3. For pavement design, curb and gutter, and sidewalks see individual plan and profile sheets. Pavement design to be based on Resistance Value 'R' derived from Hveem tests and are to be approved by the Engineering Division of the El Paso County Planning and Community Development prior to work above

At intersections, all curb returns will have 20-foot radius unless otherwise noted. 5. All existing utilities have been shown according to the best available information. The contractor is responsible for field location and verification prior to beginning work. If it appears that there could be a conflict with any utilities, whether indicated on the plans or not, the contractor is to notify the engineer

and owner immediately. The contractor is responsible for the protection and repair (if necessary) of all utilities. 6. A Pre-Construction meeting shall be held with the El Paso County Planning and Community Development and Widefield Water and Sanitation District prior

Approved plans, Engineering Criteria Manual, etc. is required to be on-site at all times during construction. 8. All necessary permits, such as SWMP, ESQCP, Fugitive Dust, Access, C.O.E. 404, etc. shall be obtained prior to construction.

All handicap ramps to be per El Paso County Standard SD 2-40. 10. The contractor shall coordinate exact locations and layout with the El Paso County Planning and Community Development on the placement of any pedestrian ramps prior to construction of the curb. Pedestrian ramp locations are as shown on the plans.

11. Where appropriate, neatly saw cut all existing concrete and asphalt. Repair/replace all disturbed existing items with like materials and thicknesses. 12. All disturbed areas shall be revegetated with native grasses within 21 days of excavation per Erosion Control Plan.

13. The prepared Erosion/Sediment Control Plan is to be considered a part of these plans and its requirements adhered to during the construction of this 14. All storm and sanitary sewer pipe lengths and slopes are figured from center of manhole or bend. Pipe lengths are given as a horizontal length.

15. All storm sewer bedding to be per CDoT Standards.

16. All storm sewer pipe shall be Class III B Wall unless otherwise shown on the storm sewer plan and profile sheets. 17. All wyes and bends used in construction of storm sewer facilities shall be factory fabricated, unless approved by the El Paso County Planning and

Community Development. 18. Construction and materials used in all storm and sanitary sewer manholes shall be per specifications. Storm sewer radial deflections to be grouted or

installed per manufacturer's recommendations 19. Storm sewer manholes sizes as follows unless otherwise shown:

> 18" thru 36" use 48" I.D. manhole 42" thru 48" use 60" I.D. manhole 54" thru 60" use 72" I.D. manhole

NOTE: Manhole sizes tabulated here shall be increased, if necessary, to accommodate incoming laterals 20. Sanitary sewer manhole sizes and facilities per Widefield Water and Sanitation District Specifications. Sanitary sewers to be installed with Class 'C' bedding. Sanitary sewers deeper than 12-feet shall require Class 'B' bedding. Pipe used for construction of sanitary sewer shall be SDR 35 unless shown otherwise on plan and profiles.

21. For additional utility notes, see Utility Plan and/or Service Plan.

22. All horizontal stationing is based on the 'Face of Curb', unless otherwise shown 23. All vertical design and top of curb are based on the design point shown in the typical cross section.

24. The curb line design point is located at the intersection of the face and top of curb for EPC Type A Standard 6-inch vertical curb. See typical street section for design point locations.

25. Water and sanitary sewer service provided by Widefield Water and Sanitation District. Telephone service provided by Qwest Communications. Gas service provided by Blackhills Energy. Electric service provided by Mountain View Electric.

26. All utility construction to be conducted in conformance with the current Widefield Water and Sanitation District Specifications and/or El Paso County Specifications, whichever is greater.

27. Vertical curb to be used between curb returns (CR) and at curb inlets. Transitions from ramp to vertical curb shall be 10-feet unless otherwise approved by the El Paso County Planning and Community Development. All other curb & gutter to be ramp curb & gutter. 28. Cross pans to be 6' wide and per El Paso County Standard Detail SD\_2-26.

29. Contractor responsible for meeting all Widefield Water and Sanitation District criteria when connecting to existing stubs.

30. Curb returns shall be straight graded from CR to CR unless otherwise noted. 31. Inlets are Type 'R' inlets (CDOT STD M-604-12) unless otherwise noted.

32. USPS CBU Mailboxes are to be determined by USPS.

BENCHMARK: Monument is located at the Northwest corner of the intersection of Powers Boulevard and Fontaine Street. The monument is a 3-inch aluminum cap (FIMS ID #206). Located 51.3 feet west of the west edge of asphalt of Powers Blvd and 65.5 feet north of the north edge of asphalt of Fontaine Street. Elevation=5897.89 feet (NGVD 1929, 1960 Adj.)

BASIS OF BEARINGS is based upon a portion of the Easterly boundary of the Glen at Widefield Sudbivision Filing No. 5B as recorded under Reception No. 206712326 in the records of the Clerk and Recorder's Office, County of El Paso, State of Colorado; said line being also a portion of the Easterly Right-of-Way Autumn Glen Avenue as described in said subdivision, being monumented at the Point of Tangency of said boundary by a found cap and rebar marked "PLSC 25968" and at the Point of Curvature of said boundary by a found rebar and cap marked "PLSC 25968". Said line bears

### EL PASO COUNTY STANDARD NOTES

1. All drainage and roadway construction shall meet the standards and specifications of the City of Colorado Springs/El Paso County Drainage Criteria Manual, Volumes 1 and 2, and the El Paso County Engineering Criteria Manual.

2. Contractor shall be responsible for the notification and field notification of all existing utilities, whether shown on the plans or not, before beginning

Contractor shall keep a copy of these approved plans, the Grading and Erosion Control Plan, the Stormwater Management Plan (SWMP), the soils and

construction. Location of existing utilities shall be verified by the contractor prior to construction. Call 811 to contact the Utility Notification Center of

geotechnical report, and the appropriate design and construction standards and specifications at the job site at all times, including the following: El Paso County Engineering Criteria Manual (ECM)

b. City of Colorado Springs/El Paso County Drainage Criteria Manual, Volumes 1 and 2 Colorado Department of Transportation (CDOT) Standard Specifications for Road and Bridge Construction

4. Notwithstanding anything depicted in these plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code, the Engineering Criteria Manual, the Drainage Criteria Manual, and the Drainage Criteria Manual Volume 2. Any deviations from regulations and standards must be requested, and approved, in writing. Any modifications necessary to meet criteria after-the-fact will be entirely the developer's responsibility to rectify.

5. It is the design engineer's responsibility to accurately show existing conditions, both onsite and offsite, on the construction plans. Any modifications necessary due to conflicts, omissions, or changed conditions will be entirely the developer's responsibility to rectify.

6. Contractor shall schedule a pre-construction meeting with El Paso County Planning and Community Development (P&CDD) - Inspections, prior to

. It is the contractor's responsibility to understand the requirements of all jurisdictional agencies and to obtain all required permits, including but not limited to El Paso County Erosion and Stormwater Quality Control Permit (ESQCP), Regional Building Floodplain Development Permit, U.S. Army Corps of Engineers-issued 401 and/or 404 permits, and county and state fugitive dust permits.

8. Contractor shall not deviate from the plans without first obtaining written approval from the design engineer and P&CDD. Contractor shall notify the design engineer immediately upon discovery of any errors or inconsistencies.

9. All storm drain pipe shall be Class III RCP unless otherwise noted and approved by P&CDD.

10. Contractor shall coordinate geotechnical testing per ECM standards. Pavement design shall be approved by El Paso County P&CDD prior to placement of curb and gutter and pavement.

11. All construction traffic must enter/exit the site at approved construction access points.

12. Sight visibility triangles as identified in the plans shall be provided at all intersections. Obstructions greater than 18 inches above flowline are not

13. Signing and striping shall comply with El Paso County DOT and MUTCD criteria. [If applicable, additional signing and striping notes will be provided.]

14. Contractor shall obtain any permits required by El Paso County DOT, including Work Within the Right-of-Way and Special Transport permits. 15. The limits of construction shall remain within the property line unless otherwise noted. The owner/developer shall obtain written permission and

easements, where required, from adjoining property owner(s) prior to any off-site disturbance, grading, or construction.

# **INDEX OF SHEETS**

THE GLEN AT WIDEFIELD FILING NO 12

Plan & Profile - Golden Buffs Drive Plan & Profile - Golden Buffs Drive

Plan & Profile - Lanceleaf Drive

Plan & Profile - Lanceleaf Drive

Plan & Profile - Ground Cherry Trail Plan & Profile - Dwarf Clover Court & Cul-de-Sac

Intersection Detail - Golden Buff Drive & Dwarf Clover Court + Cul-de-Sac

Intersection Detail - Golden Buff Drive, Lanceleaf Trail & Ground Cherry Court

Signing & Striping Plan - Overall

Storm Sewer Plan - Golden Buffs A1-A4

12 Storm Sewer Plan - Laterals 'F' - Filing 12 Portion

13 Grading and Erosion Control Cover Sheet Grading and Erosion Control Plan - Overall

Grading and Erosion Control Plan - Detail

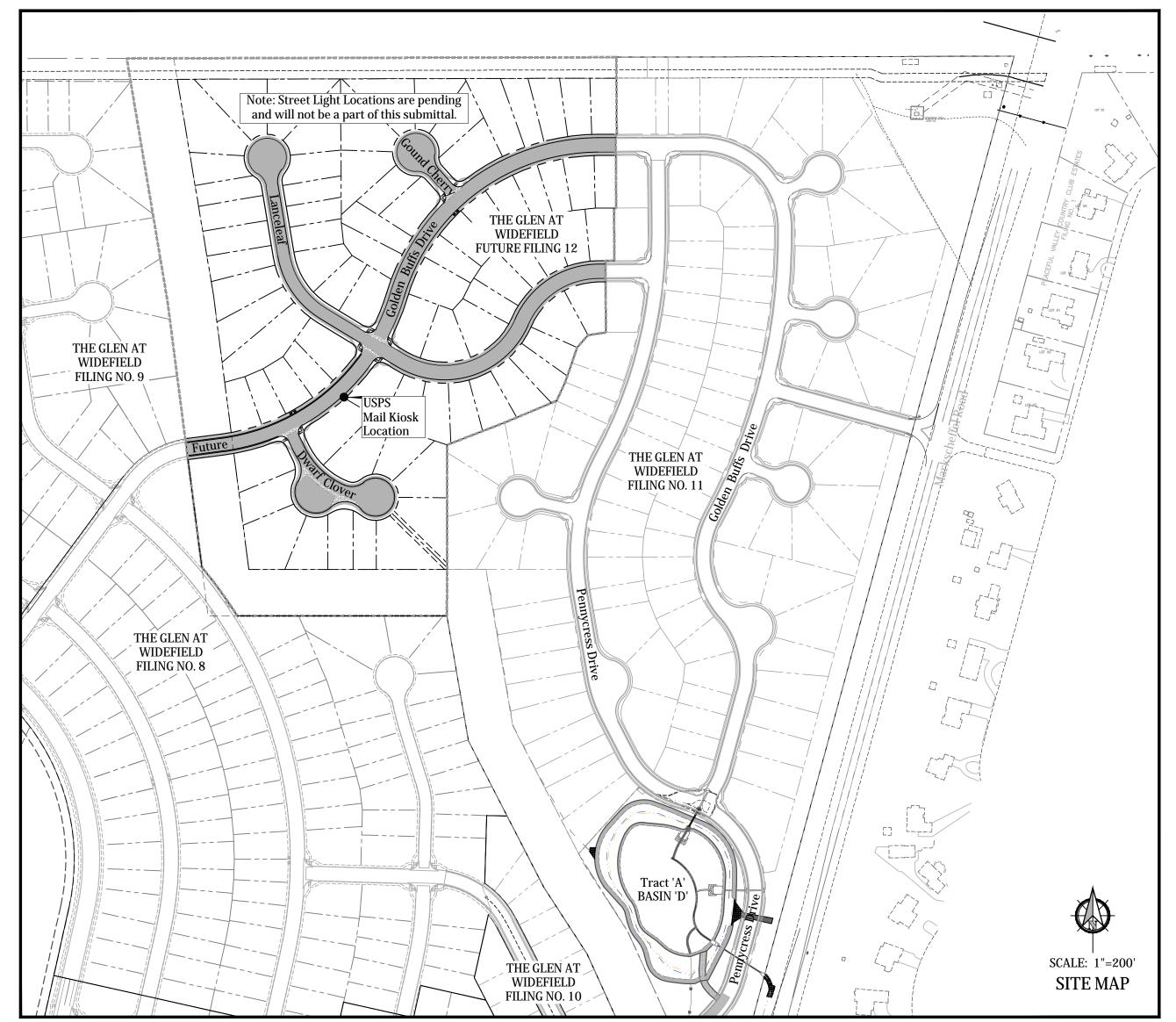
Utility Plan - Overall Utilities 17 Utility Plan - Utility Services

18 Site Detail Plan - Site Details 19 Site Detail Plan - Utility Details

# THE GLEN AT WIDEFIELD FILING NO. 12

# RESIDENTIAL SUBDIVISION CONSTRUCTION DRAWINGS CONTRUCTION CONTRUCTION DRAWINGS CONTRUCTION CONTRUCTION CONTRUCTION CONTRUCTION CONTRUCTION CONTRUCTION CONTR

# PREPARED FOR WIDEFIELD INVESTMENT GROUP



# **KEY MAP ▶**Peaceful SCALE: 1"=800' -Pennycress Dr. Mesa Ridge Parkway

Streetlight locations are pending and are not a part of this submittal.

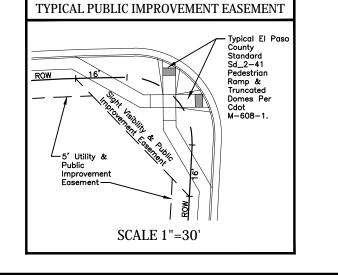
### ASSY = AssemblyBNDY = BoundaryBOP = Bottom Of Pipe OD = Outside Diameter CL = Centerline PC = Point Of Horizontal Curvature CRA = Concrete Reverse Anchor PP = Proposed PT = Point Of Horizontal Tangency CTRB = Concrete Thrust Block CR = Point Of Curb Return PVC = Poly Vinyl Chloride Pipe DIP = Ductile Iron Pipe PVC = Point Of Vertical Curvature EL = Elevation PVI = Point Of Vertical Intersection ESMT = Easement PVT = Point Of Vertical Tangency RCB = Reinforced Concrete Box RCP = Reinforced Concrete Pipe ROW = Right Of Way RT = Right SHT = Sheet

**ABBREVIATIONS** 

EX. = ExistingFC = Face Of CurbFES = Flared End Section FLG = Flange FL = Flowline SS = Sanitary Sewer GB = Grade Break HP = Hiah Point STA = StationHORIZ = Horizontal STD = Standard TA = Top Of Asphalt HYD = HvdrantI.D. = Inside Diameter TC = Top Of CurbTOP = Top Of Pipe = Left TYP = Typical LF = Linear Feet LP = Low PointVC = Vertical Curve MAX = Maximum VERT = Vertical MH = Manhole

Kiowa Project No. 19016 May 3rd, 2023





## WIDEFIELD WATER AND SANITATION DISTRICT GENERAL NOTES

All utility construction to be conducted in conformance with the current Widefield Water and Sanitation District specifications. Compaction requirements shall be 95% Standard Proctor as determined by ASTM D698, unless otherwise approved by the Widefield Water and Sanitation District or a higher standard is imposed by another agency having right-of-way

All materials and workmanship shall be subject to inspection by the Widefield Water and Sanitation District. The Widefield Water and Sanitation District reserves the right to accept or reject any such materials and

workmanship that does not conform to its standards and specifications. The Developer or his Engineer has located all fire hydrants and future service stubs. Any required realignment, either horizontal or vertical, shall be at the expense of the Developer

All ductile iron pipe, to include fittings, valves and fire hydrants will be wrapped with polyetheylene tubing, and electrically isolated.

All ductile iron pipe and fittings shall be double bonded. Specifications for cathodic protection on both Dip mains and PVC mains is specified in the Standards and Specifications.

PVC main lines shall be installed with coated No. 12 tracer wire. The Contractor is required to notify the Widefield Water and Sanitation District (390-7111) a minimum of 48 hours and a maximum of 96 hours prior to the start of construction. The Contractor shall also notify affected utility companies 48 hours prior to construction adjacent to the known utility lines The location of all utilities as shown on these drawings are approximate only. The location of all utilities shall be verified prior to construction by the

The Contractor shall field excavate and verify the vertical and horizontal location of all tie-ins. Contractor shall notify the Widefield Water and Sanitation District and the Engineer of the field verified information prior to

0. All bends shall be field staked prior to construction.

1. Any water utility material removed and not reused shall be returned to the Widefield Water and Sanitation District if the District so requests.

12. The Contractor shall at his expense support and protect all utility mains so that they will function continuously during construction. Should a utility mair fail as a result of the Contractor's operation, it will be replaced immediately by either the Contractor or the Widefield Water and Sanitation District at full cost of labor and materials to the Contractor.

Any pumping or bypass operations must be reviewed and approved prior to execution by both the Widefield Water and Sanitation District and the

. Contractor must replace or repair any damage to all surface improvements including but not limited to fences, curb and gutter and/or asphalt that may be caused during construction.

. All water lines 6" and larger, and all sewer lines 8" and larger, shall have as "As-Built" plans prepared and approved prior to final acceptance by the Widefield Water and Sanitation District. Prior to construction, a Pre-Construction Conference is required a minimum

of 72 hours in advance of commencement of work. To set the Pre-Construction conference, contact Brandon Bernard, Water Superintendent (464-2051) and/or Mark McCormick, Wastewater Superintendent (491-0128) of the Widefield Water and Sanitation District for a time. No Pre-Construction Conference times will be set until 4 sets or

signed drawings are received by the Widefield W & S District.

# LEGEND

Street R.o.w.	Curb & Gutter
Street Center Line	(curb Section As Shown On Plans)
Proposed Water	——ғм—— Existing Force Main
🏋 Proposed Water Hydrant	
Proposed Water Valve	Existing Water Hydrant
<ul><li>Proposed Sanitary Mh</li></ul>	Existing Water Valve
Proposed Sanitary Sewer	<ul> <li>Existing Sanitary Mh</li> </ul>
Proposed Storm Sewer	Existing Sanitary Sewer
☐ Proposed Storm Inlet	Existing Storm Sewer
<ul><li>Proposed Storm Mh</li></ul>	☐ Existing Storm Inlet
Proposed Storm Fes	<ul><li>Existing Storm Mh</li></ul>
Proposed Boxbase Mh	Existing Storm Fes

# THE GLEN AT WIDEFIELD EAST THE GLEN A WIDEFIELD FILING NO. 1 NOT TO SCALE

VICINITY MAP

### particular roadway and drainage facilities are designed and are correct to the best of my knowledge and belief. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparation of these detailed plans and specifications.

