

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

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 STAGING & MATERIALS STORAGE AREA (NATIVE GRAVEL)
- 5 ASPHALT MILLINGS

EPC TYPE B (CARRY) CURB A

EPC TYPE B (SPILL) CURB B

EROSION CONTROL LEGEND: LEGEND:

- | | | | |
|-----|---|-----------|--|
| VTC | VEHICLE TRACKING CONTROL PAD | — 62.32 — | PROPOSED PROPERTY LINE |
| SF | SILT FENCE | — 62.32 — | EXISTING CONTOURS |
| SM | SEED & MULCH | X 31.5 | PROPOSED CONTOURS |
| CWA | CONCRETE WASHOUT AREA (TO BE COMPLETELY CONTAINED & REMOVED UPON COMPLETION OF PROJECT) | X 31.5 | EXISTING SPOT ELEVATIONS |
| IP | INLET PROTECTION | — 1.0% — | PROPOSED SPOT ELEVATIONS |
| EDB | EXTENDED DRAINAGE BASIN | DS | PROPOSED GRADES |
| RR | RIPRAP APRON (5'Lx5'Wx2'D; d50=12" RR) | | ROOF DRAIN DOWNSPOUTS W/TRANSITION COUPLINGS & CONNECTION TO STORM DRAIN (COORDINATE W/ARCHITECT AND PLUMBING PLANS) |
| SSA | STABILIZED STAGING AREA | | |
| TSB | TEMPORARY SEDIMENT BASIN | | |

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 HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

JOHN P. SCHWAB, P.E. #29891

DATE

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

DATE

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.

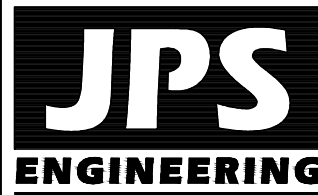
JENNIFER IRVINE, P.E.,
COUNTY ENGINEER / ECM ADMINISTRATOR

DATE

PCD PROJECT NO. PPR-1950

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

SITE GRADING & EROSION
CONTROL PLAN



19 E. Willamette Ave.
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80903

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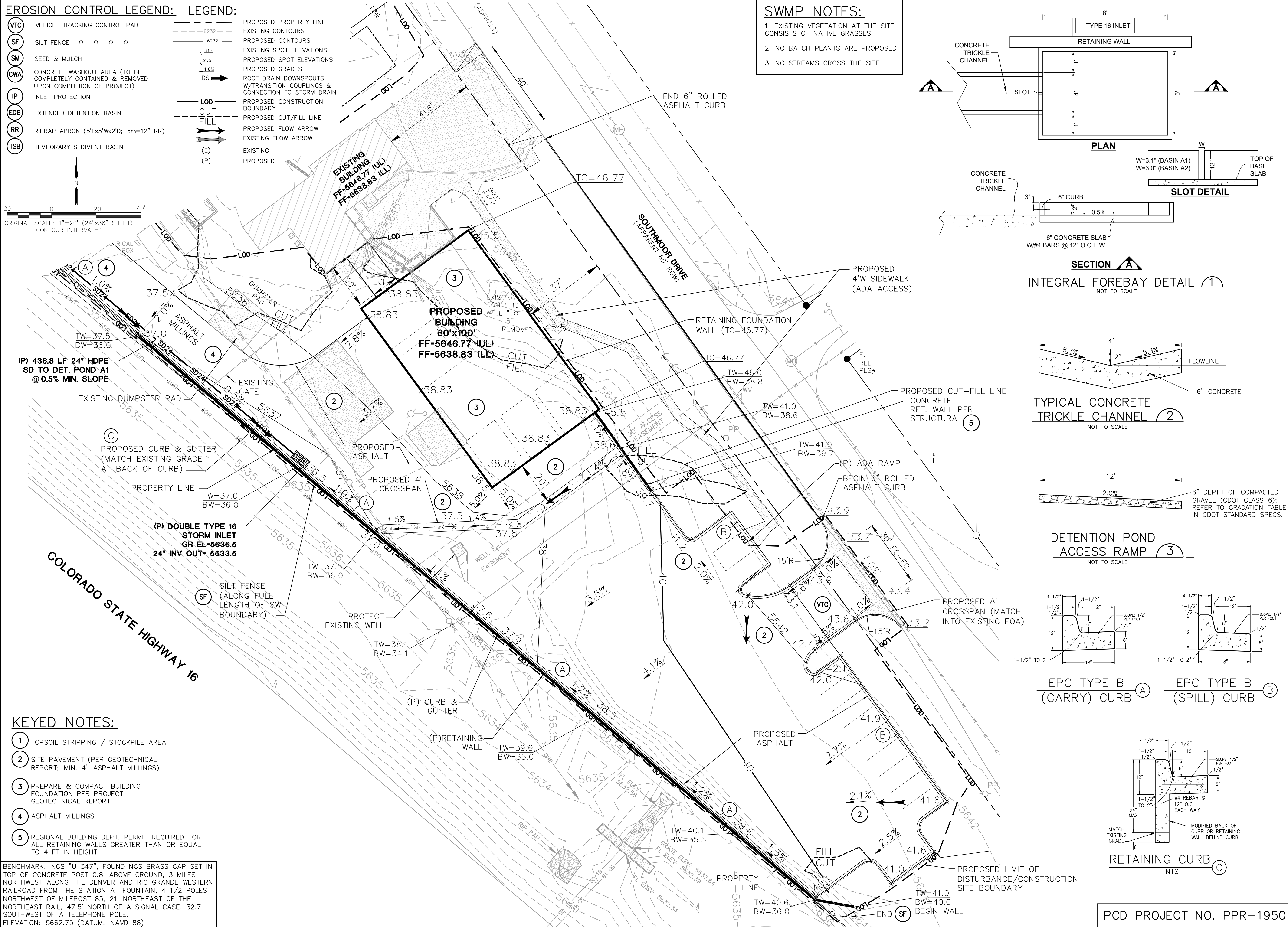
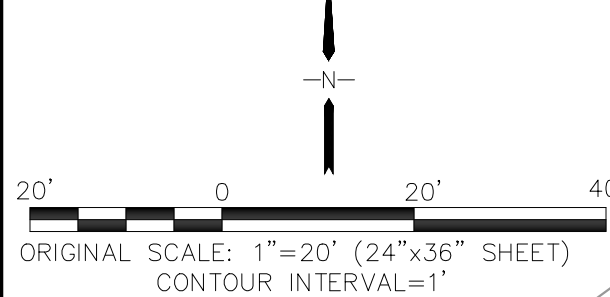
BY	DATE	REVISION
JPS	7/22/20	COUNTY COMMENTS
JPS	10/06/20	COUNTY COMMENTS
JPS	1/23/21	COUNTY COMMENTS
JPS	11/08/21	COUNTY COMMENTS
JPS	12/14/21	COUNTY COMMENTS
JPS	04/23/24	REV. POND A1

HORIZ. SCALE: 1"=40'	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: LDC	CHECKED: JPS
CREATED: 6/21/19	LAST MODIFIED: 04/23/24
PROJECT NO: 111705	MODIFIED BY: PV
SHEET:	

