

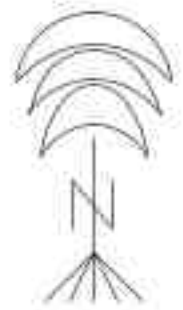
STAR POINT CONDOMINIUMS RETAINING WALL REPAIR PROJECT

CONSTRUCTION PLANS FOR PROPOSED RETAINING WALL RECONSTRUCTION

LOCATED IN THE NE 1/4 OF NE 1/4 OF SECTION 28 TOWNSHIP 2 SOUTH, RANGE 68 WEST
OF THE 6TH PRINCIPAL MERIDIAN
CITY OF THORNTON, ADAMS COUNTY, COLORADO, USA



1 VICINITY MAP
SCALE : 1" = 1/2 MILE (COURTESY MICROSOFT BING)



BIDDING SET NOT FOR CONSTRUCTION

LINE TYPE LEGEND

EXISTING	PROPOSED	
---	---	RIGHT-OF-WAY
---	---	LOT LINE
---	---	EASEMENT
---	---	MINOR CONTOUR (1' INTERVAL)
---	---	MAJOR CONTOUR (5' INTERVAL)
---	---	EDGE OF ASPHALT
---	---	EDGE OF CONCRETE
---	---	EDGE OF GRAVEL
---	---	CURB AND GUTTER (SPILL/CATCH)
---	---	EDGE OF BUILDING
---	---	DITCH FLOWLINE
---	---	PAVEMENT FLOWLINE
---	---	WOOD FENCE
---	---	HAND RAIL
---	---	OVERHEAD UTILITY
---	---	WATER LINE
---	---	WATER SERVICE
---	---	SANITARY SEWER
---	---	SANITARY SEWER SERVICE
---	---	STORM SEWER
---	---	SIDEWALK TRENCH DRAIN
---	---	IRRIGATION LINE
---	---	GASLINE
---	---	UNDERGROUND ELECTRIC
---	---	FIBER OPTIC / "F" TELECOMM
---	---	QUALITY LEVEL D "OLD" UTILITY DENOTED
---	---	TOP OF BERM / TOE OF BERM
---	---	SAWCUT
---	---	LINEAR DEMO / REMOVAL

SYMBOL LEGEND

EX.	PROP.	
▲	▲	PROJECT BENCHMARK
△	△	CONTROL POINT
▽	▽	SPOT ELEVATION
○	○	CONIFEROUS TREE
○	○	DECIDUOUS TREE
+	+	LIGHT POLE
□	□	ELECTRIC PEDESTAL
□	□	IRRIGATION VALVE BOX
□	□	GAS METER
□	□	FIRE HYDRANT
□	□	WATER METER
□	□	WATER VALVE
□	□	SANITARY MANHOLE
□	□	CLEANDUT
□	□	DOWNSPOUT
□	□	SIGN
□	□	AREA INLET
×	×	OBJECT DEMO / REMOVAL

HATCH LEGEND

PROP.	
▨	CONCRETE SIDEWALK
▨	REMOVAL LIMITS
▨	BLOCK RETAINING WALL

LABEL LEGEND

NOTE	PROPOSED CALL-OUT, REQUIRED FOR PROJECT (COMPLETED BY CONTRACTOR)
NOTE	PROPOSED REFERENCE, REQUIRED FOR PROJECT (CONTRACTOR TO COORDINATE)
NOTE	PROPOSED LABEL
NOTE	EXISTING LABEL

CONTACT LIST

OWNER

STAR POINT CONDOMINIUM ASSOCIATION, INC.
8701 SOUTH HURON STREET
THORNTON, COLORADO 80260

CLIENT/OWNER'S REPRESENTATIVE

ACCUINC
ATTN: YVONNE GARCIA
(303)733-1121
YGARCIA@ACCUINC.COM

CIVIL ENGINEER

KNOTT LABORATORY, LLC
ATTN: ZACHARY R. HENRICH, P.E.
7185 S. TUCSON WAY
CENTENNIAL, CO 80112
(720) 610-4058
ZHENRICH@KNOTTLAB.COM

JURISDICTION

CITY OF THORNTON
INFRASTRUCTURE DEPARTMENT
12450 WASHINGTON STREET
THORNTON, CO 80241
(720) 977-6234
INFRASTRUCTUREDEPT@THORNTONCO.GOV

BUILDING DEPARTMENT

ADAMS COUNTY PLANNING & DEVELOPMENT DEPARTMENT
4430 S ADAMS COUNTY PARKWAY
BRIGHTON, CO 80601
(720) 523-6800

UTILITIES

COLORADO 811
16361 TABLE MOUNTAIN PARKWAY
GOLDEN, CO 80403
(800) 922-1987
ADMINISTRATOR@CO811.ORG
*CONTRACTOR TO CALL 811 TO VERIFY ALL EXISTING UTILITY PROVIDERS WITH IN THE PROJECT AREA.

ABBREVIATIONS

ABC = AGGREGATE BASE COURSE
APPROX = APPROXIMATE
BEG = BEGINNING
BLDG = BUILDING
BOS = BOTTOM OF STEP
BW = BOTTOM OF WALL
C&G = CURB AND GUTTER
CDOT = COLORADO DEPARTMENT OF TRANSPORTATION
CL = CENTERLINE
CRL = CLEARANCE
CMP = CORRUGATED METAL PIPE
CONC = CONCRETE
CONST = CONSTRUCT
CONT = CONTINUOUS
DEMO = DEMOLITION
DIA = DIAMETER
(E) = EXISTING
EA = EDGE OF ASPHALT
EC = EDGE OF CONCRETE
ECON = EXISTING CONDITIONS
EG = EXISTING GROUND
ELEV = ELEVATION
END = ENDING
EOG = EDGE OF GRAVEL
ESMT = EASEMENT
EW = EACH WAY
(F) = FINAL
FFE = FINISHED FLOOR ELEVATION
FG = FINISHED GRADE
FH = FIRE HYDRANT
FL = FLOW LINE
FND = FOUNDATION
GRAD = GRADING
HBP = HOT BITUMINOUS PAVEMENT
HDPE = HIGH DENSITY POLYETHYLENE PIPE
HORIZ = HORIZONTAL
HP = HIGH POINT
(I) = INITIAL
INV = INVERT
LONG = LONGITUDINAL
LP = LOW POINT
LT = LEFT
LVC = LENGTH OF VERTICAL CURVE
MAX = MAXIMUM
ME = MA = MATCH EXISTING
MH = MANHOLE
MIN = MINIMUM
(N) = NEW; TO BE CONSTRUCTED
NO = NUMBER
NOM = NOMINAL
NTS = NOT TO SCALE
OC = ON CENTER
OS = OFFSET

(P) = PROP = PROPOSED
PED = PEDESTAL (UTILITY)
PERF = PERFORATED
PERM = PERMANENT
PC = POINT OF CURVATURE
PB = PRIORITY
PT = POINT OF TANGENCY
PVC = POLYVINYL CHLORIDE PIPE
PVI = POINT OF VERTICAL INTERSECTION
(R) = REMOVE
(R&R) = REMOVE AND REPLACE
R = RADIUS
RCP = REINFORCED CONCRETE PIPE
RE = REFER TO
REQ = REQUIRED
RET = RETAINING
ROW = RIGHT-OF-WAY
RT = RIGHT
SAN = SANITARY SEWER
SOG = SLAB-ON-GRADE
SF = SILT FENCE
STA = STATION
SW = SIDEWALK
TA = TOP OF ASPHALT
TBC = TOP BACK OF CURB
TC = TOP OF CONCRETE
(T) = TEMP = TEMPORARY
TOS = TOP OF FOUNDATION
TOS = TOP OF STEP
TP = TOP OF PAVEMENT
TW = TOP OF WALL
TYP = TYPICAL
UTIL = UTILITY
VERT = VERTICAL
VP = VALLEY PAN
W/ = WITH
W/O = WITHOUT
WTR = POTABLE WATER
X-SEC = CROSS SECTIONAL



BIDDING SET
NOT FOR
CONSTRUCTION

REV	BY	DATE	DESCRIPTION
1	SRD	06/26/2024	BID SET - FOR PRICING ONLY

COVER

STAR POINT CONDOMINIUMS
RETAINING WALL RECONSTRUCTION PROJECT
8701 SOUTH HURON STREET, THORNTON, COLORADO 80260
ADAMS COUNTY

KL JOB NUMBER: 22013 STAR POINT	FILE NAME: 22013 COVER-DETAILS.DWG
DRAWING SIZE: ARCH D (24" X 36")	SURVEY BY: KNOTT LABORATORY, LLC
SURVEY DATE: 06/04/2024	SCALE: 1" = 5'
DESIGNED BY: SRD	DRAWN BY: SRD
SUBMITTED BY: SRD	REVIEWED BY: ZRH
INITIAL DATE: 06/19/2024	© COPYRIGHT 2024 - KNOTT LABORATORY, LLC

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SCOPE OF WORK

THE GENERAL SUMMARY FOR THE SCOPE OF WORK IS AS FOLLOWS:

- 1. DEMO EXISTING TIMBER RETAINING WALLS, CONCRETE CURB & GUTTER, CHAIN LINK FENCES, AND CONCRETE SIDEWALK AS NECESSARY.
- 2. CONSTRUCT BLOCK RETAINING WALLS, CHAIN LINK FENCES, CONCRETE CURB CUTS, AND CONCRETE SIDEWALK AS NECESSARY.
- 3. REPLACE LANDSCAPING FEATURES TO RECLAIM ANY DISTURBED AREAS.

DESIGN CRITERIA & SPECIFICAITONS

MUNICIPAL CODE BASIS OF CIVIL DESIGN AND PROJECT SPECIFICATIONS:

- 1. THE "STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS, REVISED OCTOBER, 2012" WERE FOLLOWED BY KNOTT LABORATORY, LLC (THE ENGINEER) IN THE DESIGN OF THE COMPLETE PROJECT, DEPICTED ON THE PLANS, DETAILS, NOTES, ETC (THE CONSTRUCTION DOCUMENTS) WITH THE CITY OF THORNTON INFRASTRUCTURE DEPARTMENT (THE JURISDICTION) HAVING AUTHORITY. ALL MATERIALS AND WORKMANSHIP BY THE BUILDER OR GENERAL CONTRACTOR (THE CONTRACTOR), INCLUDING ALL SUB-CONTRACTORS, SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARDS, SPECIFICATIONS, BUILDING CODE REQUIREMENTS, AND THE CONSTRUCTION DOCUMENTS.
- 3. THE "2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC)" WITH AMENDMENTS BY THE ADAMS COUNTY BUILDING DEPARTMENT (THE JURISDICTION) HAVING AUTHORITY WERE FOLLOWED BY THE ENGINEER IN THE CONSTRUCTION DOCUMENTS AND WILL BE FOLLOWED BY THE CONTRACTOR FOR PROJECT COMPLETION.
- 4. THE "2019 EDITION OF THE M&S STANDARD PLANS" AND THE "2023 EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" BY THE COLORADO DEPARTMENT OF TRANSPORTATION WERE SUPPLEMENTED BY THE ENGINEER IN THE CONSTRUCTION DOCUMENTS AND WILL BE FOLLOWED BY THE CONTRACTOR FOR PROJECT COMPLETION.

CONSTRUCTION NOTES:

GENERAL PROJECT NOTES

- 1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE TO THE LOCAL JURISDICTIONAL REQUIREMENTS SPECIFIED ABOVE AS "MUNICIPAL CODE BASIS OF DESIGN". ANY ITEMS NOT COVERED BY THE LOCAL JURISDICTION SHALL CONFORM TO THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AS WELL AS, THE CDOT M&S STANDARD DETAILS, LATEST EDITION.
- 2. ALL OTHER REQUIREMENTS NOT COVERED BY CDOT SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, (IBC), LATEST EDITION.
- 3. PERIODIC CONSTRUCTION OBSERVATIONS BY THE ENGINEER DO NOT CONSTITUTE "SPECIAL INSPECTIONS" NOR DO THEY NECESSARILY MEET THE AUTHORITY HAVING JURISDICTIONAL REQUIREMENTS FOR INSPECTIONS, AND DO NOT IMPLY ACCEPTANCE OF WORK BY THE ENGINEER. THE ENGINEER RESERVES THE RIGHTS TO PERFORM RANDOM OBSERVATIONS FOR ONGOING CONSTRUCTION ACTIVITY FOR PURPOSES OF VERIFICATION AND DOCUMENTATION.
- 4. PRODUCT SUBSTITUTIONS, CHANGES TO, OR VARIATIONS FROM THE CONSTRUCTION DOCUMENTS MUST BE SUBMITTED TO THE ENGINEER IN WRITING BY THE CONTRACTOR.
- 5. THE CONTRACTOR IS RESPONSIBLE TO ENSURE PROPER MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.
- 6. THE ENGINEER ASSUMES NO LIABILITY FOR JOBSITE SAFETY. THE CONTRACTOR SHALL ADD ERECTION FOR FRAMING, BOLTS, STABILIZER PLATES, ETC. AS NECESSARY TO COMPLY WITH OSHA REQUIREMENTS.
- 7. THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES (MECHANICAL, ELECTRICAL, LANDSCAPING, ETC.), AS REQUIRED FOR CONSTRUCTION.
- 8. DESPITE SIGNIFICANT EFFORTS TO PROVIDE A COMPLETE AND CLEAR SET OF CONSTRUCTION DOCUMENTS, DISCREPANCIES OR OMISSIONS MAY OCCUR. RELEASE OF THE CONSTRUCTION DOCUMENTS ANTICIPATES CONTINUED COOPERATION AND CONTINUED COMMUNICATION BETWEEN THE ENGINEER, THE CONTRACTOR, AND THE OWNER TO ACHIEVE SUCCESSFUL COMPLETION OF THE PROJECT. THE CONSTRUCTION DOCUMENTS HAVE BEEN PREPARED FOR USE BY A QUALIFIED CONTRACTOR WITH EXPERIENCE IN THE INDUSTRY STANDARDS, TECHNIQUES, AND SYSTEMS DEPICTED HEREIN.
- 9. JURISDICTIONAL PLAN REVIEW AND APPROVAL IS ONLY FOR GENERAL CONFORMANCE WITH CITY/COUNTY DESIGN CRITERIA AND THE MUNICIPAL CODE. THE CITY/COUNTY IS NOT RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF THE DRAWINGS, DESIGN, DIMENSIONS, AND ELEVATIONS SHALL BE CONFIRMED AND CORRELATED BY THE CONTRACTOR AT THE JOB SITE.
- 10. AT LEAST ONE COPY OF THE APPROVED CONSTRUCTION PLANS SHALL BE KEPT ON THE JOB SITE AT ALL TIMES. CONTRACTOR TO VERIFY WITH PROJECT ENGINEER THE LATEST REVISION DATE OF THE APPROVED CONSTRUCTION PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR WILL MAINTAIN AND KEEP ALL REQUIRED PERMITS ONSITE AT ALL TIMES. THE CONTRACTOR SHALL ALSO KEEP ONSITE AT LEAST ONE COPY OF THE JURISDICTIONAL STANDARDS AND SPECIFICATIONS, LATEST EDITIONS.
- 11. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES. CALL THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 1-800-922-1987 AND ANY NECESSARY PRIVATE UTILITY TO PERFORM LOCATES PRIOR TO CONDUCTING ANY SITE WORK.
- 12. CONTRACTOR SHALL OBTAIN AND MAINTAIN NECESSARY INSURANCE, BONDS, LICENSING, ETC AS REQUIRED BY THE JURISDICTION FOR CONTRACTING.
- 13. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS REQUIRED TO PERFORM THE WORK SUCH AS RIGHT-OF-WAY PERMIT, GRADING AND EXCAVATION PERMIT, CONSTRUCTION DEWATERING PERMIT, STORM WATER QUALITY PERMIT, ARMY CORP OF ENGINEER PERMIT, ETC.
- 14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF ALL APPLICABLE CODES, SPECIFICATIONS, AND STANDARDS NECESSARY TO PERFORM THE WORK, AND BE FAMILIAR WITH THEIR CONTENTS PRIOR TO COMMENCING ANY WORK.
- 15. CONTRACTOR SHALL COORDINATE WITH THE JURISDICTIONAL ENGINEER TO IDENTIFY PROJECT INSPECTION AND TESTING REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AND PAY FOR INSPECTIONS AND TESTING AS REQUIRED. ALL MATERIALS TESTING SHALL CONFORM TO THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (ASHTO) STANDARD SPECIFICATIONS FOR TRANSPORTATION MATERIALS AND METHODS OF SAMPLING AND TESTING, LATEST EDITION, UNLESS OTHERWISE REQUIRED BY THE JURISDICTION.

