- Il new construction to conform to the specifications of El Paso County Planning and Community Development, Widefield Water and Sanitation Distri nd the Fountain Mutual Irrigation Company (FMIC). Any asphalt removed is to be replaced to meet the specifications of the El Paso County Planning
- numity Development.

  nent design, curb and gutter, and sidewalks see individual plan and profile sheets. Pavement design to be based on Resistance Value 'R'

  om Hween tests and are to be approved by the Engineering Division of the EI Paso County Planning and Community Development prior

- derived from Hveem tests and are to ee appuresco y to the contraction of the State S

- A PTF-CONSTRUCTION meeting shall be nein with the EP 280 clustof Ptaining and Community Development and whether water and Santanion Distri-prior to any construction.

  All necessary permits, such as SWMF\_ESQCP\_Flighter Dust, Access, C.O.E. 404, etc. shall be obtained prior to construction.

  All necessary permits, such as SWMF\_ESQCP\_Flighter Dust, Access, C.O.E. 404, etc. shall be obtained prior to construction.

  All handcap ramps to be per EP pass County Standards TSQ\_2-40.

  The contractor shall coordinate exact locations and layout with the EI Pass 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.
- pedestrian gramps for the construction of the curve. Pedestrian ramp locations are as allows on the plans. Where appropriate all existing concrete and asphalt. Repiral replace allows the desixing kennes with like materials and thicknesses. All disturbed areas shall be revegetated with native grasses within 21 days of excavation per Erosion Control Plan.

  The prepared Forsion (Fediment Control Plan is to be considered a part of these plans and its requirements adhered to during the construction of this prepared Forsion Control Plan is to be considered a part of these plans and its requirements adhered to during the construction of this prepared Forsion Control Plan is to be considered a part of these plans and its requirements adhered to during the construction of this
- 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.
- All storm sewer bedding to be per CDoT Standards.

  All storm sewer pipe shall be Class III 8 Wall unless otherwise shown on the storm sewer plan and profile sheets.

  All storm sewer pipe shall be Class III 8 Wall unless otherwise shown on the storm sewer plan and profile sheets.

  All veyes and beneds used in construction of storm sewer facilities shall be factory fabricated, unless approved by the El Paso County Development Services Department.

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

- 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 manufacturer's recommendations.

  18. If there are the sewer of the sewer radial deflections to be grouted or installed year.

  18. If there are the sewer radial steeps of the sewer radial steeps of the sewer radial deflections to be grouted or a sewer radial steep.

  20. Sanitary sewer manufacturer 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. Pripe used for construction of sanitary sewers shall be SDR 35 unless shown otherwise on plan and profiles.

  21. All Profit of the Start Start

- 24. The turn lime usery points to octate at the intersection or the rate and top of curio or the ray in Sannata to-into retrical curio. See typical street section for design point focations.

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

  26. All utility construction to be conducted in conformance with the current Widefield Water and Sanitation District Specifications and/or El Paso County
- An utuly construction to be conducted in conformance with the current wherein water and salination uterface specifications, whichever is greater.

  Specifications, whichever is greater.

  Specifications, whichever is greater.

  For including the property of the property of

#### EL PASO COUNTY STANDARD NOTES

- Contractor shall be responsible for the notification and field notification of all existing utilities, whether shown on the plans or not, before be construction. Location of existing utilities shall be verified by the contractor prior to construction. Call 811 to contact the Utility Notification
- CONTROL STATE (SWITT) STATE (S

- 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 De Trainage Criteria Manual, and the Drainage Criteria Manual, and the Jurianage Criteria Manual, an
- 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
- 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.
- tor shall not deviate from the plans without first obtaining written approval from the design engineer and P&CDD. Contractor shall notify the ngineer 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 pavemen
- 11. All construction traffic must enter/exit the site at approved construction access points

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

#### INDEX OF SHEETS

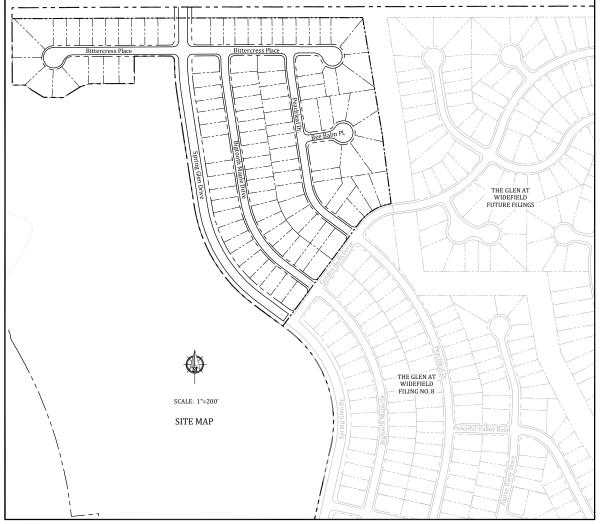
- Plan and Profile Spring Glen Drive (30+00 to 43+00)
- Plan and Profile Spring Glen Drive 43+50 to 45+89)
  Plan and Profile Bigtooth Maple Drive (25+50 to 37+82)
- Plan and Profile Peachleaf Drive (25+00 to 38+36) Plan and Profile - Bittercress Place (0+00 to 9+00)
- Plan and Profile -- Bittercress Place (9+00 to 14+39) Plan and Profile Bee Balm Place (1+00 to 3+51)
- Overall Signage and Striping Plan
- Storm Sewer Plan (Outfall) Storm Sewer Plan (Peachleaf Drive)
- Grading and Erosion Control Plan
- Grading and Erosion Control Details
- Utility Plan
  Utility Plan -- Water Line Lowering Details
- Utility Services Plan

- Detention Basin Details
- Site Detail Plan -- Utility Details

# THE GLEN AT WIDEFIELD FILING NO. 9

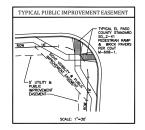
# RESIDENTIAL SUBDIVISION CONSTRUCTION DRAWINGS

### PREPARED FOR WIDEFIELD INVESTMENT GROUP



# ASSY = ASSEMBLY BNDY = BOUNDARY BOUNDARY BOUNDARY CL = CENTERUNE CL = CENTERUNE CTHE = CONCRETE THRUST BLOCK CTHE = CONCRETE THRUST BLOCK CT = POINT OF CLUBB RETURN DIP = DUCTILE IRON PIPE EL = ELEVATION ESMT = EASEMENT EX = EXSTING FC = FACE OF CURB FCS = FLANGE FL = FLANGE FL = FLANGE FL = FLANGE FL = FLANGE NTS = NOT TO SCALE DD = OUTSIDE DIAMETER DC = POINT OF HORIZONTAL CURVATURE PP = PROPOSED PT = POINT OF HORIZONTAL TANGENCY PVC = POLY VINYL CHLORIDE PIPE PVC = POINT OF VERTICAL CURVATURE PVI = POINT OF VERTICAL LINTERSECTION PVT = POINT OF VERTICAL TANGENCY RCB = REINFORCED CONCRETE BOX RT = RIGHT OF WAY RT = RIGHT OF WAY SHEET FLANGE FLOWLINE GB = GRADE BREAK HP = HIGH POINT HORIZ = HORIZONTAL HYD = HYDRANT = INSIDE DIAMETER = LEFT = LINEAR FEET

ABBREVIATIONS



Kiowa Project No. 17038 September 7, 2018

# D698, unless otherwise approved by the Widefield Water and Sanitation

- All materials and workmanship shall be subject to inspection by the Widefield Water and Sanitation District. The Widefield Water and and workmanship that does not conform to its standards and
- The Developer or his Engineer has located all fire hydrants and future
- All ductile iron pipe, to include fittings, valves and fire hydrants will be
- cathodic protection on both Dip mains and PVC mains is specified in the Standards and Specifications
- 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 anies 48 hours prior to construction adjacent to the known
- The location of all utilities as shown on these drawings are approximat only. The location of all utilities shall be verified prior to
- The Contractor shall field excavate and verify the vertical and horizonta location of all tie-ins. Contractor shall notify the Widefield Water and Sanitation District and the Engineer of the field verified information prior

- Any pumping or bypass operations must be reviewed and approved pri to execution by both the Widefield Water and Sanitation District and the
- Contractor must replace or repair any damage to all surface
- Contractor must replace or repair any damage to all surface improvements, including but not limited to fences, curb and gutter and/o 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.
- Widefield Water and Sanitation District.
  5. 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 of signed drawings are received by the Widefield W & S District.
  Pre-Construction Date / Initials

### LEGEND



- PROPOSED STORM INLET PROPOSED STORM FFS PROPOSED BOXBASE MH
  - EXISTING SANITARY SEWER EXISTING STORM SEWER FYISTING STORM MH ☐ EXISTING STORM FES

VICINITY MAP

## WIDEFIELD WATER AND SANITATION DISTRICT

Widefield Water and Sanitation District specifications. Compaction requirements shall be 95% Standard Proctor as determined by ASTM District or a higher standard is imposed by another agency having

GENERAL NOTES

- Sanitation District reserves the right to accept or reject any such materia
- shall be at the expense of the Developer.
- wrapped with polyetheylene tubing, and electrically isolated.

  All ductile iron pipe and fittings shall be double bonded. Specifications for
- PVC main lines shall be installed with coated No. 12 tracer wire. prior to the start of construction. The Contractor shall also notify affecte
- All bends shall be field staked prior to construction
- All bends shall be field staked prior to construction.
  Any water utility material removed and not reused shall be returned to the Widefield Water and Sanitation District if the District so requests.
  The Contractor shall at his expense support and protect all utility mains that they will function continuously during construction. Should a utility main 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.

### CURB & GUTTER \_\_\_\_\_ FYISTING WATER EXISTING WATER HYDRAN EXISTING WATER VALVE EXISTING SANITARY MH

#### GOVERNING AGENCIES

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, and said plans and specifications are in conformity with applicable master drainage plans and master transportation plans. Said plans and spucifications meet the purposes for which the particular roadway and drainage facilities are designed and are correct to the best of my knowledge and pelief, if accept responsibility for any liability caused by any negligent acts, errors or donis for some my part in preparation of these detailed plans and specifications.

Sept. 7, 2018

Rehard N. Wray, P.E. 819810

Date

For and on behalf of Klova Ongineering Corp.

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

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 EI 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

UTILITY APPROVALS

The control of the co

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.

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 accordinaly.

WIDEFIELD WATER AND SANITATION DISTRICT

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.

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

Sept. 7, 2018

these detailed plans and specifications.

