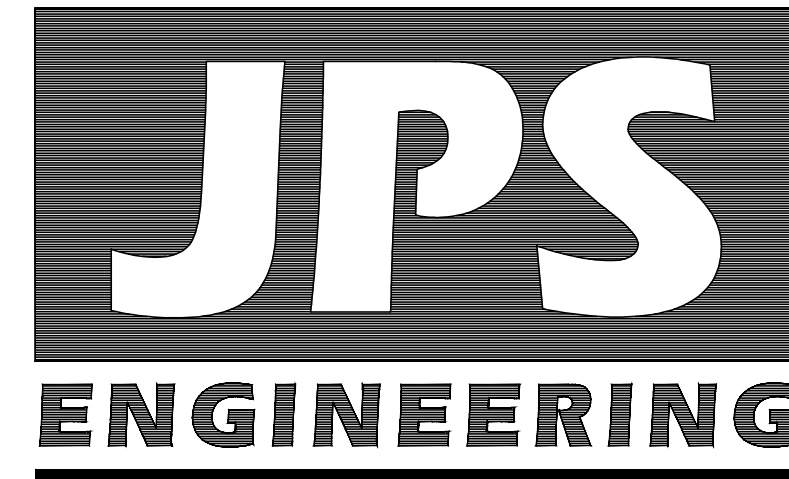


COLORADO KIDS RANCH

18065 SADDLEWOOD ROAD, MONUMENT, CO 80132
 Grading & Erosion Control (GEC) Plans
 El Paso County, Colorado

PREPARED FOR:
COLORADO PUMPKIN PATCH LLC
 18065 Saddlewood Road
 Monument, Co 80132-8324

PREPARED BY:

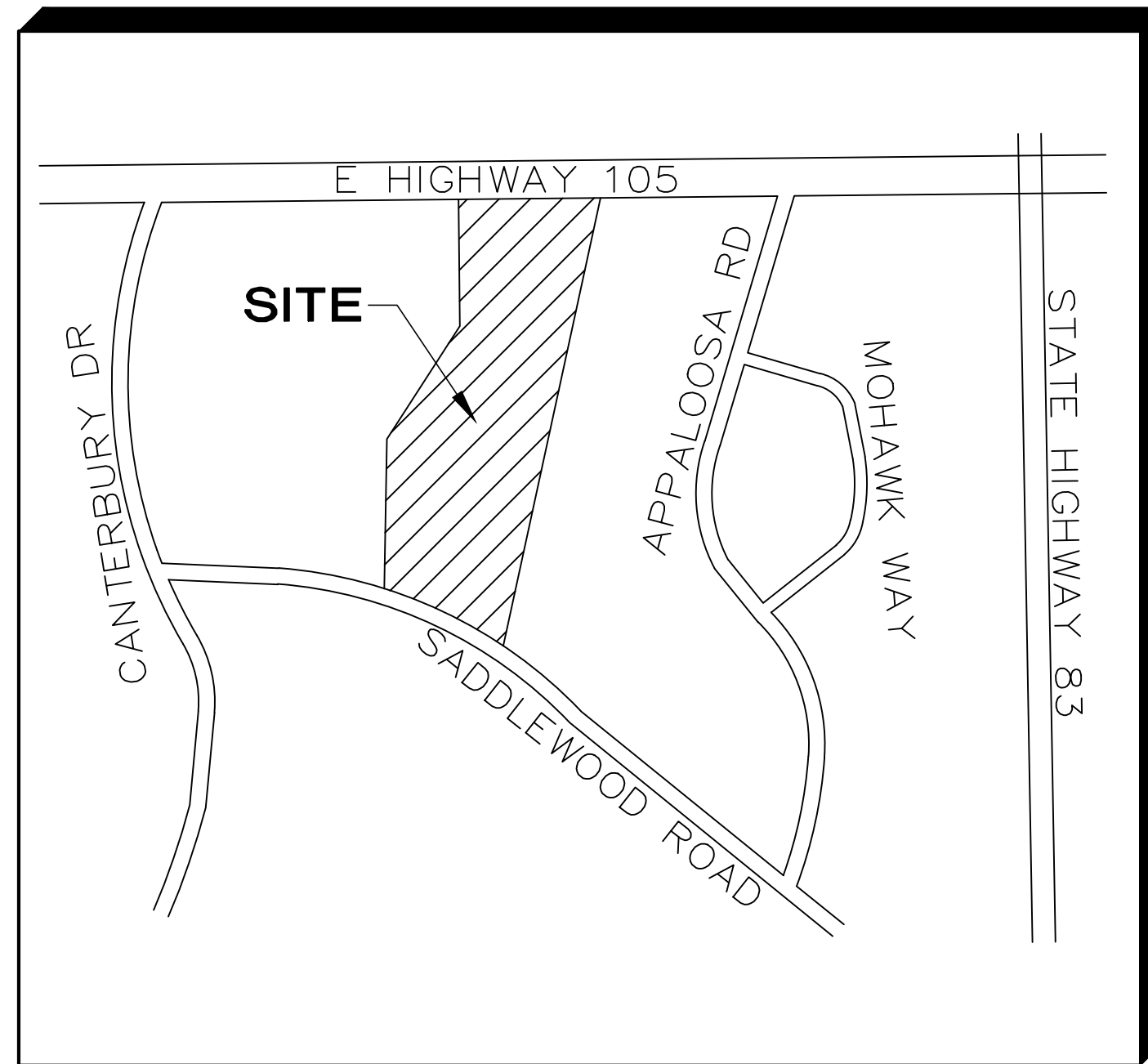


PREPARED BY:

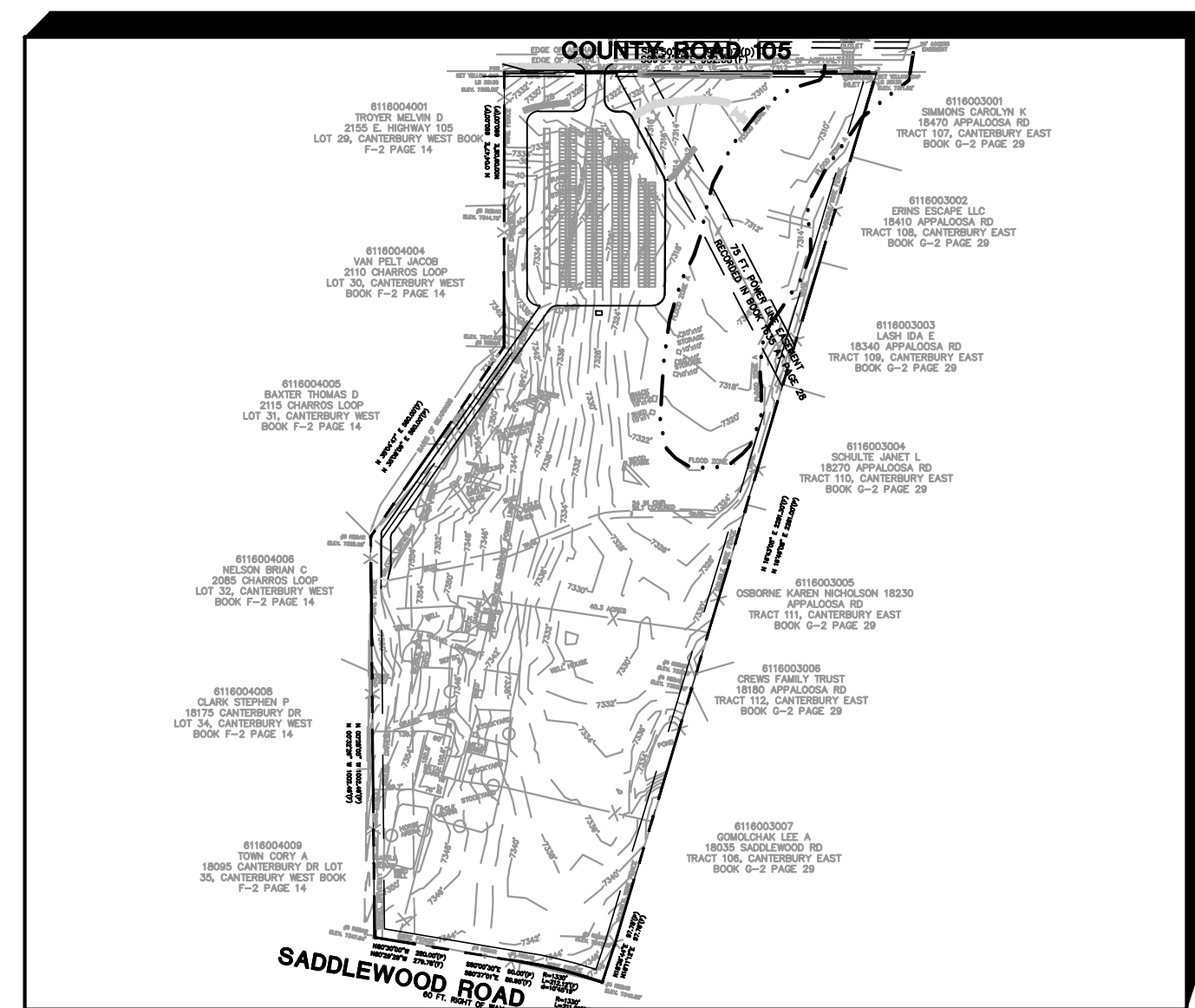
19 East Willamette Avenue
 Colorado Springs, Colorado 80903
 April, 2024

AGENCIES/CONTACTS

OWNER:	COLORADO PUMPKIN PATCH LLC 18065 SADDLEWOOD ROAD MONUMENT, CO 80132-8324 MR. JD CHAPMAN (719)799-6708	WATER/WASTEWATER:	N/A
CIVIL ENGINEER:	JPS ENGINEERING, INC. 19 E. WILLAMETTE AVENUE COLORADO SPRINGS, CO 80903 MR. JOHN P. SCHWAB, P.E. (719)477-9429	GAS DEPARTMENT:	BLACK HILLS ENERGY MR. SEBASTIAN SCHWENDER (719)399-3176
LOCAL ROADS & DRAINAGE:	EL PASO COUNTY PCD 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 (719)520-6300	ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 MR. DAVE WALDNER (719)495-2283
		TELEPHONE COMPANY:	CENTURY LINK COMMUNICATIONS (LOCATORS) (800)922-1987 A.T. & T. (LOCATORS) (719)635-3674



VICINITY MAP
 NOT TO SCALE



SITE MAP
 NTS

BENCHMARK:
 REBAR WITH YELLOW CAP AT NW PROPERTY CORNER, EL=7338.85' (DATUM: NAVD 88)

GEC PLAN SHEET INDEX

C1.0	GEC PLAN TITLE SHEET
G2.0	GENERAL NOTES & LEGEND
C1.1	SITE GRADING & EROSION CONTROL PLAN
C1.2	CIVIL NOTES & DETAILS
C2.1	NORTH SITE GRADING & EROSION CONTROL PLAN
C3.1	CIVIL & EROSION CONTROL NOTES & DETAILS
C3.2	EROSION CONTROL DETAILS
C4.1	DETENTION BASIN PLAN & DETAILS
C4.2	DETENTION BASIN DETAILS

ENGINEER:

DESIGN ENGINEER'S STATEMENT:

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION 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 LIABILITY CAUSED BY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

John P. Schwab 4/11/24
 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.

John Chapman 4/24/24
 OWNER SIGNATURE DATE

NAME: COLORADO PUMPKIN PATCH LLC
 ADDRESS: 18065 SADDLEWOOD ROAD,
 MONUMENT, CO 80132-8324
 PHONE: (719)799-6708 EMAIL: 6APPLEBIZNESS@GMAIL.COM

EL PASO COUNTY:

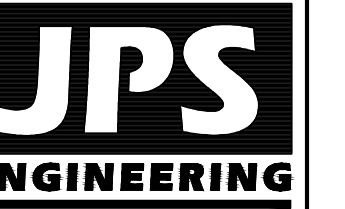
COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY 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, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

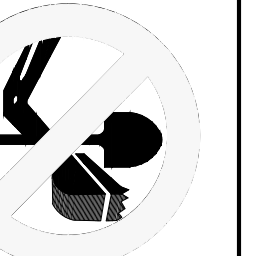
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JOSHUA PALMER, P.E. 4/30/2024
 COUNTY ENGINEER / ECM ADMINISTRATOR DATE

PCD FILE NO. PPR2235



19 E. Willamette Ave.
 Colorado Springs, CO
 80903
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COLORADO KIDS RANCH
 18065 SADDLEWOOD ROAD, MONUMENT, CO 80132

GEC PLAN
 TITLE SHEET

HORIZ. SCALE:	N/A	DRAWN:	PV
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	ALESSI	CHECKED:	JPS
CREATED:	12/06/23	LAST MODIFIED:	04/11/24
PROJECT NO:	112301	MODIFIED BY:	PV

SHEET: C1.0

COUNTY GENERAL NOTES:

- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- 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 CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
 - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - CDOT M & S STANDARDS
- 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 DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- 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.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- ALL STORM DRAIN PIPE SHALL BE CLASS III RCP WITH CLASS B BEDDING UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DPW (DEPT. OF PUBLIC WORKS) AND MUTCD CRITERIA.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DPW, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

GENERAL DRAINAGE NOTES:

- INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE IMPACTS WITHIN EACH LOT.
- BUILDERS AND PROPERTY OWNERS SHALL IMPLEMENT & MAINTAIN EROSION CONTROL BEST MANAGEMENT PRACTICES FOR PROTECTION OF DOWNSTREAM PROPERTIES AND FACILITIES INCLUDING PROTECTION OF EXISTING GRASS BUFFER STRIPS ALONG THE DOWNSTREAM PROPERTY BOUNDARIES.
- GRADING AND DRAINAGE WITHIN LOTS IS THE RESPONSIBILITY OF THE INDIVIDUAL BUILDERS AND PROPERTY OWNERS.

COUNTY SIGNING AND STRIPING NOTES:

- ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
- ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY.
- ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.
- STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
- ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
- ALL STREET NAME SIGNS SHALL HAVE "D" SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4" UPPER-LOWER CASE LETTERING ON 8" BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6" LETTERING, UPPER-LOWER CASE ON 12" BLANK, WITH WHITE BORDER THAT IS NOT RECESSED. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 40 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 18" BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS".
- ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
- ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARD S-614-B REGARDING USE OF THE P2 TUBULAR STEEL POST SLIPBASE DESIGN.
- ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
- ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 12" WIDE AND 8' LONG PER CDOT S-627-1.
- ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15MIL THICKNESS EPOXY PAINT. ALL NON-LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1.
- THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
- THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

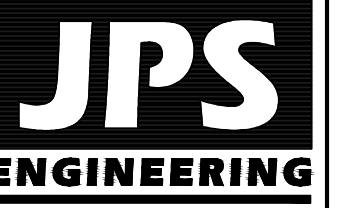
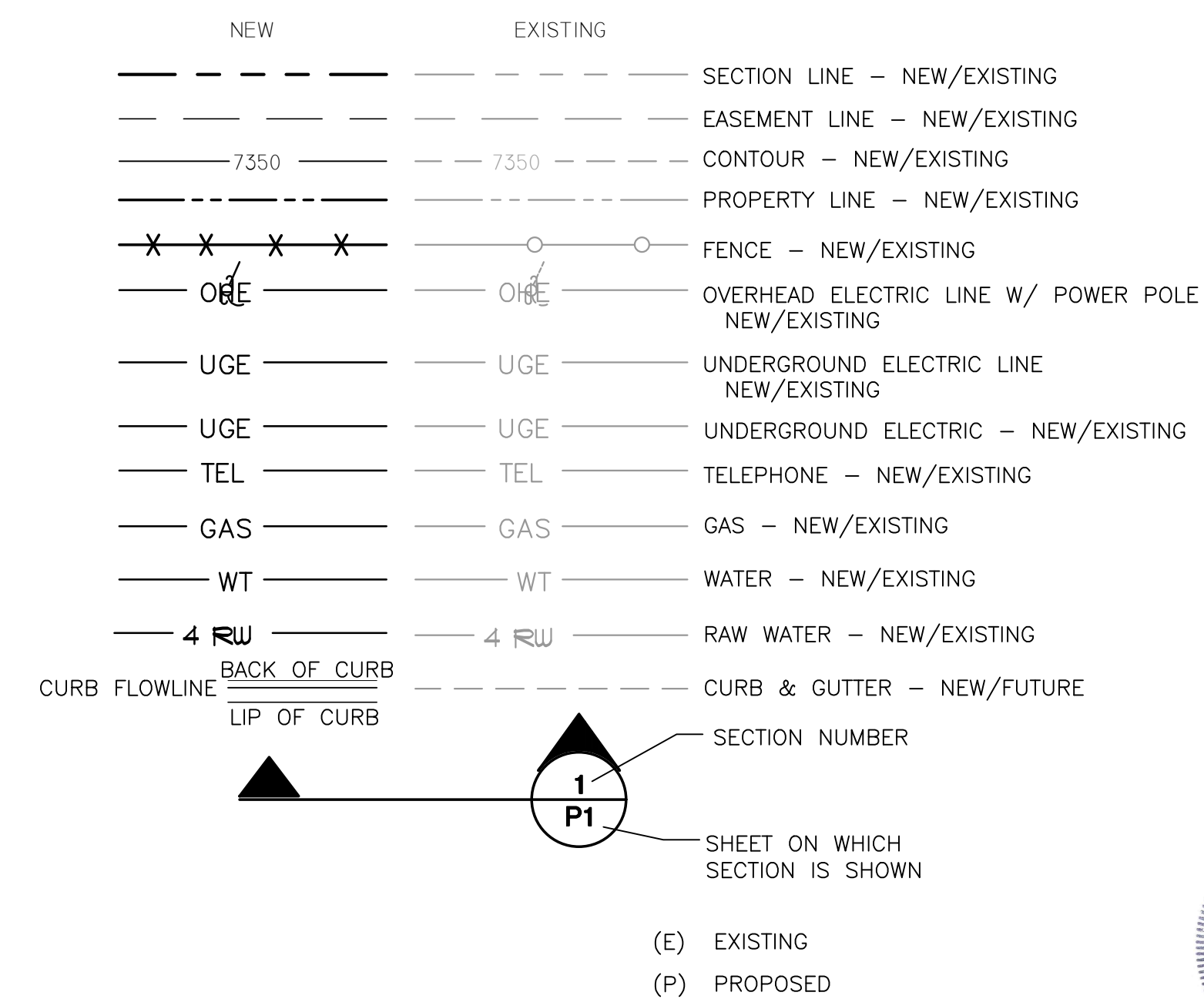
PROJECT GENERAL CIVIL NOTES:

- ALL CONSTRUCTION SHALL MEET THE FOLLOWING STANDARDS & SPECIFICATIONS:
 - INTERNATIONAL BUILDING CODE, LATEST EDITION ADOPTED BY LOCAL JURISDICTION
 - 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 ACCESS TO THE APPLICABLE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
- 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 OTHER CONTROL MEASURES 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 ENGINEERING SPECIFICATIONS.
- CONCRETE USED IN CURB AND GUTTER, SIDEWALK, AND CROSSSPAN CONSTRUCTION SHALL MEET CITY 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.

