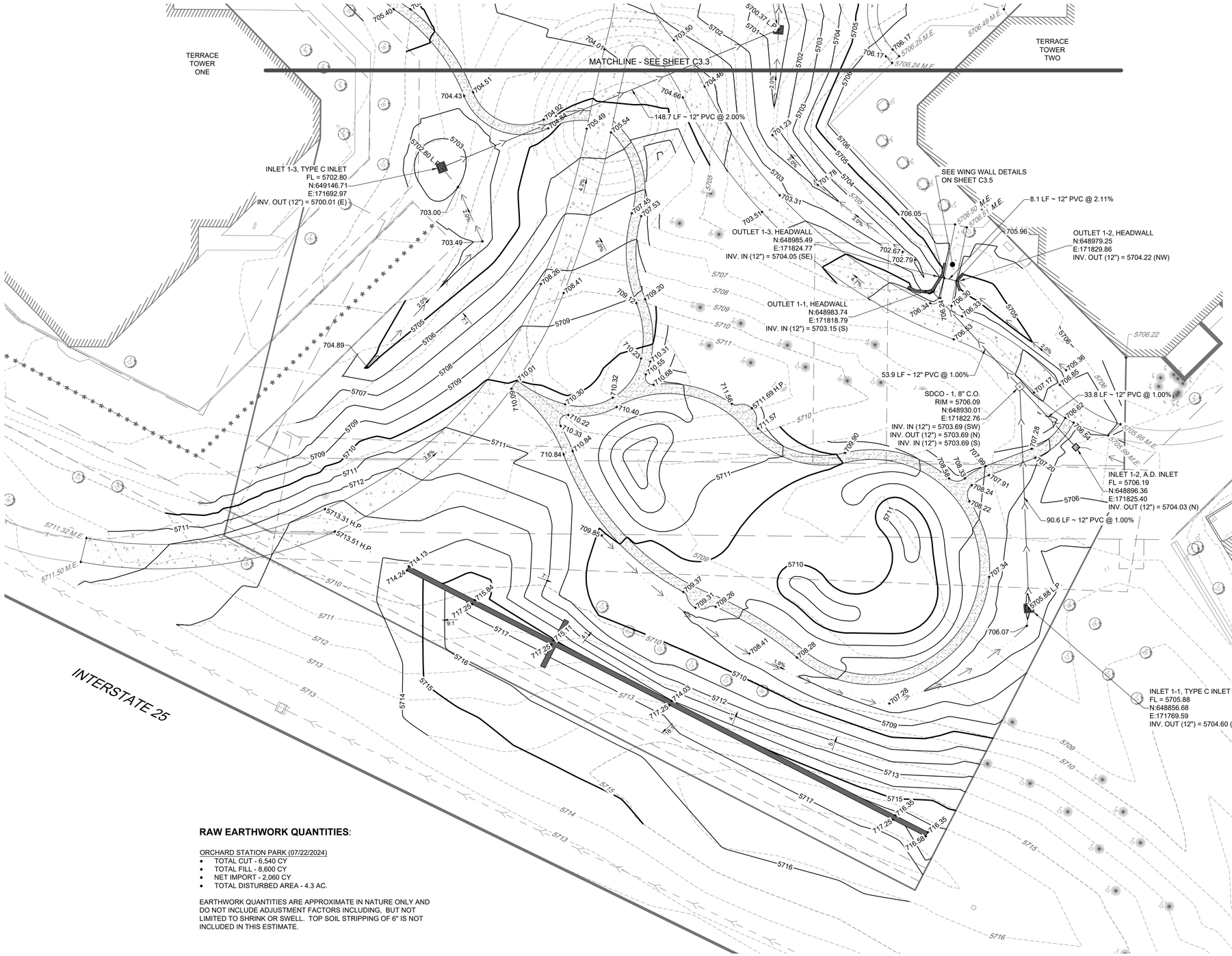

GRADING AND EROSION CONTROL LEGEND

- 5281 — EXISTING MINOR CONTOUR
- 5280 — EXISTING MAJOR CONTOUR
- 5281 — PROPOSED MINOR CONTOUR
- 5280 — PROPOSED MAJOR CONTOUR
- PROPOSED STORM SEWER LINE
- PROPOSED MANHOLE
- PROPOSED BOX BASE MANHOLE
- PROPOSED INLET
- PROPOSED FLARED END SECTION
- 0.00% — EXISTING SLOPE ARROW
- 0.00% — PROPOSED SLOPE ARROW
- x80.58 — EXISTING SPOT ELEVATION
- x80.55 — PROPOSED SPOT ELEVATION

NOTES:

1. ALL SLOPES ARE MAXIMUM OF 4H:1V UNLESS OTHERWISE NOTED.
2. GRADES SHOWN REPRESENT FLOWLINE AND/OR FINISHED GRADE.
3. ALL SIDEWALKS HAVE A MAXIMUM CROSS SLOPE OF 2%.
4. ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
5. REFER TO SITE PLAN FOR HORIZONTAL LAYOUT.

RAW EARTHWORK QUANTITIES:

ORCHARD STATION PARK (07/22/2024)

- TOTAL CUT - 6,540 CY
- TOTAL FILL - 8,600 CY
- NET IMPORT - 2,060 CY
- TOTAL DISTURBED AREA - 4.3 AC.

EARTHWORK QUANTITIES ARE APPROXIMATE IN NATURE ONLY AND DO NOT INCLUDE ADJUSTMENT FACTORS INCLUDING, BUT NOT LIMITED TO SHRINK OR SWELL. TOP SOIL STRIPPING OF 6" IS NOT INCLUDED IN THIS ESTIMATE.

0 10 20 40

SCALE: 1" = 20'

BENCHMARK

UDFCD BENCHMARK NUMBER CC-9 BEING A 3-1/4" ALUMINUM ALLOY CAP STAMPED "UDFCD CC - 9" LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF S JOILET STREET AND INVERNESS DRIVE EAST, 46.5' NORTH OF THE CENTER LINE OF INVERNESS DRIVE EAST AND 59' EAST OF THE CENTERLINE OF SOUTH JOILET STREET.

ELEVATION = 5732.89 FEET (NAVD88)

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NO.	DATE	NOTES

PROJECT NO.	23023	
NO.	DATE	NOTES
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2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/20	ISSUED TO GREENWOOD VILLAGE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
GRADING & DRAINAGE PLAN

SHEET
C3.4

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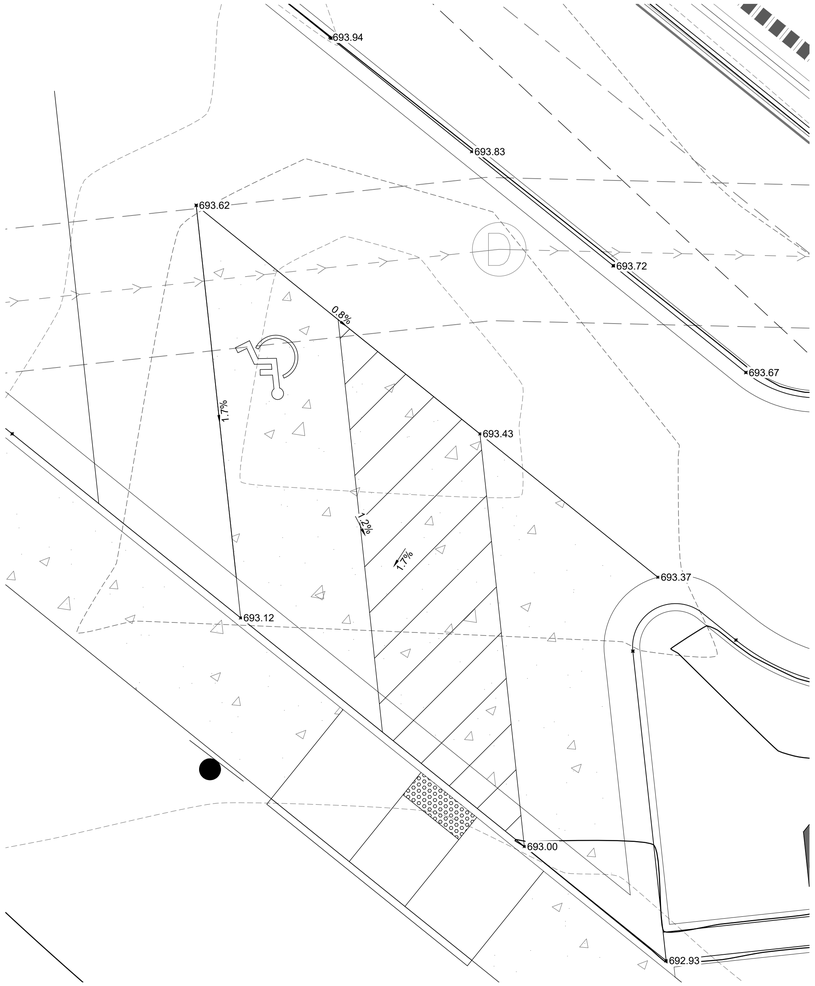
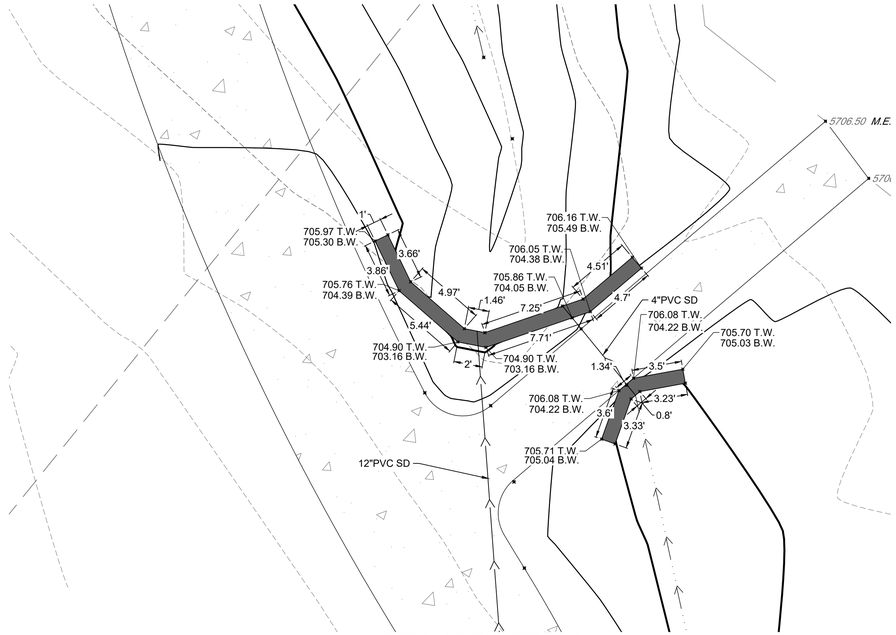


HANDICAP PARKING DETAIL
H: 1" = 5'



TERRACE TOWER TWO
HEADWALL DETAILS
H: 1" = 5'

CURB RAMP DETAIL
H: 1" = 5'

GRADING AND EROSION CONTROL LEGEND

5281	EXISTING MINOR CONTOUR
5280	EXISTING MAJOR CONTOUR
5281	PROPOSED MINOR CONTOUR
5280	PROPOSED MAJOR CONTOUR
	PROPOSED STORM SEWER LINE
	PROPOSED MANHOLE
	PROPOSED BOX BASE MANHOLE
	PROPOSED INLET
	PROPOSED FLARED END SECTION
0.00%	EXISTING SLOPE ARROW
0.00%	PROPOSED SLOPE ARROW
×80.55	EXISTING SPOT ELEVATION
×80.55	PROPOSED SPOT ELEVATION

NOTES:
1. ALL SLOPES ARE MAXIMUM OF 4H:1V UNLESS OTHERWISE NOTED.
2. GRADES SHOWN REPRESENT FLOWLINE AND/OR FINISHED GRADE.
3. ALL SIDEWALKS HAVE A MAXIMUM CROSS SLOPE OF 2%.
4. ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
5. REFER TO SITE PLAN FOR HORIZONTAL LAYOUT.

0 2.5 5 10
SCALE: 1" = 5'

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DATE	NO.	NOTES

PROJECT NO: 23023

DATE	NO.	NOTES
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2024/06/14	3	ISSUED TO GREENWOOD VILLAGE
2024/09/20	4	ISSUED TO GREENWOOD VILLAGE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
GRADING DETAILS

SHEET
C3.5

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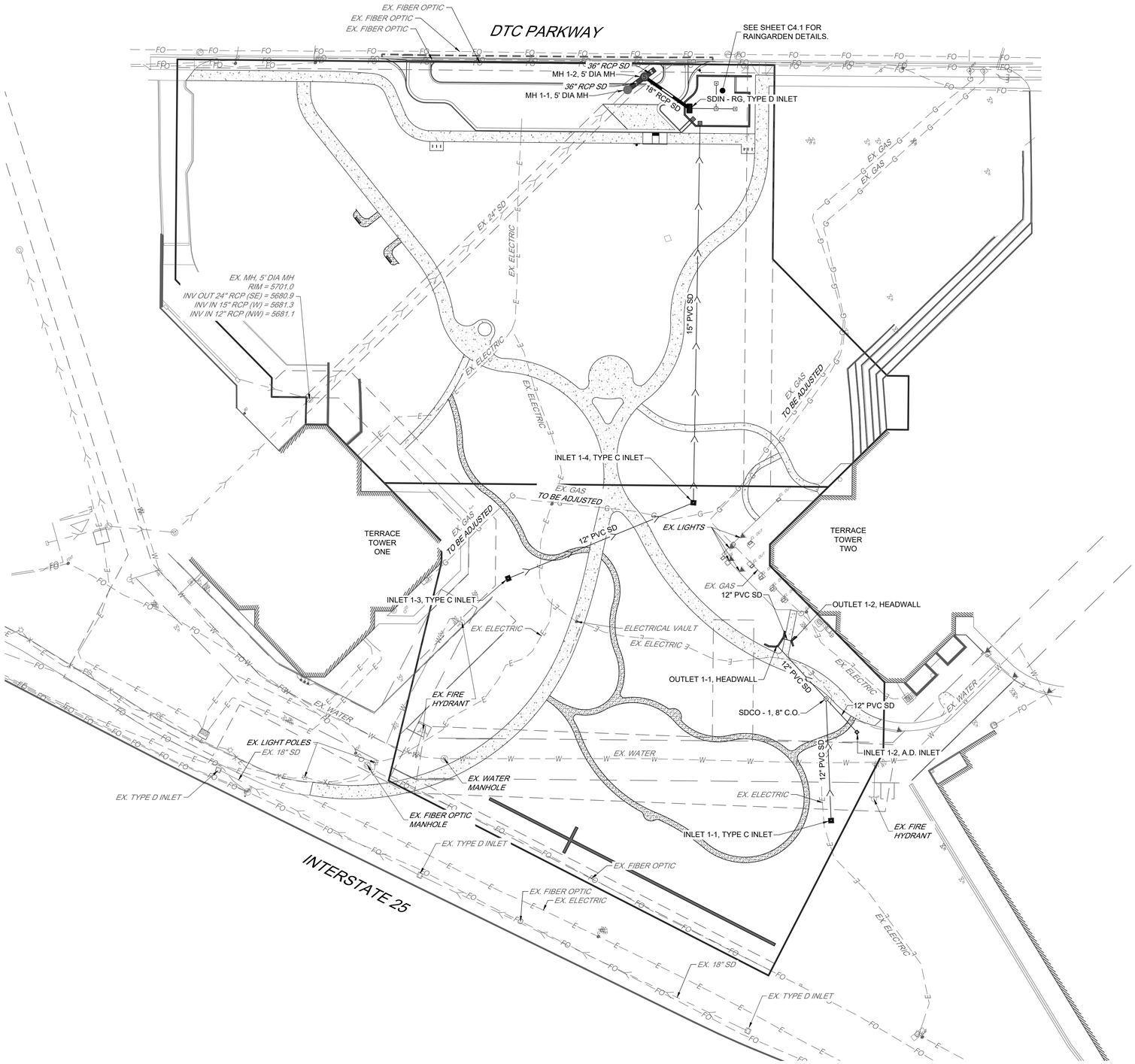

PROPOSED LEGEND

- LOT LINE
- EASEMENT
- ROAD CENTERLINE
- CURB AND GUTTER (CATCH)
- CURB AND GUTTER (SPILL)
- SIDEWALK
- STORM SEWER
- SANITARY SEWER
- WATER LINE
- IRRIGATION LINE
- MANHOLE
- INLET
- FLARED END SECTION
- WATER BEND
- WATER CROSS

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE LATEST EDITION OF THE GREENWOOD VILLAGE STANDARDS PRIOR TO CONSTRUCTION, AND KEEPING THE CONSTRUCTION PLANS AND THE STANDARDS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
2. CONTRACTOR TO VERIFY EXISTING UTILITY CONNECTIONS AND LOCATIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES FROM THESE PLANS.
3. DRY UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL FIELD-VERIFY LOCATION AND DEPTH, AND SHALL COORDINATE ANY NECESSARY ADJUSTMENTS WITH THE UTILITY PROVIDER.
4. CONTRACTOR TO COORDINATE ALL REMOVAL AND/OR RELOCATION OF EXISTING DRY UTILITIES WITH THE APPROPRIATE PUBLIC SERVICE PROVIDERS.
5. CONTRACTOR TO REMOVE AND DISPOSE OF ALL MATERIALS DEMOLISHED INCLUDING BUT NOT LIMITED TO ASPHALT, CONCRETE, PIPES, POLES AND ANY OTHER MATERIALS DUE TO THE INSTALLATION OF PROPOSED IMPROVEMENTS.
6. SEE SHEET C4.1 FOR RAINGARDEN DETAILS.
7. ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED. THE MAINTENANCE OF PRIVATE STORM SEWER IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
8. INLET NORTHING AND EASTINGS PROVIDED IS LOCATED AT THE CENTER OF THE INLET FLOWLINE.
9. ALL AREA DRAINS SHALL BE NYLOPLAST DRAIN BASINS OR APPROVED EQUIVALENT.
10. ALL AREA DRAINS SHALL BE 12" MINIMUM WITH A STANDARD GRATE.
11. ALL PRIVATE DRAIN SYSTEM PIPE TO BE PVC OR DUAL WALL HDPE.

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ISSUED TO GREENWOOD VILLAGE	3	2024/06/14
ISSUED TO GREENWOOD VILLAGE	4	2024/09/20

PROJECT NO. 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
UTILITY PLAN

SHEET
C4.0

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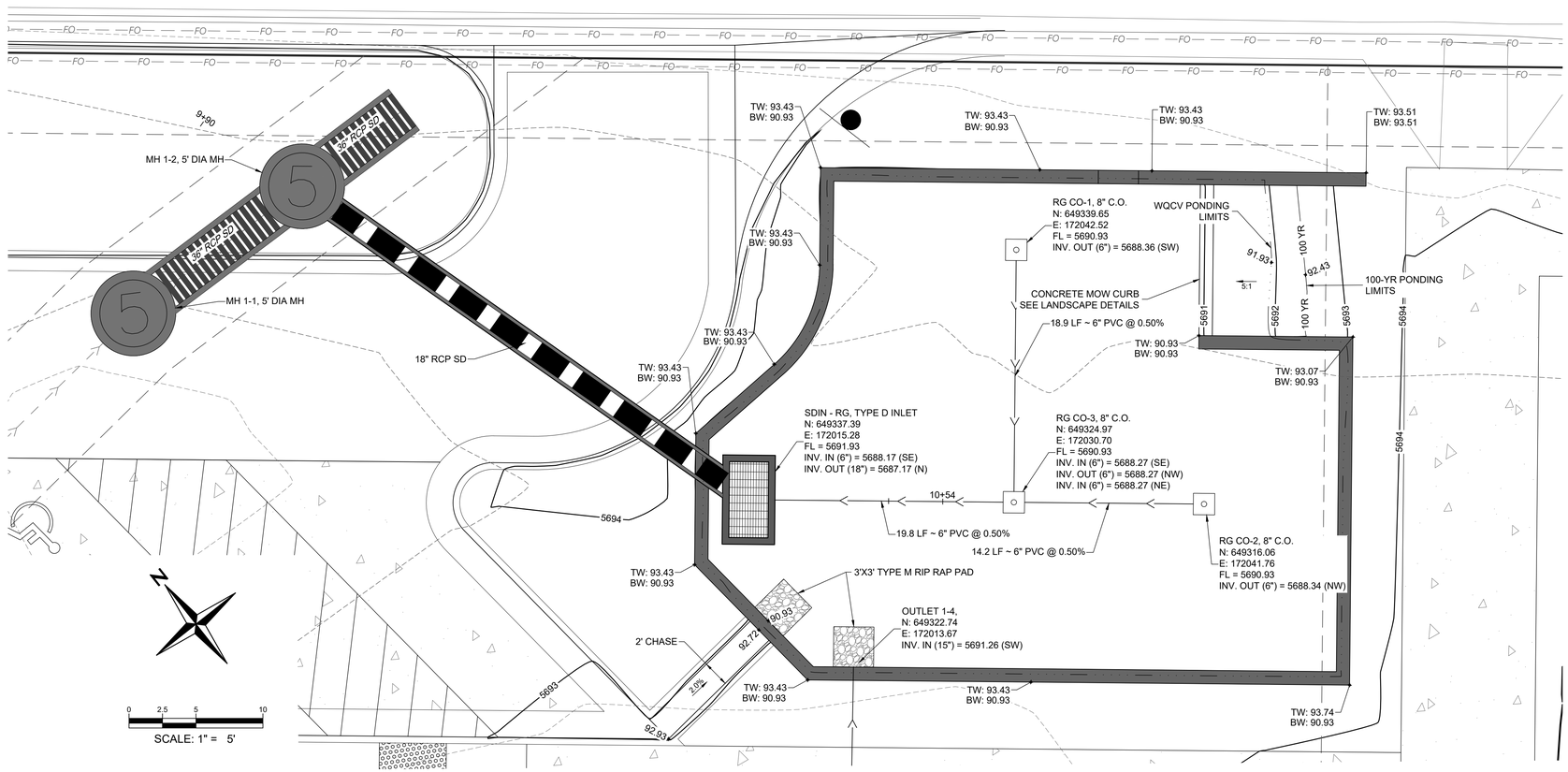


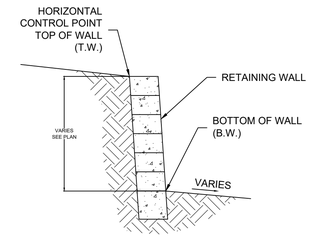
RAINGARDEN PLAN

H: 1" = 5'

RAINGARDEN INFORMATION	
FLAT AREA REQUIRED (SQ. FT.)	483
FLAT AREA PROVIDED (SQ. FT.)	1408
WQCV REQUIRED (CU. FT.)	1461
WQCV PROVIDED (CU. FT.)	1487

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE LATEST EDITION OF THE GREENWOOD VILLAGE STANDARDS PRIOR TO CONSTRUCTION, AND KEEPING THE CONSTRUCTION PLANS AND THE STANDARDS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
2. CONTRACTOR TO VERIFY EXISTING UTILITY CONNECTIONS AND LOCATIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES FROM THESE PLANS.
3. DRY UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL FIELD-VERIFY LOCATION AND DEPTH, AND SHALL COORDINATE ANY NECESSARY ADJUSTMENTS WITH THE UTILITY PROVIDER.
4. CONTRACTOR TO COORDINATE ALL REMOVAL AND/OR RELOCATION OF EXISTING DRY UTILITIES WITH THE APPROPRIATE PUBLIC SERVICE PROVIDERS.
5. CONTRACTOR TO REMOVE AND DISPOSE OF ALL MATERIALS DEMOLISHED INCLUDING BUT NOT LIMITED TO ASPHALT, CONCRETE, PIPES, POLES AND ANY OTHER MATERIALS DUE TO THE INSTALLATION OF PROPOSED IMPROVEMENTS.
6. REFER TO MILE HIGH FLOOD DISTRICT CHAPTER 4 - T-3 BIORETENTION SYSTEMS FOR GROWING MEDIA REQUIREMENTS AND ADDITIONAL RAINGARDEN DETAILS. SEE LANDSCAPE PLANS FOR SPECIFIED PLANT LIST/SEED MIX.
7. SLOPE SUBGRADE (2%-10%) TO UNDERDRAIN TO REDUCE SATURATED SOIL CONDITIONS.



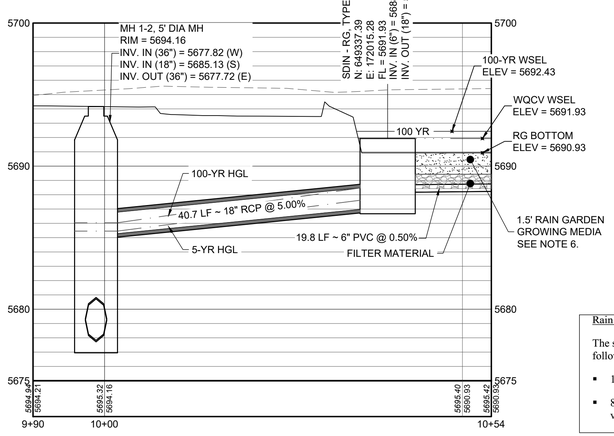
1 TYPICAL RETAINING WALL SECTION

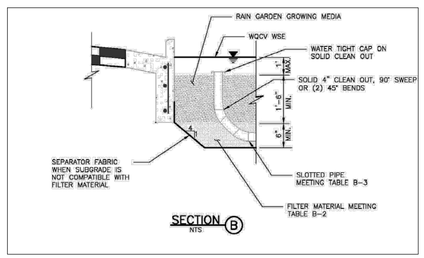
N.T.S.

NOTE:
CONTRACTOR TO PROVIDE STRUCTURAL DESIGN AND SHOP DRAWINGS FOR RETAINING WALL.