Richard N. Wray, P.E. #19310 For and on behalf of Kiowa Engineering Corp.

Owner/Developer's Statement:

I, the owner/developer have read and will comply with all of the requirements of the grading and erosion control plan and all the requirements specified in these detailed plans and specifications.

**STATEMENTS** 

These detailed plans and specifications were prepared under my direction and supervision.

Said plans and specifications have been prepared according to the criteria established by the

County for detailed roadway, drainage, grading and erosion control plans and specifications,

master transportation plans. Said plans and specifications meet the purposes for which the

and said plans and specifications are in conformity with applicable master drainage plans and

I. Rvan Watson. President Glen Development Company 3 Widefield Boulevard

Colorado Springs, Colorado 80911

County plan review is provided only for general conformance with County Design Criteria. The County is not responsible for the accuracy and adequacy of the design, dimensions, and/or elevations which shall be confirmed at the job site. The County through the approval of this

Filed in accordance with the requirements of the El Paso County Land Development Code, Drainage Criteria Manual, and Engineering Criteria Manual as amended.

document assumes no responsibility for completeness and/or accuracy of this document.

In accordance with ECM Section 1.12, these construction documents will be valid for construction for a period of 2 years from the date signed by the El Paso County Engineer. If construction has not started within those 2 years, the plans will need to be resubmitted for approval, including payment of review fees at the Planning and Community Development Directors discretion.

Josh Palmer, P.E. County Engineer / ECM Administrator

## **UTILITY APPROVALS**

## WATER AND SEWER MAIN EXTENSIONS

Any changes or alterations affecting the grade, alignment, elevation and/or depth of cover of any water or sewer mains or other appurtenance shown on this drawing shall be the responsibility of the Owner/Developer. The Owner/Developer shall be responsible for all operational damages and defects in installation and material for mains and services from the date of approval until final acceptance

Print Name <u>J. Ryan Watson</u>

DBA: GLEN DEVELOPMENT COMPANY

Address: 3 Widefield Boulevard Colorado Springs, CO 80911 (719) 392-0194

FIRE AUTHORITY APPROVAL

The number of fire hydrants and hydrant locations shown on this water installation plan are correct and adequate to satisfy the fire protection requirements as specified by the Fire District serving the property noted on the plans.

Security Fire Department

Security Fire Department

# DISTRICT APPROVALS

The Widefield Water and Sanitation District recognizes the design engineer as having responsibility for the design. The Widefield Water and Sanitation District has limited its scope of review accordingly.

> WIDEFIELD WATER AND SANITATION DISTRICT WASTEWATER DESIGN APPROVAL

In case of errors or omissions with the sewer design as shown on this document the standards as defined in the "Rules and

WIDEFIELD WATER AND SANITATION DISTRICT

Approval expires 180 days from Design Approval.

WATER DESIGN APPROVAL

Regulations for Installation of Sewer Mains and Services" shall rule.

In case of errors or omissions with the sewer design as shown on this document the standards as defined in the "Rules and Regulations for Installation of Sewer Mains and Services" shall rule.

# **GOVERNING AGENCIES**

Approval expires 180 days from Design Approval.

El Paso County Planning & Community **Development Department** 2880 International Circle Suite 110 Colorado Springs Colorado (719) 520-6300

Black Hills Energy 18965 Bas Camp Road Unit A7 Monument, Colorado (719) 359-0586

Widefield Water & Sanitation District 37 Widefield Blvd. Colorado Springs, Colorado

(719) 390-7111

Mountain View Electric Association 11140 East Woodmen Road Falcon, Colorado (719) 495-2283

# **DEVELOPER:**

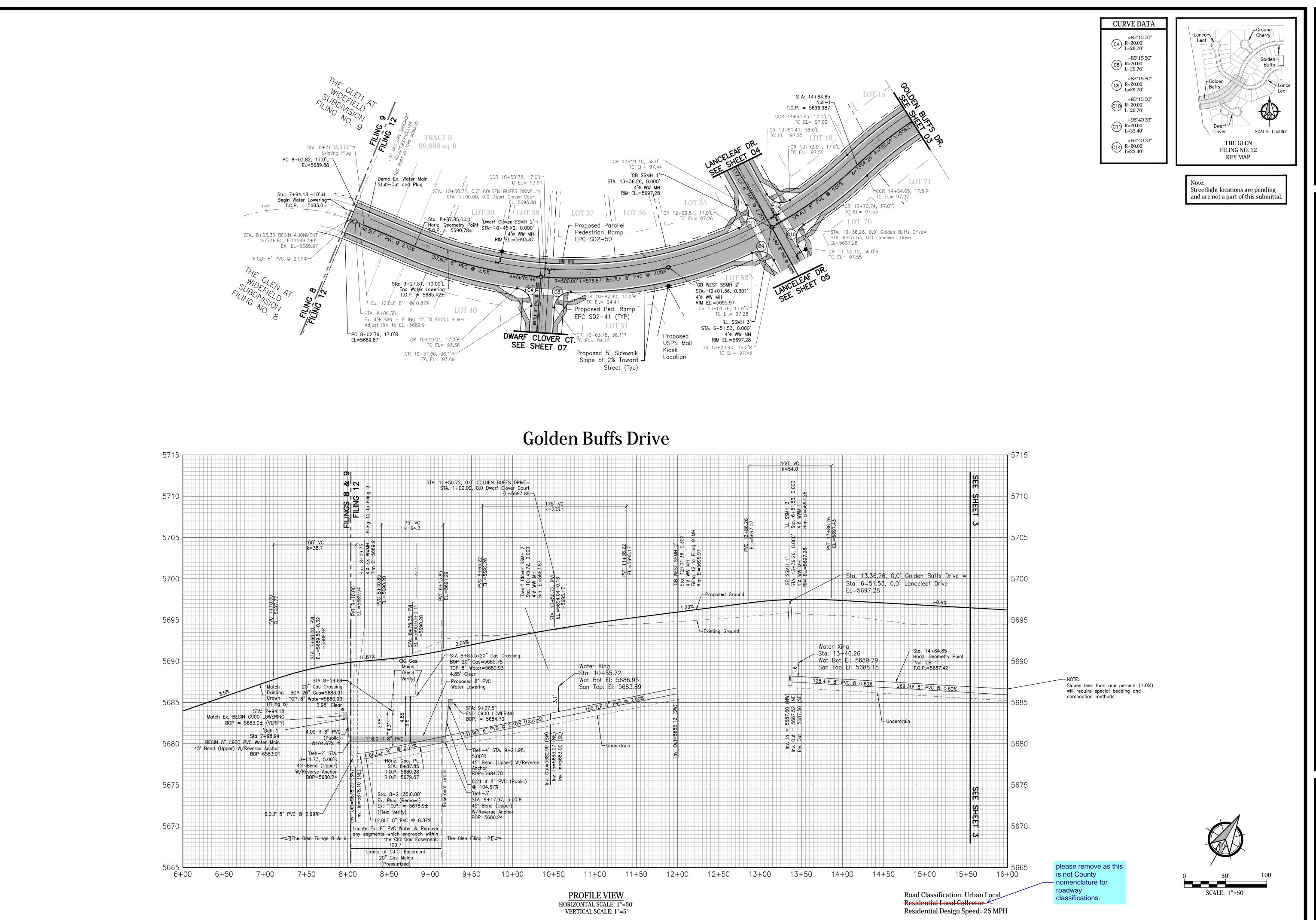


PREPARED BY:

ingineering Corporation

1604 South 21st Street Colorado Springs, Colorado 80904 (719) 630-7342

PCD File No. SF-22-024





Buff en old Profile - Gol 15+50 JTY, COLORADO

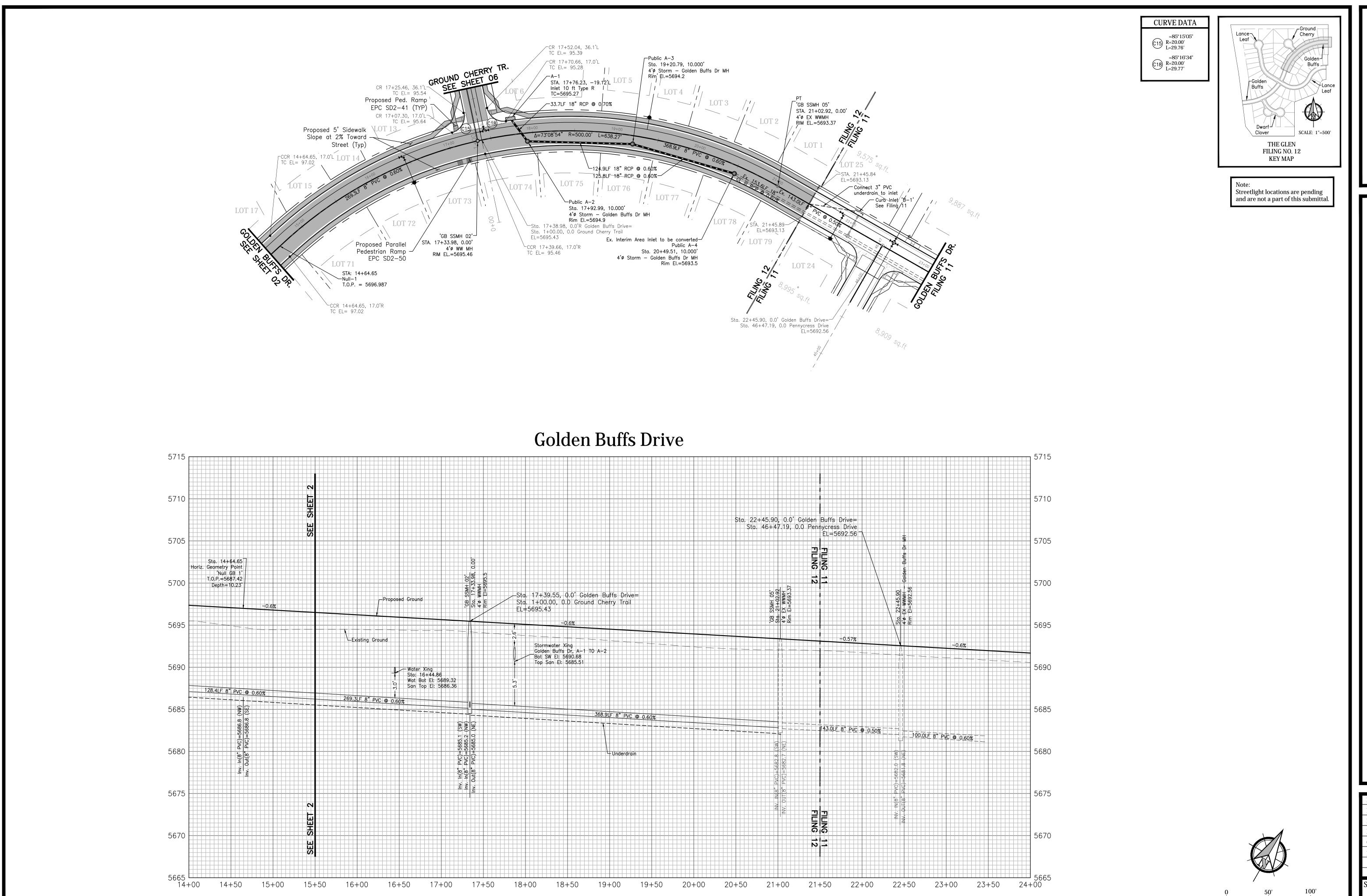
Date: May 3rd, 2023 Design: MJK Drawn: MJK

and

Plan al Sta: 8+C EL PASO,

Check: AWMc

**SHEET** 



PROFILE VIEW
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'







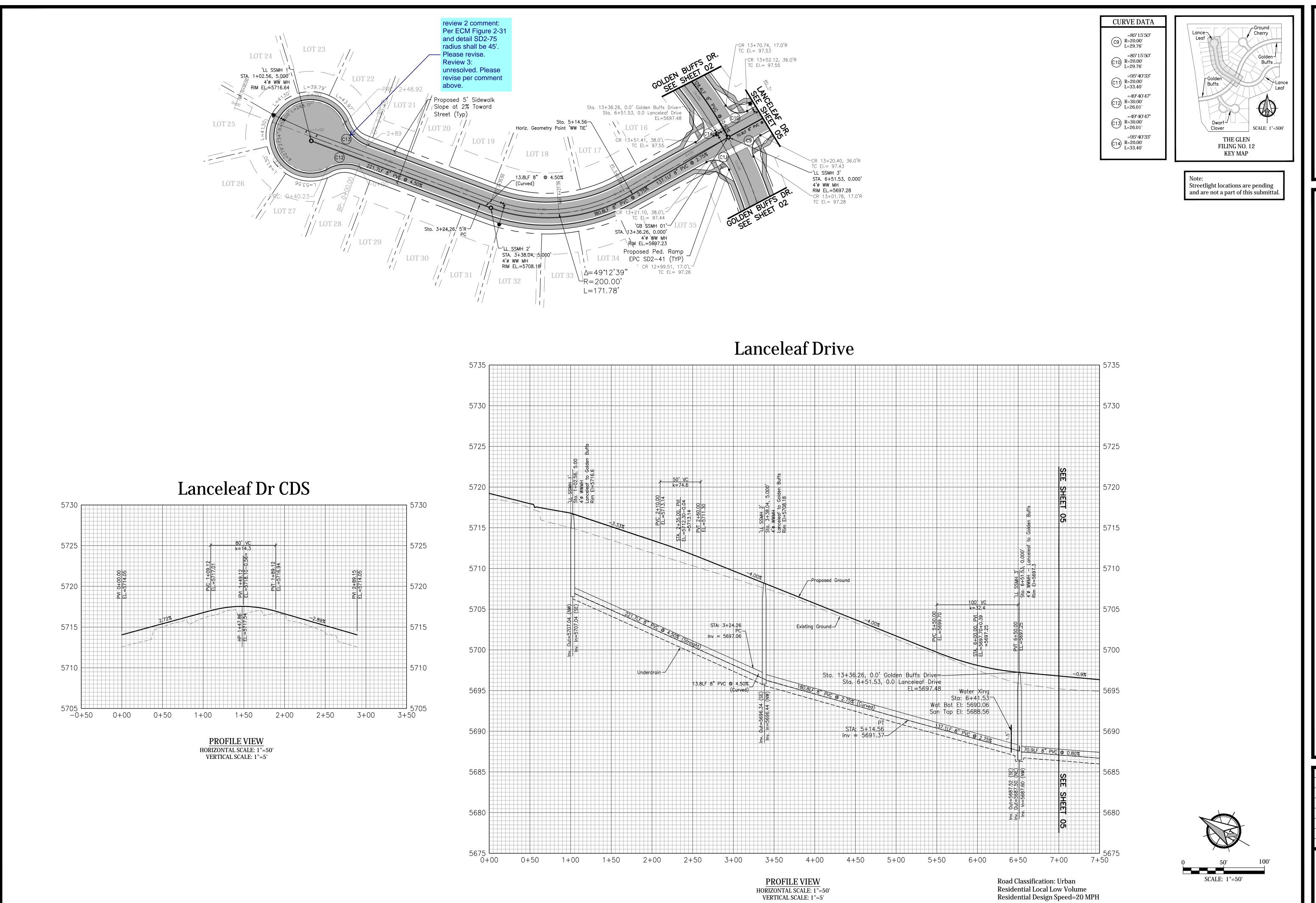
Date: May 3rd, 2023 Design: MJK Drawn: MJK Check: AWMc

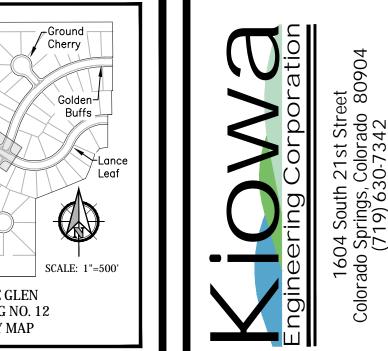
**SHEET** 

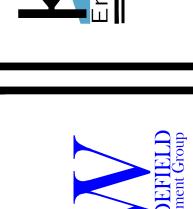
SCALE: 1"=50'

Road Classification: Urban Local Residential Local Collector

Residential Design Speed=25 MPH







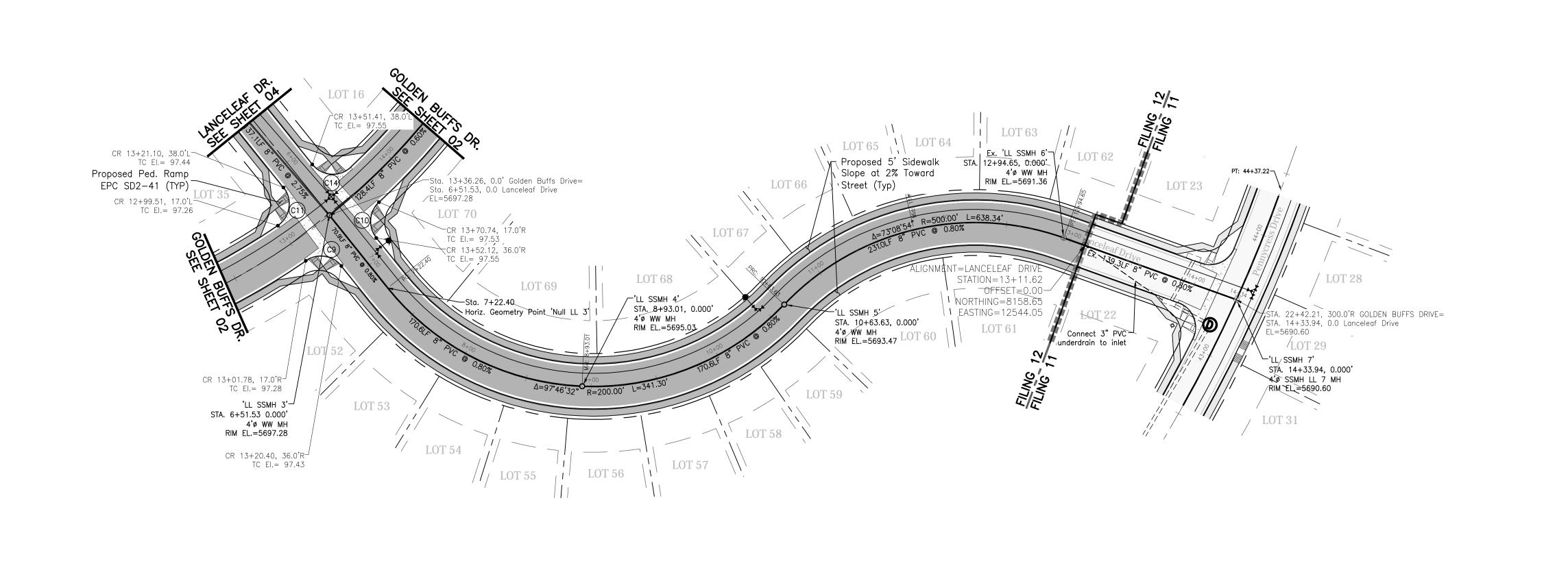


GLEN AT WIDEFIELD
Plan and Profile - Lancele
Sta: 1+00 to 7+00

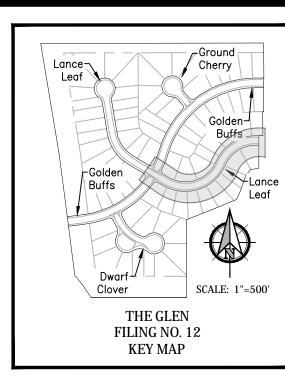
Project N	o.: 19016
Date:	May 3rd, 2023
Design:	MJK
Drawn:	MJK
Check:	AWMc
D!!	

