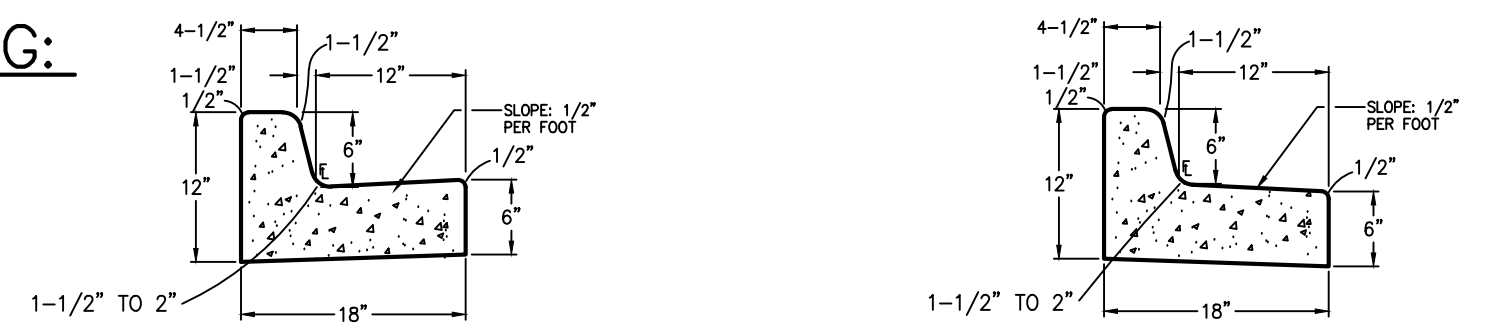


CONTROL MEASURE/BMP PHASING:

- INITIAL BMP'S:**
- VTC
 - SILT FENCE ALONG DOWNSTREAM EDGE OF GRADING LIMITS
 - SEDIMENT BASINS
- INTERIM BMP'S:**
- INLET PROTECTION
 - TEMPORARY SEED & MULCH
- FINAL BMP'S:**
- SEEDING & MULCHING



EROSION CONTROL LEGEND: LEGEND:

- (VTC) VEHICLE TRACKING CONTROL PAD
 - (SF) SILT FENCE
 - (SM) SEED & MULCH
 - (CWA) CONCRETE WASHOUT AREA (TO BE COMPLETELY CONTAINED & REMOVED UPON COMPLETION OF PROJECT)
 - (IP) INLET PROTECTION
 - (EDB) EXTENDED DRAINAGE BASIN
 - (RR) RIPRAP APRON (5'Lx5'Wx2'D; d₅₀=12" RR)
 - (SSA) STABILIZED STAGING AREA
 - (TSB) TEMPORARY SEDIMENT BASIN
- 6232 PROPOSED PROPERTY LINE
 - 6232 EXISTING CONTOURS
 - 31.5 PROPOSED CONTOURS
 - 31.5 EXISTING SPOT ELEVATIONS
 - 1.0% PROPOSED GRADES
 - DS ROOF DRAIN DOWNSPOUTS W/TRANSITION COUPLINGS & CONNECTION TO STORM DRAIN (COORDINATE W/ARCHITECT AND PLUMBING PLANS)

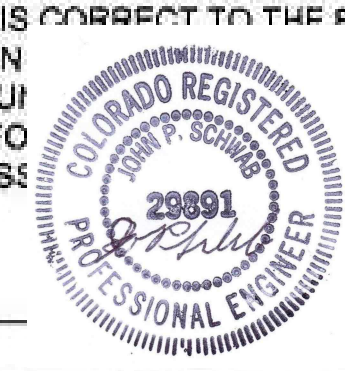
ESTIMATED EARTHWORK QUANTITY:

UNCLASSIFIED EXCAVATION (TOTAL CUT) = 1,988 CY
 * EMBANKMENT FILL = 1,925 CY
 NET (CUT) = 63 CY
 *(ASSUMES 15% COMPACTION FACTOR)

NOTE: THIS ESTIMATE IS PROVIDED FOR INFORMATION ONLY, REPRESENTING THE CALCULATED BULK EARTHWORK VOLUME TO FINISHED GRADE, EXCLUDING ANY ADJUSTMENT FOR PAVEMENT DEPTHS, ETC. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF EARTHWORK QUANTITIES AS BASIS FOR BID PRICING AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

DESIGN ENGINEER'S STATEMENT:

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN CRITERIA ESTABLISHED BY THE COUNTY ENGINEER. I ACCEPT RESPONSIBILITY FOR ANY NEGLIGENCE, ACTS, ERRORS OR OMISSIONS IN PREPARING THIS PLAN.



JOHN P. SCHWAB, P.E. #28891 DATE 11/3/22

OWNER/DEVELOPER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

ARACO CONCRETE CONTRACTOR, LLC
 MR. ARTURO ACOSTA
 7470 SOUTHMOOR DRIVE
 FOUNTAIN, CO 80817

EL PASO COUNTY:

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.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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 DIRECTOR'S DISCRETION.

COUNTY ENGINEER / ECM ADMINISTRATOR DATE

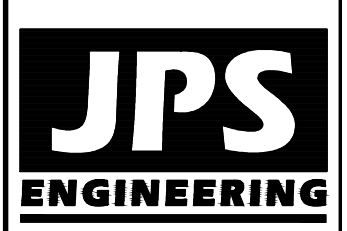
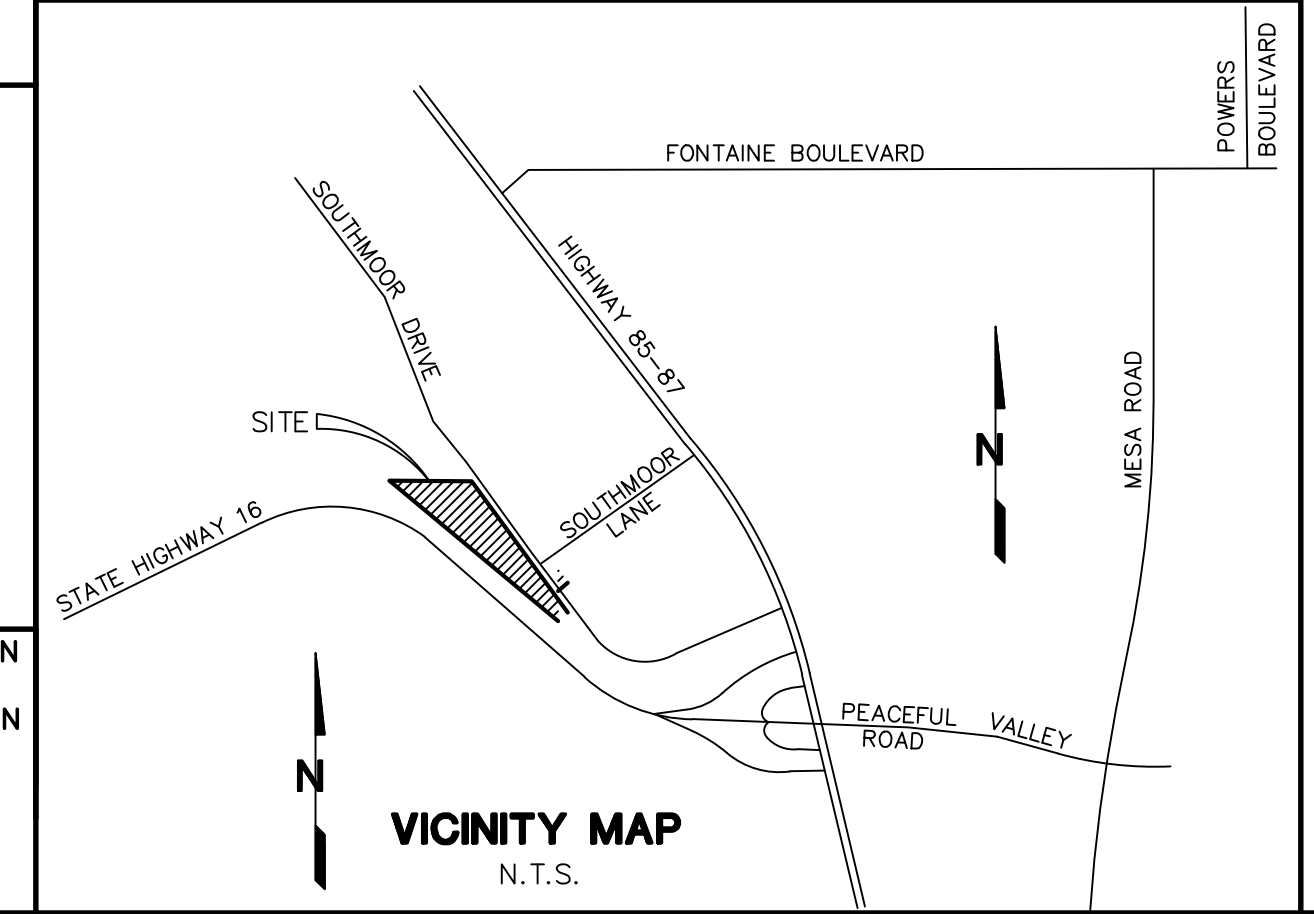
PCD PROJECT NO. PPR-1950