J. Ryan Watson, President

Glen Development Company 3 Widefield Boulevard Colorado Springs, Colorado 80911

Jennifer Irvine, P.E. County Engineer / ECM Administrator

WATER AND SEWER MAIN EXTENSIONS

Print Name J. Mark Watson, President

DBA: GLEN DEVELOPMENT COMPANY

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

Signed Security Fire Department

FIRE AUTHORITY APPROVAL

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

El Paso County Planning & Communit

37 Widefield Blvd. Colorado Springs, Colorado (719) 390-7111

Mountain View Electric Association I 1140 East Woodmen Road

#### **DEVELOPER:**



3 WIDEFIELD BOULEVARD COLORADO SPRINGS, CO 80911

Klowa Engineering Corporation

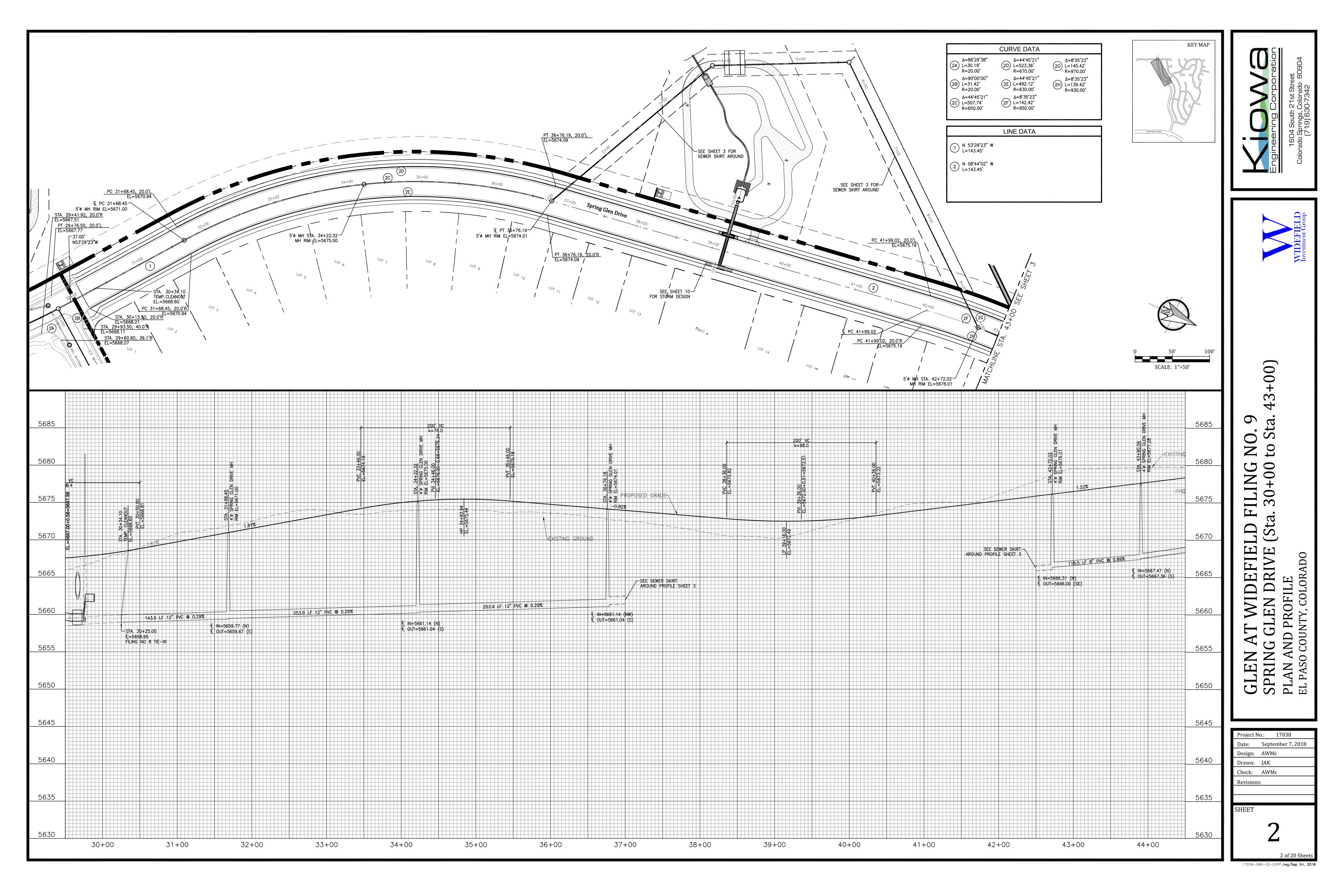
1604 South 21st Street

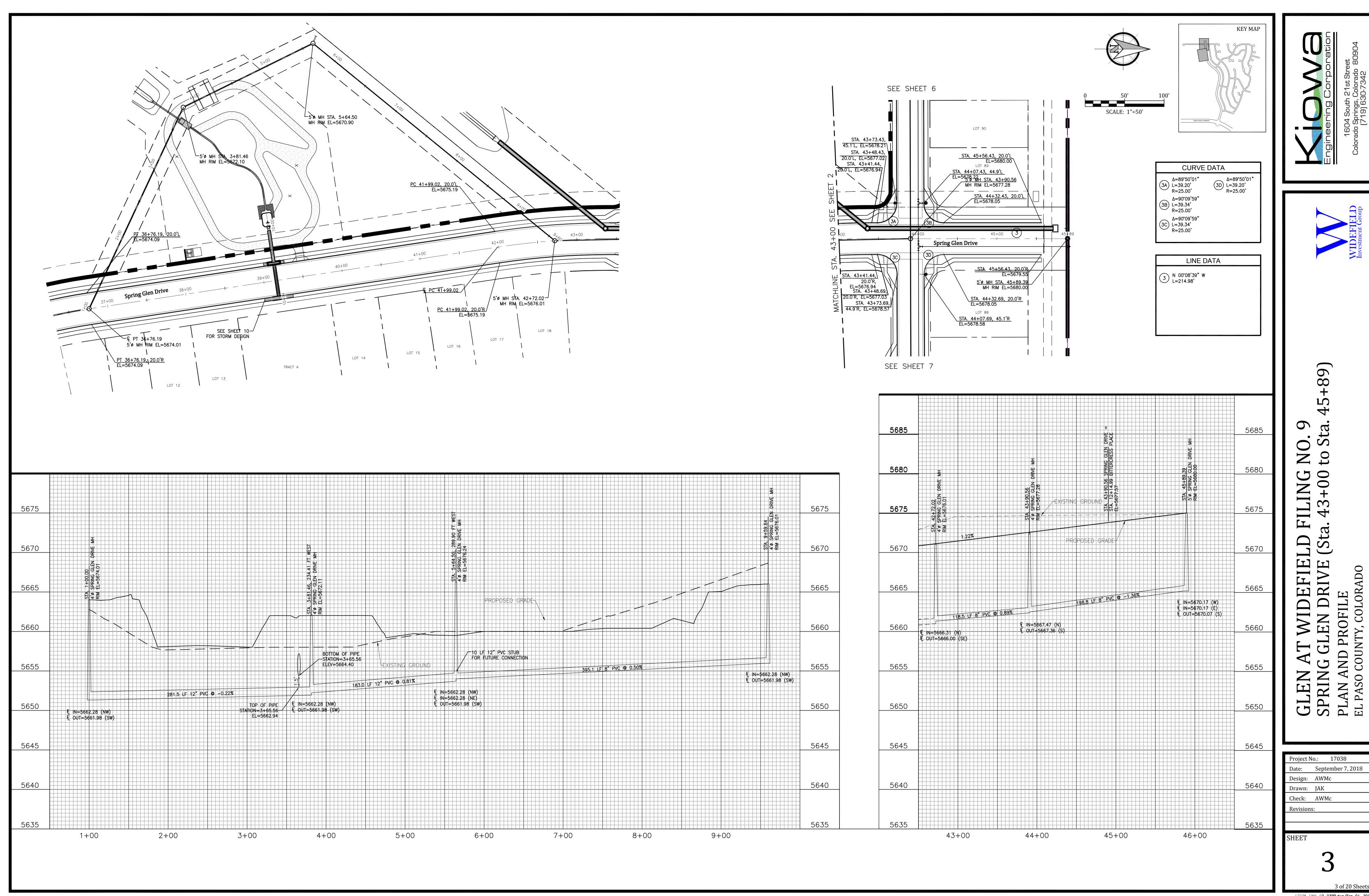
Colorado Springs, Colorado 80904 (719) 630-7342

PREPARED BY:

Black Hills Energy 18965 Bas Camp Road Unit A7

(719) 359-0586

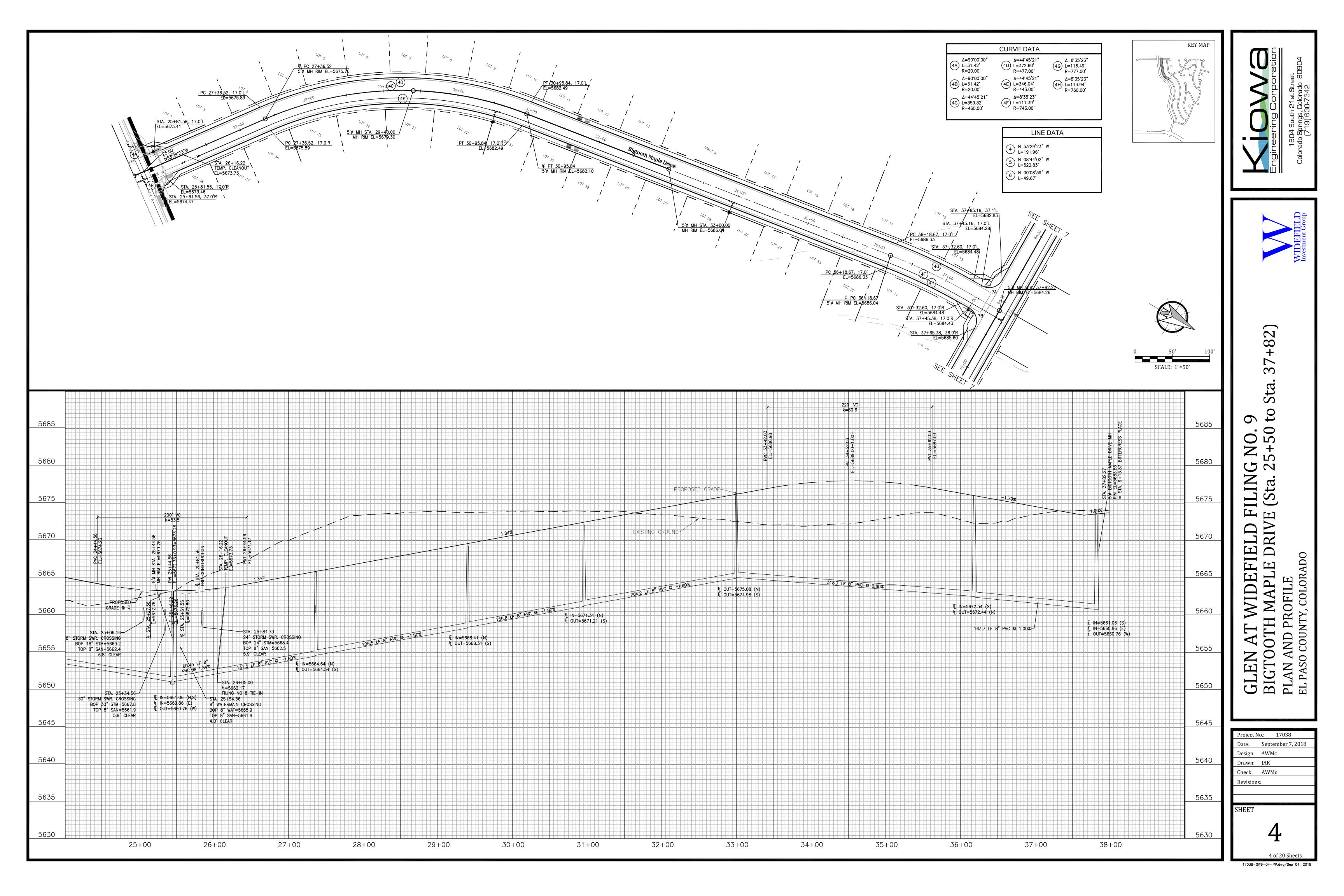


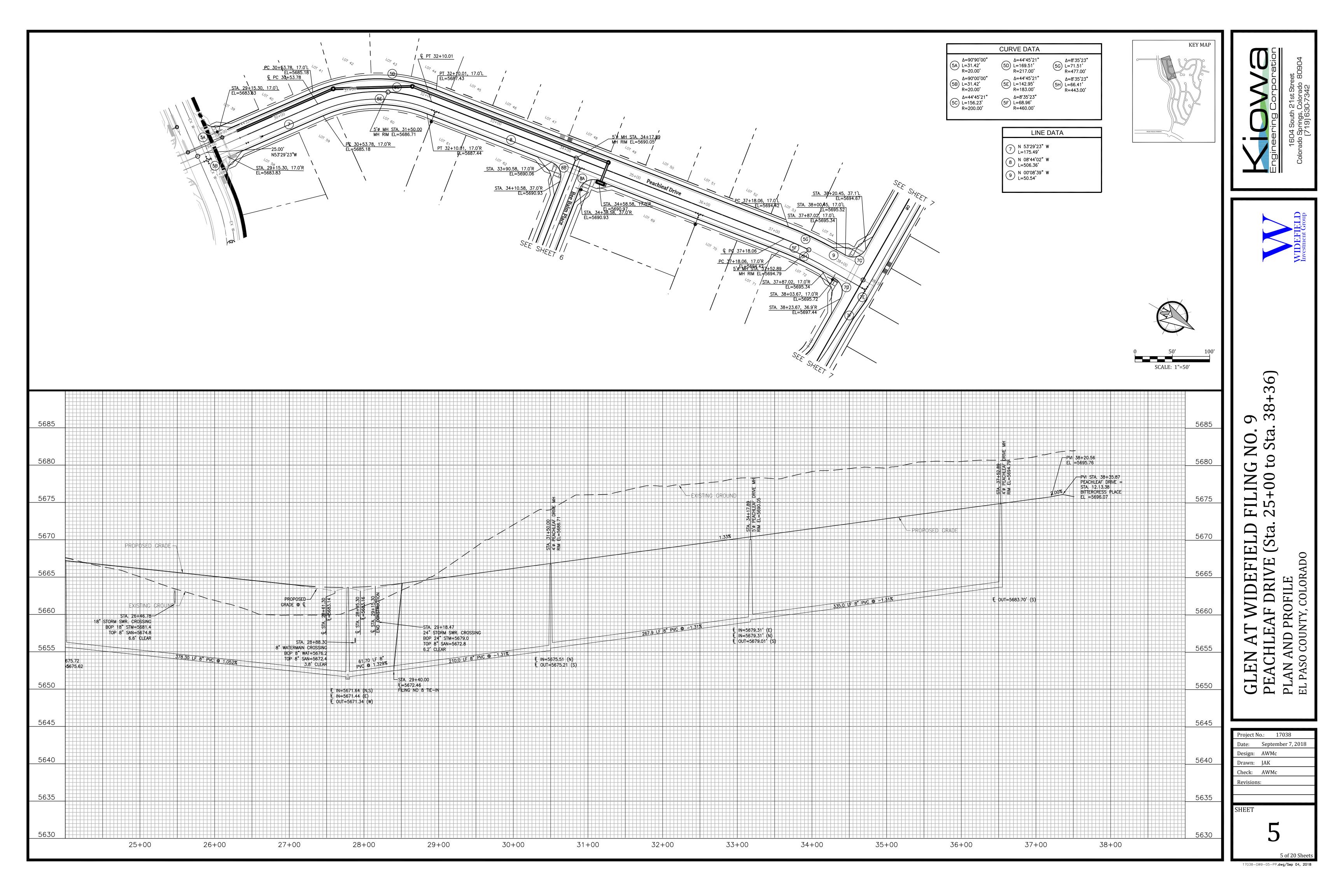


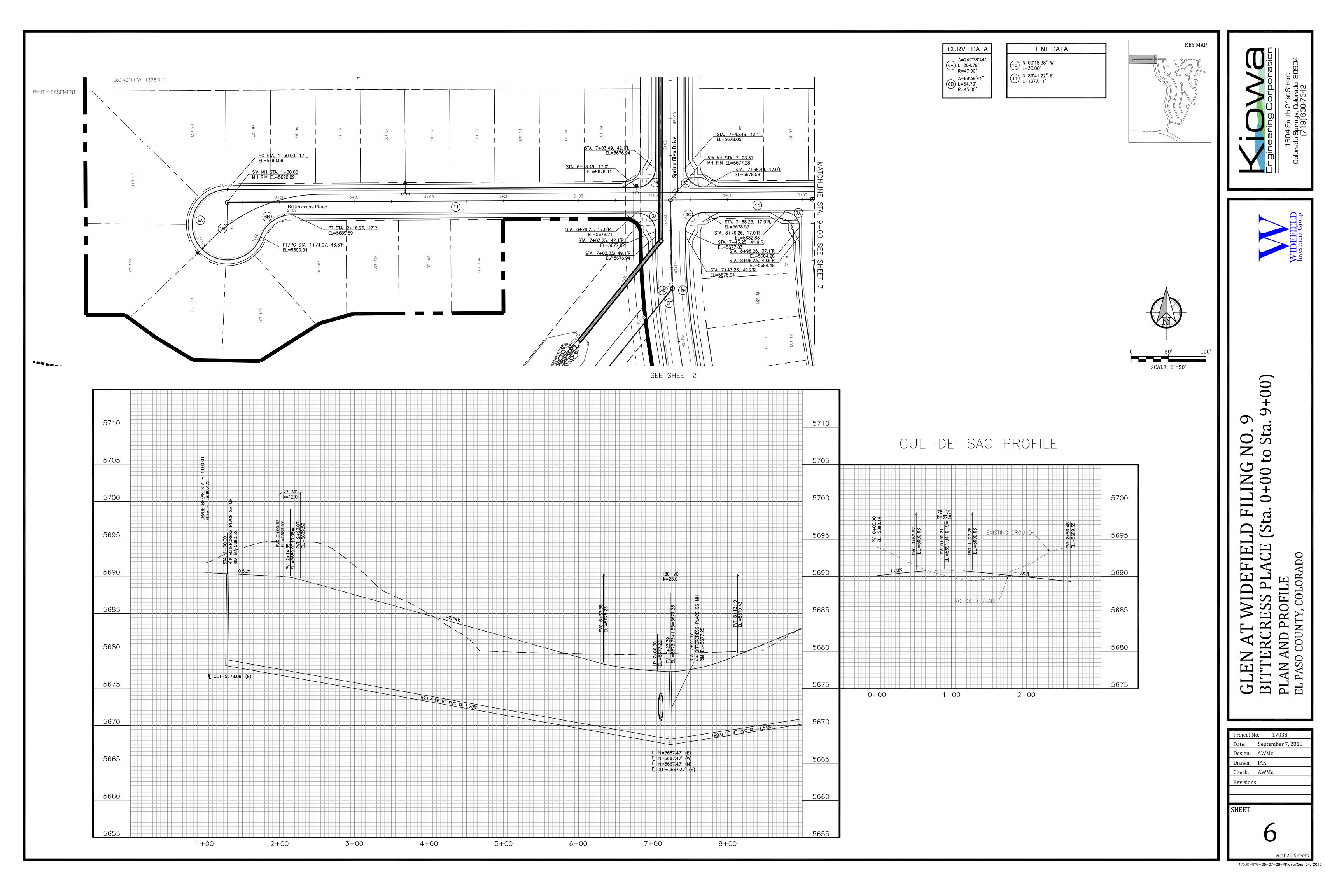
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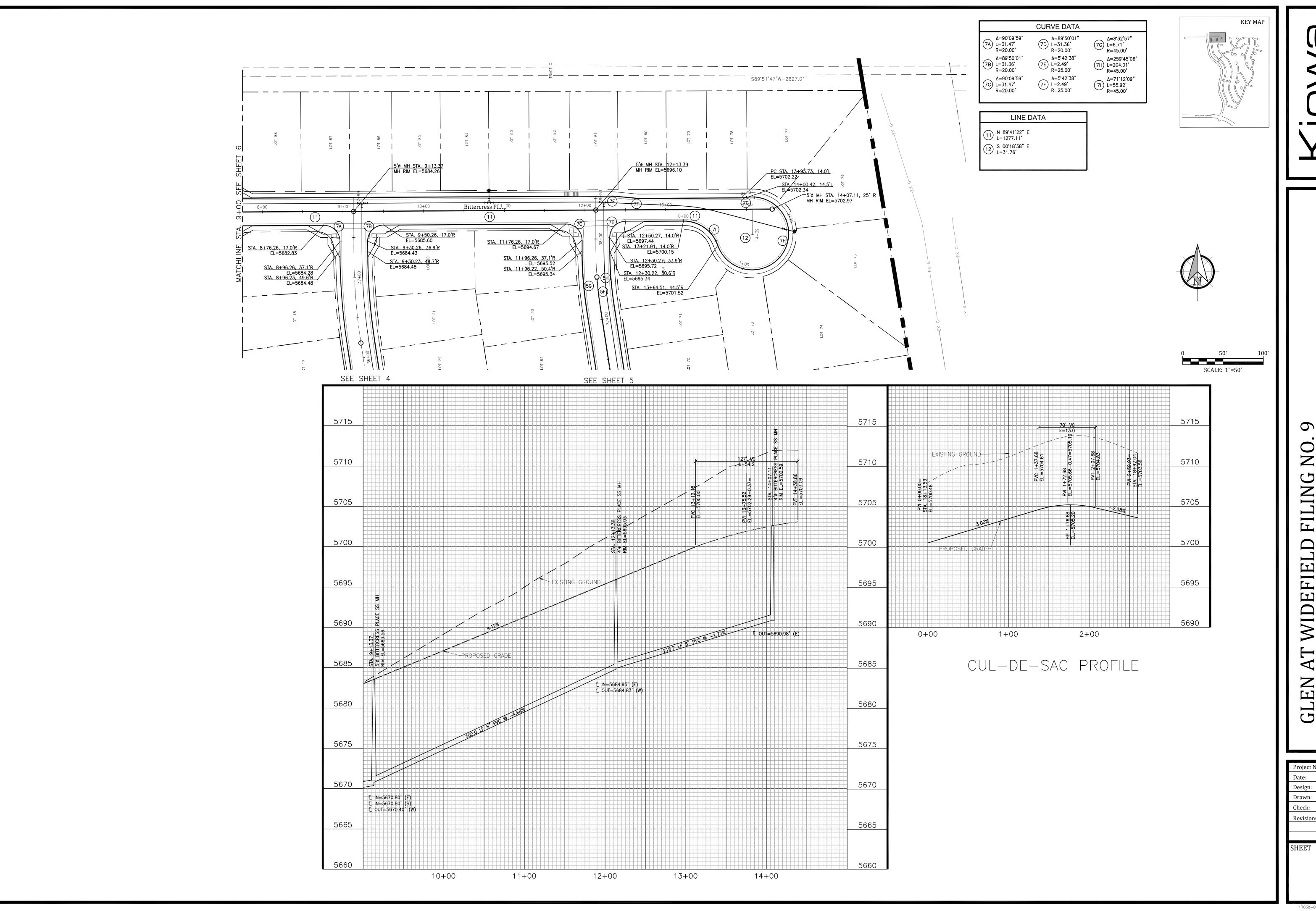
Project No.: 17038 Date: September 7, 2018 Drawn: JAK Check: AWMc