sions:



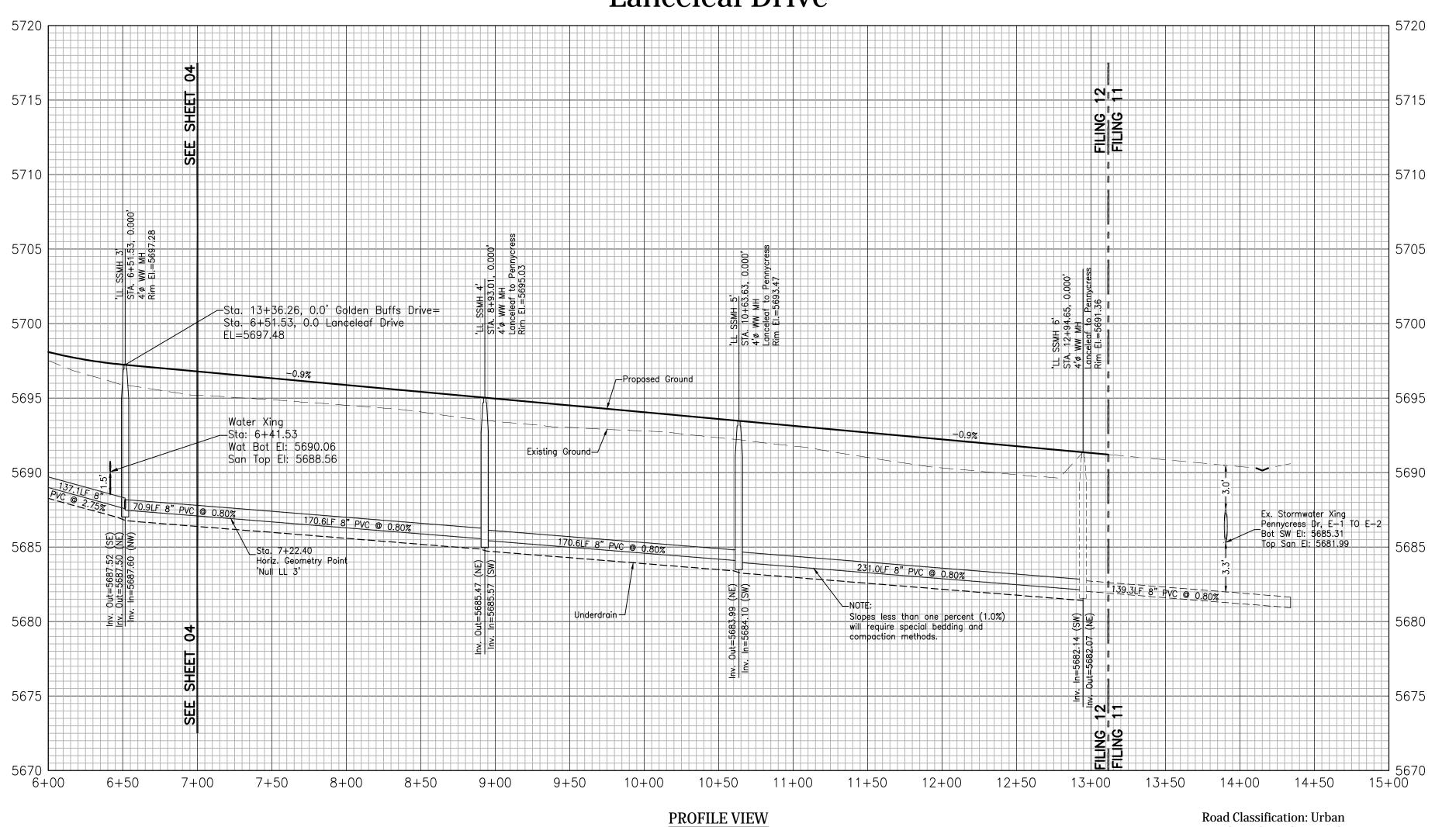


CURVE DATA  $\begin{array}{c} = 85^{\circ}15'50'' \\ \hline \text{C9} \quad R = 20.00' \\ L = 29.76' \end{array}$ =85°15'50" C10 R=20.00' L=29.76' =95°40'33" C11) R=20.00' L=33.40' =95°40'33" ©14) R=20.00' L=33.40'

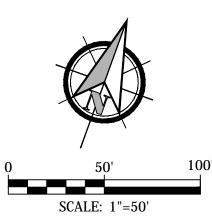


Streetlight locations are pending and are not a part of this submittal.

Lanceleaf Drive



HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1"=5'



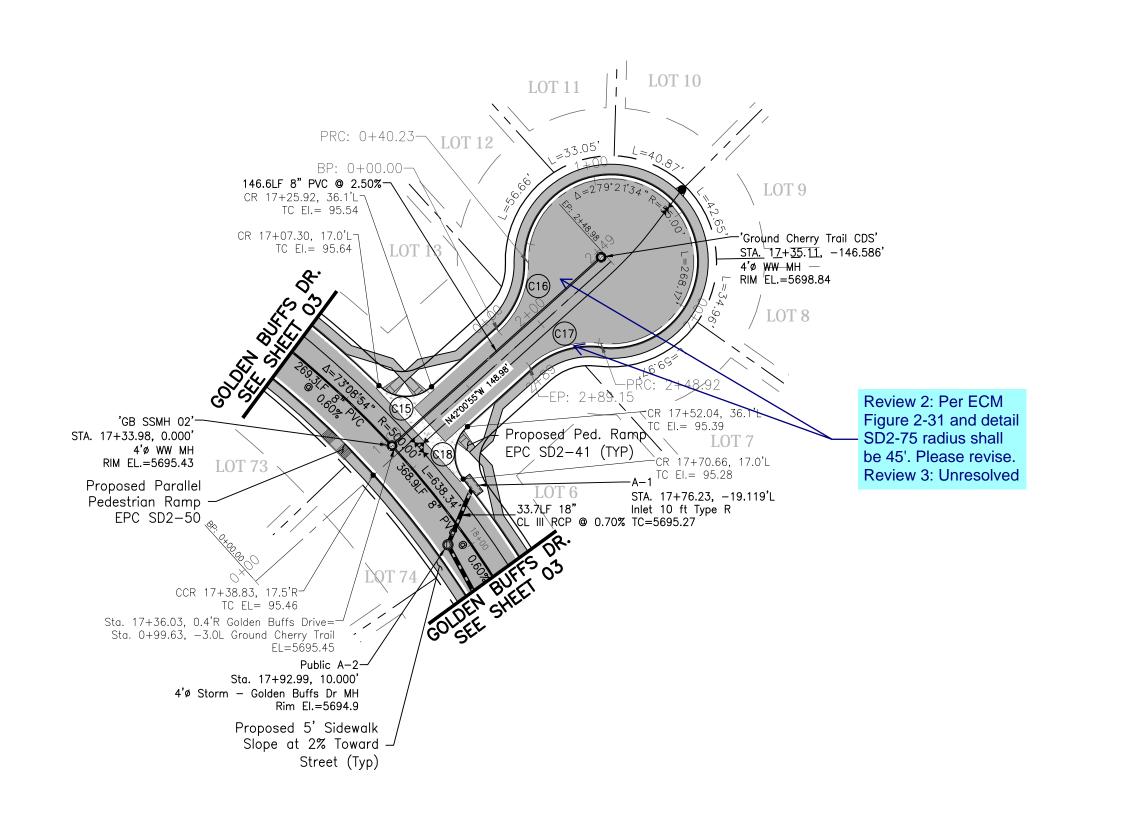
NO N anceleaf rofile Plan Sta: 6-EL PAS

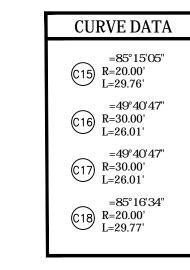
Date: May 3rd, 2023 Design: MJK Drawn: MJK Check: AWMc

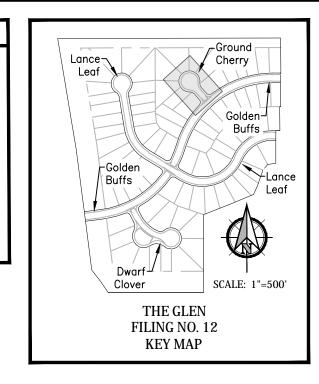
**SHEET** 

05 of 19 Sheets

Road Classification: Urban Residential Local Low Volume Residential Design Speed=20 MPH

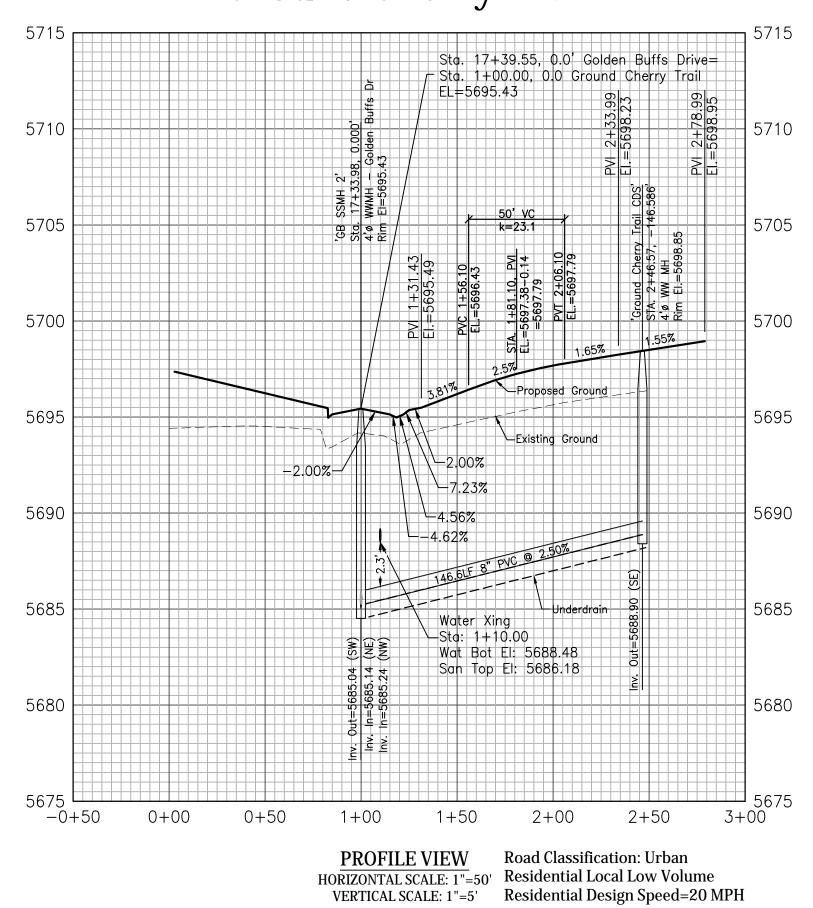




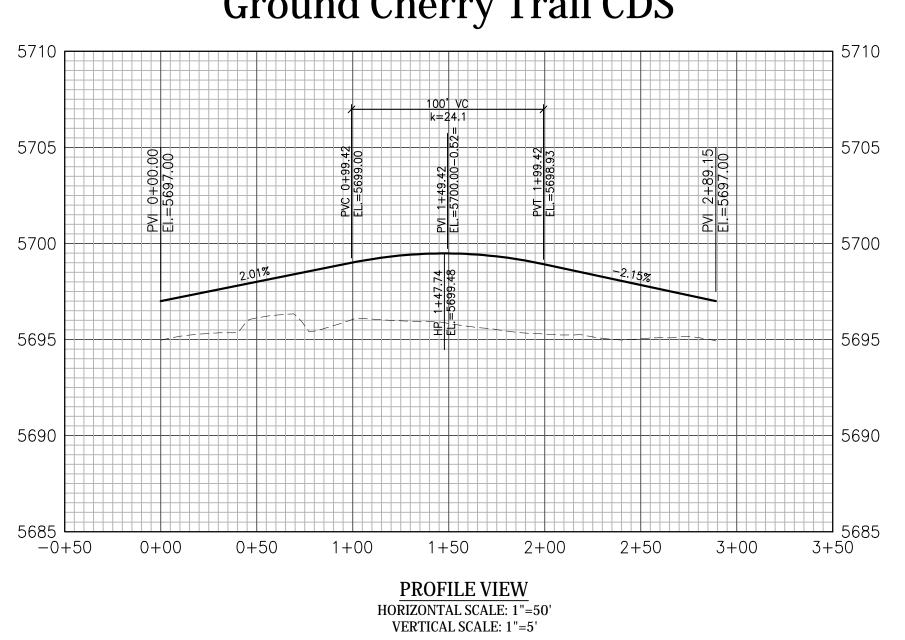


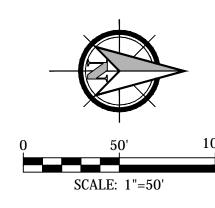
Streetlight locations are pending and are not a part of this submittal.

# **Ground Cherry Trail**



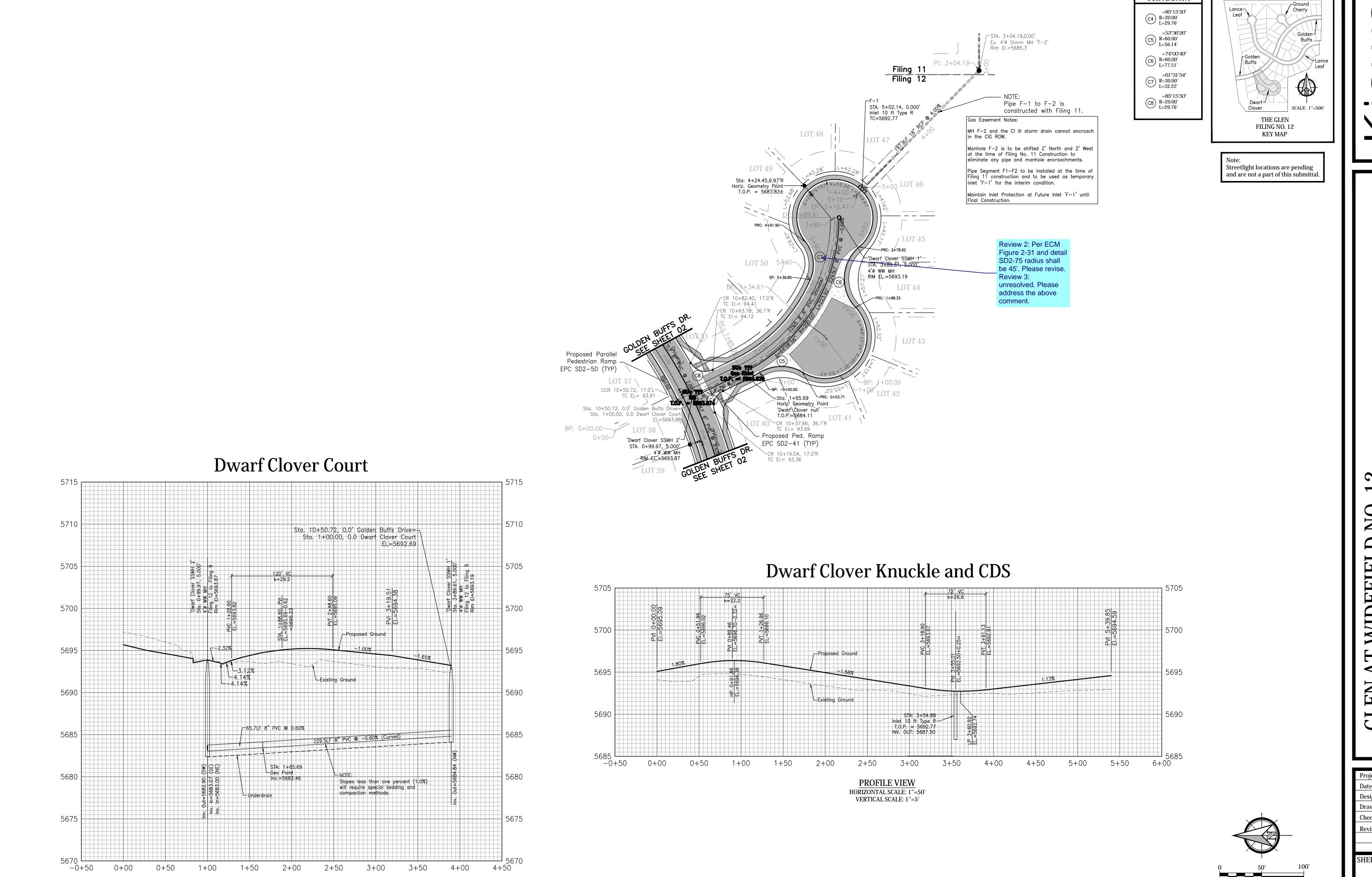
# **Ground Cherry Trail CDS**





Project N	Vo.: 19016
Date:	May 3rd, 2023
Design:	MJK
Drawn:	MJK
Check:	AWMc
D	





Road Classification: Urban

Residential Local Low Volume Residential Design Speed=20 MPH

PROFILE VIEW

HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1"=5'

**CURVE DATA** 

p

n

Knuckle

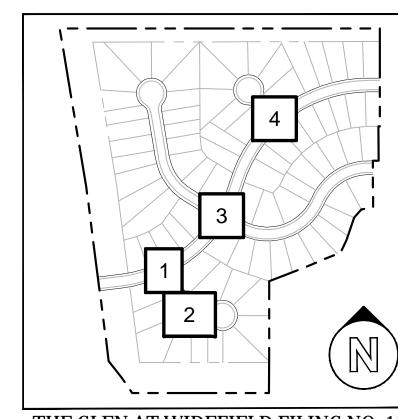
Date: May 3rd, 2023 Design: MJK Drawn: MJK Check: AWMc





Date: May 3rd, 2023 Design: MJK Drawn: MJK Check: AWMc

08 of 19 Sheets



STA. 3+56.00 (-32.92,L)

DWARF CLOVER →

COURT CUL-DE-SAC

STA. 3+60.09 (30.68,R)