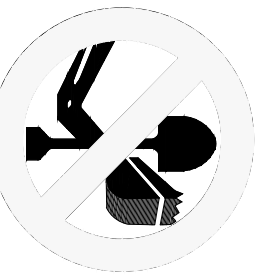
HANDICAP ACCESS NOTES:

- 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.

LEGEND:



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 18065 SADDLEWOOD ROAD, MONUMENT, CO 80132**

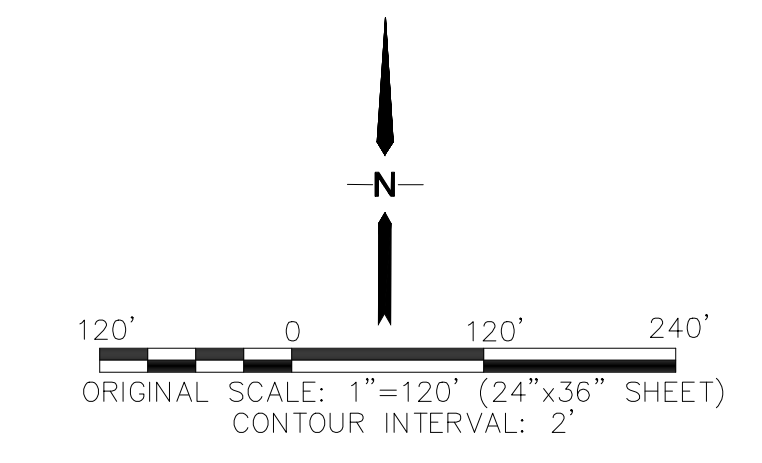
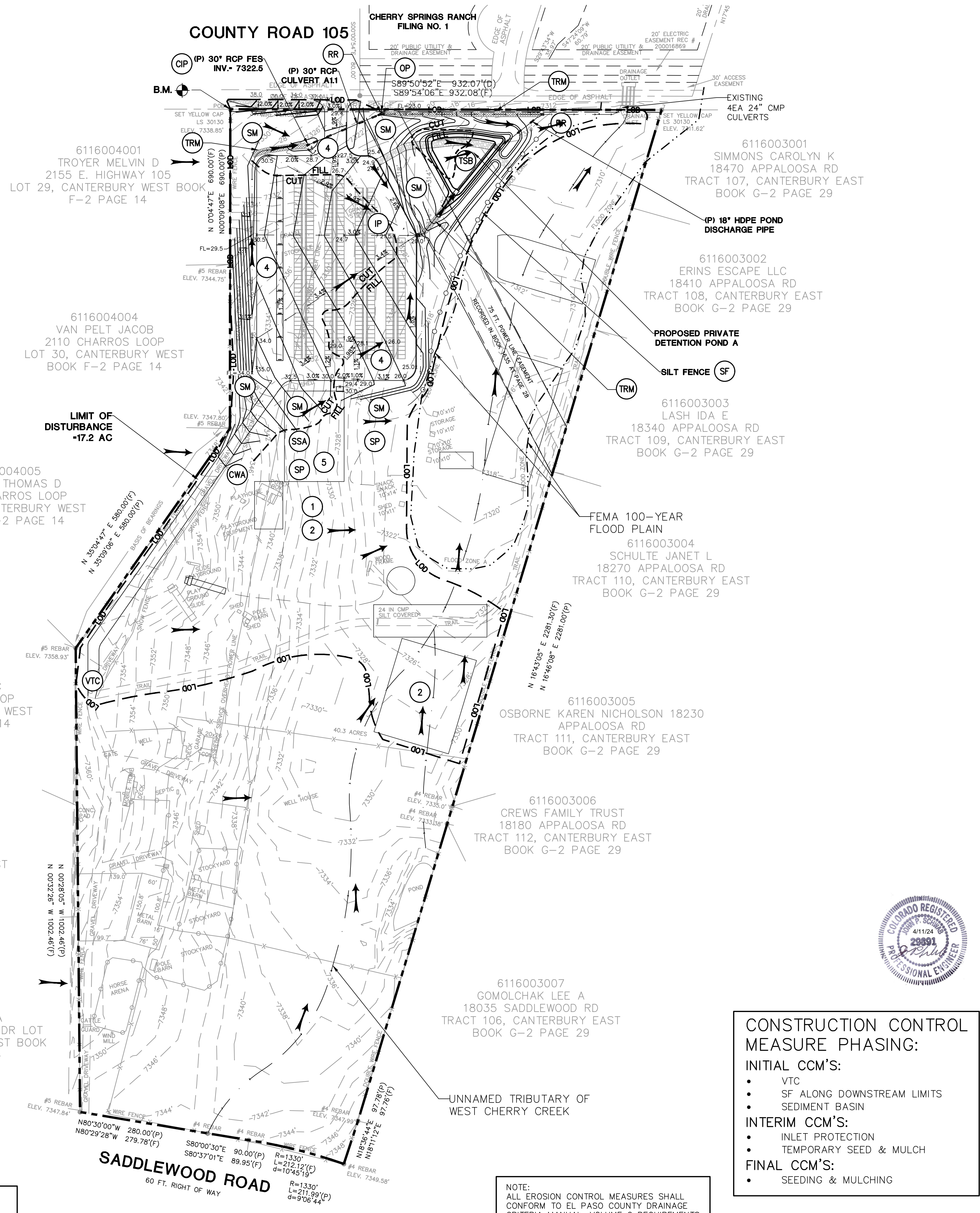
NO.	REVISION	BY	DATE

GENERAL NOTES AND LEGEND

HORZ. SCALE:	N/A	DRAWN:	PV
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	ALESSI	CHECKED:	JPS
CREATED:	12/06/23	LAST MODIFIED:	02/12/24
PROJECT NO:	112301	MODIFIED BY:	PV

G2.0

NOTE: PER STANDARD COUNTY DETENTION MAINTENANCE AGREEMENT, A BLANKET MAINTENANCE EASEMENT HAS BEEN PROVIDED ACROSS THE PROPERTY.



- LEGEND**
- FEMA 100-YEAR FLOODWAY
 - FEMA 100-YR FLOODPLAIN
 - PROPERTY LINE
 - EASEMENT LINE
 - PROPOSED EDGE OF GRAVEL PAVEMENT
 - 7350 PROPOSED CONTOUR
 - 7350 EXISTING CONTOUR
 - × 99.0 PROPOSED SPOT ELEVATION (FLOWLINE)
 - × 99.0 EXIST. SPOT ELEVATION
 - TW TOP OF RETAINING WALL
 - BW BOTTOM OF RETAINING WALL
 - (E) EXISTING
 - (P) PROPOSED
 - PIA PLANNED INFILTRATION AREA
 - - - CUT/FILL
 - - - CUT/FILL DEMARCATION LINE
 - - - LOD
 - FLOW DIRECTION ARROW

- EROSION CONTROL LEGEND:**
- (SF) SILT FENCE
 - (VTC) VEHICLE TRACKING PAD
 - (IP) INLET PROTECTION
 - (SM) SEED & MULCH
 - (CWA) CONCRETE WASHOUT AREA
 - (RR) RIPRAP APRON (4'Lx4'WX18\"/>

ESTIMATED EARTHWORK QUANTITY:
 UNCLASSIFIED EXCAVATION (TOTAL CUT) = 17,290 CY
 *TOTAL FILL = 17,007 CY
 NET (CUT) = 283 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.

- KEYED NOTES**
- 1 TOPSOIL & STRIPPINGS STOCKPILE AREA
 - 2 CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.
 - 3 PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT
 - 4 PARKING LOT PAVING PER GEOTECHNICAL REPORT (6\"/>

CONSTRUCTION CONTROL MEASURE PHASING:

INITIAL CCM'S:

- VTC
- SF ALONG DOWNSTREAM LIMITS
- SEDIMENT BASIN

INTERIM CCM'S:

- INLET PROTECTION
- TEMPORARY SEED & MULCH

FINAL CCM'S:

- SEEDING & MULCHING



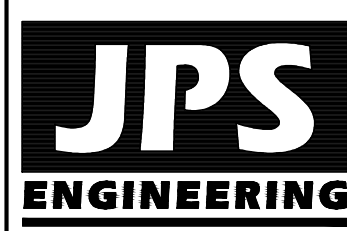
BENCHMARK:
 REBAR WITH YELLOW CAP AT NW PROPERTY CORNER, EL=7338.85' (DATUM: NAVD 88)

NOTE: EXISTING VEGETATION CONSISTS OF NATIVE GRASSES (APPROX. 70% COVERAGE)

NOTE: ALL EROSION CONTROL MEASURES SHALL CONFORM TO EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUME 2 REQUIREMENTS

**COLORADO KIDS RANCH
 18065 SADDLEWOOD ROAD, MONUMENT, CO 80132**

SITE GRADING AND EROSION CONTROL PLAN

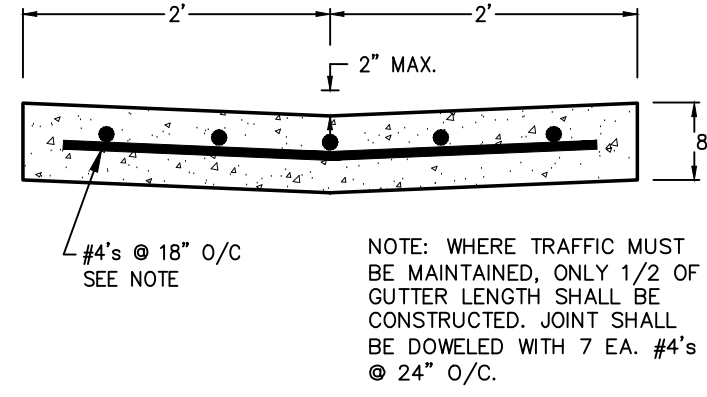


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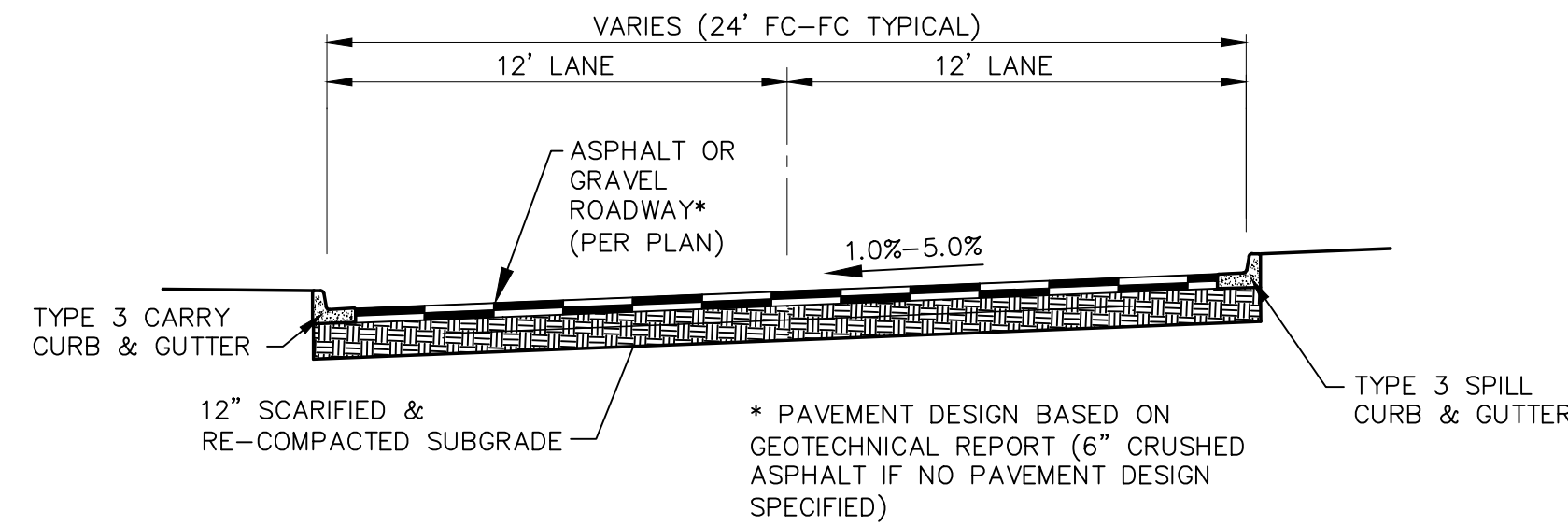
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NO.	REVISION	BY	DATE

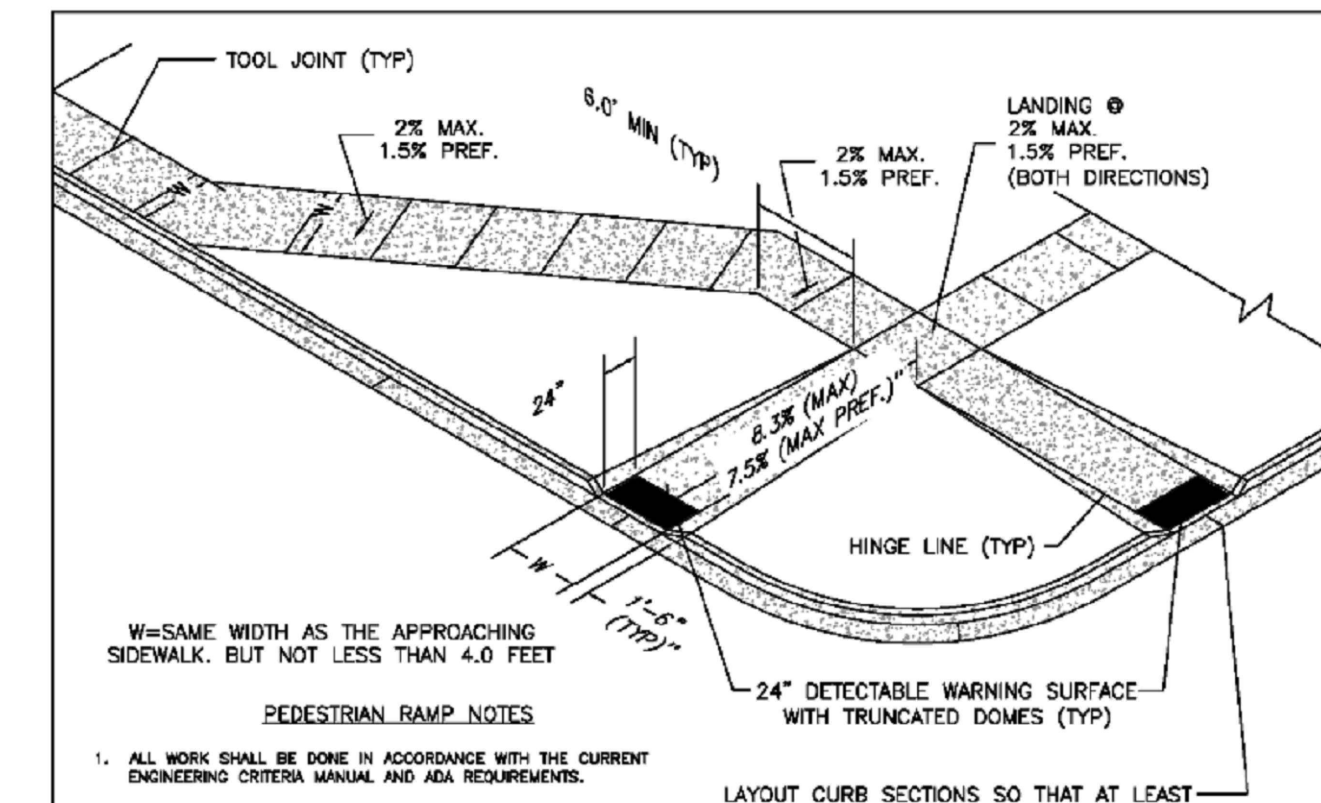
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VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: ALESSI	CHECKED: JPS
CREATED: 12/06/23	LAST MODIFIED: 04/11/24
PROJECT NO: 112301	MODIFIED BY: PV
SHEET:	C1.1