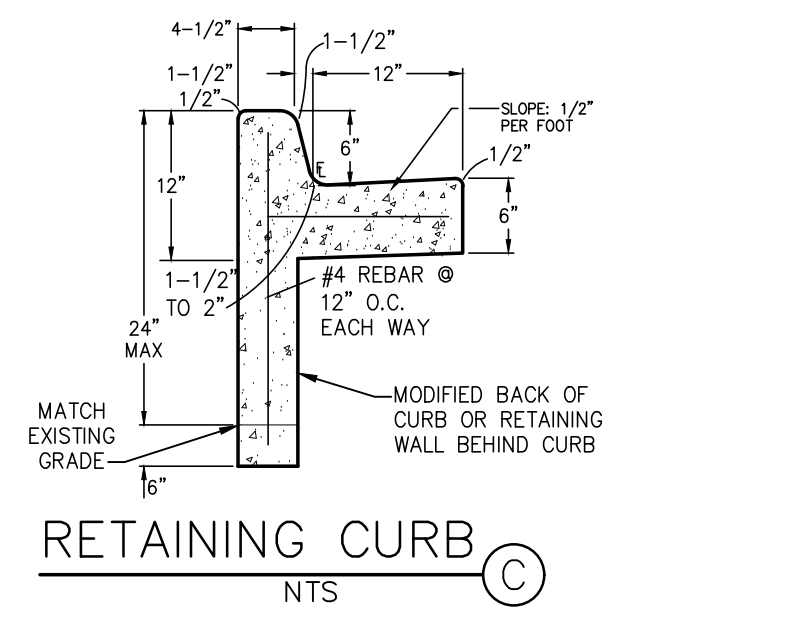
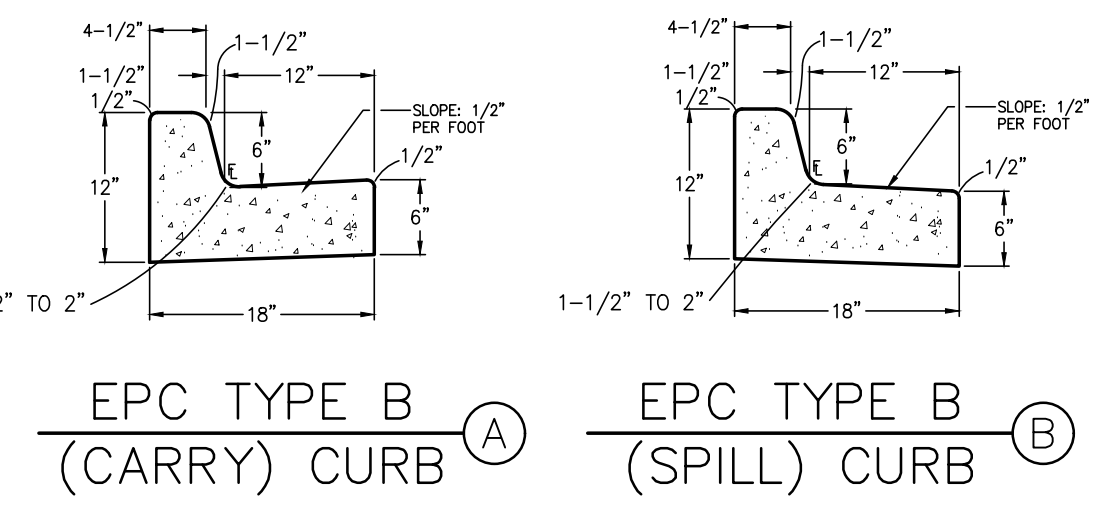
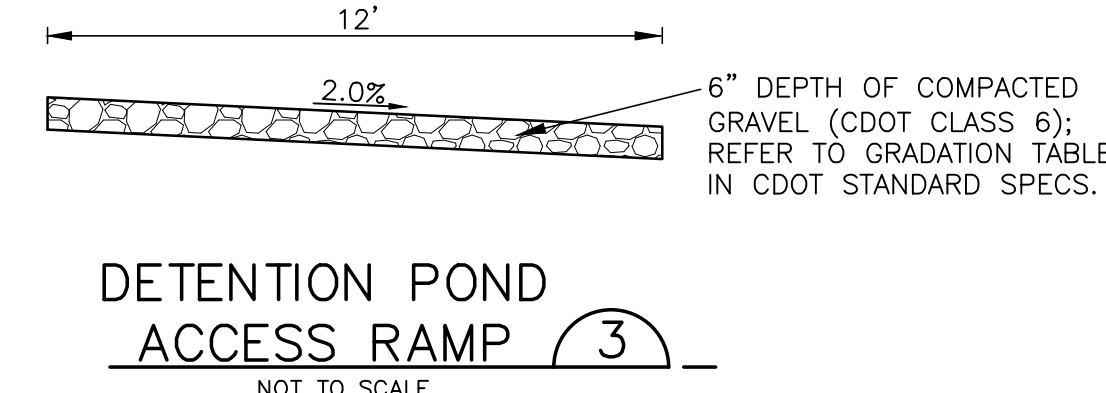
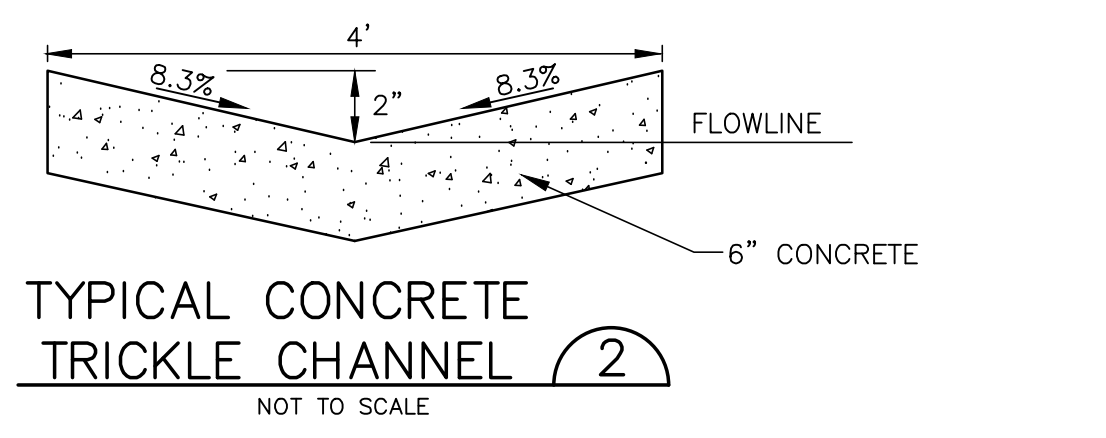
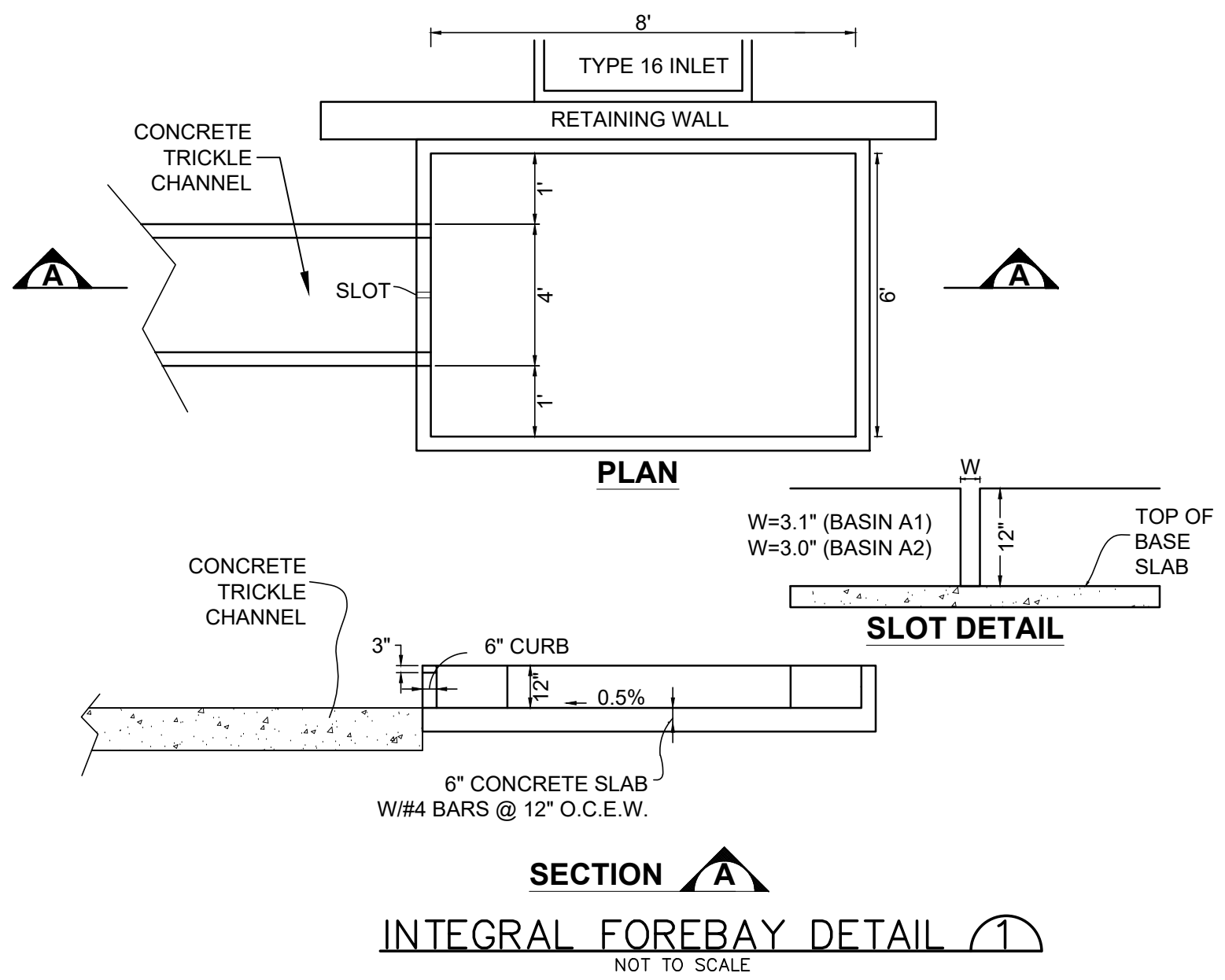
C1

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
PROPOSED GRADES
ROOF DRAIN DOWNSPOUTS
W/TRANSITION COUPLINGS & CONNECTION TO STORM DRAIN
PROPOSED CONSTRUCTION BOUNDARY
PROPOSED CUT/FILL LINE
PROPOSED FLOW ARROW
EXISTING FLOW ARROW
EXISTING
PROPOSED



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



- 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
- 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)

JPS
ENGINEERING

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

**SOUTH SITE GRADING
PLAN & DETAILS**

NO.	REVISION	DATE	BY
A	EPC COMMENTS	9/30/20	JPS
B	EPC COMMENTS	10/06/20	JPS
C	EPC COMMENTS	1/25/21	JPS
D	EPC COMMENTS	11/08/21	JPS
E	EPC COMMENTS	12/17/21	JPS
F	EPC COMMENTS	04/22/24	JPS

HORIZ. SCALE: 1"=20'

VERT. SCALE: N/A

SURVEYED: LDC

CREATED: 6/21/19

PROJECT NO: 111705

SHEET:

DRAWN: BJJ

DESIGNED: JPS

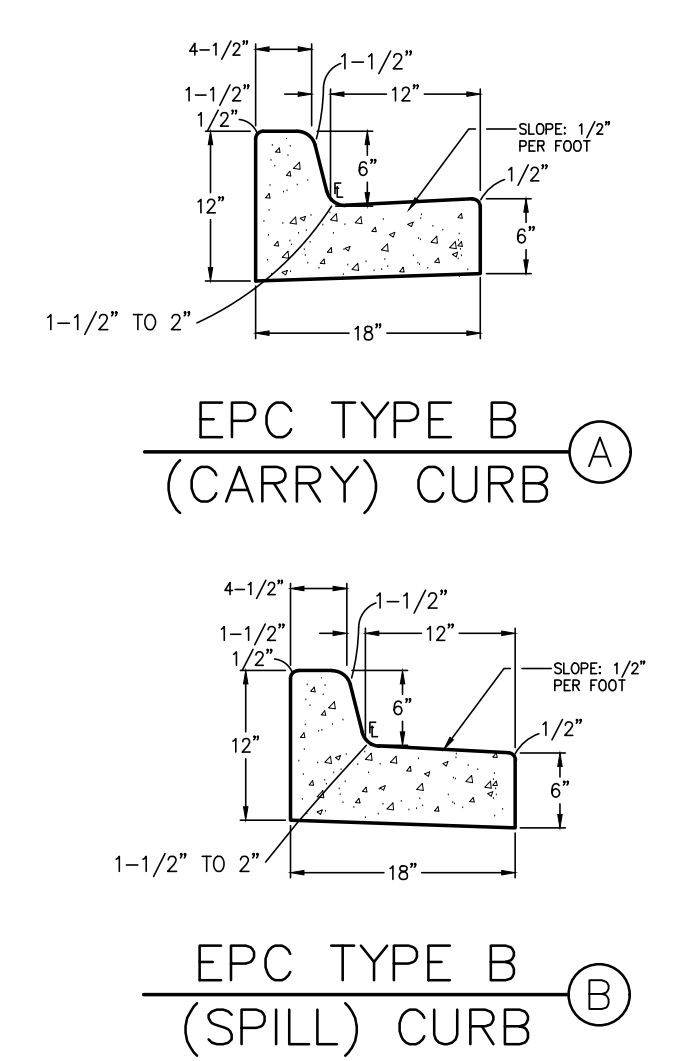
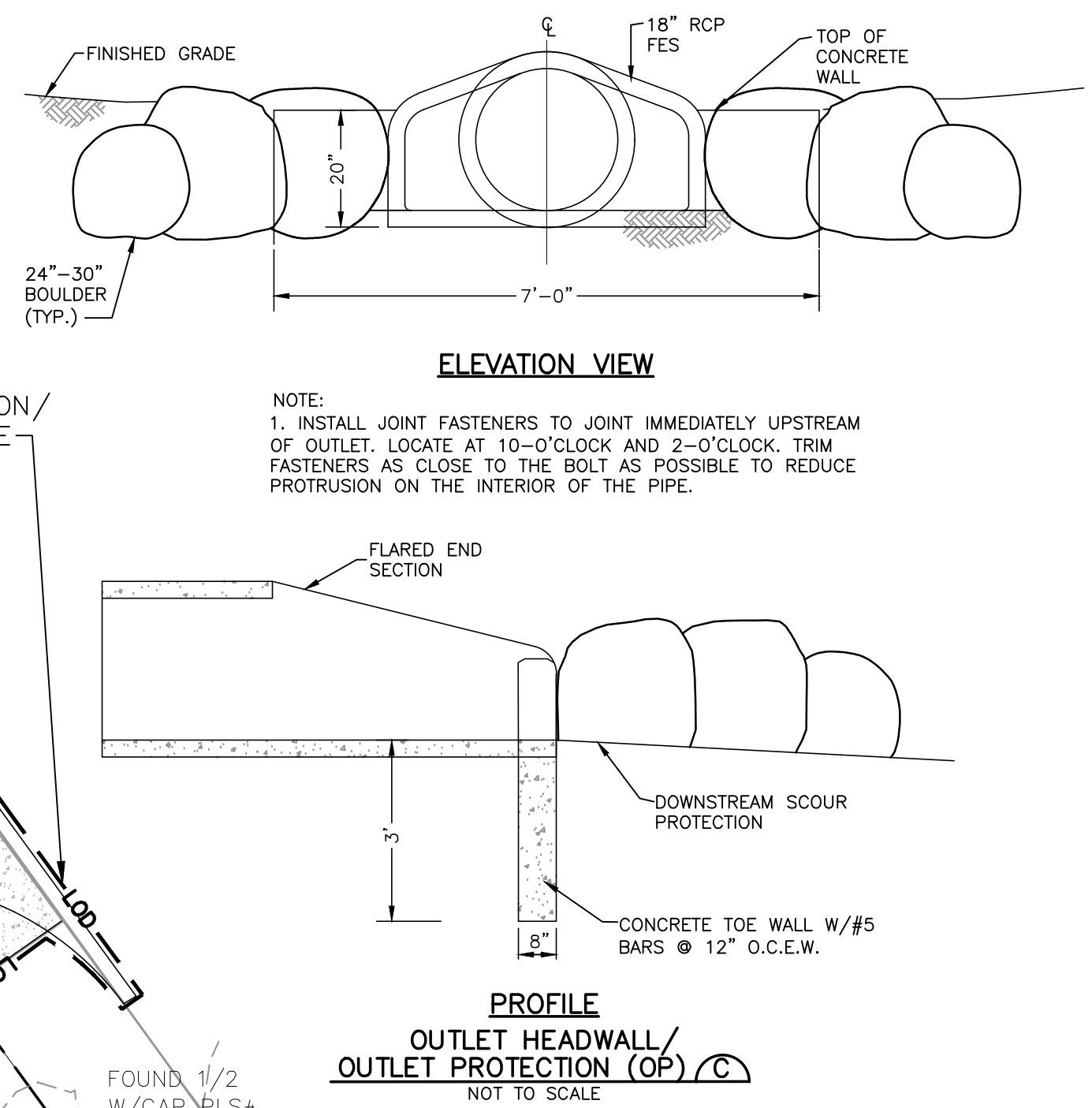
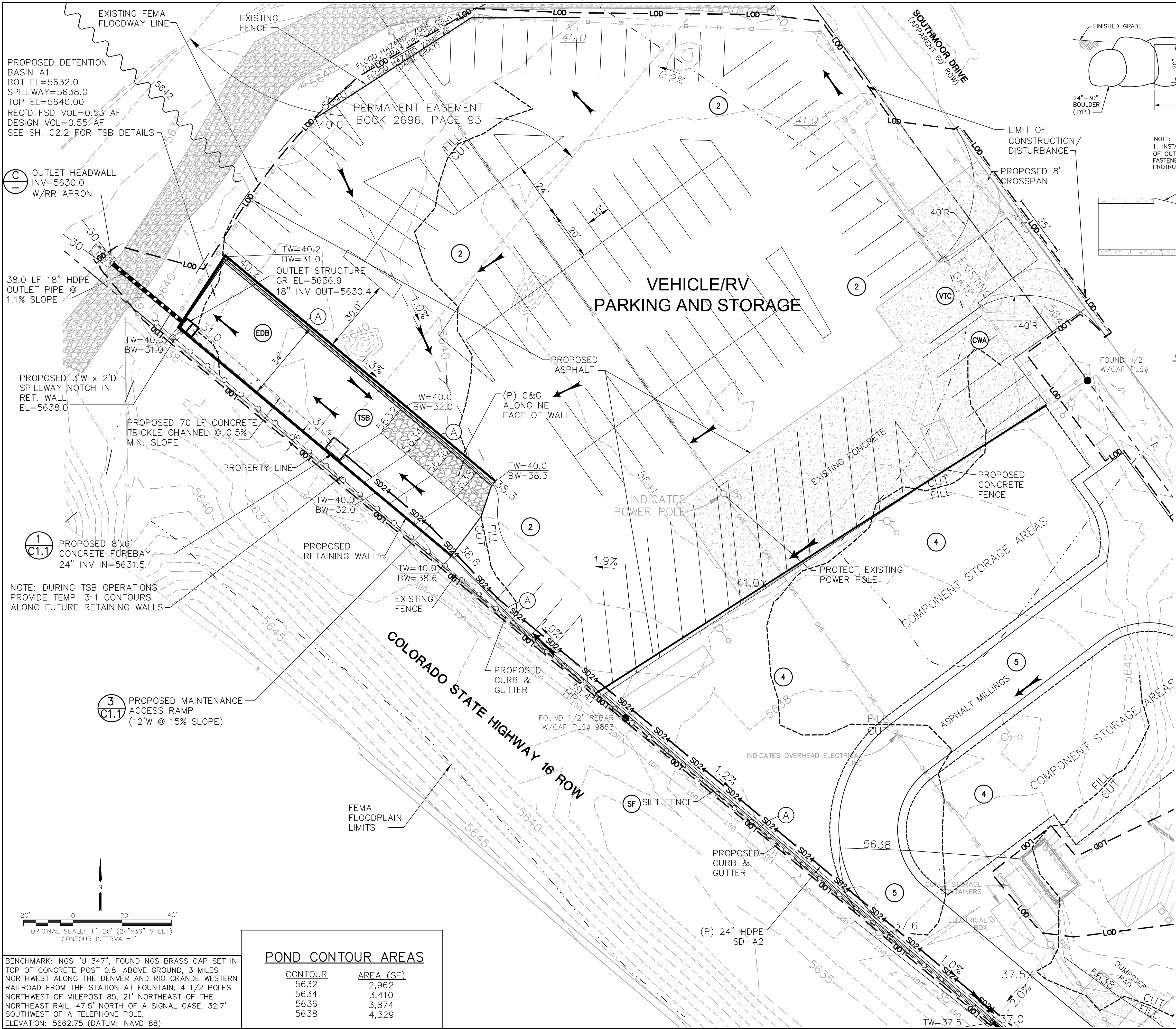
CHECKED: JPS

LAST MODIFIED: 04/22/24

MODIFIED BY: pv

PCD PROJECT NO. PPR-1950

C1.1

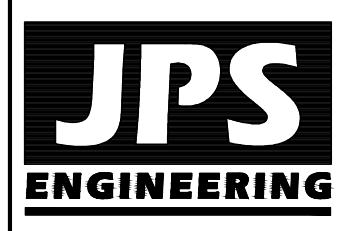


- KEYED NOTES:**
- 1 TOPSOIL STRIPPING / STOCKPILE AREA
 - 2 SITE PAVEMENT (PER GEOTECHNICAL REPORT; MIN. 4" FULL-DEPTH ASPHALT)
 - 3 PREPARE & COMPACT BUILDING FOUNDATION PER PROJECT GEOTECHNICAL REPORT
 - 4 STAGING & MATERIALS STORAGE AREA (NATIVE GRAVEL)
 - 5 ASPHALT MILLINGS

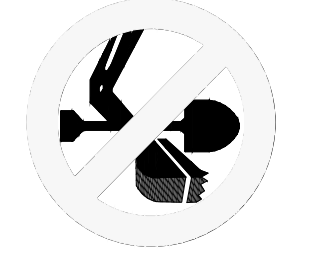
PCD PROJECT NO. PPR-1950

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NORTH SITE GRADING PLAN



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BY	DATE
JPS	10/23/19
JPS	7/22/20
JPS	10/06/20
JPS	1/25/21
JPS	11/08/21
JPS	04/23/24

HORZ. SCALE: 1"=20'	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: LDC	CHECKED: JPS
CREATED: 6/21/19	LAST MODIFIED: 04/23/24
PROJECT NO: 111705	MODIFIED BY: PV