94.20 STA. 3+08.10 94.27 (-13.17,L)



\_STA. 1+83.41 (14.00,R)

95.87 95.70

-2.5% STA. 2+19.75 (44.68,R)

95.50

94,84

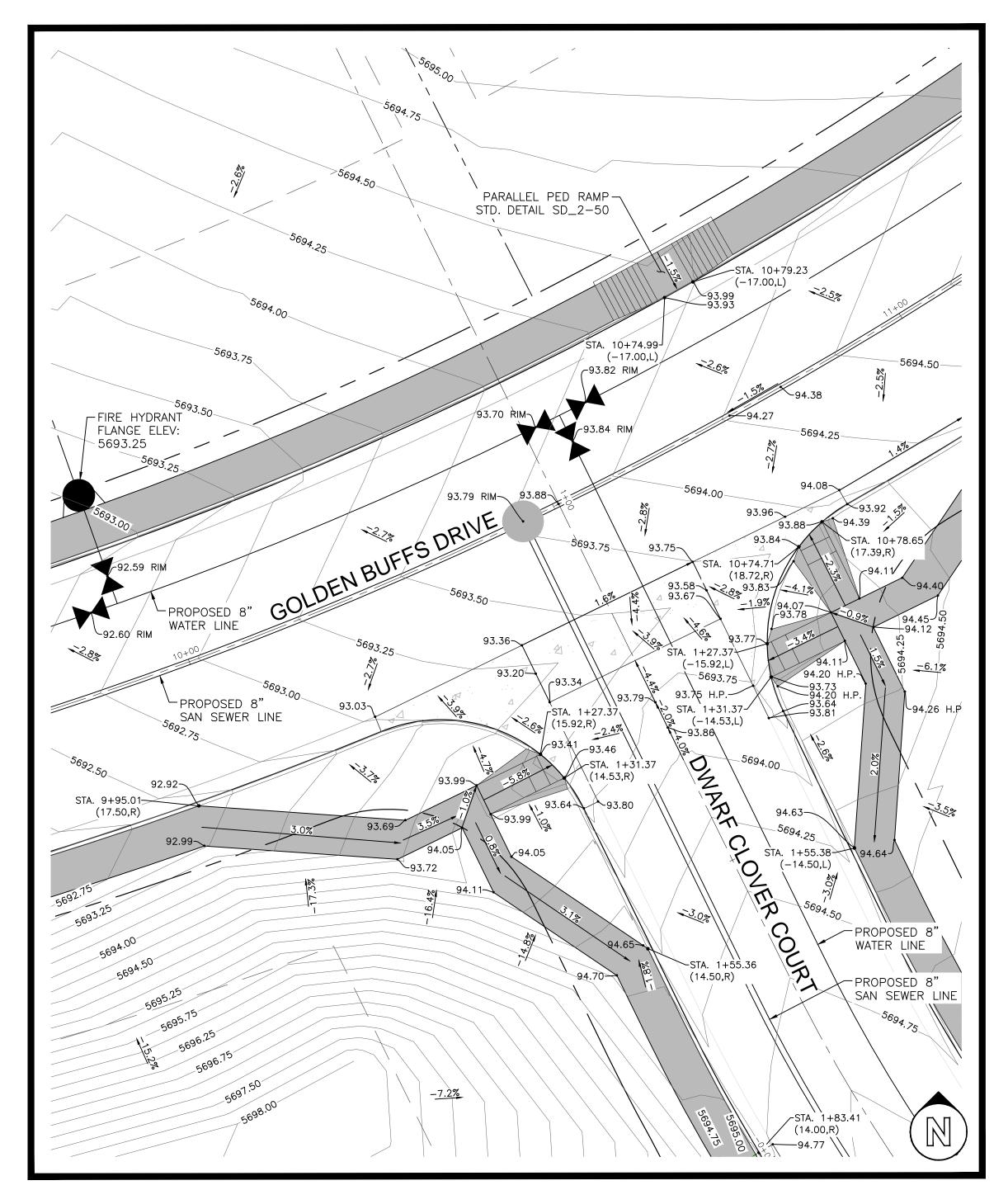
STA. 2+60.72 (34.62,R)

-<u>1.7%</u>

DWARF CLOVER COURT

CUL-DE-SAC KNUCKLE

-<u>1.7%</u>



GRADING DETAIL 2 - DWARF CLOVER COURT CUL-DE-SAC KNUCKLE SCALE 1" = 10'

STA. 3+00.59-(48.41,R)

95.90 H.P.

PROPOSED 8"
WATER LINE

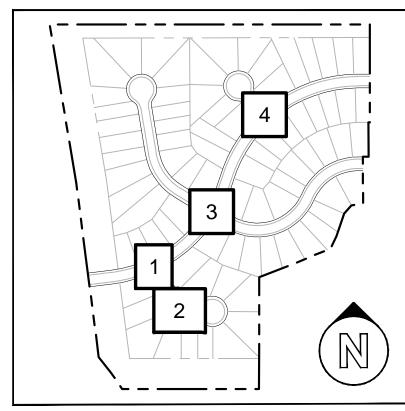
PROPOSED 8"
SAN SEWER LINE

STA. 2+99.09 (18.00,R)

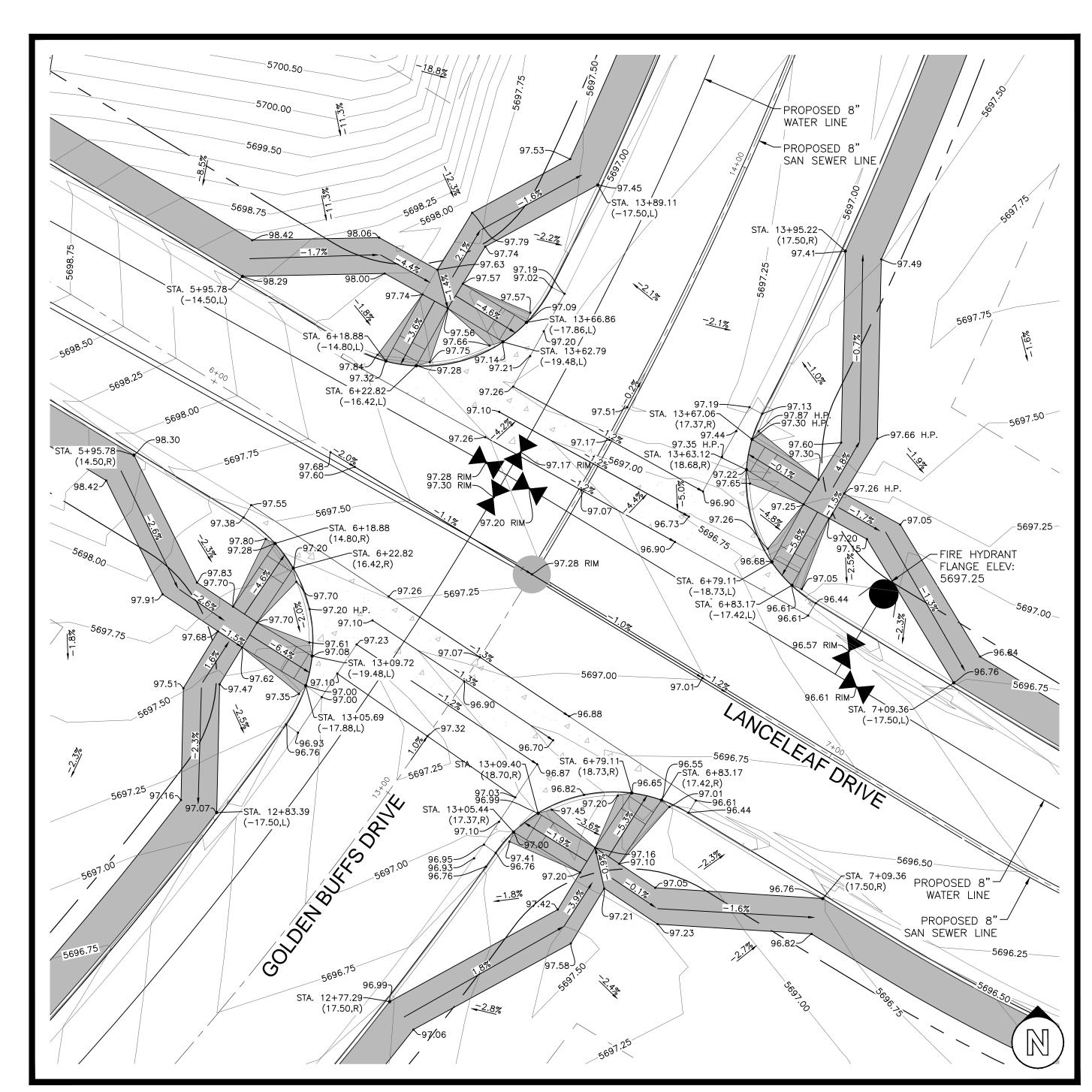
GRADING DETAIL 1 - GOLDEN BUFF DRIVE & DWARF CLOVER COURT

SCALE 1" = 10'

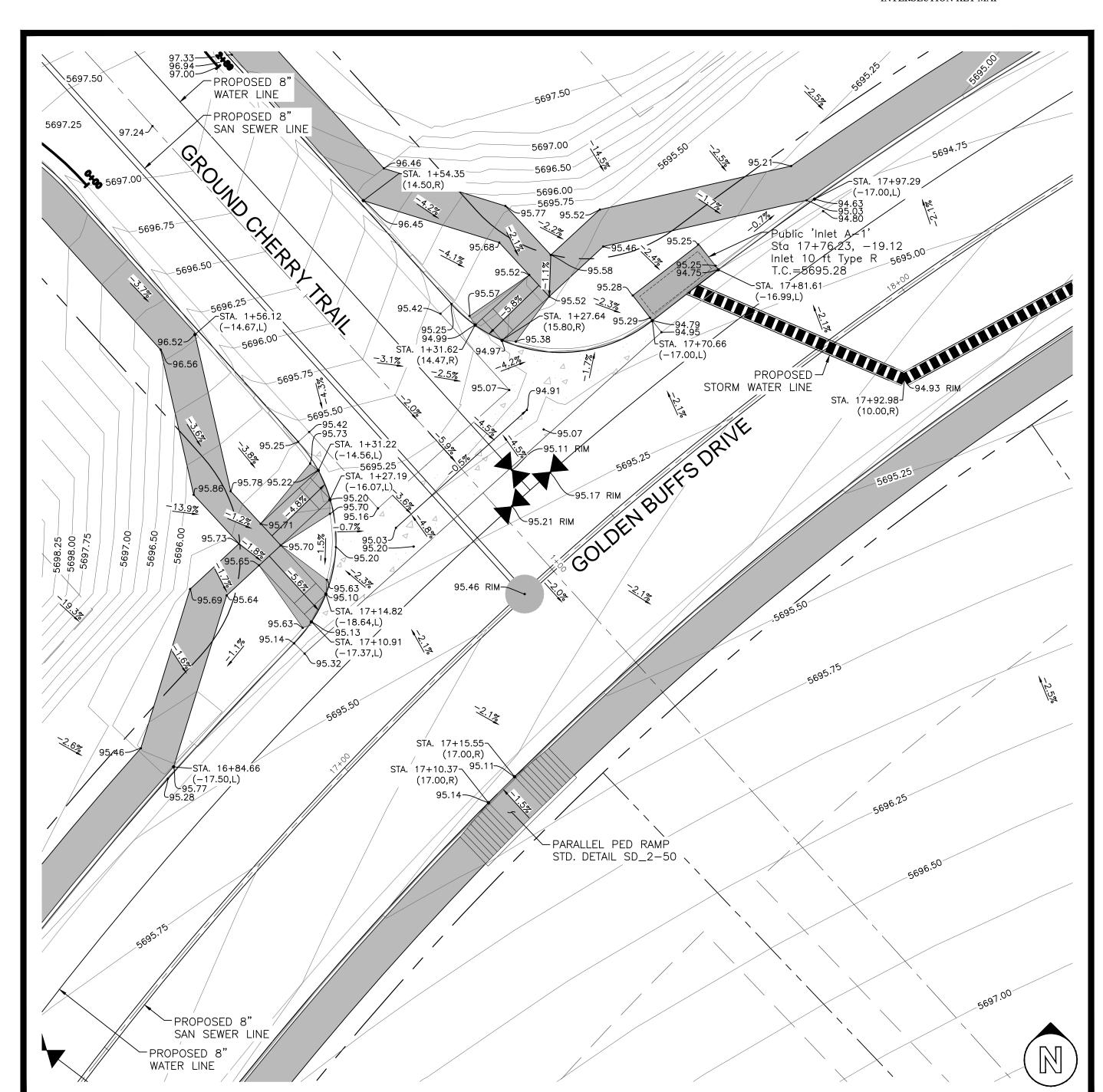
Streetlight locations are pending and are not a part of this submittal.



THE GLEN AT WIDEFIELD FILING NO. 12
INTERSECTION KEY MAP

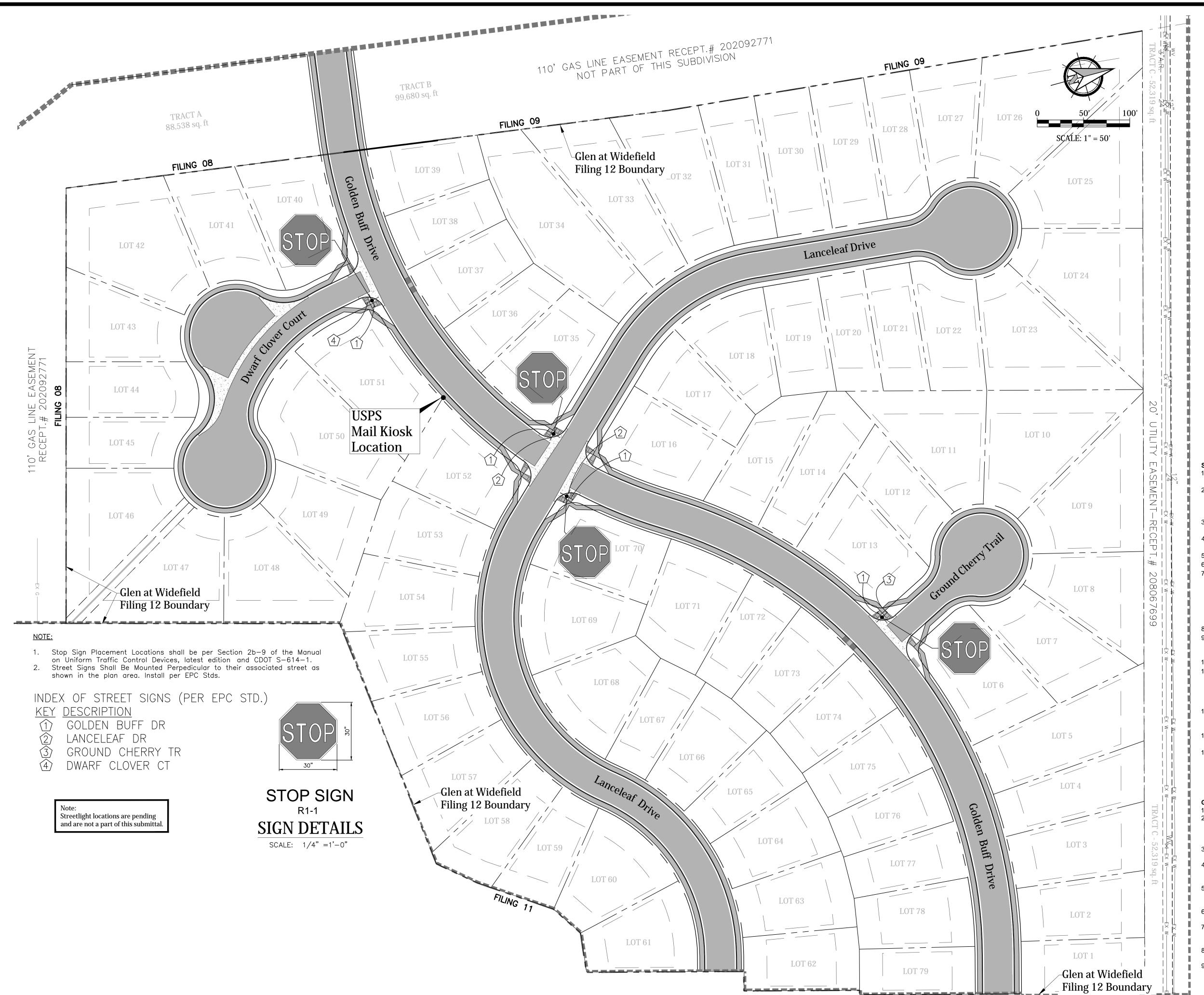


GRADING DETAIL 3 - GOLDEN BUFF DRIVE & LANCELEAF DRIVE SCALE 1" = 10'



GRADING DETAIL 4 - GOLDEN BUFF DRIVE & GROUND CHERRY TRAIL SCALE 1" = 10'

Project N	Vo.: 19016
Date:	May 3rd, 2023
Design:	MJK
Drawn:	MJK
Check:	AWMc
Revision	s:



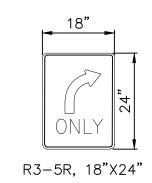




24"x24"

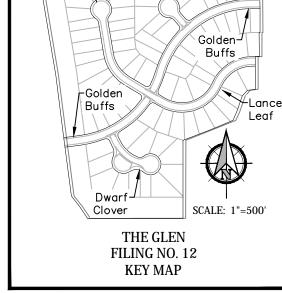


R4-7R. KEEP RIGHT OF MEDIAN (24"x30")





30"x30"

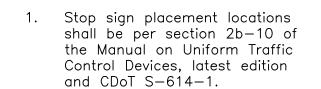


,–Ground −

Cherry

30" R1 - 1STOP SIGN

<u>Note:</u>



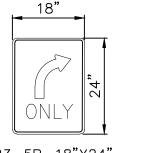
Stop Sign Placement Locations

Street Signs Shall Be Mounted

Perpedicular to their associated

shall be per Section 2b-9 of the

Manual on Uniform Traffic Control Devices, latest edition and CDOT



street as shown in the plan area. Install per EPC Stds.

S-614-1.

# SIGN DETAILS SCALE: 1/4" = 1'-0"

Signing and Striping Notes: All signs and pavement markings shall be in compliance with the current Manual on Uniform Traffic Control Devices (MUTCD).