TYPICAL CONCRETE CROSSSPAN 1
SCALE: 1" = 1'-0"

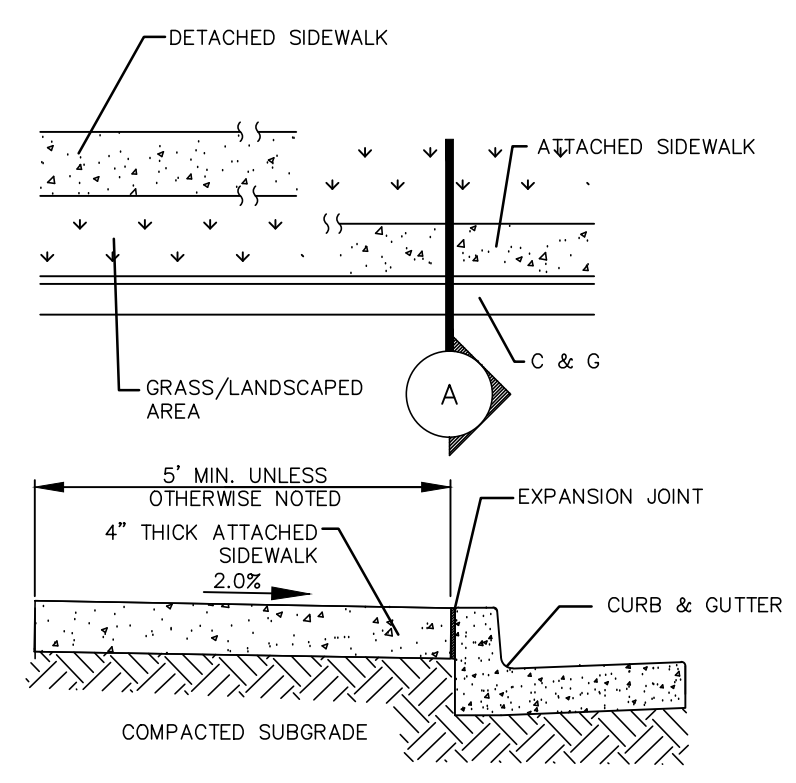


TYPICAL PARKING / ACCESS DRIVE SECTION A
SCALE: 1"=5' H
1"=2.5' V

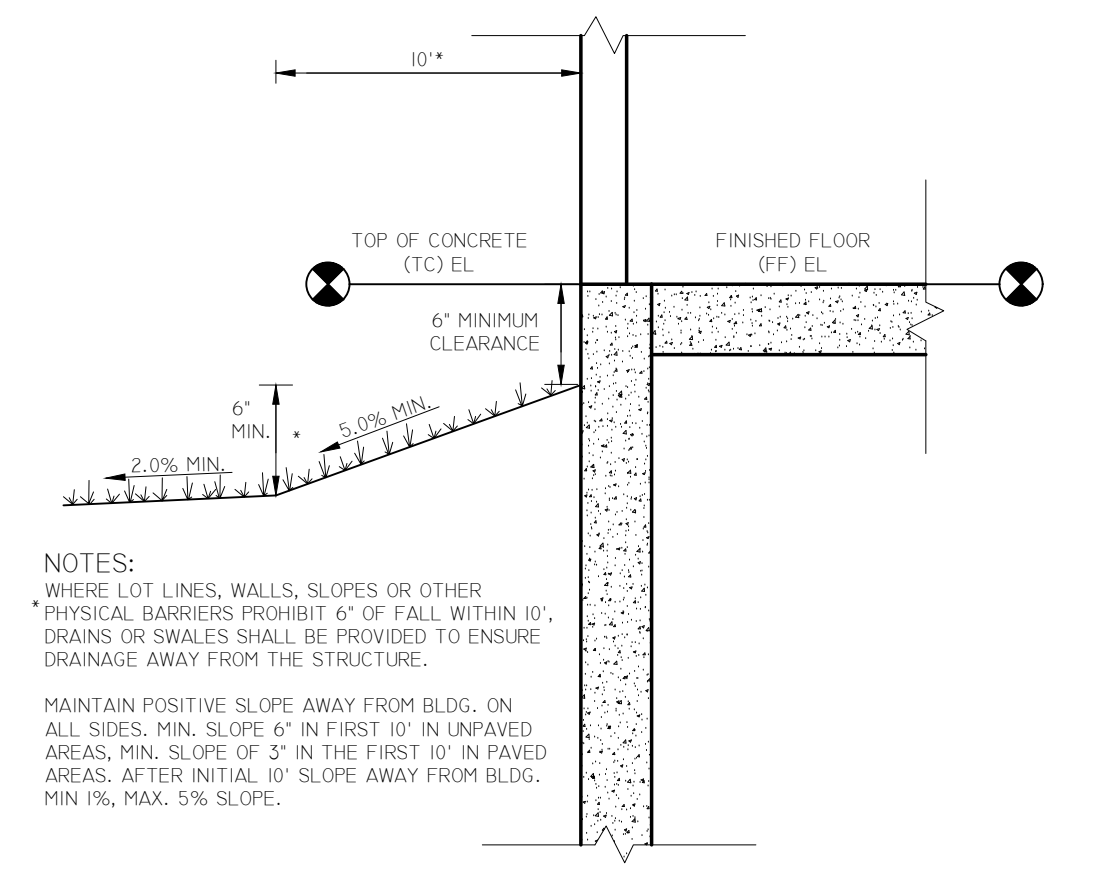


- PEDESTRIAN RAMP NOTES**
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
 - CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
 - PEDESTRIAN CURB RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON-COLORED, NON-SCORED, COARSE BROOM FINISH.
 - PEDESTRIAN CURB RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 8.3% MAXIMUM RUNNING RAMP SLOPE DUE TO STREET INTERSECTION GRADIES AND/OR ALIGNMENTS. SEE SDJ SECTION 6.3.8 FOR PEDESTRIAN PUSHBUTTON LOCATION REQUIREMENTS.
 - DETECTABLE WARNING SURFACE SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
 - DETECTABLE WARNING SURFACE SHALL BE PREFABRICATED, CAST IRON (PATINA NATURAL FINISH) AND IN ACCORDANCE WITH ECU CHAPTER 8 AND SDJ-42. THERMOPLASTIC TRUNCATED DOMES AND PAVINGS WILL NOT BE ACCEPTED.
 - THE DETECTABLE WARNING SURFACE SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
 - PEDESTRIAN CURB RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK 4" MINIMUM.
 - ALL PEDESTRIAN CURB RAMP SHALL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF 90-DEGREE OR TERNAL RAMP WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
 - DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNALAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED PEDESTRIAN CURB RAMP AREAS AND LENGTHS ARE PROHIBITED.
 - THE COUNTERSLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A RAMP SHALL NOT EXCEED 5%.
- GENERAL NOTES**
- WHERE THE 1'-6" FLARED SIDING OF A PERPENDICULAR CURB RAMP IS OAK CONTIGUOUS WITH A PEDESTRIAN OR HAND SURFACE AREA (PEDESTRIAN CIRCULATION PATH), THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
 - PEDESTRIAN WALKWAY (PEDESTRIAN ACCESS ROUTE) AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN WALKS ON OPPOSITE CURBING SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
 - AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, OCCURRENCE OF THE FLARE SECS, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.

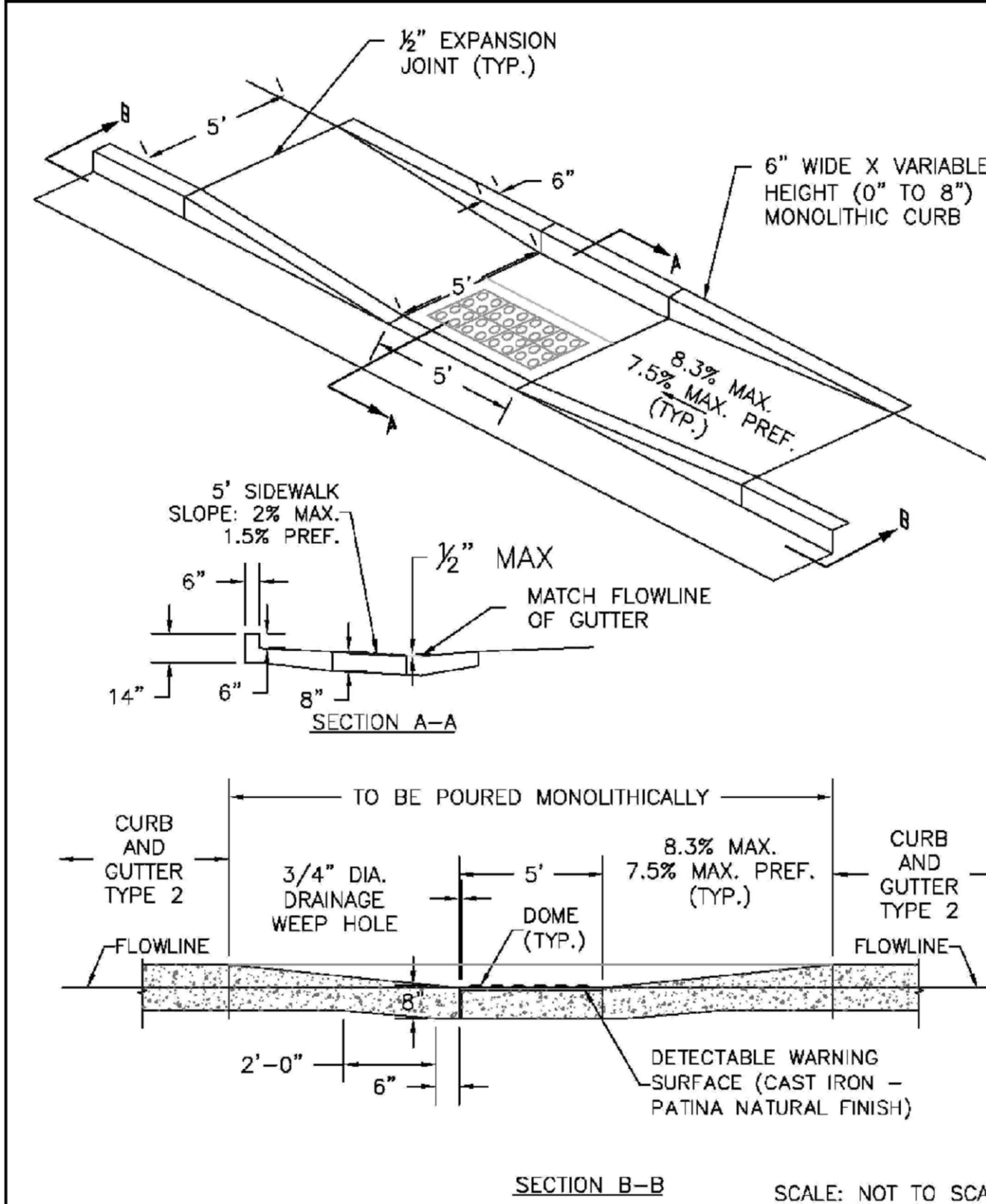
DATE APPROVED: 6/23/20	DESIGNED BY: Jennifer E. Irvine	REVISION DATE: 6/23/20	FILE NAME: SD_2-41
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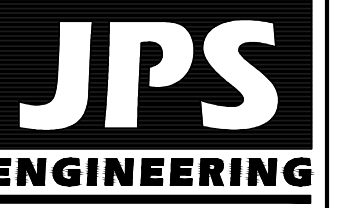
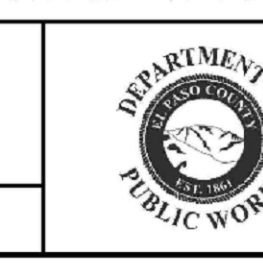
CONCRETE SIDEWALK DETAIL 2
N.T.S.



TYPICAL BUILDING DRAINAGE DETAIL 3
N.T.S.



DATE APPROVED: 6/23/20	DESIGNED BY: Jennifer E. Irvine	REVISION DATE: 6/23/20	FILE NAME: SD_2-50
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19 E. Willamette Ave.
Colorado Springs, CO
80903
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FAX: 719-471-0766
www.jpsegr.com



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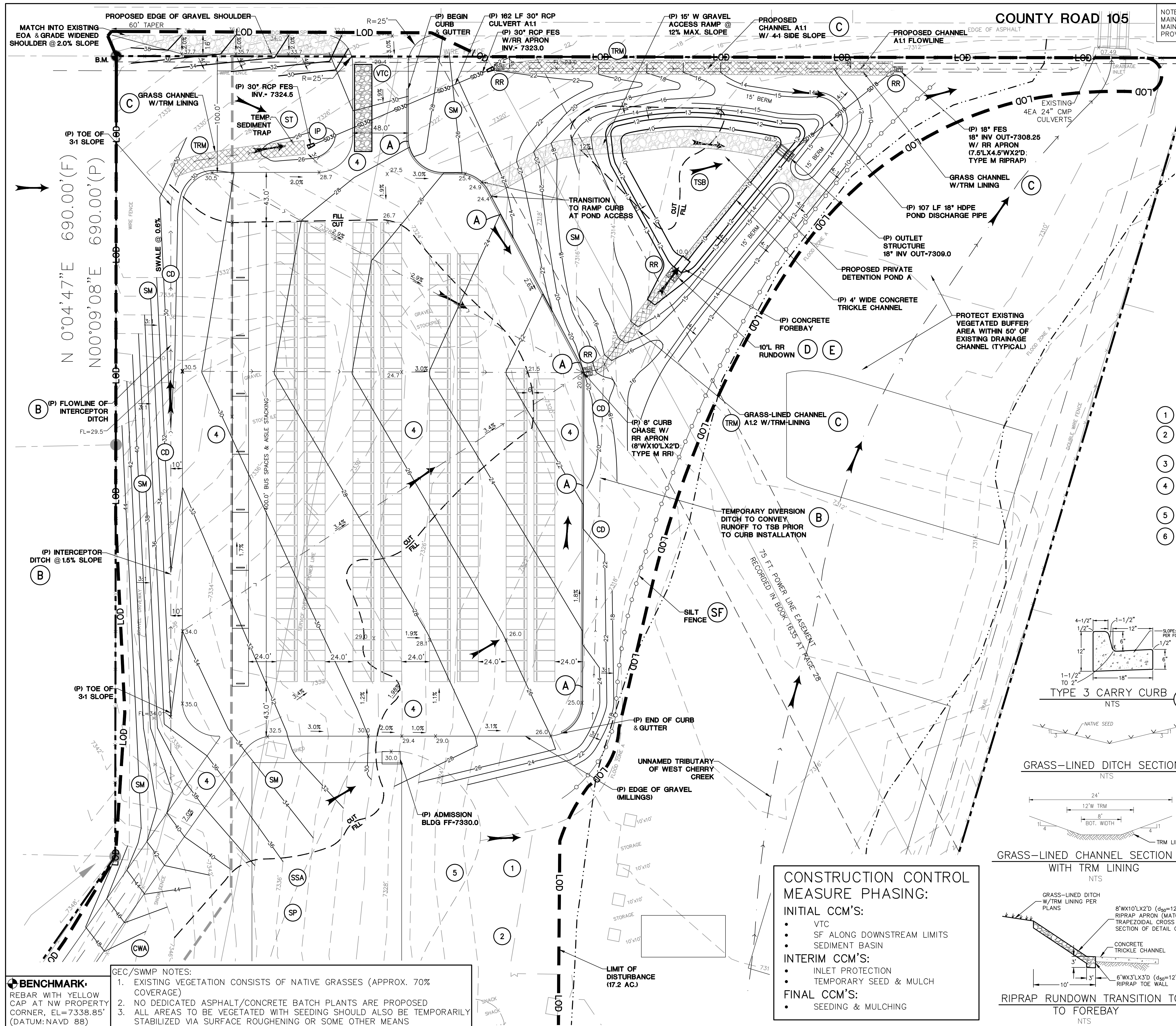
NO.	REVISION	BY	DATE

CIVIL NOTES AND DETAILS

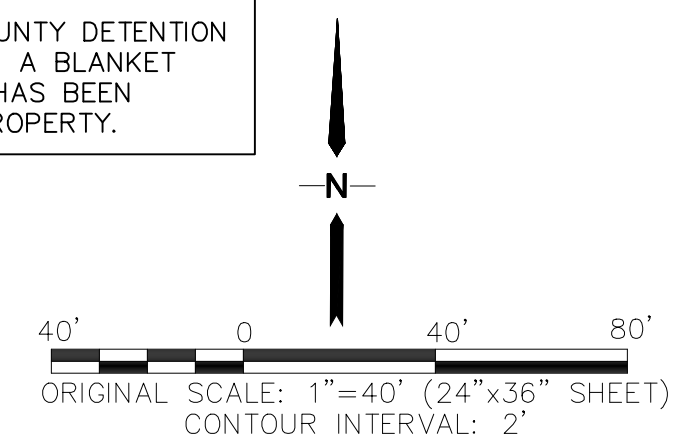
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VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	ALESSI	CHECKED:	JPS
CREATED:	12/06/23	LAST MODIFIED:	02/12/24
PROJECT NO:	112301	MODIFIED BY:	PV

SHEET: C1.2





NOTE: PER STANDARD COUNTY DETENTION MAINTENANCE AGREEMENT, A BLANKET MAINTENANCE EASEMENT HAS BEEN PROVIDED ACROSS THE PROPERTY.