GEC SHEET INDEX:

- C1 SITE GRADING & EROSION CONTROL PLAN
- C1.1 SOUTH SITE GRADING PLAN & DETAILS
- C1.2 NORTH SITE GRADING PLAN
- C2.1 CIVIL NOTES & DETAILS
- C2.2 GRADING & EROSION CONTROL NOTES & DETAILS
- C2.3 EROSION CONTROL DETAILS
- C3.1 DETENTION BASIN DETAILS

NOTE: 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 TO BE ACCEPTABLE.

BENCHMARK: NGS "U 347", FOUND NGS BRASS CAP SET IN TOP OF CONCRETE POST 0.8' ABOVE GROUND, 3 MILES NORTHWEST ALONG THE DENVER AND RIO GRANDE WESTERN RAILROAD FROM THE STATION AT FOUNTAIN, 4 1/2 POLES NORTHWEST OF MILEPOST 85, 21' NORTHEAST OF THE NORTHEAST RAIL, 47.5' NORTH OF A SIGNAL CASE, 32.7' SOUTHWEST OF A TELEPHONE POLE.
 ELEVATION: 5662.75 (DATUM: NAVD 88)



19 E. Willamette Ave.
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 1-800-922-1987
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 BEFORE YOU DIG, GRADE, OR EXCAVATE
 FOR THE MEMBER UTILITIES.

NO.	REVISION	DATE
1	COUNTY COMMENTS	7/22/20
2	COUNTY COMMENTS	10/06/20
3	COUNTY COMMENTS	1/23/21
4	COUNTY COMMENTS	11/08/21
5	COUNTY COMMENTS	12/14/21

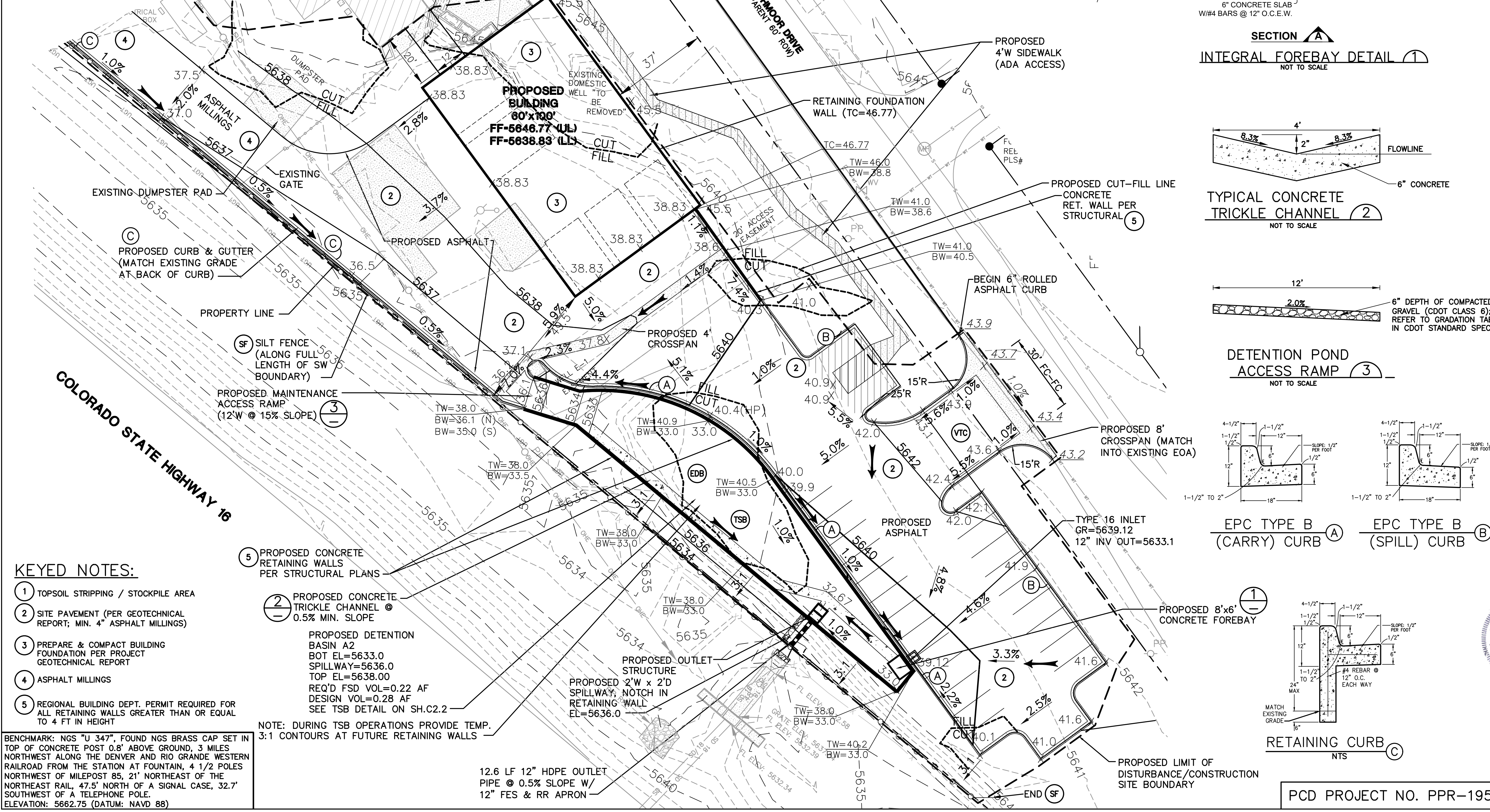
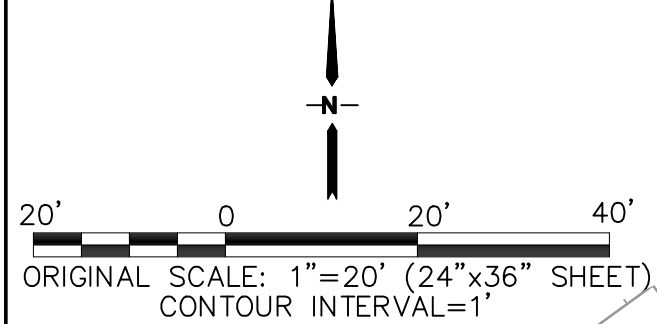
ARACO CONCRETE
 7470 SOUTHMOOR DR., COLORADO SPRINGS, COLORADO 80817