- Removal of existing pavement markings shall be accomplished by a method that does not materially damage the pavement. The pavement markings shall be removed to the extent that they will not be visible under day or night conditions. At no time will it be acceptable to paint over existing pavement markings.
- Any deviation from the striping and signing plan shall be approved by El Paso County Planning and Community Development Review Services.
- All signs shown on the signing and striping plan shall be new signs. Existing signs
- may remain or be reused if they meet current El Paso County and MUTCD standards. 5. Street name and regulatory stop signs shall be on the same post at intersections.
- All removed signs shall be disposed of in a proper manner by the contractor.
- All street name signs shall have "D" series letters, with local roadway signs being 4" upper-lower case lettering on 8" blank and non-local roadway signs being 6" lettering, upper-lower case on 12" blank, with a white border that is not recessed. Multi-lane roadways with speed limits of 40 mph or higher shall have 8" upper-lower case lettering on 18" blank with a white border that is not recessed. The width of the non-recessed white borders shall match page 255 of the 2012 MUTCD "Standard Highway Signs"
- 8. All traffic signs shall have a minimum High Intensity Prismatic grade sheeting. 9. All local residential street signs shall be mounted on a 1.75" x 1.75" square tube sign post and stub post base. For other applications, refer to the CDOT Standard S-614-8
- regarding use of the P2 tubular steel post slipbase design. 10. All signs shall be single sheet aluminum with 0.100" minimum thickness.
- 11. All limit lines/stop lines, crosswalk lines, pavement legends, and arrows shall be a minimum 125 mil thickness preformed thermoplastic pavement markings with tapered leading edges per CDOT Standard S-627-1. Word and symbol markings shall be the narrow type. Stop bars shall be 24" in width. Crosswalks lines shall be 12" wide and 8' long per CDOT S-627-1.
- All longitudinal lines shall be a minimum 15mil thickness epoxy paint. All non-local residential roadways shall include both right and left edge line striping and any additional striping as required by CDOT S-627-1.
- 13. The contractor shall notify El Paso County Planning and Community Development Review Services (719) 520-6819 prior to and upon completion of signing and striping.
- The contractor shall obtain a work in the right of way permit from the El Paso County Department of Public Works (DPW) prior to any signage or striping work within an existing El Paso County roadway.

FILING 11

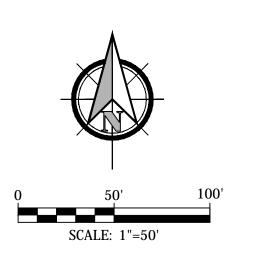
- Before excavating, contractor shall verify location of underground utilities.
- Contractor shall be responsible for any monumentation and/or benchmarks which will be disturbed or destroyed by construction. Such points shall be referenced and replaced with appropriate monumentation by a registered professional authorized to practice land surveying.
- Approval of these plans by the County does not authorize any work to be performed until a permit has been issued.
- The approval of theses plans or issuance of a permit by El Paso County does not authorize the contractor, subdivider, or owner to violate any Federal, State, or City laws, ordinances, regulations, or policies.
- The contractor shall be responsible for all new, temporary and existing traffic signs from the start of the construction project until acceptance by El Paso
- 6. All traffic signs, pavement, and traffic signals shall meet or exceed M.U.T.C.D.
- The contractor shall not remove any existing signs, pavement markings or traffic signals during the project without authorization of the Engineering Inspector
- assigned to the project. The contractor shall prepare a detailed Traffic Control Plan, submit to El Paso
- County for approval, and obtain appropriate permits. The contractor shall be responsible for all work zone traffic control. The contractor shall be responsible for furnishing, installing and maintaining the temporary traffic control devices throughout the duration of the project.

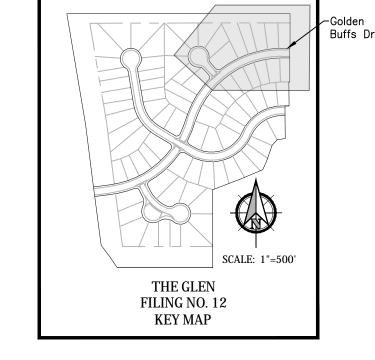
# S $\overline{\phantom{a}}$ ver WIDEFIELD 0 AT GLEN

ng & Striping - O 12 (Entire Site) , county, colorado Signing Filing 12 EL PASO,

Project N	No.: 19016
Date:	May 3rd, 2023
Design:	MJK
Drawn:	MJK
Check:	AWMc
Revision	s:

**SHEET** 





Streetlight locations are pending and are not a part of this submittal.

# Profile View of Golden Buffs Drive

Sta. 17+92.99, 10.000'

Public 4' Storm — Golden Buffs Dr MH
Rim El, = 5694.9

TRACT B

LOT 25

LOT 79 LOT 24 LO

PENNYCRESS DR SEE FILING 11

Storm Lateral 'B'
See Filing 11

FILING

125.8 LF 18" Public CL III RCP @ 0.60%

TRACT C - 52,319 sq. ft

-'A-3'
Sta\_19+20.79, 10.000'
Public 4'v\Storm - Golden Buffs Dr MH
Rim El.+5694.2

124.9 \F 18" Public
CL III RCP @ 0.60%

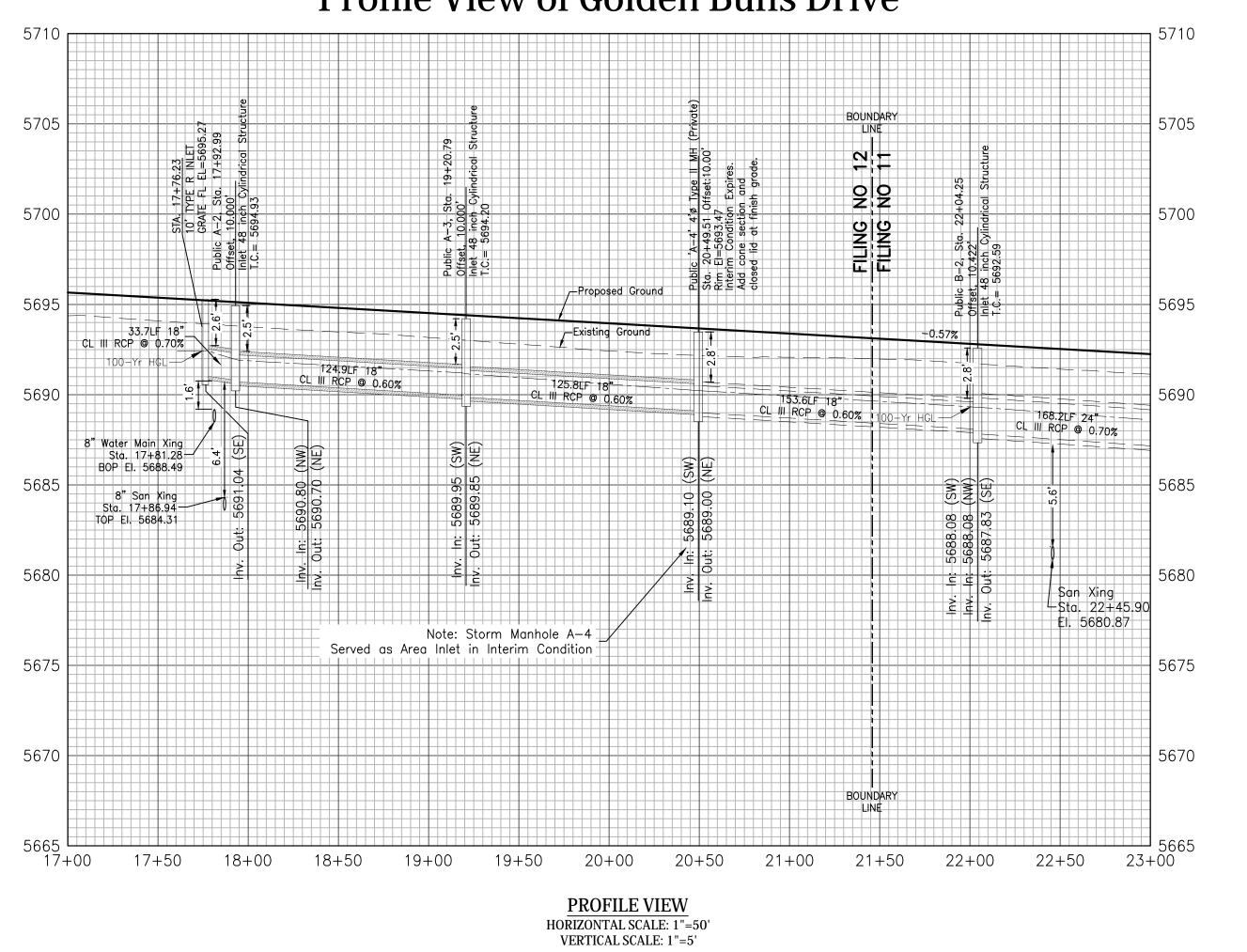
LOT 5

368.9LF 8" PV& © 0.60%─

'A-1' Sta 17+76.23, -19 12 Public Inlet 10 ft Type R T.C.=5695.27

LOT 8

LOT 7



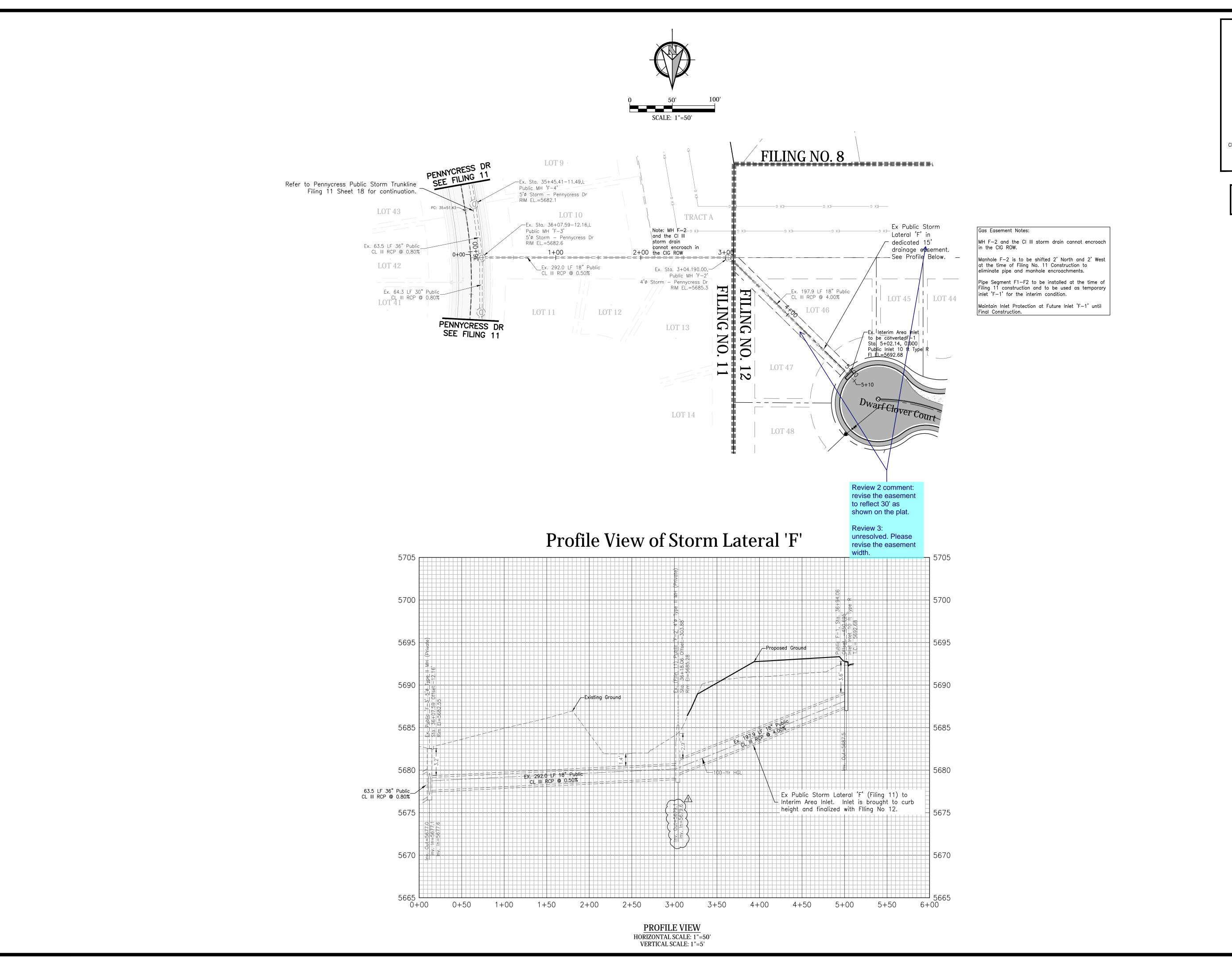
- Golden ]
o 21+45.87 Storm Sewer Begin Sta: 17+7 EL PASO, COUNTY,

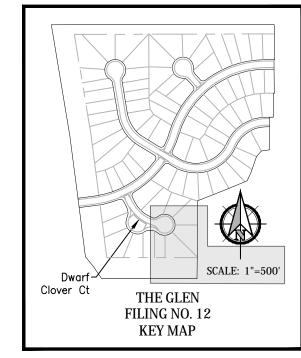
Buffs

Project No.: 19016 Date: May 3rd, 2023

Drawn: MJK

Check: AWMc





Note: Streetlight locations are pending and are not a part of this submittal

WIDEFIELD

ortion

4

GLEN A'I' WIDEFIELD NO. 12
Storm Sewer Plan - Laterals 'F' - Filing 12
Ref: Pennycress Storm Trunkline

Project No.: 19016

Date: May 3rd, 2023

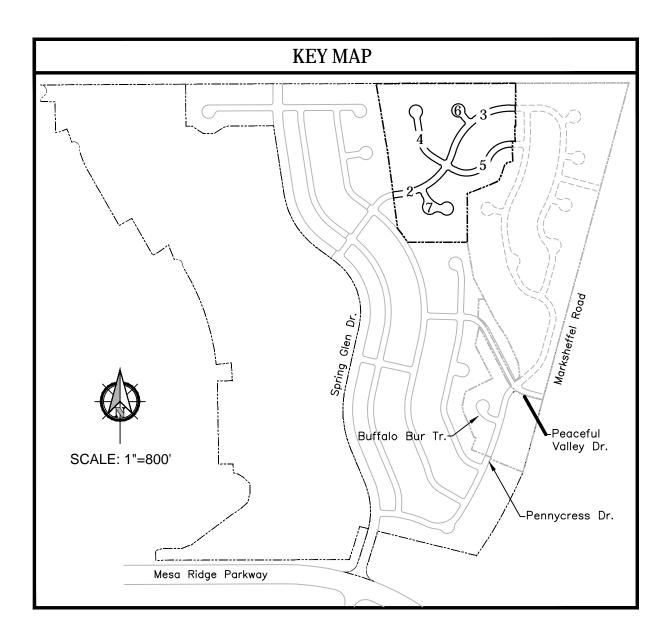
Design: MJK

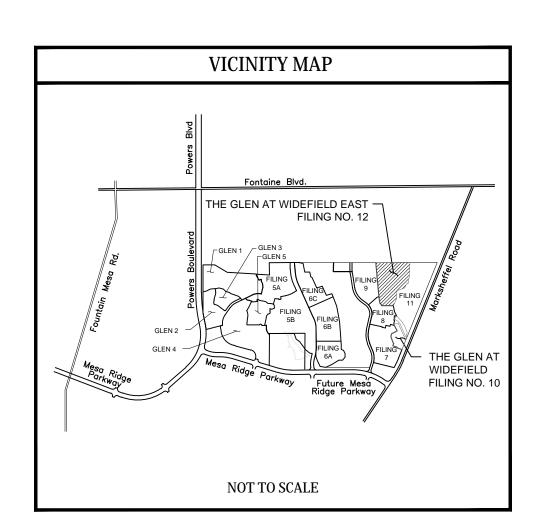
Drawn: MJK
Check: AWMc
Revisions:

SHEET

# THE GLEN AT WIDEFIELD FILING NO. 12

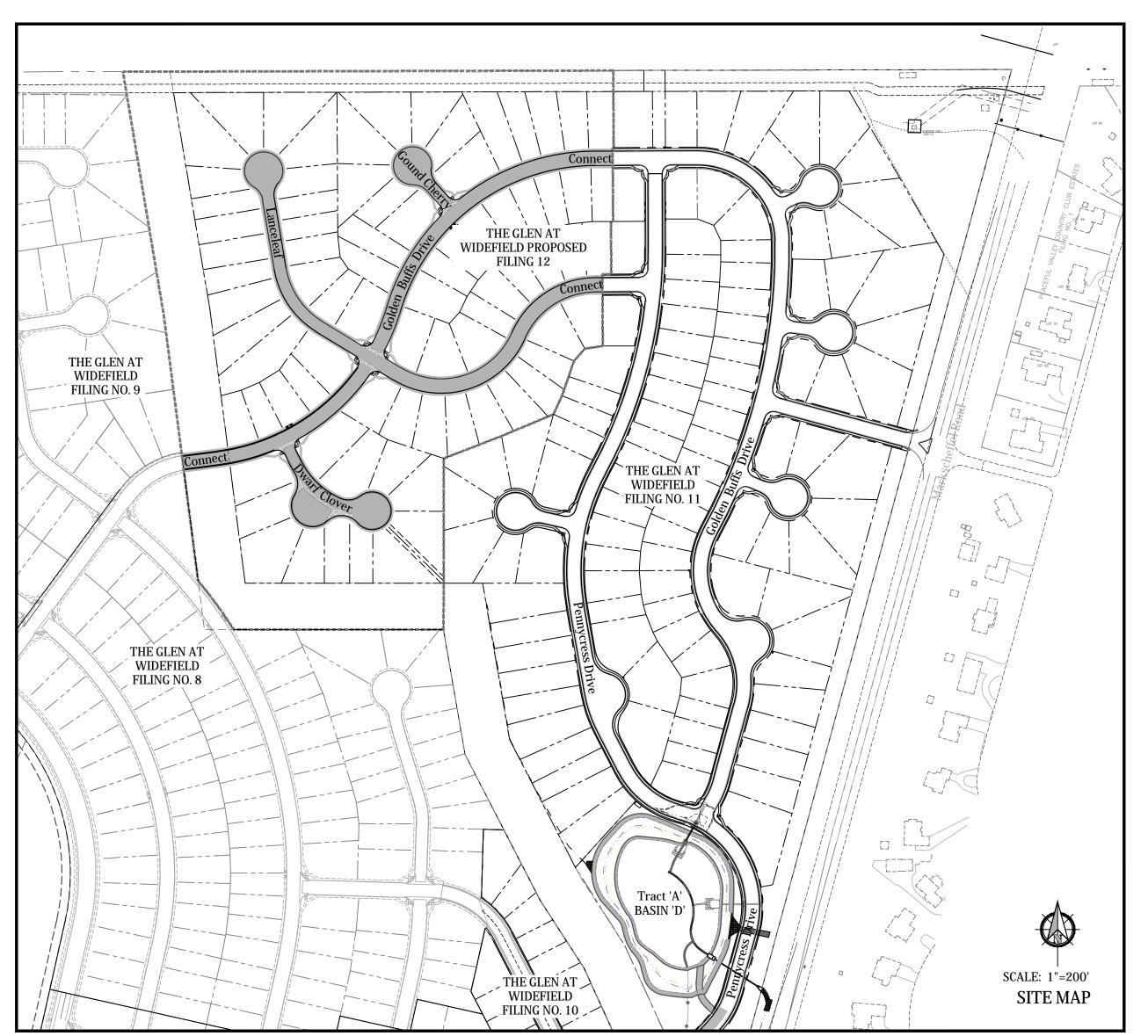
# Grading, Erosion & Sediment Control Cover Sheet PREPARED FOR WIDEFIELD INVESTMENT GROUP