3 of 20 Sheet 17038-GW9-0**2-03PP.dwg/Sep 04, 2018** 









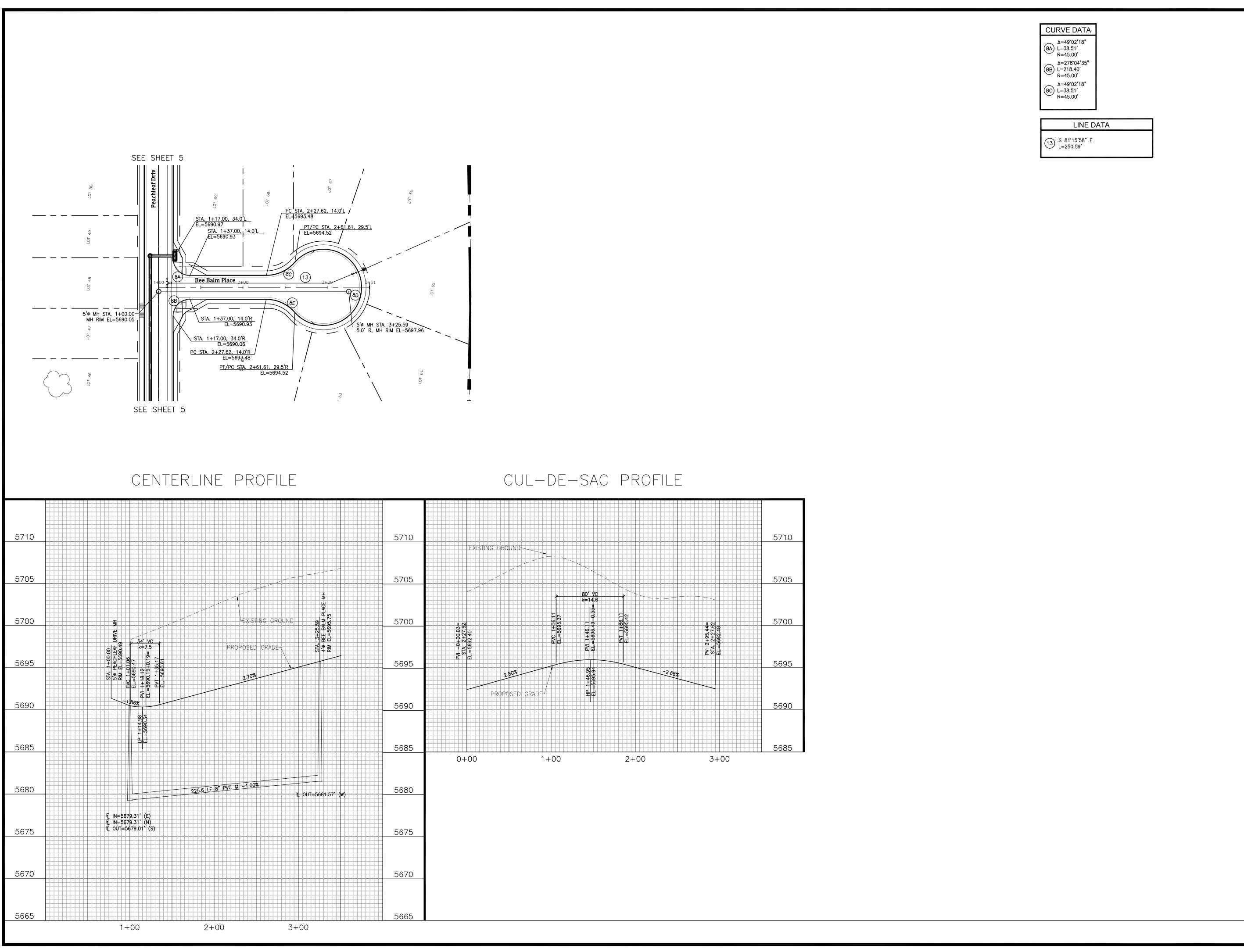


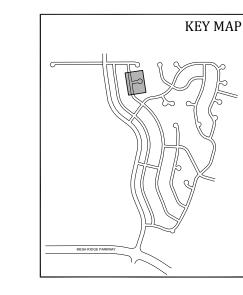


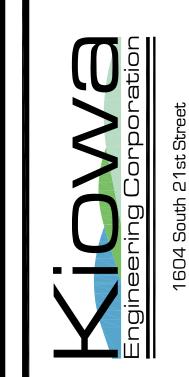
NO to St GLEN AT WIDEFIELD FILING BITTERCRESS PLACE (Sta. 9+00 PLAN AND PROFILE EL PASO COUNTY, COLORADO

Date: September 7, 2018 Design: AWMc

Drawn: JAK Check: AWMc







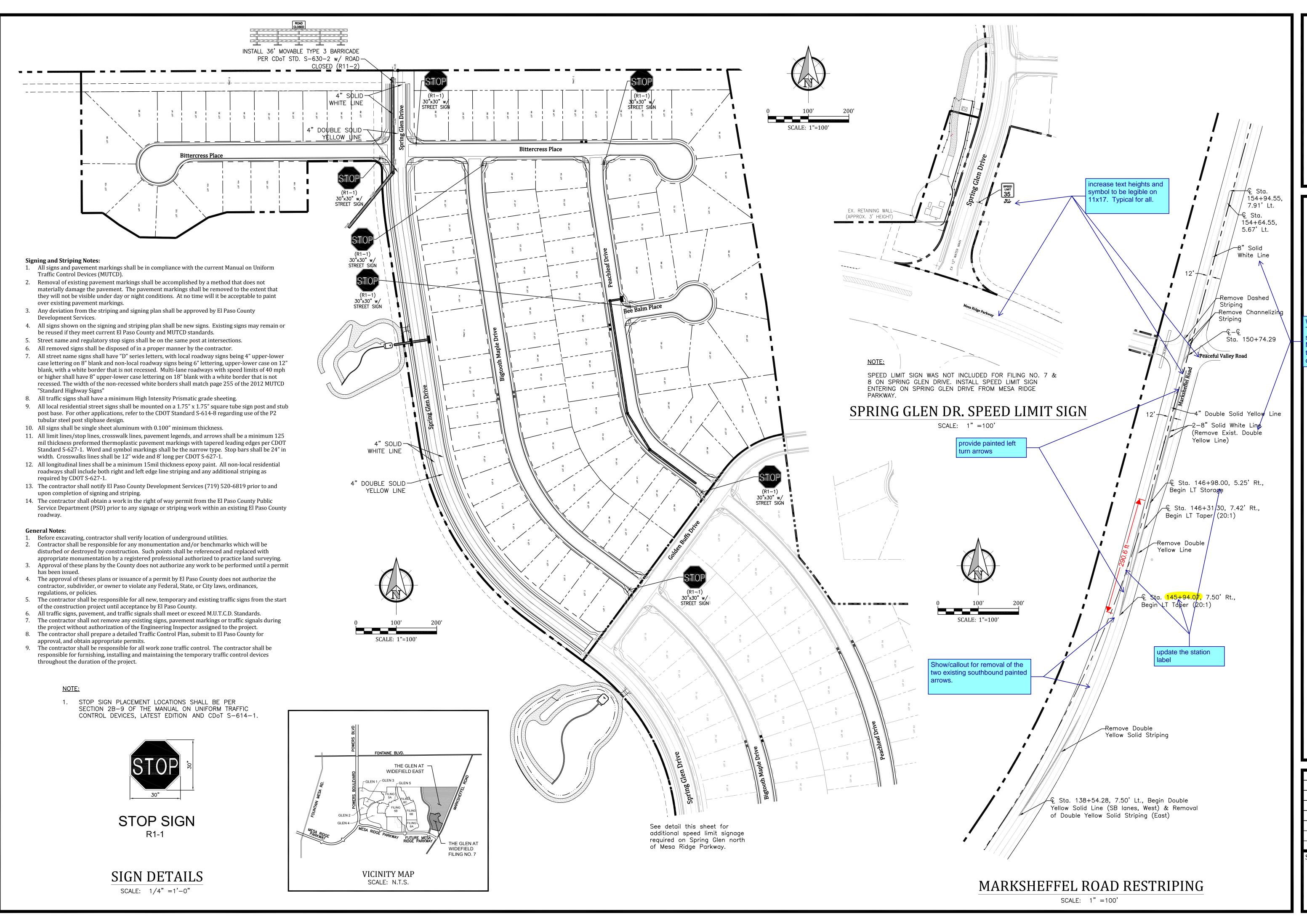




GLEN AT WIDEFIELD FILING NO.
BEE BALM PLACE (Sta. 1+00 to Sta. 3+PLAN AND PROFILE
EL PASO COUNTY, COLORADO

Date: September 7, 2018 Drawn: JAK

Check: AWMc



Engineering Corporation



Why (2) solid white line?
This should just be a single solid white line.
May need to provide a typical cross section for clarification.

GLEN AT WIDEFIELD FILING NO. OVERALL SIGNAGE AND STRIPING PL

COLORADO

Project No.: 17038

Date: September 7, 2018

Design: AWMc

Drawn: JAK

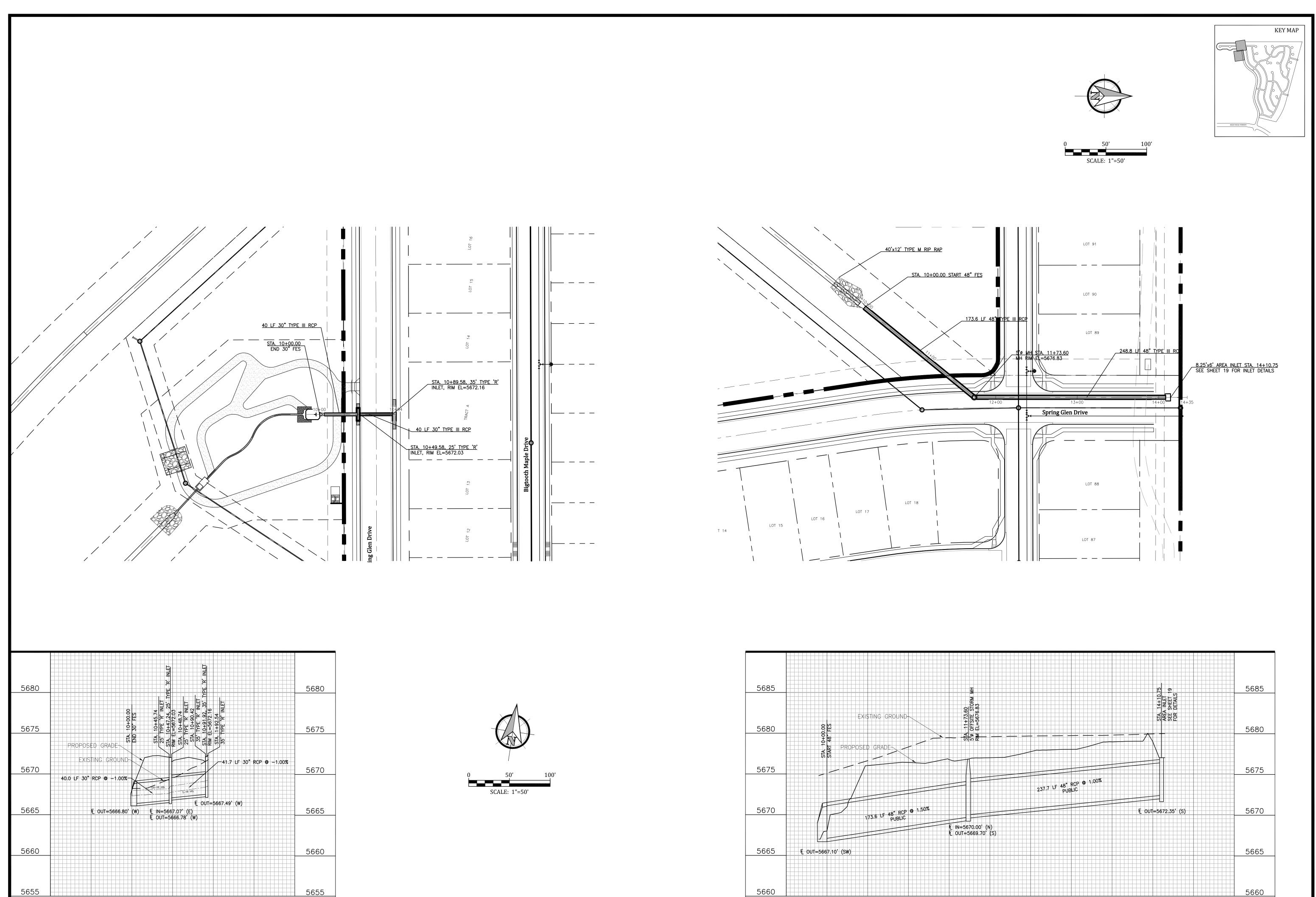
Check: AWMc

Check: AWMc Revisions:

SHEET

9 of 20 Shee

17038-GW9-09-SP.**dwg/Sep 24, 2018** 



10+00

10+50

11+00

11+50

12+00

12+50

13+00

13+50

14+00

14+50

9+50

10+00

10+50

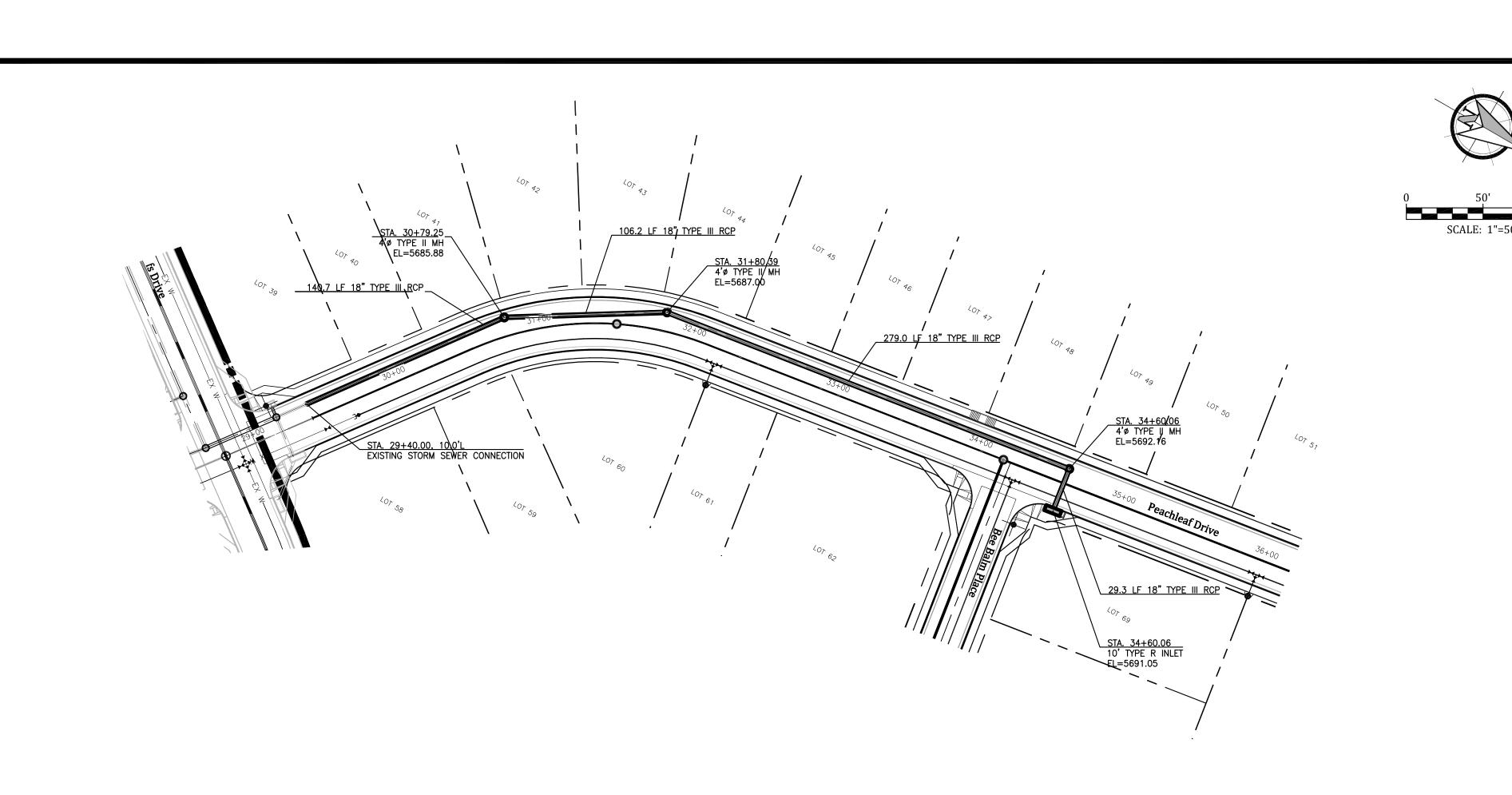
11+00 11+50

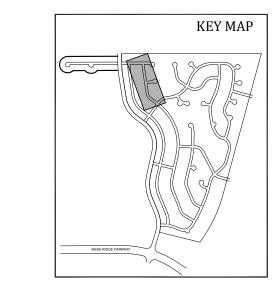


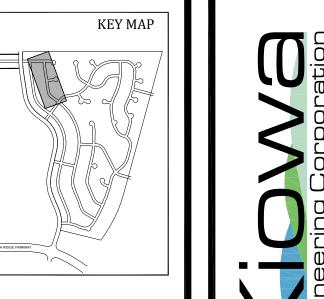
GLEN AT WIDEFIELD FILING NO. 9
STORM SEWER PLAN (Outfall & Offsite)
PLAN AND PROFILE
EL PASO COUNTY, COLORADO

Project No.: 17038 Date: September 7, 2018 Design: AWMc Drawn: JAK Check: AWMc

5660





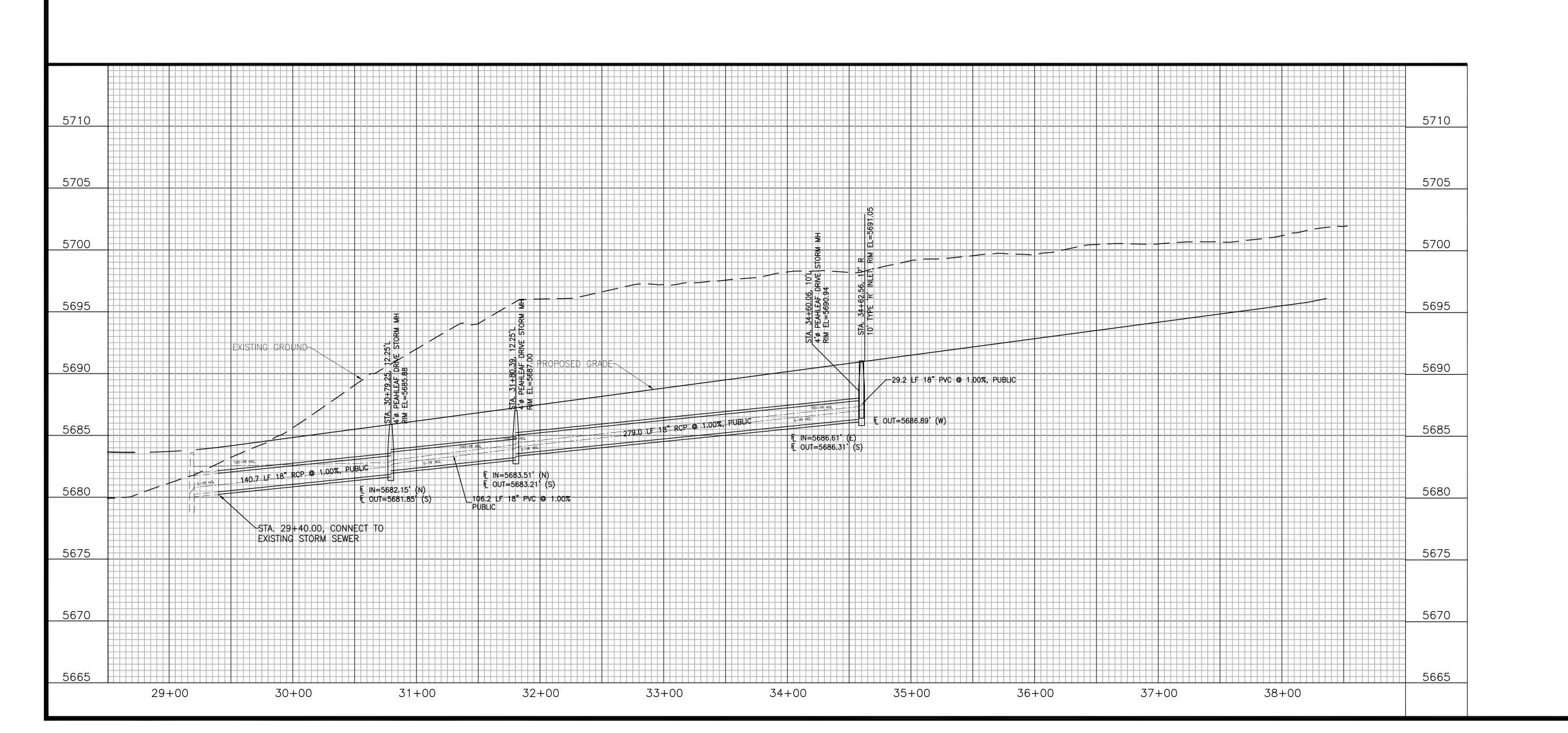


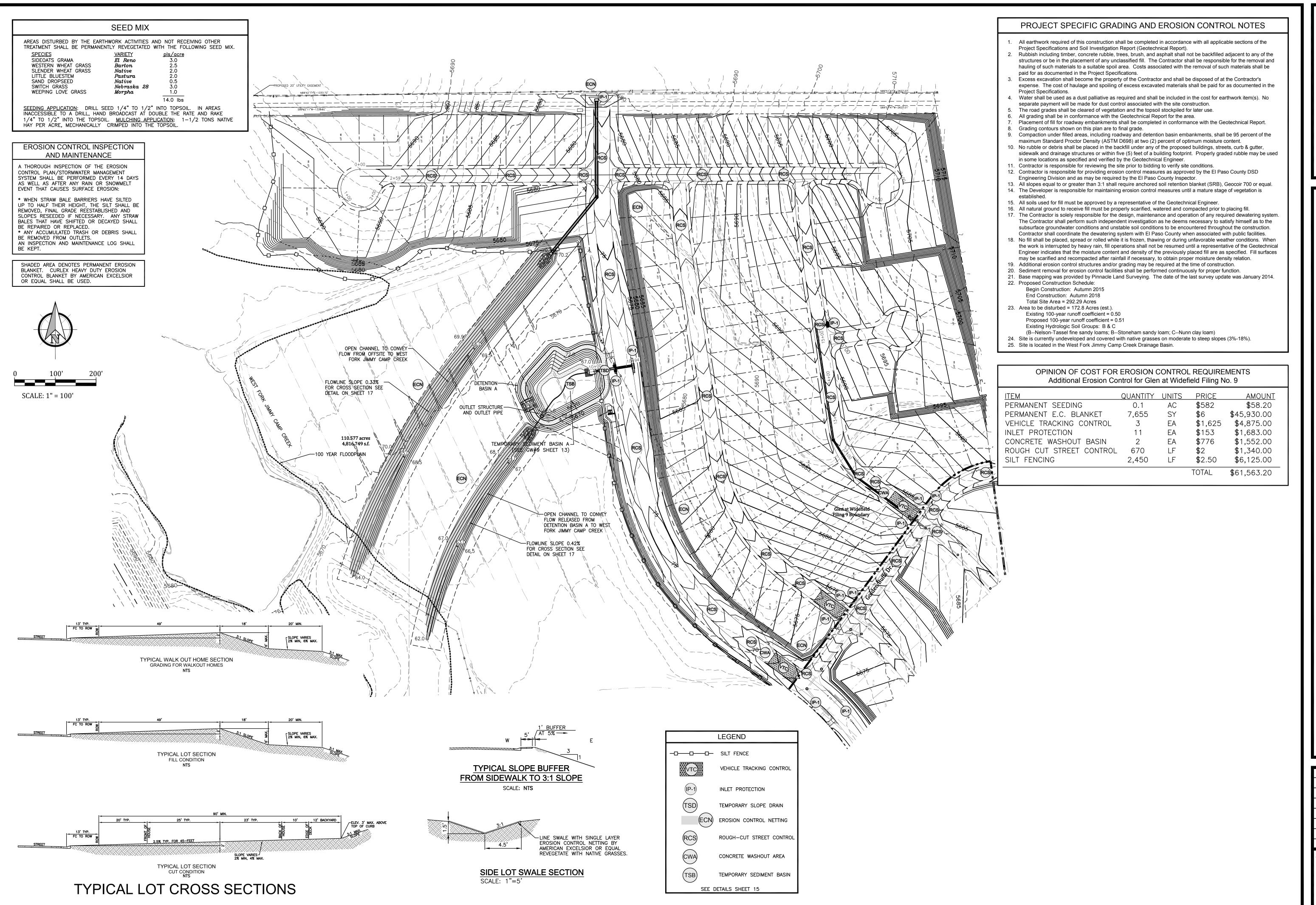




GLEN AT WIDEFIELD FILING NO. 9
STORM SEWER PLAN (PEACHLEAF DRIVE)
PLAN AND PROFILE
EL PASO COUNTY, COLORADO

Project N	Vo.: 17038
Date:	September 7, 2018
Design:	AWMc
Drawn:	JAK
Check:	AWMc
Revision	s:





Engineering Corporation

WIDEFIELD Investment Group

GLEN AT WIDEFIELD FILING NOGRADING AND EROSION CONTROL
GRADING AND EROSION CONTROL

Project No.: 17038

Date: September 7, 2018

Design: AWMc

Drawn: JAK

Check: AWMc

Revisions:

НЕЕТ

12 of 20 Sheets

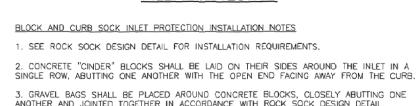
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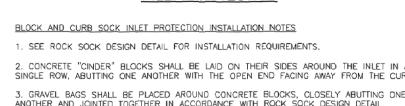
# INLET PROTECTION (P-1)

# 3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.







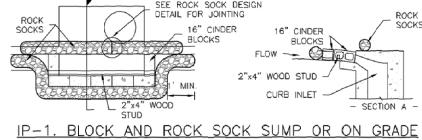


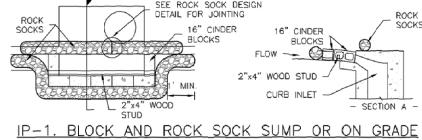
2"x4" WOOD STUD	CURB IN	LET —		SECTION A -
IP-1. BLOCK AND ROCK SOCK	K SUMP	OR	ON	GRADE
INLET PROTE	CTION			
BLOCK AND CURB SOCK INLET PROTECTION INSTAL	LATION NOTES	<u>s</u>		
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLAT	ON REQUIREM	IENTS.		

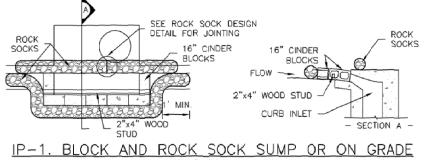


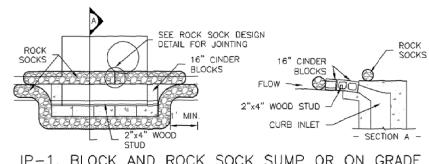












ROUGH CUT STREET CONTROL INSTALLATION NOTES

ROADS THAT HAVE NOT RECEIVED ROAD BASE.

EROSION, AND PERFORM NECESSARY MAINTENANCE

DOCUMENTED THOROUGHLY.

ROADBED

GEOTEXTILE SOCK(S) FILLED WITH

GENERAL INLET PROTECTION INSTALLATION NOTES

INLET PROTECTION MAINTENANCE NOTES

INLET PROTECTION IN STREETS.

-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.

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. 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 ERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF

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.

50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR 1/4 OF THE HEIGHT FOR

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

CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

EARTHEN BERM(S)

EXCAVATED ROADBED

SEE PLAN VIEW FOR

 LOCATION OF ROUGH CUT STREET CONTROL MEASURES.

ROUGH CUT STREET CONTROL INSPECTION AND MAINTENANCE NOTES

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

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

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON

ROUGH CUT STREET CONTROL PLAN

SECTION A

SECTION B

STREET SLOPE (%)

ROUGH-CUT STREET CONTROL (RCS)

SEE TABLE RCS-1 8' MINIMUM SPACING

FOR VEHICLE PASSAGE

OTEXTILE SOCK(S) FILLED

COMPACTED FARTHEN BERMIS

SPACING (FT)

NOT TYPICALLY NEEDED

TABLE ECB-1. ECB MATERIAL SPECIFICATIONS

100%

30% MIN 70% MAX

-TYPE OF ECB (STRAW, STRAW-COCONUT, COCONUT, OR EXCELSIOR). -AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.

SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.

2. 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPS, ALTHOUGH

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

E 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

(LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.

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

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

. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON

5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OF

4. ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE

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.

5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER

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

SHALL BE RESEEDED AND MULCHED.

