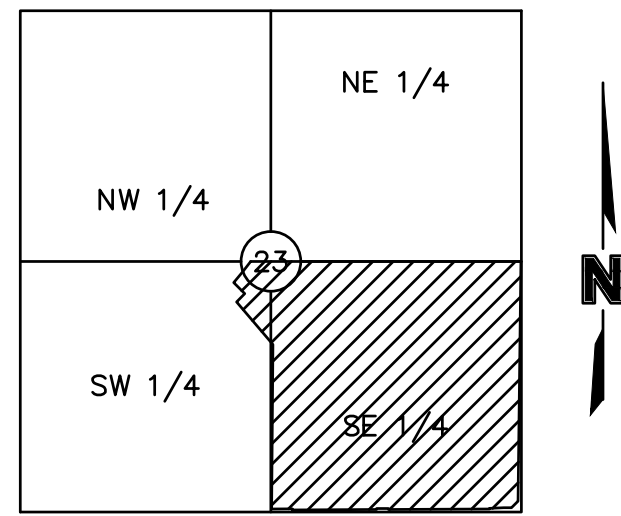


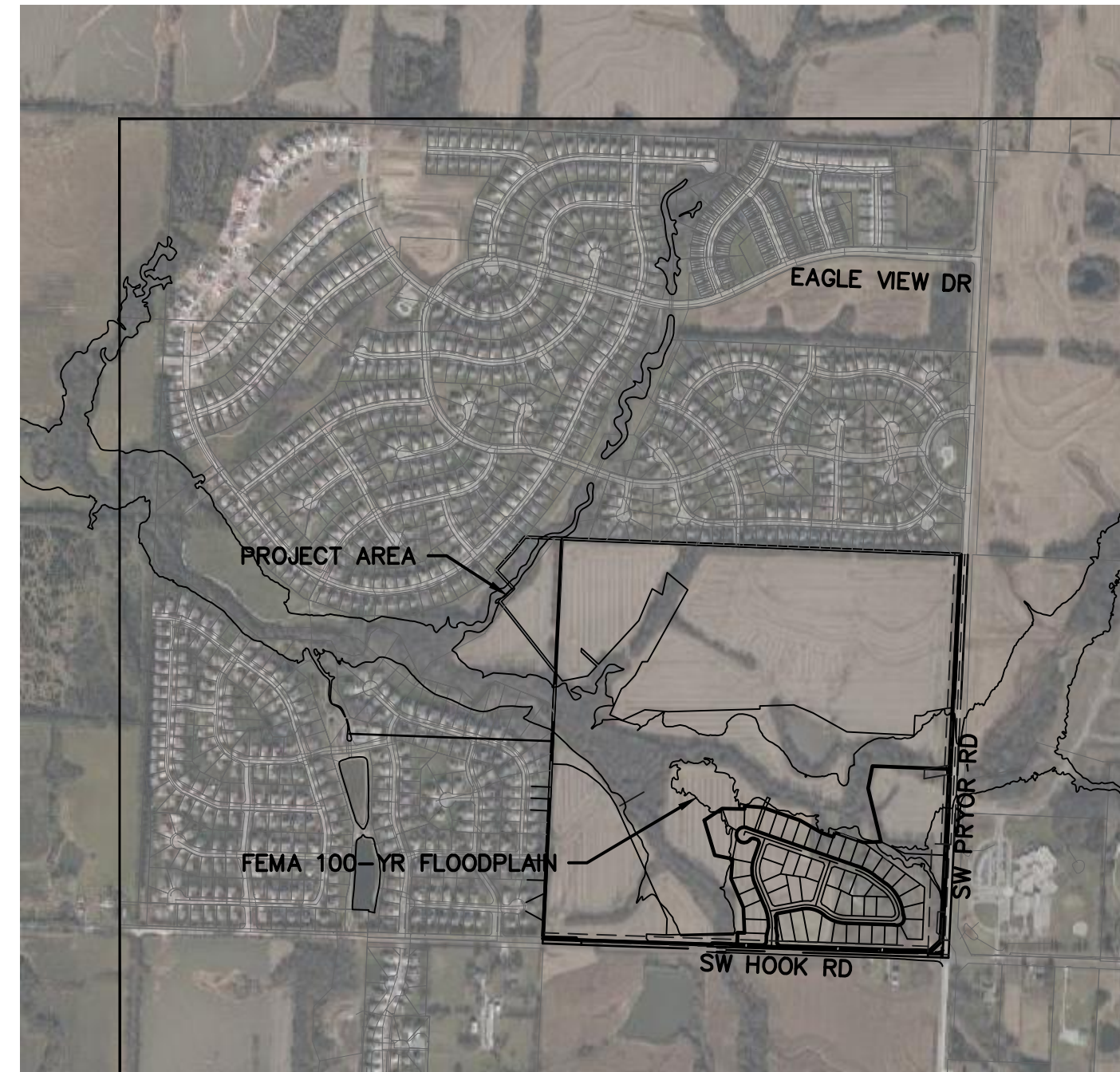
THE RETREAT AT HOOK FARMS SITE DISTURBANCE PLANS