SHEET: **C1.2**

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)

POND CONTOUR AREAS

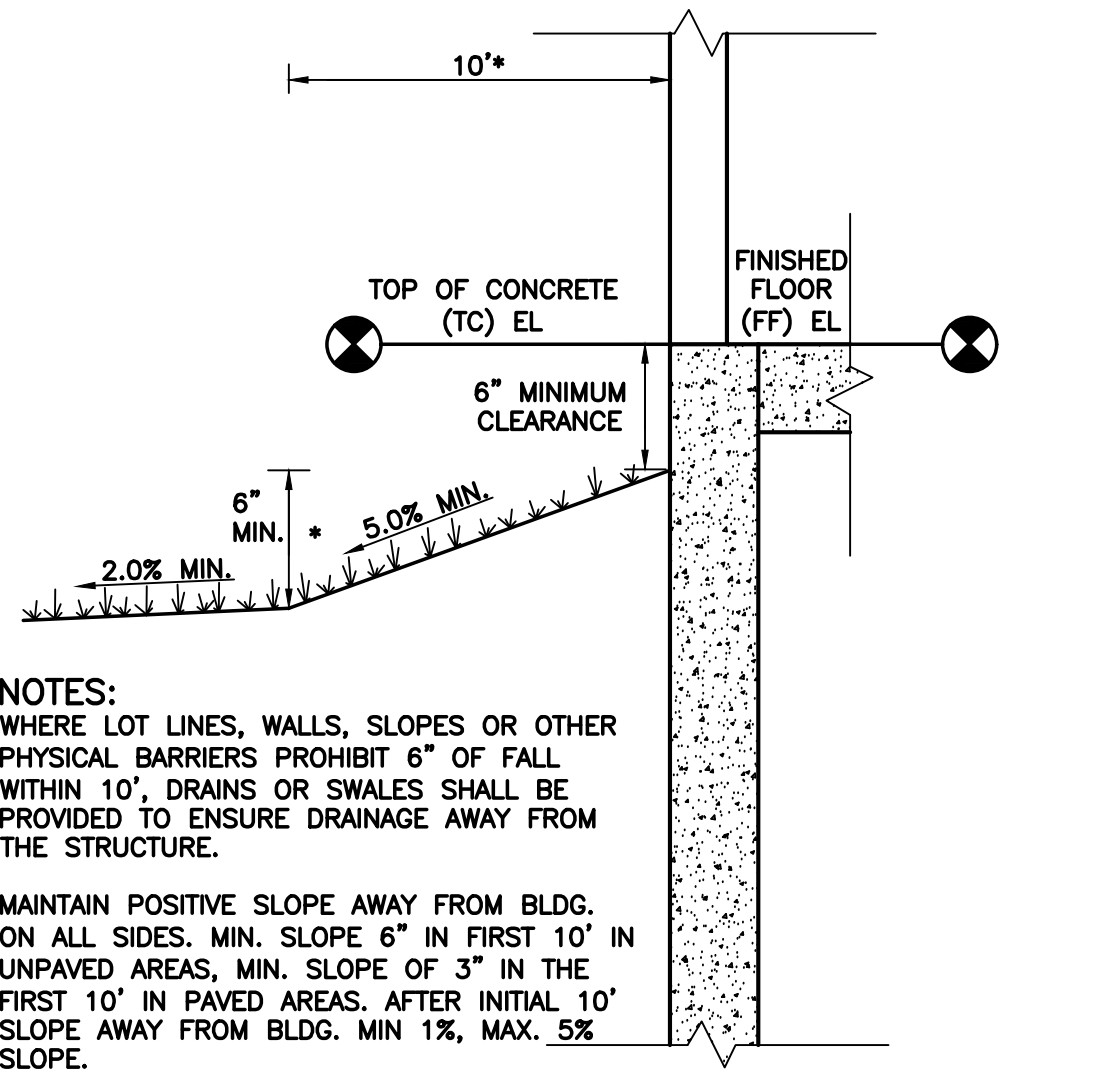
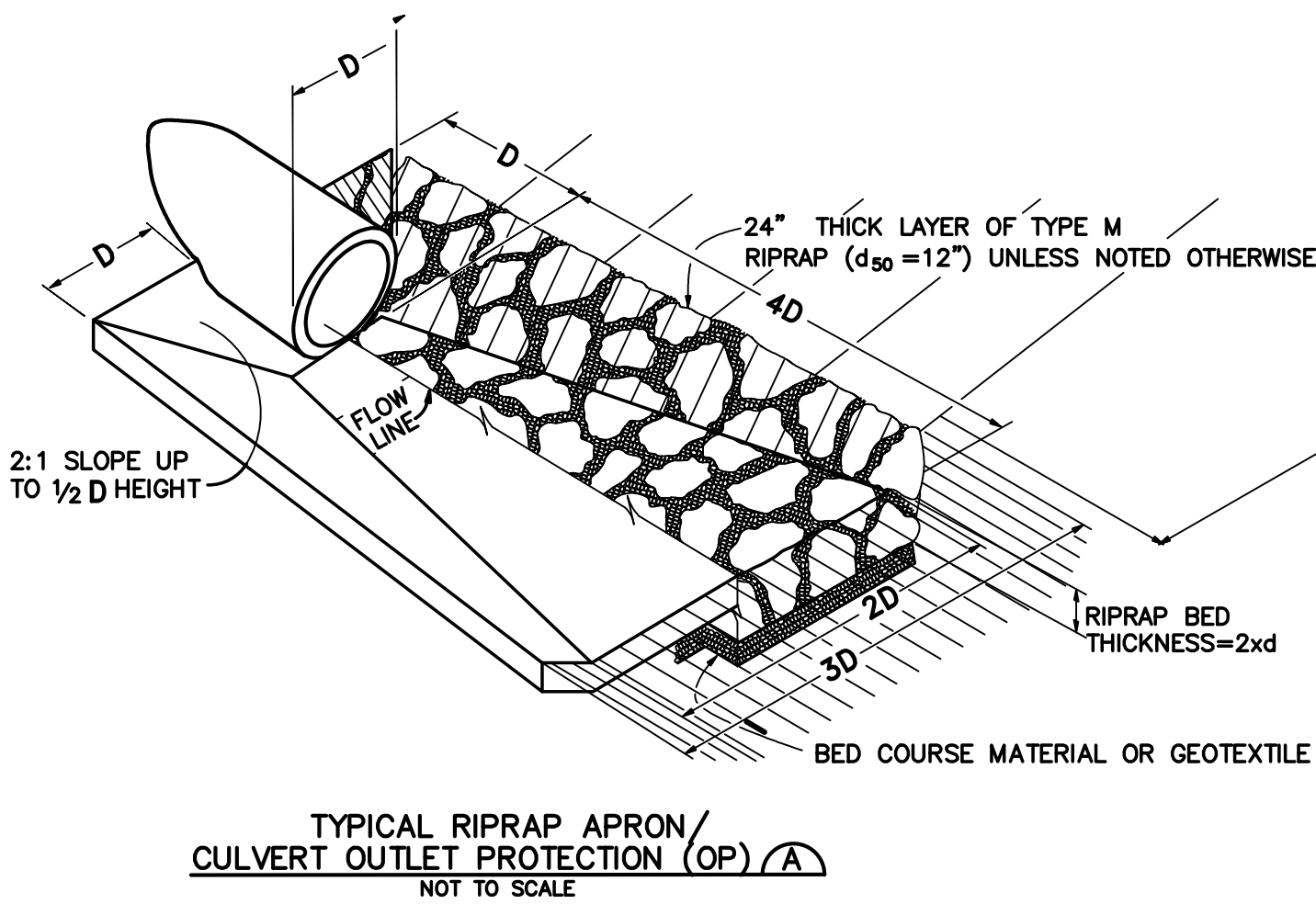
CONTOUR	AREA (SF)
5632	2,962
5634	3,410
5636	3,874
5638	4,329

GENERAL CIVIL NOTES:

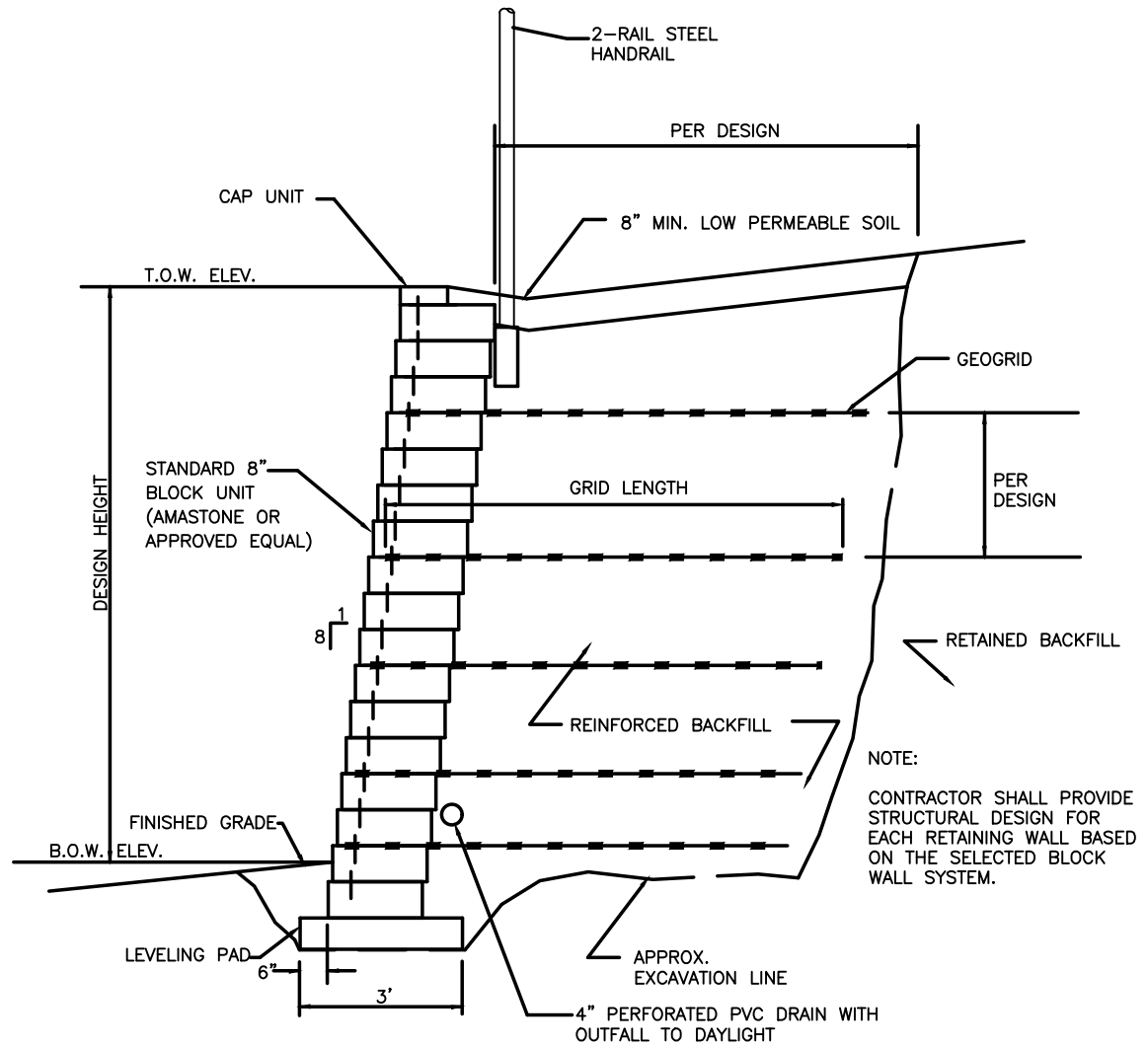
- All construction shall meet the following standards & specifications:
 - 2009 International Building Code.
 - Pikes Peak Regional Building Code, latest edition.
 - El Paso County Engineering Criteria Manual (ECM), latest edition.
 - Project Geotechnical Report.
- The contractor shall be responsible 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:

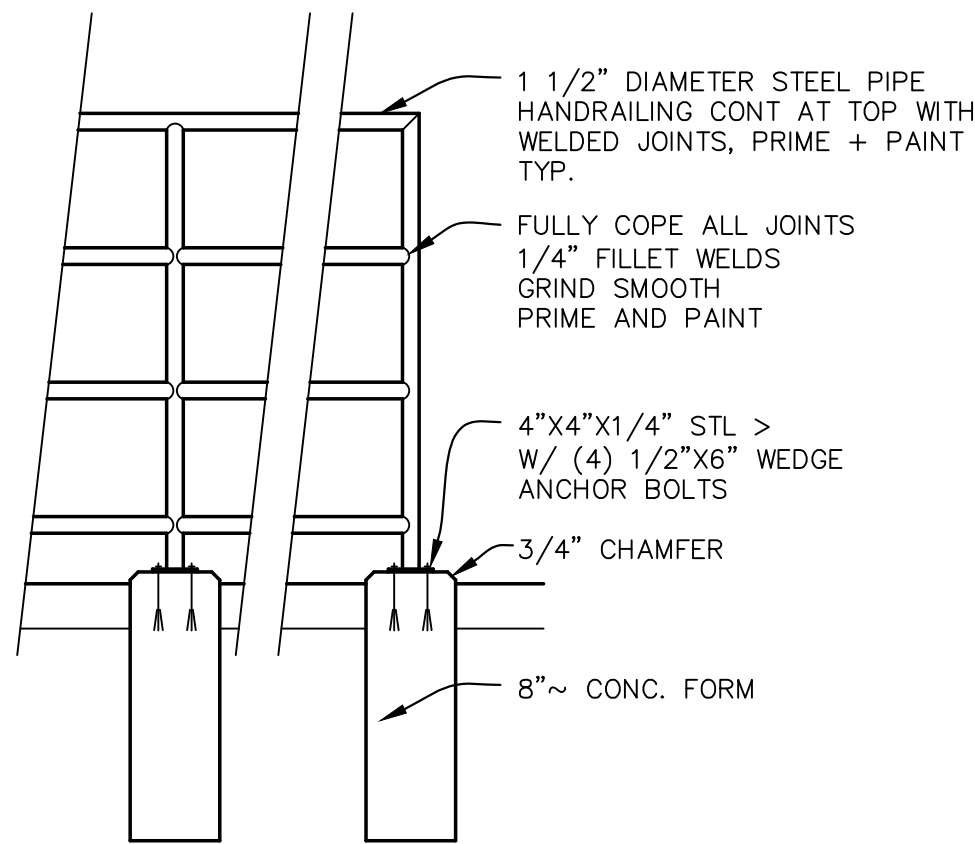
- RAMPS ARE NOT TO BE PLACED IN HANDICAP ACCESS AISLES.
- ACCESS AISLES MAY NOT EXCEED A 2% (1:48) SLOPE IN ANY DIRECTION.
- HANDICAP RAMPS MAY NOT EXCEED A SLOPE OF 8% (1:12).
- THE MINIMUM WIDTH FOR HANDICAPPED RAMPS IS 36 INCHES. THE SIDES OF RAMPS MAY NOT EXCEED A SLOPE OF 10% UNLESS PROTECTED WITH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



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)



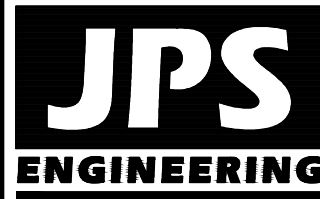
HANDRAIL DETAIL (D)
SCALE: NTS



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7470 SOUTHMOOR DR., COLORADO SPRINGS, COLORADO 80817

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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No.	REVISION	BY	DATE
A	EPC SUBMITTAL	JPS	10/22/19
A	COUNTY COMMENTS	JPS	7/22/20

CIVIL NOTES &
DETAILS

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS.

REVISED 7/02/19

1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
2. 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.
3. 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 SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. 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 APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO 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.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. 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 ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
8. 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 HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. 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 IMPLEMENTATION.
10. 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 REQUESTED AND APPROVED.
11. 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 STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. 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 WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR 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, CREEK OR STREAM.
14. 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 PERMIT IS IN PLACE.
15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
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.
17. 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 AND CIRCUMSTANCES.
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.
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.
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.
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.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT 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.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT FOR THIS SITE (SOIL; GEOLOGY, AND GEOLOGIC HAZARD STUDY, ARACO MINOR SUBDIVISION" BY ENTECH ENGINEERING, INC., DATED JULY 25, 2018) 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 (SMWP), 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, CO 80246-1530
ATTN: PERMITS UNIT

ESTIMATED TIME SCHEDULE:

INSTALL BMP'S MARCH, 2021
SITE GRADING MARCH, 2021
SEEDING & MULCHING AUGUST, 2021
STABILIZATION SEPTEMBER, 2022
TOTAL DISTURBED AREA: 3.4 ACRES
RECEIVING WATERS: FOUNTAIN CREEK

EXISTING VEGETATION:

NATIVE GRASSES (APPROXIMATELY 70 PERCENT COVERAGE)

SEEDING MIX:

GRASS	VARIETY	AMOUNT IN PLS LBS. PER ACRE
CRESTED WHEAT GRASS	EPHRAIM OR HYCREST	4.0 LBS.
PERENIAL RYE	LINN	2.0 LBS.
WESTERN WHEATGRASS	SARTON	3.0 LBS.
SMOOTH BROME GRASS	LINCOLN OR MANCHAR	5.0 LBS.
SIDEOATS GRAMA	EPHRAIM	2.5 LBS.
TOTAL:		16.5 LBS.