DOCUMENTED THOROUGHLY.

SEDIMENT BASIN INSTALLATION NOTES

LOCATION OF SEDIMENT BASIN

6. PIPE SCH 40 OR GREATER SHALL BE USED.

ROUGH CUT STREET CONTROL INSTALLATION NOTES

ROADS THAT HAVE NOT RECEIVED ROAD BASE

EROSION, AND PERFORM NECESSARY MAINTENANCE.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

-LOCATION OF ROUGH CUT STREET CONTROL MEASURES.

ROUGH CUT STREET CONTROL INSPECTION AND MAINTENANCE NOTES

LARGER THAN 15 ACRES.

-TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
-FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE

AT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.

FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE

FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA

DIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND—DISTURBING ACTIVITY

4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND

ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15
PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR

EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR

ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS

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

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

E. 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

5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

EROSION CONTROL BLANKET (ECB)

EROSION CONTROL BLANKET MAINTENANCE NOTES

EROSION, AND PERFORM NECESSARY MAINTENANCE.

RESEEDED AND MULCHED AND THE ECB REINSTALLED.

100%

STRAW\*

COCONUT

COCONUT

EXCELSIOR

SEE PLAN VIEW FOR:

 LOCATION OF ECB.

EROSION CONTROL BLANKET INSTALLATION NOTES

STAKING PATTERNS BY SLOPE

ECB-3. OUTSIDE OF DRAINAGEWAY

STRAW-COCONUT

SED<mark>IMENT BASIN</mark> "A"

RISER PIPE, PERFORATIONS

VERTICALLY SPACED 4"

1' DEPTH, LINED WITH

24" THICK TYPE 'M' RIPRAP

CRUSHED ROCK

0.5% MIN

\*\* C,F,I,L

APART, 1 COLUMN OF 5

A. 0.38 ac-ft REQUIRED TO SPILLWAY CREST.

B. 8" PVC PERFORATED

 $^{2}$ / $_{32}$ " ø HOLES.

C. 8' LONG SPILLWAY,

TO TOE OF SLOPE.

NSIST OF A TEMPORARY SLOP

<u>SEDIMENT BASIN PLAN</u>

RIPRAP BEDDING

CREST LENGTH\*\*

EL. 03.00 AT CREST

CRUSHED ROCK

8" RISER

OF HOLES

PVC OR GREATER

STAKING PATTERNS BY ECB TYPE

STAGGER OVERLAPS

OVERLAPPING JOINT

MANUFACTURER SPEC. OR PATTERN

TYPE (SEE STAKING PATTERN DETAIL)

COCONUT OR EXCELSIOR

BASED ON ECB AND/OR SLOPE

| EXCELSIOR | RECOMMENDED

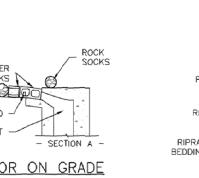
100%

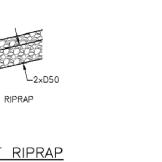
DOUBLE/ NATURAL

DOUBLE/ NATURAL

DOUBLE/ NATURAL

DOUBLE/ NATURAL





LIMIT OF BERM

9' MIN. --

EXCAVATED AND

AREA

TRUCK ACCESS

PLAN VIEW

AREA

SECTION A-A

SIGN MATERIAL, EXCAVATION, AND RESTORATION
ARE INCLUDED IN THE COST OF THE CONCRETE
WASHOUT STRUCTURE,
EROSSON BALES MAY BE USED AS AN
ALTERNATIVE FOR THE BERM.

EPC STD SD 3-84

SLOPE DRAIN INSTALLATION NOTES

ELECT TO INSTALL LARGER FACILITIES.

SLOPE DRAIN MAINTENANCE NOTES

SEE PLAN VIEW FOR:
 -LOCATION AND LENGTH OF SLOPE DRAIN

-PIPE DIAMETER, D. AND RIPRAP SIZE, D50.

6. RIPRAP PAD SHALL BE PLACED AT SLOPE DRAIN OUTFALL.

EROSION, AND PERFORM NECESSARY MAINTENANCE.

ADDITIONAL ARMORING SHALL BE INSTALLED.

2. SLOPE DRAIN SHALL BE DESIGNED TO CONVEY PEAK RUNOFF FOR 2-YEAR 24-HOUR

. SLOPE DRAIN DINENSIONS SHALL BE CONSIDERED MINIMUM DIMENSIONS; CONTRACTOR MAY

4. SLOPE DRAINS INDICATED SHALL BE INSTALLED PRIOR TO UPGRADIENT LAND-DISTURBING

5. CHECK HEADWATER DEPTHS FOR TEMPORARY AND PERMANENT SLOPE DRAINS. DETAILS

7. ANCHOR PIPE BY COVERING WITH SOIL OR AN ALTERNATE SUITABLE ANCHOR MATERIAL.

I. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION

FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN

EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THORCUGHLY.

4. INSPECT INLET AND OUTLET POINTS AFTER STORMS FOR CLOGGING OR EVIDENCE OF OVERTOPPING. BREACHES IN PIPE OR OTHER CONVEYANCE SHALL BE REPAIRED AS SOON AS

5. INSPECT RIPRAP PAD AT OUTLET FOR SIGNS OF EROSION. IF SIGNS OF EROSION EXIST,

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

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

SHOW MINIMUM COVER; INCREASE AS NECESSARY FOR DESIGN HEADWATER DEPTH.

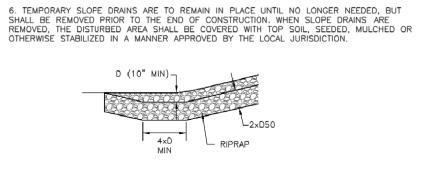
STORM AT A MINIMUM. FOR LONGER DURATION PROJECTS, LARGER MAY BE APPROPRIATE

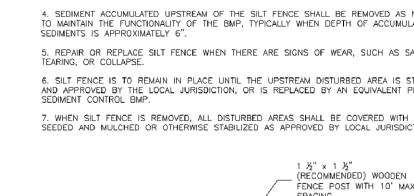
CONCRETE WASHOUT AREA (CWA)

MAXIMUM STORAGE

(另 OF VOLUME AREA)

RAMP





COMPACTED BACKFILL

A

EROSION, AND PERFORM NECESSARY MAINTENANCE.

SILT FENCE INSTALLATION NOTES

SILT FENCE MAINTENANCE NOTES

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.

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

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

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

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.

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

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."

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

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

NG PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEE RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').

SIDEWALK OR OTHER PAVED SURFACE

INSTALL ROCK FLUSH WITH OR BELOW TOP OF PAVEMENT

COMPACTED SUBGRADE

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.

(WIDTH CAN BE LESS IF CONST VEHICLES ARE

BOTH SIDES)

UNLESS OTHERWISE SPECIFIED

CDOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" MINUS ROCK

NON-WOVEN GEOTEXTILE

VEHICLE TRACKING CONTROL (VTC)

approved in writing.

Plan (SWMP).

BY LOCAL JURISDICTION, US

NON-WOVEN GEOTEXTILE FABRIC BETWEEN SOIL AND ROCK

UNLESS OTHERWISE SPECIFIED BY LOCAL

OR 6" MINUS ROCK

URISDICTION, USE CDOT SECT. #703, AASHTO

drainage system or facilities 13. Erosion control blanketing is to be used on slopes steeper than 3:1

12. Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to runoff to State Waters, including any surface or subsurface storm

through, or from the earth disturbance area shall be designed to limit the discharge to a non-erosive

14. Building, construction, excavation, or other 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. BMPs may be required by El Paso County Engineering if deemed necessary, based on specific conditions and

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).

-TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH,

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE

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

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

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.

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.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED

CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

EROSION, AND PERFORM NECESSARY MAINTENANCE.

ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

STANDARD EPC GRADING AND EROSION CONTROL NOTES

Construction may not commence until a Construction Permit is obtained from Development Services and a

contamination, or degradation of State Waters. All work and earth disturbance shall be done in a manner

requirements of the most recent version of the relevant adopted El Paso County standards, including the

4. A separate Stormwater Management Plan (SWMP) for this project shall be completed and an Erosion and Stormwater Quality Control Permit (ESQCP) issued prior to commencing construction. During construction

the SWMP is the responsibility of the designated Stormwater Manager. The SWMP shall be located on

El Paso County will be held prior to any construction. It is the responsibility of the applicant to coordinate

Disturbed areas and stockpiles, which are not at final grade but will remain dormant for longer than 30 days, shall also be mulched within 21 days after interim grading. And area that is going to remain an

interim for more than 60 days shall also be seeded. All temporary soil erosion control measures and

Temporary soil erosion control facilities shall be removed and earth disturbance areas graded and

8. All persons engaged wit hearth disturbance shall implement and maintain acceptable soil erosion and

. All temporary erosion control facilities including BMPs and all permanent facilities intended to control

and the DCM Volume II and maintained throughout the duration of the earth disturbance operation.

that the exposed area of any disturbed land shall be limited to the shortest practical period of time.

10. Any earth disturbance shall be conducted in such a manner so as to effectively reduce accelerated soil

erosion and resulting sedimentation. All disturbances shall be designed, constructed, and completed so

1. Any temporary or permanent facility designed and constructed for the conveyance of stormwater around,

sediment control measures including BMP's in conformance with the erosion control technical standards

erosion of any earth disturbance operations shall be installed as defined in the approved plans, the SWMP

of the Drainage Criteria Manual (DCM) Volume II and in accordance with the Stormwater Management

stabilized with permanent soil erosion control measures pursuant to standards and specification

prescribed in the DCM Volume II and the Engineering Criteria Manual (ECM) appendix I.

BMP's shall be maintained until permanent soil erosion control measures are implemented and

. Once the ESQCP has been issued, the contractor may install the initial stage erosion and sediment control BMP's as indicated on the GEC. A preconstruction meeting between the contractor, engineer, and

6. Soil erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be

completed within 21 calendar days after final grading, or earth disturbance, has been completed.

. Notwithstanding anything depicted in these plans in words or graphic representation, all design and

Land Development Code, the Engineering Criteria Manual, the Drainage Criteria Manual, and the Drainage Criteria Manual Volume 2. Any deviations to regulations and standards must be requested, and

construction related to roads, storm drainage and erosion control shall conform to the standards and

. Stormwater discharges from construction sites shall not cause or threaten to cause pollution,

site at all times and shall be kept up to date with work progress and changes in the field.

Preconstruction Conference is held with Development Services Inspections.

that minimizes pollution of any on-site or off site waters, including wetlands.

the meeting time and place with County DSD inspections staff.

USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

1. SEE PLAN VIEW FOR

CONSTRUCTION MAT OR TRM).

circumstances 5. Vehicle tracking of soils and construction debris off-site shall be minimized. Materials tracked offsite shall

be cleaned up and properly disposed of immediately

16. Contractor shall be responsible for the removal of all wastes from the construction site for 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.

7. The owner, site developer, contractor, and/or their authorized agents shall be responsible for the removal of all constructions debris, dirt, trash, rock, sediment, and sand that may accumulate in the storm sewer or other drainage conveyance and stormwater appurtenances as a result of site development.

18. 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. 19.No chemicals are to be used by the contractor, which have the potential to be released in stormwater

unless permission for the use of a specific chemical is granted in writing by the ECM Administrator. In granting the use of such chemicals, special conditions and monitoring may be required. 20.Bulk storage structures for petroleum products and other chemicals shall have adequate protection so as to contain all spills and prevent any spilled material from entering State Waters, including any surface or

subsurface storm drainage system or facilities. 21.No person shall cause the impediment of stormwater flow in the flow line of the curb and gutter or in the

22.Individuals shall comply with the "Colorado Water Quality Control Act" (Title 25, Article8, CRS), and the Clean Water Act" (33 USC 1344), in addition to the requirements included in the DCM Volume II and the ECM Appendix I. All appropriate permits must be obtained by the Contractor prior to the construction

(NPDES, Floodplain, 404, fugitive dust, etc.). In the event of conflicts between these requirements and laws, rules, or regulations of other Federal, State, or County Agencies, the more restrictive laws, rules, or

regulations shall apply. 23.All construction traffic must enter/exit the site at approved construction access points.

24. Prior to actual construction the permitee shall verify the location of existing utilities. 25.A water source shall be available on site during earthwork operations and utilized as required to minimize dust from earthwork equipment and wind.

26. The soils report for this site entitled Subsurface Soil Investigation The Glen at Widefield, Filing #6, Widefield, Colorado has been prepared by Soil Testing and Engineering, Inc. and shall be considered a

27.At least ten days prior to the anticipated start of construction, for projects that will disturb 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 Heath and Environment, Water Quality Division. The application contains certification of completion of a stormwater management plan (SWMP), of which this grading and

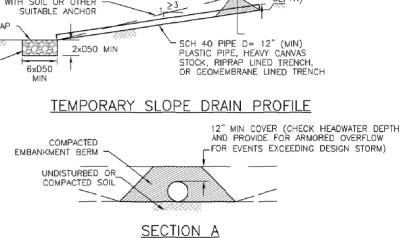
erosion control plan may be a part. For information or application materials contact: Colorado Department of Public Health and Environment

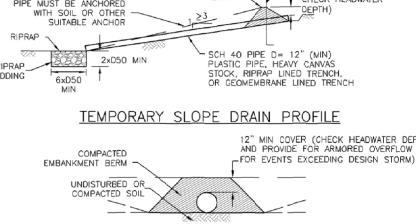
Water Quality Control Division WQCD - Permits 4300 Cherry Creek Drive South Denver, Colorado 80246-1530

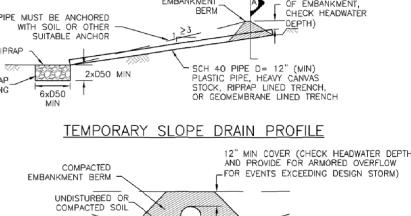
Attn: Permits Unit

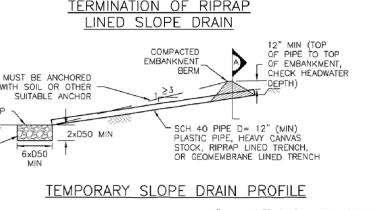
SECTION A

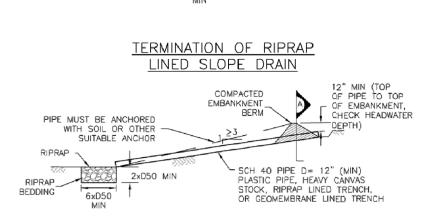
# TEMPORARY SLOPE DRAIN (TSD)