RG OUTLET PROFILE

H: 1" = 10'
V: 1" = 5





REFER TO URBAN DRAINAGE AND FLOOD CONTROL DISTRICT CRITERIA MANUAL VOLUME 3 FOR ADDITIONAL BIO-RETENTION DETAILS AND REQUIREMENTS

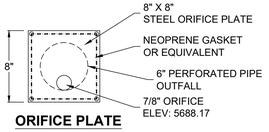
Rain Garden Growing Medium

The supplier should premix the rain garden compost mixture (above) with coarse sand, in the following proportions, prior to delivery to the site:

- 15% rain garden compost mixture described above (by volume)
- 85% coarse sand (either Class C Filter Material per Table B-2 or sand meeting ASTM C-33) (by volume)

Table B-2. Gradation Specifications for CDOT Class C Filter Material
(Source: CDOT Table 703-7)

Sieve Size	Mass Percent Passing Square Mesh Sieves
19.0 mm (3/4")	100
4.75 mm (No. 4)	60 – 100
300 µm (No. 50)	10 – 30
150 µm (No. 100)	0 – 10
75 µm (No. 200)	0 - 3



ORIFICE PLATE
N.T.S

Table B-3. Dimensions for Slotted Pipe

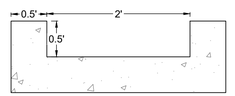
Pipe Diameter	Slot Length[1]	Maximum Slot Width	Slot Centers[1]	Open Area[1] (per foot)
4"	1-1/16"	0.032"	0.413"	1.90 in^2
6"	1-3/8"	0.032"	0.516"	1.98 in^2

[1] Some variation in these values is acceptable and is expected from various pipe manufacturers. Be aware that both increased slot length and decreased slot centers will be beneficial to hydraulics but detrimental to the structure of the pipe.

Table B-6. Native Seed Mix for Rain Gardens [2]

Common Name	Scientific Name	Variety	PLS[2] lbs per Acre	Ounces per Acre
Sand bluestem	Andropogon hallii	Garden	3.5	
Sideoats grama	Bouteloua curtipendula	Butte	3	
Prairie sandreed	Calamovilfa longifolia	Goshen	3	
Indian ricegrass	Oryzopsis hymenoides	Paloma	3	
Switchgrass	Panicum virgatum	Blackwell	4	
Western wheatgrass	Pascopyrum smithii	Ariba	3	
Little bluestem	Schizachyrium scoparium	Patura	3	
Alkali sacaton	Sporobolus airoides		3	
Sand dropseed	Sporobolus cryptandrus		3	
Pasture sage[1]	Artemisia frigida			2
Blue aster[1]	Aster laevis			4
Blanket flower[1]	Gaillardia aristata			8
Prairie coneflower[1]	Ratibida columnifera			4
Purple prairieclover[1]	Dalea (Petalostemum) purpurea			4
Sub-Totals:			27.5	22
Total lbs per acre:			**28.9**	

[1] Wildflower seed (optional) for a more diverse and natural look.
[2] PLS = Pure Live Seed.



1 2' CURB CHASE

1" = 1'

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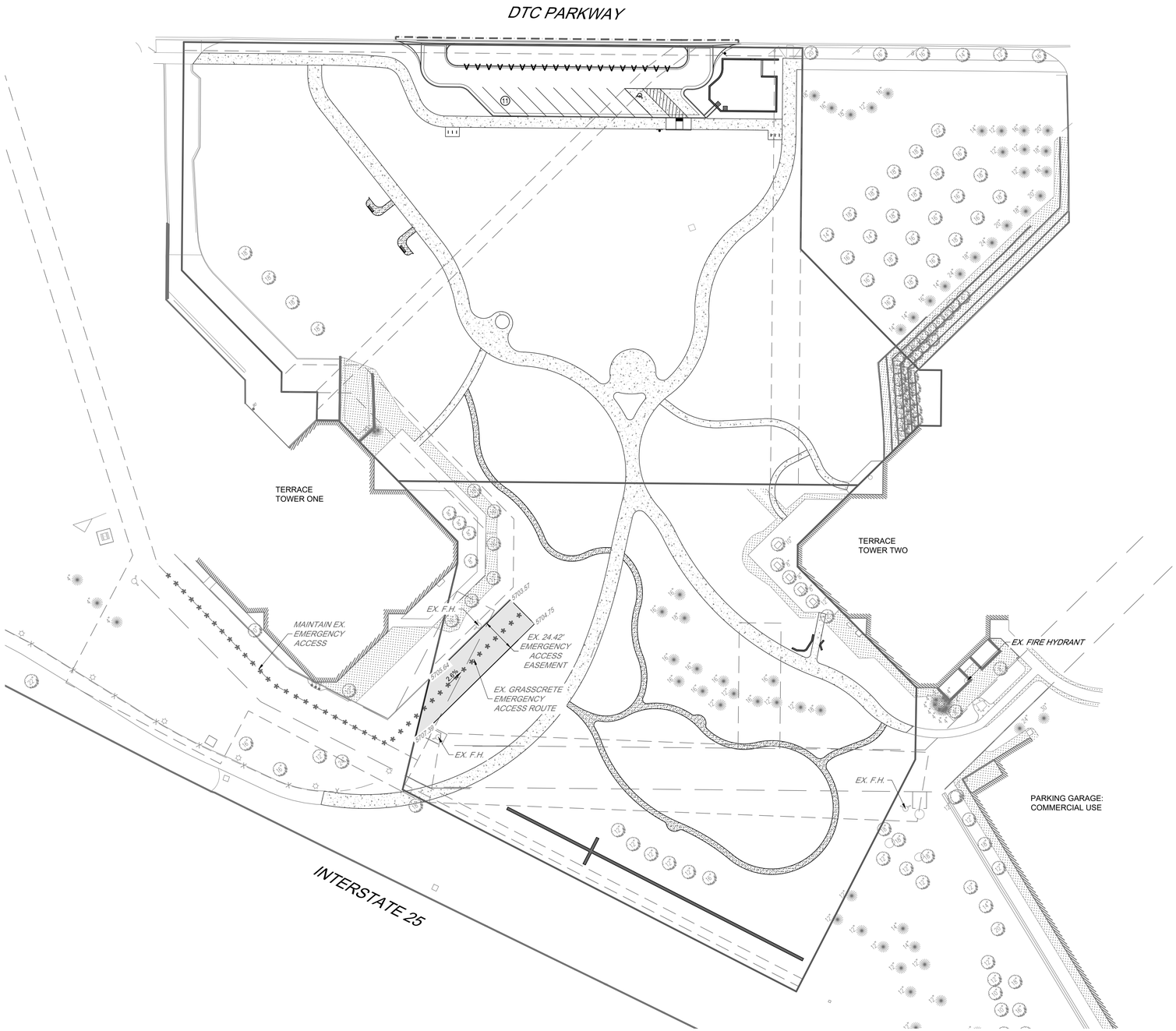
3	2024/06/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/20	ISSUED TO GREENWOOD VILLAGE

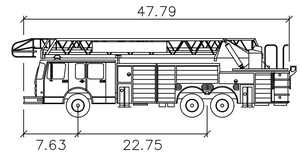
PROJECT NO 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
RAINGARDEN PLAN

SHEET
C4.1

I:\2023\23023 – Orchard Station Park\CADD\Sheet Sets\SDP\P-23023 – Raingrden Plan.dwg tab: C4.1 RAINGARDEN PLAN Sep 11, 2024 – 8:38am rogiesby





South Metro Fire

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

PROPOSED LEGEND

- LOT LINE
- EASEMENT
- ROAD CENTERLINE
- CURB AND GUTTER (CATCH)
- CURB AND GUTTER (SPILL)
- SIDEWALK

EXISTING LEGEND

- PROPERTY LINE
- R.O.W.
- LOT LINE
- EASEMENT
- SECTION LINE
- ROAD CENTERLINE
- EDGE OF PAVEMENT
- CURB AND GUTTER
- CONCRETE
- FENCE
- RETAINING WALL

N

0 25 50 100

SCALE: 1" = 50'

Redland
WHERE GREAT PLACES BEGIN
720.283.6783 REDLAND.COM
▪ Land Planning ▪ Civil Engineering ▪ Landscape Architecture ▪ Construction Management

DATE	NO.	NOTES
PROJECT NO: 23023		
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE
2024/09/20	4	ISSUED TO GREENWOOD VILLAGE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
EMERGENCY ACCESS PLAN

SHEET
C5.0

I:\2023\23023 – Orchard Station Park\CAD\Sheet Sets\SDP\P–23023 – Emergency Access Plan.dwg tobr C5.0 EMERGENCY ACCESS PLAN Sep 11, 2024 – 8:38am roglesby

SIGHT DISTANCE TRIANGLE NOTE: ALL SHRUBS, ORNAMENTAL GRASS AND PERENNIAL PLANTING IN THE SIGHT DISTANCE TRIANGLE ARE TO BE MAINTAINED AND NO TALLER THAN 36" AT ANY TIME. ALL TREES IN THE SIGHT DISTANCE TRIANGLE ARE TO BE MAINTAINED AND MUST BE LIMBED UP SO NO BRANCHES ARE LOWER THAN 84" AT ANY TIME.

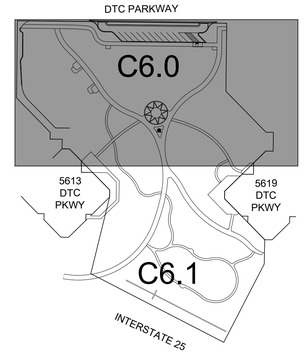
ALL LANDSCAPE AREAS WITH PLANTS, GROUNDCOVER, SOD, AND NATIVE SEED TO BE ON AUTOMATIC IRRIGATION SYSTEM. SHRUBS AND OTHER PLANTING TO BE ON DRIP IRRIGATION & SOD & NATIVE SEED TO BE ON SPRAYHEADS AND ROTORS.

MATCHLINE, SEE SHEET C6.1

LEGEND

- EDGER
- CONCRETE
- CRUSHER FINES
- SOD
- NATIVE SEED
- BIORETENTION SEED
- DECIDUOUS TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES
- GROUNDCOVER PLANTING
- EXISTING DECIDUOUS TREES
- EXISTING ORNAMENTAL TREES
- EXISTING EVERGREEN TREES

KEYMAP



NORTH

0 10 20 40

SCALE: 1" = 20'

SAGE DESIGN GROUP
LANDSCAPE ARCHITECTURE SITE PLANNING ENTITLEMENT
1500 South Pearl St. Suite 200 Denver, Colorado 80210
303.470.2855 (p) 303.470.2894 (f) www.sagedesigngroup.com

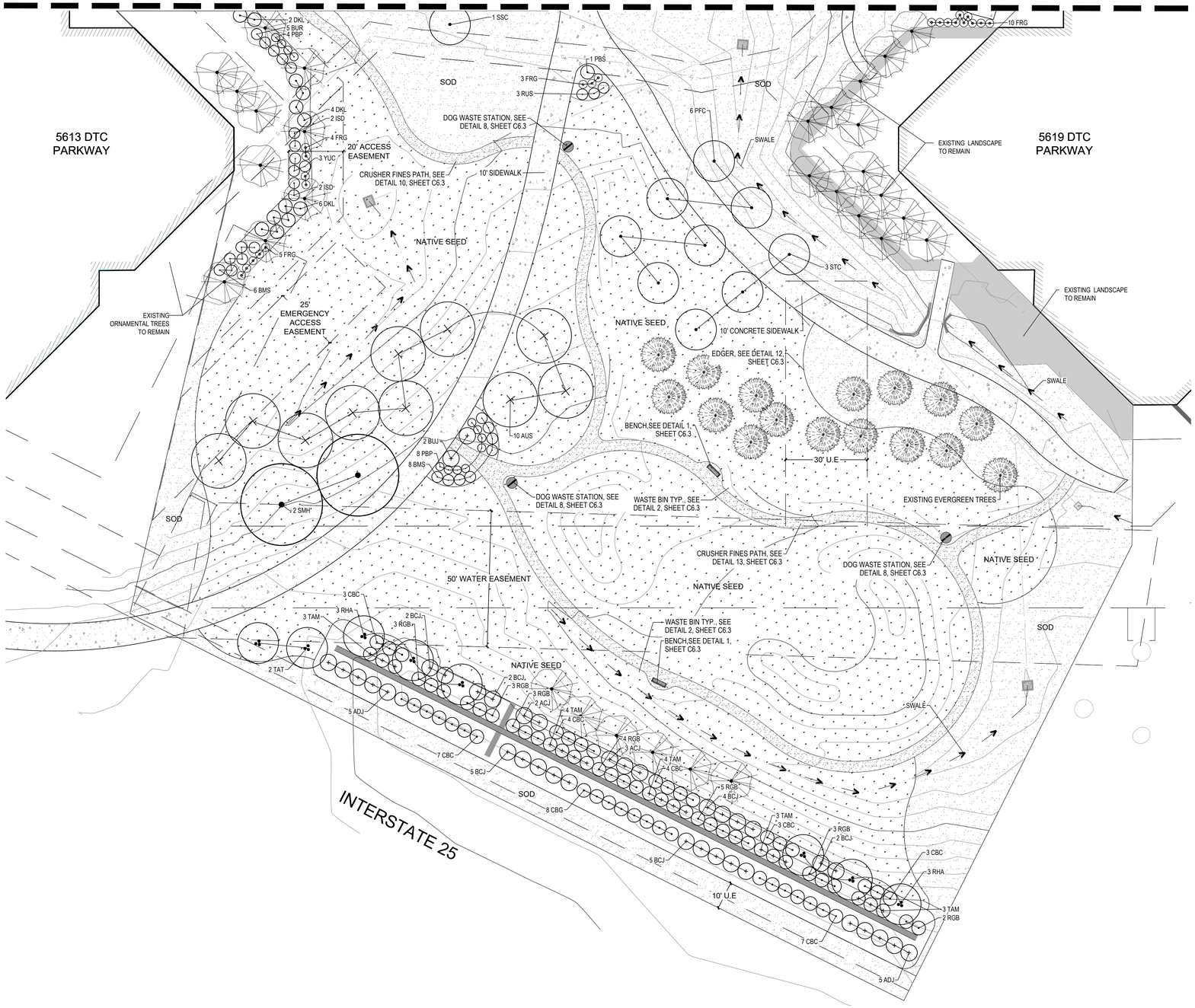
NO	DATE	NOTES
1	20240110	ISSUED TO GREENWOOD VILLAGE
2	20240424	ISSUED TO GREENWOOD VILLAGE
3	20240614	ISSUED TO GREENWOOD VILLAGE
4	20240920	ISSUED TO GREENWOOD VILLAGE

PROJECT NO. 23023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
LANDSCAPE PLAN

SHEET
C6.0

MATCHLINE, SEE SHEET C6.0



LEGEND

- EDGER
- CONCRETE
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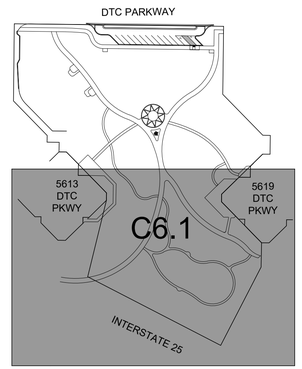

KEYMAP

ALL LANDSCAPE AREAS WITH PLANTS , GROUNDCOVER, SOD, AND NATIVE SEED TO BE ON AUTOMATIC IRRIGATION SYSTEM. SHRUBS AND OTHER PLANTING TO BE ON DRIP IRRIGATION & SOD & NATIVE SEED TO BE ON SPRAYHEADS AND ROTORS.

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SCALE: 1" = 20'

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ORCHARD STATION PARK
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LANDSCAPE PLAN

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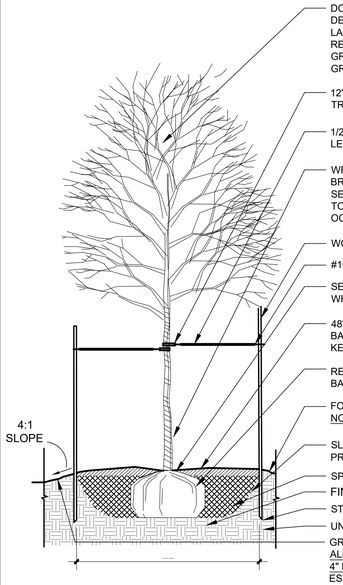
C6.1



DO NOT CUT SINGLE LEADER. PRUNE DAMAGED OR DEAD WOOD AND CO-DOMINANT LEADERS AT LANDSCAPE ARCHITECT'S DIRECTION ONLY. DO NOT REMOVE LOWER LIMBS AND SPROUTS FOR AT LEAST TWO GROWING SEASONS. DO NOT FERTILIZE FOR AT LEAST ONE GROWING SEASON.

12" NYLON TREE STRAP ON GUY WIRE AND AROUND TREE TRUNK.

1/2 " DIA. WHITE PVC PIPE SECTION ON ENTIRE LENGTH OF EACH WIRE.

WRAP ENTIRE SURFACE OF TRUNK TO SECOND BRANCH WITH SPECIFIED TREE WRAP MATERIAL SECURED WITH ELECTRICAL TAPE, NOT TWINE AT TOP AND BOTTOM & AT 2-FT. INTERVALS. WRAP OCT 15 AND REMOVE BY MARCH 31.

WOOD POSTS OR APPROVED EQUAL

#10 GUY WIRE, DOUBLE STRAND TWISTED.

SET ROOT COLLAR 4" HIGHER THAN GRADE AT WHICH TREE GREW.

48" CIRCLE OF SHREDDED BARK MULCH (4"-6" DEEP) AROUND BASE OF TREES IN GRASS AREAS.
KEEP MULCH BACK FROM TREE TRUNK.

REMOVE ALL TWINE, BURLAP AND TOP $\frac{2}{3}$ OF WIRE BASKET AFTER THE TREE IS SET IN PLACE.

FORM SAUCER AROUND EDGE OF TREE PIT.
NO WATERING SAUCERS IN IRRIGATED TURF AREAS.

SLOPE SIDES OF PIT AS SHOWN. ROUGHEN SIDES PRIOR TO BACKFILLING.

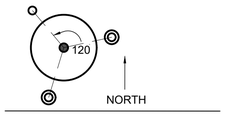
SPECIFIED BACKFILL MIXTURE

FINISH GRADE

STAKE TO EXTEND MIN. 24" INTO UNDISTURBED SOIL

UNDISTURBED SUBGRADE

GRASS MOUND, 4:1 SLOPE.
ALL TREES SHALL BE SET AT FINAL GRADE
4" HIGHER THEN SURROUNDING GRADE.
ESTABLISH ROOT COLLAR AS GROWN AT NURSERY.

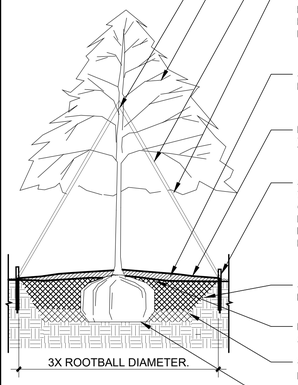


BRACE DETAIL

NOTES:
1. ANY BROKEN OR CRUMBLING ROOTBALL WILL BE REJECTED. REMOVING THE WIRE WILL NOT BE AN EXCUSE FOR DAMAGED ROOTBALLS. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING.
2. TREES SHOULD BE PLANTED THE SAME DAY AS DELIVERED TO THE SITE.
3. REPLACE ALL PIT EXCAVATION WITH THE FOLLOWING BACKFILL;
4. CLASS I, SUBMIT TESTING CERTIFICATE.
5. TOPSOIL TO BE CLEAN, NEUTRAL PH AND HAVE NO FOREIGN MATERIALS OR CONTAMINATES.
6. 50% PLANTER MIX / 50% COMPOST OR PREPARED PLANTER MIX OR 75% IMPORTED TOPSOIL / 25% PREPARED PLANTER MIX. SUBMIT PROPOSED BACKFILL TO OWNERS REPRESENTATIVE FOR APPROVAL BEFORE PLANTING.
7. DO NOT INCLUDE FERTILIZER FOR NEWLY PLANTED TREES UNLESS DIRECTED BY OWNERS REPRESENTATIVE.
8. COORDINATE IRRIGATION AND TREE PLANTINGS IN SOD AREAS. IRRIGATE IN MORE APPLICATIONS IN LESSER AMOUNTS. PREVENT OVER WATERING. CONTACT OWNERS REPRESENTATIVE IF NEEDED.
9. NO WATERING SAUCERS IN IRRIGATED TURF AREAS
10. SUPPLEMENTAL HAND WATERING WILL BE REQUIRED DURING ESTABLISHMENT PERIOD AND PERSONNEL MUST BE ONSITE TO INSURE NEWLY PLANTED TREES GET ENOUGH WATER WERE NEEDED. COORDINATE WITH OWNERS REPRESENTATIVE TO MEET ALL WATERING ISSUES AND ESTABLISH BEST MAINTENANCE PRACTICES. CONSTANT VIGILANCE WILL BE NEEDED FOR SUCCESSFUL TREE PLANTING.

1 DECIDUOUS TREE DETAIL

SCALE: N.T.S.



SPECIFIED TRUNK COLLAR ATTACHMENT, HEAVY DUTY. DO NOT TWIST.

DO NOT PRUNE LEADER. PRUNE ALL BROKEN AND DEAD BRANCHES AFTER PLANTING AND MULCHING. PRUNE TO TYPICAL FORM OF SPECIES. DO NOT PRUNE LOWER BRANCHES.

PLACE $\frac{1}{2}$" DIA. WHITE PVC PIPE, 36" LENGTH ON ALL GUY WIRES.

#10 GUY WIRE PROVIDE 3 AT EQUIDISTANT AROUND TREE. KEEP CLEAR OF BRANCHES TO PREVENT RUB DAMAGE. ON PLANTS 6' HT. AND BELOW STAKE WITH 2 EACH, STAKE AS PER DECIDUOUS TREES.

SPECIFIED MULCH, 0" DEPTH AT TRUNK, 4" THK. AT EDGE OF RING.

FORM SAUCER AROUND EDGE OF TREE PIT. NO WATERING SAUCERS IN IRRIGATED TURF AREAS.

SPECIFIED STAKES INSIDE 4" WATERING SAUCER DRIVEN FLUSH WITH GRADE, 24", 3 PER TREE. REMOVE SAUCER UPON SEEDING OR SODDING IN IRRIGATED AREAS. NO WATERING SAUCERS IN IRRIGATED TURF AREAS. WATERING SAUCER LOCATED AT DRIP LINE OF
EVERGREEN TREES.

SLOPE SIDES OF PIT AS SHOWN. ROUGHEN SIDES PRIOR TO BACKFILLING.

ELEVATE THE ROOT BALL 4" ABOVE FINAL GRADE IN IRRIGATED AREAS.

SPECIFIED BACKFILL MIXTURE. AMENDMENTS AS SPECIFIED. INITIAL STABILIZING BACKFILL, $\frac{1}{3}$ DEPTH, COMPACTED.

SET ROOT BALL ON EXISTING UNDISTURBED SOIL. DIG PLANT PIT 24" WIDER THAN ROOTBALL. REMOVE ALL TWINE, BURLAP AND TOP $\frac{2}{3}$ OF WIRE AFTER THE TREE IS SET IN PLACE.

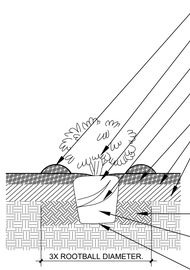
BRACE DETAIL

NOTES:
1. ANY BROKEN OR CRUMBLING ROOTBALL WILL BE REJECTED. REMOVING THE WIRE WILL NOT BE AN EXCUSE FOR DAMAGED ROOTBALLS. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING.
2. TREES SHOULD BE PLANTED THE SAME DAY AS DELIVERED TO THE SITE. KEEP PLANTS MOST AND SHADED UNTIL PLANTING.
3. REPLACE ALL PIT EXCAVATION WITH THE FOLLOWING BACKFILL;
- CLASS I, SUBMIT TESTING CERTIFICATE.
- TOPSOIL TO BE CLEAN, NEUTRAL PH AND HAVE NO FOREIGN MATERIALS OR CONTAMINATES.
- 50% PLANTER MIX / 50% COMPOST OR PREPARED PLANTER MIX OR 75% IMPORTED TOPSOIL / 25% PREPARED PLANTER MIX. SUBMIT PROPOSED BACKFILL TO OWNERS REPRESENTATIVE FOR APPROVAL BEFORE PLANTING.
- DO NOT INCLUDE FERTILIZER FOR NEWLY PLANTED TREES UNLESS DIRECTED BY OWNERS REPRESENTATIVE.

4. COORDINATE IRRIGATION AND TREE PLANTINGS IN SOD AREAS. IRRIGATE IN MORE APPLICATIONS IN LESSER AMOUNTS. PREVENT OVER WATERING. CONTACT OWNERS REPRESENTATIVE IF NEEDED.
5. NO WATERING SAUCERS IN IRRIGATED TURF AREAS
6. SUPPLEMENTAL HAND WATERING WILL BE REQUIRED DURING ESTABLISHMENT PERIOD AND PERSONNEL MUST BE ONSITE TO INSURE NEWLY PLANTED TREES GET ENOUGH WATER WERE NEEDED. COORDINATE WITH OWNERS REPRESENTATIVE TO MEET ALL WATERING ISSUES AND ESTABLISH BEST MAINTENANCE PRACTICES. CONSTANT VIGILANCE WILL BE NEEDED FOR SUCCESSFUL TREE PLANTING.

2 EVERGREEN TREE DETAIL

SCALE: N.T.S.



INSTALL WOOD MULCH AROUND THE BASE OF SHRUBS IN OPEN SPACE AREAS.

PRUNE ALL DAMAGED OR DEAD WOOD AFTER PLANTING AND MULCHING.

PLACE TOP OF ROOT BALL 2" ABOVE FINISH GRADE

SCORE CONTAINER ROOTBALLS WITH ENCIRCLING ROOTS

4" DEPTH SPECIFIED MULCH.

FINISH GRADE

AMEND SOIL TO A DEPTH OF 6" TO 8" BELOW FINISH GRADE IN ALL SHRUB AREAS NOTE: SEE SPECS., NOTES AND PLANT LIST FOR FURTHER INFORMATION

EXISTING SOIL BACKFILL (DO NOT USE AMENDED SOIL)
REMOVE CONTAINER, PLACE ON UNDISTURBED SOIL.

UNDISTURBED PIT BOTTOM FOR ROOT BALL BASE

NOTE:
1. DO NOT PLANT ANY PLANT WITH ROOTBALL NOT IN CONFORMANCE WITH COLORADO NURSERY ACT REQUIREMENTS
2. HOLD MULCH TOP GRADE 1" BELOW EDGE OF WALK, EDGING OR CURB.
3. DO NOT PUT ANY ORGANIC AMENDMENT BELOW 12 INCHES IN THE SOIL PROFILE.
4. INSTALL WOOD MULCH AROUND THE BASE OF ALL SHRUBS IN OPEN SPACE AREAS TO PROVIDE SEPARATION BETWEEN NATIVE GRASS AND THE SHRUB.

3 SHRUB PLANTING DETAIL

SCALE: N.T.S.