PROJECT SPECIFIC NOTES

- 1. A GEOTECHNICAL INVESTIGATION WAS NOT PERFORMED FOR THIS PROJECT. THE RECOMMENDATIONS FROM THE FOLLOWING REPORTS ARE TO BE FOLLOWED: N/A.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPTLY NOTIFYING THE ENGINEER OF ANY PROBLEMS OR POTENTIAL PROBLEMS IN CONFORMING TO THE DESIGN LINE AND GRADE FOR ANY ELEMENT OF THE CONSTRUCTION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPTLY NOTIFYING THE ENGINEER OF SITE CONDITIONS THAT DIFFER FROM THOSE

SHOWN ON THE APPROVED PLANS.

- 3. IN THE EVENT THE CONTRACTOR ALLOWS, AUTHORIZES, APPROVES OR CONSTRUCTS ITEMS THAT DIFFER FROM THE APPROVED PLANS, SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, WITHOUT WRITTEN APPROVAL BY THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY LIABILITY ARISING FROM SUCH CHANGES.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, AND ANY OTHER NEEDED ACTION TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE, PASSABLE ACCESS TO BUILDINGS AND ROADWAYS ADJACENT TO THE WORK THROUGHOUT THE DURATION OF CONSTRUCTION.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING BARRICADES AND OTHER SAFETY DEVICES AS NECESSARY AROUND THE SITE TO PROTECT PROPERTY AND PERSONS. THE CONTRACTOR IS REQUIRED TO COORDINATE WITH ALL AFFECTED PARTIES AS TO CLOSURE OF TRAILS, SIDEWALKS, ROADWAYS, UTILITY SERVICE OUTAGES, ACCESS TO PRIVATE PROPERTY, ETC.
- 7. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR DEPICTED UNDERGROUND UTILITY COMPLETENESS OR ACCURACY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND/OR LOCATION OF ALL UNDERGROUND UTILITIES AND PARTICIPATE IN THE RESOLUTION OF ANY CONFLICTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 8. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING UTILITIES AND SHALL REPAIR ANY DAMAGE CAUSED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANY.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JOB SITE CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROTECTION OF PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED ONLY TO WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, THE ENGINEER, AND THE GOVERNING JURISDICTION HARMLESS FOR ANY AND ALL LIABILITY, IN CONNECTION WITH PERFORMANCE OF WORK OR MAINTENANCE OF THE SITE.
- 11. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
- 12. REQUIREMENTS OF THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) AND THE ENVIRONMENTAL PROTECTION AGENCY (EPA), SHALL ALSO BE FOLLOWED AS RELATED TO THE ASSOCIATED WORK.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING NEARBY PUBLIC AND/OR PRIVATE STREETS OF MUD AND DEBRIS DUE TO CONSTRUCTION ACTIVITIES ON A DAILY BASIS OR AS DIRECTED BY GOVERNING JURISDICTION.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCEPTANCE AND CONTROL OF ALL SURFACE AND SUBSURFACE DRAINAGE AND GROUNDWATER ENTERING THE PROJECT AREA. CONTRACTOR TO PAY FOR ANY DEWATERING OPERATIONS AND IS REQUIRED TO OBTAIN DEWATERING PERMITS, AS NECESSARY.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCH BOX AND/OR SHORING DESIGN ASSOCIATED WITH ALL COMPONENTS OF THIS WORK.
- 16. THE CONTRACTOR SHALL BE REQUIRED TO COORDINATE WITH ALL BUSINESS AND/OR RESIDENTIAL OWNERS ON ANTICIPATED CLOSURE OF THE ACCESS POINTS ONTO ADJACENT PROPERTY. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN PUBLIC ACCESS TO STREETS AND PRIVATE PROPERTY ADJOINING THE PROJECT. THE CONTRACTOR WILL NOT BE ALLOWED TO SHUT OFF ACCESS TO ANY PROPERTY AND MUST COORDINATE WORK WITH THE PROPERTY OWNERS.
- 17. THE CONTRACTOR IS RESPONSIBLE FOR ALL QUALITY CONTROL (QC) MATERIALS TESTING. THE CONTRACTOR CAN PROVIDE INTERNAL QC TESTING BY VERIFIED AGENTS. THE CONTRACTOR SHALL COORDINATE AND PAY FOR QUALITY ASSURANCE (QA) MATERIALS TESTING. QUALITY ASSURANCE MATERIALS TESTING MUST BE CONDUCTED BY AN INDEPENDENT THIRD PARTY TESTING AGENT. QC/QA TESTING IS REQUIRED FOR ALL SUBGRADE, BASE COURSE, CONCRETE, AND ASPHALT PAVEMENTS. TESTING SHALL CONFORM TO THE JURISDICTIONAL SPECIFICATIONS, LATEST EDITION. ALL TEST RESULTS SHALL BE ELECTRONICALLY FORWARDED TO THE ENGINEER FOR REVIEW AND FINAL ACCEPTANCE.
- 18. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND OBTAINING A SUITABLE STAGING AREA AND WILL COORDINATE WITH THE PROJECT OWNER, AS SUCH.
- 19. THE CONTRACTOR SHALL PROVIDE SHORING AT ALL LOCATIONS NECESSARY TO SUPPORT THE EARTH AND/OR ROADWAY ADJACENT TO ANY EXCAVATION, EMBANKMENT, OR OTHER CONSTRUCTION OPERATION. LOCATIONS SHALL BE AS DETERMINED BY THE CONTRACTOR'S SEQUENCE OF OPERATIONS AND TRAFFIC CONTROL ARRANGEMENTS. SHORING SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.

SURVEY NOTES

- 1. PROJECT BENCHMARK - SEE PLANS, AS NOTED.
- 2. COORDINATE SYSTEM - DATUM NAVD 83, COLORADO STATE PLANE, CENTRAL ZONE, US FOOT, DECIMAL DEGREES.
- 3. TOPOGRAPHIC AND EXISTING CONDITIONS MAPPED BY KNOTT LABORATORY, LLC.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFEGUARDING THE PROJECT BENCHMARK AND OTHER SURVEY CONTROL MONUMENTS. DAMAGED MONUMENTS SHALL BE RE-ESTABLISHED AND REPLACED BY A LICENSED PROFESSIONAL LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
- 5. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND MAINTAIN CONSTRUCTION STAKING. THE CONTRACTOR SHALL FURTHER BE RESPONSIBLE FOR THE ACCURACY OF ALL STAKING IN ACCORDANCE WITH THE APPROVED PLANS. IN THE EVENT THAT DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OR PROJECT MANAGER PRIOR TO COMMENCING WITH CONSTRUCTION OPERATIONS.
- 6. CONTRACTOR IS RESPONSIBLE FOR STAKING ANY TEMPORARY CONSTRUCTION EASEMENTS. TEMPORARY CONSTRUCTION EASEMENTS ARE TO BE LIMITED TO SPECIFIC CONSTRUCTION ITEMS AND THE AREA IS TO BE RETURNED TO EXISTING CONDITION AS SOON AS POSSIBLE. AREAS WITHIN TEMPORARY EASEMENTS ARE NOT TO BE USED FOR STAGING, UNLESS WITH WRITTEN APPROVAL BY OWNER.
- 7. AS-BUILT RECORD DRAWINGS ARE REQUIRED FOR: N/A. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH AS-BUILT SURVEY POINTS BY A PROFESSIONAL LICENSED LAND SURVEYOR FOR ALL REQUIRED ITEMS AT NO ADDITIONAL EXPENSE TO THE PROJECT.
- 8. THE AREA OF THE SUBJECT PROPERTY IS APPROXIMATELY 5.2 ACRES.
- 9. THE PROJECT DISTURBANCE LIMIT IS APPROXIMATELY 0.1 ACRES.

EXISTING CONDITION NOTES

- 1. CONTRACTOR TO COORDINATE WITH THE ENGINEER IF ANY CHANGES ARE PRESENTED IN THE FIELD THAT DIFFER FROM THE PLANS.

- 2. CONTRACTOR TO RESTORE ALL FINAL SURFACES TO A CONDITIONS THAT MEETS OR EXCEEDS THE EXISTING CONDITIONS.
- 3. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER TO VERIFY EXISTING IRRIGATION CONTROLS, BOXES, AND LINES/PIPES PRIOR TO CONSTRUCTION.
- 4. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPAIRED IMMEDIATELY AND PRIOR TO CONTINUING OTHER WORK, UNLESS SPECIFIED FOR DEMOLITION.

DEMOLITION NOTES

- 1. ANY ADDITIONAL DEMOLITION WORK NOT SHOWN ON THE DEMOLITION PLANS NEEDS PRIOR APPROVAL BY THE ENGINEER AND PROJECT OWNER.
- 2. REPAIR OF ASPHALT PATCHING AND PAVEMENT IS INCIDENTAL TO REMOVAL OF ADJACENT CONCRETE CURB & GUTTER AND WILL NOT BE PAID FOR AS EXTRA.
- 3. IF EXISTING MAILBOXES ARE REQUIRED TO BE REMOVED AND/OR REINSTALLED FOR CONSTRUCTION, CONTRACTOR TO COORDINATE WITH OWNER AND THE UNITED STATES POSTAL SERVICE (USPS), AS NEEDED.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION AND OFF-SITE REMOVAL OF ALL CONCRETE FOUNDATIONS, WALKS, WALLS, TREES AND OTHER DEBRIS INDICATED ON THE SURVEY OR SPECIFIED IN THE CONSTRUCTION PLANS. ALL SALVAGEABLE ITEMS WHICH ARE NOT BEING RE-USED ON SITE SHALL BE RETURNED TO THE OWNER, IF SO DESIRED BY THE OWNER.
- 5. THE CONTRACTOR SHALL PROTECT ALL OTHER PERMANENT STRUCTURES DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED TO EXISTING STRUCTURES, FEATURES, OR OBJECTS THAT OCCURS WITHIN THE DURATION OF CONSTRUCTION.

SITE CONDITION NOTES

- 1. UPON PROJECT COMPLETION, THE CONTRACTOR SHALL RESTORE THE SITE CONDITIONS, AESTHETIC APPEAL, FUNCTIONALITY, AND INTEGRITY OF ALL INFRASTRUCTURE TO IMPROVE THE SITE FROM THAT OF EXISTING CONDITIONS.
- 2. THE CONTRACTOR SHALL KEEP THE WORK AREA DRY OF STANDING WATER AND SHALL KEEP THE EXCAVATION AREAS FREE FROM STORM RUN-OFF.
- 3. COLD WEATHER CONCRETING PROCEDURES SHALL BE PROVIDED AS RECOMMENDED IN THE AMERICAN INSTITUTE OF CONCRETE (ACI) "STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING" (ACI 308, LATEST EDITION).
- 4. NO CONCRETE SHALL BE PLACED IN AN EXCAVATION CONTAINING STANDING WATER OR ON FROZEN GROUND.
- 5. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONSTRUCTION ACTIVITIES IN ADDITION TO NORMAL CONSTRUCTION PROCEDURE SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER, AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS

GRADING NOTES

- 1. PROPOSED CONCRETE/ASPHALT TO MATCH EXISTING ELEVATIONS AT ALL ADJOINING SAWCUT LOCATIONS.
- 2. CONTRACTOR TO ADJUST ALL PROPOSED AND EXISTING ELEVATIONS FOR ALL MANHOLES, CLEANOUTS, RIMS, VALVE BOXES, AND GRATES TO HAVE A TOP/FINISHED ELEVATION TO MATCH PROPOSED GRADE.
- 3. CONTRACTOR TO MATCH EXISTING ELEVATIONS AT ALL PROPERTY LINES/BOUNDARIES. GRADING SHALL OCCUR WITHIN THE PROPERTY LIMITS. WHERE OFF-SITE WORK IS APPROVED, WRITTEN PERMISSION OF THE ADJACENT PROPERTY OWNER MUST BE OBTAINED PRIOR TO ANY OFF-SITE GRADING OR CONSTRUCTION.
- 4. VEGETATED SLOPES GREATER THAN 3:1 REQUIRE SOIL STABILIZATION.
- 5. CONTRACTOR SHALL OBTAIN ANY "CUT AND FILL" PERMITS FROM THE REGULATING CITY OR COUNTY AGENCY, AS REQUIRED.
- 6. NO WORK SHALL OCCUR IN WETLANDS OR FLOOD PLAINS WITHOUT APPROPRIATE PERMITS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMITS RELATED TO WORK WITHIN ANY WETLANDS OR FLOODPLAIN. ANY WORK AS SUCH WILL BE IN ACCORDANCE WITH THE ISSUED PERMITS.
- 7. DURING ALL SUBSURFACE ACTIVITIES, WORKERS SHALL BE ALERT FOR VISUAL AND OLFACTORY SIGNS OF CONTAMINATION. IF SOIL CONTAMINATION IS ENCOUNTERED, WORK SHALL STOP AND PROCEDURES ESTABLISHED IN THE CDOT 250 SPEC SHALL BE FOLLOWED. ANY CONTAMINATED SOILS OR LANDFILL MATERIAL SHALL BE PROPERLY HANDLED AND SAMPLED PRIOR TO DISPOSAL.

GENERAL UTILITY NOTES

- 1. SUBSURFACE UTILITY ENGINEERING (SUE) PLANS WERE NOT PREPARED FOR THIS PROJECT AS THE DETERMINING CRITERIA WAS NOT MET. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES IN THE PROJECT AREA PRIOR TO COMMENCING ANY WORK. THE ENGINEER WILL NOT BE HELD RESPONSIBLE FOR LOCATION AND/OR ACCURACY OF ANY UTILITIES EITHER DEPICTED OR NOT.
- 2. KNOWN PHYSICAL FEATURES AND EXISTING UTILITIES WITHIN THE LIMITS OF THE PROJECT HAVE BEEN SHOWN BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL ABOVE AND BELOW GROUND EXISTING UTILITIES INFRASTRUCTURE PRIOR TO COMMENCING ANY WORK.
- 3. THE QUALITY LEVEL FOR EACH UTILITY IS SPECIFIED ON PLAN. IF NO UTILITY QUALITY LEVEL IS SPECIFIED THEN THE QUALITY LEVEL FOR THAT UTILITY IS DEPICTED AS QUALITY LEVEL "D".
- 4. PER ASCE 38-02, THE FOLLOWING UTILITY QUALITY LEVELS ARE DESCRIBED AS FOLLOWS:

UTILITY QUALITY LEVEL A
PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY AT A SPECIFIC POINT. MINIMALLY INTRUSIVE EXCAVATION EQUIPMENT IS TYPICALLY USED TO MINIMIZE THE POTENTIAL FOR UTILITY DAMAGE. A PRECISE HORIZONTAL AND VERTICAL LOCATION, AS WELL AS OTHER UTILITY ATTRIBUTES, IS SHOWN ON PLAN DOCUMENTS. ACCURACY IS TYPICALLY SET TO 15-MM VERTICAL AND TO APPLICABLE HORIZONTAL SURVEY AND MAPPING ACCURACY AS DEFINED OR EXPECTED BY THE PROJECT OWNER.

UTILITY QUALITY LEVEL B
INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES. QUALITY LEVEL B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

UTILITY QUALITY LEVEL C
INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION. "OLC" UTILITIES ARE DEPICTED ON

THE PLANS BY A "SOLID" LINE WITH A UTILITY TYPE DENOTATION.

- UTILITY QUALITY LEVEL D
INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS. "OLD" UTILITIES ARE DEPICTED ON THE PLANS BY A "DOTTED LINE WITH A UTILITY TYPE DENOTATION."
- 5. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY DESIGN CHANGES AND/OR UTILITY RELOCATIONS, IF IT IS DEEMED NECESSARY TO CONDUCT THE WORK FOR PROJECT COMPLETION.
- 6. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH UTILITY OWNERS IN THE REMOVAL, ADJUSTMENT, AND/OR RELOCATION OPERATIONS SO THAT THE UTILITY WORK CAN BE ACCOMPLISHED WITHOUT IMPACTING THE CONSTRUCTION SCHEDULE OR WITHOUT NEGATIVELY EFFECTING THE UTILITY CONSUMERS.
- 7. THE CONTRACTOR SHALL COMPLY WITH ARTICLE 1.5 OF TITLE 9, CRS ("EXCAVATION REQUIREMENTS") WHEN EXCAVATING OR GRADING IS PLANNED IN THE AREA OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITIES AT LEAST TWO (2) BUSINESS DAYS, NOT INCLUDING THE ACTUAL DAY OF NOTICE, PRIOR TO COMMENCING SUCH OPERATIONS. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 811 OR 1-800-922-1987, TO HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES. ALL OTHER UNDERGROUND FACILITIES SHALL BE LOCATED BY CONTACTING THE RESPECTIVE OWNER. UTILITY SERVICE LATERALS SHALL ALSO BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING.