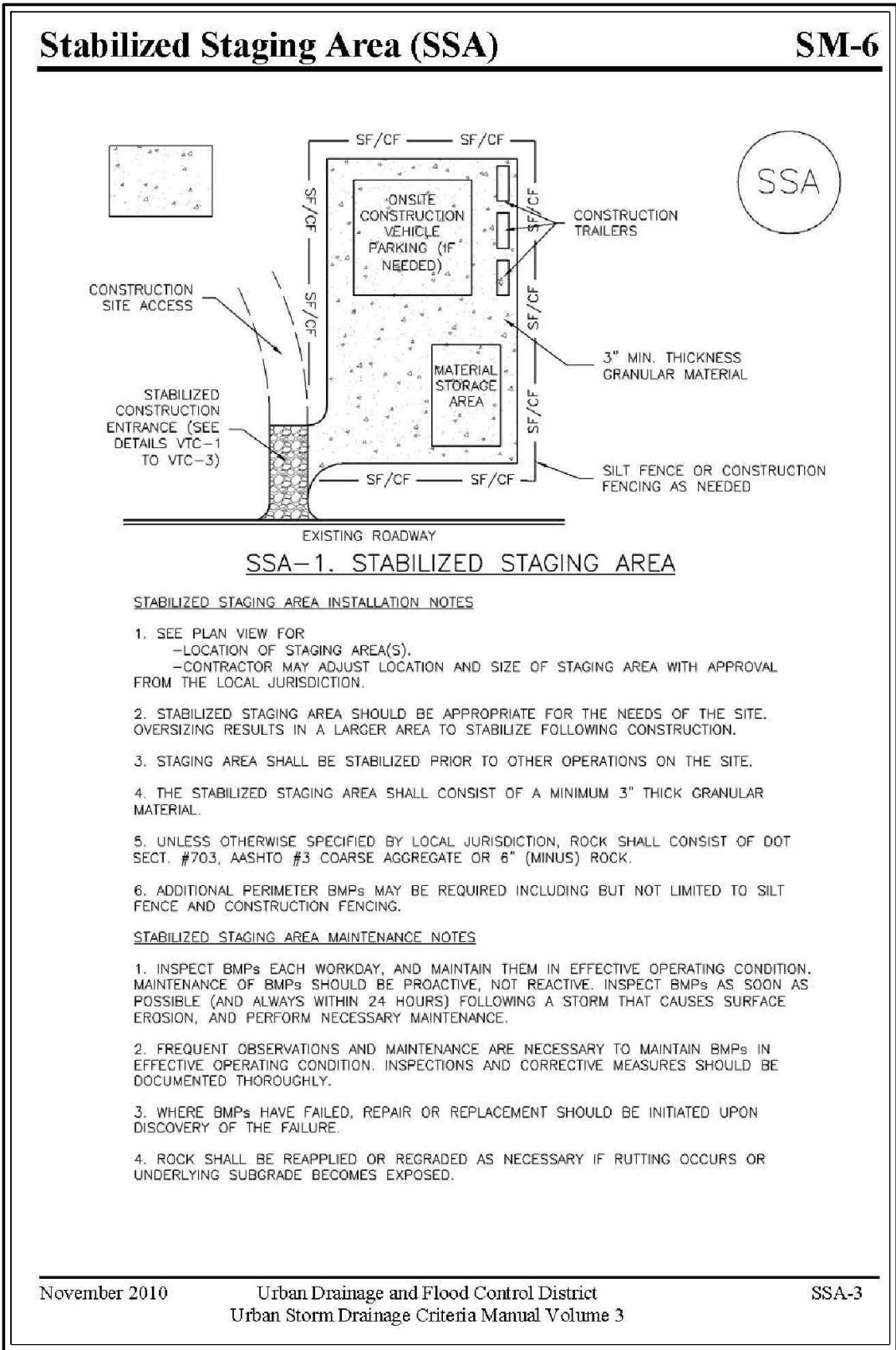
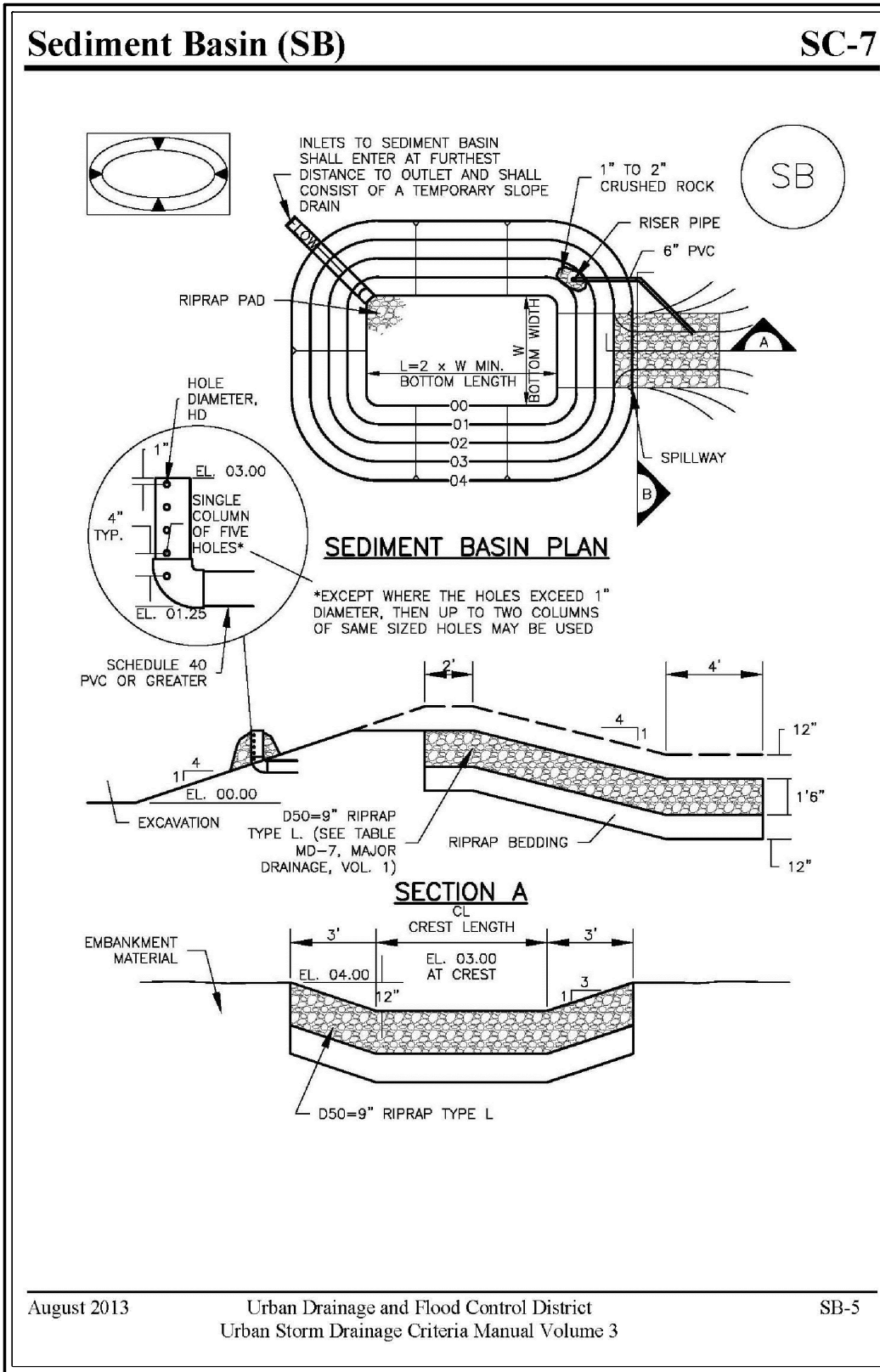
SEEDING & FERTILIZER APPLICATION: DRILL SEED OR
HYDRO-SEED PER
CDOT SPEC. SECTION 212.

MULCHING APPLICATION: CONFORM TO CDOT
SPEC-SECTION 213.

SEDIMENT CONTROL MAINTENANCE PROGRAM:

PERIODIC SITE INSPECTIONS FREQUENCY
RE-VEGETATION OF EXPOSED SOILS BI-WEEKLY
SEDIMENT REMOVAL FROM BMP'S WITHIN 21 DAYS OF GRADING
REMOVAL OF BMP'S MONTHLY
AFTER STABILIZATION ACHIEVED

- 1 AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION.
- 2 ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.



TEMPORARY SEDIMENT BASIN DESIGN DATA				
BASIN	DRAINAGE AREA (AC)	BOTTOM WIDTH (FT)	CL (FT)	HD (IN)
A1	1.5	21	3	13/16"
A2	2.3	21	3	13/16"

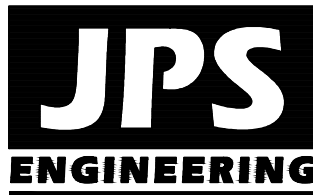


ARACO CONCRETE
7470 SOUTHMOOR DR., COLORADO SPRINGS, COLORADO 80817

GRADING & EROSION
CONTROL NOTES &
DETAILS

HORZ. SCALE: N/A DRAWN: BJJ
VERT. SCALE: N/A DESIGNED: JPS
SURVEYED: LDC CHECKED: JPS
CREATED: 6/21/19 LAST MODIFIED: 7/25/21
PROJECT NO: 111705 MODIFIED BY: BJJ

SHEET: C2.2



19 E. Willamette Ave.
Colorado Springs, CO
80903

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FAX: 719-471-0766
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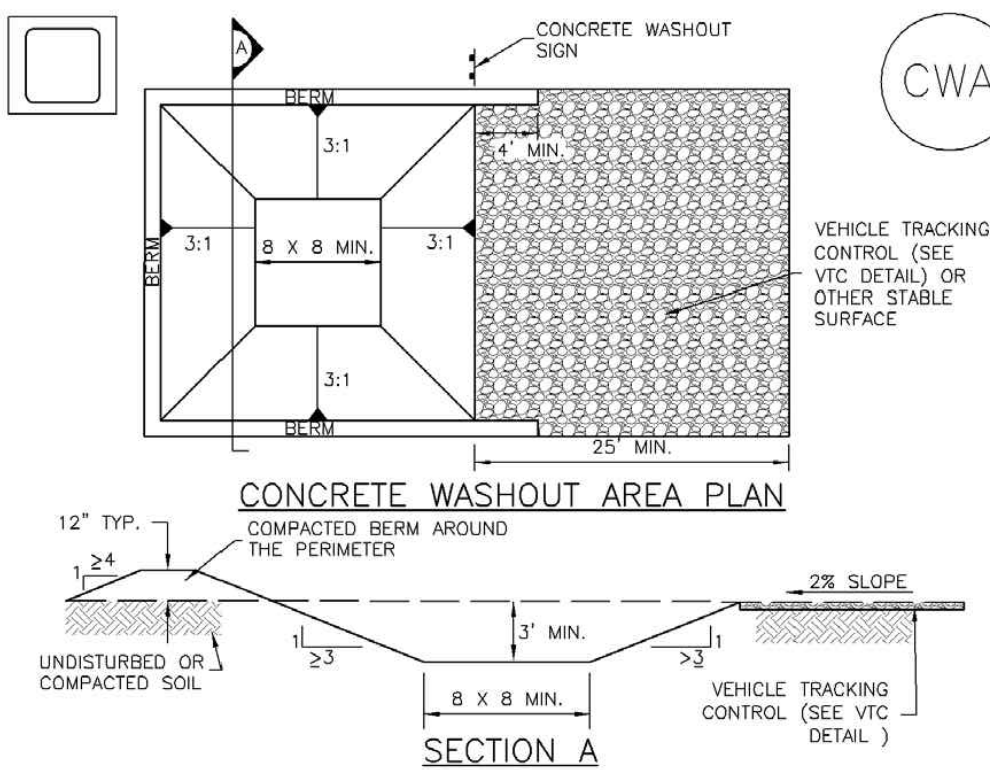


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FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

BY	DATE	REVISION
JPS	10/22/19	EPC SUBMITTAL
JPS	7/22/20	COUNTY COMMENTS
JPS	1/25/21	COUNTY COMMENTS

Concrete Washout Area (CWA)