PLANTING NOTES:

Minimum Plant size Requirements and Soil Preparation:

1. ALL PLANT MATERIALS SHALL MEET OR EXCEED SIZE IN SCHEDULES. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REFUSE PLANT MATERIALS WHICH DO NOT MEET THE QUALITY REQUIRED FOR THE PROJECT. ALL DECIDUOUS TREES SHALL HAVE FULL, WELL SHAPED HEADS, ALL EVERGREEN TREES SHALL BE UNSHEARED AND FULL TO THE GROUND. PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1.
2. ALL TREES TO BE STAKED OR GUYED PER DETAILS ON SHEET L-301.
3. ALL TREE LOCATIONS ARE TO BE STAKED FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION..
4. SOD AND SHRUB BEDS AREAS SHALL BE AMENDED WITH: CLASS II COMPOST AT A RATE OF 5 CUBIC YARDS PER 1000 S.F.; AMMONIUM SULFATE (20-0-0) AT A RATE OF 5 LBS PER 1000 S.F.; AND SOIL SULFUR (90% -100% ELEMENTAL) AT A RATE OF 10 LBS PER 1000 S.F. AMENDMENTS SHALL BE THOROUGHLY BLENDED TO HOMOGENOUS CONDITION TO A DEPTH OF NO LESS THAN 6" AND NO MORE THAN 12" BELOW FINISH GRADE.
5. ALL NATIVE SEED AREAS SHALL BE AMENDED WITH: BIOSOL AT A RATE OF 1000 LBS/ACRE AND BE THOROUGHLY BLENDED TO A HOMOGENOUS CONDITION TO A DEPTH OF NO LESS THAN 6" AND NO MORE THAN 12" BELOW FINISH GRADE.
6. ALL BACKFILL MATERIAL PER DETAILS ON SHEET L-202.
7. PRIOR TO PLANTING ANY TREES ON SITE, THE LANDSCAPE CONTRACTOR SHALL PERFORM A SOIL PERCOLATION TEST TO DETERMINE IF THERE ARE ANY DRAINAGE PROBLEMS. THE LANDSCAPE CONTRACTOR IS REQUIRED TO DIG 3 HOLES AT DIFFERENT LOCATIONS AS DIRECTED BY OWNERS REPRESENTATIVE. THE HOLE SHALL BE EQUAL IN SIZE TO THE LARGEST TREE PIT REQUIRED FOR EACH PARTICULAR LOCATION. ADDITIONAL LOCATIONS WILL BE REQUIRED IF VARIOUS SOIL TYPES ARE FOUND AROUND THE SITE AND/OR IF THE OWNER'S REPRESENTATIVE FINDS IT NECESSARY. THE LANDSCAPE CONTRACTOR SHALL VERIFY TEST PIT LOCATIONS WITH OWNER'S REPRESENTATIVE AND FILL EACH HOLE WITH WATER AND MONITOR HOW MUCH WATER IS REMAINING IN THE HOLE AFTER 24 HOURS. MAKE A WRITTEN REPORT TO THE OWNER'S REPRESENTATIVE. IF IT IS DETERMINED THAT SOIL DRAINAGE IS A PROBLEM, A RESOLUTION WILL BE WORKED OUT BY THE OWNER AND IF NECESSARY A CHANGE ORDER WILL BE INITIATED.
8. ALL TREES, SHRUBS, PERENNIALS, SOD AREAS SHALL BE GUARANTEED TO REMAIN ALIVE AND HEALTHY FOR A 1-YEAR PERIOD AFTER INITIAL ACCEPTANCE. ALL REPLACEMENT COSTS SHALL BE BORN BY THE CONTRACTOR.
9. TREE WRAPPING MATERIAL SHALL BE FOUR INCHES WIDE, BITUMINOUS IMPREGNATED TAPE, CORRUGATED OR CREPE PAPER, BROWN IN COLOR, SPECIFICALLY MANUFACTURED FOR TREE WRAPPING. TREES SHALL BE WRAPPED BETWEEN OCTOBER 15 AND NOVEMBER 1 OF THE YEAR THEY ARE PLANTED. NO TREE WRAPPING SHALL BE PERMITTED UNTIL A LICENSED LANDSCAPE CONTRACTOR OR CERTIFIED ARBORIST HAS INSPECTED THE TREE. IT IS THE DUTY OF THE CONTRACTOR TO WRAP DECIDUOUS TREES DURING THE ONE-YEAR WARRANTY PERIOD.
10. ALL TREES TO BE PLANTED A MINIMUM OF (3) THREE FEET FROM ALL EDGER, (5) FIVE FEET FROM ALL CONCRETE WALKS AND (8) EIGHT FEET AWAY FROM BUILDINGS.
11. DO NOT PLANT ANY PLANT MATERIAL IN THE BOTTOM OF ANY DRAINAGE SWALE. RELOCATE AS NEEDED. CONTACT OWNERS REPRESENTATIVE IF MORE INFORMATION IS NEEDED BEFORE PLANTING.
12. CONTRACTOR TO REMOVE ALL TREE STAKING AND GUYING AFTER ONE YEAR.

Edging:

1. FURNISH AND INSTALL GREEN DURA EDGE (WITH ROLLED TOP) MODEL - EDT 144010 (14 GA X 4" X 10') WITH RUST FREE STAKES BETWEEN ALL PLANTING BEDS AND TURF AREAS AS SHOWN ON PLANS. INSTALL QUANTITY AND SPACING OF STAKES PER MANUFACTURER'S SPECIFICATIONS. THE TOP OF ALL EDGING MATERIAL SHALL BE 1/2 INCH ABOVE THE FINISHED GRADE OF ADJACENT LAWN OR MULCH AREAS.
2. CONTRACTOR SHALL SUBMIT SAMPLES OF EDGER AND STAKES TO OWNER FOR APPROVAL BEFORE ORDERING OR INSTALLATION.

Weed Barrier and Shrub Bed Mulch:

1. WHERE SHOWN ON PLANS, SHRUB BEDS MULCHED WITH - CASCADE CEDAR ("GORILLA HAIR") TO BE A MINIMUM DEPTH OF 4 INCHES WITH NO LANDSCAPE FABRIC. ROCK MULCH SHALL BE 1.5"-2" DIAMETER TAN LOCAL WASHED RIVER ROCK TO BE A MINIMUM DEPTH OF 3". AND ALL COBBLE AREAS TO BE 5"-12" TAN HORIZON COBBLE. BOTH ROCK MULCH AND COBBLE TO BE PLACED OVER MIRAFI LANDSCAPE FABRIC. SEE PLANT LIST, LANDSCAPE PLANS FOR MORE INFORMATION. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER FABRIC AND MULCH HAVE BEEN INSTALLED.
2. CONTRACTOR SHALL SUBMIT SAMPLES OF ALL MULCH TYPES & FABRIC TO OWNER FOR APPROVAL BEFORE ORDERING OR INSTALLATION.

Irrigation System:

1. COORDINATE IRRIGATION INSTALLATION WITH PROPOSED TREE LOCATIONS TO ENSURE PROPER FINAL PLACEMENT OF TREES
2. CONTRACTOR TO LOCATE AND INSTALL IRRIGATION MATERIALS AWAY FROM ALL RETAINING WALLS AS TO NOT COMPROMISE THE WALLS STRUCTURAL INTEGRITY.
3. LANDSCAPE CONTRACTOR TO INSTALL IRRIGATION SYSTEM PER PLANS.
4. NO SPRAY IRRIGATION SHALL BE INSTALLED WITHIN 5 FEET OF BUILDING FOUNDATIONS.

NATIVE SEED NOTES:

Preparation:

1. GRADES: VERIFY THAT FINISH GRADES ARE CONSISTENT WITH THE SLOPES AND GRADES INDICATED ON THE DRAWINGS.
2. SCHEDULE: COORDINATE SOD AND SEEDING SCHEDULE WITH INSTALLATION OF IRRIGATION SYSTEM TO ENSURE THAT NEITHER OPERATION WILL DAMAGE THE OTHER. INSURE SYSTEM IS OPERATING TO PROVIDE ADEQUATE WATER.
3. SOIL: ALL NATIVE GRASS SHOULD HAVE A MINIMUM OF 6 INCHES OF TOPSOIL, PH RANGE OF 5.5 TO 7, A MINIMUM OF 3-5 PERCENT ORGANIC MATERIAL CONTENT. ACCEPTABLE TOPSOIL SHALL CONSIST OF LOOSE FRIABLE LOAM, FREE OF HEAVY CLAY, REFUSE, STUMPS AND LARGE ROOTS, ROCKS OVER 2 INCHES (50 MM) IN DIAMETER, BRUSH, WEEDS AND WEED SEEDS, OR OTHER MATERIAL WHICH WOULD BE DETRIMENTAL TO THE PROPER DEVELOPMENT OF VEGETATIVE GROWTH.
   a. TOPSOIL SOURCE: REUSE SURFACE SOIL STOCKPILED ON-SITE. VERIFY SUITABILITY OF STOCKPILED SURFACE SOIL TO PRODUCE TOPSOIL. CLEAN SURFACE SOIL OF ROOTS, PLANTS, SOD, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH.
4. ORGANIC AMENDMENT: COMPOST IS A WIDELY USED BULK ORGANIC SOIL AMENDMENT AND A RECYCLED PRODUCT. BECAUSE IT IS APPLIED AT MUCH GREATER RATES THAN FERTILIZER, COMPOST HAS A SIGNIFICANT CUMULATIVE EFFECT ON NUTRIENT AVAILABILITY AND MAY REDUCE OR ELIMINATE INITIAL FERTILIZATION. CONSIDER EACH PLANT'S PH AND SOLUBLE SALT REQUIREMENTS AND HOW THEY RELATE TO THE COMPOST BEING USED AND THE RESULTING SOIL-COMPOST MIX.
   a. COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, PH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4 INCH SIEVE; SOLUBLE SALT CONTENT OF 5-10 DECISIEMENS/M; NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS AND FREE OF SUBSTANCES TOXIC TO PLANTINGS; AND AS FOLLOWS:

-ORGANIC MATTER CONTENT: 50 TO 60 PERCENT OF DRY WEIGHT.

-MANURE: WELL-ROTTED, UNLEACHED, STABLE OR CATTLE MANURE CONTAINING NOT MORE THAN 25 PERCENT BY VOLUME OF STRAW, SAWDUST, OR OTHER BEDDING MATERIALS; FREE OF TOXIC SUBSTANCES, STONES, STICKS, SOIL, WEED SEED, AND MATERIAL HARMFUL TO PLANT GROWTH.

5. WEED CONTROL: IF WEEDS ARE PRESENT IN THE AREA TO BE PLANTED, PERFORM HERBICIDE TREATMENT OVER THE ENTIRE AREA TO BE PLANTED. ALLOW SUFFICIENT TIME TO SUCCESSFULLY COMPLETE THE ENTIRE HERBICIDE TREATMENT PROCESS BEFORE PROCEEDING WITH PLANTING. REPEAT PROCEDURE AS NEEDED AS WEED GROWTH BECOMES EVIDENT THROUGHOUT THE DURATION OF LANDSCAPE CONSTRUCTION. SUBMIT HERBICIDE TREATMENT PLAN TO OWNER FOR APPROVAL.
6. FERTILIZERS - DO NOT FERTILIZE GRASSES.

Installation:

1. CONTRACTOR TO SUBMIT INSTALLATION METHOD TO OWNER FOR APPROVAL.
2. SEE PLANT SCHEDULE FOR NATIVE SEED VARIETIES.
3. SEEDING NATIVE GRASS: INSTALL SEED FOR METHOD AGREED UPON WITH OWNER.
   a. DO NOT USE WET SEED OR SEED THAT IS MOLDY OR OTHERWISE DAMAGED.
   b. INSTALL SEED ONLY WHEN SOIL MOISTURE IS APPROPRIATE.
   c. RESTORE GRADE IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.
   d. SOWING RATES VARY WITH GRASS SPECIES AND MIXTURES, SOW SEED AT RATES SPECIFIED PER MANUFACTURER RECOMMENDATIONS.
   e. PROTECT SEEDED AREAS WITH SLOPES EXCEEDING 4:1 WITH EROSION-CONTROL BLANKETS INSTALLED AND STAPLED ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. COORDINATE EROSION-CONTROL MATERIALS WITH SLOPE RATIOS.
   f. PROTECT SEEDED AREAS WITH SLOPES LESS THAN 6:1 BY SPREADING STRAW MULCH. SPREAD UNIFORMLY AT A MINIMUM RATE OF 2 TONS/ACRE (42 KG/92.9 SQ. M) TO FORM A CONTINUOUS BLANKET 1-1/2 INCHES (38 MM) IN LOOSE THICKNESS OVER SEEDED AREAS. SPREAD BY HAND, BLOWER, OR OTHER SUITABLE EQUIPMENT.
   g. PROTECT SEEDED AREAS FROM HOT, DRY WEATHER OR DRYING WINDS BY APPLYING COMPOST MULCH WITHIN 24 HOURS AFTER COMPLETING SEEDING OPERATIONS. SOAK AREAS, SCATTER MULCH UNIFORMLY TO A THICKNESS OF 3/16 INCH (4.8 MM), AND ROLL SURFACE SMOOTH.

Warranty:

4. GROWING SEASONS:
   a. WHEN REMEDIAL SEEDING IS REQUIRED, THE NATIVE PLANT SEEDING CONTRACTOR SHALL PERFORM ADDITIONAL REMEDIAL SEEDING IN THE SAME AREA FOR A MINIMUM OF TWO FULL GROWING SEASONS.
   b. IF AFTER TWO FULL GROWING SEASONS THE REMEDIAL SEEDING PERFORMANCE IS UNACCEPTABLE TO THE OWNER, ADDITIONAL REMEDIAL ACTION IS REQUIRED.
   c. THE REMEDIAL ACTIONS OUTLINED ABOVE WILL REMAIN IN EFFECT UNTIL ALL RESTORATION SEEDING ZONES MEET THE THIRD GROWING SEASON CRITERIA.
2. IF SEEDED AREAS GREATER THAN 10 SQUARE FEET FAIL TO MEET THE TERMS OF THE GUARANTEE, THE NATIVE PLANT SEEDING CONTRACTOR WILL DEVELOP AND SUBMIT TO THE OWNER A REMEDIAL ACTION PLAN THAT TAKES INTO CONSIDERATION THE SITE GOALS AND SPECIFIC DEFICIENCIES CAUSING THE REMEDIAL ACTION.

MAINTENANCE SCHEDULE

1. START UP AND CHECK IRRIGATION SYSTEM IN MARCH. MONITOR THROUGHOUT THE SUMMER.
2. PLANT ANNUAL FLOWERS IN SPRINGTIME AND MAINTAIN THROUGHOUT THE SUMMER.
3. MOW TURF AND STRING TRIM AROUND BEDS AND TREES WEEKLY DURING GROWING SEASON.
4. EDGE SIDEWALKS MONTHLY.
5. APPLY FERTILIZER THREE TIMES DURING GROWING SEASON.
6. MONITOR FOR TRASH AND EMPTY CONTAINERS WEEKLY.
7. TREAT FOR BROAD LEAF WEEDS AS NEEDED DURING GROWING SEASON.
8. BLOWOUT IRRIGATION SYSTEM IN OCTOBER.
9. ROUTINE MONITORING OF STORMWATER STRUCTURES AND AFTER EACH RAIN EVENT.
10. FERTILIZE TREES YEARLY, PERFORM MAINTENANCE PRUNING AND REMOVE HAZARDOUS BRANCHES AS NEEDED.
11. CLEAR WALKWAYS AND PARKING STALLS OF SNOW AS NEEDED.

LANDSCAPE PLANT LIST

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE	SIZE AT INSTALLATION	(5-7 YEAR SIZE)	QUANTITY
DECIDUOUS TREES						
SSM	STATE STREET MAPLE	ACER MIYABEI "MORTON"	3" CAL. B&B	12'H X 5'W	15'H X 7'W	1
ENO	ENGLISH OAK	QUERCUS ROBUR	3" CAL. B&B	12'H X 4'W	13'H X 6'W	5
KCT	KENTUCKY COFFEE TREE (SEEDLESS)	GYMNOCLADUS DIOICA 'ESPRESSO'	3" CAL. B&B	12'H X 5'W	15'H X 7'W	2
SMH	SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'	3" CAL. B&B	12'H X 5'W	15'H X 7'W	5
			SUBTOTAL:			13
DECIDUOUS ORNAMENTAL TREES						
SSC	SPRING SNOW CRABAPPLE	MALUS X 'SPRING SNOW'	2" CAL. B&B	8'H X 4'W	10'H X 6'W	12
PFC	PRAIRIFIRE CRABAPPLE	MALUS X 'PRAIRIFIRE'	2" CAL. B&B	8'H X 4'W	10'H X 6'W	12
STC	SUGAR TYME CRABAPPLE	MALUS X 'SUGAR TYME'	2" CAL. B&B	8'H X 4'W	10'H X 6'W	9
RAC	RADIANT CRABAPPLE	MALUS X 'RADIANT'	2" CAL. B&B	8'H X 4'W	10'H X 6'W	6
RHA	RUSSIAN HAWTHORNE	CRATAEGUS AMBIGUA	8' CLUMP	8'H X 4'W	10'H X 6'W	6
TAT	TATARIAN MAPLE	ACER TATARICUM	2" CAL. B&B	8'H X 4'W	10'H X 6'W	2
			SUBTOTAL:			47
EVERGREEN TREES						
AUS	AUSTRIAN PINE	PINUS NIGRA	10', B&B	8'H X 4'W	10'H X 5'W	12
			SUBTOTAL:			12
DECIDUOUS SHRUBS						
AAS	AUTUMN AMBER SUMAC	RHUS TRILOBATA 'AUTUMN AMBER'	5 GAL. CONT.	.5'H X 1.5'W	1.5'H X 6'W	7
AWS	ANTHONY WATERER SPIREA	SPIRAEA JAPONICA 'ANTHONY WATERER'	5 GAL CONT.	1'H X 1'W	3'H X 3'W	10
BMS	BLUE MIST SPIREA	SPIRAEA CARYOPTERIS INCANA	5 GAL CONT.	1'H X 1'W	3'H X 3'W	20
BUR	DWARF BURNING BUSH	EUONYMUS ALATUS 'COMPACTA'	5 GAL CONT.	1.5'H X 1.5'W	4'H X 3'W	5
CBC	CORAL BEAUTY COTONEASTER	COTONEASTER DAMMERI 'CORAL BEAUTY'	5 GAL CONT.	.5'H X 1.5'W	2' H X 5'W	39
CHL	CHINESE LILAC	SYRINGA X CHINENSIS	5 GAL CONT.	1'H X 1'W	8'H X 8'W	4
DCB	DWARF CRIMSON BARBERRY	BERBERIS THUNBERGII ATROPURPUREA 'CRIMSON PYGMY'	5 GAL CONT.	1'H X 1'W	2'H X 3'W	29
DKL	DWARF KOREAN LILAC	SYRINGA MEYERI 'PALIBIN'	5 GAL CONT.	1'H X 1'W	5'H X 5'W	20
GDP	GOLD DROP POTENTILLA	POTENILLA FRUTICOSA 'GOLD DROP'	5 GAL CONT.	1'H X 1'W	3'H X 3'W	25
GMS	AMUR MAPLE (SHRUB TYPE)	ACER GINNALA	5 GAL CONT.	1'H X 1'W	8'H X 8'W	3
ISD	ISANTI DOGWOOD	CORNUS SERICEA 'ISANTI'	5 GAL CONT.	1'H X 1'W	4'H X 4'W	12
KOR	KNOCK OUT ROSE	ROSA 'RADRAZZ'	5 GAL CONT.	1'H X 1'W	4'H X 4'W	19
LGS	LOW GROW SUMAC	RHUS AROMATICA 'GROW-LOW'	5 GAL CONT.	1'H X 1'W	3'H X 5'W	9
MOR	MORMON TEA	EPHEDRA VIRDIS	5 GAL CONT.	1'H X 1'W	3'H X 3'W	4
PBP	PINK BEAUTY POTENTILLA	POTENILLA FRUTICOSA 'PINK BEAUTY'	5 GAL CONT.	1'H X 1'W	3'H X 3'W	18
PBS	PAWNEE BUTTES SAND CHERRY	PRUNUS BESSEYI 'PAWNEE BUTTES'	5 GAL CONT.	1'H X 1'W	1.5'H X 6'W	13
RAB	TALL GREEN RABBITBRUSH	CHRYSOTHAMNUS NASEOSUS 'GRAVEOLENS'	5 GAL CONT.	1'H X 1'W	4'H X 4'W	9
RGB	ROSY GLOW BARBERRY	BERBERIS THUNBERGII 'ROSY GLOW'	5 GAL CONT.	1'H X 1'W	4'H X 4'W	23
RTD	RED TWIG DOGWOOD	CORNUS SERICEA 'BAILEY'	5 GAL CONT.	1'H X 1'W	8'H X 8'W	7
RUS	RUSSIAN SAGE	PEROVSKIA ARTIPLICIFOLIA	5 GAL CONT.	1'H X 1'W	4'H X 4'W	45
SSB	SHADBLOW SERVICEBERRY	AMELANCHIER CANADENSIS	10 GAL CONT.	2'H X 2'W	12'H X 8'W	6
TLS	THREELEAF SUMAC	RHUS TRILOBATA	5 GAL CONT.	1'H X 1'W	8'H X 8'W	5
VIB	MOHICAN VIBURNUM	VIBURNUM LANTANA 'MOHICAN'	5 GAL CONT.	1'H X 1'W	8'H X 8'W	7
YUC	IVORY TOWER YUCCA	YUCCA FILAMENTOSA 'IVORY TOWER'	5 GAL CONT.	1'H X 1'W	3'H X 3'W	16
			SUBTOTAL:			355
EVERGREEN AND BROADLEAF SHRUBS						
ADJ	ANDORRA JUNIPER	JUNIPERUS HORIZONTALIS 'YOUNGSTOWN'	5 GAL CONT.	0.25'H X 1'W	1.5'H X 6'W	15
BCJ	BLUE CHIP JUNIPER	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	5 GAL CONT.	0.25'H X 1'W	.75'H X 6'W	20
BMJ	BROADMOOR JUNIPER	JUNIPERUS SABINA 'BROADMOOR'	5 GAL CONT.	0.25'H X 1'W	1.5'H X 5'W	25
BUJ	BUFFALO JUNIPER	JUNIPERUS 'BLUE ARROW'	5 GAL CONT.	0.25'H X 1'W	1'H X 4'W	2
BAJ	BLUE ARROW JUNIPER	JUNIPERUS SABINA 'BUFFALO'	5 GAL CONT.	3'H X 1'W	10'H X 3'W	8
TAM	TAMMY JUNIPER	JUNIPERUS SABINA 'TAMARISCIFOLIA'	5 GAL CONT.	1.5'H X 1'W	2.5'H X 4'W	17
			SUBTOTAL:			87
ORNAMENTAL GRASSES						
FRG	FEATHERED REED GRASS	CALAMAROSTIS X ACUTIFLORA 'KARL FORESTER'	1 GAL CONT.	1'H X 0.5'W	3'H X 2'W	95
MLG	MORNING LIGHT GRASS	MISCANTHUS SINENSIS 'MORNING LIGHT'	1 GAL CONT.	1'H X 0.5'W	4'H X 2'W	5
PD	PRAIRIE DROPSEED	SPOROBOLUS HETEROLEPIS	1 GAL CONT.	0.5'H X 0.5'W	2'H X 2'W	57
			SUBTOTAL:			157
GROUND COVERS, VINES, ANNUALS & PERENNIALS						
BES	BLACK EYED SUSAN	RUDBECKIA FULGIDA 'GOLDSTRUM'	1 GAL. CONT.	0.5'H X 0.5'W	2.5'H X 2'W	104
DGD	DWARF GOLD DAYLILY	HEMEROCALLIS 'STELLA DORO'	1 GAL. CONT.	0.5'H X 0.5'W	1.5'H X 1.5'W	30
PCF	PRAIRIE CONEFLOWER	ECHINACEA PURPUREA 'NANA'	1 GAL. CONT.	0.5'H X 0.5'W	1.5'H X 2'W	3
SAL	MAY NIGHT SALVIA	SALVIA SYLVESTRIS X 'MAINACHT'	1 GAL. CONT.	0.5'H X 0.5'W	2'H X 1.5'W	12
SAJ	AUTUMN JOY SEDUM	SEDUM SPECTABILE 'AUTUMN JOY'	1 GAL. CONT.	0.5'H X 0.5'W	2'H X 2'W	56
TUL	TULIPS	ASSORTED COLORS	BULBS	0.5'H X 0.25'W	2'H X 2'W	28
ICE	PURPLE ICE PLANT	DELOSPERMA COORPERI	2.5" POT, 18" O.C.	0.25'H X 0.25'W	0.25'H X 2'W	46
VER	TURKISH VERONICA	VERONICA LIWANENSIS	2.5" POT, 18" O.C.	0.125'H X 0.25'W	0.125'H X 1'W	76
			SUBTOTAL:			355

NOTE - PLANT QUANTITIES ARE FOR CONTR

MODEL : STAY BENCH 22" X 60" X 32
MANF : LANDSCAPE FORMS
COLOR :
CONTACT :NATALIE CALIGARIS (269-276-4451)

1 STAY BENCH - 6'
SCALE: N.T.S.

MODEL : AUSTIN BIN 24" X 35" X 34 GAL
MANF : LANDSCAPE FORMS
COLOR :
CONTACT :NATALIE CALIGARIS (269-276-4451)

2 WASTE BIN
SCALE: N.T.S.

MODEL : CHARLIE TABLE 6'
MANF : LANDSCAPE FORMS
COLOR :
CONTACT :NATALIE CALIGARIS (269-276-4451)

3 TABLE
SCALE: N.T.S.

MODEL : EMERSON BIKE RACK
MANF : LANDSCAPE FORMS
COLOR :
CONTACT :NATALIE CALIGARIS (269-276-4451)

4 BIKE RACK
SCALE: N.T.S.

MODEL SQUARE CONCRETE BENCH
MANF : BELSON OUTDOORS
COLOR :
CONTACT : BELSON OUTDOORS (1-800-232-5664)

5 CONCRETE CUBE (3' X 3')
SCALE: N.T.S.

WHITE WEATHERSTONE

SAND WEATHERSTONE

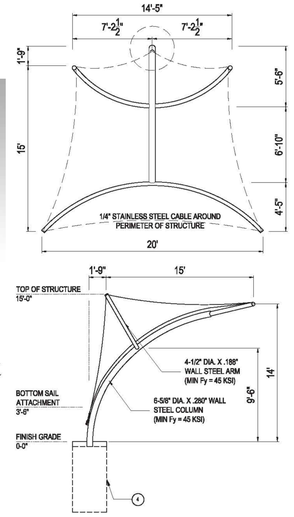
CHARCOAL WEATHERSTONE

WHITE WEATHERSTONE

SAND WEATHERSTONE

CHARCOAL WEATHERSTONE

6 CONCRETE SPHERES (24", 36")
SCALE: N.T.S.



MODEL : TORNADO TN15201FPM
MANF : SHADE SYSTEMS, INC
COLOR :
CONTACT : BRANDON SMITH (844-286-9123)

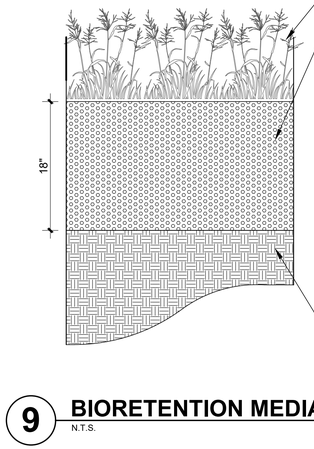
7 SHADE SAIL
SCALE: N.T.S.