WATER, SEWER, AND DRY UTILITY NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MIGHT HAVE UTILITY LINES ON OR ACROSS THE PREMISES, OR WHO MIGHT BE AFFECTED BY THE CONSTRUCTION. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING UTILITIES AND SHALL REPAIR ANY DAMAGES AT OWN EXPENSE. CALL THE UTILITY NOTIFICATION CENTER OF COLORADO AT 811 AT LEAST 2 DAYS IN ADVANCE BEFORE COMMENCEMENT OF WORK.
- 2. ALL UTILITIES SHALL BE BACKFILLED, AND COMPACTED IN ACCORDANCE WITH THE JURISDICTIONAL STANDARD SPECIFICATIONS, LATEST EDITION.
- 3. ALL MATERIALS SHALL BE U.L. LISTED AND FACTORY MUTUAL APPROVED UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING BARRICADES AND OTHER TRAFFIC WARNING DEVICES AS NECESSARY AROUND THE PERIMETER OF CONSTRUCTION AND ADJACENT TO ANY OPEN TRENCHES.
- 5. ALL VALVES, MANHOLE LIDS, AND SEWER CLEAN-OUTS LOCATED IN PAVED AREAS, SHALL BE AASHTO H-20 TRAFFIC RATED.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ELEVATIONS AND ADJUSTING ALL COVERS AND LIDS IN PAVED AREAS TO MEET STANDARD SPECIFICATIONS. ALL FIELD ADJUSTMENTS SHALL BE NOTED AND BROUGHT TO THE ENGINEERS ATTENTION FOR FINAL ACCEPTANCE.
- 7. AT ALL DRY-TIE CONNECTIONS WHERE A SOLID SLEEVE IS USED, THE TWO CONNECTING PIPES MUST BE BUTTED TO EACH OTHER. WEDDING BAND STYLE SPACERS ARE TO BE USED IF NECESSARY TO ENSURE NO SPACE IS LEFT BETWEEN PIPES.

STORM SEWER NOTES

- 1. ALL STORM SEWER SHALL BE HIGH-DENSITY POLYETHYLENE (HDPE) DUAL WALL PIPE WITH SMOOTH INTERIOR WALL AND CORRUGATED EXTERIOR WALL, UNLESS OTHERWISE NOTED.
- 2. ALL STORM SEWER INLETS ARE REQUIRED TO HAVE AN TWELVE INCH (12") SUMP BELOW THE LOWEST INLET ELEVATION, UNLESS OTHERWISE STATED IN THE PLAN SET. SUMP IS NOT REQUIRED FOR MANHOLES.
- 3. ALL MANHOLE RIMS AND INLET GRATES SHOULD BE FLUSH AND SET TO ELEVATIONS THAT MATCH THE FINISHED GRADE.
- 4. MAINTAIN A ONE FOOT (1') MINIMUM COVER OVER ALL STORM SEWER PIPE.
- 5. ALL STORM SEWER VALLEY INLETS GRATES (NEW, RELOCATED, AND ADJUSTED) SHALL HAVE A MINIMUM OF SIX INCH (6") WIDE BY SIX INCH (6") THICK CONCRETE COLLAR PLACED AROUND INLET.
- 6. ALL STORM SEWER LENGTH CALL OUTS ON THE PLANS ARE FROM CENTER OF STRUCTURE OR END OF FLARED END SECTION.

DRAINAGE NOTES

- 1. A DETAILED ENGINEERING DRAINAGE REPORT AND/OR CALCULATIONS HAS NOT BEEN PREPARED FOR THIS PROJECT. THE PROPOSED DRAINAGE DESIGN FOLLOWS THAT OF HISTORIC DRAINAGE PATTERNS. DRAINAGE FEATURES HAVE BEEN SIZED TO EITHER MATCH OR EXCEED EXISTING. THE ENGINEER IS RELEASED FROM ALL LIABILITY REGARDING ANY FUTURE FLOODING OR WATER DAMAGE, AS THE SITE DRAINAGE WAS SET BY THE ORIGINAL APPROVED DEVELOPMENT PLANS.
- 2. THIS PROJECT IS LOCATED IN ZONE X AS AN AREA HAVING LESS THAN 1% CHANCE OF FLOOD, AS DENOTED IN THE FEMA FLOOD INSURANCE RATE MAP (FIRM) NUMBER 08001C0601J, REVISED ON DECEMBER 2, 2021.

EROSION CONTROL NOTES

- 1. IF REQUIRED, CONTRACTOR MUST SUBMIT A CONSTRUCTION SITE MANAGEMENT PLAN (CSMP) FOR REVIEW AND APPROVAL BY THE CITY/COUNTY PRIOR TO START OF CONSTRUCTION. THE CSMP MUST BE MAINTAINED ON-SITE AND UPDATED AS NEEDED TO REFLECT CURRENT CONDITIONS DURING CONSTRUCTION AND FOLLOWING CONSTRUCTION UNTIL SUCH TIME AS PROPER VEGETATION IS REESTABLISHED.
- 2. CONTRACTOR SHALL MAINTAIN AND KEEP THE SITE CONDITIONS IN ACCORDANCE WITH THE CONSTRUCTION SITE MANAGEMENT PLAN (CSMP), AS REQUIRED.
- 3. CONTRACTOR SHALL WORK IN A MANNER THAT MINIMIZES THE POTENTIAL FOR EROSION.
- 4. ANY AREA DISTURBED BY CONSTRUCTION THAT IS NOT PAVED OR NATURAL ROCK SURFACE SHALL BE RE-VEGETATED WITHIN ONE CONSTRUCTION SEASON.
- 5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO EXCAVATION ACTIVITIES AT ALL TIMES DURING PROJECT CONSTRUCTION. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO PREVENT ACCELERATED EROSION ON THE SITE AND ON ANY ADJACENT PROPERTIES. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION PROTECTION DURING CONSTRUCTION AND FOLLOWING CONSTRUCTION UNTIL SUCH TIME AS PROPER VEGETATION IS REESTABLISHED.
- 6. ALL TOPSOIL, AS REASONABLY POSSIBLE, SHALL BE SALVAGED AND NO TOPSOIL SHALL BE REMOVED FROM SITE EXCEPT AS SET FORTH IN THE APPROVED PLANS. TOPSOIL AND OVERBURDEN SHALL BE SEGREGATED AND STOCKPILED SEPARATELY. TOPSOIL AND OVERBURDEN SHALL BE REDISTRIBUTED WITHIN THE EXCAVATED AREA AFTER TRENCHING/DISTURBING TO PROVIDE A SUITABLE BASE FOR AREAS WHICH WILL BE SEEDED AND PLANTED. RUNOFF FROM STOCKPILED AREA SHALL BE CONTROLLED TO PREVENT EROSION AND RESULTANT SEDIMENTATION OF RECEIVING WATER.
- 7. TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DISTURBED

- AREAS WITHIN 14 DAYS AFTER BACKFILLING IS COMPLETE. SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN 14 DAYS TO DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL BE LEFT DORMANT FOR LONGER THAN 30 DAYS. TEMPORARY STABILIZATION SHALL CONSIST OF PLACEMENT OF TOPSOIL, TEMPORARY SEEDING, AND MULCHING. THE CONTRACTOR WILL BE RESPONSIBLE FOR WATERING SEEDED AREAS AS NECESSARY TO ESTABLISH VEGETATIVE COVER.
- 8. PERMANENT STABILIZATION IS TO BE COMPLETED ONCE ALL WORK IS COMPLETE. PERMANENT STABILIZATION SHALL CONSIST OF PERMANENT SEEDING AND MULCHING. THE CONTRACTOR WILL BE RESPONSIBLE FOR WATERING SEEDED AREAS AS NECESSARY TO ESTABLISH VEGETATIVE COVER AND RESEEDING ANY BARE SPOTS AS NECESSARY, UNTIL FULLY ESTABLISHED.
- 9. FUGITIVE DUST EMISSIONS RESULTING FROM CONSTRUCTION ACTIVITIES AND/OR WIND SHALL BE CONTROLLED. WATER SHALL BE USED AS A DUST PALLIATIVE WHEN REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SOURCE AND APPLICATION OF CONSTRUCTION WATER FOR DUST CONTROL AS NEEDED.
- 10. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION AND SHALL BE INSTALLED WITHIN 24 HOURS IF REQUIRED BY THE STORMWATER COORDINATOR FOR THE JURISDICTION.

LANDSCAPING NOTES

- 1. ALL BUSHES, SHRUBS, PLANTINGS, AND OTHER FIXED OBJECTS ARE TO REMAIN PROTECTED IN PLACE DURING CONSTRUCTION. IF SUCH LANDSCAPING ITEMS ARE IN THE IMMEDIATE CONSTRUCTION AREA, THEY MAY BE REMOVED AND REPLACED IN-KIND, AS NEEDED FOR CONSTRUCTION. CONTRACTOR TO MAINTAIN EXISTING LANDSCAPING REQUIREMENTS AS DETERMINED BY THE LOCAL JURISDICTION.
- 2. ALL EXISTING TREES ARE TO REMAIN PROTECTED IN PLACE DURING CONSTRUCTION, WITH THE EXCEPTION OF TREES THAT HAVE BEEN INDIVIDUALLY SPECIFIED FOR REMOVAL, TREATMENT, TRIMMING, AND/OR REDUCING.
- 3. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER TO VERIFY CONSTRUCTION OF NEW IRRIGATION CONTROLS, BOXES, AND LINES/PIPES PRIOR TO ANY NEW PLANTING, SEEDING, AND/OR FINAL SOIL STABILIZATION.
- 4. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER TO RE-ESTABLISH LANDSCAPING IRRIGATION AND PLANTINGS TO MATCH EXISTING CONDITIONS.
- 5. LANDSCAPE ROCK TO BE 6" THICK MIN OF CDOT CLASS A FILTER MATERIAL OR PLACED BENEATH ALL LANDSCAPE ROCK AND SHALL BE MIRAFI MSCALE, OR APPROVED EQUAL.
- 6. GRASS LANDSCAPE AREAS SHALL BE EITHER PLACED SOO OF COLORADO ORIGIN BLUEGRASS MIX IN IRRIGATED AREAS ONLY OR SHALL BE NATIVE SEED MIX MEETING THE JURISDICTIONAL REQUIREMENTS AND APPLIED BY SPAY APPLICATION WITH AN APPROVED HYDRAULIC MULCH.

PAVING NOTES

- 1. PRIOR TO PAVING, THE PAVEMENT SUBGRADE SHALL BE PROE ROLLED WITH A LOADED DUMP TRUCK OR HEAVILY LOADED PNEUMATIC TIRED CONSTRUCTION VEHICLE. AREAS WHICH DEFORM EXCESSIVELY UNDER THE WHEEL LOADS SHALL BE REMOVED AND REPLACED PRIOR TO PAVING FOR DRIVABLE SURFACES.
- 2. ALL PAVING SURFACES AND CORRESPONDING AGGREGATE BASE COURSE SHALL BE CONSTRUCTED ON PREPARED SUBGRADE. SUBGRADE SHALL MEET CONDITIONS OF +95% MAXIMUM DRY DENSITY AND +2% OPTIMUM MOISTURE CONTENT, PER STANDARD PROCTOR (AASHTO T 99), AS DETERMINED BY NUCLEAR GUAGE (AASHTO T 310), UNLESS OTHERWISE STATED IN THE REFERENCED GEOTECHNICAL REPORT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CERTIFIED MATERIALS TESTING AGENT TO COLLECT REPRESENTATIVE SAMPLES OF EXISTING SITE SUBGRADE MATERIAL AND CONDUCT ALL LABORATORY AND FIELD TESTING TO ENSURE SUBGRADE MEETS COMPACTION REQUIREMENTS.
- 3. EXISTING ASPHALT PAVEMENT SHALL BE STRAIGHT SAW CUT WHEN ADJOINING WITH NEW ASPHALT PAVEMENT OR WHEN ACCESS TO UNDERGROUND UTILITIES IS REQUIRED. TACK COAT SHALL BE APPLIED TO ALL EXPOSED SURFACES INCLUDING SAW CUTS, POTHOLES, TRENCHES, AND ASPHALT OVERLAY. ASPHALT PATCHES IN THE RIGHT-OF-WAY SHALL BE PER JURISDICTIONAL SPECIFICATIONS.
- 4. NO UNDERMINING OF EXISTING PAVEMENTS ARE ALLOWED. IF UNDERMINING IS EVIDENT, PAVEMENT SHALL BE CUT BACK ACCORDINGLY AND REPAIRED AT NO ADDITIONAL COST TO THE PROJECT.
- 5. CONCRETE REPLACEMENT AREAS SHALL BE CLEAN CUT AT AN EXISTING JOINT OR AT A MINIMUM ONE-HALF STONE INCREMENT TO MAINTAIN SQUARE PLACEMENT AND AVOID RECTANGULAR STONES. ALL SAW CUT OR TOOLED JOINTS SHALL APPEAR SIMILAR IN NATURE TO THE EXISTING CONCRETE PAVEMENT.
- 6. ONE-HALF INCH EXPANSION JOINT MATERIAL SHALL BE INSTALLED WHEN ABUTTING ANY EXISTING CONCRETE TO A FIXED STRUCTURE. EXPANSION JOINTS ARE ALSO REQUIRED AT ALL ADJOINING SIDEWALK TEE "T" CONNECTIONS AND ADDITIONALLY AT A MINIMUM LINEAR DISTANCE OF ONE HUNDRED FEET (100') INTERVALS. ZIP CAP SPACERS OR BACKER ROD SHALL BE USED TO PROVIDE A CLEAN JOINT PRIOR TO CALKING SEALANT TO ALL JOINTS. JOINT SEALANT IS REQUIRED FOR ALL CONCRETE JOINTS.
- 7. CONTRACTOR TO DEVELOP JOINT LAYOUT PLAN AND PROVIDE TO ENGINEER FOR REVIEW, PRIOR TO ANY CONCRETE PLACEMENT. JOINT LAYOUTS SHALL MEET CDOT M-412-1, UNLESS OTHERWISE STATED IN THE PLANS.
- 8. THE CONTRACTOR SHALL PROVIDE A MEDIUM BROOM FINISH ON ALL EXTERIOR CONCRETE WALKS, RAMPS AND PAVING SURFACES.
- 9. MECHANICALLY VIBRATE ALL FRESHLY PLACED CONCRETE.
- 10. ALL CURB MEASUREMENTS ARE TO FLOW LINE UNLESS OTHERWISE NOTED.
- 11. ALL SIDEWALKS ARE TO BE A MINIMUM OF 4' WIDE, UNLESS OTHERWISE NOTED.
- 12. CONCRETE CURE SHALL BE APPLIED TO ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES. REFER TO CDOT SPECIFICATIONS.

LIMITATIONS OF LIABILITY DISCLAIMER

- 1. THE RECOMMENDED REPAIRS DEPICTED BY THIS PLAN SET ARE ALL PROPOSED TO BE CONSTRUCTED WITH THIS PROJECT. THIS PLAN SET ADDRESSES REPAIRS TO CORRECT "KNOWN" DEFECTS. IF THE OWNER AND/OR CONTRACTOR FAILS TO IMPLEMENT THE REPAIRS RECOMMENDED WITHIN THIS PLAN SET, THEN THE ENGINEER WILL BE RELEASED OF ALL RESPONSIBILITY RELATING TO ANY DEFECTS OR DEFICIENCIES, AS SUCH.
- 2. THE PROPOSED CONDITIONS PRESENTED IS NOT AN INDICATOR OF FUTURE PERFORMANCE AND/OR FAILURE. THE ENGINEER IS RELEASED FROM ALL LIABILITY RELATING TO ANY CONSTRUCTION METHODS, MATERIAL PERFORMANCE, CHANGING SITE CONDITIONS, NATURAL EVENTS, ETC.
- 3. THE INTENTIONAL PURPOSE OF THE PROPOSED CONDITIONS IS TO IMPROVE THAT OF THE EXISTING DEVELOPMENT. THE OVERALL PURPOSE AND OBJECTIVES OF THE ORIGINAL APPROVED DEVELOPMENT PLANS HAVE NOT BEEN CHANGED. ASSUMPTIONS HAVE BEEN MADE BY THE ENGINEER BASED UPON EXPERIENCE, TRAINING, EDUCATION, AND JUDGEMENT. KNOTT RESERVES THE RIGHT TO MODIFY/SUPPLEMENT THE PLANS FOR ANY ADDITIONAL INFORMATION AVAILABLE.