MM-1

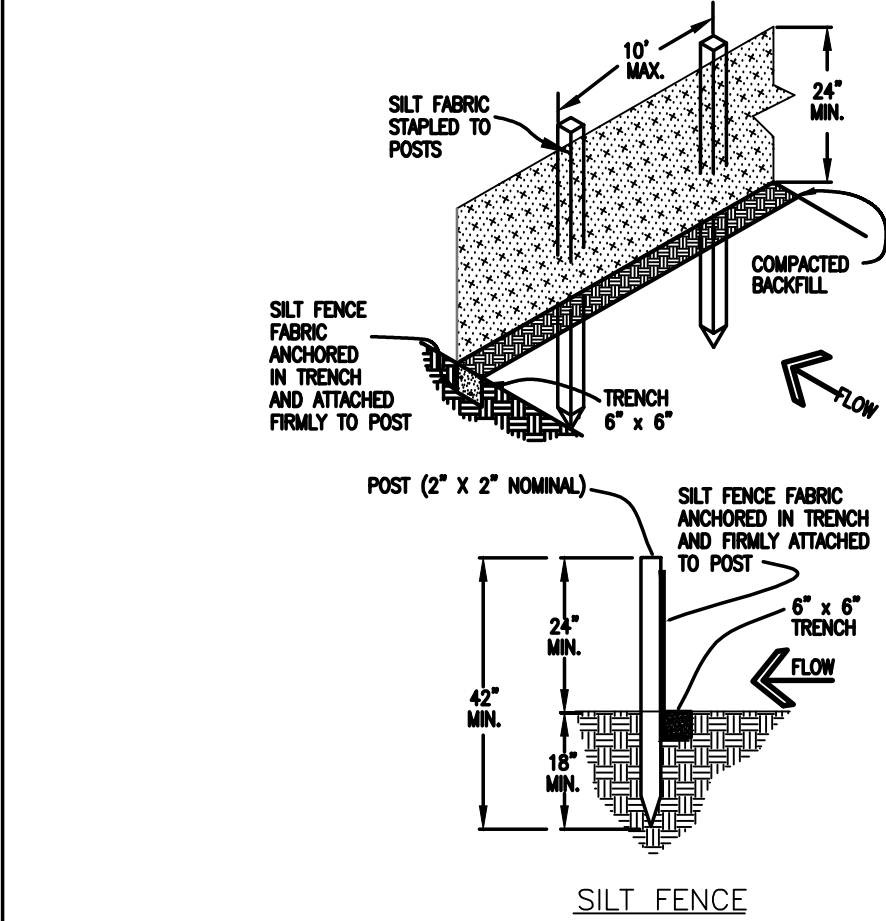


CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
-CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

November 2010 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 CWA-3



SILT FENCE NOTES

INSTALLATION REQUIREMENTS

1. SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
2. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
3. METAL POSTS SHALL BE "STUDDUED TEE" OR "U" TYPE WITH MINIMUM HEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
4. THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG #9 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
5. WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG. THE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3" ABOVE THE ORIGINAL GROUND SURFACE.

6. ALONG THE TOE OF FILLS, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOE OF THE FILL IS RECOMMENDED.
7. THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES. HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

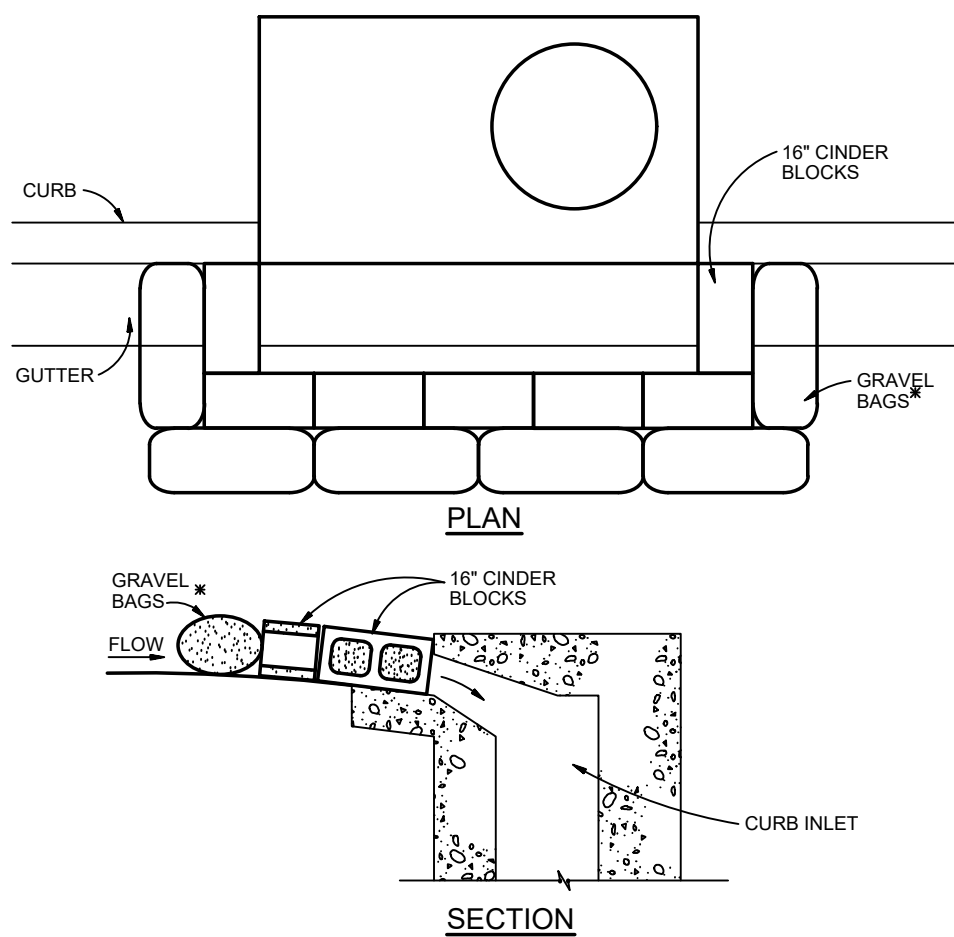
MAINTENANCE REQUIREMENTS

1. CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL. DAMAGED, COLLAPSED, UNENTRENCHED OR INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
2. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
3. SILT FENCES SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure SF-2
Silt Fence
Construction Detail and Maintenance
Requirements

3-36



BLOCK AND GRAVEL BAG CURB INLET PROTECTION

BLOCK AND GRAVEL BAG CURB INLET PROTECTION NOTES

INSTALLATION REQUIREMENTS

1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
2. CONCRETE BLOCKS ARE TO BE LAID AROUND THE INLET IN A SINGLE ROW ON THEIR SIDES. ADJUTING ONE ANOTHER WITH THE OPEN ENDS OF THE BLOCK FACING OUTWARD.
3. GRAVEL BAGS ARE TO BE PLACED AROUND THE CONCRETE BLOCKS CLOSELY ADJUTING ONE ANOTHER SO THERE ARE NO GAPS.
4. GRAVEL BAGS ARE TO CONTAIN WASHED SAND OR GRAVEL APPROXIMATELY 3/4 INCH IN DIAMETER.
5. BAGS ARE TO BE MADE OF 1/4" INCH WIRE MESH (USED WITH GRAVEL ONLY) OR GEOTEXTILE.

- AN ALTERNATE 3/4" TO 1" GRAVEL FILTER OVER A WIRE SCREEN MAY BE USED IN PLACE OF GRAVEL BAGS. THE WIRE MESH SHALL EXTEND ABOVE THE TOP OF THE CONCRETE BLOCKS AND THE GRAVEL PLACED OVER THE WIRE SCREEN TO THE TOP OF THE CONCRETE BLOCKS.

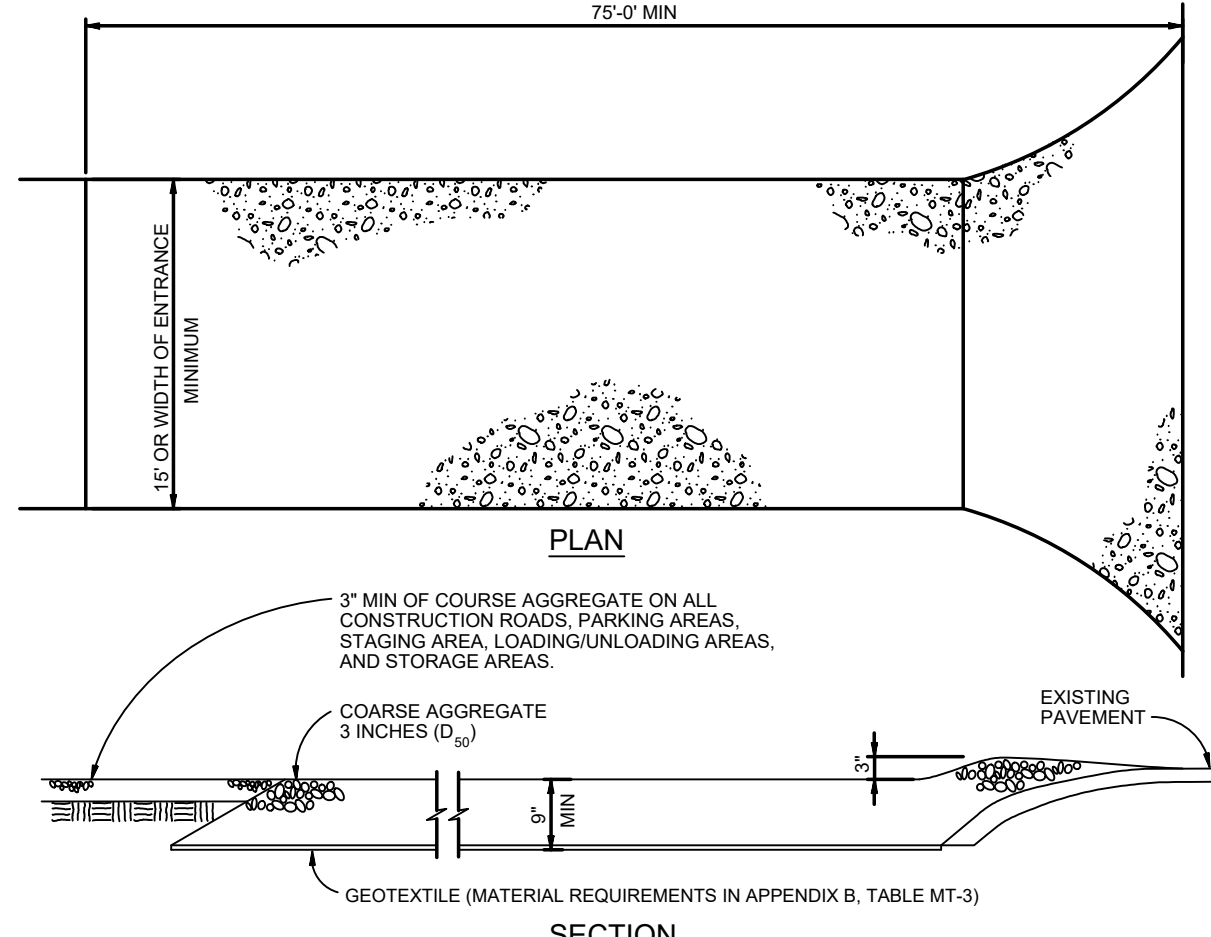
MAINTENANCE REQUIREMENTS

1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.
3. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DESIGN DEPTH OF THE TRAP.
4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure IP-3
Block & Gravel Bag Curb Inlet Protection
Construction Detail and Maintenance
Requirements

3-27



VEHICLE TRACKING

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 EVENTS.
2. STONES ARE TO BE REPLACED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
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.