MANUFACTURER: ULINE
PACKAGE: 1003-L DOGIPOT STATION W/10GAL TRASH RECEPTACLE & LID, ALUMINUM SIGN, BAG DISPENSER, MOUNTING POST, BAGS FOR TRASH & PET WASTE.
COLOR: AS PROVIDED IN PACKAGE

CONTACT: HTTP://WWW.ULINE.COM/BL_8262/DOG-WASTE-SYSTEM
1-800-295-5510
INSTALL PER MANUFACTURER'S SPECIFICATION.

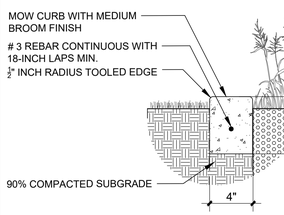
COORDINATE WITH OWNER FOR ALL LOCATIONS.

8 DOG WASTE STATION
N.T.S.



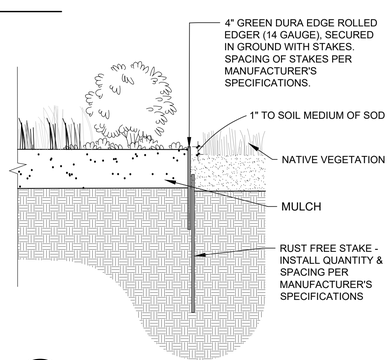
SOIL PARAMETERS	TEST NAME	BIORETENTION MEDIA PROPERTIES
Texture/Gradation	ASTM D7928 Sedimentation (Hydrometer) Method	Particle Size Distribution: 70-80% Sand (0.05-2.0 mm diameter) 5-25% Silt (0.002-0.05 mm diameter) 5-15% Clay (<0.002 mm diameter) Notes: Sand, silt and clay percentages are by dry weight. Particle sizes are based on the USDA soil classification system. Distribution is measured after gravel > 2 mm is removed from sample. Media should have no more than 25% material > 2 mm. Equivalent sieve sizes for the upper and lower limit of sand are #10 and #240, respectively.
Organic Matter	ASTM D2974	1-5% by dry weight
pH	ASA/AASHTO	6.0 - 8.5
Salinity/Salts (EC) dS/m or mmhos/cm	Saturated Paste	<3
Nitrate Nitrogen (ppm)	ASA2 33-3	<30
Phosphorus (ppm)	Use Olsen when pH>6.2, otherwise use Mehlich-3	Olsen: <20 or Mehlich-3: <30

9 BIORETENTION MEDIA
N.T.S.

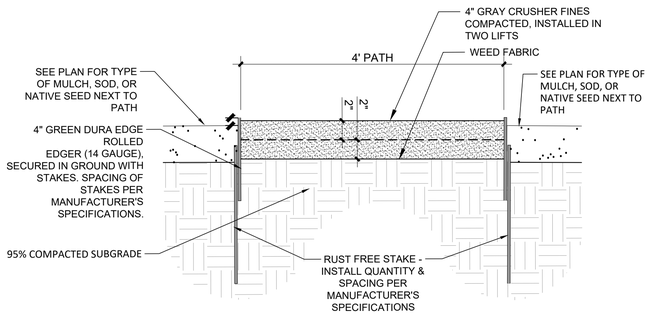


NOTES:
1. WEAKENED PLANE JOINT - 10 FEET O.C. MAXIMUM. CUT CONCRETE WITH TROWEL EDGE TO DEPTH OF REBAR. TOOL FINISH JOINT USING GROOVER WITH 1.5 INCH DEEP BIT.
2. ISOLATION/EXPANSION JOINT. PLACE AT ENDS OF MOW CURB ABUTTING OTHER IMPROVEMENTS (TYP.)
3. FINISH GRADE SHALL BE 1-INCH IN LAWN AREAS AND 3 INCH IN PLANTING AREAS (BELOW TOP OF MOW CURB).
4. CONCRETE SHALL BE CLASS 560-C-3250

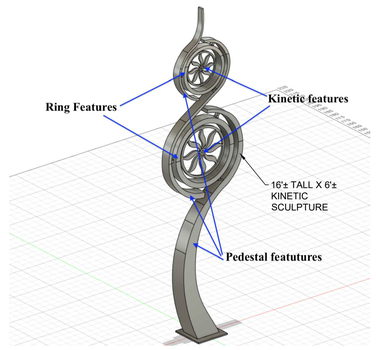
10 MOW CURB
N.T.S.



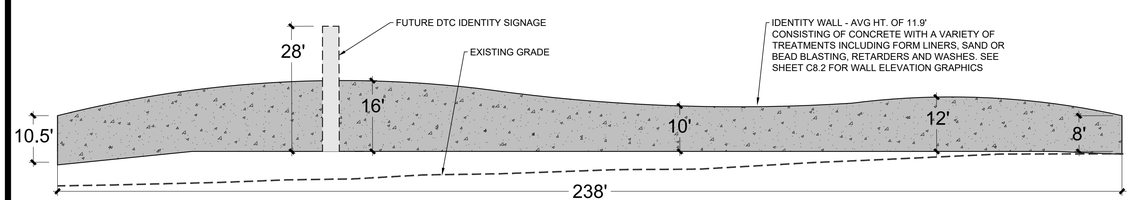
12 EDGER
N.T.S.



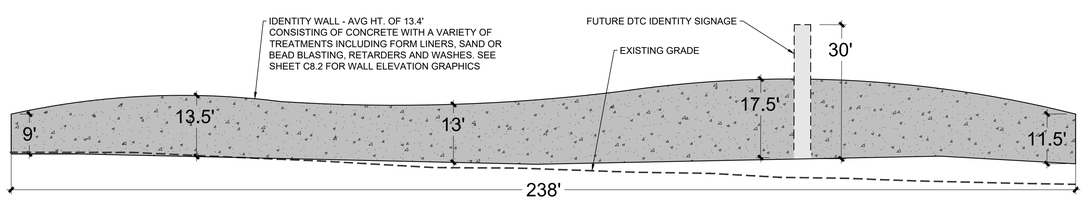
13 CRUSHER FINES WITH EDGING
N.T.S.



14 KINETIC SCULPTURE
SCALE: N.T.S.



VIEW FROM INTERSTATE 25 LOOKING EAST



VIEW FROM INSIDE THE PARK LOOKING WEST

11 IDENTITY WALL
SCALE: N.T.S.

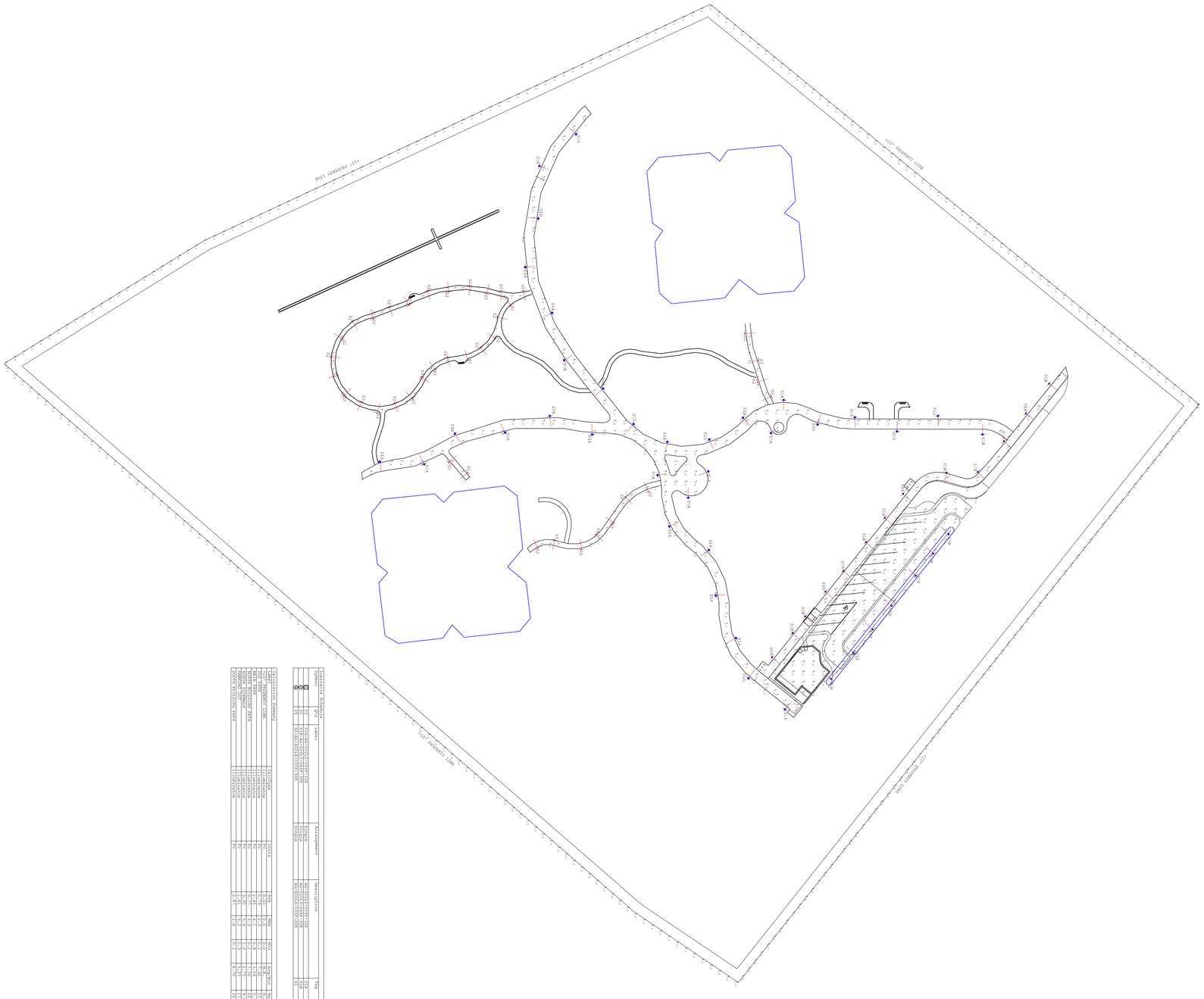
SAGE DESIGN GROUP
LANDSCAPE ARCHITECTURE SITE PLANNING ENTITLEMENT
1500 South Pearl St. Suite 200 Denver, Colorado 80210
303.470.2655 (p) 303.470.2894 (f) www.sagedesigngroup.com

PROJECT NO:	23023	NOTES
NO.	DATE	
1	2024/01/10	ISSUED TO GREENWOOD VILLAGE
2	2024/04/24	ISSUED TO GREENWOOD VILLAGE
3	2024/08/14	ISSUED TO GREENWOOD VILLAGE
4	2024/09/20	ISSUED TO GREENWOOD VILLAGE

NOTES
NO.
DATE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
LANDSCAPE DETAILS

SHEET
C6.3


NORTH PROPERTY LINE
WEST PROPERTY LINE
SOUTH PROPERTY LINE
EAST PROPERTY LINE

| | | |

TYPE S1A & S1B

FGP Area Light

landscape

Product Data Sheet

FGP has a pleasing flower-like organic form created by three stems that rise from the connection with the pole. The soft, triangular head holds LEDs in triangular arrays that cast illumination between the verticals in a clean footprint. The area light is ideal for pedestrain spaces such as campuses, parks and plazas, helping to create public spaces that are usable 24 hours a day. LED light sources are energy efficient. Light is finished using Landscape Forms' proprietary Pangard II powdercoat finish.

LED Technology

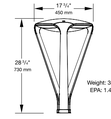
The area light employs solid state LED technology that provides exceptional energy efficiency and very long life. Designed to maximize this potential by managing the thermal properties of LEDs, the FGP area light's cast aluminum heatsink and housing efficiently dissipate heat. FGP uses full spectrum LED light engines that provide outstanding color rendering ability. The thermoformed integrated diffuser lens reduces glare, improving the visual experience.

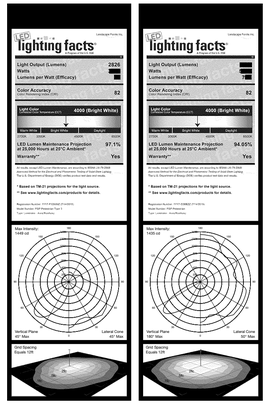
Electrical

Surge protected 100V-277V 50/60 Hz, Class 2 integrated dimmable driver. LED cartridge with weatherproof quick disconnect provides ease of installation and serviceability. FGP Pedestrian ships prewired.

FGP Area Type 3
Type 3 Distribution
Fixture: Cast Aluminum
CCT: 2700K, 3000K, 3500K, 4000K
Drive Current: 460mA
Optic: LEDiL® STRATA
Lens: Impact Modified Acrylite®
Power Supply: 100V-277V
LED Driver: 50W
Dimmable: 0-10V
BUG Rating: B1 U2 G1
IP Rating: IP66

FGP Area Type 5
Type 5 Distribution
Fixture: Cast Aluminum
CCT: 2700K, 3000K, 3500K, 4000K
Drive Current: 560mA
Optic: LEDiL® STRATA
Lens: Impact Modified Acrylite®
Power Supply: 100V-277V
LED Driver: 60W
Dimmable: 0-10V
BUG Rating: B2 U2 G1
IP Rating: IP66

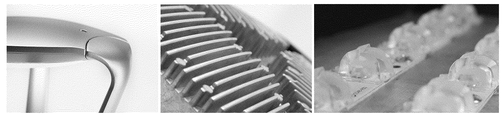




FGP Area Light

landscape

Product Data Sheet



Finish

Pangard II®, offered exclusively by Landscape Forms, is a 19 step program of cleaning, priming, and powdercoating that resists rusting, chipping, peeling and fading to produce the finest metal finish available for site furniture and outdoor lighting. In addition, Pangard II® contains no heavy metals and is free of Hazardous Air Pollutants.

To Order

Specify: Product, Lamp, Drive Current, Color Temperature, Input Voltage, Height, optional 7-pin (ANSI 136.41) Twist Lock receptacle, and Powdercoat Color.

AG FGP	500L3 (30 LED Type 3) 500L5 (30 LED Type 5)	046F (460 mA) 056F (560 mA)	40K (4000K) 35K (3500K) 30K (3000K) 27K (2700K)	UV1 (100-277VAC)	12 (144in) 14 (168in) 16 (192in)	NTW (No Twist Lock) TW1 (Twist Lock)

EXAMPLE: AG – 500L3 – 046F – 35K / UV1 – 12 – TW1 – Powdercoat Color

Product Modifications

Don't see what you are looking for? Our goal is to partner with you as the designer to manufacture solutions needed for the space you are creating. We offer the option to modify our standard product to meet certain design specifications or needs. Contact your local Landscape Forms representative to learn more about these offerings.

Warranty

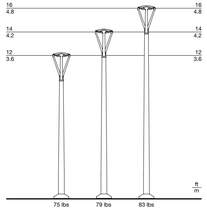
LED lighting products are warranted for six years.

Other

UL Listed, RoHS Compliant, Next Generation Luminaires Winner

Designed by Francisco Gomez Paz

Click here for patent information related to this product.



Visit our landscapeforms.com for more information. Specifications are subject to change without notice. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level.
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TYPE S2

FGP Path Light

landscape

Product Data Sheet

The FGP path light has a pleasing flower-like organic form created by three stems that rise from the connection with the base. The soft, triangular head holds LEDs in triangular arrays that cast illumination between the verticals in a clean footprint.

High-design surface mounted LED path light uses aiming angles, color rendering and glare reduction to shape and enhance lighting performance. Aluminum cartridge houses energy efficient LEDs and provides excellent thermal management. Fixture is made of durable cast aluminum with galvanized steel base plate. Mounting hardware and template included for ease of installation.

Lighting Facts®

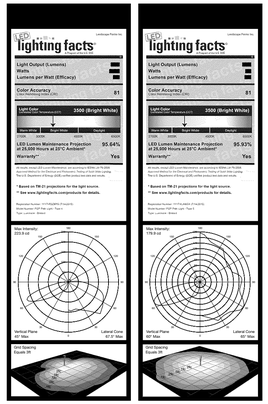
Landscape Forms is committed to the development of energy efficient lighting. We participate in the Department of Energy Lighting Facts® label program. This activity is voluntary but helps consumers evaluate the multitude of products on the market today. The Lighting Facts® label provides a quick but comprehensive summary of luminaire performance as measured by the IESNA LM-79 photometric test standard for solid state lighting.

Electrical

Surge protected 100V-277V 50/60 Hz, Class 2 driver. LED cartridge with weatherproof quick disconnect provides ease of installation and serviceability. Internal wiring completed at the factory.

FGP Path Light Type 4
Type 4 Distribution
CCT: 2700K, 3000K, 3500K, 4000K
Drive Current: 250mA
Optic: 6 Khatod Collimators
Lens: Diffused Acrylite®
Power Supply: 100V-277V
LED Driver: 7W
BUG Rating: B0-U1-G1
IP Rating: IP66 for LED Cartridge
Weight: 31lbs

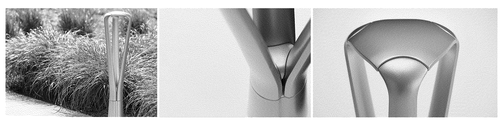
FGP Path Light Type 5
Type 5 Distribution
CCT: 2700K, 3000K, 3500K, 4000K
Drive Current: 250mA
Optic: 9 Khatod Collimators
Lens: Diffused Acrylite®
Power Supply: 100V-277V
LED Driver: 7W
BUG Rating: B0-U1-G1
IP Rating: IP66 for LED Cartridge
Weight: 31lbs



FGP Path Light

landscape

Product Data Sheet



Finish

Pangard II®, offered exclusively by Landscape Forms, is a 19 step program of cleaning, priming, and powdercoating that resists rusting, chipping, peeling and fading to produce the finest metal finish available for site furniture and outdoor lighting. In addition, Pangard II® contains no heavy metals and is free of Hazardous Air Pollutants.

To Order

Specify: Product, Lamp, Drive Current, Color Temperature, Input Voltage, and Powdercoat Color.

AG FGP	400L4 (6 LED, Type 4) 400L5 (9 LED, Type 5)	025F (250mA)	40K (4000K) 35K (3500K) 30K (3000K) 27K (2700K)	UV1 (100-277VAC)

EXAMPLE: AG – 400L4 – 025F – 35K – UV1 – Powdercoat Color

Product Modifications

Don't see what you are looking for? Our goal is to partner with you as the designer to manufacture solutions needed for the space you are creating. We offer the option to modify our standard product to meet certain design specifications or needs. Contact your local Landscape Forms representative to learn more about these offerings.

Warranty

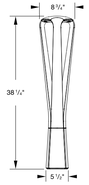
LED lighting products are warranted for six years.

Certifications

UL Listed, RoHS Compliant, Next Generation Luminaires Winner

Designed by Francisco Gomez Paz

Click here for patent information related to this product.



Visit landscapeforms.com for more information. Specifications are subject to change without notice. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level.
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landscapeforms.com | specify@landscapeforms.com

NOTES	NO.	DATE

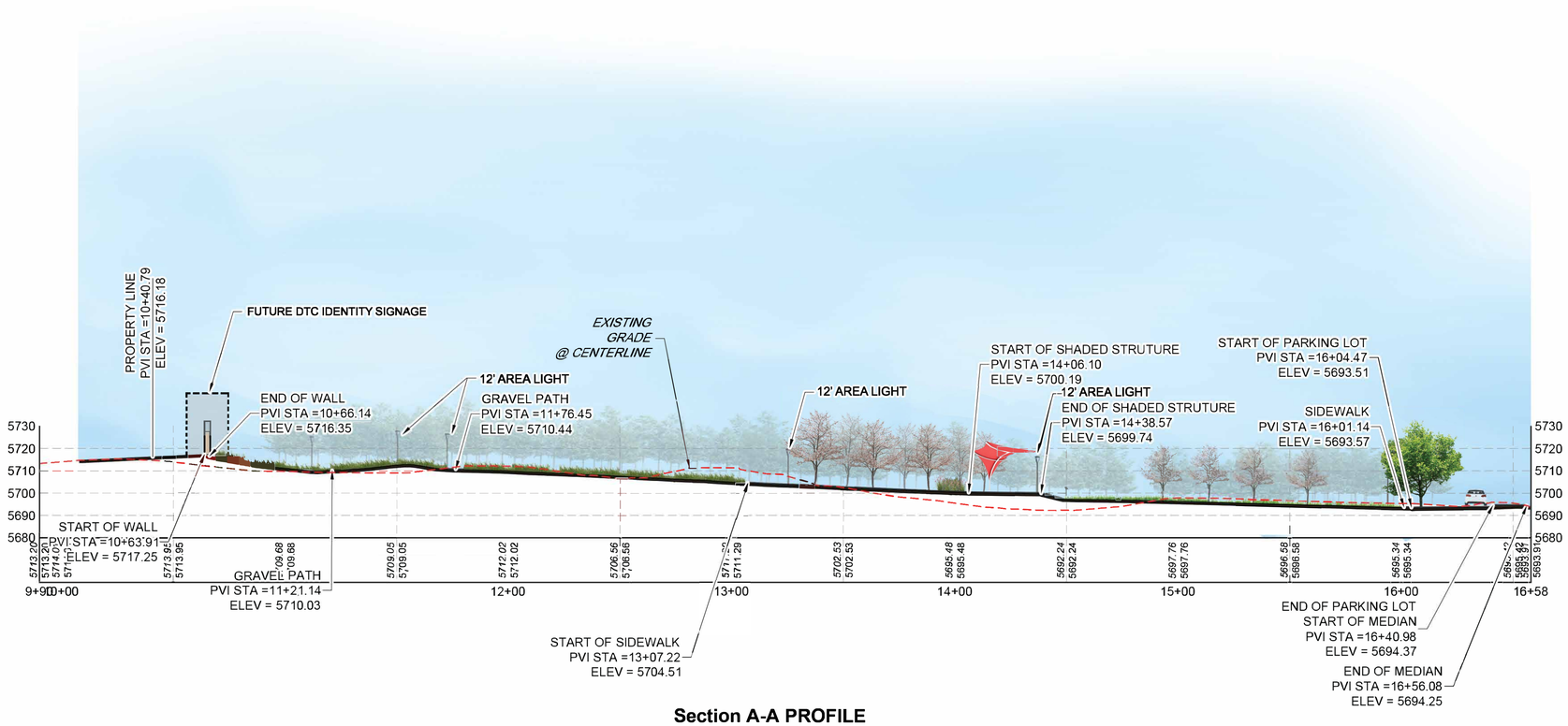
PROJECT NO. 23023

NOTES	NO.	DATE
ISSUED TO GREENWOOD VILLAGE	1	2024/01/10
ISSUED TO GREENWOOD VILLAGE	2	2024/04/24
ISSUED TO GREENWOOD VILLAGE	3	2024/06/14
ISSUED TO GREENWOOD VILLAGE	4	2024/09/20

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN

LIGHT FIXTURE CUTSHEETS

SHEET
C7.1



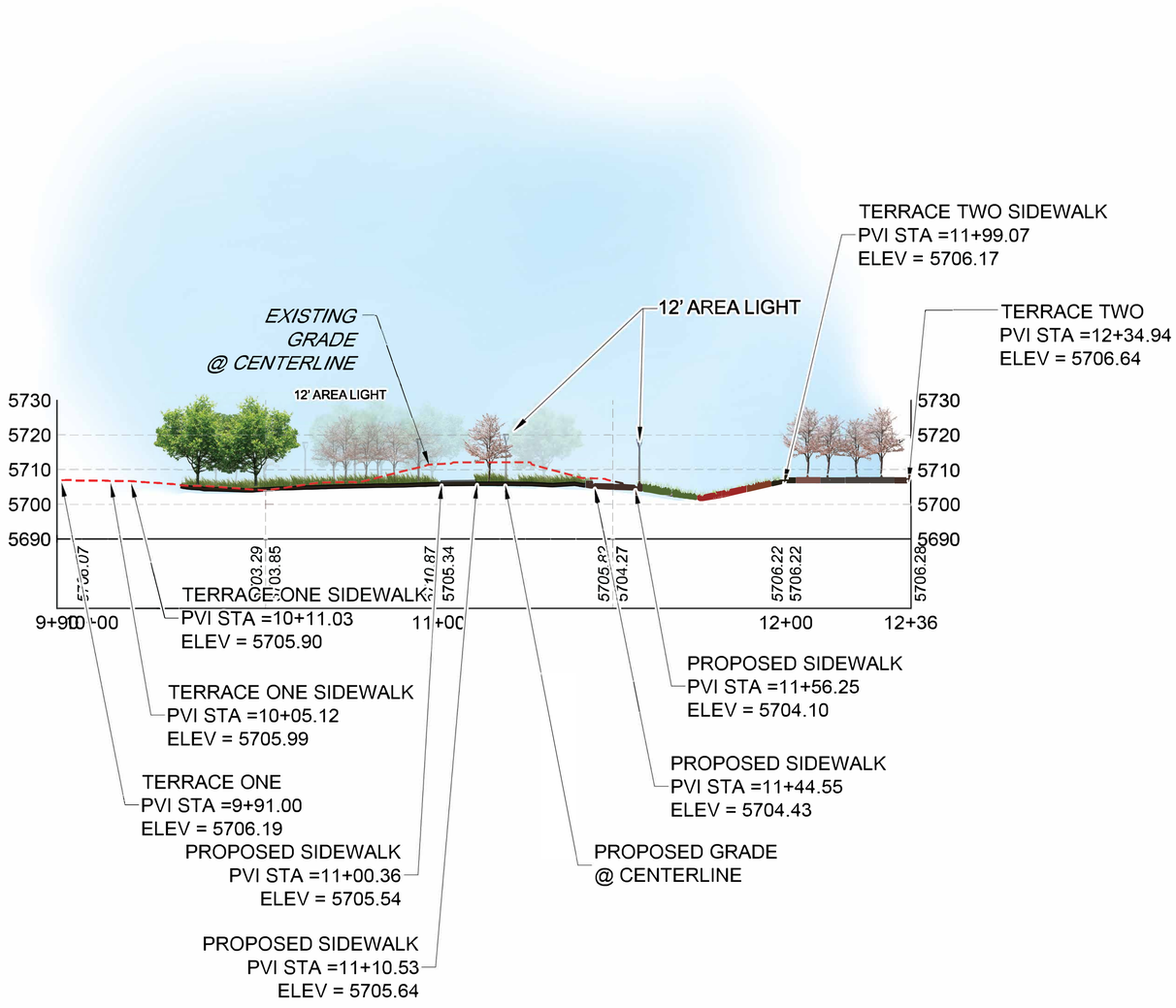
Section A-A PROFILE
H: 1" = 30'
V: 1" = 30