KNOTT
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PROJECT NOTES

STAR POINT CONDOMINIUMS

RETAINING WALL RECONSTRUCTION PROJECT

8701 SOUTH HURON STREET, THORNTON, COLORADO 80260

ADAMS COUNTY

KL JOB NUMBER: 22013 STAR POINT

FILE NAME: 22013 COVER-DETAILS.DWG

DRAWING SIZE: ARCH D (24" X 36")

SURVEY BY: KNOTT LABORATORY, LLC

SURVEY DATE: 06/04/2024

DESIGNED BY: SBD

SUBMITTED BY: SBD

INITIAL DATE: 06/19/2024

SCALE: 1" = 5'

DRAWN BY: ZRH

REVIEWED BY: SBD

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DESCRIPTION

BID SET - FOR PRICING ONLY

DATE

06/26/2024

BY

SBD

REV

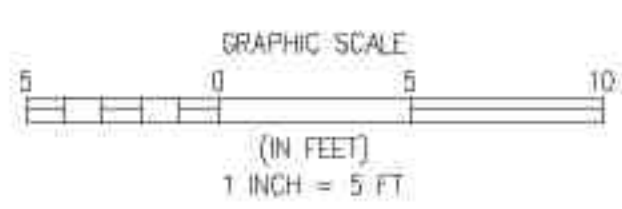
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SHEET 2 OF 11

C0.1



1 ECON PLAN
SCALE : AS NOTED



- NOTES:
1. CONTRACTOR TO LOCATE ALL UTILITIES IN THE PROJECT AREA PRIOR TO COMMENCING ANY WORK. CONTRACTOR TO COORDINATE WITH ENGINEER FOR ANY DISCREPANCIES OR CONFLICTS WITH THE PROPOSED DESIGN AND EXISTING UNDERGROUND UTILITIES.
 2. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER FOR ANY MODIFICATIONS TO THE EXISTING IRRIGATION SYSTEMS.

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ECON & DEMO PLAN #1
STAR POINT CONDOMINIUMS
RETAINING WALL RECONSTRUCTION PROJECT
8701 SOUTH HURON STREET, THORNTON, COLORADO 80260
ADAMS COUNTY

KL JOB NUMBER: 22013 STAR POINT
FILE NAME: 22013 PLANSHEETS.DWG
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REVIEWED BY: ZRH
INITIAL DATE: 06/19/2024



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ECON PLAN
SCALE : AS NOTED

GRAPHIC SCALE
0 5 10
(IN FEET)
1 INCH = 5 FT

NOTES:

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2. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER FOR ANY MODIFICATIONS TO THE EXISTING IRRIGATION SYSTEMS.

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ECON & DEMO PLAN #2

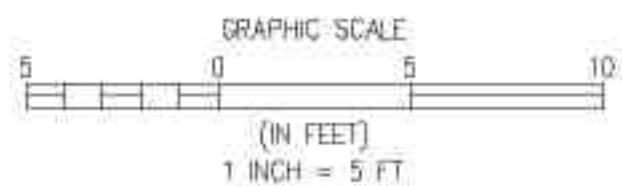
STAR POINT CONDOMINIUMS
RETAINING WALL RECONSTRUCTION PROJECT
8701 SOUTH HURON STREET, THORNTON, COLORADO 80260
ADAMS COUNTY

KL JOB NUMBER: 22013 STAR POINT
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DRAWING SIZE: ARCH D (24" X 36")
SURVEY BY: KNOTT LABORATORY, LLC
SURVEY DATE: 06/04/2024 SCALE: 1" = 5'
DESIGNED BY: SRD
SUBMITTED BY: SRD
DRAWN BY: SRD
REVIEWED BY: ZRH
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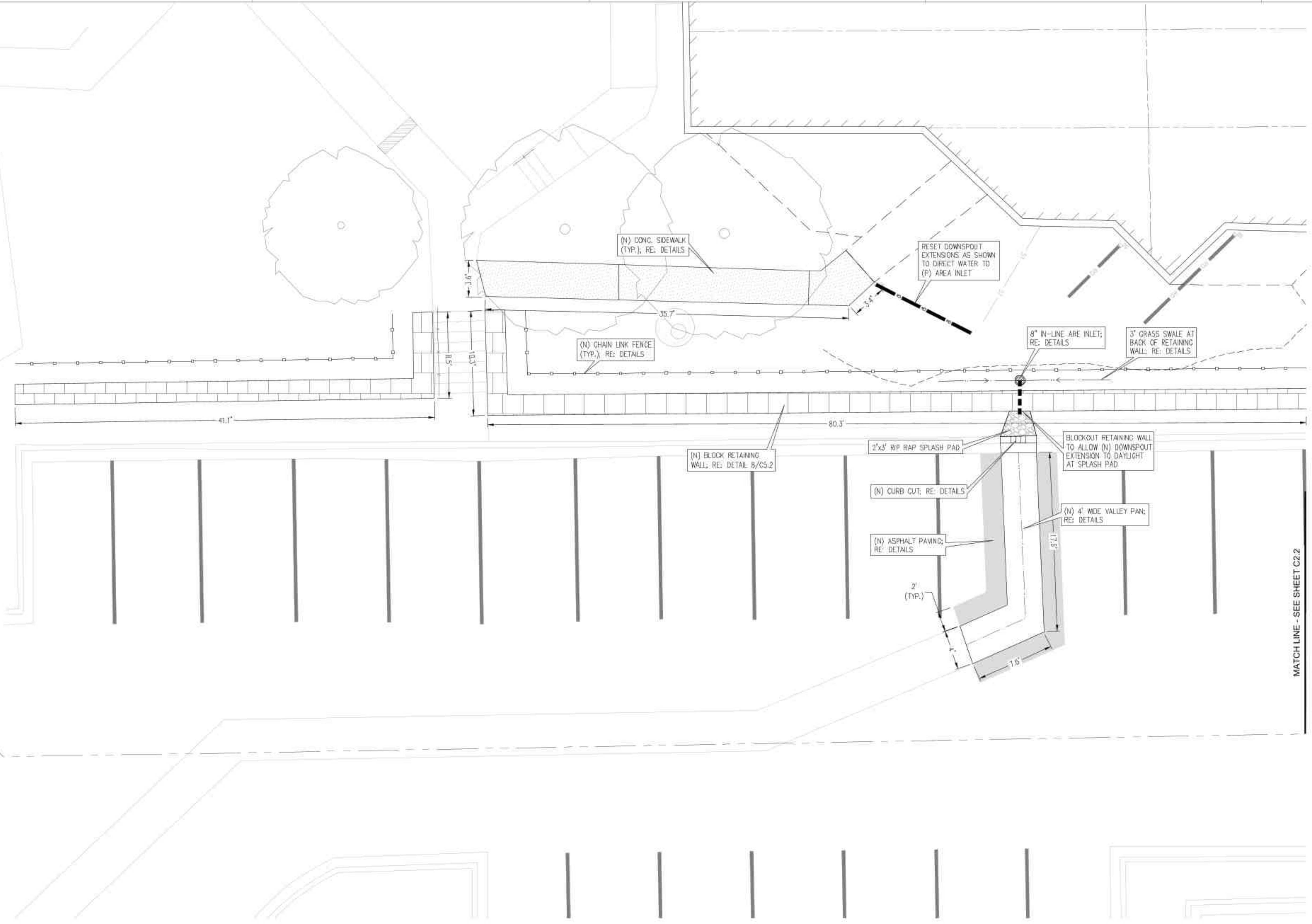
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SHEET 4 OF 11

1 SITE PLAN
SCALE : AS NOTED



- NOTES:
1. CONTRACTOR TO LOCATE ALL UTILITIES IN THE PROJECT AREA PRIOR TO COMMENCING ANY WORK. CONTRACTOR TO COORDINATE WITH ENGINEER FOR ANY DISCREPANCIES OR CONFLICTS WITH THE PROPOSED DESIGN AND EXISTING UNDERGROUND UTILITIES.
 2. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER FOR ANY MODIFICATIONS TO THE EXISTING IRRIGATION SYSTEMS.



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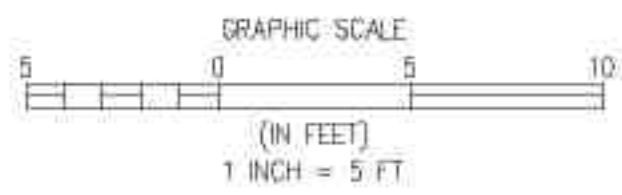
SITE PLAN #1

STAR POINT CONDOMINIUMS
RETAINING WALL RECONSTRUCTION PROJECT
8701 SOUTH HURON STREET, THORNTON, COLORADO 80260
ADAMS COUNTY

KL JOB NUMBER: 22013 STAR POINT	FILE NAME: 22013 PLANSHEETS.DWG
DRAWING SIZE: ARCH D (24" X 36")	SURVEY BY: KNOTT LABORATORY, LLC
SURVEY DATE: 06/04/2024	SCALE: 1" = 5'
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C2.1

1 SITE PLAN
SCALE : AS NOTED



NOTES:

1. CONTRACTOR TO LOCATE ALL UTILITIES IN THE PROJECT AREA PRIOR TO COMMENCING ANY WORK. CONTRACTOR TO COORDINATE WITH ENGINEER FOR ANY DISCREPANCIES OR CONFLICTS WITH THE PROPOSED DESIGN AND EXISTING UNDERGROUND UTILITIES.
2. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER FOR ANY MODIFICATIONS TO THE EXISTING IRRIGATION SYSTEMS.

MATCH LINE - SEE SHEET C2.1

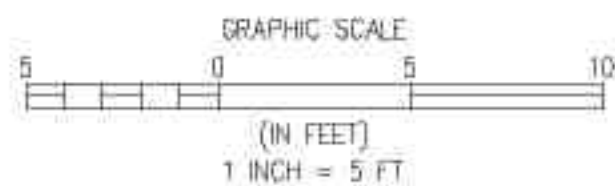
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SITE PLAN #2
STAR POINT CONDOMINIUMS
RETAINING WALL RECONSTRUCTION PROJECT
8701 SOUTH HURON STREET, THORNTON, COLORADO 80260
ADAMS COUNTY

KL JOB NUMBER:	22013 STAR POINT
FILE NAME:	22013 PLANSHEETS.DWG
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SURVEY DATE:	06/04/2024
SCALE:	1" = 5'
DESIGNED BY:	SBD
DRAWN BY:	SBD
SUBMITTED BY:	SBD
REVIEWED BY:	ZRH
INITIAL DATE:	06/19/2024
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1 GRADING PLAN
SCALE : AS NOTED



NOTES:

1. CONTRACTOR TO LOCATE ALL UTILITIES IN THE PROJECT AREA PRIOR TO COMMENCING ANY WORK. CONTRACTOR TO COORDINATE WITH ENGINEER FOR ANY DISCREPANCIES OR CONFLICTS WITH THE PROPOSED DESIGN AND EXISTING UNDERGROUND UTILITIES.
2. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER FOR ANY MODIFICATIONS TO THE EXISTING IRRIGATION SYSTEMS.

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FILE NAME: 2201.3 PLANSHEETS.DWG
DRAWING SIZE: ARCH D (24" X 36")
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DESIGNED BY: SBD
SUBMITTED BY: SBD
INITIAL DATE: 06/19/2024

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STAR POINT CONDOMINIUMS
RETAINING WALL RECONSTRUCTION PROJECT
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ADAMS COUNTY

GRADING PLAN #1

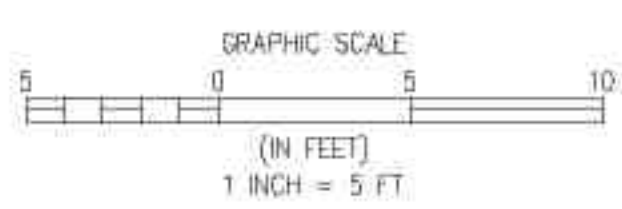
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CONSTRUCTION



C3.1

1 GRADING PLAN
SCALE : AS NOTED



- NOTES:
1. CONTRACTOR TO LOCATE ALL UTILITIES IN THE PROJECT AREA PRIOR TO COMMENCING ANY WORK. CONTRACTOR TO COORDINATE WITH ENGINEER FOR ANY DISCREPANCIES OR CONFLICTS WITH THE PROPOSED DESIGN AND EXISTING UNDERGROUND UTILITIES.
 2. CONTRACTOR TO COORDINATE WITH OWNER'S LANDSCAPER FOR ANY MODIFICATIONS TO THE EXISTING IRRIGATION SYSTEMS.

MATCH LINE - SEE SHEET C3.1

4" MIN, 7" MAX CONCRETE
STEP AS REQUIRED, MATCH (E)

(N) 6" SCH. 35 PVC DRAIN PIPE;
12" MIN BURY DEPTH @ 2% MIN.
SLOPE. DAYLIGHT AT SPLASH PAD.
CONTRACTOR TO VERIFY INLET DROP
IN FIELD.

MATCH GRADE AT
END OF WALL (TYP.)

REV	BY	DATE	DESCRIPTION
1	SRD	06/26/2024	BID SET - FOR PRICING ONLY

GRADING PLAN #2
STAR POINT CONDOMINIUMS
RETAINING WALL RECONSTRUCTION PROJECT
8701 SOUTH HURON STREET, THORNTON, COLORADO 80260
ADAMS COUNTY

KL JOB NUMBER:	22013 STAR POINT
FILE NAME:	22013 PLANSHEETS.DWG
DRAWING SIZE:	ARCH D (24" X 36")
SURVEY BY:	KNOTT LABORATORY, LLC
SURVEY DATE:	06/04/2024
SCALE:	1" = 5'
DESIGNED BY:	SRD
SUBMITTED BY:	SRD
REVIEWED BY:	ZRH
INITIAL DATE:	06/19/2024
© COPYRIGHT 2024 - KNOTT LABORATORY, LLC	