Streetlight locations are pending and are not a part of this submittal

	SEED MIX		
Areas disturbed by the earthwork shall be permanently revegetated SPECIES SIDEOATS GRAMA WESTERN WHEAT GRASS SLENDER WHEAT GRASS LITTLE BLUESTEM SAND DROPSEED SWITCH GRASS WEEPING LOVE GRASS			
Seeding Application: Drill Seed 1/ to a drill, hand broadcast at doul topsoil. <u>Mulching application</u> : 1-	ble the rate and	rake 1/4" to 1/2" into the	



# EROSION CONTROL INSPECTION AND MAINTENANCE

A Thorough Inspection of the Erosion Control Plan/Stormwater Management System shall be performed every 14 days as well as after any rain or snowmelt event that causes Surface \* When Straw Bale Barriers have silted up to half their height, the silt shall be removed, final grade re—established and slopes re—seeded, if necessary. Any straw bales that have shifted or decayed shall be repaired or \* Any Accumulated Trash or debris shall be removed from outlets. An inspection and maintenance log shall be

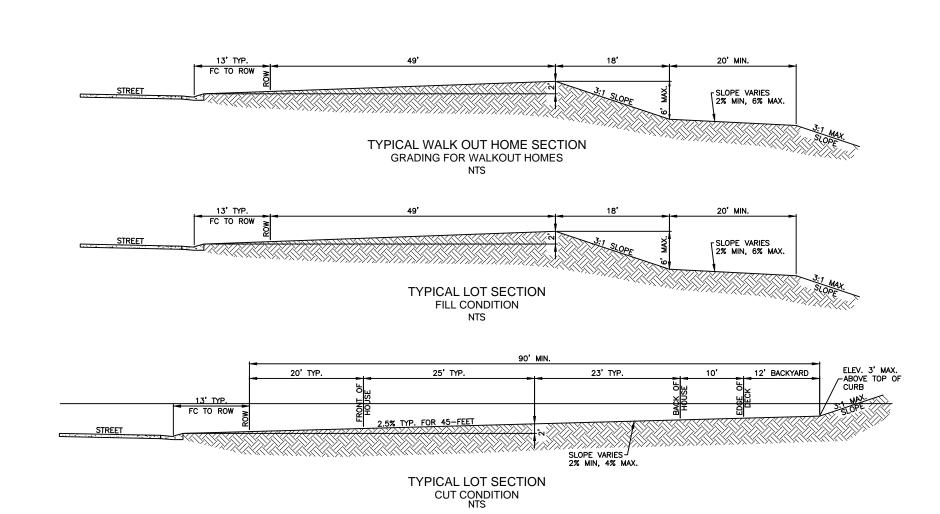
ITEM	QUANTITY	UNITS	PRICE	AMOUNT
PERMANENT SEEDING	18	AC	\$1,875	\$33,750.00
PERMANENT E.C. BLANKET	0	SY	\$7	\$0.00
VEHICLE TRACKING CONTROL	2	EΑ	\$2,867	\$5,734.00
SURFACE ROUGHENING	9	AC	\$250	\$2,250.00
INLET PROTECTION	2	EΑ	\$202	\$404.00
CONCRETE WASHOUT BASIN	2	EΑ	\$1,089	\$2,178.00
SILT FENCING	6,453	LF	\$3	\$19,359.00
PRICES REFLECT CURRENT FAE			TOTAL	\$63,675.00

## PROJECT SPECIFIC GRADING AND EROSION CONTROL NOTES

- a manner that minimizes pollution of any on-site or off-site waters, including wetlands. Notwithstanding anything depicted in these plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to 17. the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code, the Engineering Criteria Manual,
- the Drainage Criteria Manual, and the Drainage Criteria Manual Volume 2. Any deviations from regulations and standards must be requested, and approved, in writing. A separate Stormwater Management Plan (SMWP) for this project shall be completed and an Erosion and Stormwater Quality Control Permit (ESQCP) issued prior to commencing construction. Management of the SWMP during construction is the responsibility of the
- designated Qualified Stormwater Manager or Certified Erosion Control Inspector. The SWMP Once the ESQCP is approved and a "Notice to Proceed" has been issued, the contractor may install the initial stage erosion and sediment control measures as indicated on the
- County will be held prior to any construction. It is the responsibility of the applicant to coordinate the meeting time and place with County staff.
- Control measures must be installed prior to commencement of activities that could contribute land areas shall be installed immediately upon completion of the disturbance. All temporary sediment and erosion control measures shall be maintained and remain in
- effective operating condition until permanent soil erosion control measures are implemented and final stabilization is established. All persons engaged in land disturbance activities shall 23. No person shall cause the impediment of stormwater flow in the curb and gutter or ditch assess the adequacy of control measures at the site and identify if changes to those control All changes to temporary sediment and erosion control measures must be incorporated into the Stormwater Management Plan.
- Temporary stabilization shall be implemented on disturbed areas and stockpiles where ground disturbing construction activity has permanently ceased or temporarily ceased for longer than
- Final stabilization must be implemented at all applicable construction sites. Final stabilization is achieved when all ground disturbing activities are complete and all disturbed areas either 25. All construction traffic must enter/exit the site only at approved construction access points. have a uniform vegetative cover with individual plant density of 70 percent of pre-disturbance 26. Prior to construction the permittee shall verify the location of existing utilities. levels established or equivalent permanent alternative stabilization method is implemented. All 27. A water source shall be available on site during earthwork operations and shall be utilized as temporary sediment and erosion control measures shall be removed upon final stabilization
- All permanent stormwater management facilities shall be installed as designed in the approved plans. Any proposed changes that affect the design or function of permanent stormwater management structures must be approved by the ECM Administrator prior to
- Earth disturbances shall be conducted in such a manner so as to effectively minimize accelerated soil erosion and resulting sedimentation. All disturbances shall be designed. constructed, and completed so that the exposed area of any disturbed land shall be limited to the shortest practical period of time. Pre-existing vegetation shall be protected and maintained within 50 horizontal feet of a waters of the state unless shown to be infeasible and specifically
- Compaction of soil must be prevented in areas designated for infiltration control measures or where final stabilization will be achieved by vegetative cover. Areas designated for infiltration control measures shall also be protected from sedimentation during construction until final areas designated for infiltration and vegetation control measures must be loosened prior to installation of the control measure(s)
- Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be a stabilized conveyance designed to minimize erosion and the discharge of sediment off site.
- 13. Concrete wash water shall be contained and disposed of in accordance with the SWMP. No subsurface storm drainage system or facilities. Concrete washouts shall not be located in an area where shallow groundwater may be present, or within 50 feet of a surface water body,
- During dewatering operations of uncontaminated ground water may be discharged on site, but shall not leave the site in the form of surface runoff unless an approved State dewatering Erosion control blanketing or other protective covering shall be used on slopes steeper than

- Stormwater discharges from construction sites shall not cause or threaten to cause pollution, 16. Contractor shall be responsible for the removal of all wastes from the construction site for contamination, or degradation of State Waters. All work and earth disturbance shall be done in disposal in accordance with local and State regulatory requirements. No construction debris, tree slash, building material wastes or unused building materials shall be buried, dumped, or discharged at the site. Waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. Control measures may be required by El Paso County Engineering if deemed necessary, based on specific conditions
  - 18. Tracking of soils and construction debris off-site shall be minimized. Materials tracked off-site shall be cleaned up and properly disposed of immediately.
- 19. The owner/developer shall be responsible for the removal of all construction debris, dirt, trash rock, sediment, soil, and sand that may accumulate in roads, storm drains and other drainage conveyance systems and stormwater appurtenances as a result of site development. shall be located on site at all times during construction and shall be kept up to date with work 20. The quantity of materials stored on the project site shall be limited, as much as practical, to
- that quantity required to perform the work in an orderly sequence. All materials stored on-site shall be stored in a neat, orderly manner, in their original containers, with original manufacturer's labels. approved GEC. A Preconstruction Meeting between the contractor, engineer, and El Paso 21. No chemical(s) having the potential to be released in stormwater are to be stored or used
  - onsite unless permission for the use of such chemical(s) is granted in writing by the ECM Administrator. In granting approval for the use of such chemical(s), special conditions and monitoring may be required.
- pollutants to stormwater. Control measures for all slopes, channels, ditches, and disturbed 22. Bulk storage of allowed petroleum products or other allowed liquid chemicals in excess of 55 gallons shall require adequate secondary containment protection to contain all spills onsite and to prevent any spilled materials from entering State Waters, any surface or subsurface
  - storm drainage system or other facilities. except with approved sediment control measures.
- measures are needed to ensure the continued effective performance of the control measures. 24. Owner/developer and their agents shall comply with the "Colorado Water Quality Control Act (Title 25, Article 8, CRS), and the "Clean Water Act" (33 USC 1344), in addition to the requirements of the Land Development Code, DCM Volume II and the ECM Appendix I. All appropriate permits must be obtained by the contractor prior to construction (1041, NPDES, Floodplain. 404, fugitive dust, etc.). In the event of conflicts between these requirements and other laws, rules, or regulations of other Federal, State, local, or County agencies, the most restrictive laws, rules, or regulations shall apply.

  - required to minimize dust from earthwork equipment and wind. 28. The soils report for this site has been prepared by Vivid Engineering Group (Dated: April 24, 2020) and shall be considered a part of these plans.
  - 29. At least ten (10) days prior to the anticipated start of construction, for projects that will disturb one (1) acre or more, the owner or operator of construction activity shall submit a permit application for stormwater discharge to the Colorado Department of Public Health and Environment, Water Quality Division. The application contains certification of completion of a stormwater management plan (SWMP), of which this Grading and Erosion Control Plan may
  - be a part. For information or application materials contact: Colorado Department of Public Health and Environment Water Quality Control Division
  - 4300 Cherry Creek Drive South Denver, CO 80246-1530
- Attn: Permits Unit stabilization is achieved. If compaction prevention is not feasible due to site constraints, all 30. Base mapping was provided by Pinnacle Land Surveying. The date of the last survey update was May 2019.
  - 31. Proposed Construction Schedule: Start of Construction: Fall 2023 Completion of Construction: Fall 2024
  - Final Stabilzaiton: Fall 2025 Total Site Area = 27.23 Acres
  - Existing 100-year runoff coefficient = 0.50 Proposed 100-year runoff coefficient = 0.51 Existing Hydrologic Soil Groups: B & C
  - (B--Nelson-Tassel fine sandy loams; B--Stoneham sandy loam; C--Nunn clay 33. Site is currently undeveloped and covered with native grasses on moderate to steep
  - 34. Site is located in the West Fork Jimmy Camp Creek Drainage Basin. 35. There are no Batch Plants utilized onsite.



# TYPICAL LOT CROSS SECTIONS

Kiowa Project No. 19016 March XX, 2023



WIDEFIELD 3 WIDEFIELD BOULEVARD COLORADO SPRINGS, CO 80911

**DEVELOPER:** 

PREPARED BY: ngineering Corporation

1604 South 21st Street Colorado Springs, Colorado 80904 (719) 630 7342

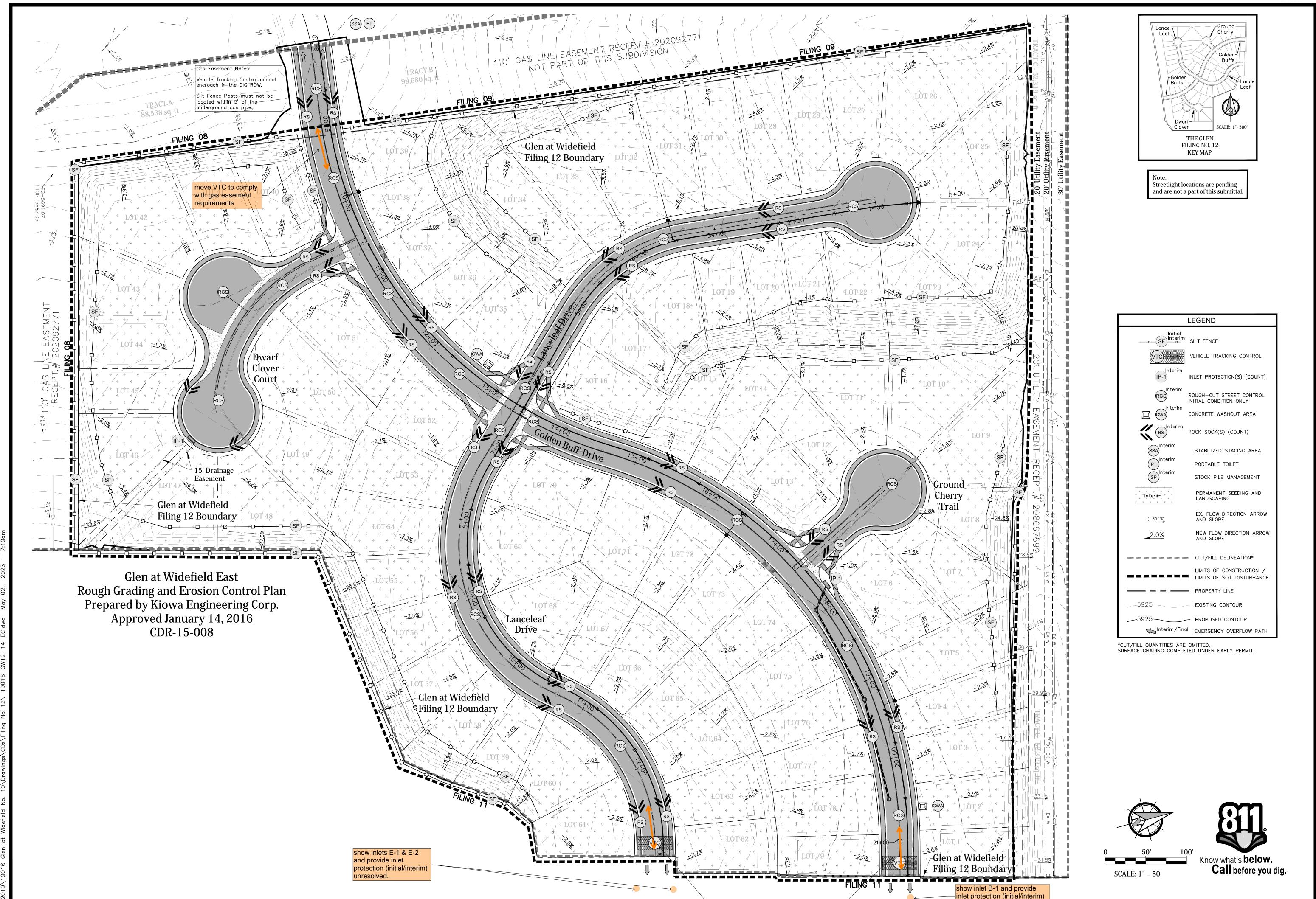
PCD File No. SF-22-024

update to reflect the correct soils report for this filing. unresolved.

OI Sediment Erosion

Grading Filing 12 EL PASO, C

Project No.: 19016 May 3rd, 2023 Drawn: MJK Check: AWMc





Erosion tire Site) FY, COLORAI

May 3rd, 2023 Check: AWMc

VTC should be 75' L unresolved.

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.

ROUGH CUT STREET CONTROL INSTALLATION NOTES

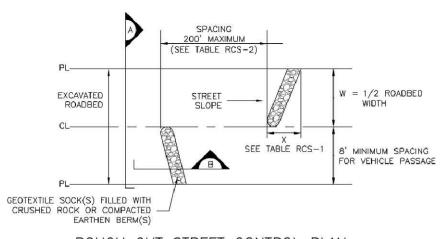
SEE PLAN VIEW FOR
 -LOCATION OF ROUGH CUT STREET CONTROL MEASURES.

ROUGH CUT STREET CONTROL INSPECTION AND MAINTENANCE NOTES

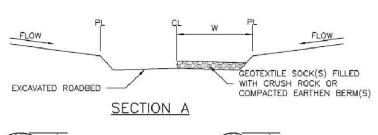
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

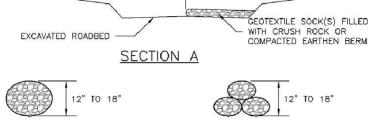
2. ROUGH CUT STREET CONTROL SHALL BE INSTALLED AFTER A ROAD HAS BEEN CUT IN, AND WILL NOT BE PAVED FOR MORE THAN 14 DAYS OR FOR TEMPORARY CONSTRUCTION ROADS THAT HAVE NOT RECEIVED ROAD BASE.

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



ROUGH CUT STREET CONTROL PLAN





	12" TO 18"	12" 10
	SECTION	В
CS-1	8	TABLE RCS-2

		SECTION B	
BLE	RCS-1	TABI	LE RCS-2
(FT)	X (FT)	LONGITUDINAL STREET SLOPE (%)	SPACING (FT)
-30	5	<2	NOT TYPICALLY NEEDE
-40	7		200
-50	9	4	200 150
-60	10.5	5	100 50
-70	12	7	25

# ROUGH-CUT STREET CONTROL

GENERAL INLET PROTECTION INSTALLATION NOTES

INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

EROSION, AND PERFORM NECESSARY MAINTENANCE.

-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,

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.

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

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

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.

SEE ROCK SOCK DESIGN DETAIL FOR JOINTING

16" CINDER

IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE

INLET PROTECTION

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

2"x4" WOOD STUD -

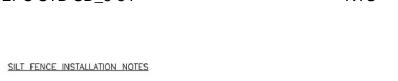
SEE PLAN VIEW FOR:

 LOCATION OF INLET PROTECTION.

INLET PROTECTION MAINTENANCE NOTES

# NOTES 1. SON MATERIAL, EXCAVATION, AND RESTORATION ARE INCLUDED IN THE COST OF THE CONCRETE WASHOUT STRUCTURE. 2. EROSION BALES MAY BE USED AS AN ALTERNATIVE FOR THE BERM. CONCRETE WASHOUT AREA EPC STD SD\_3-84

SIGN -- CONCRETE WASHOUT



LIMIT OF BERM

9' MIN, --

EXCAVATED AND

CONTAINMENT-

AREA

TRUCK ACCESS

PLAN VIEW

AREA

SECTION A-A

MAXIMUM STORAGE

(多 OF VOLUME AREA)

RAMP

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.