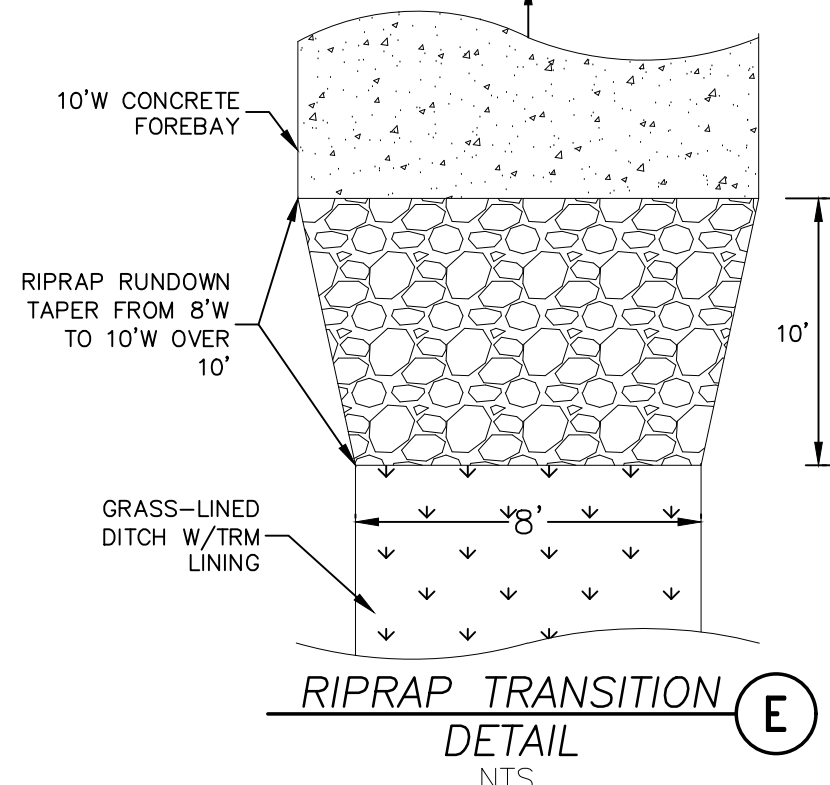
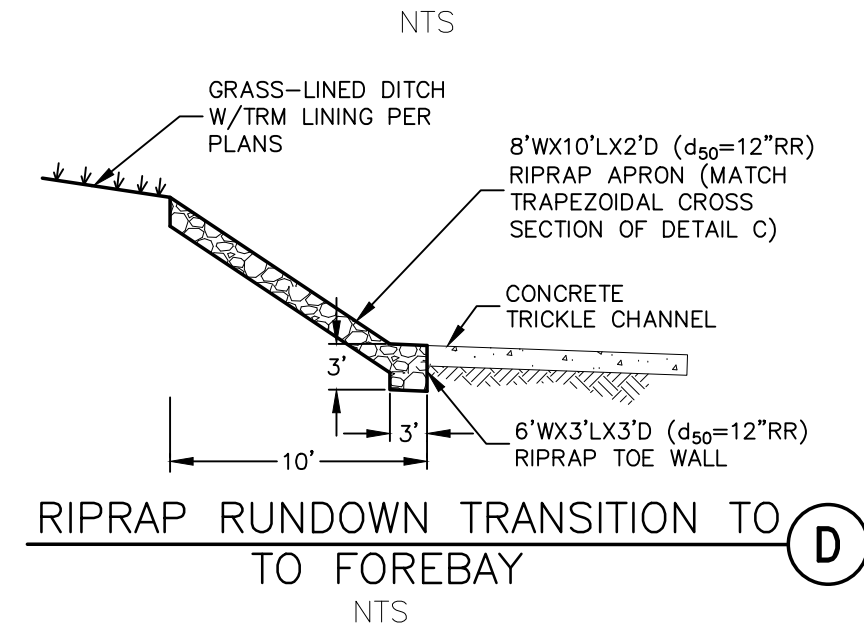
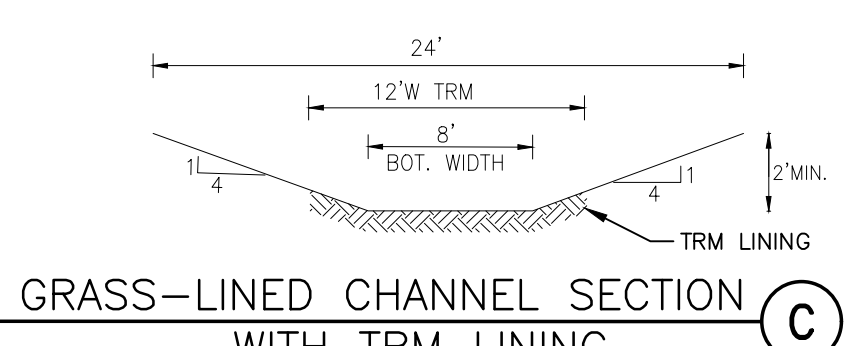
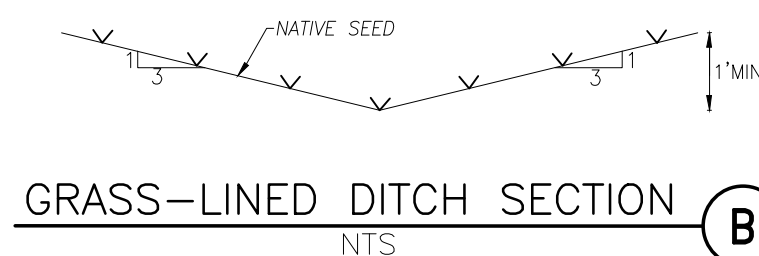
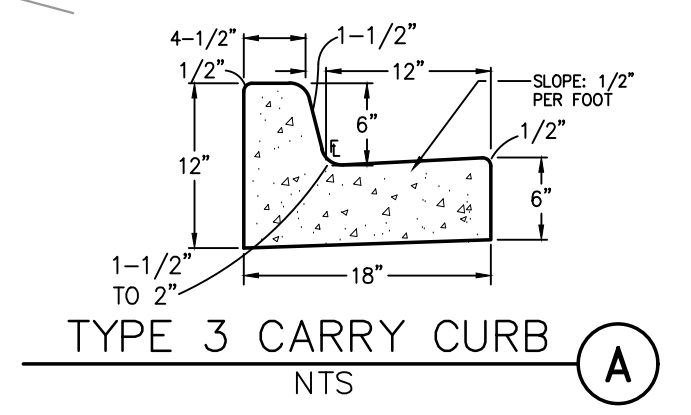


- LEGEND**
- FEMA 100-YR FLOODPLAIN
 - PROPERTY LINE
 - EASEMENT LINE
 - PROPOSED EDGE OF GRAVEL PAVEMENT
 - PROPOSED CHANNEL FLOWLINE
 - 7350 PROPOSED CONTOUR
 - EXISTING CONTOUR
 - × 99.0 PROPOSED SPOT ELEVATION (FLOWLINE)
 - × 99.0 EXIST. SPOT ELEVATION
 - TW TOP OF RETAINING WALL
 - BW BOTTOM OF RETAINING WALL
 - (E) EXISTING
 - (P) PROPOSED
 - PIA PLANNED INFILTRATION AREA
 - - - CUT/FILL CUT/FILL DEMARCATION LINE
 - LOD LIMIT OF DISTURBANCE (CONSTRUCTION SITE BOUNDARY)
 - FLOW DIRECTION ARROW

- KEYED NOTES**
- 1 TOPSOIL & STRIPPINGS STOCKPILE AREA
 - 2 CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.
 - 3 PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT
 - 4 PARKING LOT PAVING PER GEOTECHNICAL REPORT (6" COMPACTED GRAVEL OR CRUSHED ASPHALT/MILLINGS; CDOT CLASS 6 OR EQUAL UNLESS NOTED OTHERWISE)
 - 5 STORAGE AREA FOR BUILDING MATERIALS, EQUIPMENT & CONSTRUCTION WASTE (CONTRACTOR MAY ADJUST AS NEEDED)
 - 6 MIN 4'x4' CONCRETE LANDING AT DOOR W/2.0% MAX. SLOPE AWAY FROM BUILDING

EROSION CONTROL LEGEND:

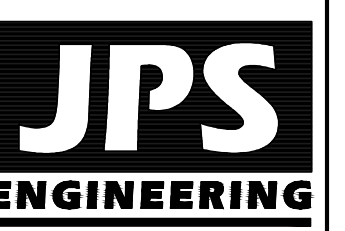
- (SF) SILT FENCE
- (VTC) VEHICLE TRACKING PAD
- (IP) INLET PROTECTION
- (SM) SEED & MULCH
- (CWA) CONCRETE WASHOUT AREA
- (RR) RIPRAP APRON (DTL., A, SH C3.1)
- (TRM) TURF REINFORCEMENT MATS (TENSAR ERONET SC150 OR EQUAL)
- (TSB) TEMPORARY SEDIMENT BASIN
- (SSA) STABILIZED STAGING AREA
- (SP) STOCKPILE PROTECTION
- (CD) CHECK DAM
- (ST) SEDIMENT TRAP



- CONSTRUCTION CONTROL MEASURE PHASING:**
- INITIAL CCM'S:**
- VTC
 - SF ALONG DOWNSTREAM LIMITS
 - SEDIMENT BASIN
- INTERIM CCM'S:**
- INLET PROTECTION
 - TEMPORARY SEED & MULCH
- FINAL CCM'S:**
- SEEDING & MULCHING

- BENCHMARK:**
REBAR WITH YELLOW CAP AT NW PROPERTY CORNER, EL=7338.85' (DATUM:NAVD 88)
- GEC/SWMP NOTES:**
1. EXISTING VEGETATION CONSISTS OF NATIVE GRASSES (APPROX. 70% COVERAGE)
 2. NO DEDICATED ASPHALT/CONCRETE BATCH PLANTS ARE PROPOSED
 3. ALL AREAS TO BE VEGETATED WITH SEEDING SHOULD ALSO BE TEMPORARILY STABILIZED VIA SURFACE ROUGHENING OR SOME OTHER MEANS

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No.	REVISION	BY	DATE



**NORTH SITE GRADING AND
EROSION CONTROL PLAN**

HORZ. SCALE: 1"=40'	DRAWN: PV
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: ALESSI	CHECKED: JPS
CREATED: 12/06/23	LAST MODIFIED: 04/11/24
PROJECT NO: 112301	MODIFIED BY: PV

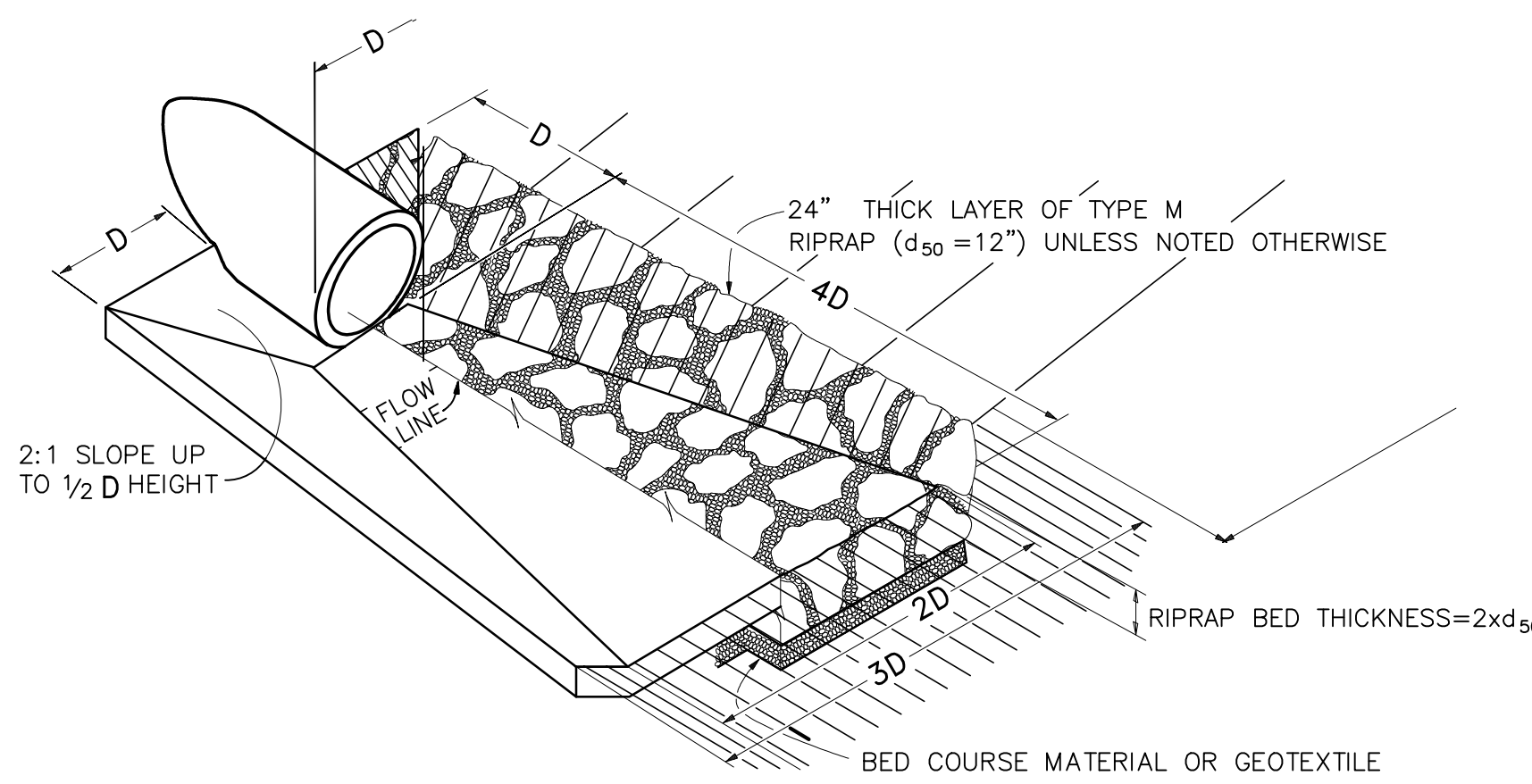
SHEET: **C2.1**

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

REVISED 7/02/19

- 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.
- 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.
- 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. 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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).
- 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.
- 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.
- 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.
- EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 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.
- 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.
- TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 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.
- 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.
- 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.
- 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.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 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.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 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.
- THE SOILS REPORT FOR THIS SITE SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT



**TYPICAL RIPRAP APRON/
CULVERT OUTLET PAVING** A
NOT TO SCALE

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.
SIDEATS 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.