BIDDING SET
NOT FOR
CONSTRUCTION

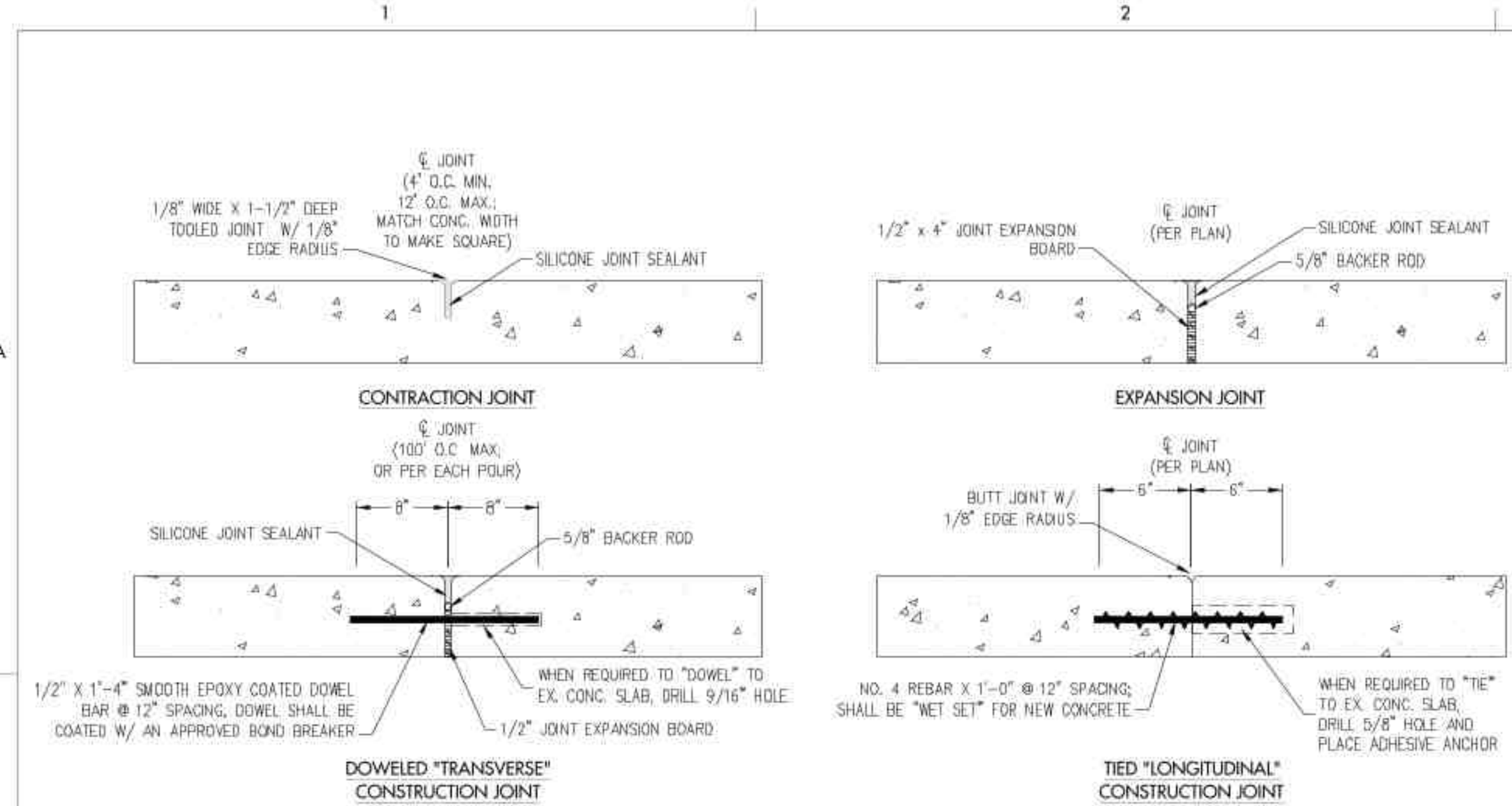
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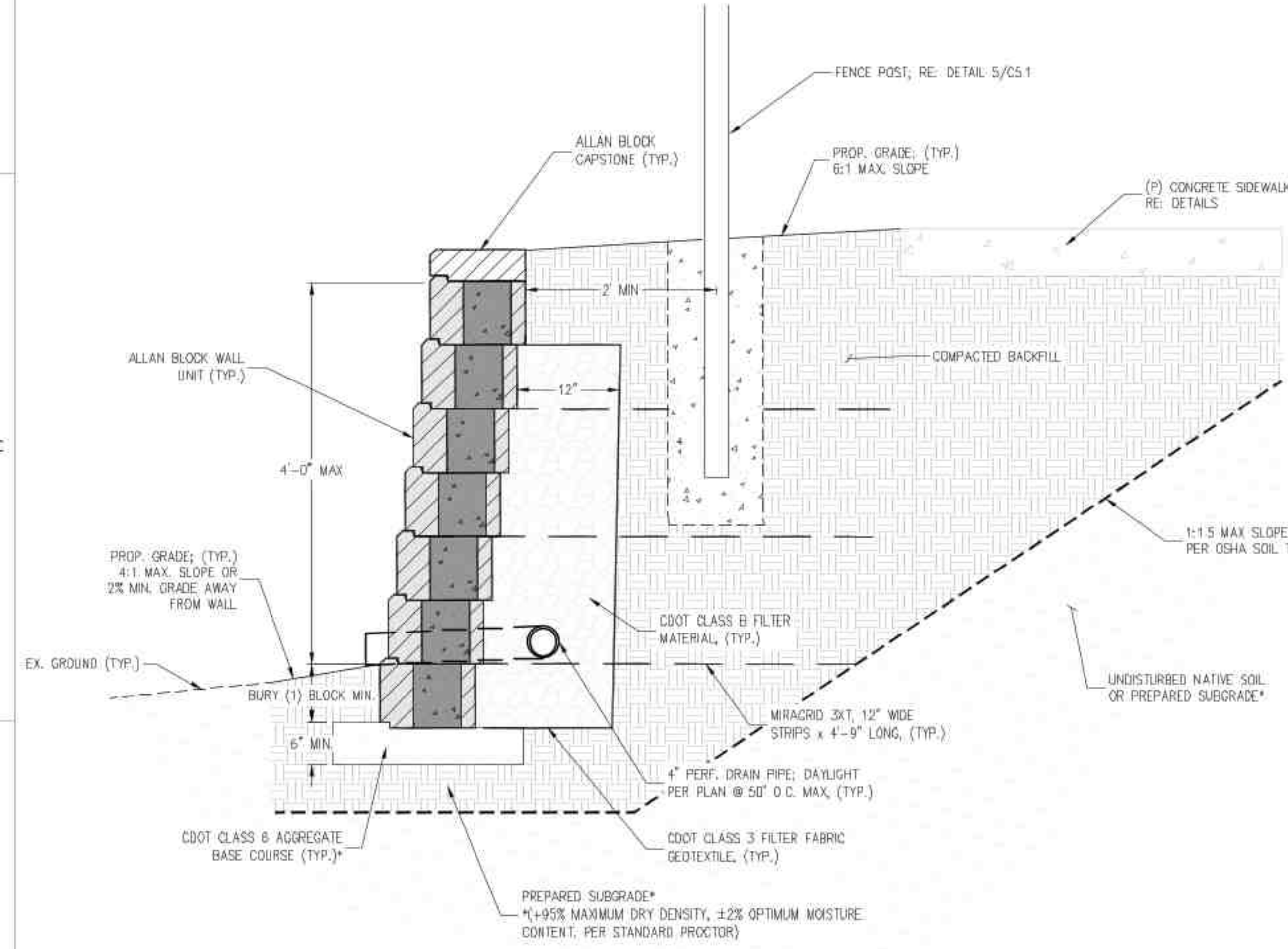
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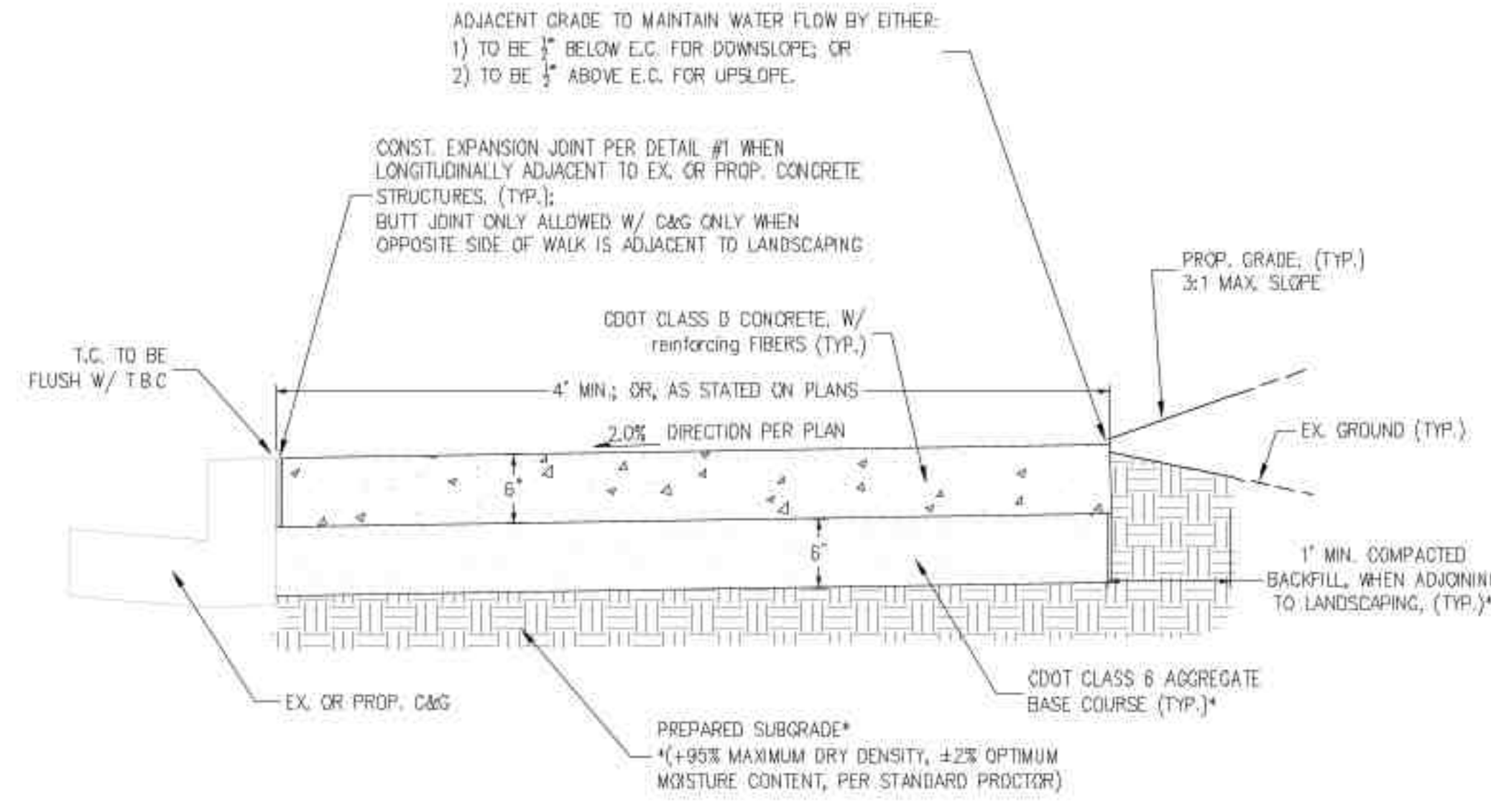
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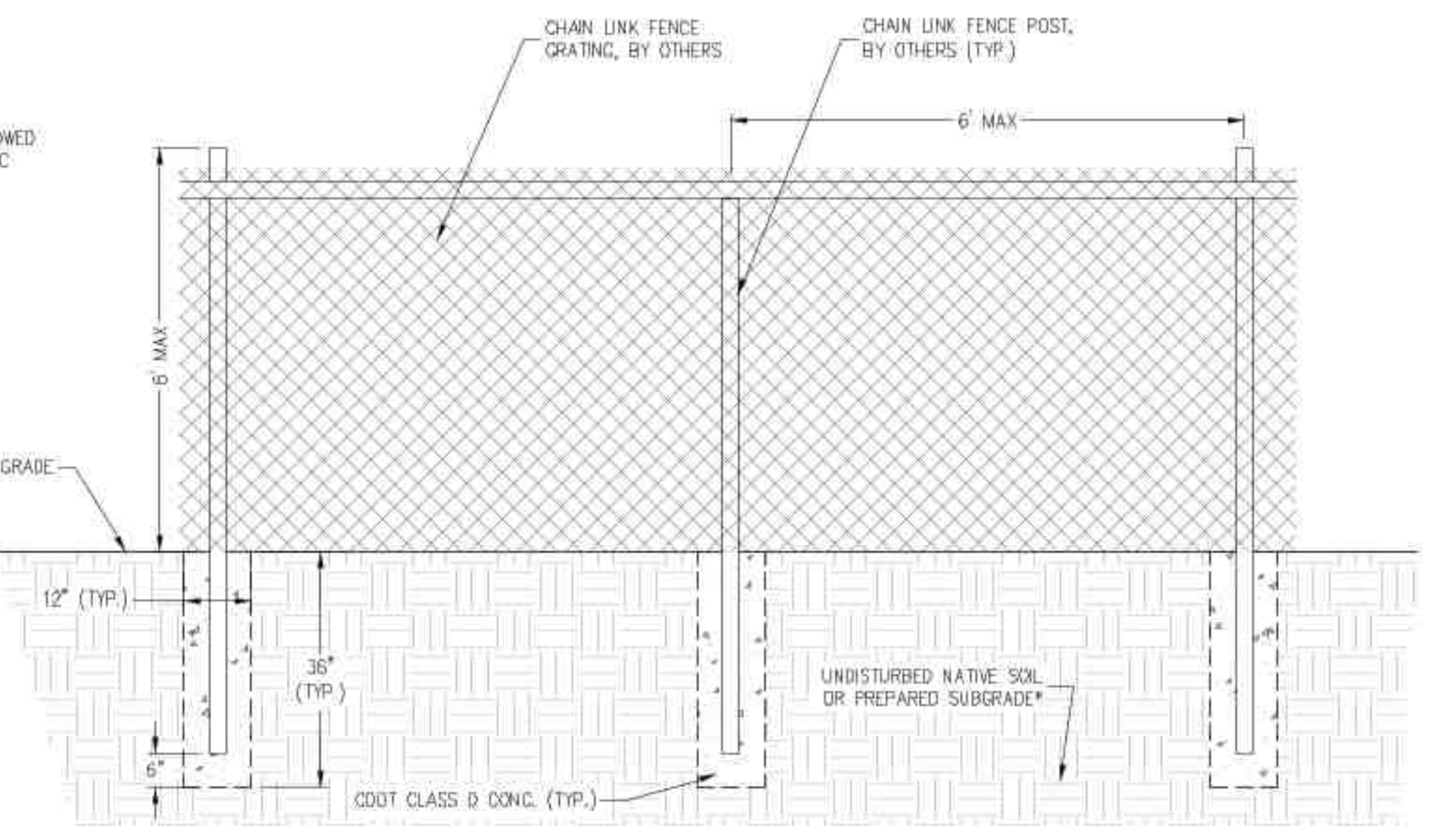
1 CONCRETE JOINT DETAILS (TYP.)
SCALE : NOT TO SCALE



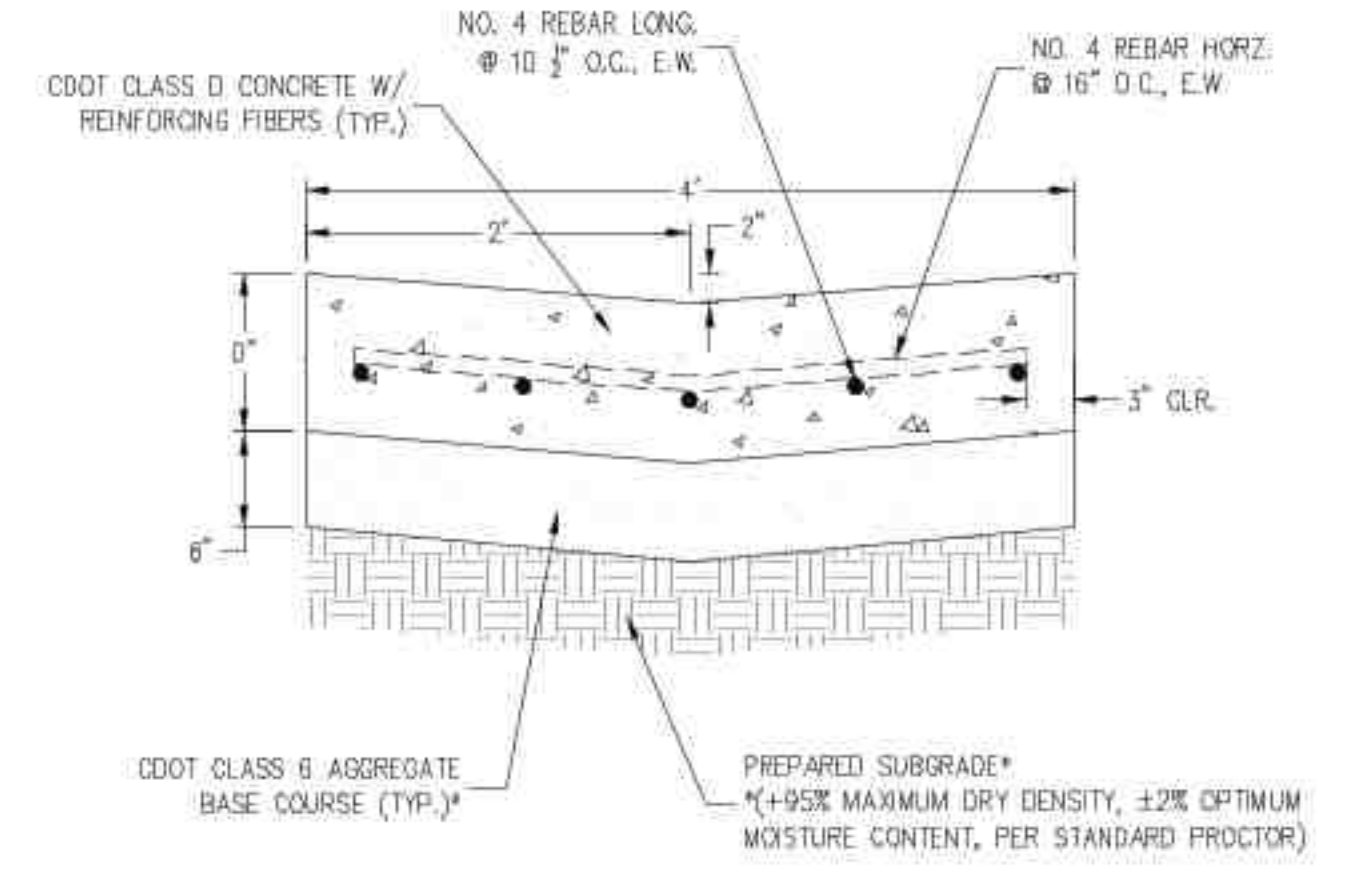
4 4' ALLAN BLOCK RETAINING WALL
SCALE : 1" = 1'