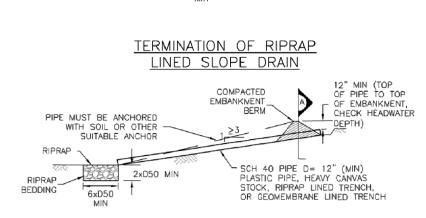


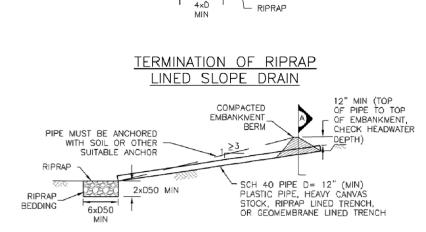


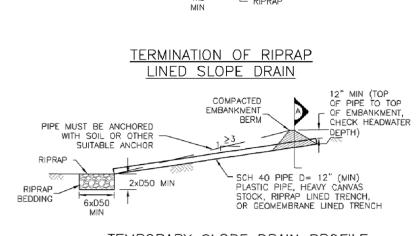


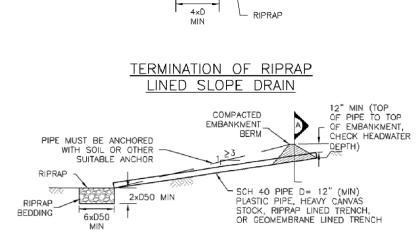


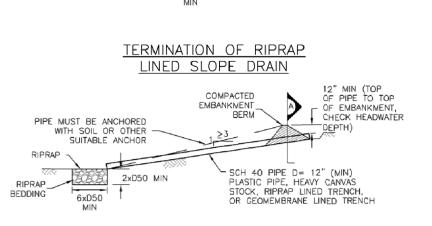


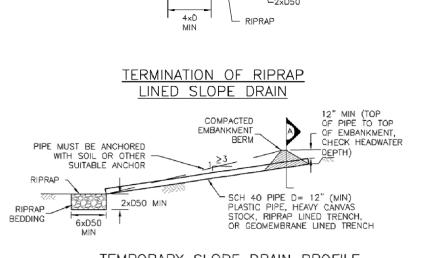


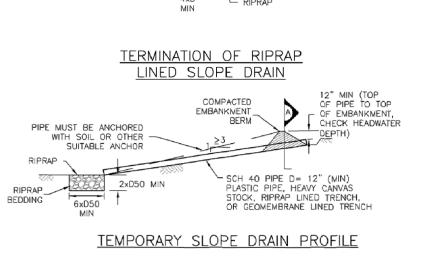


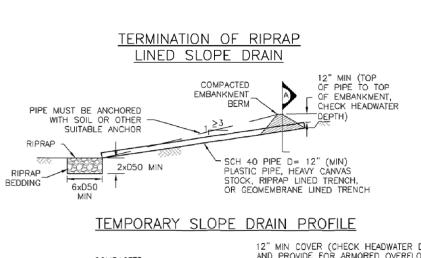


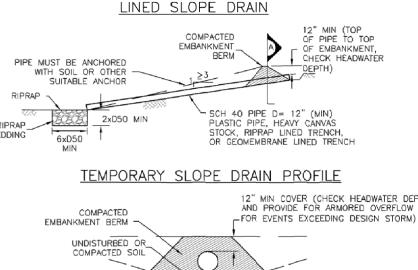


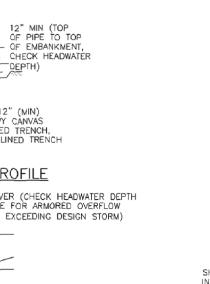


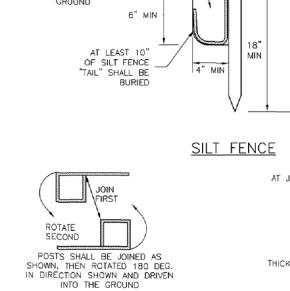


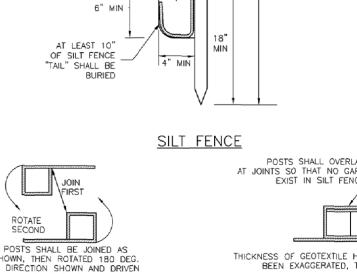


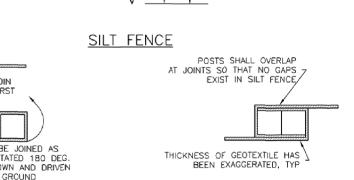












# 7 AI 0 DE 0 0 0 0 SIG ER ERC $\Box$ Z GRADIN EL PASO

9

Project No.: 17038

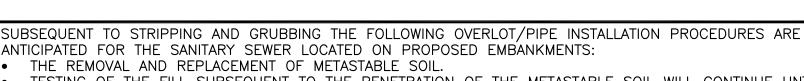
Design: AWMc

Drawn: NRK

Check: AWMc

September 7, 2018

H



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, STE SHALL

UTILITY CONTACTS

OF COLORADO SPRINGS.

FOUNTAIN ELECTRIC DIVISION.

ADDITIONAL UTILITY NOTES

GAS - ALL GAS MAINS AND SERVICES ARE TO BE INSTALLED PER THE CITY

ELECTRIC - ALL ELECTRIC SERVICES ARE TO BE INSTALLED PER THE CITY OF

LEGEND

PROPOSED 8" PVC WATER MAIN (DR 18) WITH

MJ FITTINGS (UNLESS OTHERWISE NOTED)

WIDEFIELD WATER & SANITATION DISTRICT

CONSTRUCTION SPECIFICATIONS

TEE w/CONCRETE THRUST BLOCK

MINIMUM RADIUS SHOWN FOR WATER MAIN = 290'

WATER AND SEWER MAIN EXTENSIONS

Print Name <u>J. Mark Watson, President</u>

Colorado Springs, CO 80911

DBA: GLEN DEVELOPMENT COMPANY

Address: 3 Widefield Boulevard

FIRE AUTHORITY APPROVAL

Security Fire Department

DISTRICT APPROVALS

(719) 392-0194

specified by the Security Fire District.

Security Fire Department

is issued.

PER WWSD SPECIFICATIONS AND EL PASO COUNTY ECM

4.3.6.A.1&2, THE MINIMUM COVER OVER WATER MAIN &

SERVICES AND SANITARY SEWER MAINS & SERVICES IS 5 FEET.

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

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

**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

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

Approval expires 180 days from Design Approval.

WIDEFIELD WATER AND SANITATION DISTRICT

WATER DESIGN APPROVAL

Date: \_\_\_\_\_ By: \_\_\_\_

In case of errors or omissions with the sewer design as shown

Approval expires 180 days from Design Approval.

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

Date: \_\_\_\_\_ By: \_\_\_\_

PROJECT NO.

STANDARD FIRE HYDRANT ASSEMBLY. INSTALL

8" GATE VALVE (UNLESS OTHERWISE NOTED)

PER WIDEFIELD WATER AND SANITATION DISTRICT

SCALE: 1"=100'

Know what's **below.** ┌ STA. 9+23.40, 10.0'L, Bittercress Place= MONITOR AND TEST ALL WORK ASSOCIATED WITH THE AFFECTED PORTIONS. Call before you dig. STA. 37+92.30, 10.0'R, Big Tooth Maple STA. 45+89.39, 10.0'R -Drive 8"x8" Tee, MJ RST., 3-8" Valves 12" SJ Plug W/CRA & 2" BOV STA. 12+23.40, 9.51L, Bittercress 5'ø MH STA. 45+89.39¬ Place= STA. 38+47.10, 10.0'L, MH RIM EL=5680.00 Peachleaf Drive 12"x8" Tee, MJ RST., 188.80 LF 12" 3-8" Valves PVC Water Main STA. 10+81.14, 25'R<sub>7</sub> 5'ø MH STA. 37+82.27-STD FH Assembly w// STA. 12+13.62,7 ┌ 94.51 LF 8" STA. 44+00.59, 10.0'R, Spring Glen Drive= -BIGTOOTH MAPLE DRIVE 15 LF 6" PVC | 10.00'R, 11-1/4" | PVC Water Main STA. 7+33.40, 10.0'L, Bittercress Place STA. 9+13.37Flange EL=56XX 12"x8" Cross, MJ RST., 2-12" & 2-8" Valves MH RIM EL=5684.26 STA. 13+17.78, 4.73'L ∠ STA. 13+60.88, 1.98'R Begin Pipe Deflection PVC Water Main  $\frac{1}{1}$  5'ø MH STA. 37+52.89 ΓΔ=11°55'15" r132.48 LF 8" BITTERCRESS PLACE PVC SAN MH RIM EL=5694.79 PVC Water Main R=210.00' MH RIM EL=5677.28 **FUTURE** L=43.69' ∕¬STA. 14+44.43, 23.73'R 54.91 LF 8" ¬ /<sub>/</sub>8"x6" Reducer 🖁 PVC Water Main FILING ┌190.0 LF 8" STA. 6+78.49, 19.66'R¬ \_STA. 14+59.80, 27.61'R STA. 3+68.44, 25.00'R~ / PVC SAN STD FH Assembly w/ 9.66 LF 6" PVC STD FH Assembly w/ 15.67 LF 6" PVC STD FH Assembly w/ 15.00 LF 6" PVC Flange EL=56XX Flange EL=56XX Flange EL=56XX 300.0 LF 8" 9.79 LF 8" > <sup>L</sup> 113.82 LF 8" VC Water Main 5'ø MH STA. 1+30.00~ PVC Water Main 190.00 LF 8" MH RIM EL=5690.09 60.07 LF 8" -−86.42 LF 8" -160.8 LF 8" PVC Water Main 310.05 LF 8" ✓ 🖁 118.5 LF 8" PVC SAN-PVC Water Main PVC Water Main PVC Water Main 59.70 LF 8" = <sup>1</sup> 218.7 LF 8" PVC SAN STA. 37+87.03, 1.98'R -STA. 43+41.44, 10.0'R PVC Water Main End Pipe Deflection ~5'ø MH STA. 12+13.39 End Pipe Deflection STA. 37+32.60, MH RIM EL=5696.10 10.0'R, End Pipe – - BITTERCRESS PLACE STA. 37+18.06, 10'R ~ **└ STA. 2+54.62, 10.0'L** 5'ø MH STA. 42+72.02<sup>-</sup> Deflection Begin Pipe Deflection Begin Pipe Deflection MH RIM EL=5676.01 Δ=8°35'23", R=450.00', L=67.46' Δ=8\*35'23"-A The Total R=750.00'  $\Delta = 45^{\circ}00'00''$ -5'ø MH STA. 37+52.89  $\Delta = 8^{\circ}35'23''$ L=112.44'--MH RIM EL=5694.79 R=210.00' -STA. 2+94.03, 117.78 LF 8"~ R=940.00' L=164.93' 10.00'R, 11-1/4" Bend 5'ø MH STA. PVC Water Main L=140.92' ∽STA. 36+00.28, 25'R `─ STA. 1+06.13, 51.51'L 36+18.67 STD FH Assembly w/ 27.10 LF 8" PVC Water Main ∽ STA. 36+18.66, 10.0'R <sub>-</sub> - -MH RIM End Pipe Deflection 15 LF 6" PVC Begin Pipe Deflection 「EL=5686.04 STA. 41+99.02, 10.0'R -Flange EL=56XX -STA. 1+01.02, 56.62'L Begin Pipe Deflection ←STA. 3+43.54, 21.37'R 194.03 LF 8" 7 \ 8"x6" Reducer 222.30 LF 12"; --335.0 LF 8"-STD FH Assembly w/ PVC Water Main PVC Water Main PVC SAN -STA. 0+89.95, 67.69'R 15.67 LF 6" PVC STD FH Assembly w/ 15.67 LF 6" PVC Flange EL=56XX 522.83 LF 12" Flange EL=56XX 170.70 LF 8" ~ PVC Water Main Storm Sewer, PVC Water Main See Sheet 10

390.5 LF 8" PVC SAN-1/ 10 LF 12" PVC SAN FOR FUTURE 5'ø MH STA. 5+64.50, 289.90 FT WEST

5'ø MH STA. 3+81.46,-

/ 234.4 FT WEST

SPRING GLEN DRIVE

MH RIM EL=5674.01

SPRING GLEN DRIVE

MH RIM EL=5676.24

/ 178.4 LF 12" PVC SAN-

,276.8 LF 12" PVC SAN-

5'ø MH STA. 36+76.19

STA. 36+76.19, 10.0'R ~

End Pipe Deflection

R=640.00'

L=499.93' 5'ø MH STA. 34+22.32

253.9 LF 12" PVC SAN-

MH RIM EL=5675.00

MH RIM EL=5674.01

253.9 LF 12" PVC SAN-

STA. 31+68.45, 10.0'R — Begin Pipe Deflection 5'ø MH STA. 31+68.45 MH RIM EL=5671.00

143.45 LF 12" — 143.45 LF 12" -

PVC Water Main PVC Water Main STA. 30+25.00, 10.0'R ~ STA. 30+25.00-

∽ STA. 34+29.58, 10'L, Peachleaf Drive= STA. 1+00.00, 10.0'L, Bee Balm Place

EL=5690.05 → STA. 32+20.99, 25'R 9.28.75 LF 8" Flange EL=56XX STA. 32+11.17, 10.0'R — PVC Water Main End Pipe Deflection -267.9 LF 8" PVC SAN - STA. 30+95.84, 10.0'R

STA. 30+53.78, 10.0'R — Begin Pipe Deflection ∽STA. 30+54.72, 25'R STD FH Assembly w/ 15 LF 6" PVC Flange EL=56XX

198.8 LF 8" PVC SAN-STA. 27+36.52, 10.0'R

Begin Pipe Deflection — 103.72 LF 8" **PVC Water Main** √5'ø MH STA. 27+36.52-MH RIM EL=5675.76 — STA. 26+32.80, 10.0'R Remove 8" SJ Plug & 2" BOV

87.50 LF 8" - 1/

PVC Water Main/

Remove Temp.

Storm Sewer, -See Sheet 11

Δ=44\*45'21"-

R=190.00'

L=148.42'

STA. 33+96.36, 25'R

STD FH Assembly

w/ 15 LF 6" PVC

Flange EL=56XX

\_5'ø MH STA. 34+17.89

MH RIM

EL=5686.04 i

FOR STORM SEWER DESIGN

SEE SHEETS 10-11

313.5 LF 8 300.52 LF 12" PVC Water Main

> PVC SAN 5'ø MH STA. **5**30+95.84 MH RIM

> > 5'ø MH STA. 29+40.00 MH RIM EL=5679.30 Δ=39\*38'04" R=450.00' Δ=44°45'21"-L=311.29',/

199.5 LF 8"-

EL=5682.10 ---

Δ=5**°**07'18"-⁄ R=450.00'

L=40.22'

.151.2 LF 8"-

PVC SAN

STA. 26+05.00 -

143.5 LF 12" PVC SAN-

Remove 12" SJ Plug & 2" BOV

-STA. 3+29.07, 15.37'R 8"x6" Reducer ~5'ø MH STA. 3+25.59 MH RIM EL=5697.96

STD FH Assembly w/ 15 LF 6" PVC -5'ø MH STA. 31+50.00 End Pipe Deflection ,MH RIM EL=5686.71

/210.0 LF 8" PVC SAN

12"x8" Tee, MJ RST., 3-8" Valves

STA. 29+40.00 -Remove Temp.