SITE GRADING & EROSION
 CONTROL PLAN

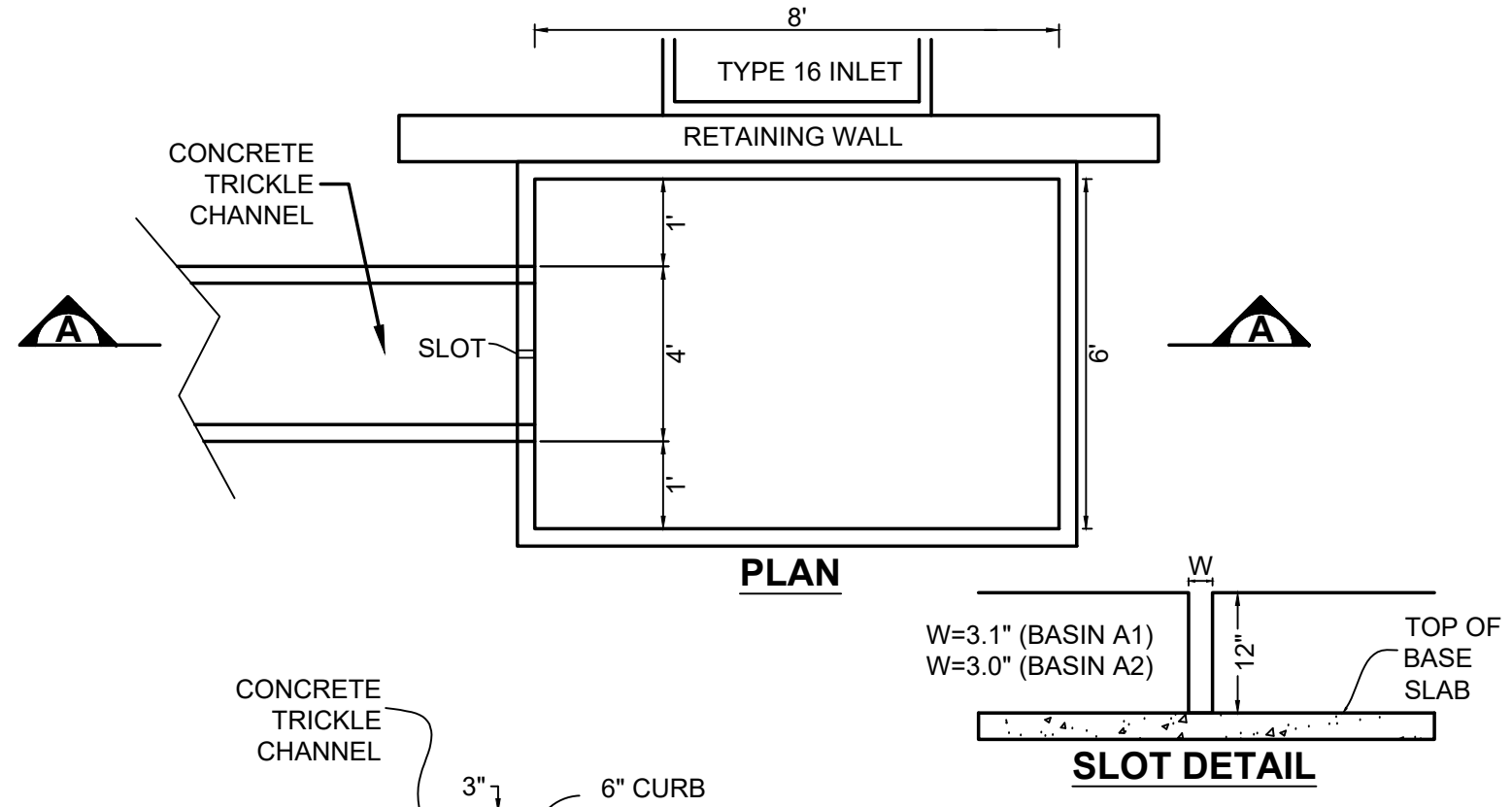
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VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: LDC	CHECKED: JPS
CREATED: 6/21/19	LAST MODIFIED: 2/14/21
PROJECT NO: 111705	MODIFIED BY: BJJ
SHEET: C1	

EROSION CONTROL LEGEND: LEGEND:

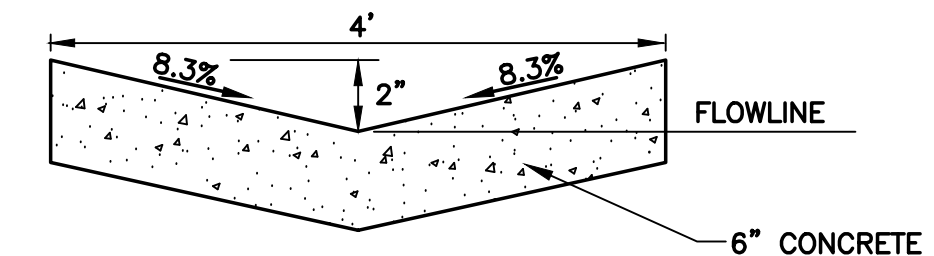
- (VTC) VEHICLE TRACKING CONTROL PAD
- (SF) SILT FENCE
- (SM) SEED & MULCH
- (CWA) CONCRETE WASHOUT AREA (TO BE COMPLETELY CONTAINED & REMOVED UPON COMPLETION OF PROJECT)
- (IP) INLET PROTECTION
- (EDB) EXTENDED DETENTION BASIN
- (RR) RIPRAP APRON (5'Lx5'Wx2'D; d₅₀=12" RR)
- (TSB) TEMPORARY SEDIMENT BASIN
- PROPOSED PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS
- EXISTING GRADES
- PROPOSED GRADES
- DS → ROOF DRAIN DOWNSPOUTS W/TRANSITION COUPLINGS & CONNECTION TO STORM DRAIN
- PROPOSED CONSTRUCTION BOUNDARY
- PROPOSED CUT/FILL LINE
- PROPOSED FLOW ARROW
- EXISTING FLOW ARROW



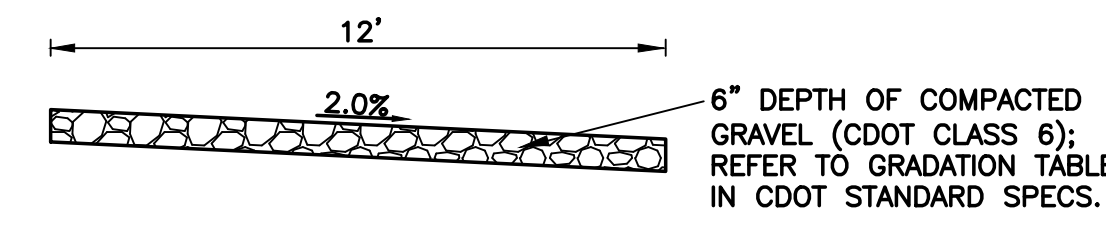
SWMP NOTES:
 1. EXISTING VEGETATION AT THE SITE CONSISTS OF NATIVE GRASSES
 2. NO BATCH PLANTS ARE PROPOSED
 3. NO STREAMS CROSS THE SITE



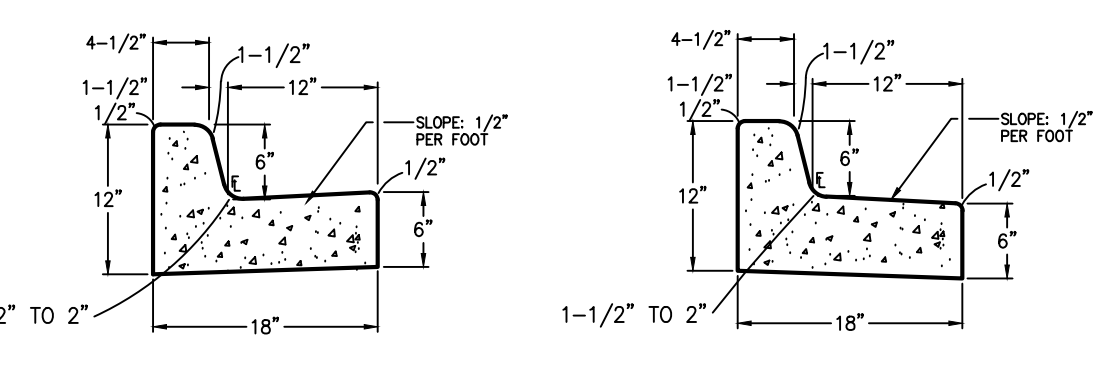
INTEGRAL FOREBAY DETAIL
NOT TO SCALE



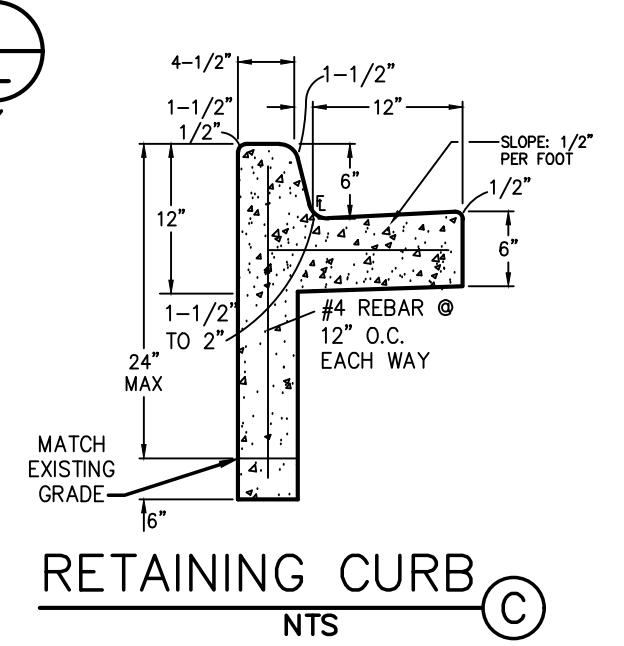
TYPICAL CONCRETE TRICKLE CHANNEL
NOT TO SCALE