SECTION 23, TOWNSHIP 47N, RANGE 23W
IN LEE'S SUMMIT, JACKSON COUNTY, MO



LOCATION MAP
Sec. 23, Twp. 47 N., Rge. 23 W.
(N.T.S.)

PROJECT TEAM & UTILITY CONTACT LIST	
OWNER / DEVELOPER HUNT MIDWEST REAL ESTATE DEVELOPMENT, INC. 8300 NE UNDERGROUND DRIVE KANSAS CITY, MO 64161 CONTACT: AARON SCHMIDT PHONE: 816.459.4285 FAX: 000.000.0000	UTILITY SERVICE NUMBERS NAME: DEVELOPMENT SERVICES PHONE: 816-969-1200 NAME: LEE'S SUMMIT WATER & SERVICES DEPARTMENT PHONE: 816-969-1940 NAME: SPIRE (MGE) PHONE: 314-342-0500 NAME: AT&T PHONE: 800-286-8313 NAME: EVERGY PHONE: 816-471-5275 NAME: SPECTRUM (TWC) PHONE: 877-772-2253
ENGINEER OLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: NAME, P.E. PHONE: 816.299.4341	NAME: GOOGLE FIBER PHONE: 877-454-6959
SURVEYOR OLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JASON RUDEBUSH, PLS PHONE: 816.361.1177	



Page Number	Sheet Number	Sheet Title
41	C400	COVER SHEET
42	C401	GENERAL NOTES
43	C402	GENERAL LAYOUT
44	C403	GRADING PLAN
45	C404	OFFSITE GRADING PLAN
46	C405	SITE DISTURBANCE PLAN - PHASE 1
47	C406	SITE DISTURBANCE PLAN - PHASE 2
48	C407	SITE DISTURBANCE PLAN - PHASE 3
49	C408	SITE DISTURBANCE DETAILS
50	C409	SITE DISTURBANCE DETAILS
51	C410	SITE DISTURBANCE DETAILS
52	C411	SITE DISTURBANCE DETAILS
53	C412	SITE DISTURBANCE DETAILS
54	C413	SITE DISTURBANCE DETAILS