SAGE DESIGN GROUP
LANDSCAPE ARCHITECTURE SITE PLANNING ENTITLEMENT
1500 South Pearl St. Suite 200 Denver, Colorado 80210
303.470.2855 (p) 303.470.2894 (f) www.sagedesigngroup.com

PROJECT NO:	23023	NOTES
DATE	NO	
2024/07/19	1	ISSUED TO GREENWOOD VILLAGE
2024/08/14	2	ISSUED TO GREENWOOD VILLAGE
2024/09/04	3	ISSUED TO GREENWOOD VILLAGE
2024/09/20	4	ISSUED TO GREENWOOD VILLAGE

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
SITE SECTIONS

SHEET
C8.0



Section B-B PROFILE
H: 1" = 20'
V: 1" = 20

SAGE DESIGN GROUP
LANDSCAPE ARCHITECTURE SITE PLANNING ENTITLEMENT
1500 South Pearl St. Suite 200 Denver, Colorado 80210
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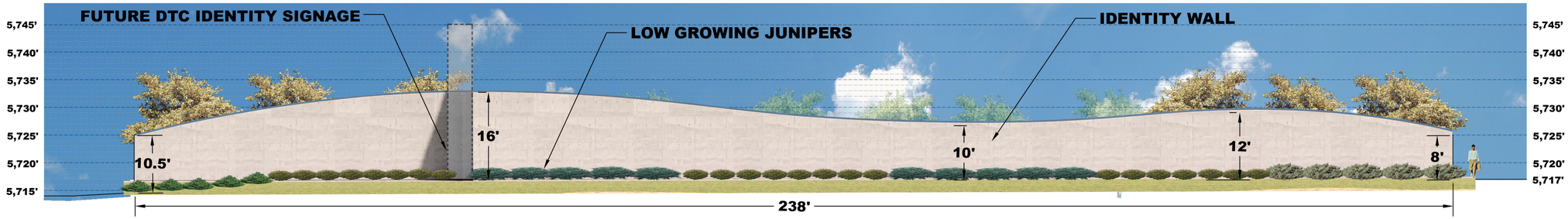
NOTES	NO.	DATE

PROJECT NO: 23023		
DATE	NO	NOTES
2024/07/10	1	ISSUED TO GREENWOOD VILLAGE
2024/08/24	2	ISSUED TO GREENWOOD VILLAGE
2024/09/04	3	ISSUED TO GREENWOOD VILLAGE
2024/09/20	4	

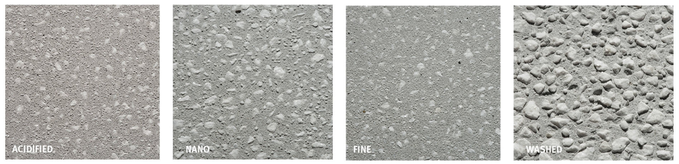
ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
SITE SECTIONS

SHEET
C8.1



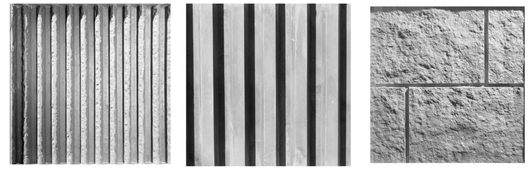
VIEW FROM INTERSTATE 25

SCALE: 1”=10’-0”



CONCRETE RETARDERS

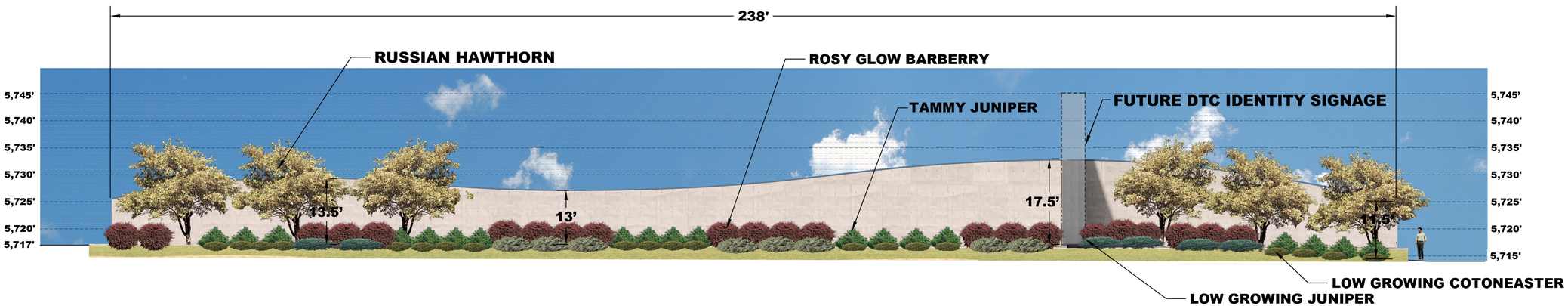
CONCRETE BEAD BLAST



CONCRETE FORM LINERS

IDENTITY WALL CONCRETE TREATMENTS

* ALL SHOWN WALL TREATMENTS ARE OPTIONS BEING CONSIDERED FOR USE



VIEW FROM ORCHARD STATION PARK

SCALE: 1”=10’-0”

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1500 South Pearl St. Suite 200 Denver, Colorado 80210
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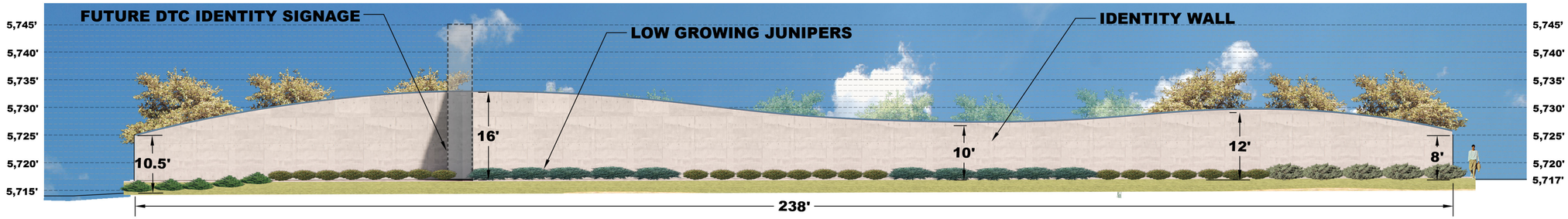
NOT FOR CONSTRUCTION

PROJECT NO	2023		
DATE	NO	NOTES	
2024/01/10	1	ISSUED TO GREENWOOD VILLAGE	
2024/04/24	2	ISSUED TO GREENWOOD VILLAGE	
2024/06/14	3	ISSUED TO GREENWOOD VILLAGE	
2024/08/20	4	ISSUED TO GREENWOOD VILLAGE	

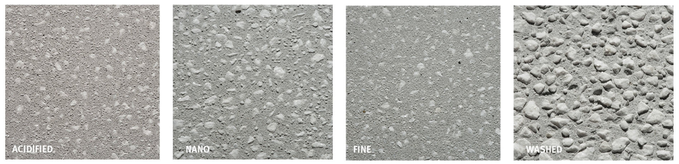
ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
WALL ELEVATIONS

SHEET
C8.2



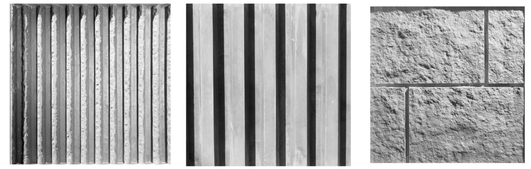
VIEW FROM INTERSTATE 25

SCALE: 1”=10’-0”



CONCRETE RETARDERS

CONCRETE BEAD BLAST



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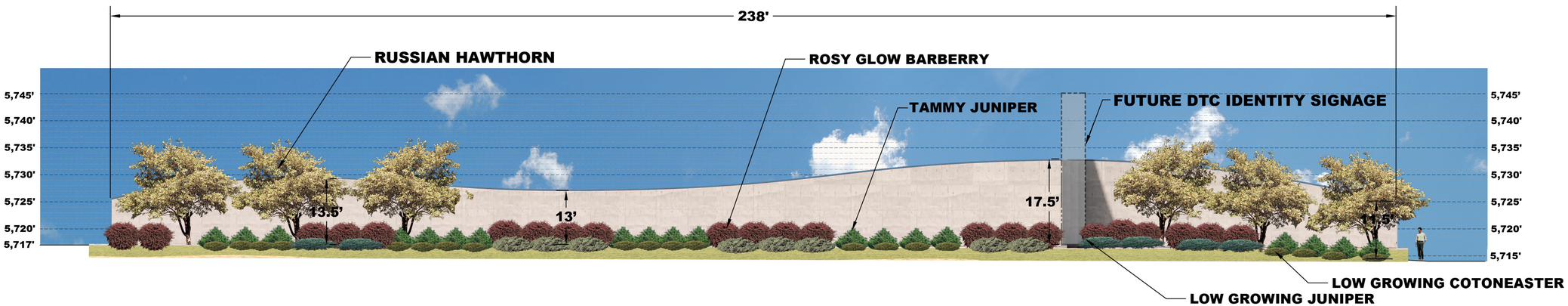

VIEW FROM ORCHARD STATION PARK

SCALE: 1”=10’-0”

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NOT FOR CONSTRUCTION

NO.	DATE	NOTES
1	20240110	ISSUED TO GREENWOOD VILLAGE
2	20240424	ISSUED TO GREENWOOD VILLAGE
3	20240614	ISSUED TO GREENWOOD VILLAGE
4	20240820	ISSUED TO GREENWOOD VILLAGE

PROJECT NO 2023

ORCHARD STATION PARK
SITE DEVELOPMENT PLAN
WALL ELEVATIONS

SHEET
C8.2

City of Greenwood Village

City Council

November 4, 2024

6060 South Quebec Street Greenwood Village, CO 80111

Staff Report: 24-02-SDP

Subject Property Address
5615 DTC Parkway

Project Area Size
5.45 Acres

Applicant
Josh Freehling, Sage Design Group

Property Owner
Goldsmith Metropolitan District and City of Greenwood Village

Zoning
Open Space 2 (O-2)

Comp Plan Planning Area
Interstate Corridor

Request
A Site Development Plan to allow Goldsmith Metropolitan District to redevelop Orchard Station Park and continue the passive open space use of the property.

P&Z Recommendation
Approval (6 – Yes to 1 – No)

Attachments
1. Vicinity and Zoning Map, Aerials, Street Views
2. Development Application
3. Intergovernmental Agreement
4. Letter of Description and Justification
5. Proposed SDP
6. Transportation Memorandum
7. Drainage Conformance Memorandum
8. Comp Plan – Interstate Corridor
9. Noise Study for I-25 Wall
10. October 15, 2024 PZC Meeting Minutes

Staff
David French, Senior Planner
dfrench@greenwoodvillage.com

Public Notice & Comments – As of 10/30/2024

# Sent	Comments Received	Support	Oppose
388	0	0	0

Public notice was provided as required per Land Development Code (LDC) Section 16-2-270. The affidavits of mailing and posting will be presented at the November 4, 2024 hearing.

Executive Summary

The Applicant requests approval of a Site Development Plan (SDP) to redevelop the Subject Property. The Subject Property is currently designated Open Space 2 (O-2) and is known as Orchard Station Park (OSP). OSP is a passive recreation open space which will remain the use of the property. The proposal includes the removal of the existing walkways on site and replacement with new walkways and crusher fine trails in addition to shaded seating areas, open grass field areas and a noise mitigation wall along Interstate 25 (I-25). The proposal also includes an eleven (11) space looped parking area along DTC Parkway. As part of the redevelopment of OSP significant new landscape plantings are proposed throughout the site in addition to regrading of the site to improve useability and drainage.

The Planning and Zoning Commission heard the case on October 15, 2024 and recommended approval of the SDP to City Council.

Background

- The Subject Property is located on the west side of DTC Parkway approximately one-quarter of a mile north of the Orchard Road and I-25 interchange. The Subject Property is located between two office buildings (5619 and 5613 DTC Pkwy.) between I-25 on the west and DTC Parkway.
- The zoning of the Subject Property is Open Space 2 (O-2. Town Center zoned office buildings are located to the north and south. To the east are Town Center zoned single family homes (One Cherry Lane). The Subject Property is located in the interstate corridor planning area of the Comprehensive Plan.
- The two lots comprising the Subject Property were part of a large annexation in 1975 which included a significant number of properties between S. Holly St. and S. Dayton St. Based on available information the Subject Property has remained open space since annexation of the parcels.
- The Subject Property is located in the Denver Tech Center Master Development Plan (DTC MDP) area. The DTC MDP was established in 1976 and most recently amended in 2013.
- The Subject Property topography slopes downward gently from I-25 (high) to DTC Pkwy. (low).
- The Subject Property is jointly owned ("tenants in common") by the City of Greenwood Village and Goldsmith Metropolitan District (Metro Dist.). The Metro Dist. purchased the property in December of 2013. In 2014 Arapahoe County approved the contribution of funds ($600,000) for the park contingent on the City of Greenwood Village contributing the same amount and also that the City, the Metro Dist. and the County enter into an Intergovernmental Agreement (IGA).
- The Metro Dist. was required to quit claim the property to the City as part of the IGA, making the City joint owners of the Subject Property.
- The IGA (Attachment 3) required that use restrictions be placed on the property and recorded with the IGA. These restrictions are to ensure long-term protection of the land for park and open space use and appropriate use of the funds provided by the County which were generated as part of Arapahoe County's Open Space Fund, which is funded by sales and use tax. The use restrictions stipulate that the only type of development allowed for the property is that which maintains or improves public access and passive recreational park-related uses and amenities, and specifically prohibits sports fields/courts, swimming pools, playground equipment and recreation centers.
- Per the IGA the Metro Dist. is responsible for maintenance and upkeep of the property.
- The City's LDC states that for Open Space zoned property not owned by the City redevelopment must occur through the SDP process. Although the City is a joint owner, the Metro Dist. is pursuing this redevelopment on their own accord and it is not a City initiated Capital Improvement Project.

Applicant Request

A Site Development Plan to redevelop and improve Orchard Station Park including:

- Redesigned concrete walks and new crush fine trails
- 11 space looped parking area along DTC Pkwy.
- 12 bicycle parking spaces
- Shade sail seating area and benches throughout
- Dog waste disposal bins
- 16-foot-tall kinetic sculpture
- 8 to 16-foot-tall noise attenuation wall along I-25
- 60 new deciduous trees, 12 new evergreen trees, 442 shrubs and 157 ornamental grasses
- Fifty-three 12-foot-tall area lights and thirty-nine 38-inch bollard path lights

Analysis

COMPREHENSIVE PLAN

Conformance with the Comprehensive Plan is part of the review criteria for an SDP. Staff finds that the proposed redevelopment of OSP conforms with the relevant Comprehensive Plan goals and policies as outlined for the Interstate Corridor Planning Area (Attachment 8). The vision statement for the Interstate Corridor specifically states that the Corridor has a background dominated by open areas, quality landscaping, scenic views and plazas, and this vision will be furthered by the enhancements proposed with this SDP. The park redevelopment will allow for the improvement of the existing amenity used by residents and people working in the City.

COMPATIBILITY OF SURROUNDING LAND USES

The proposed redevelopment of the Subject Property will be compatible with both the directly adjacent land uses as well as the uses found throughout the DTC MDP, which primarily serves as a suburban office park. Staff finds that the existing park is compatible with surrounding land uses and the improvements proposed will further enhance the park.

LANDSCAPING AND SITE MODIFICATIONS

The primary purpose of the proposed SDP is enhancement and beautification of the park to increase both the functional and aesthetic qualities of the site. As part of the redevelopment the existing walkways within OSP will be demolished and replaced by new concrete walkways in addition to ancillary crusher fine trail paths. Within the site, benches, dog waste bins, tables, and bike racks are provided. Centrally located within the site are three proposed 14-foot-tall shade sail structures to provide shaded seating and adjacent to the shade sails is 16-foot tall kinetic sculpture. A significant amount of new landscaping is provided by the proposed SDP including 60 deciduous (including 47 ornamental) trees and 12 evergreen trees, 442 shrub plantings and 157 ornamental grasses. Approximately 100 existing trees will be removed as they have exhausted their useful life and are in poor condition.

Along the western boundary of the site, adjacent to I-25, a 238-foot-long concrete noise attenuation wall is proposed to provide noise mitigation from I-25 traffic (Attachment 9). The wall incorporates an undulating design varying in height from 8 feet on the south end, up to 16 feet maximum in the middle area, back down to 10.5 feet on the north end. The wall material proposed is concrete and the Applicant has provided multiple options they are considering as to the final surface treatment of the concrete. Of the options provided, Staff finds that the concrete form liners (See Sheet 25, Attachment 5) provide the highest quality appearance, in particular the option that has a formed block aesthetic. The Applicant has stated that they will not have a final determination on the exact concrete surface treatment until after the outcome of the SDP hearing and will base their decision on the solicitation of contractor bids for the project. The I-25 side of the wall is proposed to include low growing junipers, while the interior side of the wall has more significant landscaping as to blend the wall into the park setting, including Junipers, Cotoneaster and barberry shrubs and Russian Hawthorn trees.

Sec. 16-21-380 of the LDC provides material requirements for noise walls proposed on residential properties, however specific standards are not outlined for commercial properties. The LDC states that walls shall be

constructed of brick; masonry other than cinder block; concrete in combination with brick; or concrete masonry block, such that both the aesthetic character of the wall design shall be significantly consistent with the existing environment and the quality of materials shall not detract from the existing streetscape. Staff finds that the enhanced surface treatment concrete wall is meeting the intent of the material requirements of noise walls located in the City. Additionally, the light color of the wall will blend with existing I-25 infrastructure and the two light stone colored office buildings adjacent to the Subject Property.

LIGHTING

The LDC requires that light levels in parking lots and pedestrian walkways shall not exceed a maximum foot-candle ratio difference of four to one (4:1) from the brightest areas to the darkest areas, which is being met. All lighting is proposed at a 3000 Kelvin color temperature within the limits of the LDC allowances. The area light light poles proposed are 12 feet in height. The Applicant has eliminated any light spill greater than 0.2-foot candles at 5 feet across the property line.

ACCESS AND PARKING

The Subject Property will be accessed by vehicles from DTC Pkwy. with a loop access being proposed with the entry on the north end of the parking lot and the exit on the south. The parking area contains eleven (11) angled parking spaces including one (1) accessible space. The LDC does not provide a minimum parking ratio for park use however Staff finds the parking proposed will be sufficient for OSP, which is primarily a passive use park. For pedestrians the park can be accessed from the path connections to adjacent office buildings, the existing detached sidewalk along DTC Pkwy. and the walkway which leaves the site going north and connects with the Orchard Light Rail Station via a pedestrian bridge across I-25.

TRAFFIC IMPACTS

A Transportation Memorandum (Attachment 6) was prepared to provide the expected trip generation and evaluate traffic impacts from the proposed development. Transportation Memorandums are considered in lieu of a full Transportation Impact Study (TIS) when the projected daily trip generation is less than 40 peak hour trips, new access is to local streets (not arterial roadways), expected average daily trips (ADT) is below 100 and pedestrian and bicycle facilities will be constructed.

As outlined in the Memo, the proposed OSP redevelopment is not expected to significantly increase ADT to the site. The park is expected to generate a total of 90 daily trips, both inbound and outbound, within a 24-hour weekday period with 9 trips occurring in the AM peak hour and 9 in the PM peak hour.

Public Works Staff has completed a review of the Memo and finds that it has been completed to City standards. Based on the traffic generated by the development, no roadway improvements or traffic mitigation are found to be necessary to support the development.

DRAINAGE

The Applicant prepared a drainage conformance memo for the proposed development (Attachment 7). The Community Development Engineer has reviewed the memo for the development and finds that the proposed

drainage design meets the requirements of the Drainage Criteria Manual. The development is classified as a Tier 3 development because it disturbs more than one acre of land. The existing drainage patterns on the site will be generally maintained. The proposed drainage design will route runoff into a new rain garden at the northeast side of the site near the new parking lot which will provide water quality treatment and flood attenuation to meet City Drainage requirements before entering the public system.

UTILITIES

Applicable utility agencies and external agency service providers were notified of the proposal and have provided referral response comments and/or will serve letters for the project. The Applicant team has worked directly with those agencies as applicable. Fire/safety service is provided by South Metro Fire Rescue who has also reviewed and approved the project at this stage.

REVIEW CRITERIA:

In considering an application for an SDP, the City Council shall consider the following criteria as outlined in LDC Section 16-2-50(e). The approval criteria and Staff's findings are presented in the tables below:

SDP Review Criteria Table:

Criterion	Finding	Rationale
1. Whether the development is in conformance with the Comprehensive Plan	Yes	Staff finds that the existing park as well as the proposed redevelopment to enhance and improve the park is in conformance with the Interstate Corridor goals and policies, in particular those related to the image, identity and quality of life outlined for the Corridor.
2. Whether the development is compatible with surrounding land uses	Yes	Staff finds that existing park and the proposed redevelopment are and will continue to be compatible with the adjacent office and residential uses and the suburban office park environment of the DTC MDP.
3. Whether the development adequately mitigates any adverse impacts it causes, including, without limitation, adverse impacts on traffic, view corridors, noise, property values, and the provision of public services	Yes	Staff finds that redevelopment of the park will cause no adverse impacts and will provide an improved amenity to the neighborhood and the City.
4. Whether the development is in conformance with the development criteria, restrictions and standards set forth in the MDP	Yes	The proposed development is located in the DTC MDP. The DTC MDP site and design standard requirements were incorporated into the proposed SDP and reviewed for compliance by Staff. Staff finds the MDP site and design standards are met.

5. Whether the development is in conformance with the general development objectives set forth in the commercial site and design standards in Section 16-21-20 of the LDC:	See below	See below
Minimize adverse impacts on adjacent uses	Yes	The proposed redevelopment of OSP will have no adverse impacts on adjacent uses.
Minimize disruption to the existing terrain, vegetation or other natural site features	Yes	Existing healthy tress will be protected to remain. The site topography will be modified to improve drainage and make the site more functional, and the proposed grading and drainage design is in compliance with the Greenwood Village Drainage Criteria Manual.
Improve pedestrian, bicycle and vehicular circulation within and across the site	Yes	The proposed SDP provides more pedestrian pathways than exist currently, maintains existing connections from the Subject Property to adjacent properties, provides new bicycle parking areas and provides a new parking area for park visitors.
Minimize adverse impacts on views to the mountains and to Cherry Creek Reservoir	Yes	There are no views to Cherry Creek Reservoir from the Subject Property. Views from existing residential property to the mountains will not be impacted by this redevelopment (including the noise wall) as there is already significant mature tree canopy in this area of the City and the noise wall is located 600 feet away from the nearby residential properties.
Reduce the visual impact of parking areas, screened storage areas and similar accessory areas and structures	Yes	The small parking area is separated from DTC Pkwy. by a landscaped median that includes 4 street trees and 30 shrub plantings. There are no storage areas proposed as part of the redevelopment and the accessory structures proposed are located in the interior of the site.
Design buildings that are attractive and compatible with surrounding development in terms of forms, colors, materials and texture	N/A	There are no buildings proposed with the redevelopment of the park.
Provide exterior lighting that meets the functional and security needs of the proposed land use without adversely affecting streets, adjacent properties or the community	Yes	The proposed lighting plan limits light spill beyond the property lines, and also provides an even distribution of light for the parking lot and pedestrian walkways with LDC recommendations. All lights are proposed at 3000K color temperature or less.
Provide for more identifiable and functional open space and landscaping	Yes	The proposed landscaping provided by the SDP is a significant improvement to the site and the entire site is designed to provide passive recreational space.

City of Greenwood Village

Minutes – Final
City Council

6060 South Quebec Street
Greenwood Village, CO
80111

HEARING IMPAIRED APPARATUS AVAILABLE
PLEASE TURN OFF ALL CELLULAR PHONES AND/OR AUDIBLE PAGERS
ALL BOARD, COMMISSION AND COUNCIL MEETINGS ARE DIGITALLY RECORDED

Monday, November 4, 2024	6:00 PM	Council Chambers

REGULAR MEETING - 7:00 PM

1. CALL TO ORDER - CITY COUNCIL AND LOCAL LICENSING AUTHORITY

The City Council and Local Licensing Authority of the City of Greenwood Village met in a regular session in the Council Chambers at Greenwood Village City Hall, 6060 South Quebec Street, Greenwood Village, County of Arapahoe, State of Colorado, at 7:11 p.m., following a Study Session in which Council discussed possible improvements to the Arapahoe Station Parking Lot.

2. ROLL CALL

Present: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton (Remote Participation), Libby Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*
Absent: *0*
Presiding: *1- George Lantz, Mayor*

3. PLEDGE OF ALLEGIANCE (KERBER)

Mayor Pro Tem Kerber led the pledge of allegiance.

4. PUBLIC COMMENT

Limited to 3 minutes per person, 15 minutes total time. If City Council meetings are to be conducted via remote participation, public comment is limited to written comments emailed to cityclerk@greenwoodvillage.com by 5:50 p.m. the day of the meeting.

There were no public comments.

5. CONSENT (INGEBRETSEN)

All matters listed under consent are to be considered routine and will be enacted by one motion and vote. The titles will not be read aloud. There will be no separate discussion of these items unless a Councilmember so requests.

Mayor Pro Tem Kerber requested Resolution No. 34, Series 2024 be removed from the consent agenda.

A motion was made by Councilmember Anne Ingebretsen, seconded by Councilmember Donna Johnston; to approve, as amended, the Consent Agenda. She waived reading in full of the ordinances on second reading and moved to publish them by title on the City's website. The motion carried by unanimous polled vote.

Yes: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton, Libby Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*
No: *0 - None*
Recused: *0 - None*

Councilmember Wiesner welcomed Mr. Wilson and thanked him for his service on the Board of Adjustments and Appeals (BOAA).

A. Ordinance No. 08-24: Second Reading: An Ordinance Adopting a Budget and Providing for the Appropriation of Money for the Various Funds, Departments, Offices and Agencies of the City of Greenwood Village, Colorado, for the 2025 Fiscal Year (KERBER) (2024-282)

This ordinance was adopted.