EXISTING

~208.60 LF 8" PVC Water Main PVC Water

> − STA. 29+66.28, 10.0'R Remove 8" SJ Plug & 2" BOV

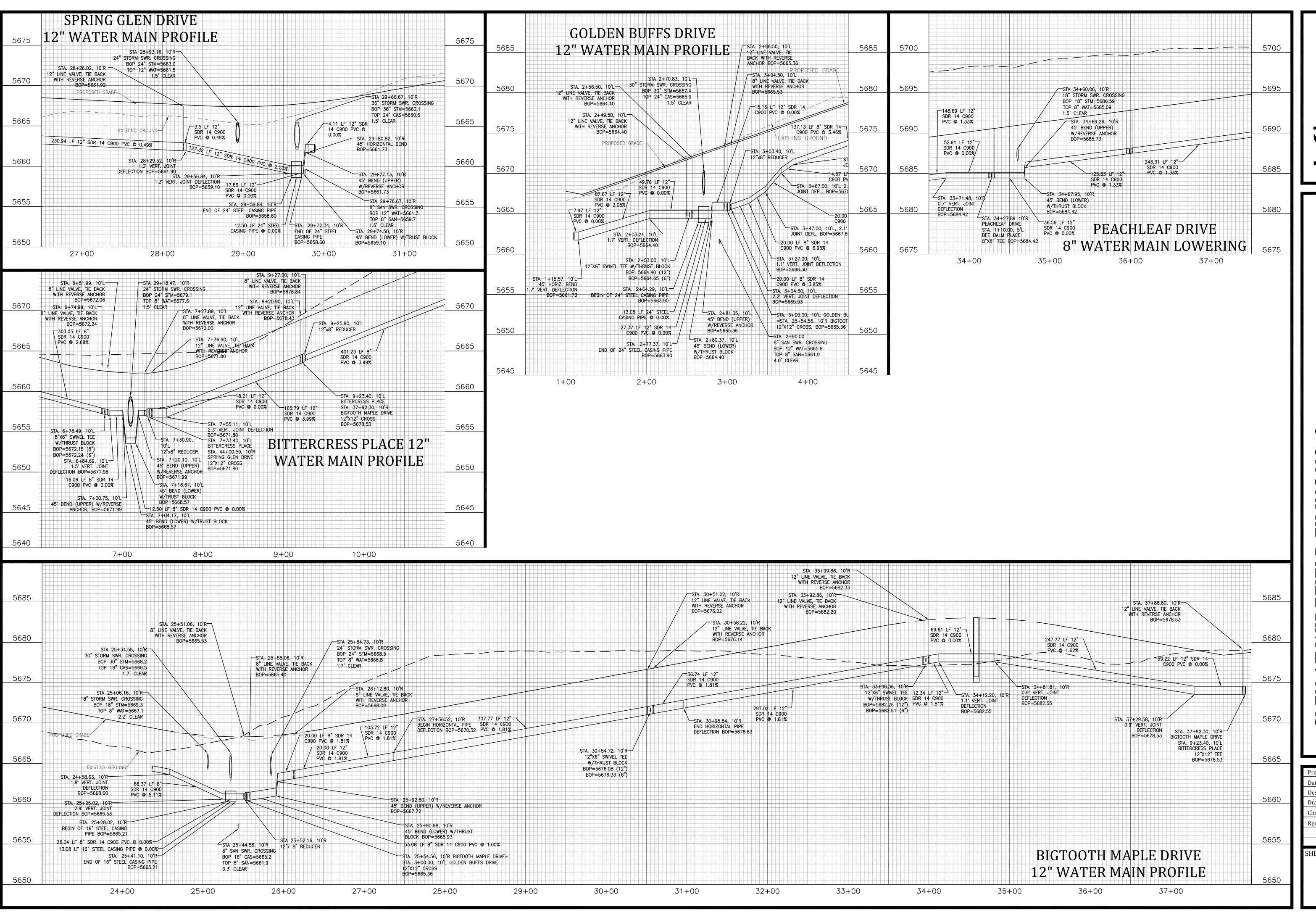
**FUTURE** 

FILING

FILING 8

on this document the standards as defined in the "Rules and Regulations for Installation of Sewer Mains and Services" shall rule.

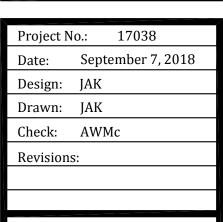
PROJECT NO. \_\_\_\_

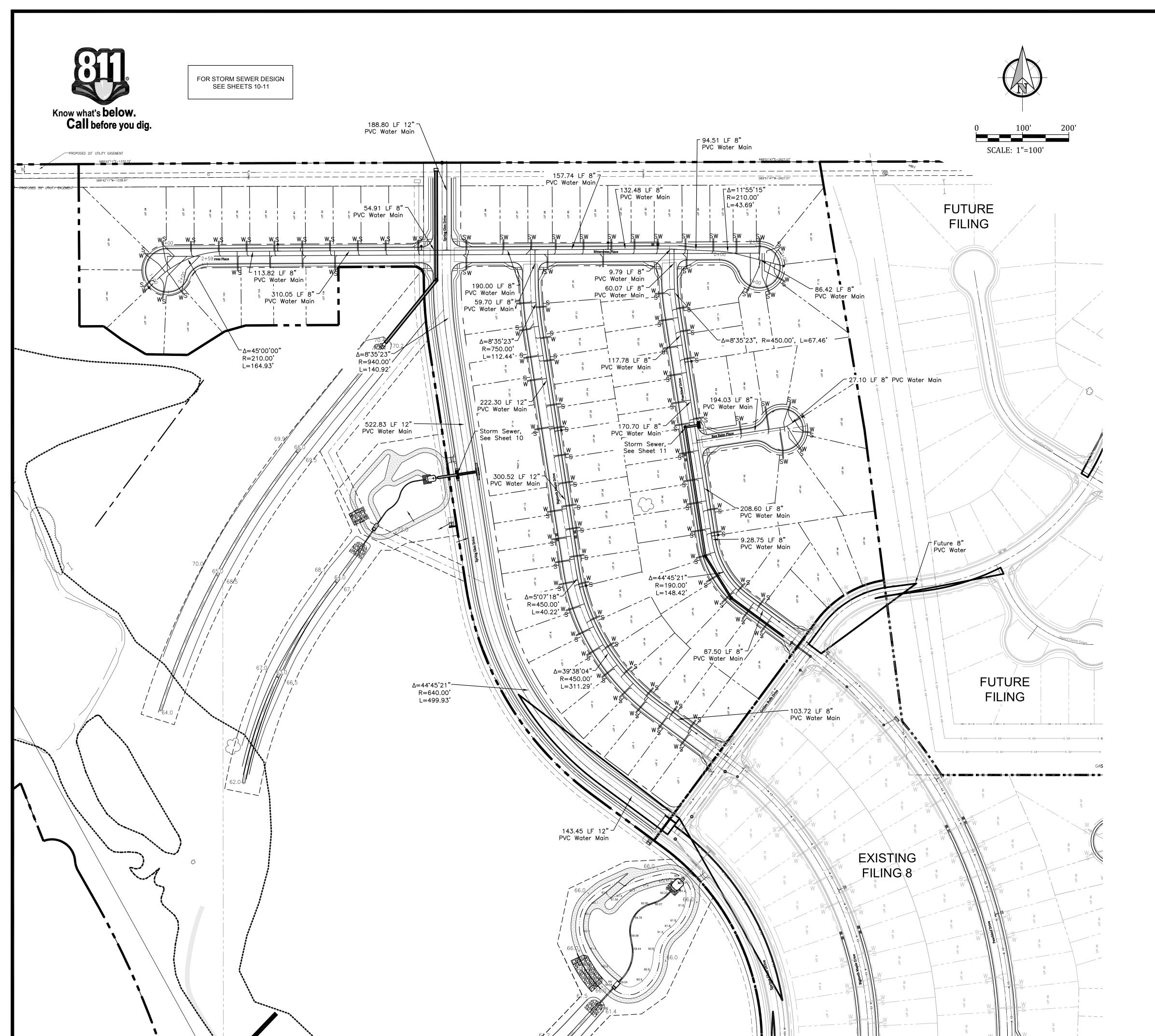


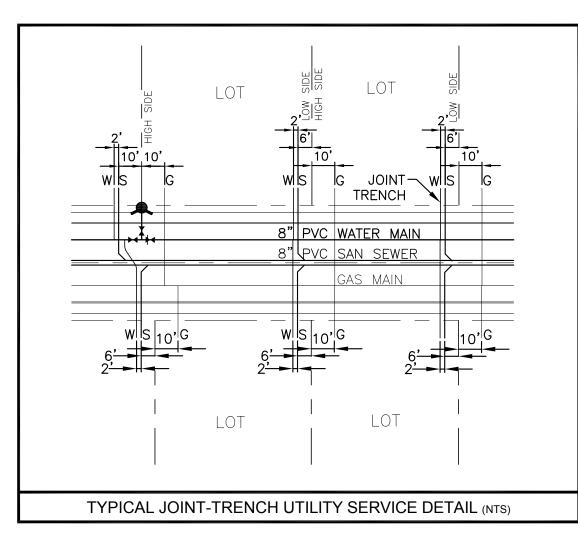




GLEN AT WIDEFIELD FILING NC UTILITY PLAN
WATER LINE LOWERING DETAILS
EL PASO COUNTY, COLORADO







## ADDITIONAL UTILITY NOTES

GAS — ALL GAS MAINS AND SERVICES ARE TO BE INSTALLED PER THE CITY OF COLORADO SPRINGS.

ELECTRIC — ALL ELECTRIC SERVICES ARE TO BE INSTALLED PER MOUNTAINVIEW ELECTRIC ASSOCIATION.

LITY CONTACTS

WER: WIDEFIELD W&S DISTRICT (WWSD)
IER: WIDEFIELD W&S DISTRICT (WWSD)
ICTRIC: MOUNTAIN VIEW ELECTRIC

390-7111 495-2283 800-303-0752 636-4632

# LEGEND

PROPOSED 8" PVC WATER MAIN (DR 18) WITH MJ FITTINGS (UNLESS OTHERWISE NOTED)

WIDEFIELD WATER & SANITATION DISTRICT
STANDARD FIRE HYDRANT ASSEMBLY. INSTALL
PER WIDEFIELD WATER AND SANITATION DISTRICT
CONSTRUCTION SPECIFICATIONS

GATE VALVE (UNLESS OTHERWISE NOTED)

TEE W/CONCRETE THRUST BLOCK

MINIMUM RADIUS SHOWN FOR WATER MAIN = 290'
PER WWSD SPECIFICATIONS AND EL PASO COUNTY ECM
4.3.6.A.1&2, THE MINIMUM COVER OVER WATER MAIN &
SERVICES AND SANITARY SEWER MAINS & SERVICES IS 5 FEET.

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, STE SHALL MONITOR AND TEST ALL WORK ASSOCIATED WITH THE AFFECTED PORTIONS.

# UTILITY APPROVALS

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

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.

WIDEFIELD WATER AND SANITATION DISTRICT WATER DESIGN APPROVAL

Date: \_\_\_\_\_ E

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.

Engineering Corporation 1604 South 21st Street Colorado Springs, Colorado 80904



N AT WIDEFIELD FILING NO
ITY SERVICES PLAN
ITY SERVICES
COUNTY, COLORADO

Project No.: 17038

Date: September 7, 2018

Design: AWMc

UTILIT EL PASO

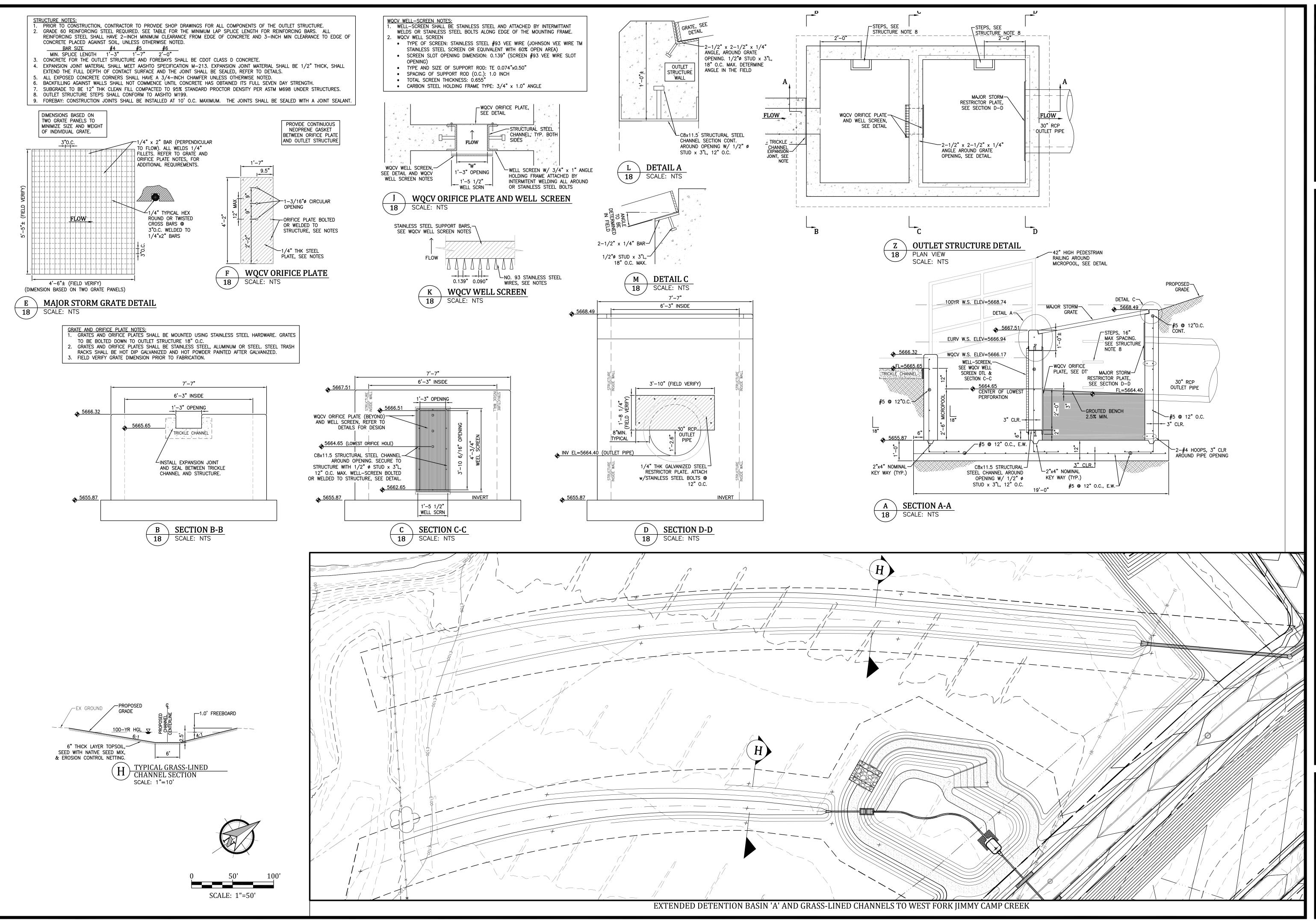
Drawn: JAK
Check: AWMc

visions:

SHEET

16 of 20 Shee

38-GW9-14-**16-UT.dwg/Sep 04. 2018** 







GLEN AT WIDEFIELD FILING NO. 9 SITE DETAIL PLAN

Project No.: 17038

Date: September 7, 2018

Design: JAK

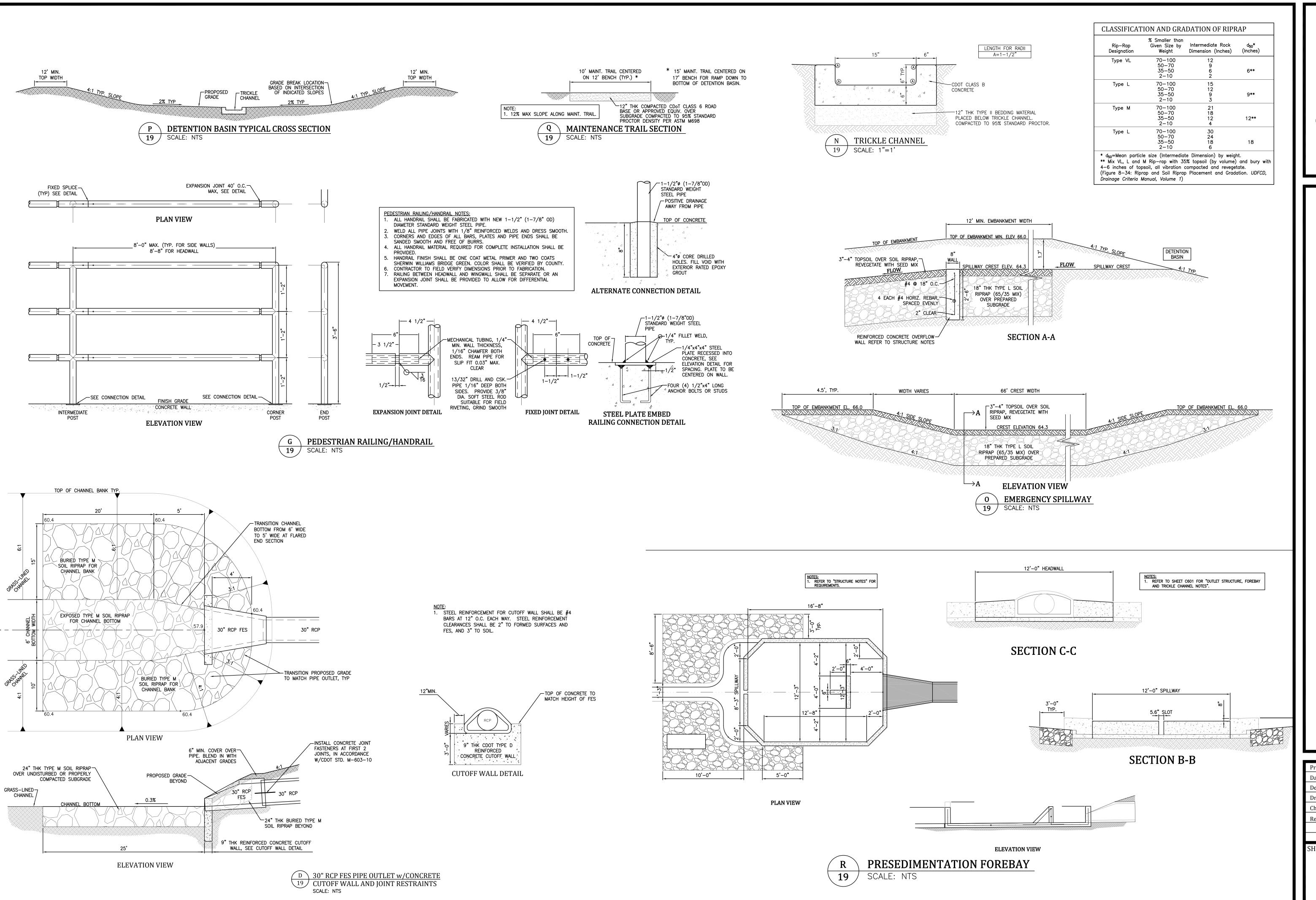
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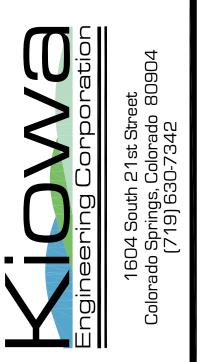
Check: AWMc