ESTIMATED TIME SCHEDULE:

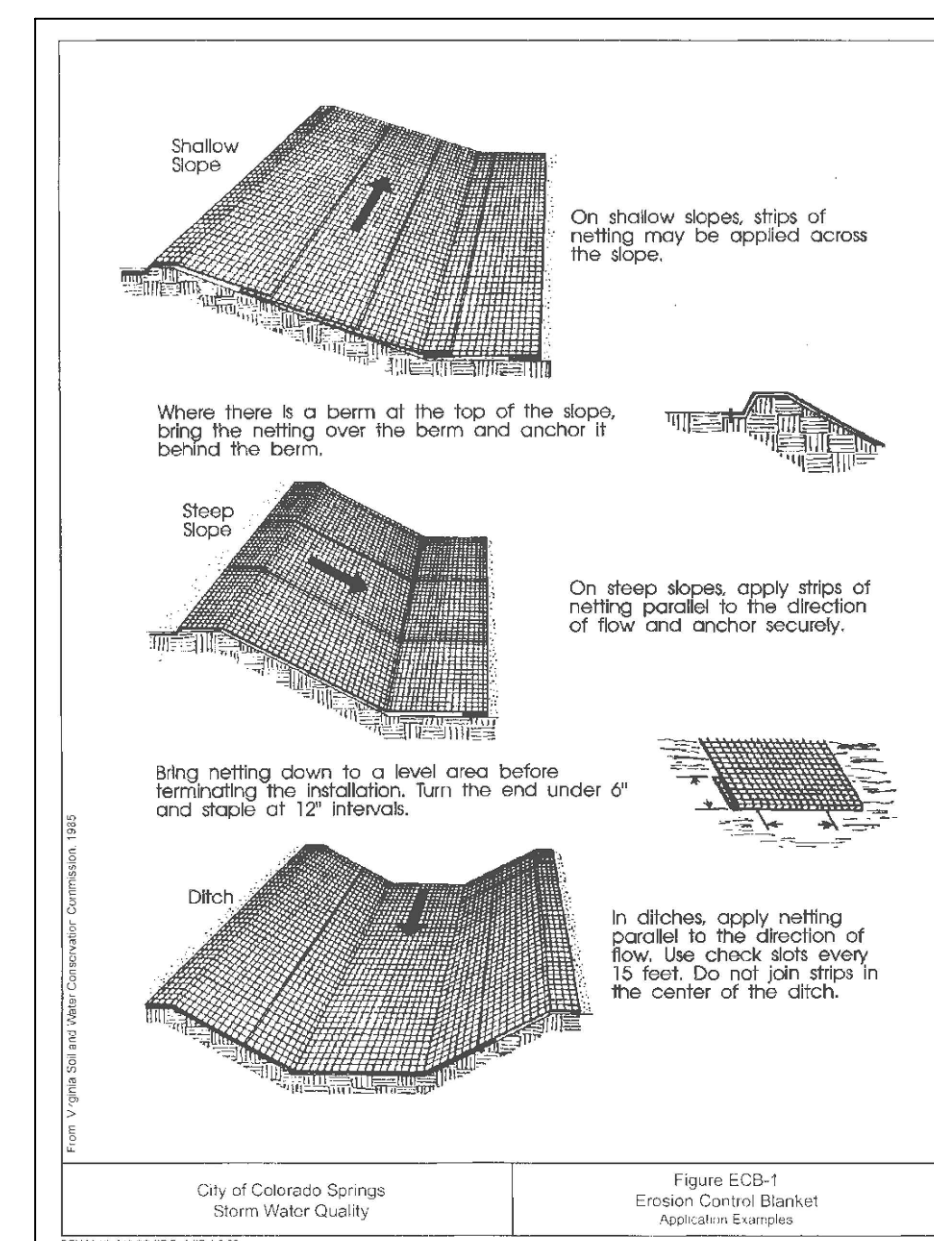
INSTALL BMP'S	APRIL, 2024
GRADING START	APRIL, 2024
GRADING COMPLETION	SEPTEMBER, 2024
SEEDING & MULCHING	SEPTEMBER, 2024
STABILIZATION	SEPTEMBER, 2025

SEDIMENT CONTROL MAINTENANCE PROGRAM:

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

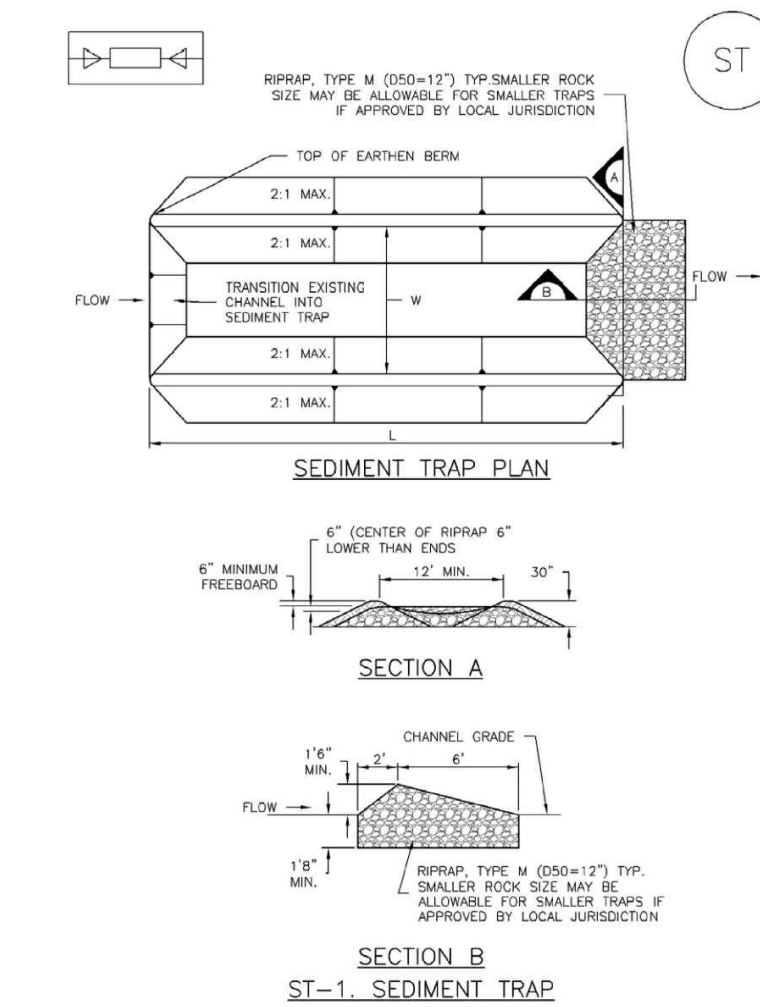
1 AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION.

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.



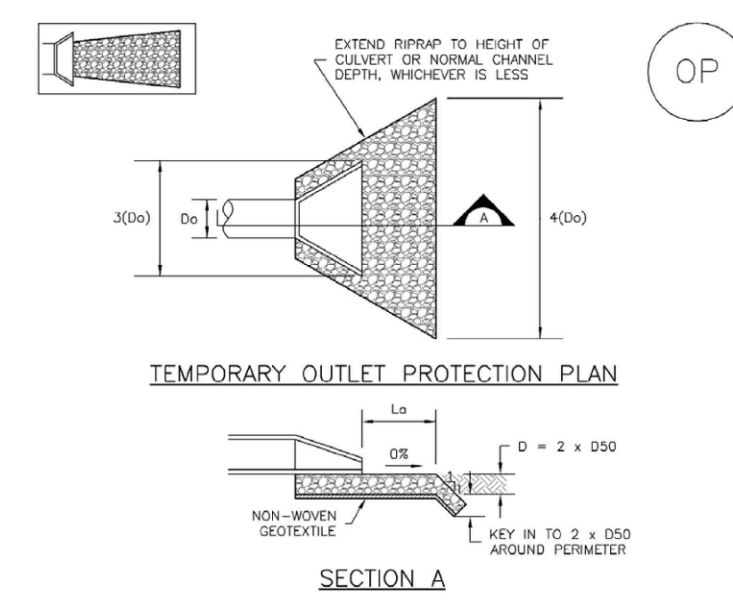
TRM TURF REINFORCEMENT MATS (TENSAR ERONET SC150 OR EQUAL)

SC-8 Sediment Trap (ST)



ST-2 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

EC-8 Temporary Outlet Protection (TOP)



PIPE DIAMETER, D ₁ (INCHES)	DISCHARGE Q (CFS)	APPROX. RIPRAP LENGTH L ₁ (FT)	APPROX. RIPRAP WIDTH W ₁ (INCHES)
8	2.5	5	4
12	5	10	4
18	10	15	6
24	20	25	12
30	40	50	16
36	60	75	24
42	90	100	32
48	120	150	48
54	150	200	64
60	200	250	80
66	250	300	96
72	300	350	112
78	350	400	128
84	400	450	144
90	450	500	160
96	500	550	176
102	550	600	192
108	600	650	208
114	650	700	224
120	700	750	240
126	750	800	256
132	800	850	272
138	850	900	288
144	900	950	304
150	950	1000	320
156	1000	1050	336
162	1050	1100	352
168	1100	1150	368
174	1150	1200	384
180	1200	1250	400
186	1250	1300	416
192	1300	1350	432
198	1350	1400	448
204	1400	1450	464
210	1450	1500	480
216	1500	1550	496
222	1550	1600	512
228	1600	1650	528
234	1650	1700	544
240	1700	1750	560
246	1750	1800	576
252	1800	1850	592
258	1850	1900	608
264	1900	1950	624
270	1950	2000	640
276	2000	2050	656
282	2050	2100	672
288	2100	2150	688
294	2150	2200	704
300	2200	2250	720
306	2250	2300	736
312	2300	2350	752
318	2350	2400	768
324	2400	2450	784
330	2450	2500	800
336	2500	2550	816
342	2550	2600	832
348	2600	2650	848
354	2650	2700	864
360	2700	2750	880
366	2750	2800	896
372	2800	2850	912
378	2850	2900	928
384	2900	2950	944
390	2950	3000	960
396	3000	3050	976
402	3050	3100	992
408	3100	3150	1008
414	3150	3200	1024
420	3200	3250	1040
426	3250	3300	1056
432	3300	3350	1072
438	3350	3400	1088
444	3400	3450	1104
450	3450	3500	1120
456	3500	3550	1136
462	3550	3600	1152
468	3600	3650	1168
474	3650	3700	1184
480	3700	3750	1200
486	3750	3800	1216
492	3800	3850	1232
498	3850	3900	1248
504	3900	3950	1264
510	3950	4000	1280
516	4000	4050	1296
522	4050	4100	1312
528	4100	4150	1328
534	4150	4200	1344
540	4200	4250	1360
546	4250	4300	1376
552	4300	4350	1392
558	4350	4400	1408
564	4400	4450	1424
570	4450	4500	1440
576	4500	4550	1456
582	4550	4600	1472
588	4600	4650	1488
594	4650	4700	1504
600	4700	4750	1520
606	4750	4800	1536
612	4800	4850	1552
618	4850	4900	1568
624	4900	4950	1584
630	4950	5000	1600
636	5000	5050	1616
642	5050	5100	1632
648	5100	5150	1648
654	5150	5200	1664
660	5200	5250	1680
666	5250	5300	1696
672	5300	5350	1712
678	5350	5400	1728
684	5400	5450	1744
690	5450	5500	1760
696	5500	5550	1776
702	5550	5600	1792
708	5600	5650	1808
714	5650	5700	1824
720	5700	5750	1840
726	5750	5800	1856
732	5800	5850	1872
738	5850	5900	1888
744	5900	5950	1904
750	5950	6000	1920
756	6000	6050	1936
762	6050	6100	1952
768	6100	6150	1968
774	6150	6200	1984
780	6200	6250	2000
786	6250	6300	2016
792	6300	6350	2032
798	6350	6400	2048
804	6400	6450	2064
810	6450	6500	2080
816	6500	6550	2096
822	6550	6600	2112
828	6600	6650	2128
834	6650	6700	2144
840	6700	6750	2160
846	6750	6800	2176
852	6800	6850	2192
858	6850	6900	2208
864	6900	6950	2224
870	6950	7000	2240
876	7000	7050	2256
882	7050	7100	2272
888	7100	7150	2288
894	7150	7200	2304
900	7200	7250	2320
906	7250	7300	2336
912	7300	7350	2352
918	7350	7400	2368
924	7400	7450	2384
930	7450	7500	2400
936	7500	7550	2416
942	7550	7600	2432
948	7600	7650	2448
954	7650	7700	2464
960	7700	7750	2480
966	7750	7800	2496
972	7800	7850	2512
978	7850	7900	2528
984	7900	7950	2544

SEEDING & MULCHING

ALL SOIL TESTING, SOIL AMENDMENT AND FERTILIZER DOCUMENTATION, AND SEED LOAD AND BAG TICKETS MUST BE ADDED TO THE CSMP.

SOIL PREPARATION

- IN AREAS TO BE SEED, THE UPPER 6 INCHES OF THE SOIL MUST NOT BE HEAVILY COMPACTED, AND SHOULD BE IN FAVORABLE CONDITION. LESS THAN SOIL STANDING PROCTOR DENSITY IS ACCEPTABLE. AREAS OF COMPACTED OR GENERAL CONSTRUCTION ACTIVITY MUST BE SCARIFIED TO A DEPTH OF 6 TO 12 INCHES PRIOR TO SPREADING TOPSOIL TO BREAK UP COMPACTED LAYERS AND PROVIDE A BLENDING ZONE BETWEEN DIFFERENT SOIL LAYERS.
- AREAS TO BE PLANTED SHALL HAVE AT LEAST 4 INCHES OF TOPSOIL SUITABLE TO SUPPORT PLANT GROWTH.
- THE CITY RECOMMENDS THAT EXISTING AND/OR IMPORTED TOPSOIL BE TESTED TO DETERMINE SOIL DEFICIENCIES AND ANY SOIL AMENDMENTS NECESSARY TO ADDRESS THOSE DEFICIENCIES. SOIL AMENDMENTS AND/OR FERTILIZERS SHOULD BE ADDED TO CORRECT TOPSOIL DEFICIENCIES BASED ON SOIL TESTING RESULTS.
- TOPSOIL SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD TO RETAIN ITS STRUCTURE, AVOID COMPACTED, AND TO PREVENT EROSION AND CONTAMINATION. STRIPPED TOPSOIL MUST BE STORED IN AN AREA AWAY FROM MACHINERY AND CONSTRUCTION OPERATIONS, AND CARE MUST BE TAKEN TO PROTECT THE TOPSOIL AS A VALUABLE COMMODITY. TOPSOIL MUST NOT BE STRIPPED DURING UNDESIRABLE WORKING CONDITIONS (E.G. DURING WET WEATHER OR WHEN TOLES ARE SATURATED). TOPSOIL SHALL NOT BE STORED IN SWALES OR IN AREAS WITH POOR DRAINAGE.

SEEDING

- ALLOWABLE SEED MIXES ARE INCLUDED IN THE CITY OF COLORADO SPRINGS STORMWATER CONSTRUCTION MANUAL. ALTERNATIVE SEED MIXES ARE ACCEPTABLE IF INCLUDED IN AN APPROVED LANDSCAPING PLAN. SEED SHOULD BE DRILL-SEEDED WHENEVER POSSIBLE.
- SEED DEPTH MUST BE 3/4 TO 3/8 INCHES WHEN DRILL SEEDING IS USED.
- BROADCAST SEEDING OR HYDRO-SEEDING WITH TOPSOIL MAY BE SUBSTITUTED ON SLOPES STEEPER THAN 3:1 OR ON OTHER AREAS NOT PRACTICAL TO DRILL SEED. SEEDING RATES MUST BE DOUBLED FOR BROADCAST SEEDING OR INCREASED BY 50% IF USING A BRILLION DRILL OR HYDRO-SEEDING. BROADCAST SEEDING MUST BE LIGHTLY HAND-RAKED INTO THE SOIL.

MULCHING

- MULCHING SHOULD BE COMPLETED AS SOON AS PRACTICABLE AFTER SEEDING, HOWEVER PLANTED AREAS MUST BE MULCHED NO LATER THAN 14 DAYS AFTER PLANTING.
- MULCHING REQUIREMENTS INCLUDE:
 - MAY BE EITHER CERTIFIED WEED-FREE AND CERTIFIED SEED-FREE MULCH MAY BE USED. MULCH MUST BE APPLIED AT 2 TONNES/ACRE AND APPROXIMATELY 2 INCHES THICK. CRIMPING AND/OR TACKIFIER CRIMPING MUST NOT BE USED ON SLOPES GREATER THAN 3:1 AND MULCH FIBERS MUST BE TUCKED INTO THE SOIL TO A DEPTH OF 1 TO 2 INCHES.
 - TACKIFIER MUST BE USED IN PLACE OF CRIMPING ON SLOPES STEEPER THAN 3:1.
- HYDRALIC MULCHING IS AN OPTION ON STEEP SLOPES OR WHERE ACCESS IS LIMITED.
 - IF HYDRO-SEEDING IS USED, MULCHING MUST BE APPLIED AS A SEPARATE SECOND OPERATION.
 - WOOD CELLULOSE FIBERS MIXED WITH WATER MUST BE APPLIED AT A RATE OF 2,000 TO 2,500 POUNDS/ACRE, AND TACKIFIER MUST BE APPLIED AT A RATE OF 100 POUNDS/ACRE.
 - EROSION CONTROL BLANKET
 - EROSION CONTROL BLANKET MAY BE USED IN PLACE OF TRADITIONAL MULCHING METHODS.