B. Ordinance No. 09-24: Second Reading: An Ordinance Fixing the Mill Levies of the City of Greenwood Village, Colorado, for the Purpose of Ad Valorem Taxes in the 2024 Fiscal Year (KERBER) (2024-283)

This ordinance was adopted.

C. Ordinance No. 16-24: Second Reading: An Ordinance Adopting a Third Amended Budget and Providing for the Supplemental Appropriation of Money for the Various Funds, Departments, Offices and Agencies of the City of Greenwood Village, Colorado, for the 2024 Fiscal Year (WIESNER) (2024-306)

This ordinance was adopted.

E. Resolution No. 35-24: A Resolution Reappointing Thomas Foottit to the Greenwood Village Board of Adjustments and Appeals and Establishing an Expiration Date of His Term (2024-308)

This resolution was adopted.

F. Resolution No. 36-24: A Resolution Reappointing Kathleen Smith to the Greenwood Village Arts and Humanities Council and Establishing an Expiration Date of Her Term (2024-309)

This resolution was adopted.

G. Resolution No. 43-24: A Resolution Repealing Resolution No. 30, Series of 2016 and Adopting a Recreation Reimbursement Policy (KERBER) (2024-341)

This resolution was adopted.

H. Resolution No. 44-24: A Resolution Appointing Paul Wilson to the Greenwood Village Board of Adjustments and Appeals and Establishing an Expiration Date of His Term (2024-348)

This resolution was adopted.

REMOVED FROM THE CONSENT AGENDA

D. Resolution No. 34-24: A Resolution Reappointing Richard Easton to the Greenwood Village Planning and Zoning Commission and Establishing an Expiration Date of His Term (2024-307)

A motion was made by Mayor Pro Tem Dave Kerber, seconded by Councilmember Anne Ingebretsen; to adopt Resolution No. 34-24: A Resolution Reappointing Richard Easton to the Greenwood Village Planning and Zoning Commission and Establishing an Expiration Date of His Term. The motioncarried byunanimous polled vote.

Yes: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton, Libby Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*

No: *0 - None*

Recused: *0 - None*

District Two Councilmembers thanked Mr. Easton for his continued service to the Planning and Zoning Commission.

6. PUBLIC HEARINGS

A. Resolution No. 40-24: A Resolution Approving the Application for an Entertainment Facility Liquor License as Requested by The Clubhouse Denver LLC d/b/a Clubhouse Work and Golf, 5680 Greenwood Plaza Blvd Suite 100 & 120, Greenwood Village, CO 80111 (Ingebretsen) (2024-339)

A quasi-judicial public hearing of the Local Licensing Authority was held at 7:17 p.m. Mayor Lantz explained the Public Hearing was being held to determine whether or not the application for an Entertainment Facility License by The Clubhouse Denver LLC d/b/a Clubhouse Work and Golf located at 5680 Greenwood Plaza Boulevard, Suite 100 and 120, Greenwood Village, CO, should be granted or denied.

Mayor Lantz accepted Exhibit A into evidence, which was a copy of the City Clerk's Office preliminary report and findings and the original application and related papers. The petition was accepted into evidence as Exhibit B.

City Attorney Haas Davidson stated the application was in proper form and order; the necessary fees had been paid, and she submitted into evidence Exhibits C and D which were the Certificate of Public Notice and the Certificate of Posting. She also noted for the record that the applicant was informed of Councilmember Hilton's remote participation in this hearing.

Mayor Lantz accepted Exhibits C and D into evidence and made them a part of the hearing record.

A motion was made by Councilmember Libby Barnacle, seconded by Councilmember Anne Ingebretsen; to accept the application and exhibits in lieu of testimony. The motion carried by unanimous voice vote.

Yes: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton, Libby Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*
No: *0 - None*
Recused: *0 - None*

Mr. Robert Runco, Attorney, Runco & Proffitt, 1616 17th Street, Suite,362 Denver, CO 80202 was sworn in.

Mr. Joshua Kaplan was sworn in and through his attorney's questions, provided a brief description of the type of coworking space for businesses he would be offering which would include the alcohol. He noted there would only be two types of beers on tap and they would be providing staff with TIPS training prior to opening. He explained the business was membership based, and they would not cater to minors. All members would be required to have IDs on file. He also noted there would be certain weekends wherein they would be open such as when Team Colorado would be in practice sessions. While their business does provide private instructors with kids, the taps would be locked in these sessions. Mr. Kaplan explained his concept further and his research into locations within the metro area. He noted they were slated to open on December 9.

There were no interested parties that spoke.

A motion was made by Councilmember Libby Barnacle, seconded by Councilmember Anne Ingebretsen to the Close Public Hearing. The motion passed by unanimous voice vote.

Yes: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton, Libby Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*
No: *0 - None*
Recused: *0 - None*

A motion was made by Councilmember Anne Ingebretsen, seconded by Mayor Pro Tem Kerber to Adopt Resolution No. 40-24: A Resolution Approving the Application for an Entertainment Facility Liquor License as Requested by The Clubhouse Denver LLC d/b/a Clubhouse Work and Golf, 5680 Greenwood Plaza Blvd Suite 100 & 120, Greenwood Village, CO 80111. The motion passed by unanimous polled vote.

Yes: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*
No: *0 - None*
Recused: *0 - None*

Mayor Lantz welcomed the new licensee and cautioned them about the importance of proper training and serving practices of alcohol.

B. Case No. PZ-24-02-SDP Orchard Station Park Site Development Plan, 5616 DTC Parkway to Construct a Park with a Walking Trail and Small Parking Lot (Ingebretsen) (2024-340)

A quasi-judicial public hearing was held at 7:33 p.m. regarding the Case No. PZ-24-02-SDP Orchard Station Park Site Development Plan, 5616 DTC Parkway to construct a park with a walking trail and small parking lot. Mayor Lantz presided with eight Councilmembers present.

City Attorney Tonya Haas Davidson stated a notice of the date, time and place of the hearing was published on the City's website, for which she offered into evidence Exhibit A, an affidavit of publication from the City Clerk. Notice was also posted on the property for which she offered, into evidence Exhibit B, a certificate of posting. Notice of the date, time and place of this hearing was also sent by mail to property owners as outlined in the Municipal Code per this type of application at least 15 days prior to this hearing. She offered into evidence Exhibit C, which was an affidavit of mailing. She noted these items complied with the Greenwood Village Municipal Code and it was her opinion the Council had jurisdiction to proceed with the public hearing. She also noted that the applicant was notified of Councilmember Hilton's remote participation in this hearing.

Mayor Lantz accepted Exhibits A, B, and C into evidence and made them part of the hearing record.

Senior Planner Mr. David French and Planning Manager Mr. Derek Stertz, were sworn in and presented the matter to Council. Senior Planner French reviewed the Orchard Station site development plan, a brief review of the application, location and the history of the property. He noted the metro district was responsible for the maintenance of the property and was originally part of the DTC Master Development Plan (MDP). He noted this property was held in joint ownership with the Goldsmith Metropolitan District. The enhancements for the project included a noise wall, parking lot and some new redesigned park walkways, 12 bicycles parking spaces, Kinetic art sculpture, a significant number of trees, and some shaded sitting areas.

He reviewed the site section showing the existing grade and the new grading proposed to provide a more level passive park which would provide a new central seating area. As part of the proposal, the proposed wall has some modulating height rises between 8 to 16 feet along Interstate 25 to help mitigate noise. It was noted that the color of the proposed wall was yet to be determined, however, the color would match the buildings in the area. The traffic study provided was not a full impact study but there was a small study showing the peak hour trips to be 9 trips per day and did not demonstrate a need for traffic mitigation for this project. He reviewed the criteria for approval, noting the proposal was in conformance of the Comprehensive plan and compatible with surrounding land uses. He noted there were no adverse impacts and any changes to uses were minimized, and disruption to existing terrain, improvements were located within and across the entire site. He also described the proposed taller replacement lighting which would be along the pathways, the height of which still meet the code requirements for the area.

Mr. Ken Lykens, 8351 E Belleview Ave, Denver, CO 80237, General Manager for Goldsmith Metropolitan District and Mr. Lee Dehmlow, 8351 E Belleview Ave, Denver, CO 80237, were

present and sworn in. Mr. Dehmlow provided a brief history of the DTC Forward project which included the proposed $3 million improvements for the proposed park, which was 30% of the project.

Mr. Dehmlow provided a review of the key design of the passive park with renewed landscaping throughout which included non-fruiting ornamental trees to mimic historical orchards that were in this location in the past. He also provided a quick review of the proposed pathways which would be oriented for most used travel and to create usable lawn space. He also highlighted an area proposing a dog walk on the west side within the native seed area. He noted the park currently has no designated seating and the upgraded proposed shaded seating area would provide more active use.

He further provided details regarding the request for the inclusion of the proposed parking lot to encourage more use from others who are further away or for families on the weekend, the types of trees that were proposed and the stainless-steel sculpture that would be obtained from San Francisco to add some dynamics and interest to the park.

Mr. Dehmlow described the elements, textures and colors of the proposed wall which would have some future identity elements added such as DTC symbology. He noted they would be coming back in the near future with a new sign program that would include some DTC identification in the proposal. He noted the current design would preserve space for this on the structure.

There was further discussion regarding the proposed lighting, which was similarly used in the RTD corridor which would enhance safety for the use of the pathway after hours.

Council requested that colors for the shading of the seating area include blue or green to keep with the theme and to work with staff to provide final designs of the wall including color and textures.

Mr. Dehmlow clarified the proposed signage program would come forward as a separate package. He noted there were four to six other areas with identification signage proposed.

A motion was made by Councilmember Libby Barnacle, seconded by Councilmember Ann Nelson; to close the public hearing. The motion carried by unanimous voice vote.

Yes: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton, Libby Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*
No: *0 - None*
Recused: *0 - None*

A motion was made by Councilmember Anne Ingebretsen, seconded by Councilmember Stahl; to Approve Case No. PZ-24-02-SDP Orchard Station Park Site Development Plan, 5616 DTC Parkway to Construct a Park with a Walking Trail and Small Parking Lot. The motion passed by unanimous polled vote.

Yes: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton, Libby Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*
No: *0 - None*
Recused: *0 - None*

7. REPORTS OF OFFICERS/BOARDS/COMMITTEES

There were no reports.

8. COMMUNICATIONS

There were no communications.

9. ADJOURNMENT

A motion was made by Councilmember Libby Barnacle, seconded by Councilmember Paul Wiesner; to Adjourn. The motion carried by unanimous voice vote.

Yes: *8 - Anne Ingebretsen, Dave Kerber, Donna Johnston, Judith Hilton, Libby Barnacle, Paul Wiesner, Thomas Stahl, Ann Nelson*
No: *0 - None*
Recused: *0 - None*

There being no further business, the meeting adjourned at 8:20 p.m.

_____
George E. Lantz
Mayor

ATTEST:

_____
Susan M. Ortiz, MMC
City Clerk

Interstate Corridor Planning Area

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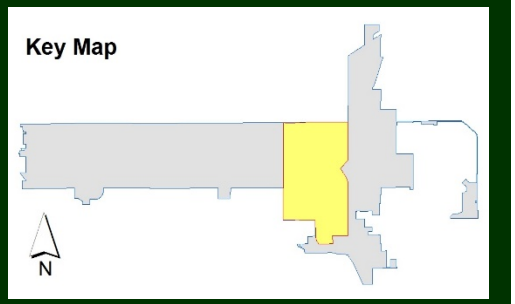


PLANNING AREA DESCRIPTION

Planning Area Boundaries

The Corridor planning area generally includes the areas of the Village south of Belleview Avenue, west of Yosemite Street, north of Arapahoe Road, and east of Quebec Street. Half of the Denver Technological Center, Greenwood Plaza and office and mixed-use centers are located within this planning area.

Planning Area History

The majority of this area was annexed into the Village in 1975. Smaller areas were annexed in 1976, 1979, 1980, 1999, 2000, 2001, 2005, 2006, and 2015.

Interstate Corridor Planning Area

CORRIDOR CHARACTER

Natural Environment

Natural features in this planning area were incorporated into the built or suburban environment.

Built Environment

The planning area is characterized by suburban office parks, an amphitheater, commercial activity, and higher density residential neighborhoods.

- Land Uses: The planning area is comprised primarily of commercial land uses with some higher-density residential components also mixed in the area.
- Residential Density: The single-family and multi-family residential area is comprised of an average of eight dwelling units per acre.
- Street Characteristics: Paved streets meander throughout the planning area. Vertical curbs and gutters are prevalent.
- Landscape: Detention ponds, open green spaces and plazas are part of the suburban commercial office park development.

CORRIDOR INVENTORY

Utilities/Services

The following utility/service providers serve the Corridor planning area:

- School District: Cherry Creek
- Sanitation: Goldsmith Gulch, Southgate, Castlewood
- Water: Castlewood, Southgate, Greenwood Plaza
- Metro Districts: Greenwood North, Greenwood, Greenwood South, Goldsmith, Orchard Valley, Marin Metropolitan Improvement District

Planning Area Facilities

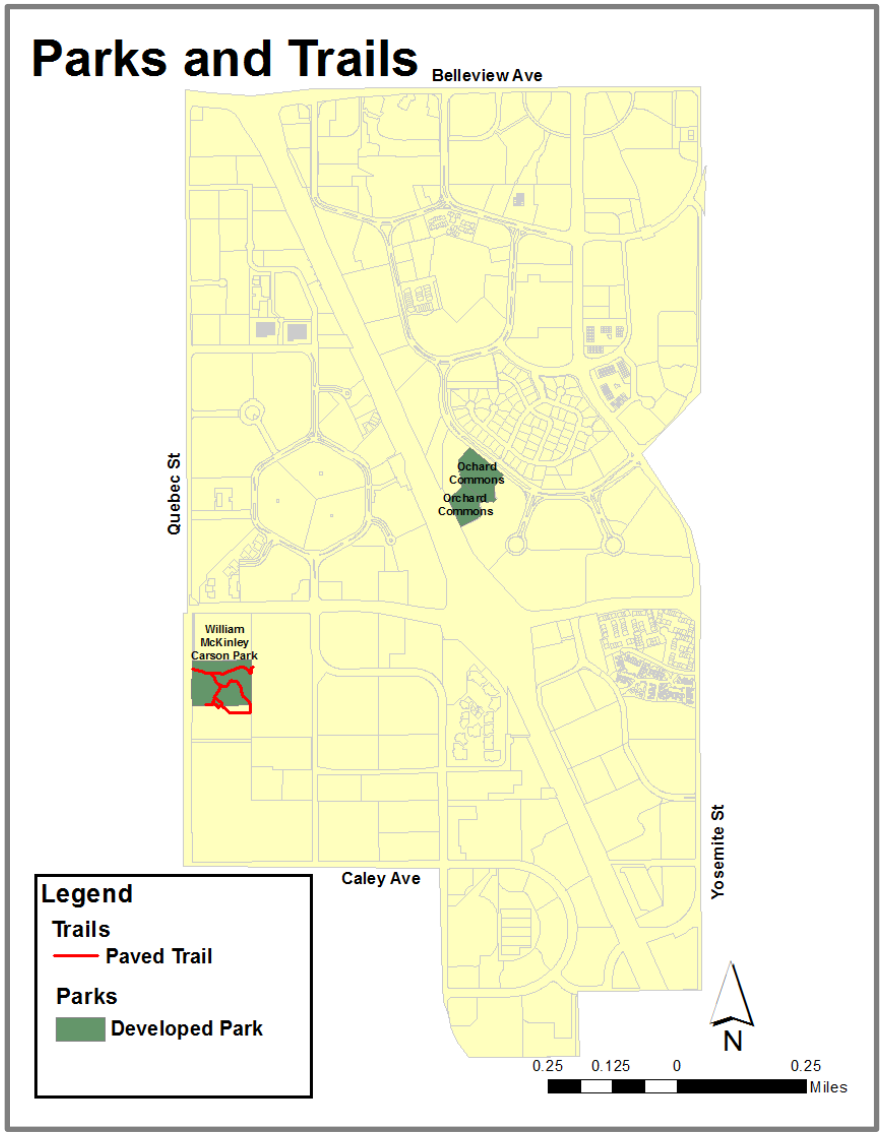
Parks and open space consist of the following:

- Improved Parks: 4.90 acres
- Unimproved Parks: 12.19 acres
- Natural Parks: None
- Bike Paths: 1.19 miles
- Equestrian Paths: None

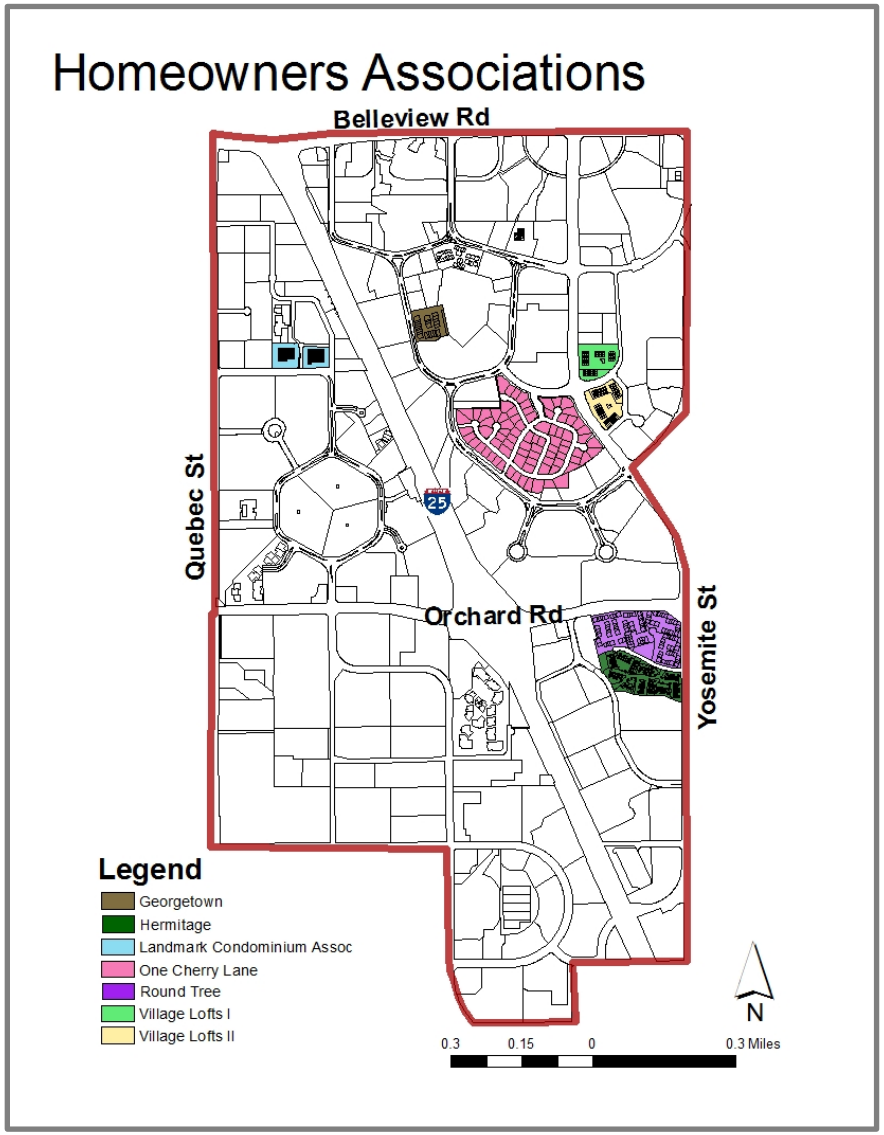
Parks

- William McKinley Carson Park
- Orchard Commons
- Orchard Station Park

Schools – None



Interstate Corridor Planning Area



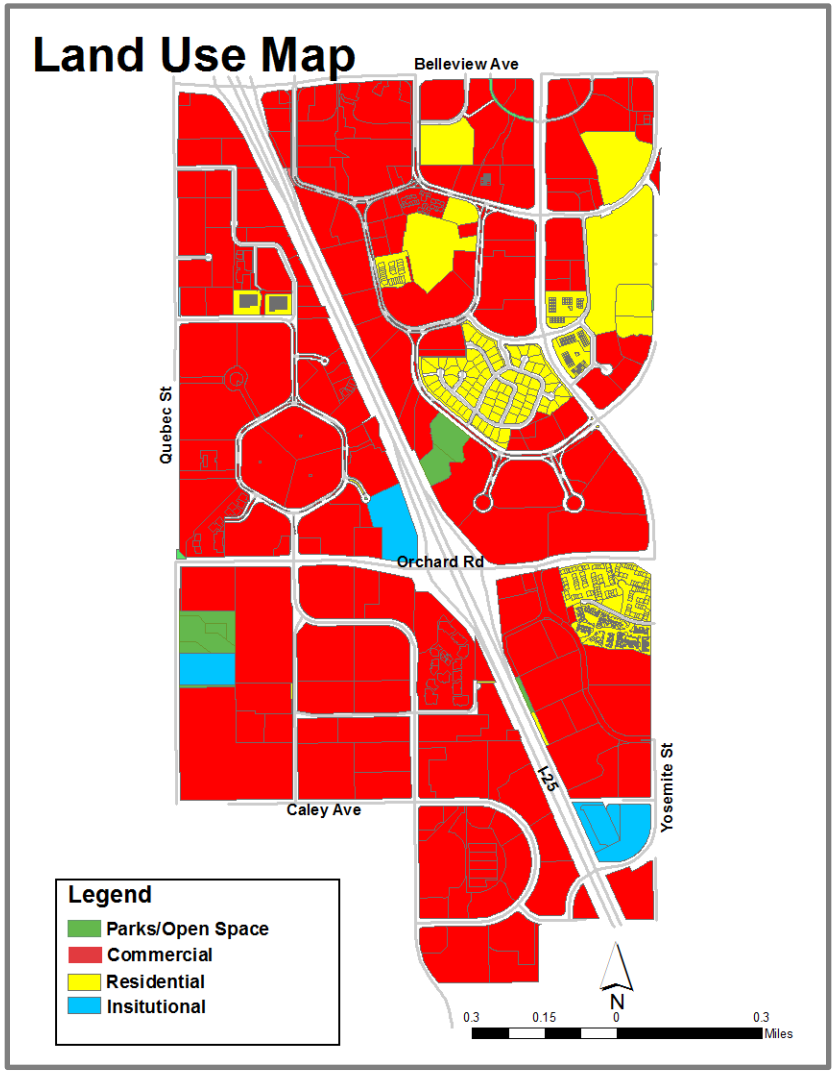
Homeowners Associations

There are seven homeowners associations maintained in the Corridor planning area. The associated neighborhoods are shown in the related map.

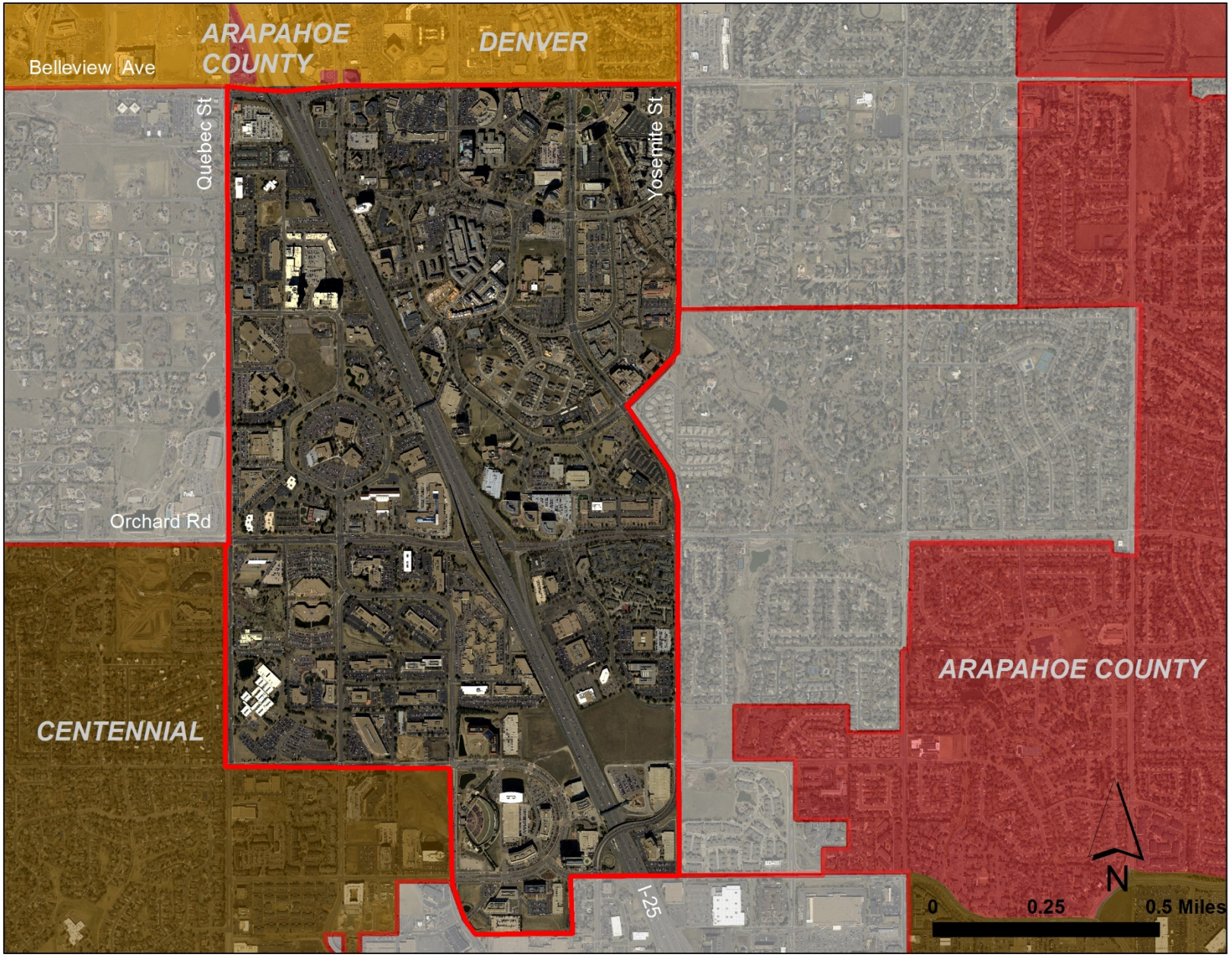
- Georgetown
- Hermitage
- Landmark
- One Cherry Lane
- Round Tree
- Village Plaza Lofts I
- Village Plaza Lofts II

THE CORRIDOR PLANNING AREA VISION

The Corridor, as a whole, serves as the primary employment district within the Village. This area provides a diverse economic and employment base. The concept of the Corridor planning area is to contain a mix of low to mid-density office, institutional and civic uses supported by retail and restaurant amenities. The existing residential is a supporting use to the commercial/employment base. `The Corridor has a background dominated by open areas, quality landscaping, scenic views and plazas. The vision preserves Colorado view corridors that attract and serve people who desire to work in an area that maximizes the unique experience of Colorado culture and natural beauty. The Corridor sets high standards in site planning, architecture, landscaping, lighting, and signage amidst an open space, park-like setting with tree-lined streets.