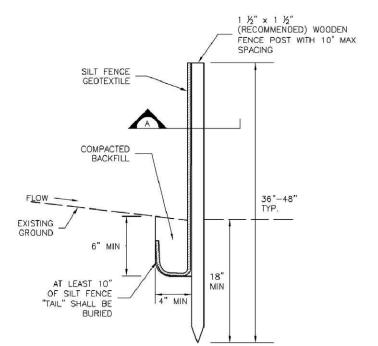
4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES. 5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS, STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

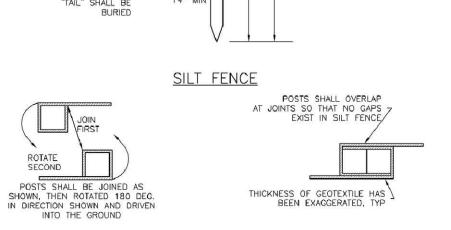
6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').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

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, 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.





# SECTION A SILT FENCE DETAIL \_\_\_\_\_\_\_\_

TABLE ECB-1. ECB MATERIAL SPECIFICATIONS

100%

DOUBLE/ NATURAL

DOUBLE/ NATURAL

DOUBLE/ NATURAL

100%

COCONUT STRAW
CONTENT CONTENT

30% MIN 70% MAX

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

2. 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPS, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.

3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL CRADING, 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

4. PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL

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

7. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs

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

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

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

4.  ${\tt ECBs}$  SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.

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

5. 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. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB-1.

EROSION CONTROL BLANKET MAINTENANCE NOTES

100%

EROSION CONTROL BLANKET INSTALLATION NOTES

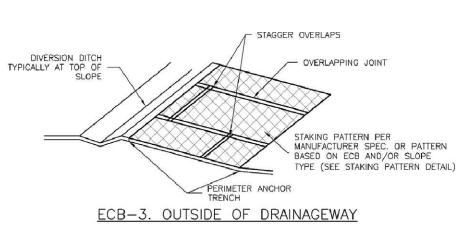
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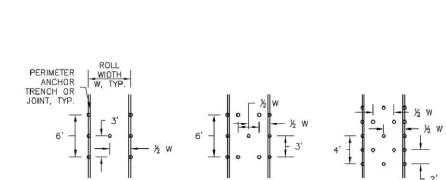
COCONUT

EXCELSIOR

BLANKET AREAS.

## STAKING PATTERNS BY SLOPE





STAKING PATTERNS BY ECB TYPE

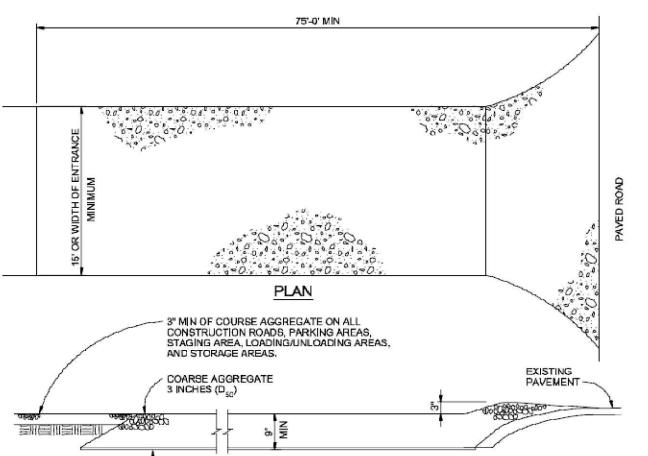
5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.











# VEHICLE TRACKING

SECTION

GEOTEXTILE (MATERIAL REQUIREMENTS IN APPENDIX B, TABLE MT-3)

# VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS 1, ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION

BEGINNING. 2, CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.

3, AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE. 4, CONSTRUCTION ROADS, PARKING AREAS,

LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED. 5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

MAINTENANCE REQUIREMENTS 1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM

SEWER DRAINS.

2, STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY. 3, SEDIMENT TRACKED ONTO PAYED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM

4, STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY. 5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

VEHICLE TRACKING CONTROL

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

# 3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL. INLET PROTECTION (P-1)

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> d 0

4

roject No.: 19016

Design: MJK

Drawn: MJK

Check: AWMc

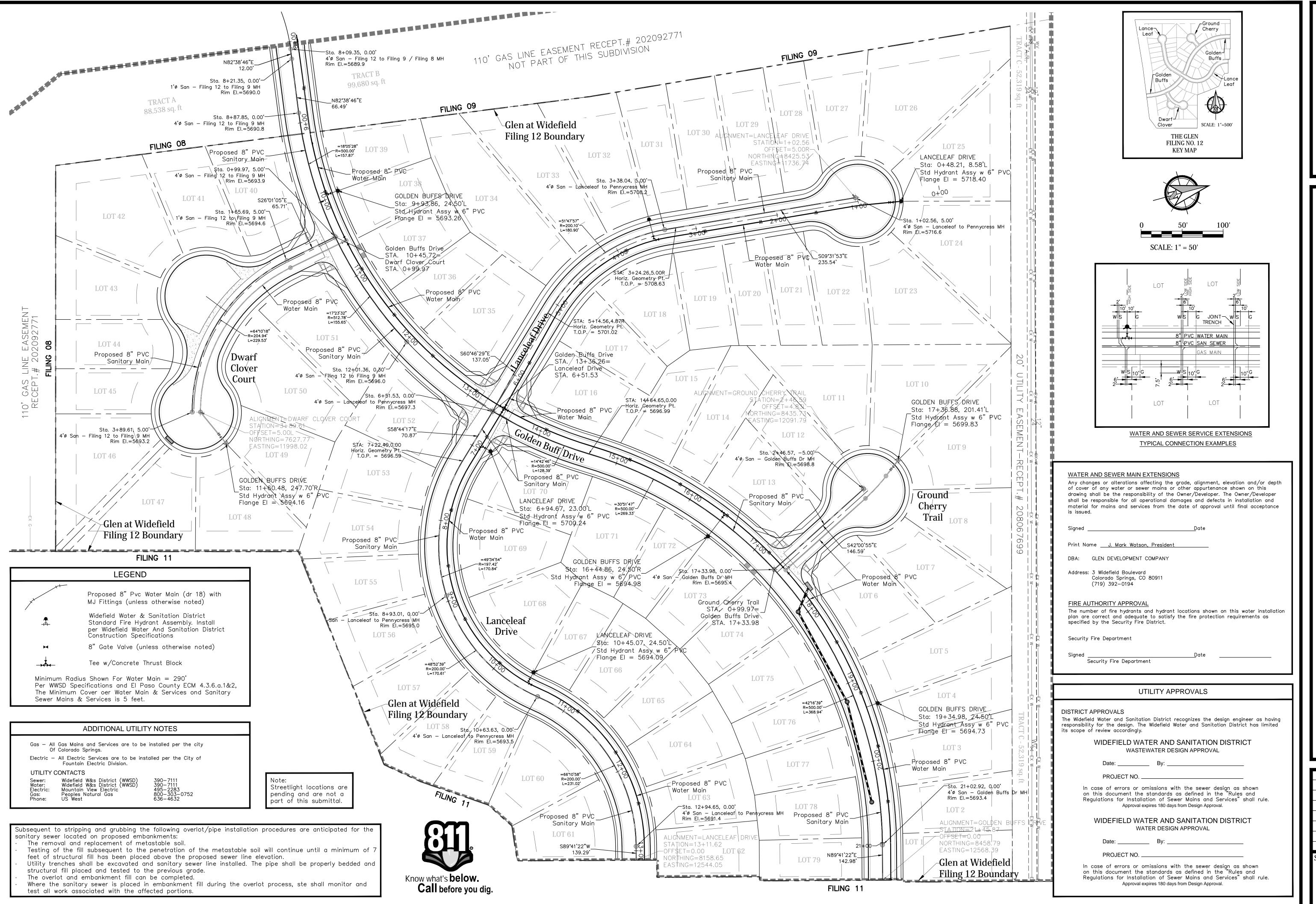
Revisions

SHEET

May 3rd, 2023

15 of 19 Sheets

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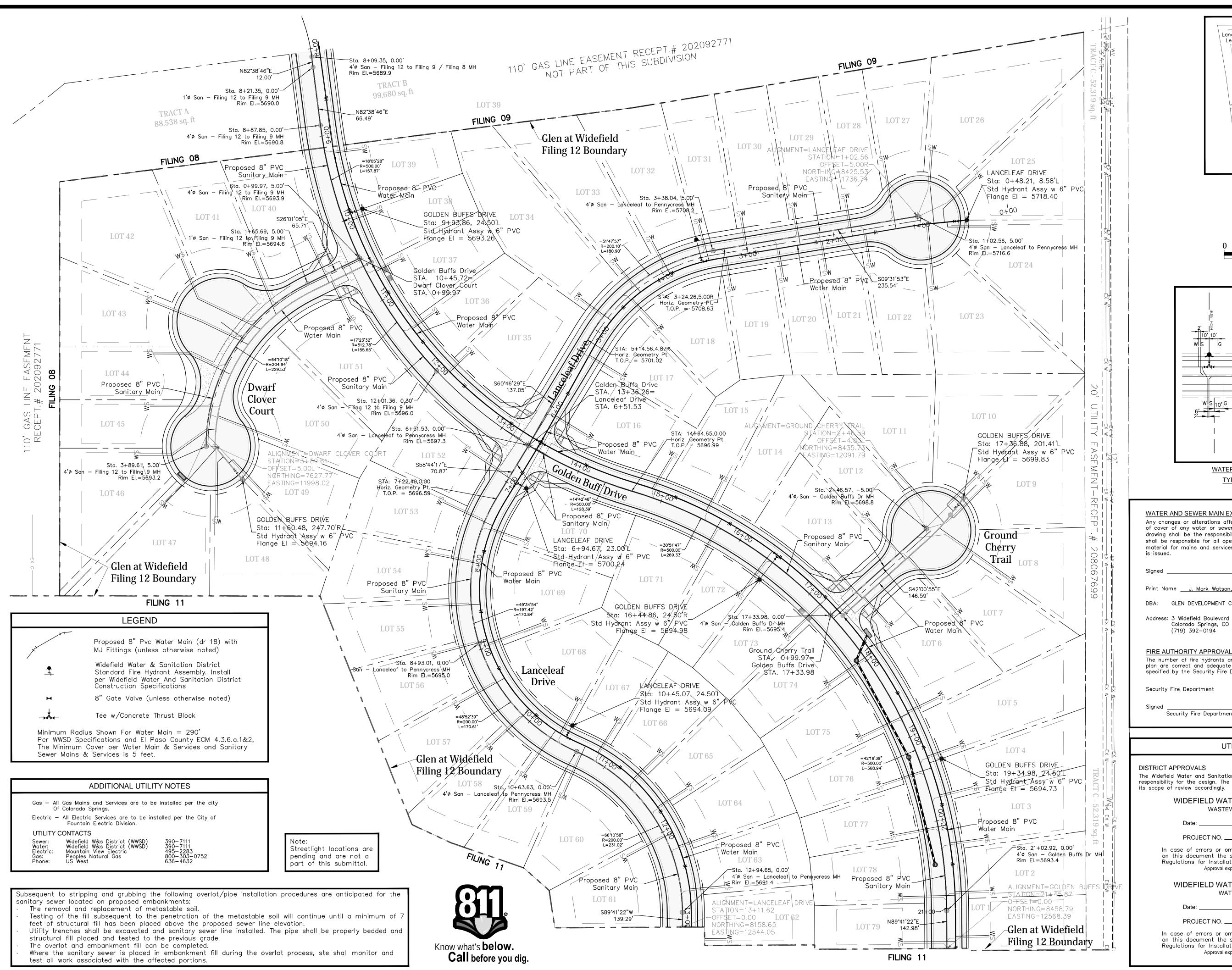


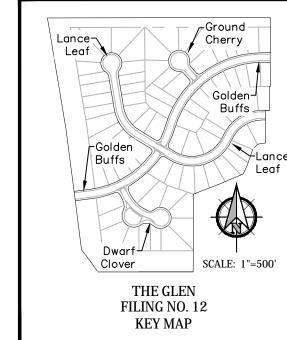
WIDEFIEI LEN Utility Filing 1 EL PASO,

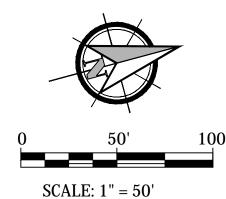
2 (Entire Site)
COUNTY, COLORADO

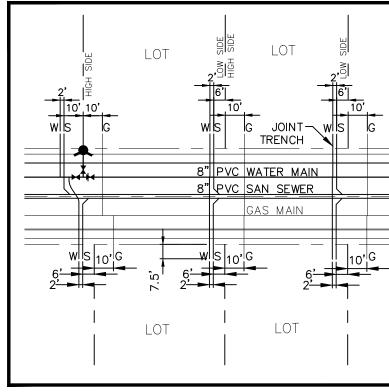
roject No.: 19016 Date: May 3rd, 2023 Design: MJK Drawn: MJK Check: AWMc **Revisions:** 

SHEET









WATER AND SEWER SERVICE EXTENSIONS TYPICAL CONNECTION EXAMPLES

WATER AND SEWER MAIN EXTENSIONS

Any changes or alterations affecting the grade, alignment, elevation and/or depth of cover of any water or sewer mains or other appurtenance shown on this drawing shall be the responsibility of the Owner/Developer. The Owner/Developer shall be responsible for all operational damages and defects in installation and material for mains and services from the date of approval until final acceptance

Print Name J. Mark Watson, President DBA: GLEN DEVELOPMENT COMPANY Address: 3 Widefield Boulevard Colorado Springs, CO 80911 (719) 392-0194

The number of fire hydrants and hydrant locations shown on this water installation plan are correct and adequate to satisfy the fire protection requirements as specified by the Security Fire District.

Security Fire Department

# **UTILITY APPROVALS**

The Widefield Water and Sanitation District recognizes the design engineer as having responsibility for the design. The Widefield Water and Sanitation District has limited its scope of review accordingly.

WIDEFIELD WATER AND SANITATION DISTRICT WASTEWATER DESIGN APPROVAL PROJECT NO. \_

In case of errors or omissions with the sewer design as shown on this document the standards as defined in the "Rules and Regulations for Installation of Sewer Mains and Services" shall rule. Approval expires 180 days from Design Approval.

WIDEFIELD WATER AND SANITATION DISTRICT WATER DESIGN APPROVAL

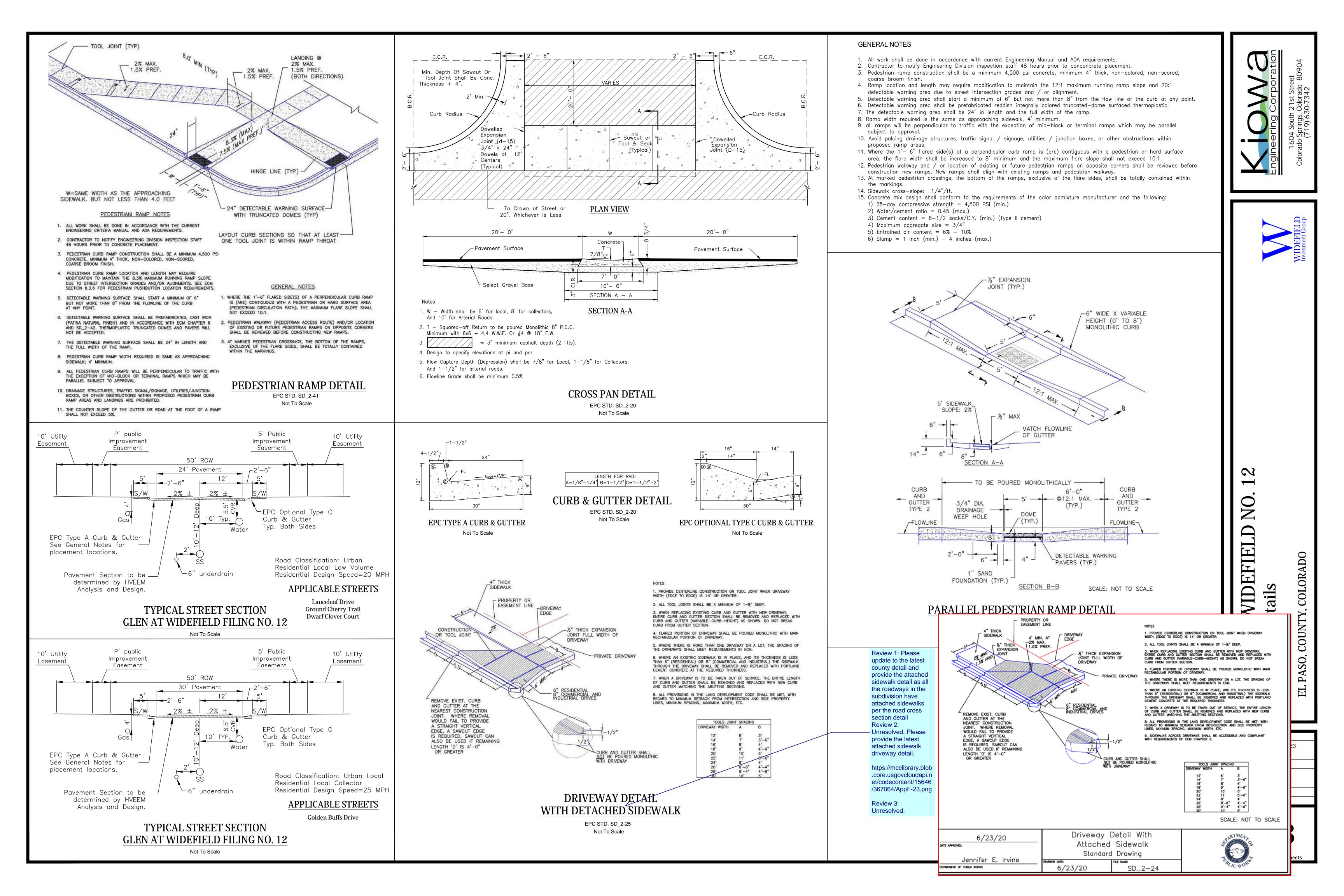
Date: \_\_\_\_\_ By: \_\_\_\_ PROJECT NO. \_\_\_\_\_

In case of errors or omissions with the sewer design as shown on this document the standards as defined in the "Rules and Regulations for Installation of Sewer Mains and Services" shall rule. Approval expires 180 days from Design Approval.