SM

STORMWATER WATERPROOFING

SEEDING & MULCHING

Figure SF-2
Silt Fence
Construction Detail and Maintenance Requirements

SILT FENCE NOTES

INSTALLATION REQUIREMENTS

- SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPUN TOGETHER ONLY AT SUPPORT POSTS AND SECURELY SEALED.
- METAL POSTS SHALL BE "SLOTTED TIE" OR "J" TYPE WITH MINIMUM HEIGHT OF 1.5 METERS FOR LARGE FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
- THE FILLER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG OR HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING DECK.
- WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSIDE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG, 16 GAGES OR HOOK BINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3" ABOVE THE ORIGINAL GROUND SURFACE.

MAINTENANCE REQUIREMENTS

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

6. ALONG THE SIDE OF FILL, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR ROOT 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 UNLESS APPROVED BY THE CITY.

8. SEDIMENT TRACKED INTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING EXCEPT FOR A SLIGHT OVERLAY.

9. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.

10. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.

11. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO CITY CRANES, BUT SHOULD NOT HAVE EXCESSIVELY STEEP SLOPES.

12. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.

13. STONES ARE TO BE REPLACED PERIODICALLY AND WHEN REPAIR IS NECESSARY.

14. SEDIMENT TRACKED INTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING EXCEPT FOR A SLIGHT OVERLAY.

15. BAGS ARE TO BE MAINTAINED TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.

16. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

Figure SF-2
Silt Fence
Construction Detail and Maintenance Requirements

VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS

- ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
- CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APPROX. TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAY.
- AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
- CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
- CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO CITY CRANES, BUT SHOULD NOT HAVE EXCESSIVELY STEEP SLOPES.

MAINTENANCE REQUIREMENTS

- REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
- STONES ARE TO BE REPLACED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
- SEDIMENT TRACKED INTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING EXCEPT FOR A SLIGHT OVERLAY.
- STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
- OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

Figure Vt-2
Vehicle Tracking
Application Examples

BLOCK AND GRAVEL BAG CURB INLET PROTECTION NOTES

INSTALLATION REQUIREMENTS

- INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
- CONCRETE BLOCKS ARE TO BE LAID AROUND THE INLET IN A SINGLE ROW ON BOTH SIDES, RESULTING ONE ANOTHER WITH THE OPEN ENDS OF THE BLOCK FACING OUTWARDS.
- GRAVEL BAGS ARE TO BE PLACED AROUND THE CONCRETE BLOCKS CLOSELY ADJUTING ONE ANOTHER SO THERE ARE NO GAPS.
- GRAVEL BAGS ARE TO BE PLACED AROUND THE CONCRETE BLOCKS CLOSELY ADJUTING ONE ANOTHER SO THERE ARE NO GAPS. BAGS ARE TO BE MADE OF 1/2" INCH WIRE MESH USED WITH GRAVEL ONLY OR GEOTEXTILE.

MAINTENANCE REQUIREMENTS

- CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL AT LEAST DAILY DURING PROLONGED RAINFALL AND WEEKLY DURING PERIODS OF NO RAINFALL.
- DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.
- SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DESIGN DEPTH OF THE TRAP.
- INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS OBTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.
- WHERE BARS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SHALL BE REPLACED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLAY SURFACE BECOMES EXPOSED.

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

Stabilized Staging Area (SSA) SM-6

SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION OF STAGING AREA.
 - CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
- STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERLAPPING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
- STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
- THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SPEC #57A MASH #1 COURSE AGGREGATE OR 3/4" MASH #2.
- ADDITIONAL PERIMETER DETAILED VTC-1 TO VTC-3.
- ADDITIONAL PERIMETER DETAILED VTC-1 TO VTC-3.

STABILIZED STAGING AREA MAINTENANCE NOTES

- INSPECT BARRIERS EACH WORKDAY AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BARRIERS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BARRIERS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.
- SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DESIGN DEPTH OF THE TRAP.
- INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS OBTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.
- WHERE BARS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SHALL BE REPLACED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLAY SURFACE BECOMES EXPOSED.

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SM-6 Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

- STABILIZED STAGING AREA SHALL BE DEMOLISHED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
- THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDING AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO IMPACTS WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE IS USED.

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

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

SSA-4

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November 2010

Concrete Washout Area (CWA) MM-1

CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - CWA INSTALLATION LOCATION.
- DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 100' OF ANY WELLS OR DRINKING WATER SOURCES. IF THE CWA IS LOCATED WITHIN THIS INFERRABLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (18 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT CISTERNS OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
- THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
- SOILS SHALL BE REPAID 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 TRUCKS.
- EXCAVATED MATERIAL FOR PERIMETER BEAM CONSTRUCTION.

Figure SB-1
Sediment Basin
Construction Detail and Maintenance Requirements

SEDIMENT BASIN NOTES

INSTALLATION REQUIREMENTS

- SEDIMENT BASINS SHALL BE INSTALLED BEFORE ANY CLEARING AND/OR GRADING IS UNDERTAKEN.
- THE AREA UNDER WHICH THE EMBANKMENT IS TO BE INSTALLED SHALL BE CLEARLY GROUND AND STRIPPED OF ALL VEGETATION AND ROOT MAT.
- THE OUTLET OF THE BASIN SHALL BE DESIGNED TO DRAIN THE VOLUME IN 40 HOURS.
- THE OUTLET IS TO BE LOCATED AT THE FURTHEST DISTANCE FROM THE INLET OF THE BASIN. BARRIERS MAY BE NEEDED TO INCREASE THE FLOW LENGTH AND SETTLING TIME.
- EMBANKMENT MATERIAL SHALL CONSIST OF SOIL WITH A MINIMUM OF 10% PASSING A #20 SIEVE. EXCAVATED SOIL CAN BE USED IF IT MEETS THIS REQUIREMENT.
- EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND WITH 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.
- WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A FENCE.

MAINTENANCE REQUIREMENTS

- CONTRACTOR SHALL INSPECT SEDIMENT BASINS AFTER EACH RAINFALL AT LEAST DAILY DURING PROLONGED RAINFALL AND WEEKLY DURING PERIODS OF NO RAINFALL.
- SEDIMENT BASINS SHALL BE CLEANED OUT BEFORE SEDIMENT HAS FILLED HALF THE VOLUME OF THE BASIN.
- SEDIMENT BASINS SHALL REMAIN OPERATIONAL AND PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED WITH ADEQUATE VEGETATIVE COVER AND/OR OTHER PERMANENT STRUCTURE AS APPROVED BY THE CITY.

Figure SB-1
Sediment Basin
Construction Detail and Maintenance Requirements

Outlet Sizing

TABLE SB-1

Required Area per Row (ft ²)	Depth at Outlet (ft)					
	1.0	1.5	2.0	2.5	3.0	4.0
2	1.04	0.71	0.50	0.38	0.26	0.17
1	1.72	1.20	0.85	0.63	0.42	0.27
0.5	4.01	2.81	2.00	1.48	1.01	0.63
0.4	3.01	2.14	1.52	1.11	0.74	0.48
0.3	2.10	1.48	1.07	0.78	0.53	0.34
0.2	1.40	1.00	0.71	0.51	0.35	0.22
0.1	0.75	0.50	0.36	0.26	0.18	0.11
0.08	0.48	0.32	0.23	0.17	0.12	0.08
0.04	0.24	0.16	0.11	0.08	0.05	0.04
0.02	0.12	0.08	0.06	0.04	0.03	0.02
0.01	0.06	0.04	0.03	0.02	0.01	0.01

TABLE SB-2

Hole Diameter (in)	Hole Diameter (ft)	Area per Row (ft ²)		
		n=1	n=2	n=3
1/4	0.006	0.05	0.10	0.15
3/8	0.011	0.08	0.15	0.23
1/2	0.016	0.11	0.22	0.33
5/8	0.020	0.15	0.30	0.45
3/4	0.024	0.19	0.38	0.57
7/8	0.029	0.23	0.46	0.69
1	0.033	0.27	0.54	0.81
1 1/8	0.042	0.34	0.67	1.00
1 1/4	0.050	0.40	0.80	1.20
1 3/8	0.058	0.46	0.92	1.38
1 1/2	0.066	0.52	1.04	1.56
1 5/8	0.074	0.58	1.16	1.74
1 3/4	0.082	0.64	1.28	1.92
1 7/8	0.090	0.70	1.40	2.10
2	0.098	0.76	1.52	2.28

Minimum sheet plate thickness: 1/4" for 1/2" holes, 3/16" for 3/8" holes.

Figure SB-2
Outlet Sizing
Application Techniques and Maintenance Requirements

STOCKPILE PROTECTION PLAN

STOCKPILE PROTECTION ELEVATION

INSTALLATION NOTES

- INSTALL PERIMETER CONTROL AROUND STOCKPILE ON CONSTRUCTION SITE.
- PERIMETER CONTROL SHALL BE INSTALLED TO SITE CONDITIONS AND INSTALLED ACCORDING TO THE RELEVANT DETAIL.
- FOR STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION, WHERE OTHER DOWNDRAGMENT CONTROLS INCLUDING PERIMETER CONTROL ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

MAINTENANCE NOTES

- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- IF PERIMETER CONTROLS MUST BE MOVED TO ACCESS STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORK DAY.
- ACCUMULATED SEDIMENT MUST BE REMOVED ACCORDING TO PERIMETER CONTROL DETAIL.

SP

STORMWATER WATERPROOFING

STOCKPILE PROTECTION

CHECK DAM ELEVATION VIEW

SECTION A-A'

SECTION B-B'

PROFILE

INSTALLATION NOTES

- CHECK DAMS SHOULD BE INSTALLED BEFORE UPSTREAM LAND DISTURBING ACTIVITIES.
- BRIDGE PAD SHOULD BE TRENCHED INTO GROUND BY A MINIMUM OF 6".

MAINTENANCE NOTES

- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE HEIGHT REACHES 3/4 THE HEIGHT OF THE CHECK DAM CREST.
- CHECK DAMS MUST REMAIN UNTIL THE UPSTREAM DISTURBANCE AREA IS STABILIZED.
- PERMANENTLY STABILIZED AREA AFTER CHECK DAMS ARE REMOVED IF REMOVAL IS REQUIRED.

CD

STORMWATER WATERPROOFING

CHECK DAM

SURFACE ROUGHENING

INSTALLATION NOTES

- SURFACE ROUGHENING MAY BE USED IN AREAS FLATTER THAN 3:1. INSTALL FURROWS ALONG CONTOUR TO INTERCEPT SHEET FLOW.
- SURFACE ROUGHENING MAY BE ACCOMPLISHED BY FURROWING, SCARIFYING, RIPPER OR DISKING THE SOIL.
- FURROWS MUST BE A MINIMUM OF 4" IN DEPTH.
- SURFACE ROUGHENING SHALL NOT BE USED ON EXTREMELY SANDY OR ROCKY SOILS.

MAINTENANCE NOTES

- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- VEHICLE AND EQUIPMENT SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.

SR

STORMWATER WATERPROOFING

SURFACE ROUGHENING

TEMPORARY SEDIMENT BASIN DESIGN DATA - POND A

BASIN	DRAINAGE AREA (AC)	REQUIRED VOLUME (AF)	D (FT)	HD* (IN)	COLUMNS	SPILLWAY WIDTH
A	6.4	0.26	3.0	3/4"	1	5'

D = DEPTH AT OUTLET
HD = HOLE DIAMETER
(PER FIGURE SB-2)
* PERFORATIONS AT 4" VERTICAL SPACING

COLORADO REGISTERED PROFESSIONAL ENGINEER
4/11/24
29891

EROSION CONTROL DETAILS

HORZ. SCALE: N/A DRAWN: PV
VERT. SCALE: N/A DESIGNED: JPS
SURVEYED: ALESSI CHECKED: JPS
CREATED: 12/06/23 LAST MODIFIED: 02/27/24
PROJECT NO: 112301 MODIFIED BY: PV
SHEET: C3.2

JPS ENGINEERING

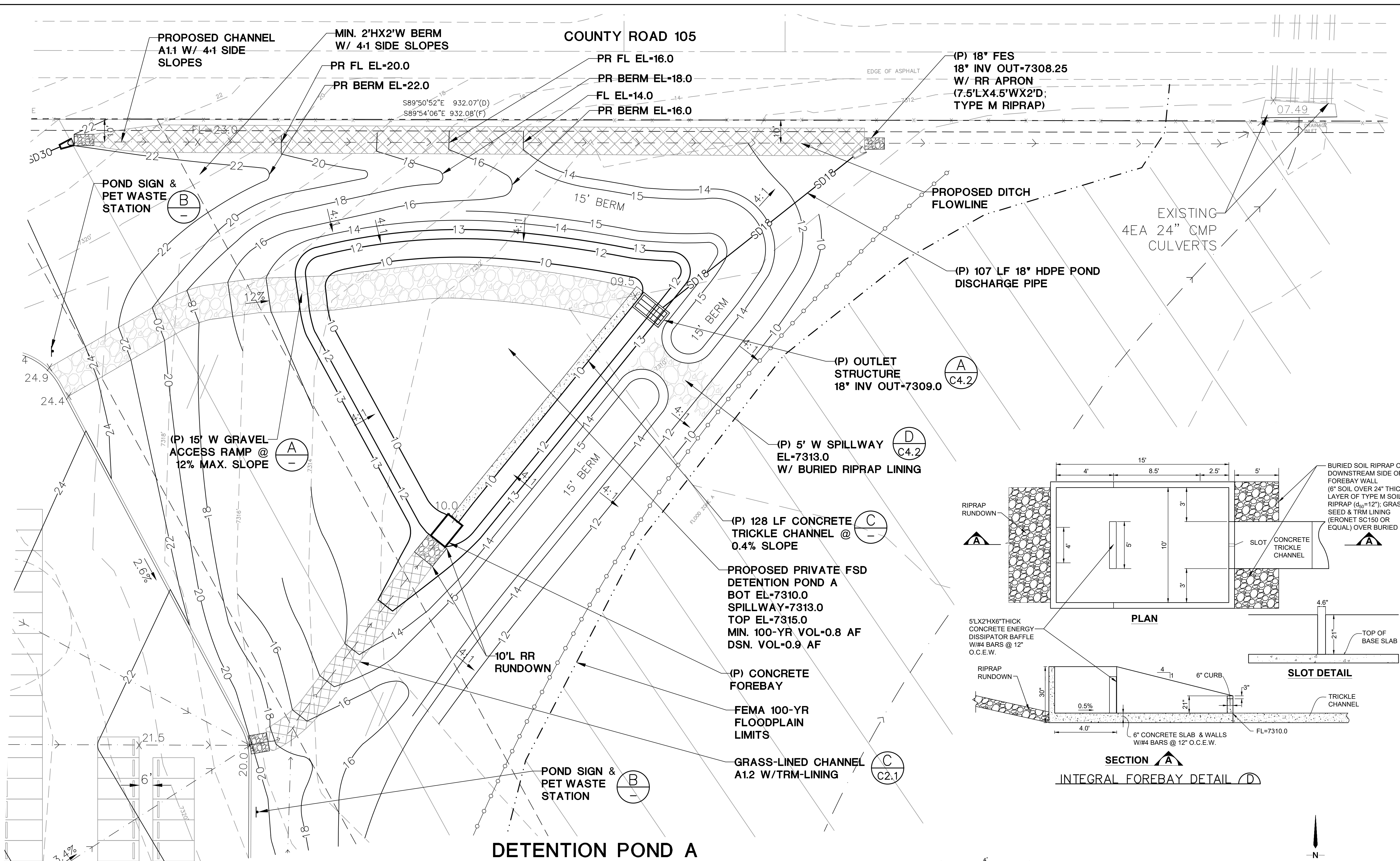
19 E. Wilomette Ave.
Colorado Springs, CO 80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpseng.com

CALL, UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COLORADO KIDS RANCH
18065 SADDLEWOOD ROAD, MONUMENT, CO 80132

NO. BY DATE REVISION



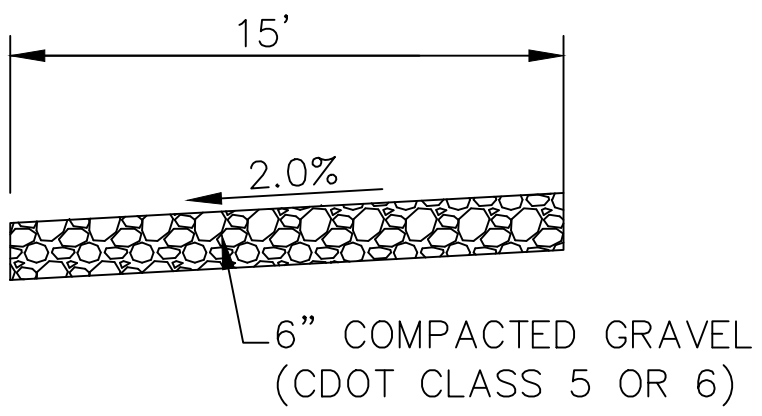
DETENTION POND A

POND SIGNAGE NOTE:

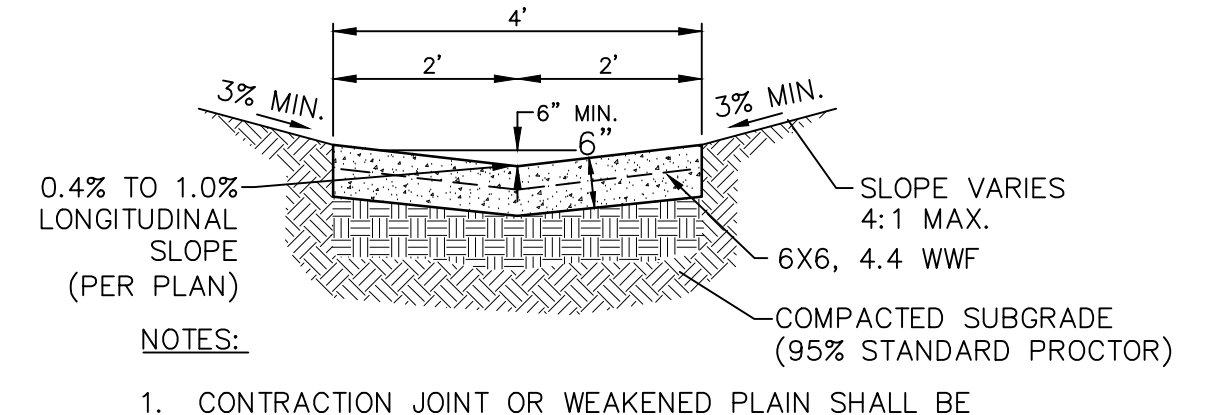
TWO SIGNS, EACH WITH A MINIMUM AREA OF 3 SQUARE FEET, SHALL BE PROVIDED AROUND THE PERIMETER OF ALL DETENTION FACILITIES. THE SIGNS SHALL BE FABRICATED OF DURABLE MATERIALS, SUCH AS METAL OR PLASTIC, USING RED LETTERING ON A WHITE BACKGROUND WITH THE FOLLOWING MESSAGE:

WARNING
THIS AREA IS A STORMWATER FACILITY
AND IS SUBJECT TO PERIODIC FLOODING

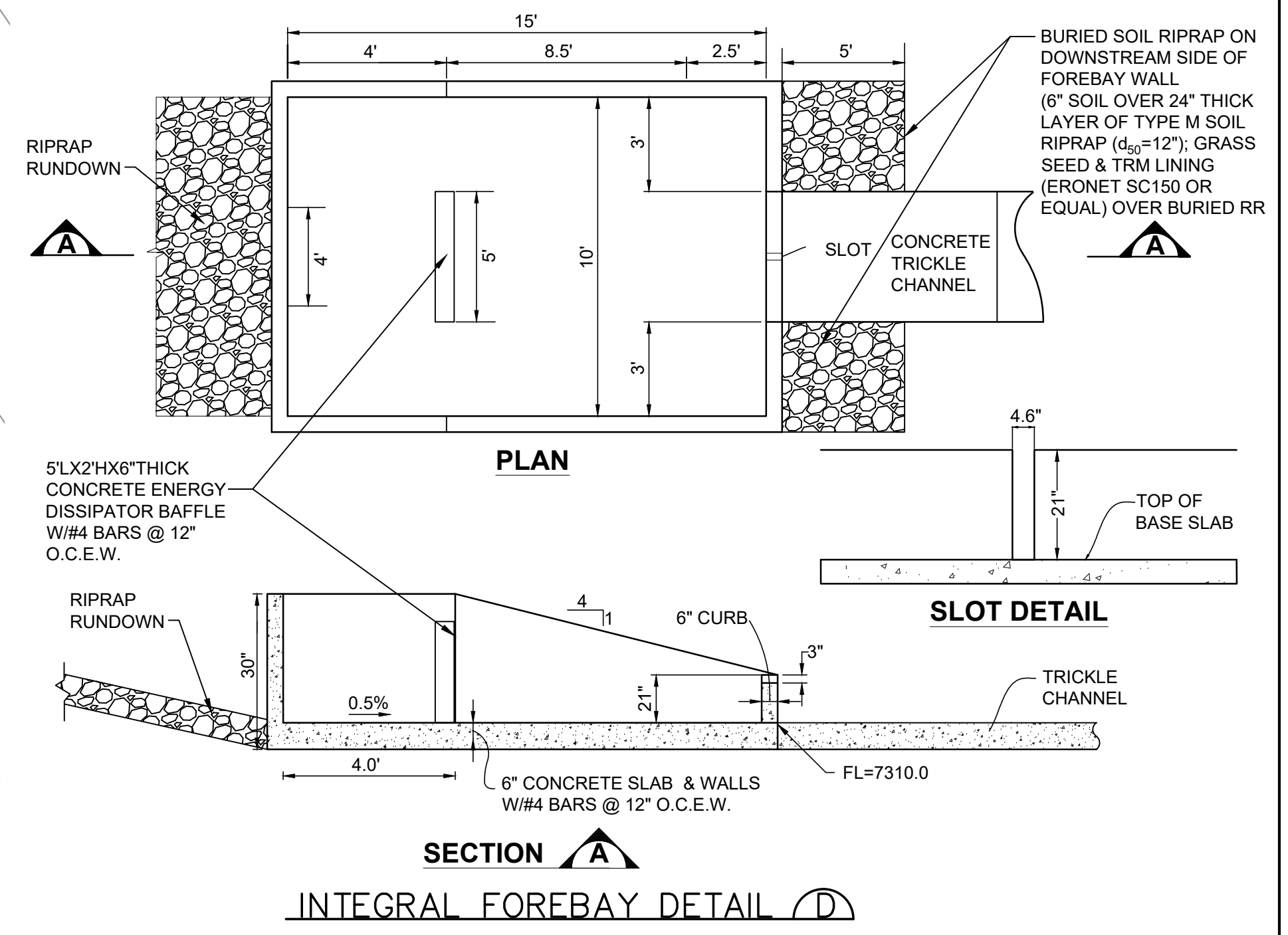
SIGN DETAIL (B)
NTS



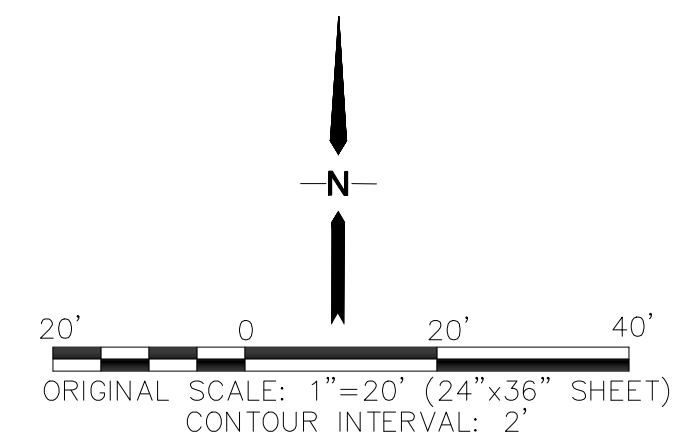
ACCESS RAMP (A)
NOT TO SCALE



CONCRETE TRICKLE CHANNEL (C)
SCALE: NTS

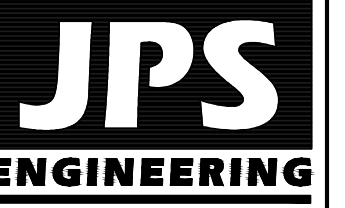


SECTION A
INTEGRAL FOREBAY DETAIL (D)



POND CONTOUR AREAS	
CONTOUR	AREA(SF.)
7310	9174
7312	12763
7313	15193

BENCHMARK:
REBAR WITH YELLOW CAP AT NW PROPERTY CORNER, EL=7338.85' (DATUM: NAVD 88)



19 E. Willamette Ave.
Colorado Springs, CO 80903
PH: 719-477-9429
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www.jpsegr.com



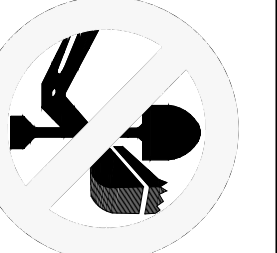
CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COLORADO KIDS RANCH
18065 SADDLEWOOD ROAD, MONUMENT, CO 80132

DETENTION BASIN PLAN AND DETAILS

HORZ. SCALE: 1"=20'	DRAWN: PV
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: ALESSI	CHECKED: JPS
CREATED: 12/06/23	LAST MODIFIED: 02/28/24
PROJECT NO: 112301	MODIFIED BY: PV
SHEET:	

C4.1

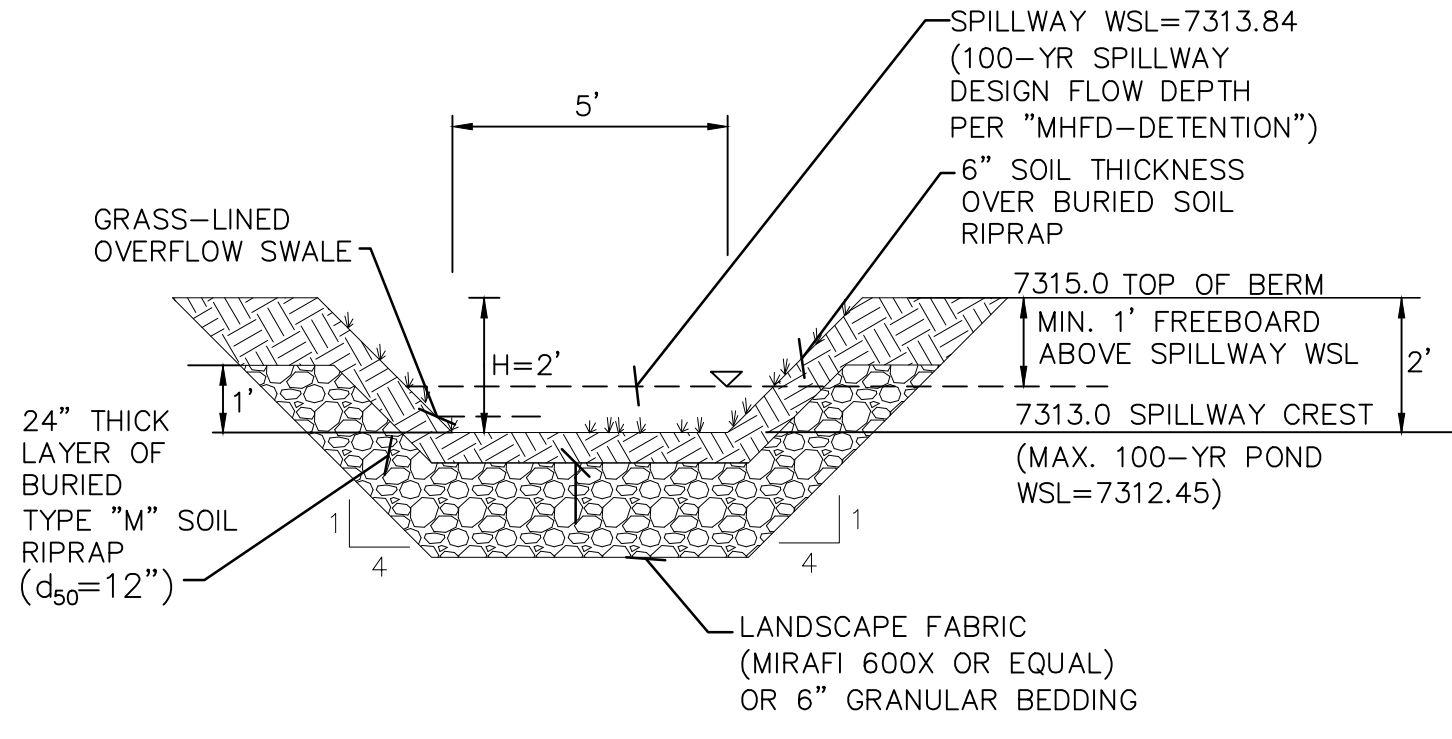


CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 7-BUSINESS DAYS IN ADVANCE
BEFORE THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

No.	REVISION	BY	DATE

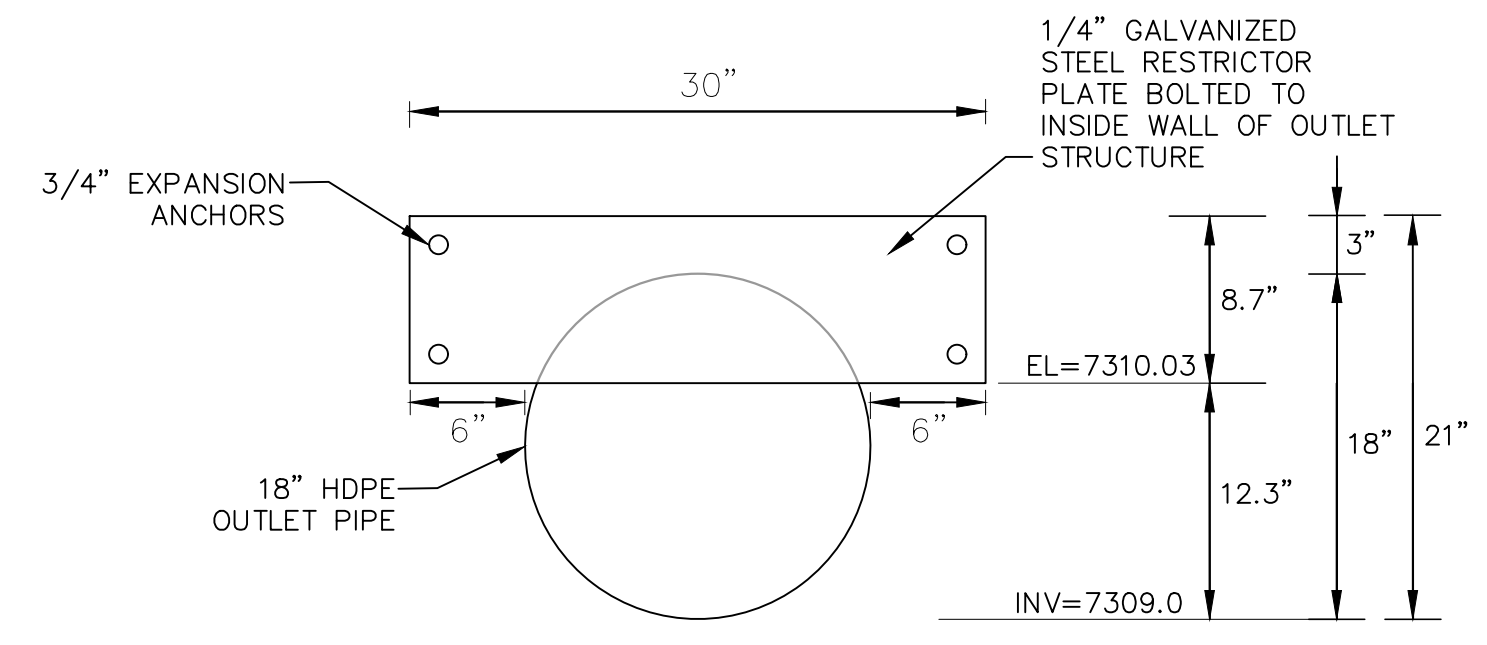
**DETENTION BASIN
DETAILS**

**COLORADO KIDS RANCH
18065 SADDLEWOOD ROAD, MONUMENT, CO 80132**

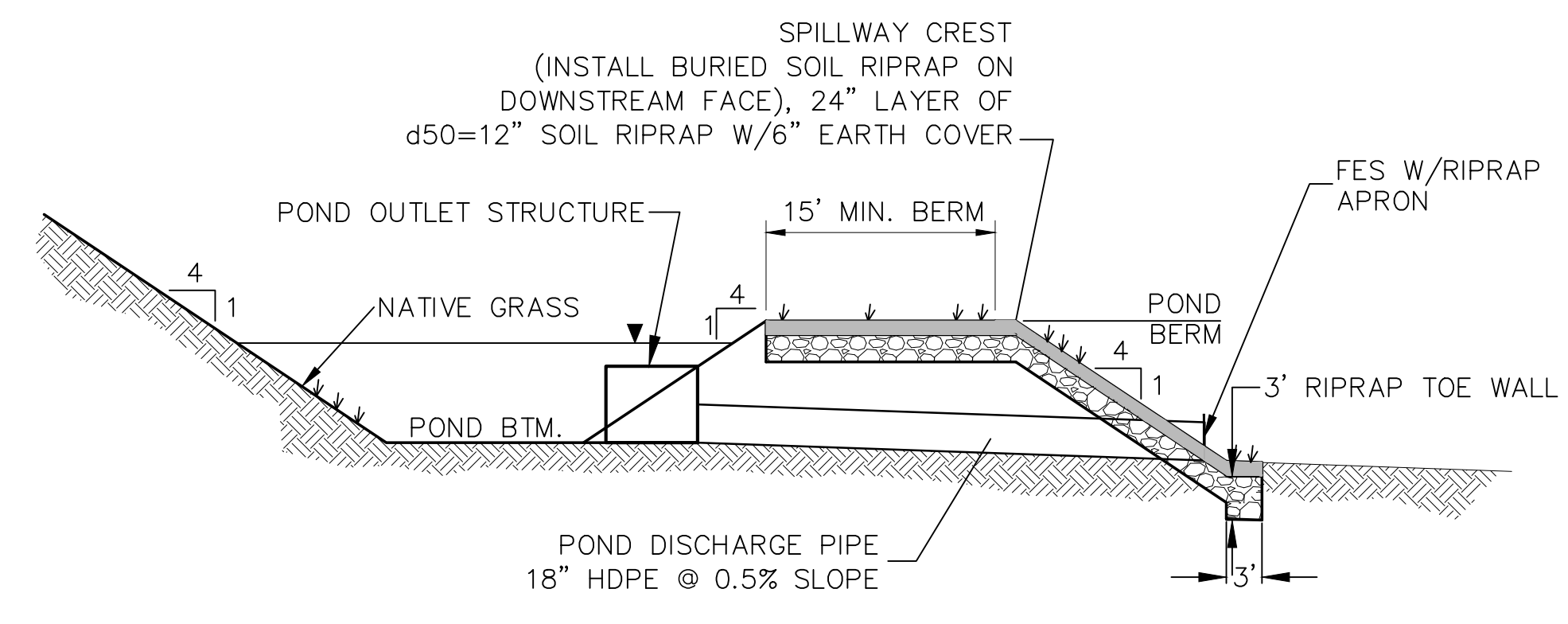


- RIPRAP NOTES:
- RIPRAP SHALL HAVE A MINIMUM SPECIFIC GRAVITY OF 2.6.
 - RIPRAP GRADATION SHALL CONFORM TO TABLE 10-7 AND 10-8 OF THE EPC DRAINAGE CRITERIA MANUAL.
 - CONTRACTOR SHALL SUBMIT RIPRAP GRADATION TO ENGINEER FOR APPROVAL PRIOR TO DELIVERY.