DETENTION POND ACCESS RAMP
NOT TO SCALE



EPC TYPE B (CARRY) CURB **EPC TYPE B (SPILL) CURB**



RETAINING CURB
NTS

KEYED NOTES:

- 1 TOPSOIL STRIPPING / STOCKPILE AREA
- 2 SITE PAVEMENT (PER GEOTECHNICAL REPORT; MIN. 4" ASPHALT MILLINGS)
- 3 PREPARE & COMPACT BUILDING FOUNDATION PER PROJECT GEOTECHNICAL REPORT
- 4 ASPHALT MILLINGS
- 5 REGIONAL BUILDING DEPT. PERMIT REQUIRED FOR ALL RETAINING WALLS GREATER THAN OR EQUAL TO 4 FT IN HEIGHT
- PROPOSED DETENTION BASIN A2
BOT EL=5633.0
SPILLWAY=5636.0
TOP EL=5638.0
REQ'D FSD VOL=0.22 AF
DESIGN VOL=0.28 AF
SEE TSB DETAIL ON SH.C2.2
- PROPOSED OUTLET STRUCTURE
2'W x 2'D SPILLWAY, NOTCH IN RETAINING WALL
EL=5636.0

NOTE: DURING TSB OPERATIONS PROVIDE TEMP. 3:1 CONTOURS AT FUTURE RETAINING WALLS

BENCHMARK: NGS "U 347", FOUND NGS BRASS CAP SET IN TOP OF CONCRETE POST 0.8' ABOVE GROUND, 3 MILES NORTHWEST ALONG THE DENVER AND RIO GRANDE WESTERN RAILROAD FROM THE STATION AT FOUNTAIN, 4 1/2 POLES NORTHWEST OF MILEPOST 85, 21' NORTHEAST OF THE NORTHEAST RAIL, 47.5' NORTH OF A SIGNAL CASE, 32.7' SOUTHWEST OF A TELEPHONE POLE.
ELEVATION: 5662.75 (DATUM: NAVD 88)

ARACO CONCRETE
 7470 SOUTHMOOR DR., COLORADO SPRINGS, COLORADO 80817

**SOUTH SITE GRADING
 PLAN & DETAILS**

JPS ENGINEERING

19 E. Willamette Ave.
 Colorado Springs, CO 80903

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 FAX: 719-471-0766
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NO.	REVISION	DATE	BY
1	EPC COMMENTS	9/30/20	JPS
2	EPC COMMENTS	10/06/20	JPS
3	EPC COMMENTS	1/25/21	JPS
4	EPC COMMENTS	11/06/21	JPS
5	EPC COMMENTS	12/17/21	JPS

HORIZ. SCALE: 1"=20'
 VERT. SCALE: N/A
 SURVEYED: LDC
 CREATED: 6/21/19
 PROJECT NO: 111705
 SHEET: C1.1

DRAWN: BJJ
 DESIGNED: JPS
 CHECKED: JPS
 LAST MODIFIED: 2/17/21
 MODIFIED BY: BJJ

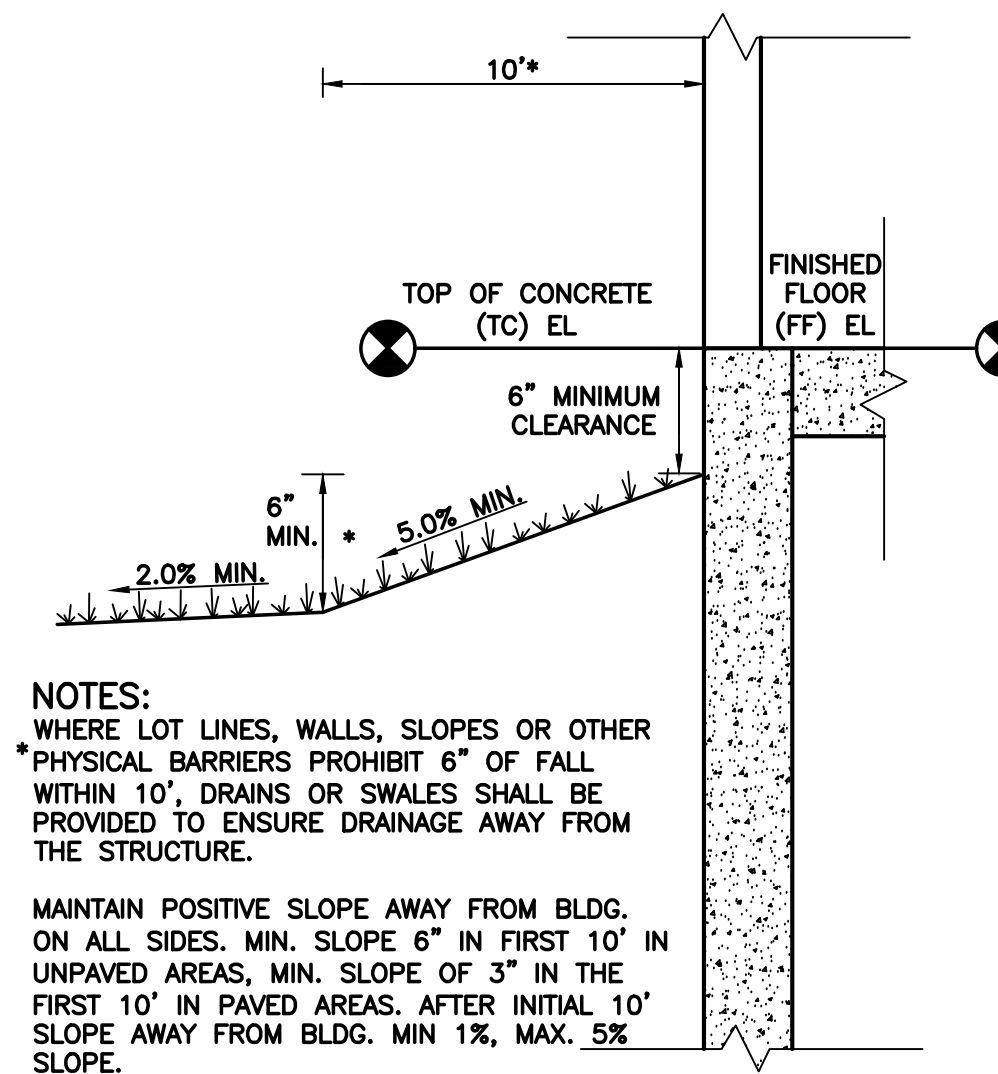
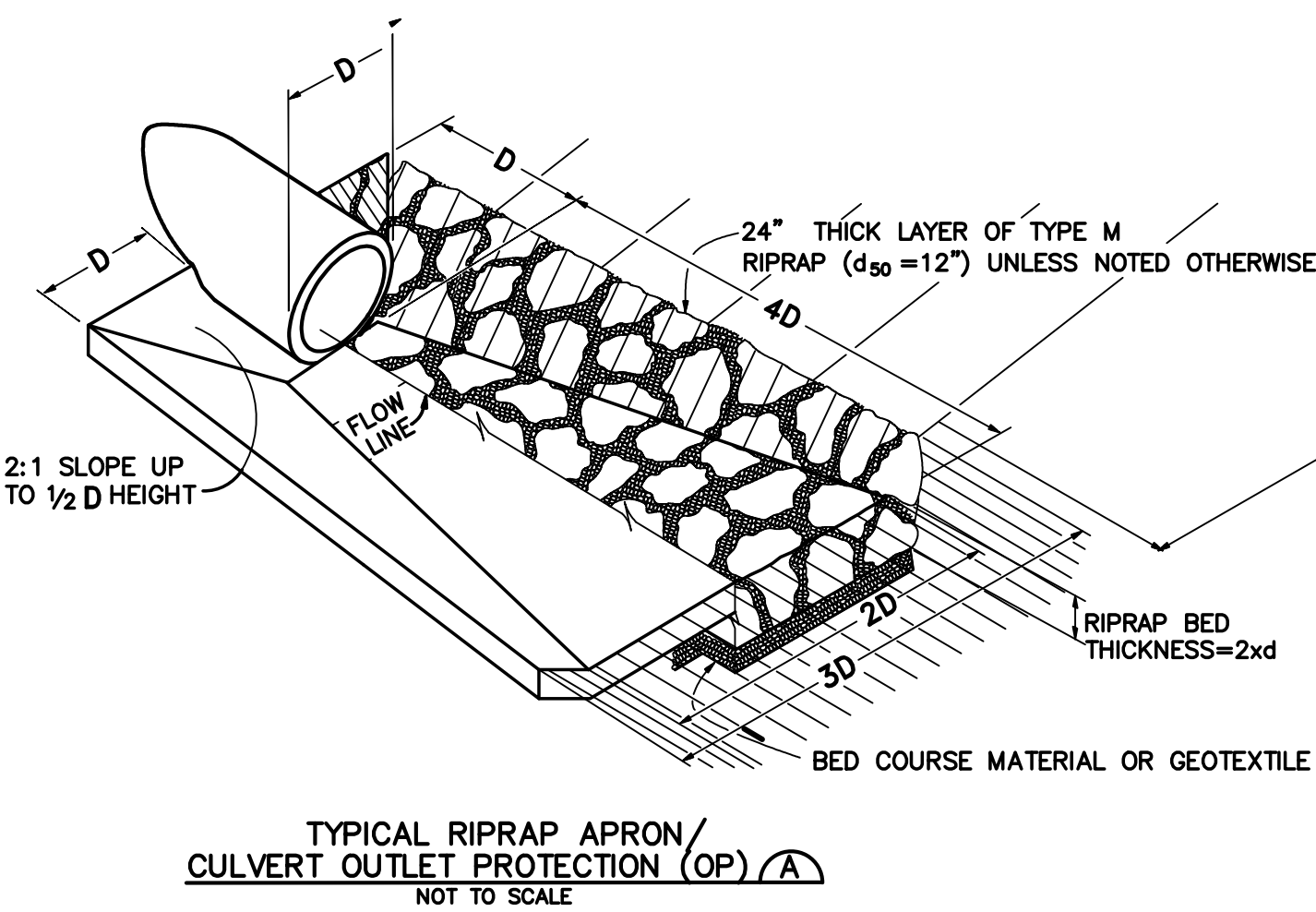
PCD PROJECT NO. PPR-1950