Interstate Corridor Planning Area



Land Use

Goals / Objectives

- ***Encourage development that supports a diverse economic and employment base.***
- ***Maintain the open space, park-like character of the Village.***
- ***Plan development to preserve scenic views and vistas.***
- ***Protect water quality when development occurs.***
- ***The current mix of uses in the I-25 Corridor is considered appropriate. Development and redevelopment should principally be focused on commercial and employment aspects of the Corridor Planning Area.***

Policies

1a. Maintain a mixture of complementary retail and restaurant amenities that serve the business office community and the Village residents.

1b. Maintain easy access to and within the Corridor to include ample parking.

1c. For all development, the developer must demonstrate that the infrastructure, roads, utilities, water, sewage, and drainage are sufficient to accommodate the proposed use and density.

1d. Protect and enhance riparian, wetland, and aquatic habits of upper Greenwood Gulch.

1e. The existing development intensity levels are considered generally appropriate for the Corridor Planning Area.

1f. Due to the built-out nature of the I-25 Corridor, significant additional housing is neither anticipated nor encouraged. Limited additional residential developments may occur where there is a previously vested right.

1g. Higher density residential development will be discouraged in the Corridor. For purposes of the Corridor Planning Area, higher density residential is a use that exceeds on average four dwelling units per acre.

Interstate Corridor Planning Area

Transportation

Goals / Objectives

- ***Maintain pedestrian and bike linkages to and throughout the planning area.***
- ***Promote easy accessibility to and from the Corridor planning area and the employment activities within the area.***
- ***Minimize traffic congestion on the periphery of the planning area.***
- ***Provide ample parking for the uses planned.***
- ***To effectuate the open space and landscaping goals of the Corridor, encourage surface parking to be well landscaped and broken up into smaller lots.***

Policies

2a. Promote land use patterns, parking policies, and traffic management methods to minimize congestion.

2b. Provide an interconnected network of tree-lined streets that tie into the surrounding neighborhoods, allowing automobile, pedestrian, and bicycle travel as appropriate.

2c. Provide connections to the Village's comprehensive trail and sidewalk system.

Image, Identity, & Quality of Life

Goals / Objectives

- ***Ensure that development minimizes the impact of noise and light on adjacent commercial and residential areas.***
- ***Promote the planning area as a major office park in the region.***
- ***Assure highest quality architecture and site planning design.***
- ***Promote high quality open space and landscaping in development.***
- ***New buildings should relate well to the existing community.***
- ***Encourage development in the corridor that contains pedestrian and plaza facilities as well as open landscaped areas, that allow employees and residents to recreate, walk, exercise, and enjoy the attributes of the character of the Corridor which includes natural views and a sense of openness.***

Policies

3a. Emphasize landscaping and open space treatments for development in the Corridor Planning Area

3b. A 30 percent open space requirement for development and redevelopment in the Corridor Planning Area is appropriate.

3c. Promote the design of buildings and streets to maintain existing view planes.

3d. Support design measures that eliminate or minimize the impacts of blank walls along streets, parks, and plazas.

3e. Encourage public plazas with amenities such as parks, outdoor pavilions, water features, benches, and trees

Image, Identity, & Quality of Life

Policies (continued)

3f. Design entrances and parking lots to be functional and inviting with continuous landscaped walkways.

3g. Display public art, particularly at public plazas, building entrances, and along pedestrian walkways.

3h. Height limitations shall maintain existing view planes.

3i. The maximum allowed height for buildings along Quebec Street should be no greater than what exists at the current building setback.

3j. In determining the appropriateness of a proposed building, the structure placement, height and massing shall consider: the existing grades and topography, separation between buildings, and impacts on the surrounding area.

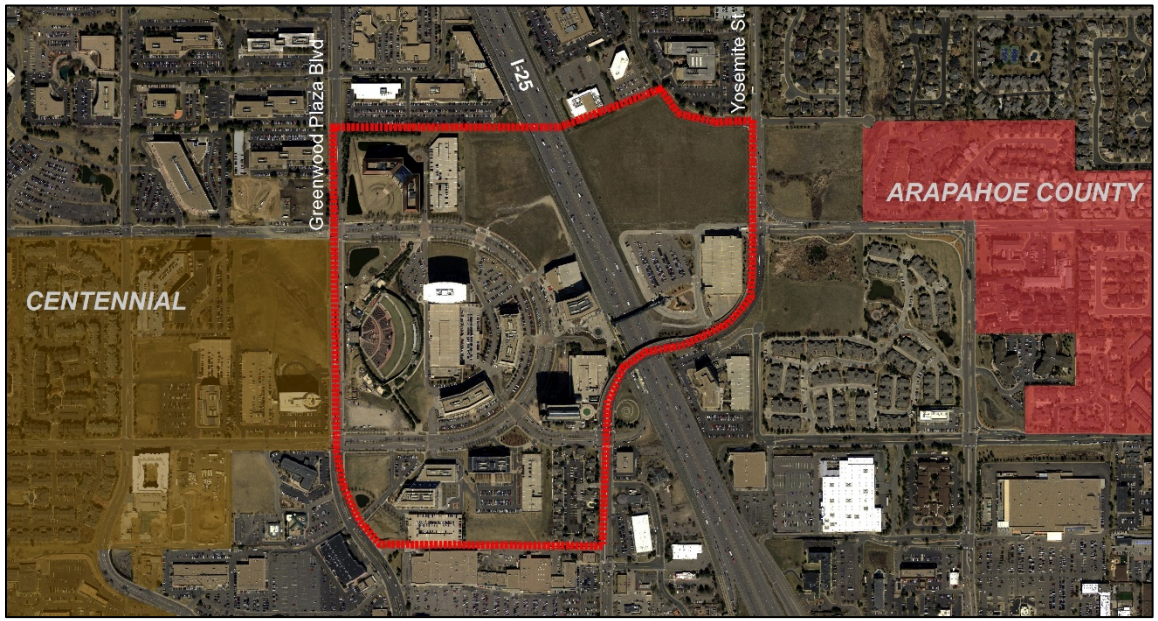
3k. Visual simulations will be required to promote an understanding of a proposed development's height and massing impact on views of the surrounding area, from multiple vantage points.

3l. Continue to encourage excellence in architecture and site planning and maintain or enhance the high-quality image, appearance, and identity of the Corridor.

THE VILLAGE CENTER PLANNING SUBAREA

The Village Center is a smaller area within the Corridor Planning Area, which has a focus on the Arapahoe Light Rail Station.

The Village Center is comprised of two parts, parcels to the east of I-25 and parcels to the west of I-25. On the west side of I-25, the Village Center has developed as a more dense office setting dominated by the light rail plaza adjoining the light rail station and the Fiddler's Green Amphitheatre. The west side of the Village Center is walkable in and around S. Fiddlers Green Circle, a tree lined boulevard. The east side of the Village Center currently has one office building and the RTD parking garage which provides parking to support the light rail station located on the west side of I-25.



Interstate Corridor Planning Area

The goals and policies of the Corridor Planning Area apply to the Village Center except for the policies below which may be conflicting:

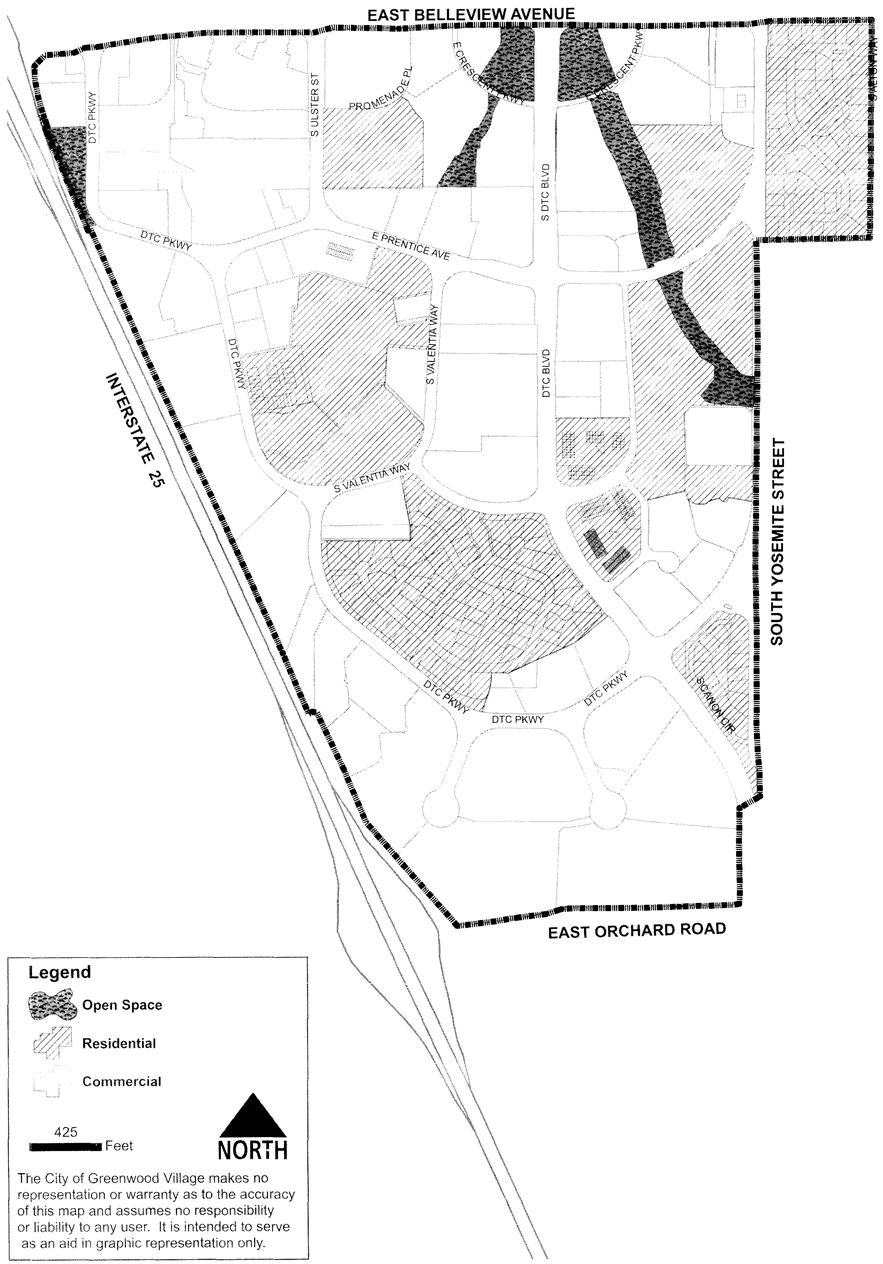
- Due to the built-out nature of the I-25 Corridor, additional housing is neither anticipated nor encouraged in the Village Center.
- Greater density will be considered in the Village Center than what is otherwise present in the Corridor Planning Area, but this greater density should not exceed the Municipal Code standards for Town Center and Mixed Commercial.
- The tallest buildings in the Village Center will be located along I-25. Other buildings in the Village Center to the west and east should decline in height to transition and blend into buildings adjacent to the Village Center. Buildings along Yosemite should be no taller than two stories.
- Ample parking in the Village Center will accommodate the uses proposed shall be provided.
- For all development, the developer must demonstrate the infrastructure in Greenwood Village is sufficient to accommodate the proposed use and density.

The Village Center serves as the primary employment district within the village.

DENVER TECH CENTER MASTER DEVELOPMENT PLAN AMENDMENT 2013

TOWN CENTER DISTRICT

EXISTING LAND USE MAP



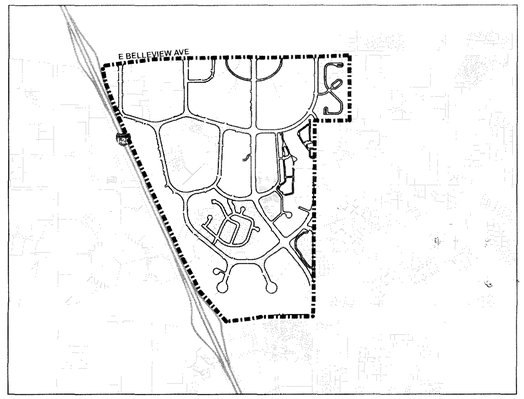
Legend

- Open Space
- Residential
- Commercial

425 Feet

NORTH

The City of Greenwood Village makes no representation or warranty as to the accuracy of this map and assumes no responsibility or liability to any user. It is intended to serve as an aid in graphic representation only.



not to scale — Vicinity Map

PURPOSE STATEMENT

The Denver Tech Center is intended to be an integrated mixture of complementary uses. The master plan encourages development which will be of enduring value while preserving the area's beauty and contributing to the overall quality of life for the people who work or live in the DTC. Value received will be enhanced by attention to quality and compliance with the overall DTC Master Plan Design Standards and T.C. Town Center Zone District.

EXISTING ZONING

The existing zoning of all land in the Denver Technological Center Town Center District by the City of Greenwood Village is "Town Center District"

AMENDMENT HISTORY

Date:

1976	City action Res. 7-1976, original Greenwood Village DTC MDP
1982	City action Res. 15-1982, update to site data to reflect reallocation of building densities
1986	City action Res. 29-1986, update to site data to reflect reallocation of building densities
1986	City action Res. 34-1986, amendment to Settlement Agreement, update site data
1989	City action Res. 104-1989, Second Amendment to Settlement Agreement, update to site data to reflect reallocation of building densities
1991	City action Ord. 41/Res. 44, Third Amendment to Settlement Agreement
1995	Inclusion of Trove (Coral Place) (no City action)
2000	Update to site data to reflect reallocation of building densities (no City action)
2006	Update to site data to reflect reallocation of building densities (no City action)
2010	Update to site data to reflect reallocation of building densities (no City action)
2013	City initiated changes to define process, site and design standards, and establish per site density

LEGAL DESCRIPTION

A parcel of land located in Section 16, Section 21 and Section 15, Township 5 South, Range 67 West of the Sixth Principal Meridian, City of Greenwood Village, County of Arapahoe, State of Colorado, more particularly described as follows:

Beginning at the Northwest corner of said Section 15; thence North 89°56'50" East along the North line of the Northwest one-quarter of said Section 15, a distance of 661.62 feet;
thence South 0°42'54" West along the East line of Tract 8, Clark Colony Subdivision of Section 15 extended, a distance of 685.52 feet to the Northeast corner of Tract 9, Clark Colony Subdivision of Section 15;
thence South 0°43'31" West along the East line of said Tract 9, a distance of 655.45 feet to the Southeast corner of said Tract 9;
thence South 89°55'11" West along the South line of said Tract 9, a distance of 661.47 feet to a point on the East line of the Northeast one-quarter of said Section 16;
thence South 0°43'34" West along the East line of said Northeast one-quarter of said Section 16, a distance of 1311.76 feet to the Northeast corner of the Southeast one-quarter of said Section 16;
thence South 0°44'55" West along the East line of said Southeast one-quarter, a distance of 2648.11 feet to the Northeast corner of said Section 21;
thence South 0°15'45" West along the East line of the Northeast one-quarter of said Section 21, a distance of 51.00 feet to a point on the easterly extension of the South right-of-way line of Orchard Road as defined by the plat named Roundtree-Phase I (Amended);
thence South 89°56'42" West along said extension and along said South right-of-way line, a distance of 763.90 feet to an angle point in said South right-of-way line;
thence South 78°19'51" West along said South right-of-way line, a distance of 1232.28 feet to a point on the East right-of-way line of Interstate Highway No. 25;
thence departing said South right-of-way line, South 69°41'02" West a distance of 105.24 feet to a point on the center line of said Interstate Highway No. 25;
thence North 24°10'05" West along said center line, a distance of 6169.48 feet to the North line of said Section 16;
thence North 89°52'59" East along said North line, a distance of 4663.73 feet to the point of beginning, containing 19,433,896 square feet or 446.1409 acres more or less.

Planning & Zoning Certificate

Approved by the City of Greenwood Village Planning & Zoning Commission this 3rd day of December, 2013.

Chairman

City Council Certificate

Approved by the City Council of the City of Greenwood Village.
Witness my hand and the corporate seal of the City of Greenwood Village this 16th day of December, 2013.

Mayor

Attest:

City Clerk

NOT COMPARED
State of Colorado } s.s.
County of Arapahoe }
An instrument of which the annexed purport duplicate was received this 6th day of February, 20 14
Matt Crane
County Clerk
by P. Flanagan Deputy

Clerk and Recorders Certificate

This plan was filed for record in the office of the County Clerk and Recorder of Arapahoe County at 7:44 AM. on the 6th day of February, 2014, in Book 445, Page 12-15, Map —, Reception D4009803.

County Clerk and Recorder
Matt Crane
By P. Flanagan

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Denver Tech Center Master Development Plan Amendment 2013
Town Center District

Development Standards and Review Process

2013 Existing Conditions
Properties are recognized as the as-built condition.

The total floor area of 22,256,314 square feet is based on the 1996 Settlement Agreement. This floor area was established by taking the area of the DTC in 1986, which was18,546,928 square feet, and calculating the maximum building coverage which is 40% of the total area, then multiplying the maximum building coverage (7,418,771 square feet) by three (3) to establish the 1.2 floor area ratio (FAR). The existing projects built or under construction as of the 2013 DTC MDP are depicted in the table to the right. The 1986 Settlement Agreement expired January 1, 2011.

Development within this Master Development Plan will be reviewed on a parcel by parcel basis within the parameters of the Greenwood Village Municipal Code as amended. Any exception to meeting density, parking and open space requirements on a parcel by parcel basis may only be approved by the City Council in accordance with the Greenwood Village Municipal Code.

Allowed Uses
Allowed uses are those allowed within the Town Center Zone District per Greenwood Village Municipal Code as amended.

Development Standards
Town Center District (T.C.) zoning restricts building ground coverage to 40 percent of the gross acreage and restricts the net floor area to no more than 3 times the maximum allowed building ground coverage. Surface parking shall not exceed 40 percent and must be sufficient to accommodate all parking needs without the use of public streets.

Land Coverage
- Allowed densities calculated on a per parcel basis
- Building Coverage: 40 percent maximum
- Parking Ground Coverage (includes surface and garage footprint): 40 percent maximum
- Open Space: 30 percent minimum
- Maximum Land Use Density: Three (3) times the building coverage maximum

Setbacks

Minimum Setbacks	Building	Parking	Signage	Utility Cabinets
Front or Streetside (from street curb face)	40 ft.	40 ft.	20 ft.	25 ft.
Side-Rear (internal from property line	15 ft.	10 ft.	20 ft.	n/a
I-25 (from property line)	50 ft.	50 ft.	n/a	n/a

Review Process
Subdivisions
All subdivision of property shall be consistent with the process set forth in the Greenwood Village Municipal Code as amended.

Rezoning
All rezoning shall be consistent with the process and standards set forth in the Greenwood Village Municipal Code as amended.

Master Plan Amendments
All Master Plan Amendments that include a modification to the uses defined by the MDP shall be consistent with the process and standards set forth in the Greenwood Village Municipal Code as amended. A modification or deviation from the site data or design standards as set forth on the MDP may be reviewed through the Site Development Plan review. Existing and forecasted FAR table may be updated administratively to reflect new development.

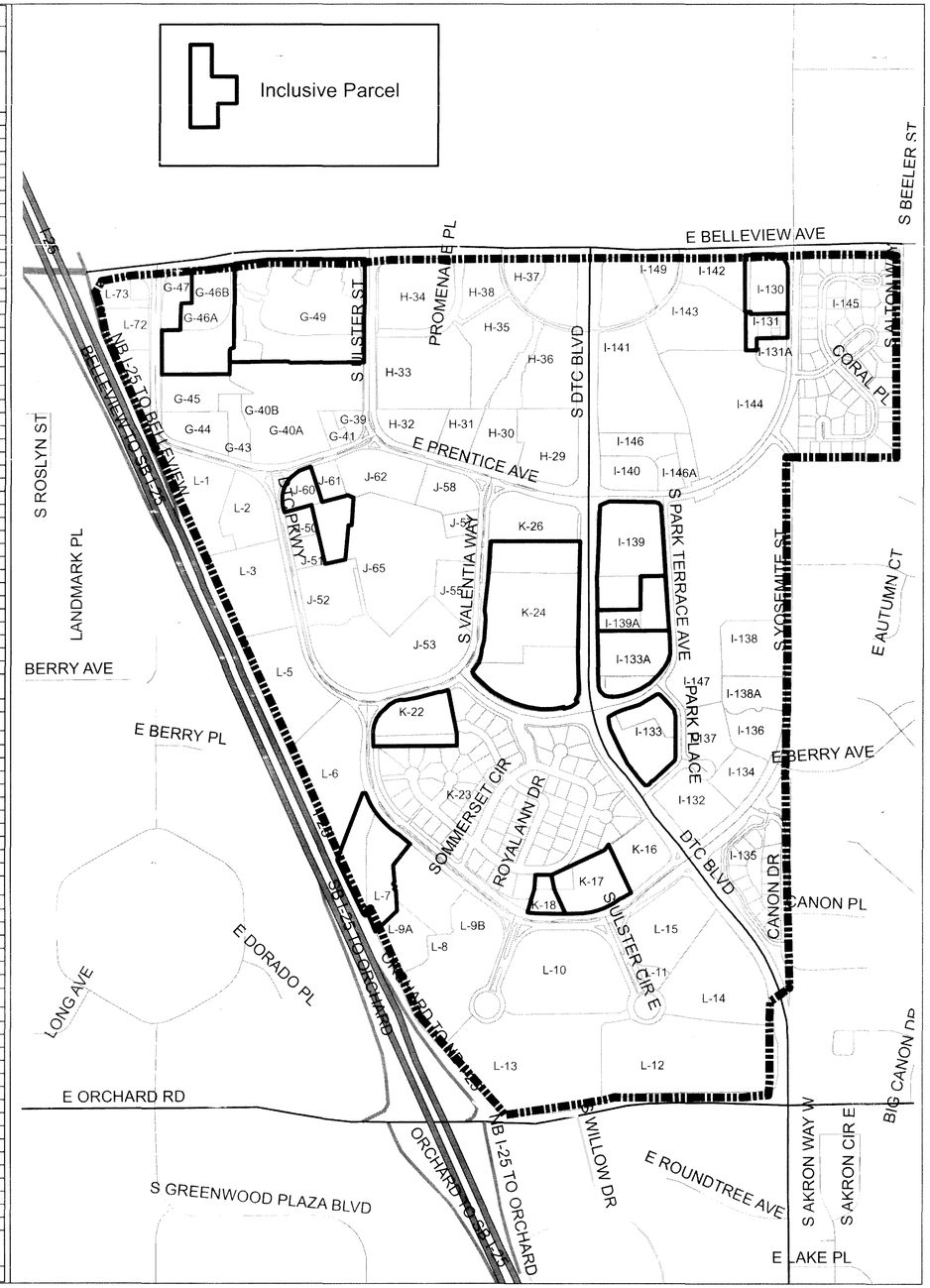
Use
Applicants must demonstrate that the proposed use:
1. Is consistent with the Master Development Plan
2. Provides harmonious development
3. Reinforces existing uses adjacent to the site and throughout DTC
4. Promotes the general welfare of all landowners and tenants in DTC
5. Protects and enhances the present and future value of all property in DTC

Special Use Review
All special use reviews shall be consistent with the process and standards set forth in the Greenwood Village Municipal Code as amended.

Site Development Plans
All Site Development Plans shall be consistent with the process and standards set forth in the Greenwood Village Municipal Code as amended.