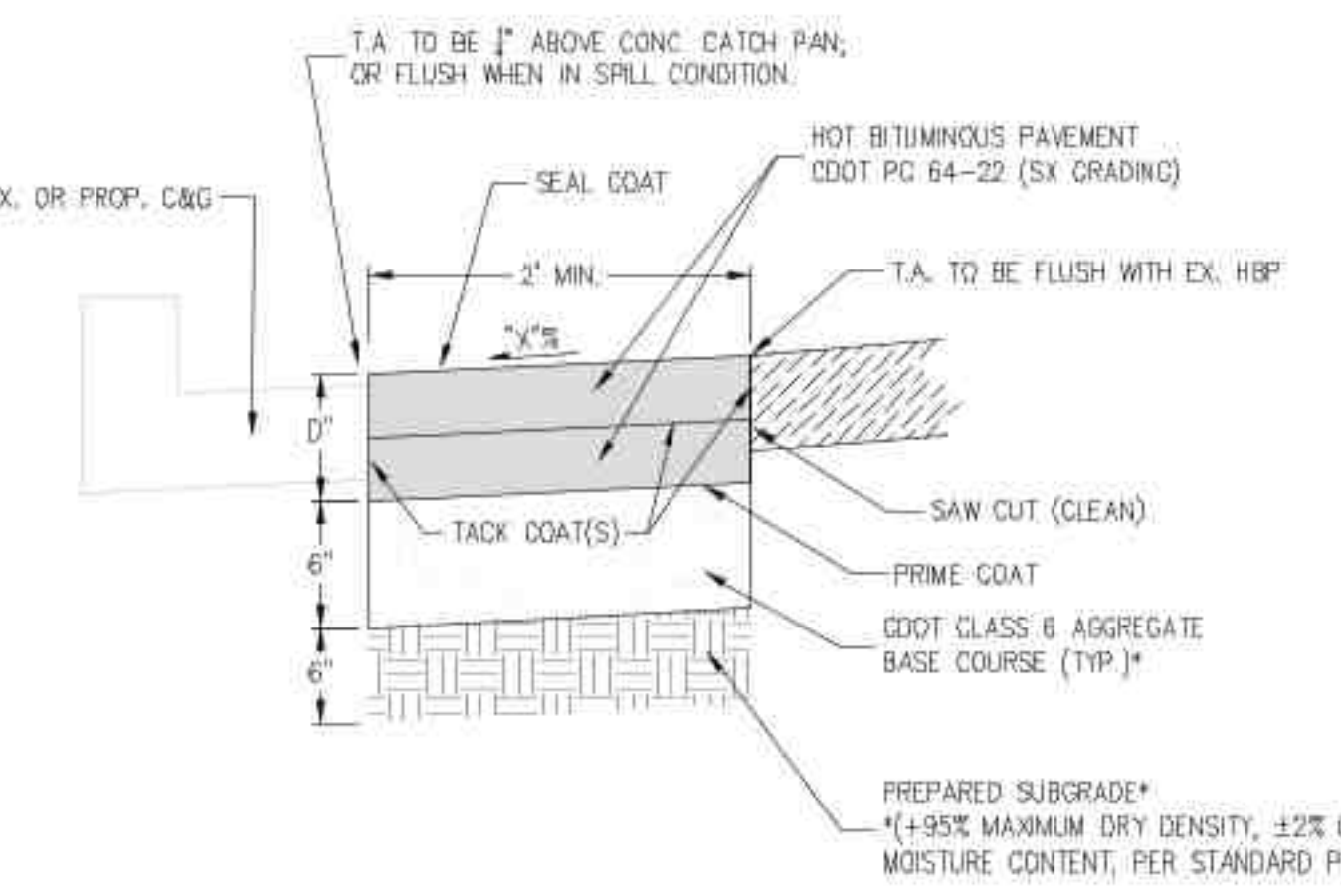
2 CONC. SIDEWALK DETAIL (TYP.)
SCALE : 1" = 1'



5 LANDSCAPE FENCE DETAIL
SCALE : NOT TO SCALE



3 4' VALLEY PAN DETAIL (TYP.)
SCALE : 1" = 1'



6 ASPHALT PAVEMENT DETAIL (TYP.)
SCALE : 1" = 1'

ALLAN BLOCK RETAINING WALL NOTES - APPLICABLE FOR ALL RETAINING WALL DETAILS:
1. DRAIN PIPE TO BE CONTINUOUSLY CONNECTED AND SHALL BE EITHER CORRUGATED POLYETHYLENE OR SDR 35 PVC.
2. DRAIN PIPE TO DAYLIGHT AT EACH END OF WALL AND AT LEAST EVERY 50' OF WALL LENGTH.
3. CONTRACTOR TO FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR WALL CONSTRUCTION AND BLOCK PLACEMENT.
4. DRAIN PIPE 90° BEND SHALL BE LARGE SWEEP.
5. TEMPORARY SHORING CONDITIONS MAY VARY BASED ON ALIGNMENT. CONTRACTOR TO FIELD VERIFY.
6. TEMPORARY SHORING WALL MAY BE REQUIRED, CONTRACTOR RESPONSIBILITY.

LANDSCAPE CHAIN LINK FENCE:
1. CHAIN LINK FENCE MEMBERS TO BE GALVANIZED OR HAVE SIMILAR PROTECTION APPLIED TO EXTERIOR MEMBERS.
2. *PREPARED SUBGRADE: (+95% MAXIMUM DRY DENSITY, ±2% OPTIMUM MOISTURE CONTENT, PER STANDARD PROCTOR)

ASPHALT PAVING NOTES:
1. PAVEMENT SLOPE "X" PER PLANS (2.0% MIN. 5.0% MAX. SLOPE IN ANY DIRECTION)
2. OVERALL ASPHALT THICKNESS "D" SHALL BE 6" MIN. OR TO MATCH EXISTING ASPHALT DEPTH IF GRATER THAN 6".
3. OVERALL ASPHALT THICKNESS "D" SHALL BE COMPACTED IN LIFTS OF 2" MIN. - 3" MAX.
4. PRIME, TACK, AND SEAL COAT MATERIALS TO MEET CDOT STANDARD SPECIFICATIONS, LATEST ADDITION.
5. EXISTING AGGREGATE BASE COURSE CAN BE STOCKPILED ON SITE AND RE-USED AFTER SUBGRADE STABILIZATION.
6. GEOTECHNICAL REPORT RECOMMENDATIONS TO TAKE PRECEDENCE OVER THIS DETAIL, IF APPLICABLE.

KNOTT LABORATORY, LLC
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**BIDDING SET
NOT FOR
CONSTRUCTION**

REV	BY	DATE	DESCRIPTION
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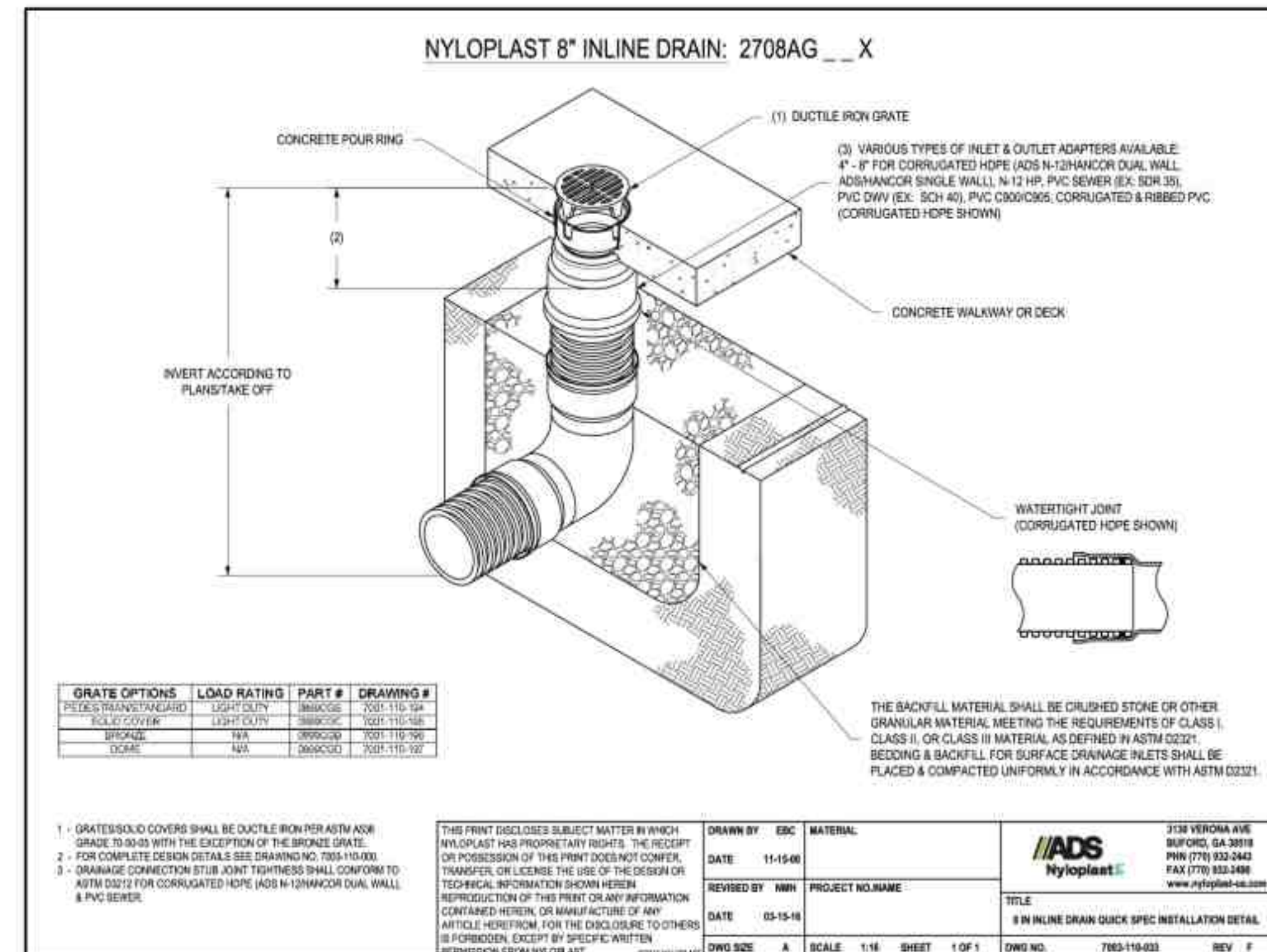
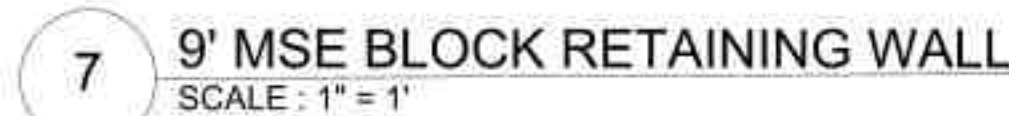
DETAILS #1

STAR POINT CONDOMINIUMS
RETAINING WALL RECONSTRUCTION PROJECT
8701 SOUTH HURON STREET, THORNTON, COLORADO 80260
ADAMS COUNTY

KL JOB NUMBER:	22013 STAR POINT
FILE NAME:	22013 COVER-DETAILS.DWG
DRAWING SIZE:	ARCH D (24" X 36")
SURVEY BY:	KNOTT LABORATORY, LLC
SURVEY DATE:	06/04/2024
SCALE:	1" = 5'
DESIGNED BY:	SRD
DRAWN BY:	SRD
SUBMITTED BY:	SRD
REVIEWED BY:	SRD
INITIAL DATE:	06/19/2024

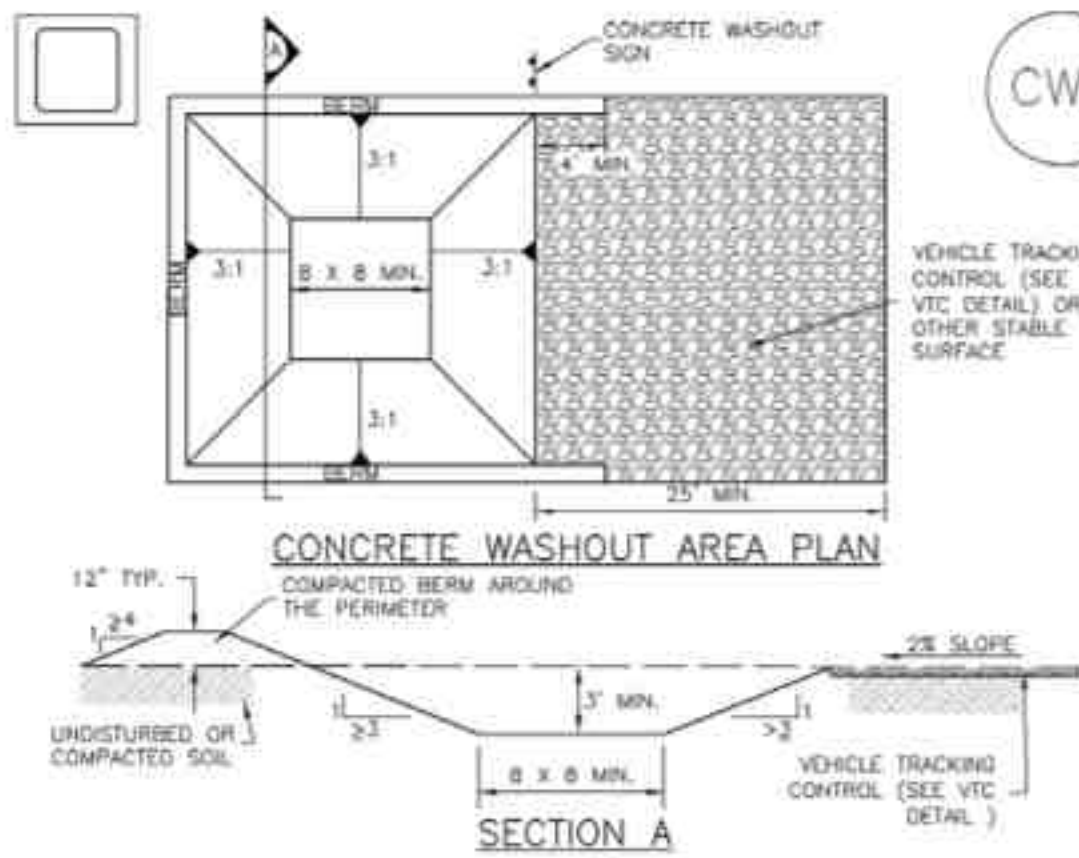
C4.1

SHEET 9 OF 11



Concrete Washout Area (CWA)