GENERAL CIVIL NOTES:

- All construction shall meet the following standards & specifications:
 - 2009 International Building Code,
 - Pikes Peak Regional Building Code, latest edition.
 - El Paso County Engineering Criteria Manual (ECM), latest edition.
 - Project Geotechnical Report.
- The contractor shall be responsible for the notification and field location of all existing utilities, whether shown on the plans or not, before beginning construction. Location of existing utilities shall be verified by the contractor prior to actual construction.
- The contractor shall have one (1) signed copy of these approved plans and one (1) copy of the appropriate design and construction standards and specifications at the job site at all times:
 - El Paso county engineering criteria manual.
- Storm drain pipe shall be rcp class iii with class c bedding unless otherwise noted.
- Stationing is at centerline unless otherwise noted. All elevations are at flowline unless otherwise noted. All dimensions are from face of curb unless otherwise noted. Lengths shown for storm sewer pipes are to center of manhole.
- Contractor shall coordinate with gas, electric, telephone and cable t.v. Utility suppliers for installation of all utilities. Minimum cover for all dry utilities shall be 36".
- Contractor shall remove and dispose of all existing structures, debris, waste and other unsuitable fill material found within the limits of excavation.
- Match into existing grades at 3:1 max cut and fill slopes.
- Revegetation of all disturbed areas shall be done with 4" topsoil and dry land grass seed after fine grading is complete ("foothills seed mix").
- Erosion control shall consist of silt fence and hay bales as shown on the drawing, and topsoil with grass seed, which will be watered until vegetation has been re-established.
- The erosion control measures outlined on this plan are the responsibility of the contractor to monitor and replace, regrade, and rebuild as necessary until vegetation is re-established.
- Contractor shall implement best management practices in a manner that will protect adjacent properties and public facilities from the adverse effects of erosion and sedimentation as a result of construction and earthwork activities within the project site.
- Additional erosion control measures may be required as determined by site conditions.
- The contractor will take the necessary precautions to protect existing utilities from damage due to this operation. Any damage to the utilities will be repaired at the contractor's expense, and any service disruption will be settled by the contractor.
- All backfill, sub-base, and/or base course material shall be compacted per the project geotechnical report and County specifications.
- Concrete used in curb and gutter, sidewalk, and crosspan construction shall meet County criteria.
- All finished grades shall have a minimum 1.0% slope to provide positive drainage.
- Contractor shall obtain all required permits prior to beginning work.

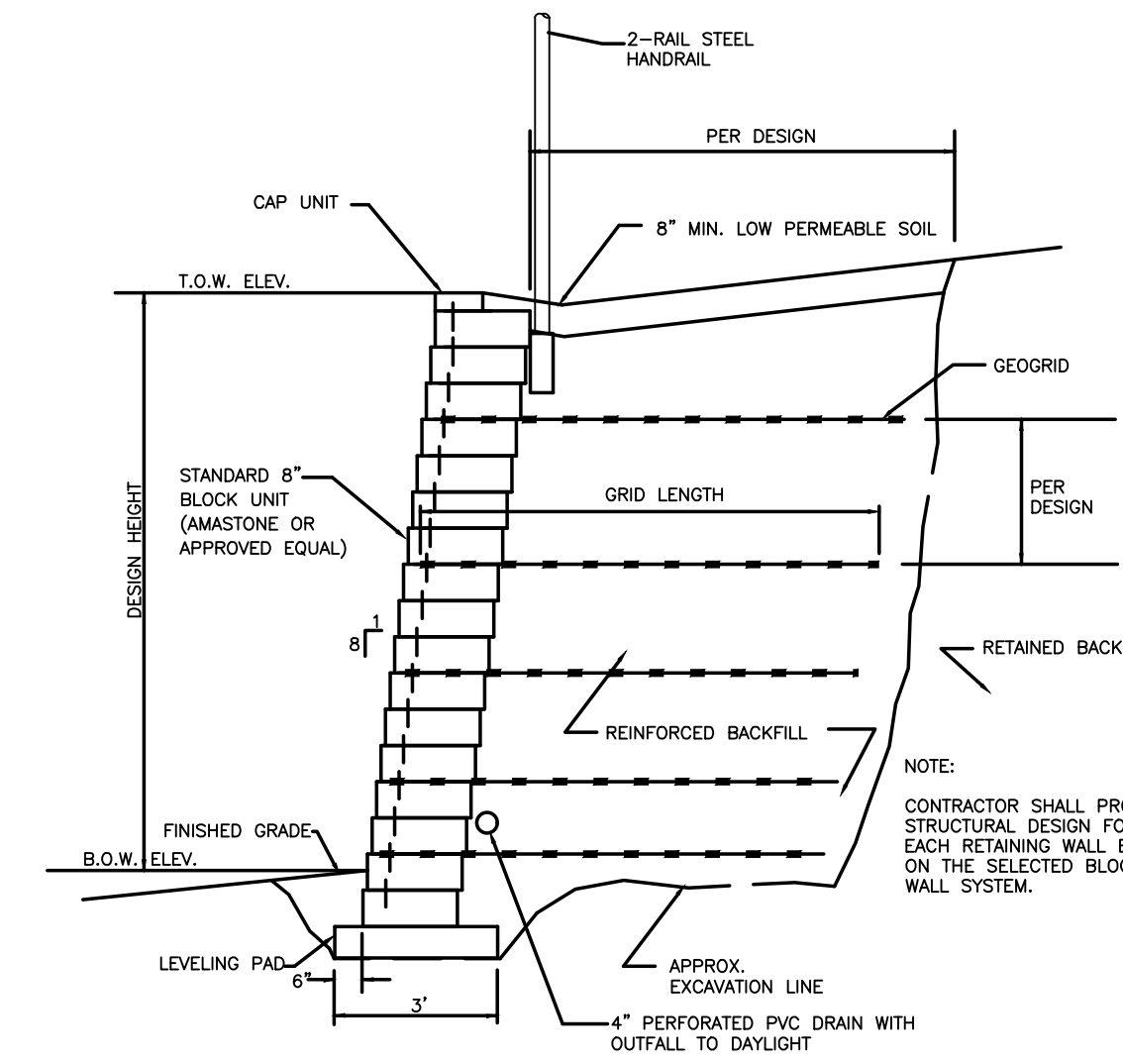
HANDICAP ACCESS NOTES:

- RAMPS ARE NOT TO BE PLACED IN HANDICAP ACCESS AISLES.
- ACCESS AISLES MAY NOT EXCEED A 2% (1:48) SLOPE IN ANY DIRECTION.
- HANDICAP RAMPS MAY NOT EXCEED A SLOPE OF 8% (1:12).
- THE MINIMUM WIDTH FOR HANDICAPPED RAMPS IS 36 INCHES. THE SIDES OF RAMPS MAY NOT EXCEED A SLOPE OF 10% UNLESS PROTECTED WITH A HANDRAIL.
- HANDICAPPED PARKING SHALL MEET ALL OTHER APPLICABLE CITY AND ADA CODE REQUIREMENTS.

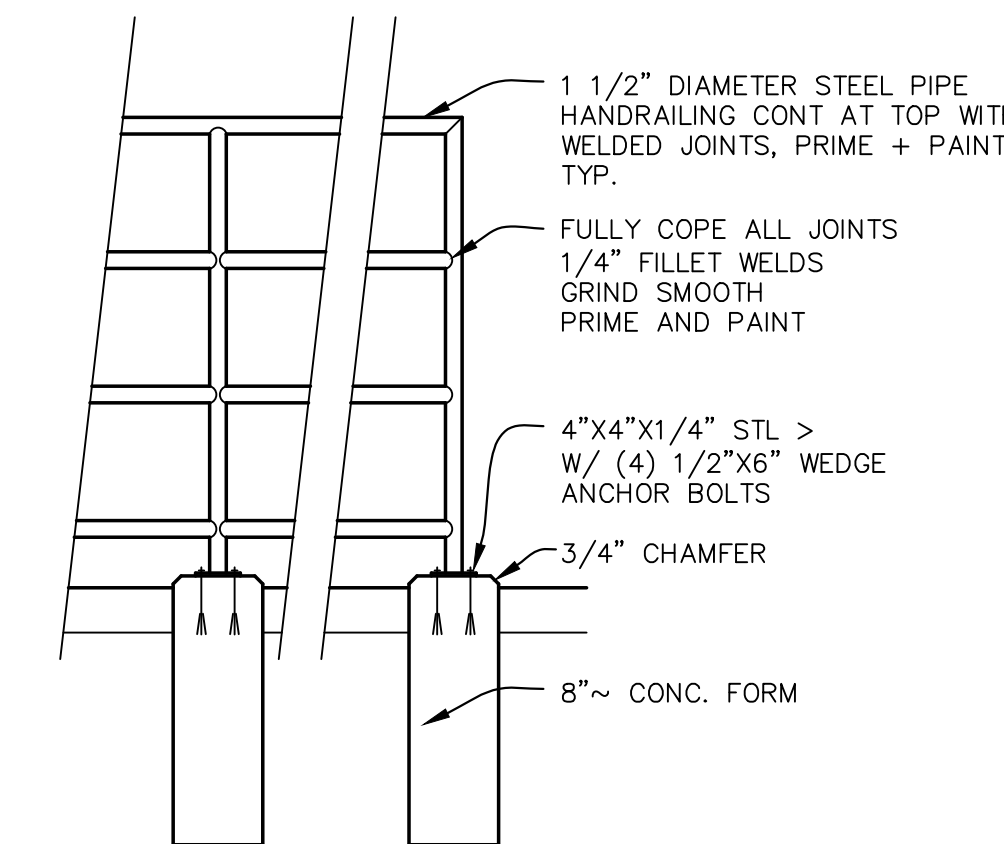


NOTES:
 WHERE LOT LINES, WALLS, SLOPES OR OTHER PHYSICAL BARRIERS PROHIBIT 6" OF FALL WITHIN 10', DRAINS OR SWALES SHALL BE PROVIDED TO ENSURE DRAINAGE AWAY FROM THE STRUCTURE.
 MAINTAIN POSITIVE SLOPE AWAY FROM BLDG. ON ALL SIDES. MIN. SLOPE 6" IN FIRST 10' IN UNPAVED AREAS, MIN. SLOPE OF 3" IN THE FIRST 10' IN PAVED AREAS. AFTER INITIAL 10' SLOPE AWAY FROM BLDG. MIN 1%, MAX. 5% SLOPE.

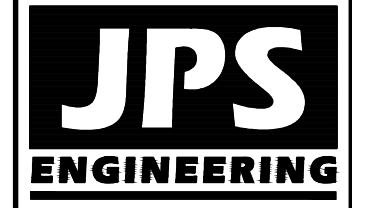
TYPICAL BUILDING DRAINAGE DETAIL B
 SCALE: NTS



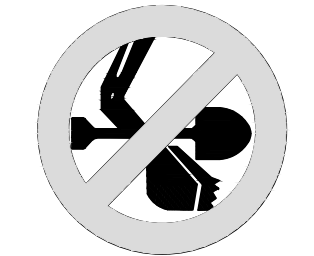
MODULAR BLOCK RETAINING WALL DETAIL C
 SCALE: NTS
 NOTE: ALTERNATIVE CONCRETE RETAINING WALLS MAY BE USED AT OWNER'S DISCRETION (REFER TO STRUCTURAL DESIGN BY OTHERS)



HANDRAIL DETAIL D
 SCALE: NTS



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 80903
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ARACO CONCRETE
 7470 SOUTHMOOR DR., COLORADO SPRINGS, COLORADO 80817