Revisions:

SHFFT

17



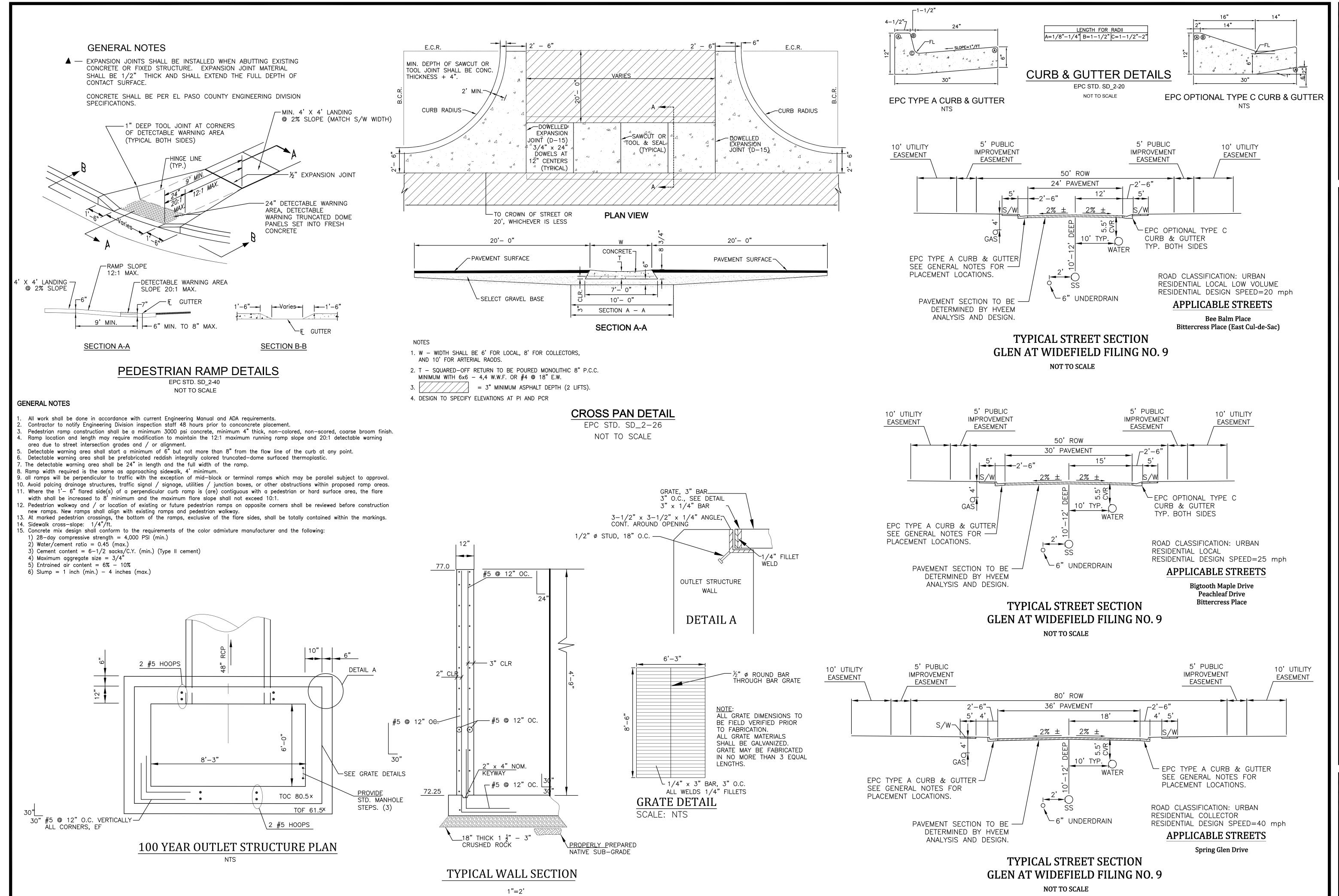




GLEI SITE DETEI EL PASC

ASIN DETAILS, COLORADO

Project No.: 17038 Date: September 7, 2018 Design: JAK Drawn: JAK Check: AWMc SHEET



Z LIN H WIDEFIE

COLORADO ETAIL GLEN AT W SITE DETAIL SITE DETAILS EL PASO COUNTY, O

Project No.: 17038 Date: September 7, 2018 Design: AWMc Drawn: JAK Check: AWMc **Revisions:** 

## **UNDERDRAIN NOTES**

TRENCH

COMPACTED BACKFILL

6" PVC, SDR 35 OR SCH 40 UNDERDRAIN

PASSIVE UNDERDRAIN DETAIL

NOT TO SCALE

SAN. SEWER MAIN

- 1. 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.
- 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 COLLECTED GROUNDWATER IS DIRECTED INTO THE PASSIVE PIPE

TRENCH

COMPACTED BACKFILL

OR SCH 40 UNDERDRAIN

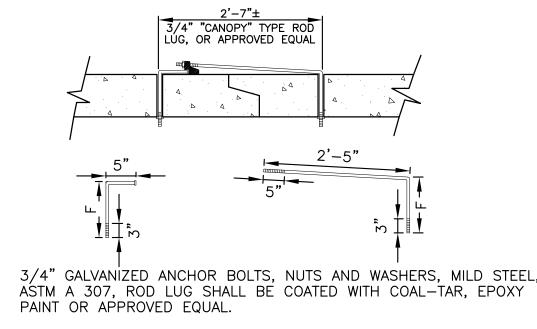
**ACTIVE UNDERDRAIN DETAIL** 

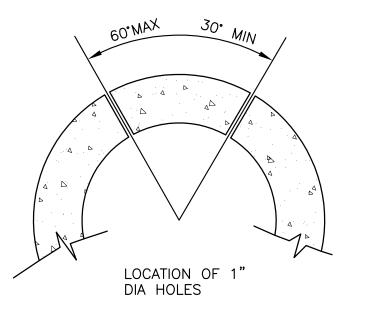
NOT TO SCALE

GRANULAR FILL 3/4" ROCK, CONSOLIDATED w/PLATE TAMPER ENCLOSED IN ENGINEERING FABRIC, MIRAFI 160N OR EQUAL.

L SAN. SEWER MAIN 6" PERFORATED PVC, SDR 35

—ACTIVE UNDERDRAIN

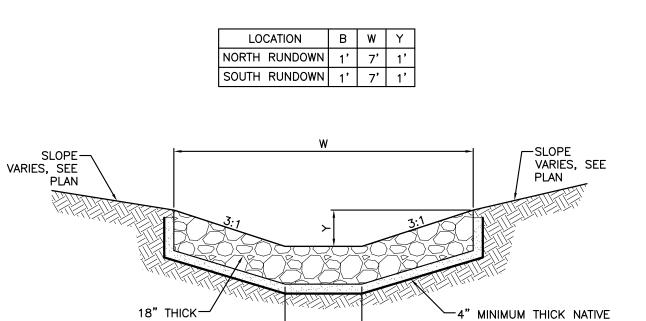




CONCRETE JOINT FASTENERS REQUIRED ON THE FIRST TWO PIPE JOINTS FROM A FLARED END SECTION.

PIPE DIAMETER	F	
18"-30"	5 <b>"</b>	
36"-42"	6"	
48"-60"	7"	
72"-84"	9"	

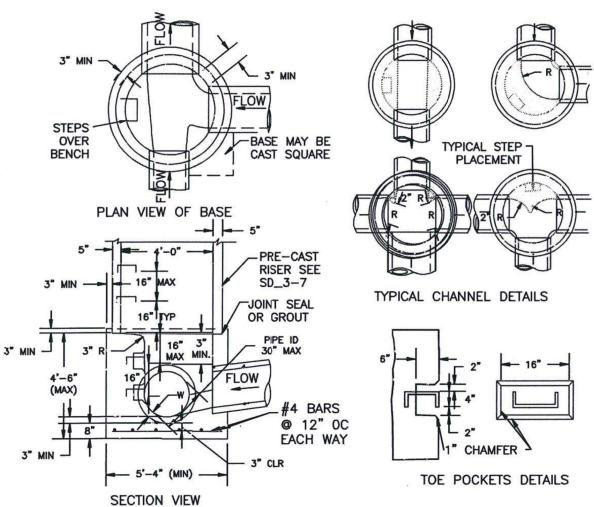
# CONCRETE PIPE JOINT FASTENER DETAIL NOT TO SCALE



SAND OVER MIRAFI 140N FILTER FABRIC

# RIPRAP RUNDOWN DETAIL -PEACEFUL VALLEY ROAD AT MARKSHEFFEL ROAD

LAYER TYPE L



NOTES

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

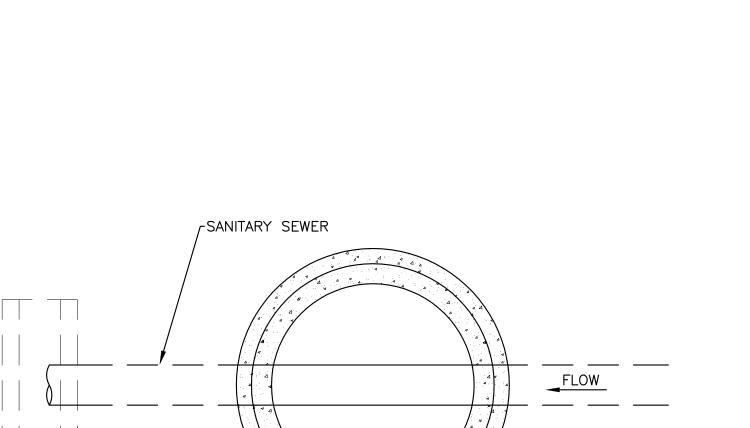
2. VIEW AND DETAILS ARE TYPICAL. DESIGN ENGINEER SHALL DETERMINE MANHOLE BASE CONFIGURATION AND DIMENSIONS FOR PARTICULAR PIPE SIZES AND ALIGNMENT.

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.

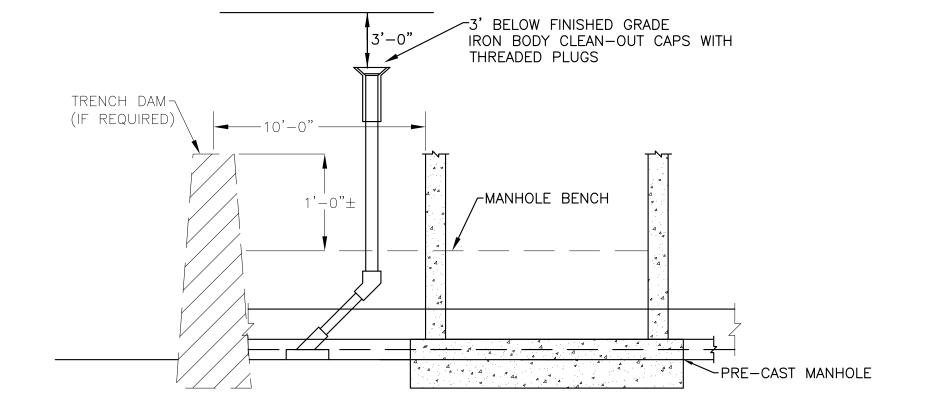
4. PIPES SHALL BE TRIMMED TO FINAL SHAPE AND SET BEFORE MANHOLE IS POURED.

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., 1/2" PER FT. MIN.) . FLOOR SHALL BE SHAPED AND CHANNELED; SEE DETAILS THIS SHEET.



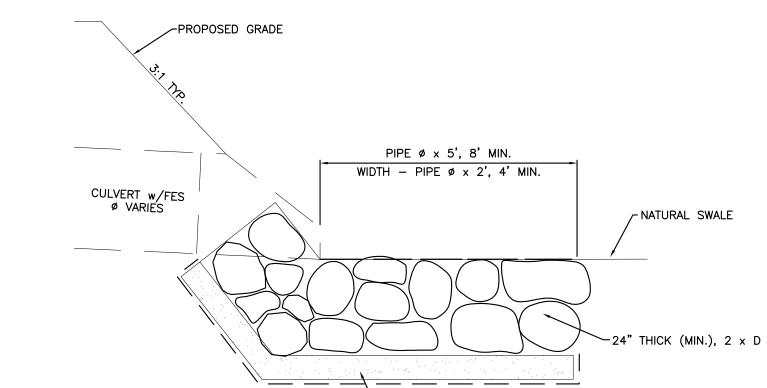
-FULL SIZE CLEAN OUTS WITH



SCREW CAPS.

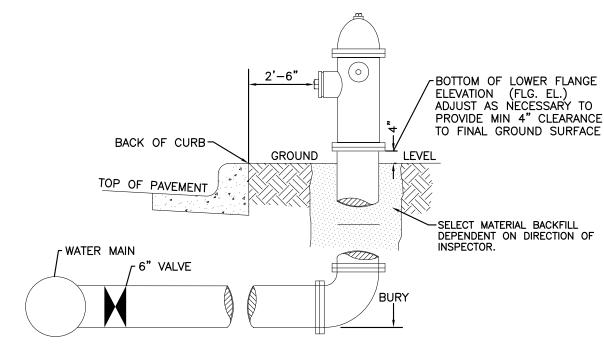
GROUNDWATER UNDERDRAIN DETAIL CLEANOUT LOCATIONS OUTSIDE MANHOLE NOT TO SCALE

STORM SEWER MANHOLE DETAIL TYPE II EPC STD. SD\_3-2 NOT TO SCALE



# TYPICAL CULVERT OUTLET PROTECTION NOT TO SCALE

4" MIN. THICKNESS OF NATIVE SAND MATERIAL OVER MIRAFI 140N FILTER



# 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 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, STE SHALL MONITOR AND TEST

ALL WORK ASSOCIATED WITH THE AFFECTED PORTIONS.

TRENCH 8" PVC WATER MAIN 8" PVC SAN SEWER LOT LOT

TYPICAL JOINT-TRENCH UTILITY SERVICE DETAIL

NOT TO SCALE

GLEI SITE UTILI

COLORADO

Project No.: 17038 Date: September 7, 2018 Design: AWMc Drawn: JAK Check: AWMc