MM-1



CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

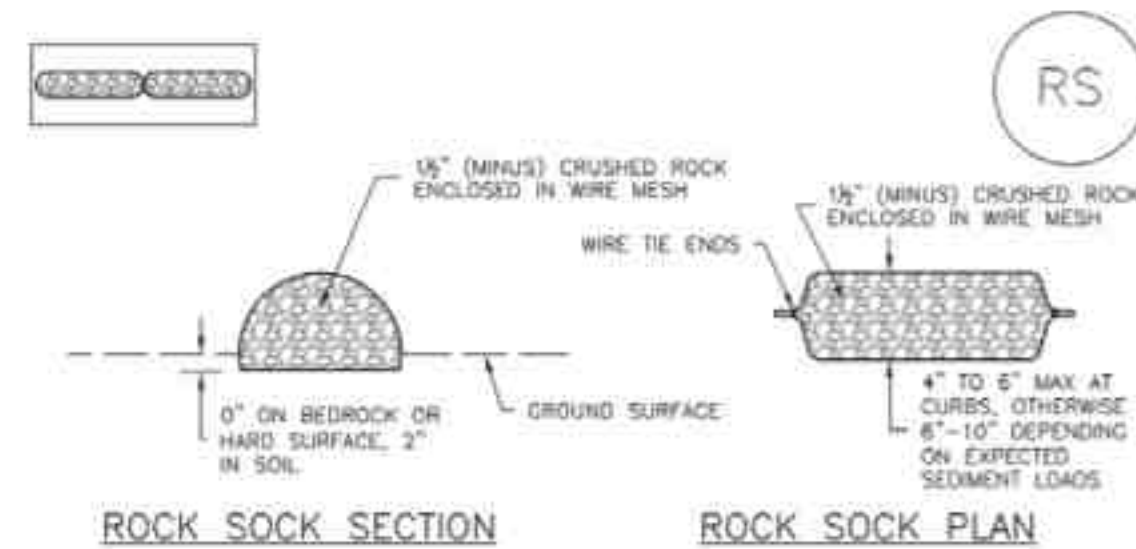
- SEE PLAN VIEW FOR CWA INSTALLATION LOCATION.
- DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST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

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

CWA-3

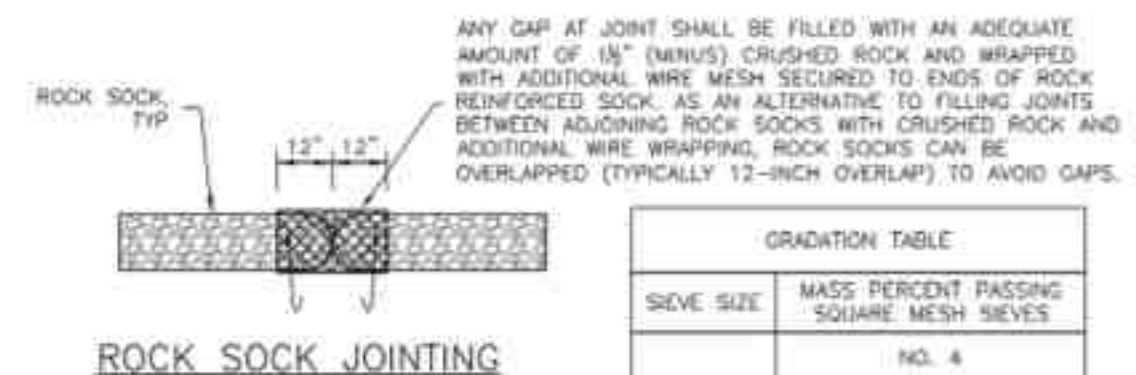
SC-5

Rock Sock (RS)



ROCK SOCK SECTION

ROCK SOCK PLAN



ROCK SOCK JOINTING

GRADATION TABLE	
SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
NO. 4	
2"	100
1 1/2"	90 - 100
3/4"	20 - 55
1/2"	0 - 15
3/8"	0 - 5

MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M-83. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.

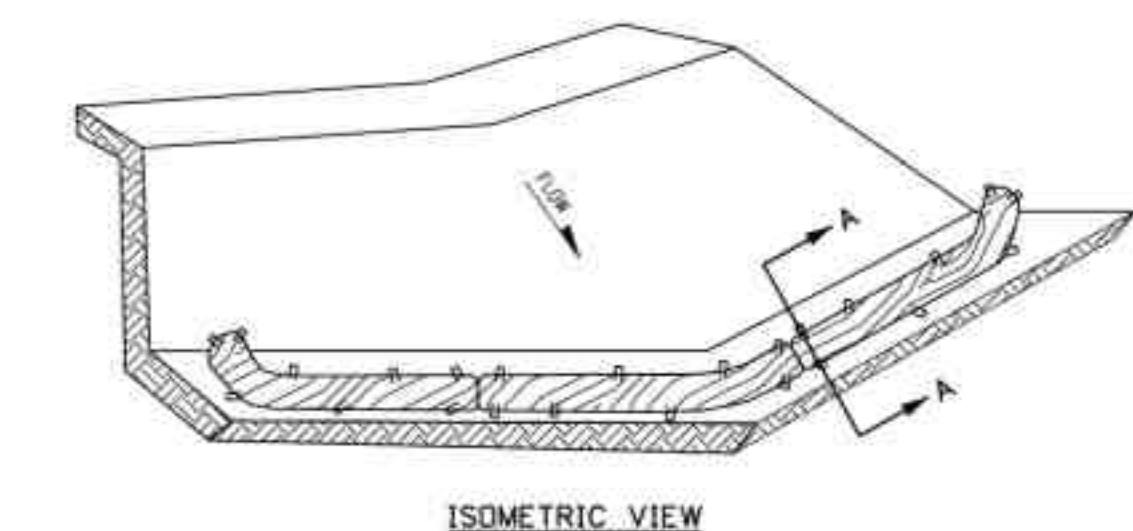
ROCK SOCK INSTALLATION NOTES

- SEE PLAN VIEW FOR LOCATION(S) OF ROCK SOCKS.
- CRUSHED ROCK SHALL BE 1/2" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1/2" MINUS).
- WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF 3", RECOMMENDED MINIMUM ROLL WIDTH OF 48"
- WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.
- SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

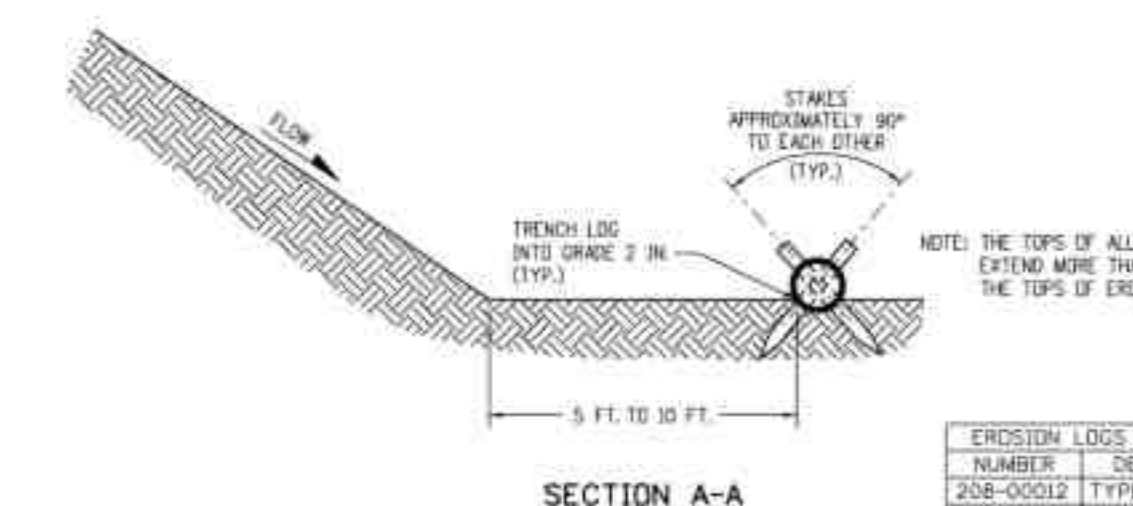
RS-1. ROCK SOCK PERIMETER CONTROL

RS-2 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

November 2010



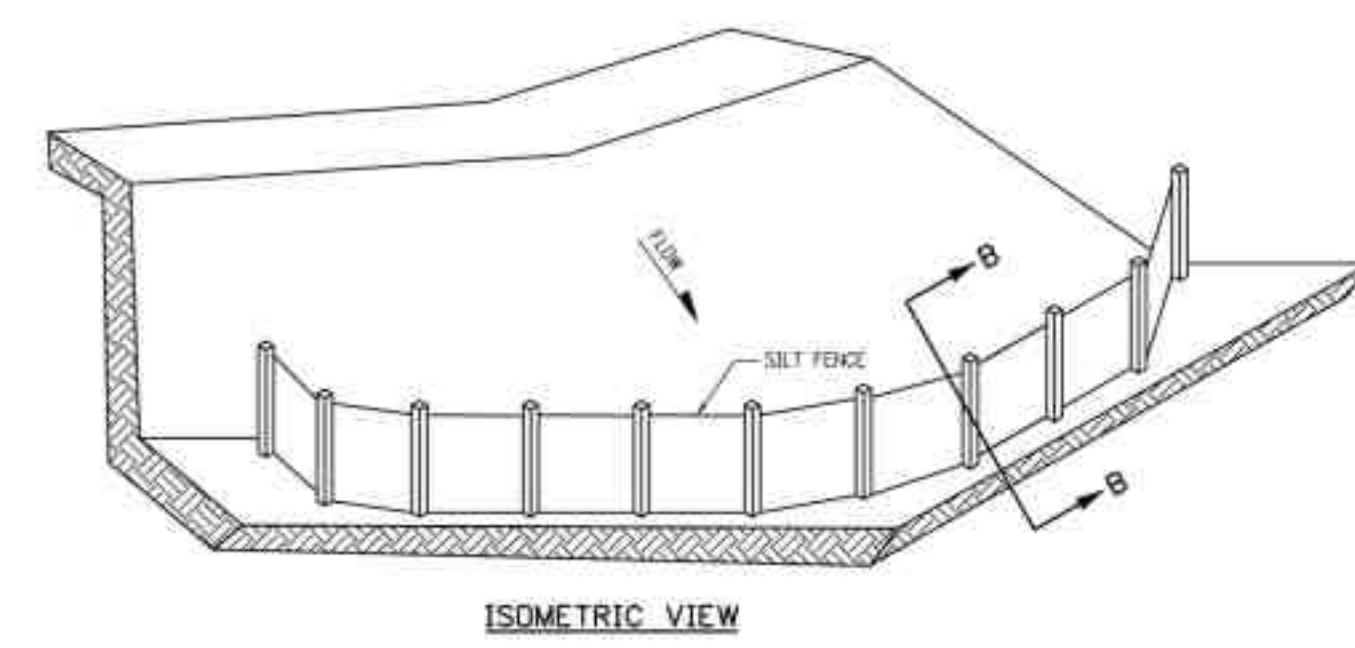
ISOMETRIC VIEW



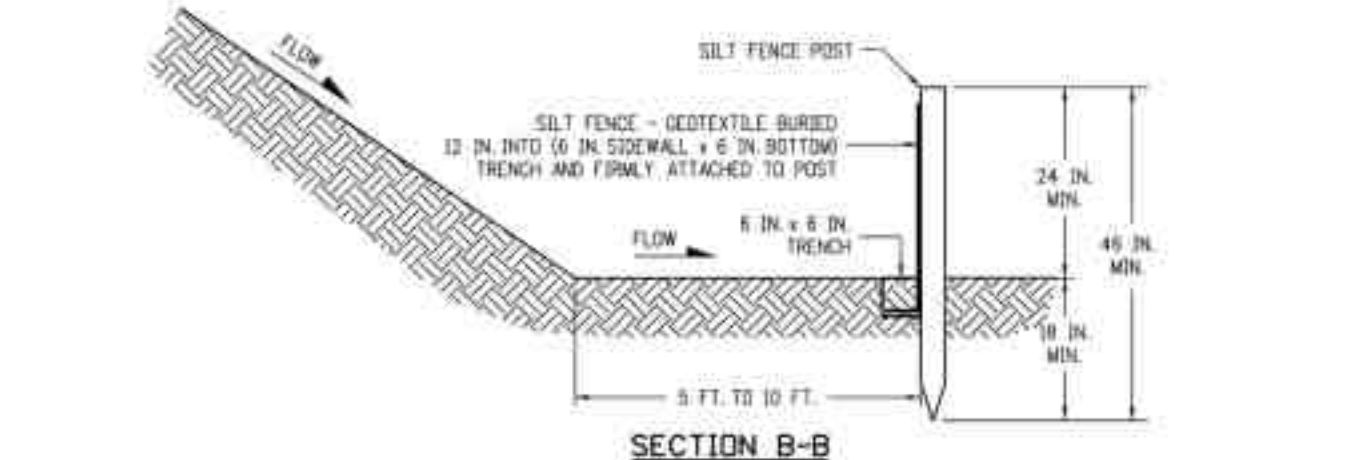
SECTION A-A

- NOTES:
- EROSION LOGS USED AT TOE OF SLOPE SHALL BE PLACED 5 TO 10 FEET BEYOND TOE OF SLOPE TO PROVIDE STORAGE CAPACITY.
 - EROSION LOGS SHALL BE PLACED ON THE CONTOUR WITH ENDS FLARED UP SLOPE.
 - SEE SHEET 2 OF 11 FOR JOINING LOGS DETAIL.

EROSION LOG TOE OF SLOPE PROTECTION



ISOMETRIC VIEW

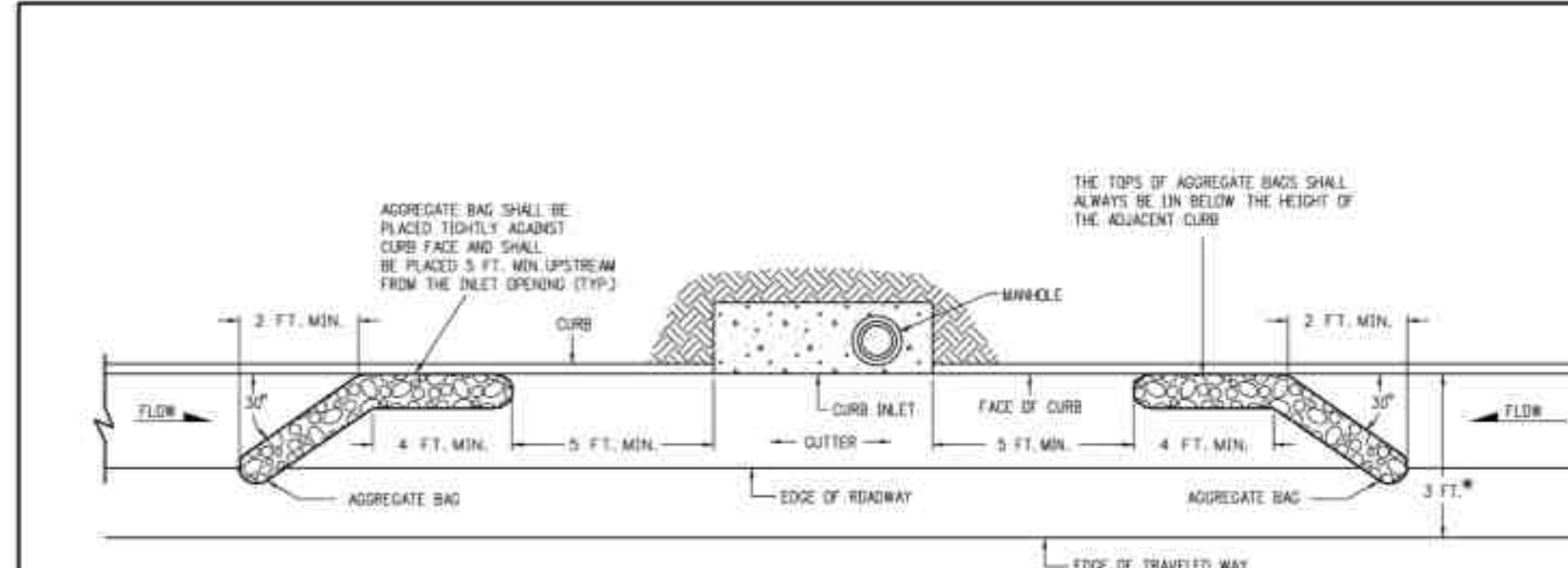


SECTION B-B

SILT FENCE TOE OF SLOPE PROTECTION

NOTE: THE PAY ITEM NUMBER FOR SILT FENCE (LF) IS 208-00020.