CIVIL NOTES &
 DETAILS

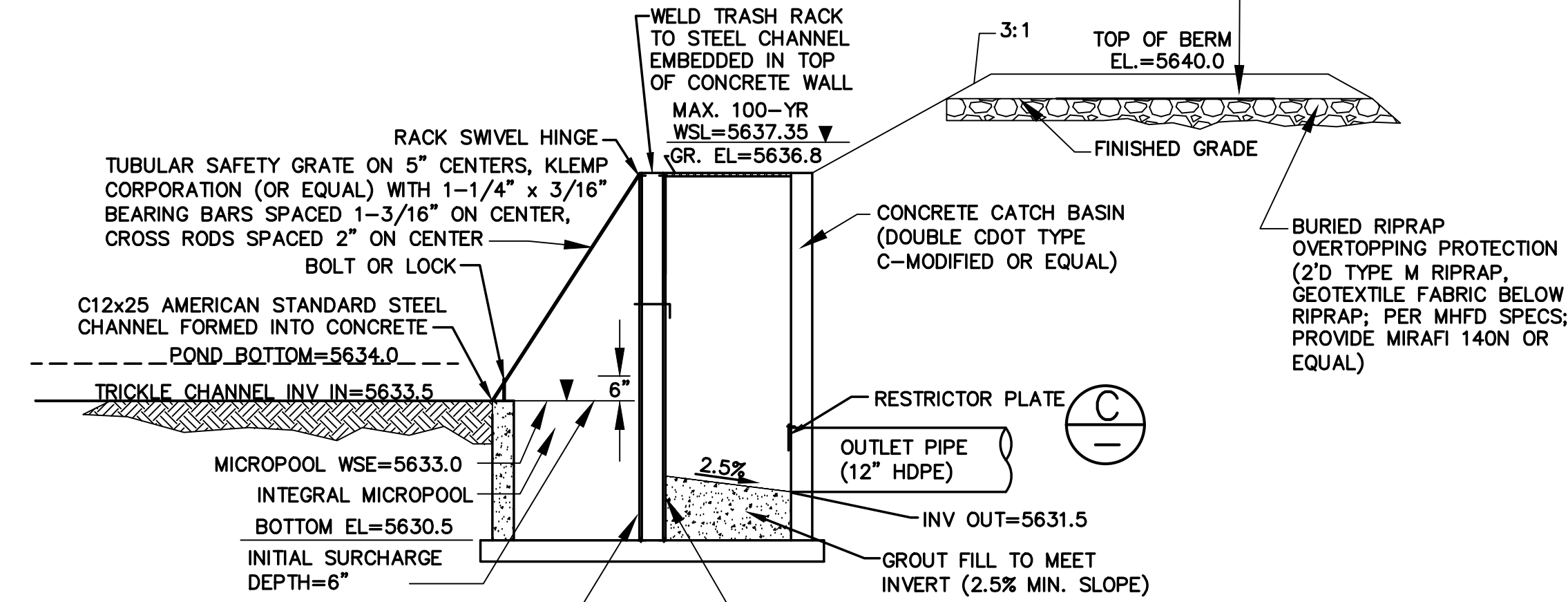
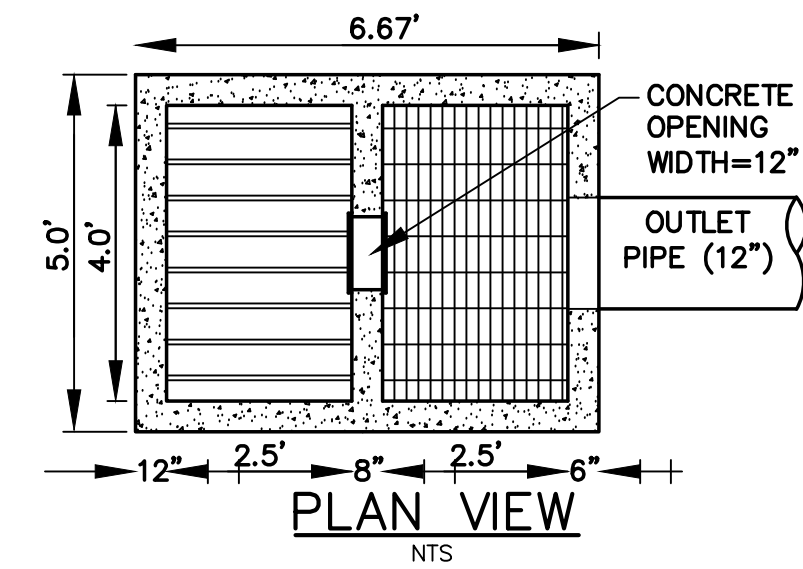
NO.	REVISION	DATE	BY
1	EPC SUBMITTAL	10/22/19	JPS
2	COUNTY COMMENTS	7/22/20	JPS



HORZ. SCALE:	N/A	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	LDC	CHECKED:	JPS
CREATED:	6/21/19	LAST MODIFIED:	7/22/21
PROJECT NO:	111705	MODIFIED BY:	BJJ

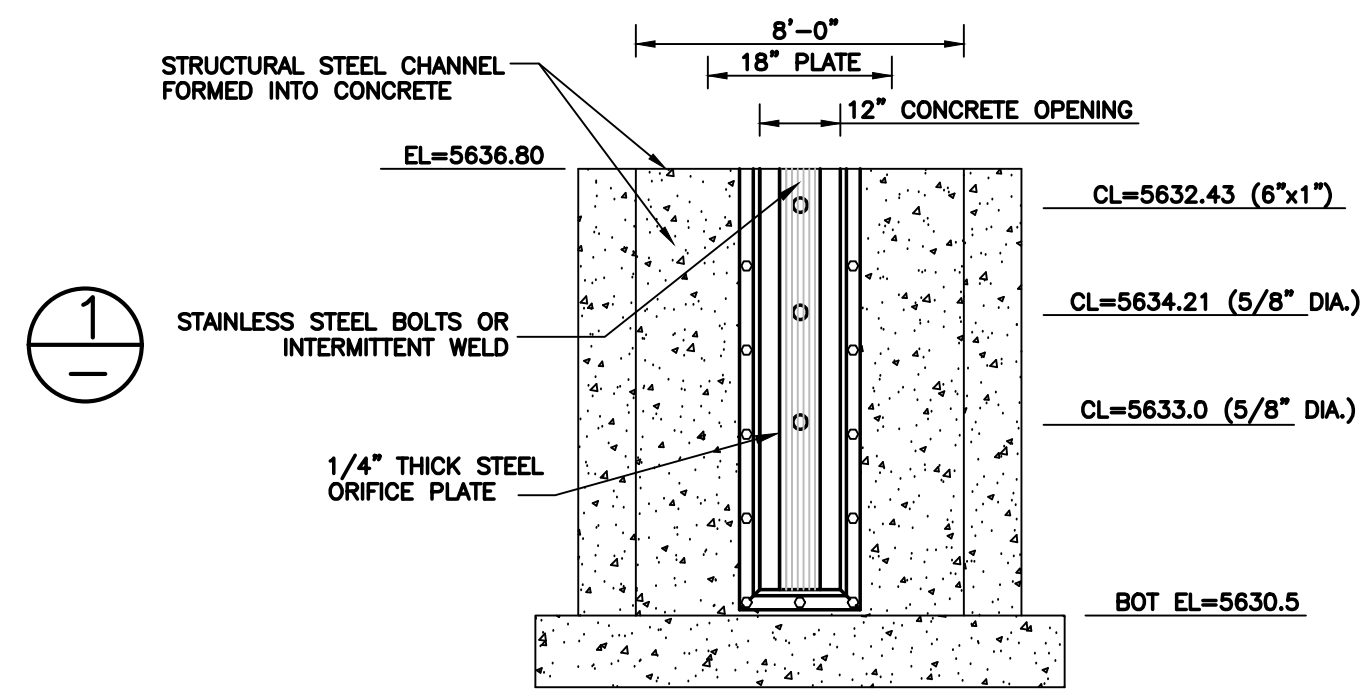
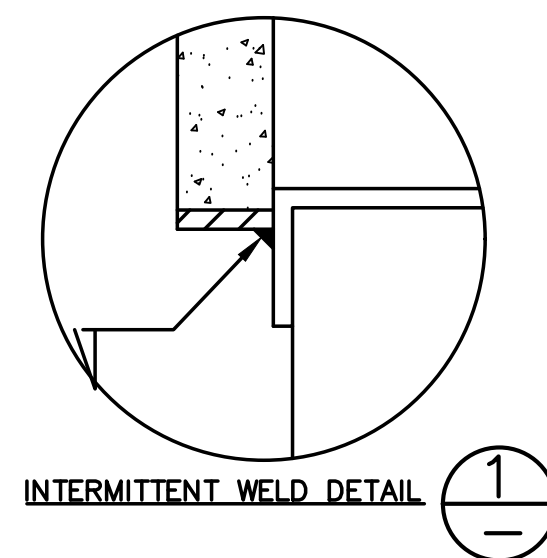
SHEET: C2.1

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VERTICAL TRASH SCREEN; STAINLESS STEEL WELL SCREEN WITH #93 VEE WIRE, OR EQUIVALENT (PER EPC DCMV2, CHAP 4.3 AND MHFD DETAIL T-12) W/CROSS RODS 2\"/>