City of Colorado Springs
Stormwater Quality

Figure VT-2
Vehicle Tracking
Application Examples

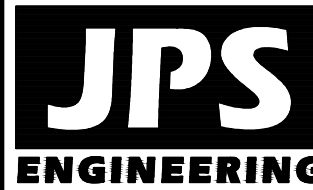
3-54

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

EROSION CONTROL
DETAILS

HORIZ. SCALE: N/A
VERT. SCALE: N/A
SURVEYED: LDC
CREATED: 4/30/20
PROJECT NO: 111705
SHEET: C2.3

DRAWN: BJJ
DESIGNED: JPS
CHECKED: JPS
LAST MODIFIED: 7/22/21
MODIFIED BY: BJJ



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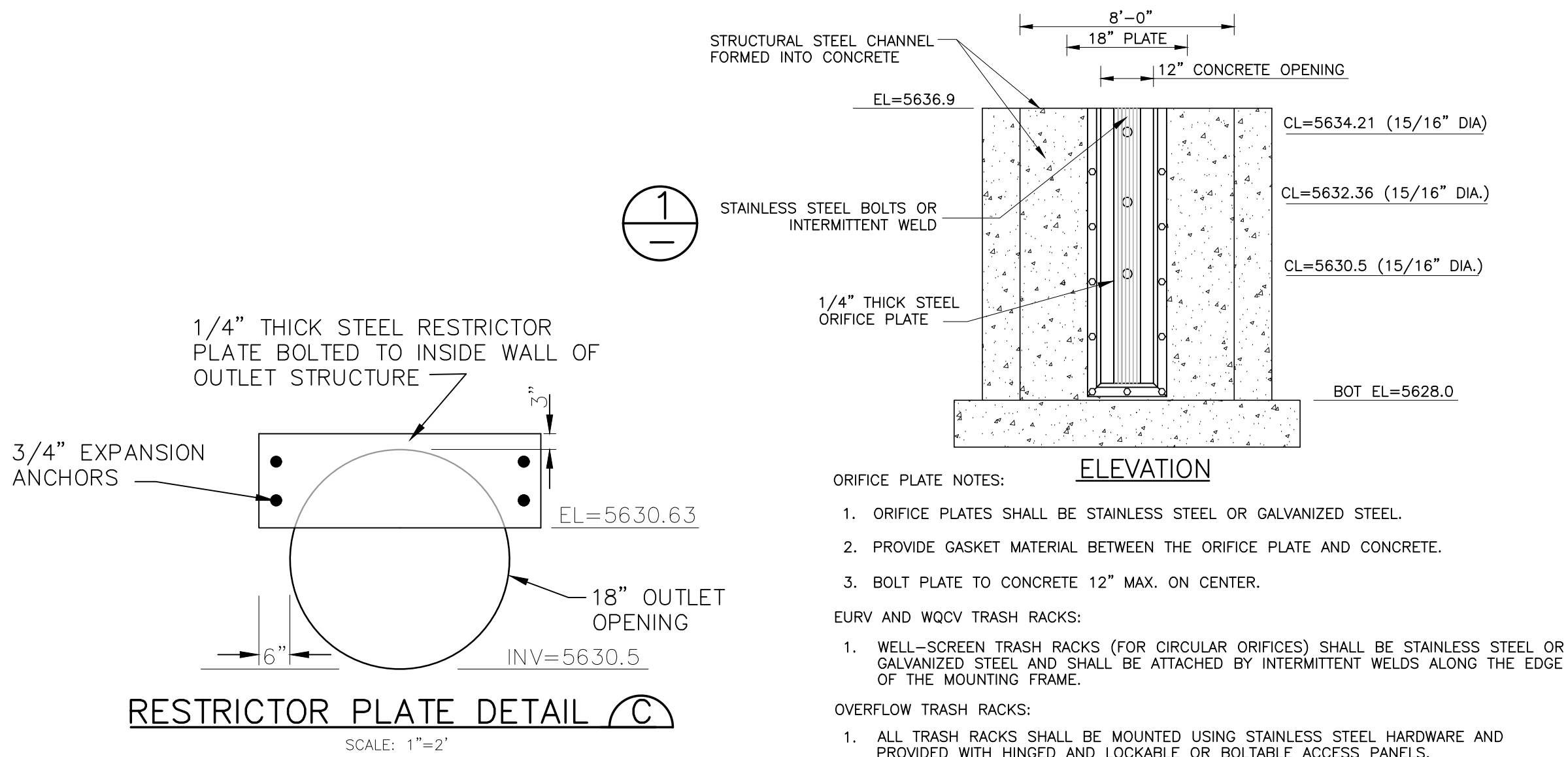
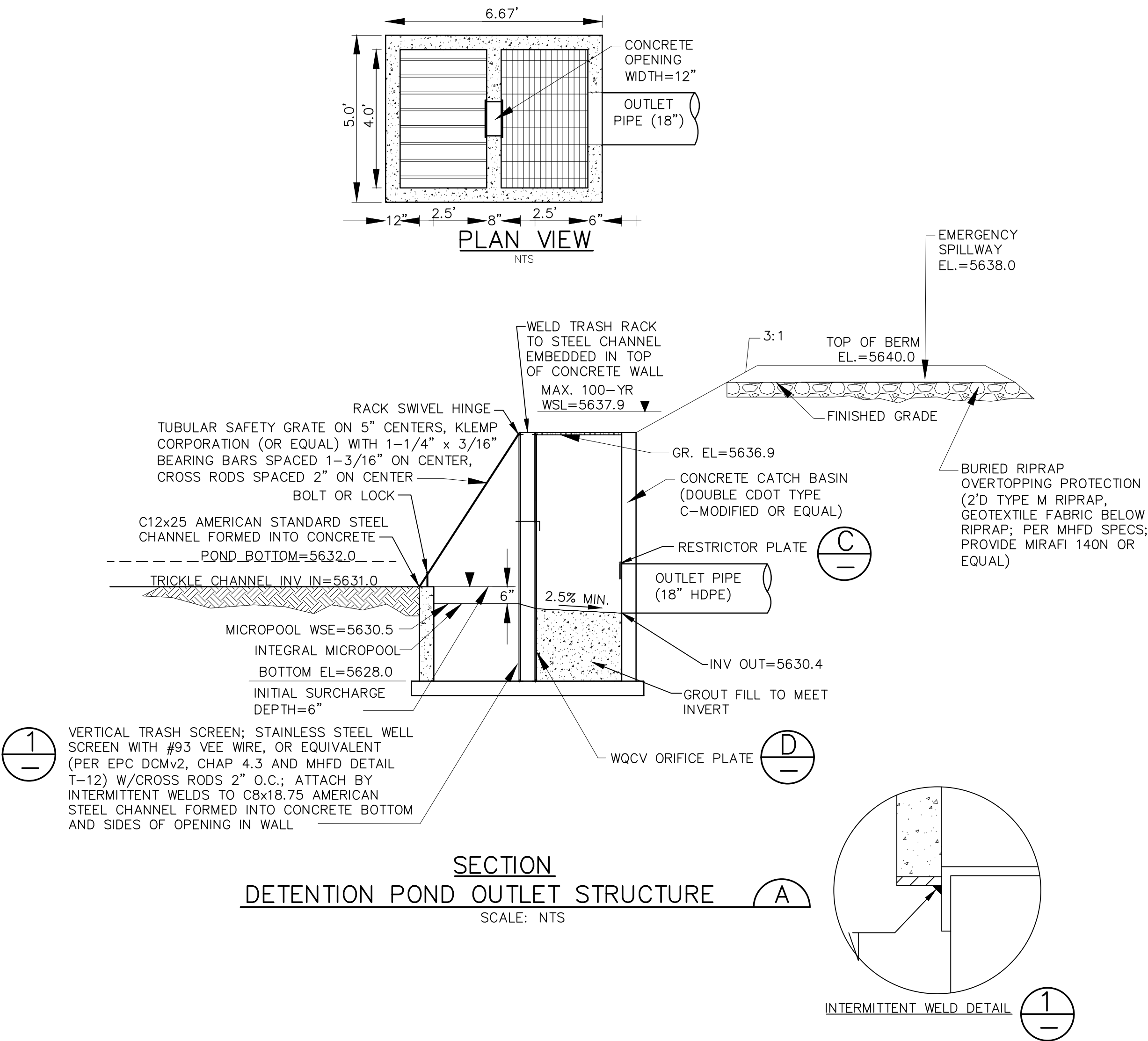
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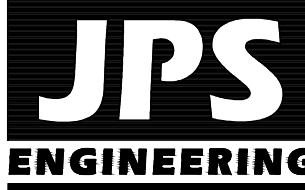




ORIFICE PLATE AND TRASH RACK
DETAILS AND NOTES

DETENTION BASIN A1 DETAILS

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NO.	REVISION	BY	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:	04/18/24
PROJECT NO:	111705	MODIFIED BY:	PV

SHEET:

C3.1