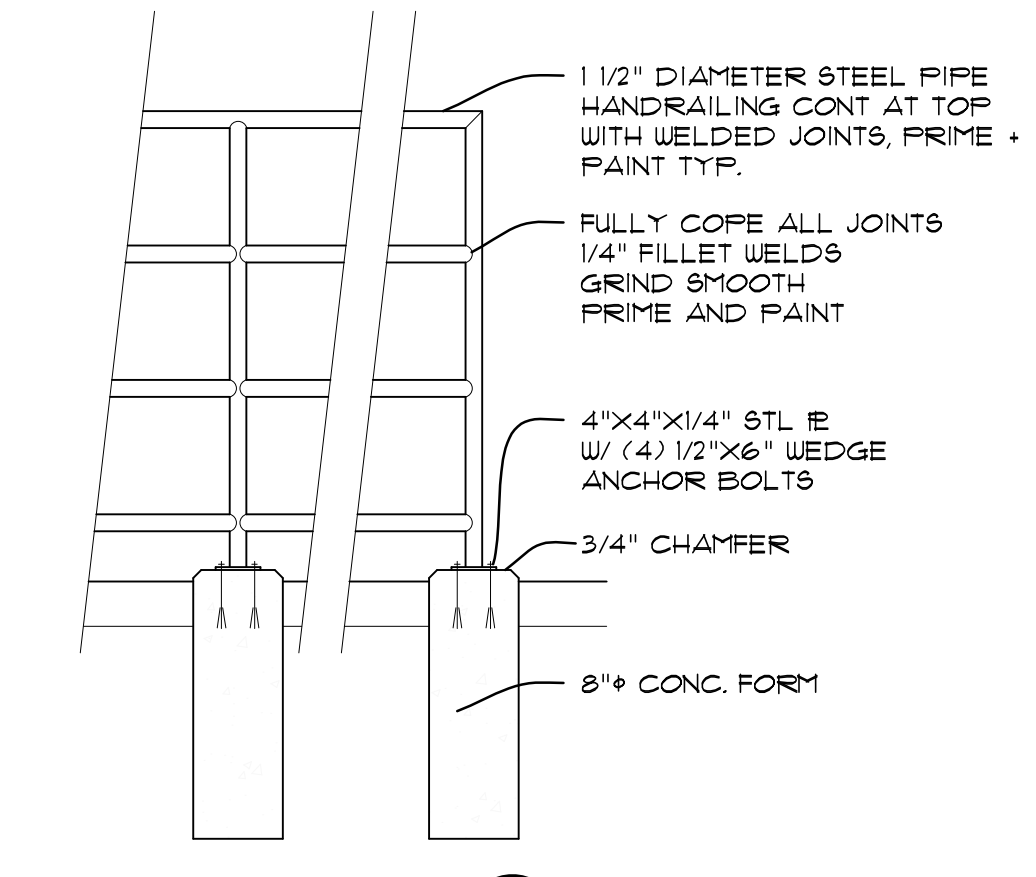
SPILLWAY DETAIL E
SCALE: NTS



RESTRICTOR PLATE DETAIL C
SCALE: NTS

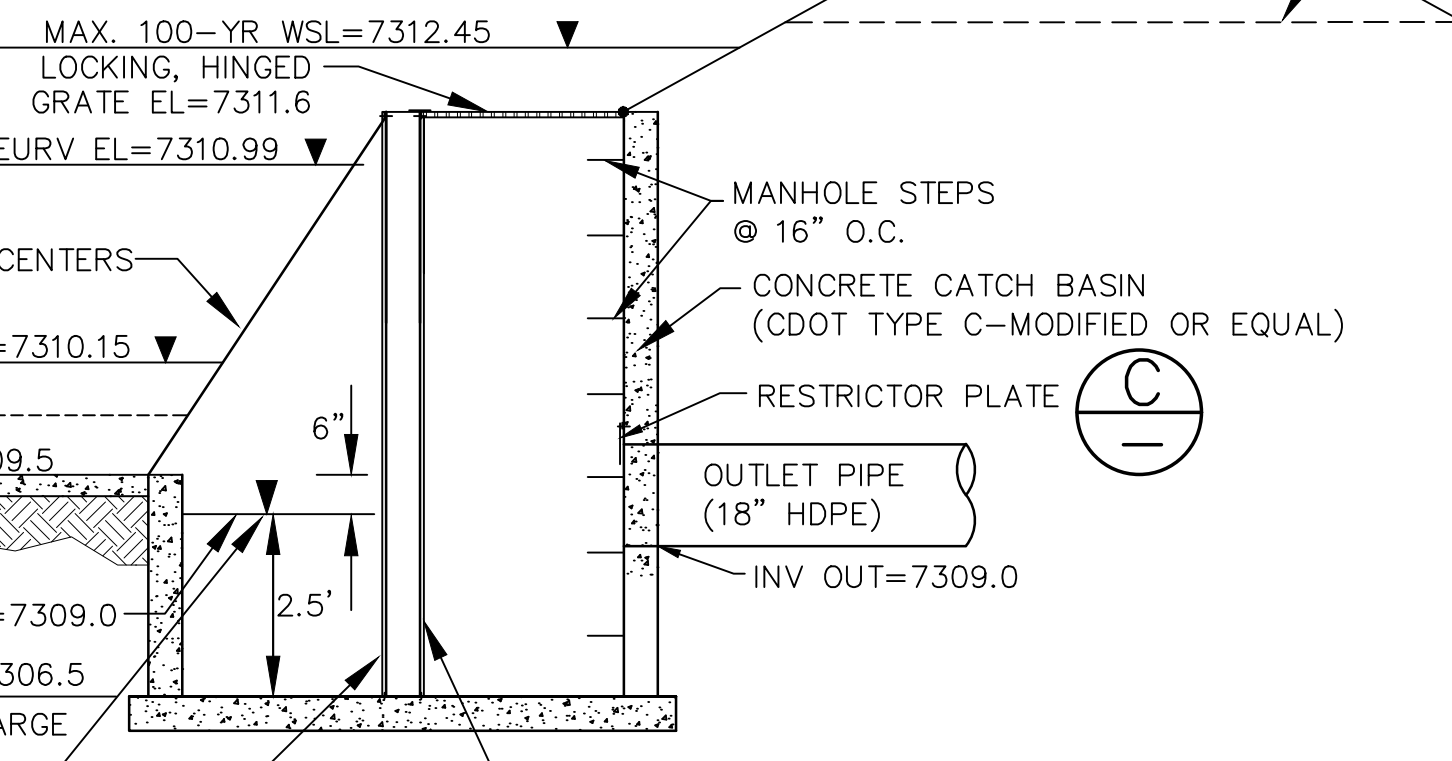
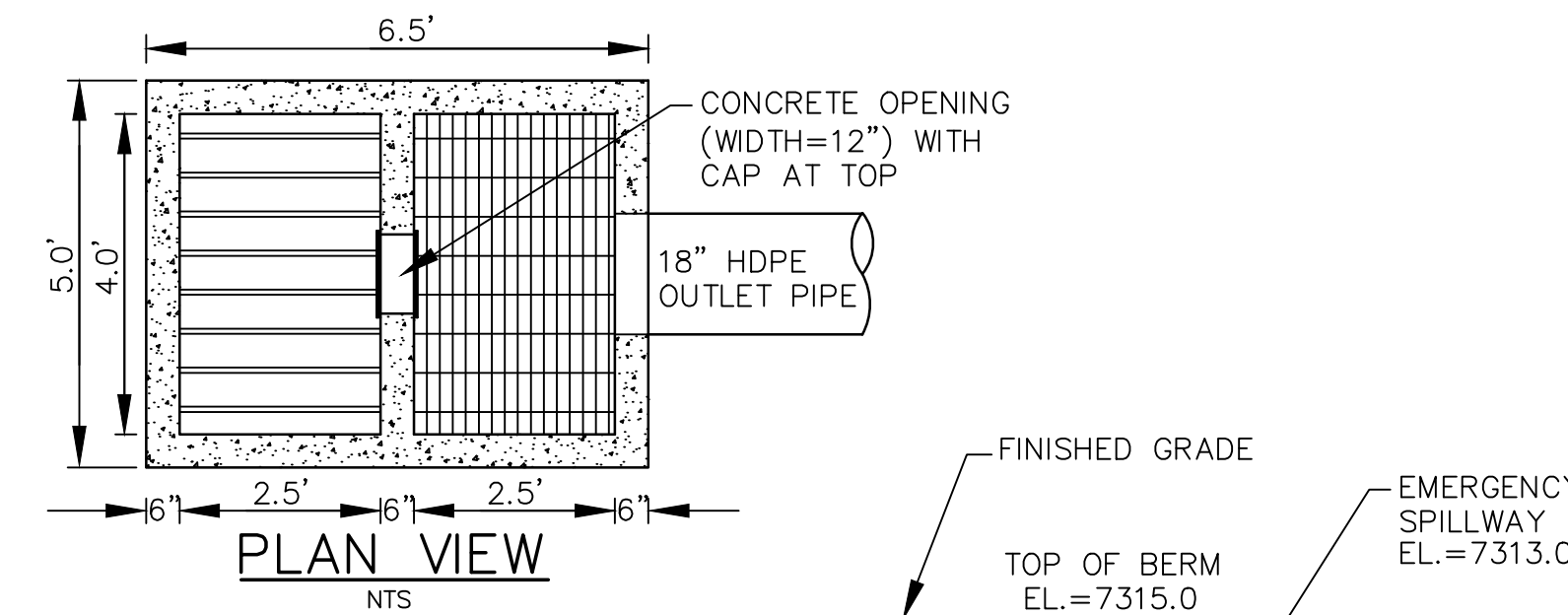


TYPICAL SECTION DETENTION POND A D
SCALE: NTS



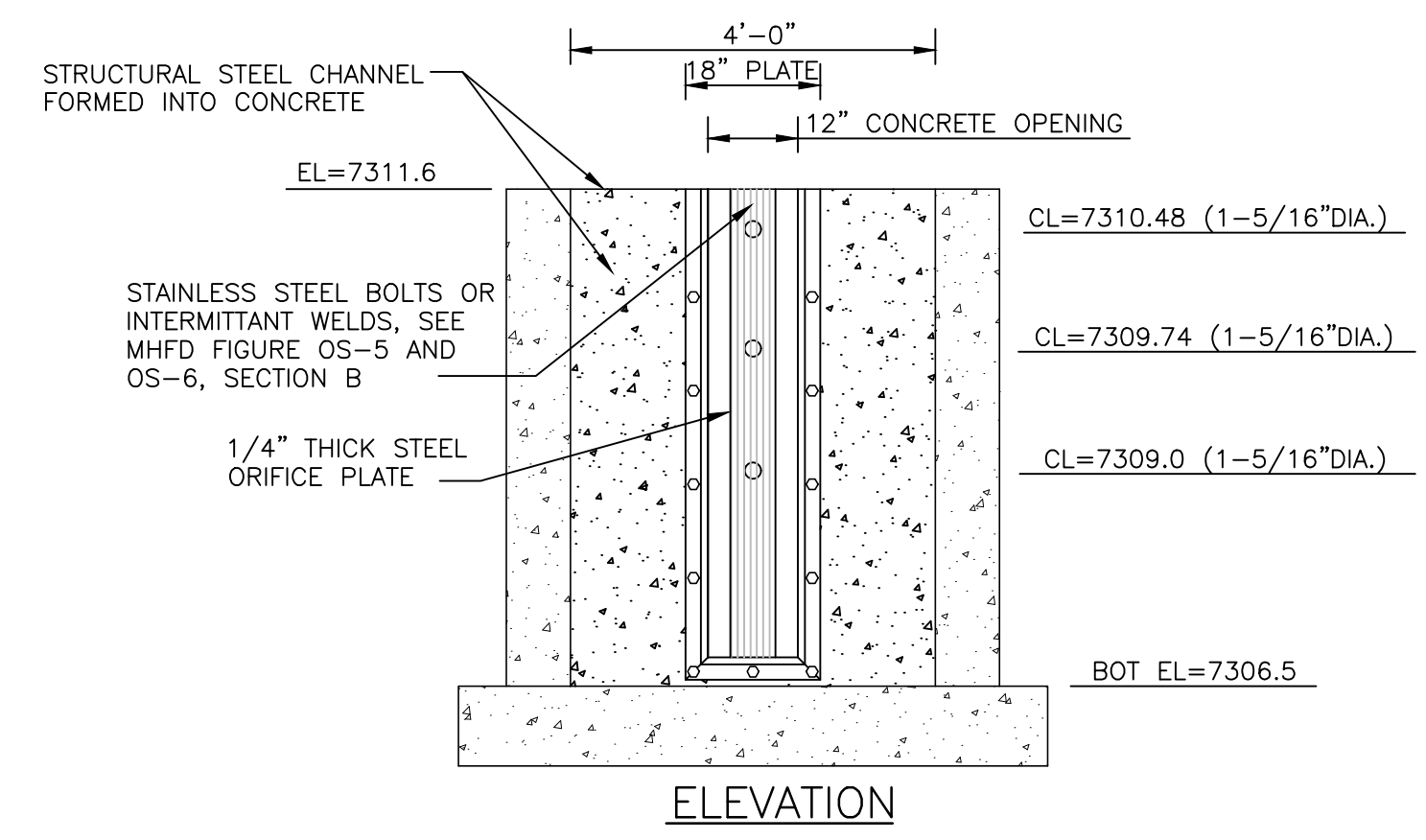
HANDRAIL DETAIL F
SCALE: NTS

NOTE:
PROVIDE HANDRAIL ALONG ALL RETAINING
WALLS & DRAINAGE STRUCTURES WITH OVER
30" HEIGHT ABOVE GRADE



**SECTION
DETENTION POND OUTLET STRUCTURE DETAIL A**
SCALE: NTS

VERTICAL TRASH SCREEN: ALUMINUM
AMICO-KLEMP SR SERIES OR EQUAL
W/CROSS RODS 2" O.C.; ATTACH BY
INTERMITTENT WELDS TO C8x18.75 AMERICAN
STEEL CHANNEL FORMED INTO CONCRETE
BOTTOM AND SIDES OF OPENING IN WALL



ORIFICE PLATE NOTES:

- ORIFICE PLATES SHALL BE STAINLESS STEEL OR GALVANIZED STEEL.
- PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
- BOLT PLATE TO CONCRETE 12" MAX. ON CENTER.

EURV AND WQCV TRASH RACKS:

- WELL-SCREEN TRASH RACKS (FOR CIRCULAR ORIFICES) SHALL BE STAINLESS STEEL OR GALVANIZED STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.

OVERFLOW TRASH RACKS:

- ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
- 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.
- TRASH RACKS SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.

**ORIFICE PLATE AND TRASH RACK
DETAILS AND NOTES B**
NTS



HORIZ. SCALE:	N/A	DRAWN:	PV
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	ALESSI	CHECKED:	JPS
CREATED:	12/06/23	LAST MODIFIED:	04/11/24
PROJECT NO.:	112301	MODIFIED BY:	PV