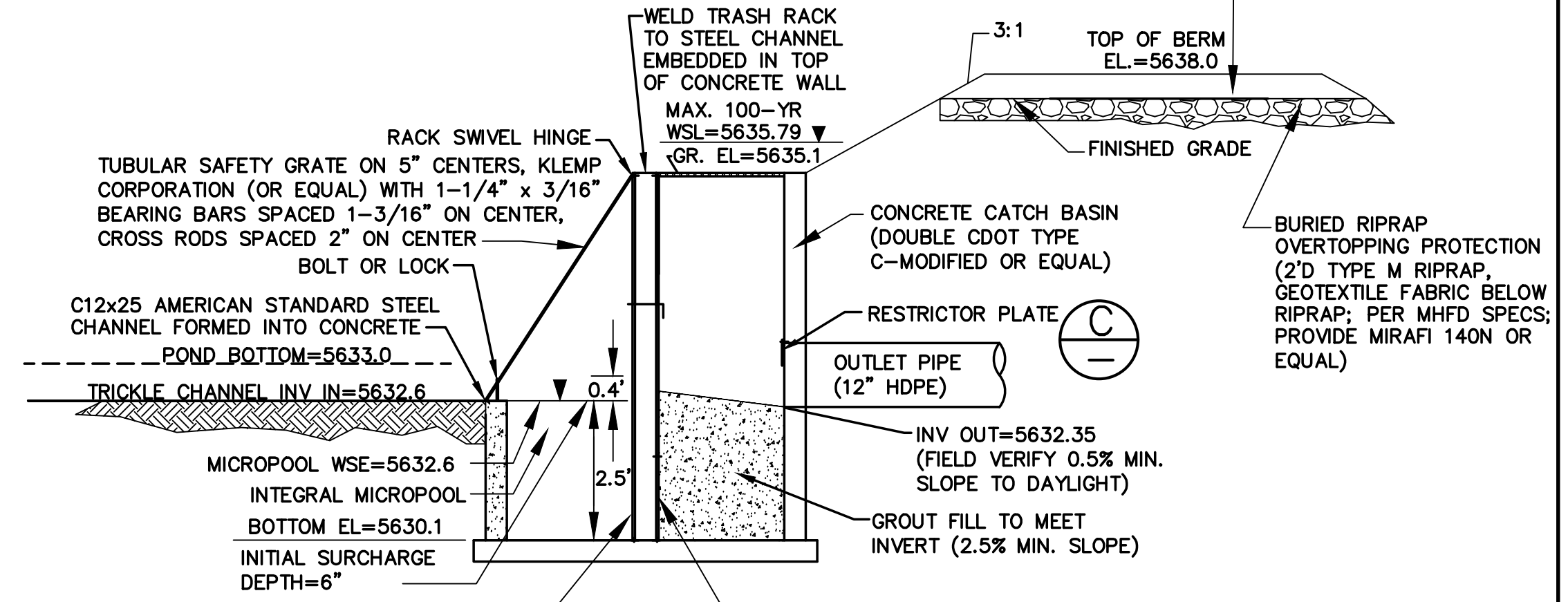
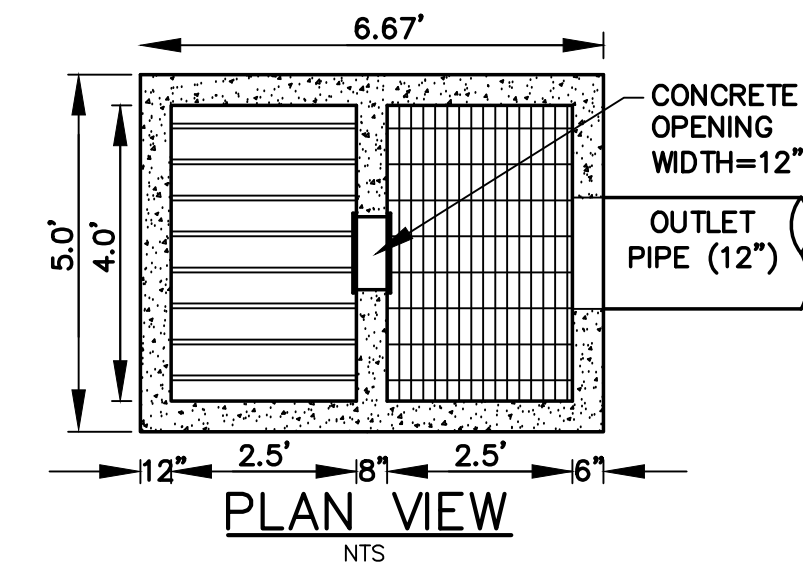
SECTION DETENTION POND OUTLET STRUCTURE SCALE: NTS



- ORIFICE PLATE NOTES:
1. PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
 2. BOLT PLATE TO CONCRETE 12\"/>
- EURV AND WQCV TRASH RACKS:
1. WELL-SCREEN TRASH RACKS (FOR CIRCULAR ORIFICES) SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
- OVERFLOW TRASH RACKS:
1. ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
 2. TRASH RACKS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.

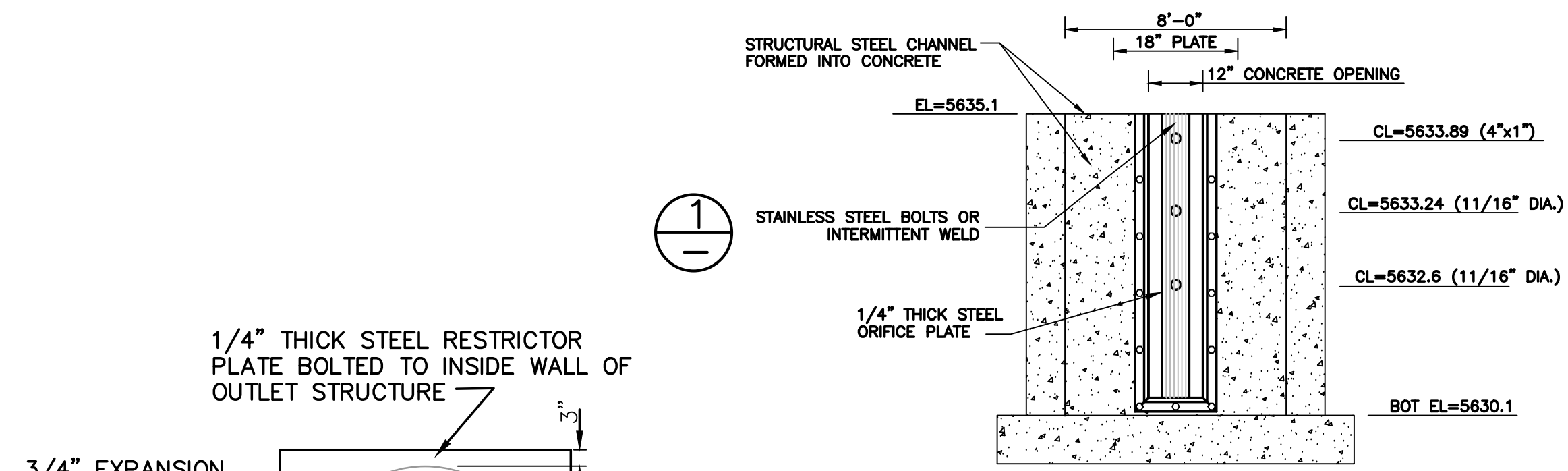
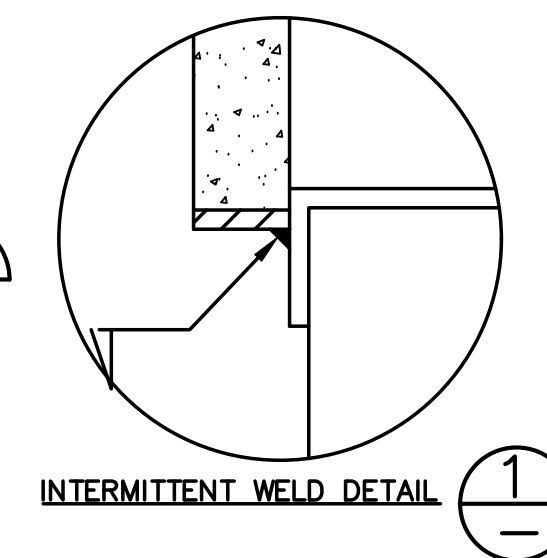
ORIFICE PLATE AND TRASH RACK DETAILS AND NOTES SCALE: NTS

DETENTION BASIN A1 DETAILS



VERTICAL TRASH SCREEN; STAINLESS STEEL WELL SCREEN WITH #93 VEE WIRE, OR EQUIVALENT (PER EPC DCMV2, CHAP 4.3 AND MHFD DETAIL T-12) W/CROSS RODS 2\"/>

SECTION DETENTION POND OUTLET STRUCTURE SCALE: NTS

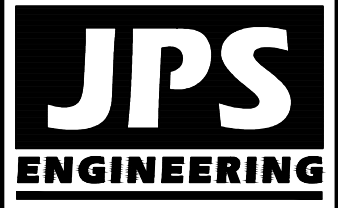


- ORIFICE PLATE NOTES:
1. PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
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ORIFICE PLATE AND TRASH RACK DETAILS AND NOTES SCALE: NTS

DETENTION BASIN A2 DETAILS

ARACO CONCRETE
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NO.	REVISION	DATE

DETENTION BASIN
DETAILS

HORZ. SCALE: N/A	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: LDC	CHECKED: JPS
CREATED: 7/22/20	LAST MODIFIED: 7/13/22
PROJECT NO: 111705	MODIFIED BY: BJJ
SHEET:	

C3.1



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