Existing and Historically Allocated Floor Area Ratios

Block and Building No.	Building Address	Existing: Parcel Area (SF)	Existing: Gross Floor Area (SF)	Existing: Floor Area Ratio	DTC 2010 Historic Allocation of Floor Area Ratios: Existing and Historic Allocation of Floor Area (SF)	DTC 2010 Historic Allocation of Floor Area Ratios: Remaining Historic Allocation of Floor Area (SF)	Total Floor Area Ratio
G-47	7700 East Belleview Avenue	52,863	10,000	0.189	63,436	53,436	1.200
G-46A,B	7730 East Belleview Avenue	229,300	142,688	0.622	142,688	0	0.622
G-49	8000 East Belleview Avenue	505,637	111,575	0.221	200,000	88,425	0.396
G-45	5200 DTC Parkway	94,979	51,035	0.537	51,035	0	0.537
G-44	5275 DTC Parkway	87,911	15,066	0.171	90,427	75,361	1.029
G-43	5295 DTC Parkway	53,301	16,600	0.311	63,961	47,361	1.200
G-40A, G40B	7935 East Prentice Avenue	377,184	128,647	0.341	218,918	90,271	0.580
G-41	8085 East Prentice Avenue	24,666	8,413	0.341	29,599	21,186	1.200
G-39	8095 East Prentice Avenue	24,989	6,610	0.265	29,987	23,377	1.200
Block G Subtotals		**1,450,830**	**490,634**	**0.338**	**890,051**	**399,417**	**0.613**
H-29	5299 DTC Boulevard	160,087	197,120	1.209	197,120	0	1.209
H-32	8101 East Prentice Avenue	87,114	149,971	1.722	149,971	0	1.722
H-34	8200 East Belleview Avenue	230,084	169,033	0.735	287,266	118,233	1.249
H-31	8231 East Prentice Avenue	65,601	18,045	0.275	78,720	60,675	1.200
H-30	8301 East Prentice Avenue	104,548	53,738	0.514	53,738	0	0.514
H-35	8350 East Crescent Parkway	181,464	85,776	0.473	100,000	14,224	0.551
H-38	8300 East Crescent Parkway	91,859	70,011	0.762	70,011	0	0.762
H-37	8310 East Belleview Avenue	55,270	6,249	0.113	10,000	3,751	0.181
H-33 - Res.	5200 South Ulster Street (387 Units)	235,164	501,910	2.134	501,910	0	2.134
H-36	8390 East Crescent Parkway	150,489	127,955	0.850	136,000	8,045	0.904
Block H Subtotals		**1,364,580**	**1,379,817**	**1.011**	**1,584,745**	**204,928**	**1.161**
I-132	5690 DTC Boulevard	126,729	171,400	1.352	180,000	8,600	1.420
I-134	5655 South Yosemite Street	76,797	75,498	0.983	75,498	0	0.983
I-130	5117 & 5131 South Yosemite	99,058	18,420	0.186	100,380	81,960	1.013
I-131	5191 South Yosemite, Suites A & B	25,997	4,950	0.190	31,196	26,246	1.200
I-138	5555 South Yosemite	135,579	39,690	0.293	50,000	10,310	0.369
I-138A - Res.	5565 South Yosemite (91 Beds)	197,316	84,307	0.427	85,000	693	0.431
I-136	5571 South Yosemite	88,707	0	0.000	90,000	90,000	1.015
I-135 - Res.	Cannon Villas (15 Single-family lots)	330,817	34,226	0.103	67,500	33,274	0.204
I-137	No Address Assigned	93,000	0	0.000	80,000	80,000	0.860
I-144 - Res.	8899 East Prentice Avenue (210 Units)	397,901	300,000	0.754	300,000	0	0.754
I-147 - Res.	5400 Park Terrace Avenue (304 Units)	799,054	475,000	0.594	475,000	0	0.594
I-145 - Res.	Coral Place/Trove (60 Single-family lots)	824,036	176,157	0.214	250,000	73,843	0.303
I-140	5290 DTC Boulevard	76,892	10,280	0.130	10,280	0	0.130
I-141	8400 East Crescent Parkway	312,275	127,080	0.407	137,000	9,920	0.439
I-142	8490 East Crescent Parkway	77,573	37,940	0.489	37,940	0	0.489
I-143	8450 East Crescent Parkway	213,551	89,864	0.421	120,000	30,136	0.562
I-131B	5201 South Yosemite	34,772	13,010	0.374	14,000	990	0.403
I-139	5302, 5312, 5322 DTC Boulevard	230,695	36,471	0.158	88,000	51,529	0.381
I-139A	5342 DTC Boulevard	88,800	10,020	0.113	10,500	480	0.118
I-146A		63,476	7,600	0.120	7,600	0	0.120
I-146B		68,060	76,256	1.120	76,256	0	1.120
I-133A - Res.	5410 South Park Terrace Avenue	152,114	121,760	0.800	121,760	0	0.800
I-133 - Res.	5677 South Park Place (245 Units, inclusive of I-133A)	174,511	143,348	0.821	157,683	14,335	0.904
I-149	8480 East Belleview Avenue	47,467	7,878	0.166	10,000	2,122	0.211
Block I Subtotals		**4,737,177**	**2,061,155**	**0.435**	**2,575,593**	**514,438**	**0.544**
J-51	5350 DTC Parkway	34,041	13,124	0.386	51,061	37,937	1.500
J-50	5310 DTC Parkway	29,720	8,027	0.270	26,748	18,721	0.900
J-61	7950 East Prentice Avenue	40,000	13,776	0.344	36,000	22,224	0.900
J-62	8000 East Prentice Avenue	136,102	39,407	0.290	41,000	1,593	0.301
J-57	5325 South Valentia Way	29,999	11,205	0.374	26,999	15,794	0.900
J-55	5347 South Valentia Way	79,999	33,776	0.422	71,999	38,223	0.900
J-60	5300 DTC Parkway	118,922	64,760	0.545	114,760	50,000	0.965
J-58 -Res.	8300 East Prentice Avenue (104 Units)	86,624	87,563	1.011	87,563	0	1.011
J-52 - Res.	5400-5448 DTC Parkway (25 Units)	143,478	64,155	0.447	64,155	0	0.447
J-53 - Res.	5500 DTC Pkwy. (248 Units)	381,585	348,892	0.914	385,845	36,953	1.011
J-65 - Res.	5335 South Valentia Way (420 Units)	428,194	379,278	0.886	417,206	37,928	0.974
Block J Subtotals		**1,508,664**	**1,063,963**	**0.705**	**1,323,336**	**259,373**	**0.877**
K-24	5350 South Valentia Way	614,319	194,114	0.316	835,715	641,601	1.360
K-22	5570 DTC Parkway	219,688	26,085	0.128	184,172	156,087	0.838
K-18	5650 DTC Parkway	42,009	15,956	0.380	50,411	34,455	1.200
K-17	5750 DTC Parkway	134,288	30,910	0.230	45,000	14,090	0.335
K-16	5675 DTC Boulevard	84,238	48,384	0.574	48,384	0	0.574
K-23 -Res.	One Cherry Lane (79 Single-family lots)	1,254,569	141,732	0.113	630,000	488,268	0.502
K-26	8400 East Prentice Avenue	148,463	172,375	1.16	172,375	0	1.161
Block K Subtotals		**2,497,574**	**631,556**	**0.253**	**1,966,057**	**1,334,501**	**0.787**
L-73	5105 DTC Parkway	48,183	48,093	0.998	57,820	9,727	1.200
L-72	5111 DTC Parkway	63,092	0	0.000	81,599	81,599	1.293
L-1	5251 DTC Parkway	189,794	221,586	1.168	221,586	0	1.168
L-2	5290 DTC Parkway	118,445	31,105	0.263	142,134	111,029	1.200
L-3	5445 DTC Parkway	236,312	304,878	1.290	304,878	0	1.290
L-5	5555 DTC Parkway	220,455	88,817	0.403	1,000,000	911,183	4.536
L-6	5575 DTC Parkway	263,071	125,000	0.475	125,000	0	0.475
L-7	5613 DTC Parkway	199,804	208,800	1.045	208,800	0	1.045
L-8	5619 DTC Parkway	329,355	227,897	0.692	292,494	64,597	0.888
L-9A	5619 DTC Parkway	94,525	0	0.000	900,000	900,000	9.521
L-9B	5619 DTC Parkway	142,876	0	0.000	102,732	102,732	0.719
L-10	5800 DTC Parkway	379,087	72,316	0.191	454,814	382,498	1.200
L-13	8505 East Orchard Road	484,288	599,520	1.238	623,396	23,876	1.287
L-11	5750 South Ulster Circle	20,158	5,990	0.297	16,780	10,790	0.832
L-15	5700 DTC Parkway	214,201	48,197	0.225	257,041	208,844	1.200
L-14	5775 DTC Boulevard	310,155	132,399	0.427	133,099	700	0.429
L-12	8745 East Orchard Road	512,743	152,628	0.298	615,292	462,664	1.200
Block L Subtotals		**3,826,544**	**2,267,226**	**0.592**	**5,537,465**	**3,270,239**	**1.447**
TOTAL		**15,385,369**	**7,894,351**	**0.513**	**13,877,247**	**5,982,896**	**0.902**



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Denver Tech Center Master Development Plan Amendment 2013
Town Center District
Page 3 of 4
Site and Design Standards

Conflicts
Where standards between Greenwood Village Code and this document conflict, the more restrictive shall prevail.

Design Objectives
Design Standards shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to:
- Building and parking orientation must be sensitive to adjacent sites as well as street views.
- Shadow studies may be required to determine that any shadows cast do not have adverse impacts, particularly on public roads.

General Design
The following general design elements are encouraged:
- Public or private outdoor gathering areas;
- Useable public spaces;
- Interesting streetscapes;
- Pedestrian ways to civic uses and amenities;
- Public art and public plazas; and
- Inviting street-level retail storefronts that are oriented toward pedestrians and provide visually interesting forms or displays for pedestrians.

Exterior Building Design
Exterior Building Design shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to:
- All buildings are to be "predominantly" brick or masonry, not metal or glass. Other materials may be considered for accents.
- Limited amounts of stucco and cementitious siding may be considered for retail or residential buildings if the quality of the design merits such consideration.
- Highly reflective glass is not allowed. Glazing may be used to help establish an appropriate building scale and to help identify uses.
- Transparent glazing should be utilized at ground levels where appropriate to encourage pedestrian activity.
- Reflective glazing may occur on the second and third surfaces of the glazing unit if energy consumption warrants and if the color is blue, bronze or gray. Up to an eight percent light transmission factor will be allowed on these surfaces.
- Areas with height restrictions shown in Exhibit 6 (Page 4 of 4) shall conform to those standards.

Pedestrian Access, Circulation and Sidewalks
General Design shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to:
- Detached sidewalks are required adjacent to streets and must have a minimum width of eight (8) feet, and must be setback a minimum of eight (8) feet from the curb.
- At least one sidewalk connection between the building and the perimeter street is required.
- Large parking areas or structure areas must have sidewalk connections to the building entries or ground plaza areas.
- Site and building design must accommodate pedestrian circulation on site from parking areas to adjoining streets and buildings.
- All driveway entries must have an adjacent sidewalk, with a minimum width of five (5) feet.
- Benches and other amenities are encouraged for the creation of activity areas.

View Preservation
The City encourages building design and orientation that considers and respects views from other properties of the mountains and Cherry Creek Reservoir.

Topography and Grading
- Topography standards shall comply with the standards set forth in the Greenwood Village Municipal Code as amended.
- Site plans should attempt to conform to existing topography and blend with adjoining and perimeter roadways.
- Changes to topography should be minimized on all development sites. Special attention should be given to providing smooth grading transitions between neighboring development sites. Graded slopes shall not exceed 3:1 and 4:1 in turf and lawn areas. Concentrated drainage across walkways and other pedestrian areas is not permitted.

Climate Considerations
Climate considerations shall comply with the standards set forth in the Greenwood Village Municipal Code as amended.

Parking Lots and Parking Structures
- Parking lots and parking structures shall comply with the standards set forth in the Greenwood Village Municipal Code as amended.
- Parking lots and structures shall use screening to promote a park-like appearance, by creating visual breaks between streets and parking lots, by reducing large expanses of pavement by including foundation plantings that visually anchor buildings to a site or by including appropriate plantings for streets, driveways or walkways; see Exhibit 1 (Page 4 of 4).

Rooftop, Ground Mounted, Wall Mounted Equipment
Equipment screening shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to the following:
- Rooftop mechanical units, communications or electronic equipment (including telecommunication dishes, antenna and the like) will only be permitted when properly screened and are a minimum of six (6) inches below a parapet wall or contained "within" a rooftop penthouse and may not be mounted on the exterior.
- Mechanical/Electrical equipment must be designed to be an integral part of any improvement. No heating, air conditioning, electrical, window washing, telecommunications or other equipment may be installed on the roof of any building or structures or attached to exterior walls unless screened with the same materials as the building exterior or enclosed in a chimney element that is integral to the building architecture.
- Rooftop penthouse enclosures must be architecturally compatible (in scale and design) and predominately of the same material as the building.
- Rooftop materials must compliment the underlying structure. Asphalt "shingled" or non-ballasted roof materials are not permitted.
- No transformer, electric, gas, or other meter of any type or other apparatus shall be located on any power pole or attached to the outside of any building, except where specifically approved.
- All ground mounted utility meters, transformers, and pedestals must be setback a minimum of 25 feet from the adjoining street, and screened to minimize their visibility.

Open Space
- Open space for developed sites is to be predominantly irrigated turf or plant area. The intent is that open space is identifiable and functional. Isolated areas of less than 300 square feet or 5 feet in width are not qualified for inclusion toward the open space minimum calculation.

Telecommunications Facilities
Telecommunications facilities shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to the following:
- Rooftop penthouse enclosures must be architecturally compatible (in scale and design) and predominately of the same material as the building. "Stealth" type materials may be used in combination with the other penthouse materials to allow for transmission/receipt of communication signals.

Site Lighting
Site lighting shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to the following:
- The ratio of spacing to fixture height should be carefully considered for the type of lighting and building scale. Spatial relationships between pole height and building height must be approved. In no case may pole heights of twenty (20) feet be exceeded, measured from the ground to the top of the pole. Poles should be placed in a landscape or walk (vs. parking lot pavement) and mounted on a concrete base no more than six inches in height above grade.
- For an exposed top deck, pole heights cannot exceed twelve (12) feet above the surface of the parking deck and must be located on inboard aisles rather than at the perimeter of the deck area.
- Any special security lighting should be confined to building entrances or outdoor pedestrian areas. With the exception of low intensity fixtures, the lighting source should not be visible from the street.
- Fountain, artwork and seasonal/temporary lighting must be approved prior to installation.

Trash and Recycling Enclosures
Trash and recycling enclosures shall comply with the standards set forth in the Greenwood Village Municipal Code as amended.

Off Street Loading and Receiving
Off street loading and receiving shall comply with the standards set forth in the Greenwood Village Municipal Code as amended.

Drainage Ways and Stormwater Facilities
All site and building drainageways and stormwater facilities shall comply with the Greenwood Village Drainage Criteria Manual in force at the time of development.

Intersection Sight Distance
Intersection site distances shall comply with the standards in the Greenwood Village Municipal as amended.

Outdoor Eating Areas
Outdoor eating areas require permit approval by the City and shall comply with the standards set forth in the Greenwood Village Municipal Code as amended.

Parking Lot Landscaping
Parking lot landscaping shall comply with the standards set forth in the Greenwood Village Municipal Code as amended.

Minimum Planting Sizes
Minimum Plant Sizes:
- On-Site Deciduous Trees: 2-1/2" caliper (measured 4" above the ground)
- Deciduous Street Trees: 3" caliper
- Ornamental and Flowering Trees: 2" caliper measured 4" above the ground
- Evergreen or Coniferous Trees: Mix of 6-10 foot height
- Shrubs: 5 gallon maximum spacing of 36", evergreens must have 24" spread
- Vines: 1 gallon

Building Landscaping
Building landscaping shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to the following:
- All landscaping must be completed as soon as weather conditions permit and in any event before a final certificate of compliance will be issued.

Retaining Walls, Fences and Screening
Retaining walls shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to the following:
- The materials and design of walls and fences must relate to the color, materials, scale, and style of the adjacent buildings and site improvements.
- Wall alignment and heights must conform to the terracing parameter depicted in Exhibit 5 (Page 4 of 4).
- Wood, chain link, or decorative interlocking masonry block walls or fencing is not permitted.

Buffering and Screening
Buffering and screening shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to Exhibit 1 (Page 4 of 4) herein.

Plant Materials, Quality, and Installation
Landscaping shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to the following:
- See required tree specifications on a per street basis; Exhibit 2 (Page 4 of 4).
- A minimum of 500 square feet per identity sign of annual or perennial decorative flower beds readily visible to the public are required adjacent to the street frontage of each parcel, preferably in the vicinity of the identity signage.
- Planting Bed Ground Cover: Native, non-decorative rock mulch is required when the aggregate area of site planting beds exceed 500 square feet to minimize negative impacts from loss of color, water, and wind erosion.
- The selection of plant materials shall be based on climate and site conditions.
- All landscape plans shall be sealed by a licensed landscape architect.

Building Site Plant Materials
The following on site trees are required:
- A minimum of 30 trees/acre comprised as follows:
  - 50% deciduous shade trees;
  - 25% ornamental trees;
  - 25% coniferous trees.
- Those portions of a site bordering I-25 must have a minimum of 40 trees/ acre with the same mix ratios as above

Berms
Berms shall comply with the standards set forth in the Greenwood Village Municipal Code as amended in addition to the following:
- Where screening is not accomplished by an architectural element, a 3-foot high minimum earth berm with a maximum 4:1 external slope, supplemented by shrub hedges and street trees is required.

Site Furnishings, Plazas, Fountains, and Art
Site furnishings may be utilized on any particular site. Design and selection of these furnishings should consider visual and operational compatibility for a particular site. Site furnishings are an integral part of landscaping design and are to be compatible with the overall materials and colors of the building and site.
- Screening is required for all newspaper and postal boxes. Ornamental iron with a metal screen and a black finish is required. Exhibit 3 (Page 4 of 4).
- Safety bollards/barriers must be compatible with the other site furnishings.
- The use of bright yellow, red or stripped or other harsh colors is not permitted.

Maintenance
Landscape maintenance shall comply to the standards set forth in the Greenwood Village Municipal Code as amended

Residential Standards
One Cherry Lane:
- All new homes within One Cherry Lane shall be of an approved design. Any new designs shall be approved by the DTC ACC and the City of Greenwood Village.
- There must be a minimum of ten feet between homes.
- There must be a minimum of 18 feet of off street parking area within driveways.

Trove (Coral Place):
USE, HEIGHT, SETBACK, GROSS FLOOR AREA AND OTHER LIMITATIONS AND RESTRICTIONS APPLICABLE TO THE PROPERTY
- 1. Uses by right on the Property shall be as follows:
  - Detached single-family dwellings;
  - Accessory uses as allowed by the City of Greeenwood Village Municipal Code as amended.
- 2. The maximum amount of Gross Floor Area that may be constructed on the Property is 250,000 square feet.
- 3a. The maximum height of any building constructed on the Property shall be 32 feet above finished grade. In addition to the requirement set forth in the foregoing sentence, no building constructed in "Area A" shall be higher in elevation than 28 feet above the existing elevation at the point on the east boundary line of "Area A" that is located due east of the approximate center point of the footprint of said building. For purposes of this paragraph 3 (a), the "existing elevation" shall be the elevation established by the Boundary and Topographic Survey of the Property prepared by Boyd, Brown, Stude & Cambern, Consulting Engineers, and certified by Creighton R. Moore, Colorado Registered Land surveyor No. 10945, on June 21, 1991 (revision date 6/25/91), submitted by TCD North, Inc. as part of its application to rezor the Property.
- 3b. No building constructed on the Property shall contain more than two (2) stories in addition to and above a basement. The basement *in* any building on the Property may be a walkout basement.
- 4. The following setbacks and building separation requirements shall apply:
  - The minimum setbacks for the main building and accessory buildings on any lot within the Property shall be 25 feet from the DTC Town Center district boundary and 20 feet from the right-of-way line of any public street. In the event that the DTC Town Center district boundary and the right-of-way line of any public street are coterminous and constitute the boundary of a lot, the 25 foot setback shall apply.
  - The minimum distance between single-family dwellings located on lots that include within their boundaries any part of the area designated on Exhibit 4 (Page 4 of 4) hereto as the "Setback Area" shall be 40 feet.
  - The minimum distance between any single-family dwelling located in "Area A" on a lot that does not include within its boundaries any part of the "Setback Area" and any other single-family dwelling located in "Area A" shall be 35 feet.
  - In the portion of the Property designated as "Area B" on Exhibit 4 hereto (which area consists of the entire Property except "Area A"), the minimum distance between any building containing more than one dwelling unit and any other building containing more than one dwelling unit shall be 20 feet, and the minimum distance between any building containing only one dwelling unit and any other building containing one or more dwelling units shall be 12 feet.
  - Notwithstanding anything to the contrary in this paragraph 5, no building or portion thereof shall be constructed in the "Setback Area".
- 5. A minimum of two (2) off-street, garaged parking spaces shall be provided for each dwelling unit constructed on the Property. Every garage on the Property shall be attached to the dwelling units.
- 6. Primary street access to the Property shall be from South Yosemite Street. No street or driveway access shall be allowed from the Property to East Belleview Avenue or South Alton Way. In addition, no street or driveway access shall be allowed from the Property to the portion of East Prentice Avenue located east of the Property.
- 7. No pole-mounted lights on the Property shall be mounted in excess of six (6) feet above finished grade. This restriction shall not apply to any light mounted on a building, provided that any such light is both accessory to the building and mounted below the roof line of the building. All lights shall be oriented and shielded in such a manner that they do not shine directly into an abutting Property.
- 8. The following restrictions and limitations concerning dwelling units shall apply:
  - Any detached single-family dwelling constructed in "Area A" of the Property shall contain a minimum of 2500 square feet of livable floor area, with a minimum of 1500 square feet of livable first floor area.
  - At least one-half (1/2) of the dwelling units constructed in "Area B" shall contain a minimum of 2200 square feet of livable floor area.
  - No more than one-half (1/2) of the dwelling units constructed in "Area B" shall contain less than 2200 square feet of livable floor area, and any such dwelling unit that contains less than 2200 square feet of livable floor area nevertheless shall contain a minimum of 2000 square feet of livable floor area.
  - No dwelling unit constructed in the same building as any other dwelling unit shall be constructed above any other dwelling unit.
  - Floor area located in basements (whether finished or unfinished, walkout or otherwise) shall not constitute part of the livable floor area of any dwelling unit.
- 9. The Property shall be subject to a declaration of covenants that impose the following additional limitations and restriction the use of the Property.
  - Any dwelling unit constructed thereon shall have a pitched roof with the tile, shake shingle or similar roof finish; no flat roof or asphalt shingles shall be allowed.
  - No recreational vehicles, boats, or other oversized vehicles shall be parked or stored thereon overnight other than in a normal two car or greater garage.
  - No garden shed or storage shed shall be constructed thereon.
  - No "For Rent" or "Apartment" signs shall be displayed thereon.
  - Any satellite or microwave communications dish or television antenna located thereon shall be screened from view form other lots.
  - The only type of fence that may be installed along the east and west boundary lines of "Area A" is a split rail fence.
- 10. A planned sign program for the Property must be obtained from the City the City Greenwood Village City Municipal Code as amended, and all permanent signage installed on the Property must be in compliance with the approved planned sign program.
- 11. The Property shall be subject to protective covenants that include design standards and a requirement for review and approval of architectural plans by a committee appointed for that purpose.

Canon Villas:
- There must be a minimum of ten (10) feet between homes.

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Denver Tech Center Master Development Plan Amendment 2013
Town Center District

Exhibits

Exhibit 1

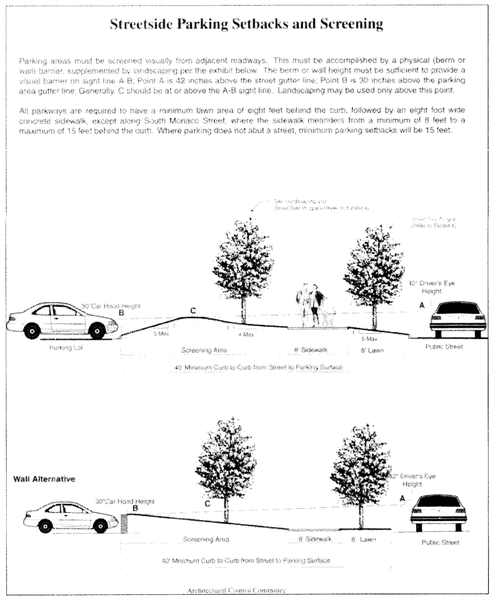


Exhibit 2

Street:	Tree Species:
Belleview Avenue**	Patmore Ash (front row),
Belleview Avenue	Linden (back row)
Berry Avenue	Redmond Linden
DTC Bouldevard**	Autumn Purple Ash
DTC Parkway	Marshall Seedless Ash
Orchard Road**	Littleleaf (Greenspire)
Orchard Road	Linden (Double Row)
Park Place	Marshall Seedless Ash
Park Place, Cul-de-Sac	Ohio Buckeye
Park Terrace Avenue (Block K)	Marshall Seedless Ash
Park Terrace Avenue (Block I)	Patmore Ash
Prentice Avenue	American Linden
Prentice Avenue (Block I)	Patmore Ash
Ulster Circle East and West	Ohio Buckeye
Ulster Street	American Linden
Valentia Way	Summit Ash
Yosemite Street	Patmore Ash

Exhibit 3

Screening is required for all newspaper
And postal boxes. Ornamental iron with
a metal screen and a black finish is required.

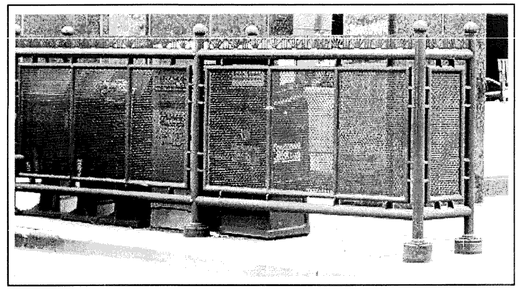
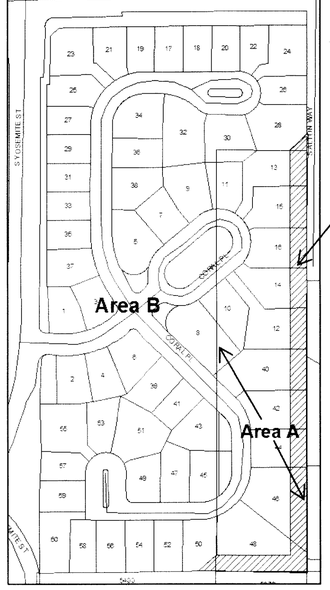


Exhibit 4



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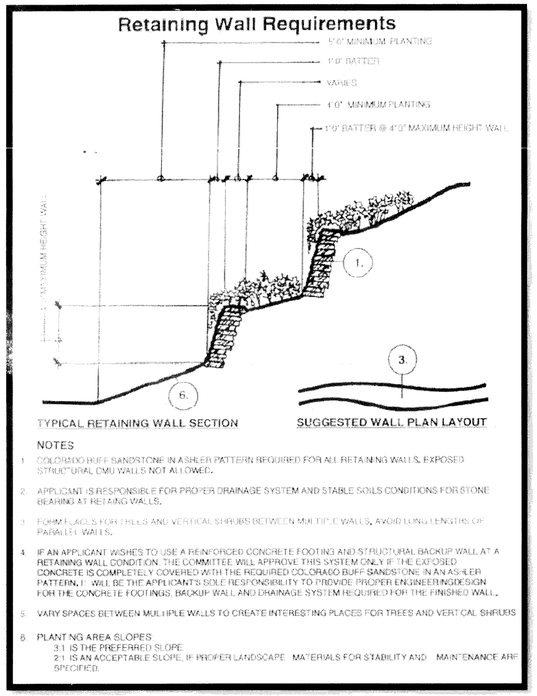
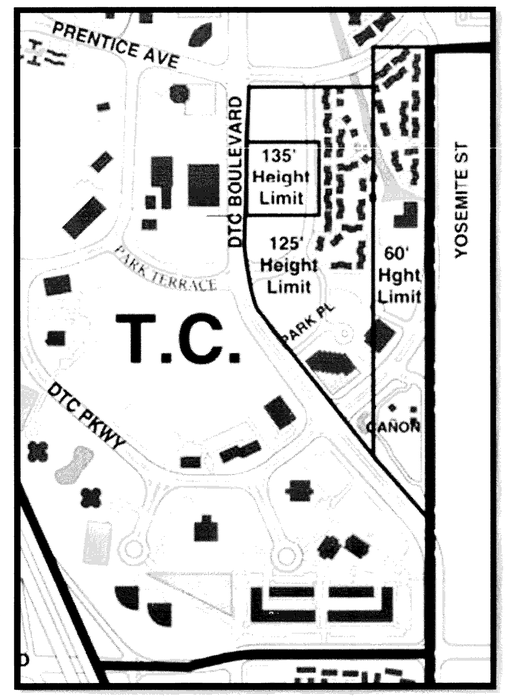


Exhibit 6



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