V Service Plan 12 (Entire Site) V, COUNTY, COLORADO WIDEFI LEN Utility Filing 1 EL PASO,

roject No.: 19016 Date: May 3rd, 2023 Design: MJK Drawn: MJK Check: AWMc Revisions:

SHEET



- Underdrain to be constructed where indicated by a dashed line (----). 2. Solid drain pipe will be used in areas as shown on the plans and as directed by the Geotechnical Engineer.
- 3. All underdrain construction shall conform with the latest City of Colorado Springs Standards.
- 4. Engineering Fabric to have a minimum 12—inch overlap above underdrain granular fill.
- 5. Underdrain Pipe to be constructed with the top of pipe equal to or below the bottom of the sanitary sewer pipe.
- 6. Geotechnical Engineer to determine extent of active/passive underdrain depending upon conditions encountered during construction.

collected groundwater is directed into the passive pipe section.

Trench

Compacted Backfill

6" PVC, SDR 35 or

SCH 40 Underdrain

PASSIVE UNDERDRAIN DETAIL

Not To Scale

Trench

Compacted Backfill

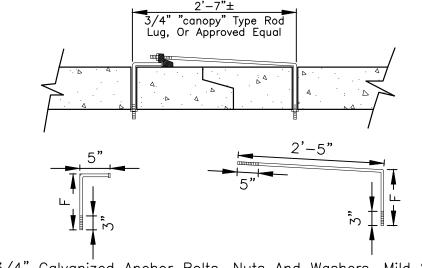
6" Perforated PVC, SDR 35

Granular Fill 3/4" Rock, Consolidated w/Plate Tamper Enclosed in Engineering Fabric, Mirafi 160n Or Equal.

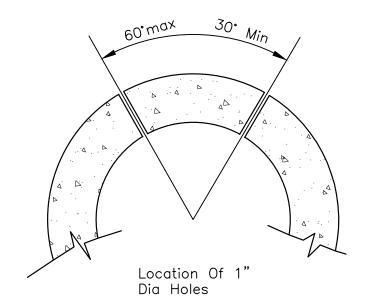
ACTIVE UNDERDRAIN DETAIL Not To Scale

Or SCH 40 Underdrain

7. The Connection between the active and passive portions of the underdrain system is to be constructed with a non-permeable barrier so that all



3/4" Galvanized Anchor Bolts, Nuts And Washers, Mild Steel, Astm A 307, Rod Lug Shall Be Coated With Coal—tar, Epoxy Paint Or Approved Equal.

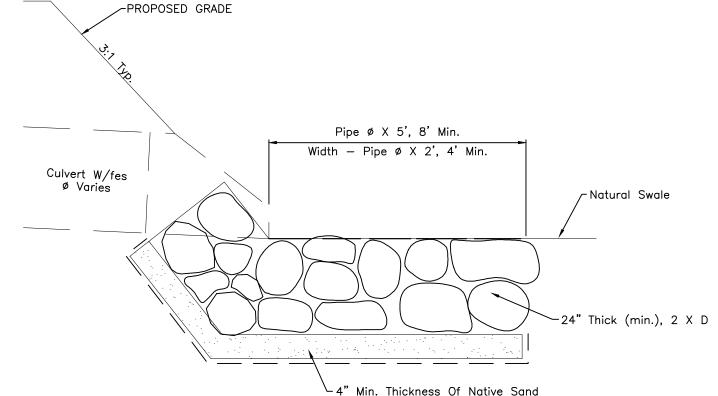


Concrete Joint Fasteners Required On The First Two Pipe Joints From A Flared End Section.

Pipe Diameter	F
18"-30"	5"
36"-42"	6"
48"-60"	7"
72"-84"	9"

9'-4"

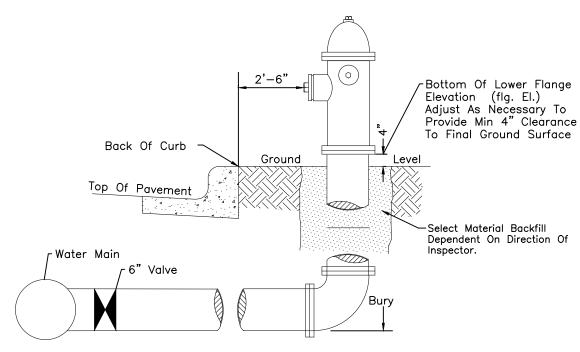
# CONCRETE PIPE JOINT FASTENER DETAIL Not To Scale



4" Min. Thickness Of Native Sand Material Over Mirafi 140n Filter Fabric

# TYPICAL CULVERT OUTLET PROTECTION

Not To Scale



# **GENERAL NOTES:**

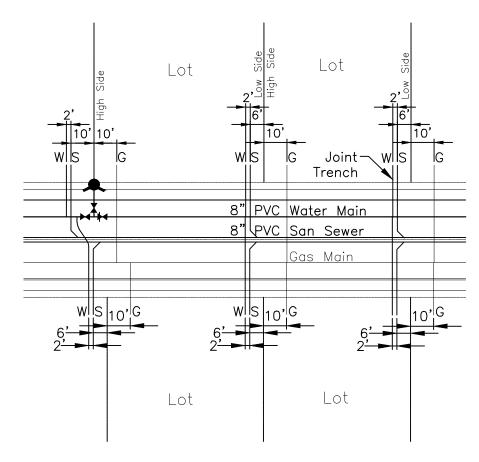
- 1. Hydrant nozzles shall be positioned at right angles to curb. If no curb or sidewalk exists, nozzles shall be placed at right angle to street or alley.
- 2. Hydrants shall be placed a minimum of 5.0 feet from any utility or drainage
- 3. Any hydrant being installed with conditions other than those mentioned and/or detailed below will require signed approval from the Widefield Water District and Security Fire District.
- 4. See Site Utility Plan for hydrant locations and flange elevations.
- 5. The upper exposed section of the hydrant above ground shall be painted rustoleum 659 yellow or equal. The buried portion of the hydrant shall be given a bituminous coating in accordance with Section 10-8.1 of AWWA Standard C110.

# FIRE HYDRANT DETAIL

Not To Scale

Subsequent To Stripping And Grubbing The Following Overlot/pipe Installation Procedures Are Anticipated For The Sanitary Sewer Located On Proposed Embankments:

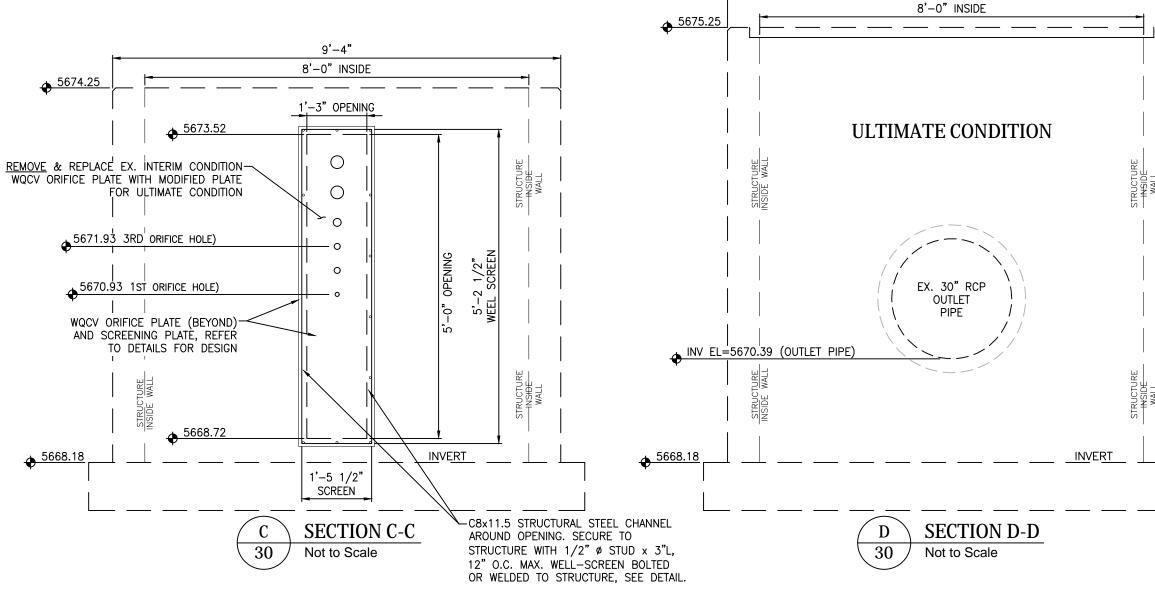
- The Removal And Replacement Of Metastable Soil.
  Testing Of The Fill Subsequent To The Penetration Of The
  Metastable Soil Will Continue Until A Minimum Of 7 Feet Of Structural Fill Has Been Placed Above The Proposed Sewer Line
- Elevation. Utility Trenches Shall Be Excavated And Sanitary Sewer Line Installed. The Pipe Shall Be Properly Bedded And Structural Fill
- Placed And Tested To The Previous Grade.
- The Overlot And Embankment Fill Can Be Completed. Where The Sanitary Sewer Is Placed In Embankment Fill During
- The Overlot Process, Site Shall Monitor and Test All Work Associated with the Affected Portions.



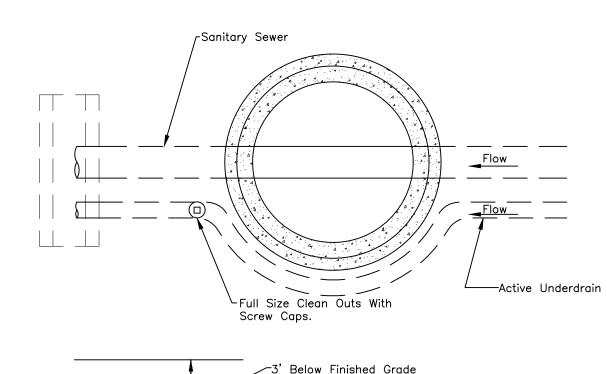
TYPICAL JOINT-TRENCH UTILITY SERVICE DETAIL Not To Scale

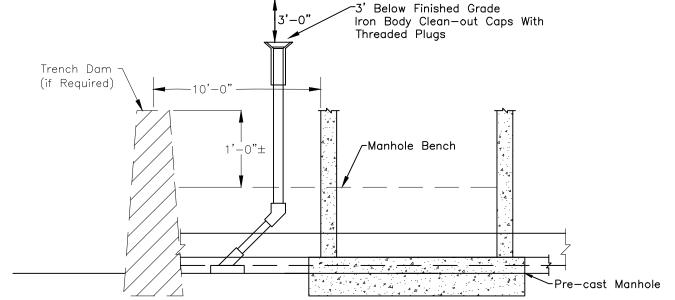
∕∕<del>///</del>2−1/8"ø √⊘/<del>///</del> 1−13/16"ø <del>√∕√/</del> 1−3/8"ø √*√*/<del>///</del> 1–3/8"ø ORIFICE PLATE-BOLTED OR WELDED TO STRUCTURE, SEE NOTES 1/4" THK PLATE, SEE PROVIDE CONTINUOUS NEOPRENE GASKET BETWEEN ORIFICE PLATE AND OUTLET STRUCTURE

**WQCV ORIFICE PLATE** Not to Scale

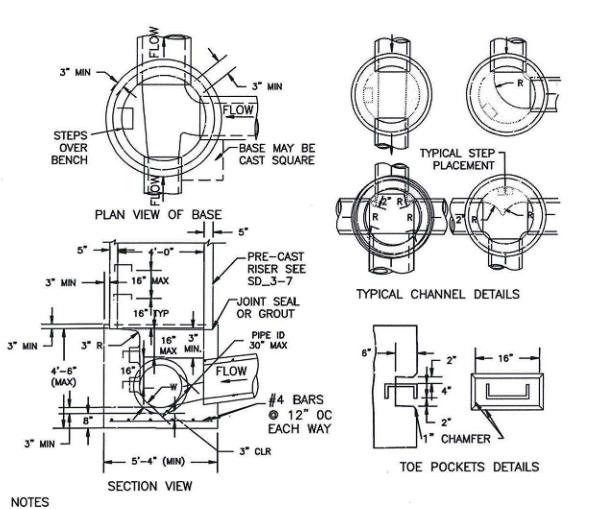


ULTIMATE CONDITION AS DESIGNED W/ FILING 11 & INCLUSIVE OF FILING 12 SHOWN HEREON FOR REFERENCE AND INFORMATIONAL PURPOSES ONLY NOTE: NO RESTRICTOR PLATE





GROUNDWATER UNDERDRAIN DETAIL CLEANOUT LOCATIONS OUTSIDE MANHOLE



1. TYPE II MANHOLES SHALL BE USED WHEN APPROPRIATE AND TYPICALLY WHEN THE PIPE SIZES ARE 30" OR LESS INSIDE DIAMETER.

2. VIEW AND DETAILS ARE TYPICAL. DESIGN ENGINEER SHALL DETERMINE MANHOLE BASE CONFIGURATION AND DIMENSIONS FOR PARTICULAR PIPE SIZES AND ALIGNMENT.

3. EITHER LADDER OF STEPS SHALL BE INSTALLED WHEN MANHOLE DEPTH EXCEEDS 30". STEPS IN BASE SHALL BE INSTALLED IN "TOE POCKETS" (SEE DETAIL THIS SHEET). LOWEST STEP SHALL BE A MAXIMUM OF 16" ABOVE THE FLOOR.

4. PIPES SHALL BE TRIMMED TO FINAL SHAPE AND SET BEFORE MANHOLE IS POURED. 5. BENCH SHALL BE SLOPED TOWARD CENTER OF MANHOLE BASE (4:1 MAX., 1/2" PER FOOT. MIN.).

6. FLOOR OF MANHOLE SHALL BE TROWELLED TO A SMOOTH, HARD SURFACE AND SHALL SLOPE TOWARDS THE OUTLET (8:1., ½" PER FT. MIN.) . FLOOR SHALL BE SHAPED AND CHANNELED; SEE DETAILS THIS SHEET.

> STORM SEWER MANHOLE DETAIL TYPE II EPC STD. SD\_3-2 Not To Scale

WIDEFIEI etail Site Pl Utility D EL PASO,

COLORADO

roject No.: 19016 May 3rd, 2023 Design: MJK Drawn: MJK Check: AWMc

SHEET

# Construction Drawings\_V3\_Comments.pdf Markup Summary

### Arrow (3)



Subject: Arrow Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:49:14 AM

Status: Color: Layer: Space:



Subject: Arrow Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:53:54 AM

Status: Color: E Layer: Space:



Subject: Arrow Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:54:01 AM

Status: Color: Layer: Space:

### Callout (7)



Subject: Callout Page Label: [1] 02 Author: Daniel Torres Date: 5/24/2023 10:20:34 PM

Status: Color: Layer: Space: please remove as this is not County nomenclature for roadway classifications.

21+50 22+00 22+50 23

delete Road Resid Resid

Subject: Callout Page Label: [1] 03 Author: Daniel Torres Date: 5/24/2023 10:21:42 PM

Status:
Color: Layer:
Space:

delete



Subject: Callout Page Label: [1] 04 Author: Daniel Torres Date: 5/24/2023 10:27:15 PM

Status: Color: Layer: Space: review 2 comment: Per ECM Figure 2-31 and detail SD2-75 radius shall be 45'. Please revise. Review 3: unresolved. Please revise per comment

above.



Subject: Callout Page Label: [1] 06 Author: Daniel Torres

**Date:** 5/24/2023 10:27:41 PM **Status:** 

Status: Color: Layer: Space: Review 2: Per ECM Figure 2-31 and detail SD2-75

radius shall be 45'. Please revise.

Review 3: Unresolved



Subject: Callout
Page Label: [1] 07
Author: Daniel Torres

Date: 5/24/2023 10:29:51 PM

Status: Color: Layer: Space: Review 2: Per ECM Figure 2-31 and detail SD2-75

radius shall be 45'. Please revise.

Review 3: unresolved. Please address the above

comment.



Subject: Callout Page Label: [1] 12 Author: Daniel Torres Date: 5/24/2023 10:36:08 PM

Status: Color: Layer: Space: Review 2 comment: revise the easement to reflect 30' as shown on the plat.

Review 3: unresolved. Please revise the easement

width.



Subject: Callout Page Label: [1] 18 Author: Daniel Torres Date: 5/24/2023 10:39:22 PM

Status: Color: Layer: Space: Review 1: Please update to the latest county detail and provide the attached sidewalk detail as all the roadways in the subdivision have attached sidewalks per the road cross section detail Review 2: Unresolved. Please provide the latest attached sidewalk driveway detail.

https://mcclibrary.blob.core.usgovcloudapi.net/codecontent/15646/367064/AppF-23.png

Review 3: Unresolved.

### Engineer (4)



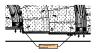
Subject: Engineer

Page Label: [1] 13-EC Cover

Author: dotprete

Date: 5/17/2023 8:46:46 AM

Status: Color: ■ Layer: Space: update to reflect the correct soils report for this filing, unresolved.



Subject: Engineer Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:54:17 AM

Status: Color: ■ Layer: Space: VTC should be 75' L unresolved.



Subject: Engineer Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:54:29 AM

Status: Color: ■ Layer: Space: show inlets E-1 & E-2 and provide inlet protection

(initial/interim) unresolved.



Subject: Engineer Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:55:02 AM

Status: Color: ■ Layer: Space: show inlet B-1 and provide inlet protection

(initial/interim) unresolved.

### Highlight (4)



Subject: Highlight

Page Label: [1] 13-EC Cover

Author: dotprete

Date: 5/17/2023 8:45:55 AM

Status: Color: Layer: Space: Vivid Engineering Group (Dated: April 24, 2020)

Subject: Highlight
Page Label: [1] 14
Author: dotprete

Date: 5/17/2023 8:54:50 AM

Status: Color: Layer: Space:

Subject: Highlight Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:54:51 AM

Status: Color: Layer: Space:

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Subject: Highlight Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:54:59 AM

Status: Color: Layer: Space:

### Image (1)



Subject: Image Page Label: [1] 18 Author: Daniel Torres

Date: 5/24/2023 10:39:40 PM

Status: Color: Layer: Space:

### Line (2)



Subject: Line Page Label: [1] 02 Author: Daniel Torres Date: 5/24/2023 10:20:02 PM

Status: Color: Layer: Space:

-50 23+00 23+50 24+

Road Classification: Urban Local
Residential Local Collector
Residential Design Speed=25 MPH

Subject: Line Page Label: [1] 03 Author: Daniel Torres Date: 5/24/2023 10:21:27 PM

Status:
Color: Layer:
Space:

### Stormwater Comments Color (1)



Subject: Stormwater Comments Color

Page Label: [1] 01-Cover

Author: dotprete

**Date:** 5/17/2023 8:56:07 AM **Status:** 

Color: Layer: Space:

### Text Box (1)



Subject: Text Box Page Label: [1] 14 Author: dotprete

Date: 5/17/2023 8:49:41 AM

Status: Color: ■ Layer: Space: move VTC to comply with gas easement

requirements