Computer File Information		Sheet Revisions		Colorado Department of Transportation 2829 West Howard Place COOT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868 Division of Project Support JBK/LTA	TEMPORARY EROSION CONTROL	STANDARD PLAN NO. M-208-1	Sheet No. 3 of 11
Creation Date: 07/04/12	Initiator: JBK	Date:	Comments:				
Last Modification Date: 04/01/19	Initiator: LTA	03/29/19	Revised to meet design				
Full Path: www.cdot.gov/business/designsupport		04/01/19	Revised to meet design				
Drawing File Name: 2080103011.dwg							
CAD Ver: MicroStation V8	Scale: Not to Scale	Units: English					

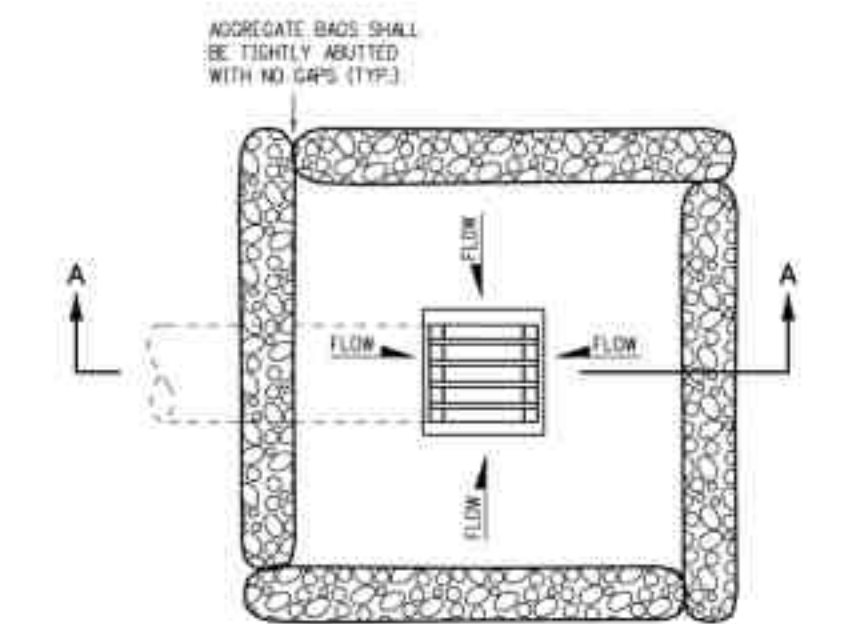


PLAN VIEW

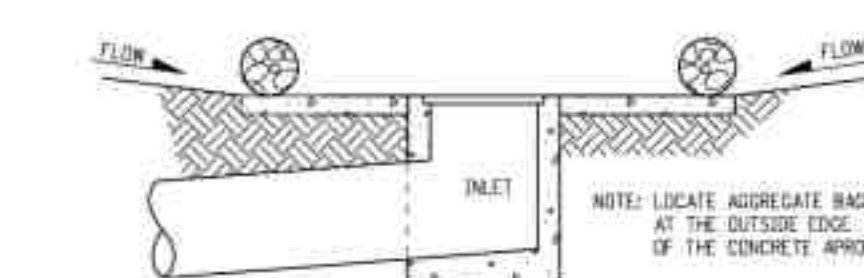
* NOTE: USE AGGREGATE BAGS ONLY WHEN THERE IS A MINIMUM CLEARANCE OF 3 FEET FROM THE EDGE OF THE TRAVELED WAY (INCLUDING CONDITIONS DURING DETOURS) TO THE FACE OF CURB.

LENGTH (L) OF INLET (FT.)	NUMBER OF AGGREGATE BAGS UPSTREAM OF INLET
0 - 5	1
6 - 10	2
11 - 15	3

AGGREGATE BAGS AT STORM DRAIN INLET (TYPE I)



PLAN VIEW



SECTION A-A

AGGREGATE BAGS AT DROP INLET

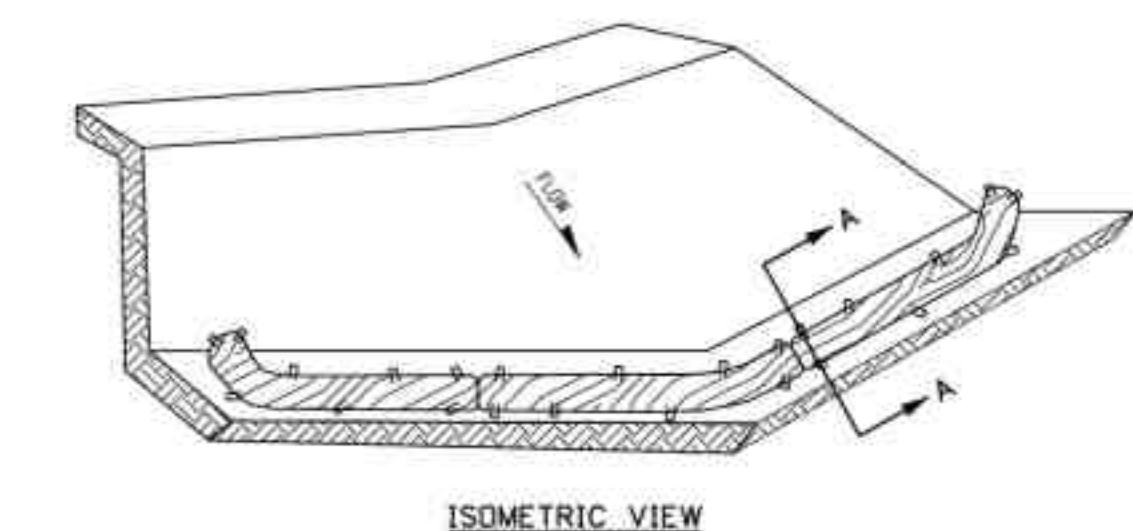
AGGREGATE BAG APPLICATIONS

NOTE: THE PAY ITEM NUMBER FOR AGGREGATE BAG (LF) IS 208-00035.

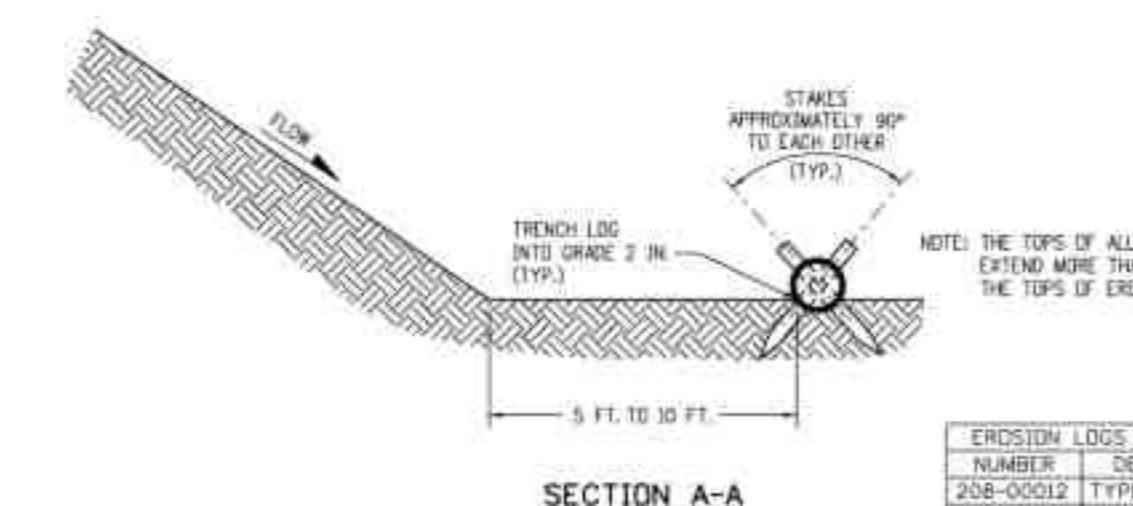
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Issued by the Project Development Branch: July 31, 2019.

Project Sheet Number:



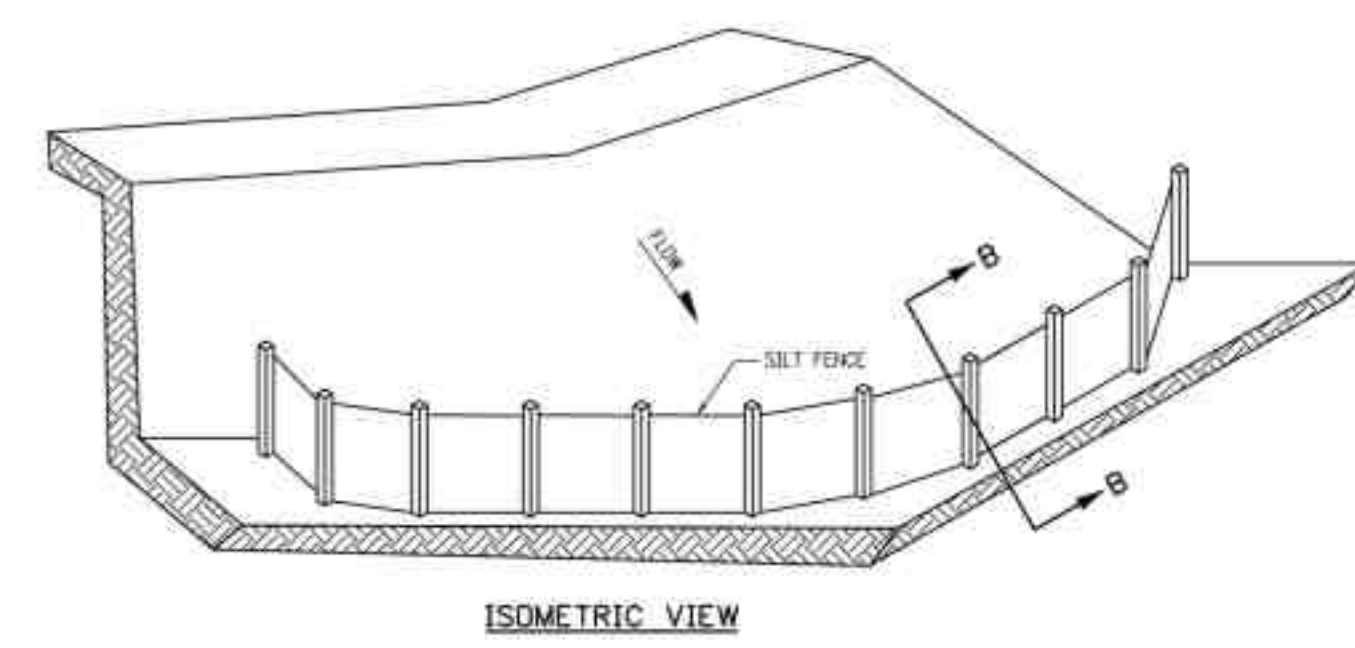
ISOMETRIC VIEW



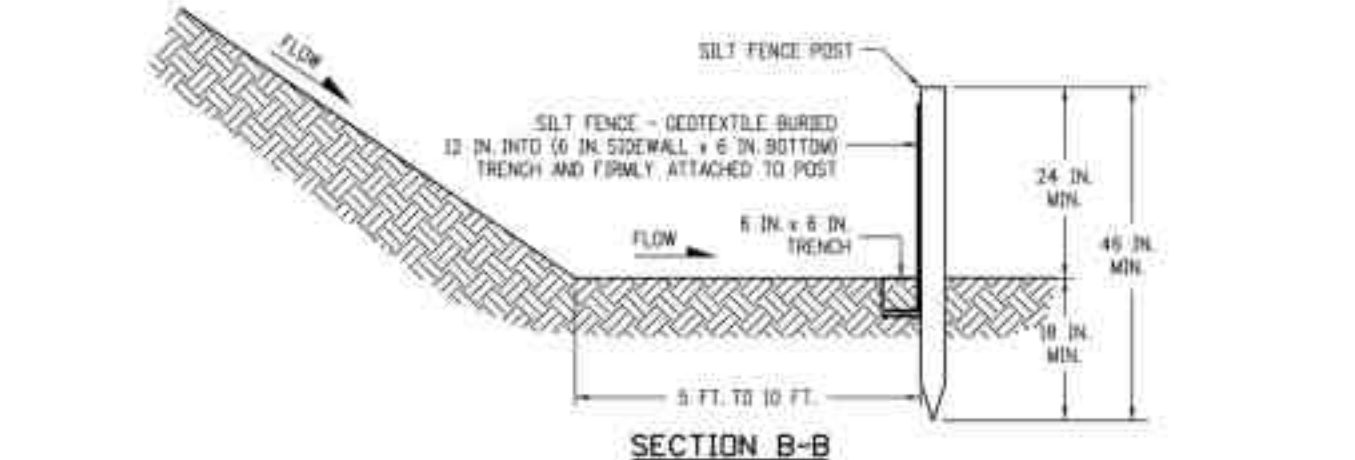
SECTION A-A

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 - EROSION LOGS SHALL BE PLACED ON THE CONTOUR WITH ENDS FLARED UP SLOPE.
 - SEE SHEET 2 OF 11 FOR JOINING LOGS DETAIL.

EROSION LOG TOE OF SLOPE PROTECTION



ISOMETRIC VIEW

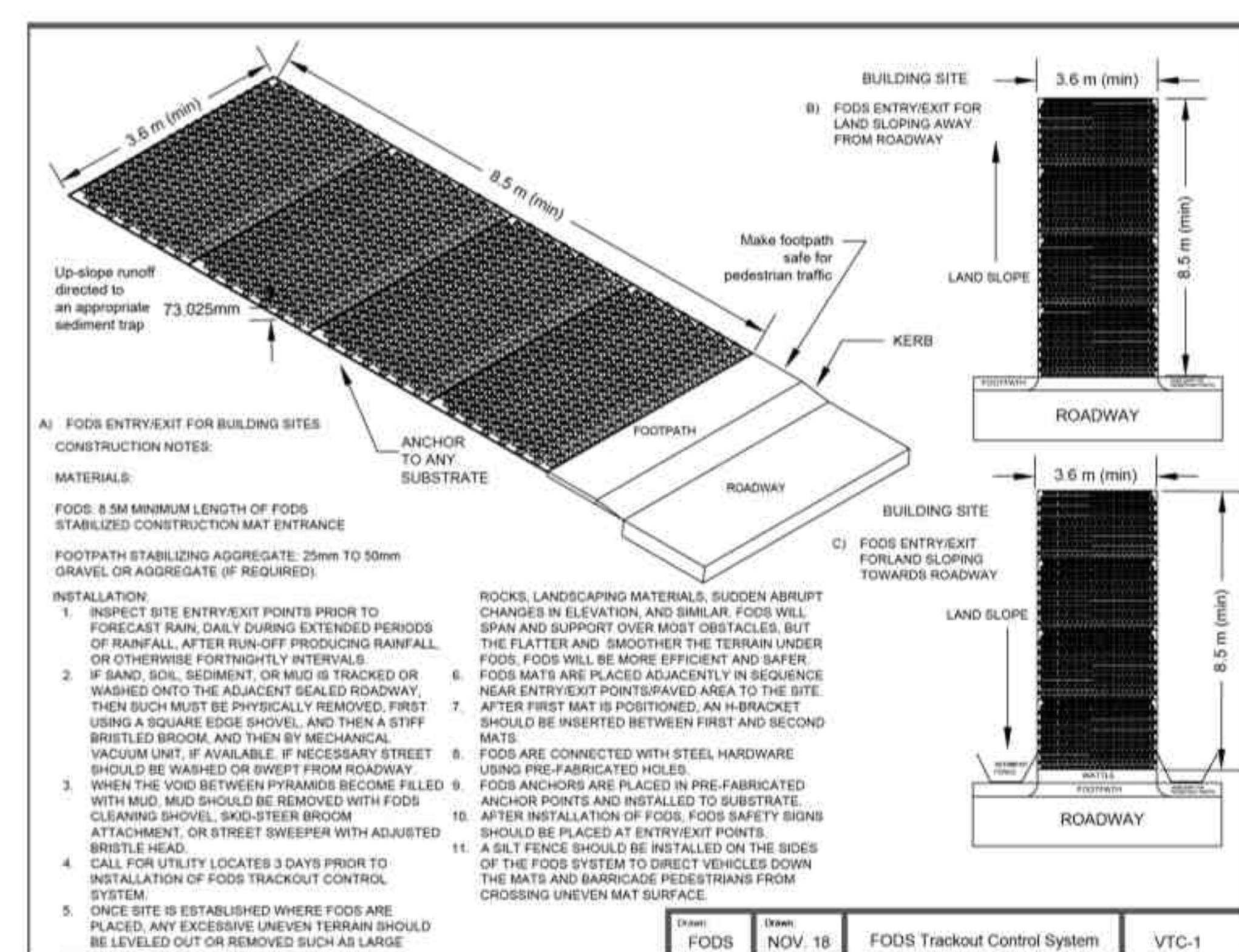


SECTION B-B

SILT FENCE TOE OF SLOPE PROTECTION

NOTE: THE PAY ITEM NUMBER FOR SILT FENCE (LF) IS 208-00020.

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PLAN VIEW

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

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