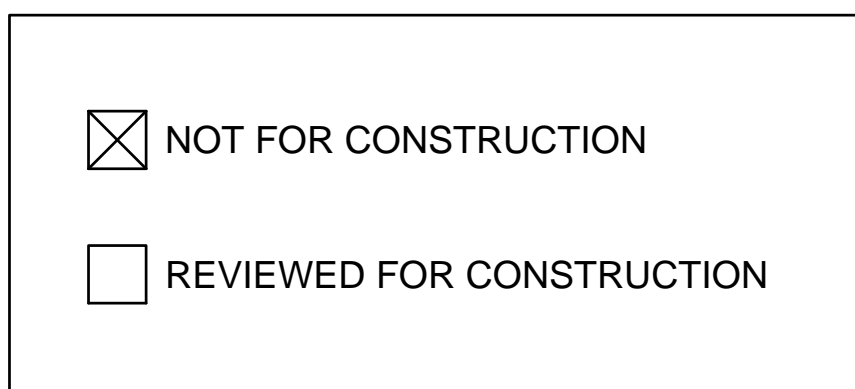
PROPERTY DESCRIPTION:

(AS PROVIDED BY CHICAGO TITLE INSURANCE COMPANY, NOVEMBER 1, 2018)

ALL THAT PART OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 47, RANGE 32, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, BEING BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF SAID SOUTHEAST QUARTER; THENCE SOUTH 89 DEGREES 45 MINUTES 34 SECONDS EAST, ALONG THE NORTH LINE OF SAID SOUTHEAST QUARTER, 2613.19 FEET TO ITS INTERSECTION WITH THE WEST RIGHT-OF-WAY LINE OF PRYOR ROAD AS NOW ESTABLISHED; THENCE SOUTH 02 DEGREES 45 MINUTES 31 SECONDS WEST, ALONG SAID WEST RIGHT-OF-WAY LINE, 2520.50 FEET; THENCE SOUTH 47 DEGREES 23 MINUTES 30 SECONDS WEST, ALONG SAID WEST RIGHT-OF-WAY LINE, 135.21 FEET TO ITS INTERSECTION WITH THE NORTH RIGHT-OF-WAY LINE OF HOOK ROAD, AS NOW ESTABLISHED; THENCE NORTH 87 DEGREES 58 MINUTES 31 SECONDS WEST, ALONG SAID NORTH RIGHT-OF-WAY LINE, 2264.70 FEET; THENCE NORTH 02 DEGREES 43 MINUTES 25 SECONDS EAST, ALONG SAID NORTH RIGHT-OF-WAY LINE, 10.00 FEET; THENCE NORTH 87 DEGREES 58 MINUTES 31 SECONDS WEST, ALONG SAID NORTH RIGHT-OF-WAY LINE, 252.00 FEET TO A POINT ON THE WEST LINE OF SAID SOUTHEAST QUARTER; THENCE NORTH 02 DEGREES 43 MINUTES 25 SECONDS EAST ALONG SAID WEST LINE, 2615.22 FEET TO THE POINT OF BEGINNING.

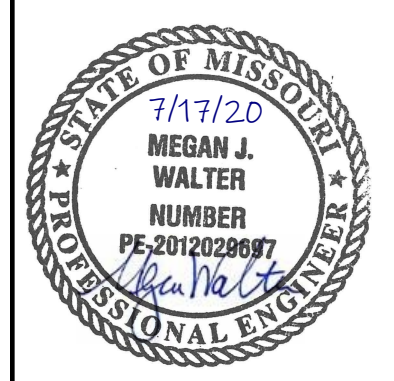
ALSO,

ALL THAT PART OF THE FOLLOWING DESCRIBED PROPERTY IN THE NORTHEAST ¼ OF THE SOUTHWEST ¼ OF SECTION 23, TOWNSHIP 47, RANGE 32, LYING NORTH OF EAGLE CREEK GREENWAY, A SUBDIVISION, ALL IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, TO-WIT:
 THE SOUTH ONE HALF OF THE NORTHEAST QUARTER AND THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER AND ALL THAT PART OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 47, RANGE 32, IN LEE'S SUMMIT, JACKSON COUNTY MISSOURI, BEING DESCRIBED AS FOLLOWS:
 BEGINNING AT THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER, THENCE NORTH 2 DEGREES 36 MINUTES 10 SECONDS EAST, ALONG THE WEST LINE OF SAID NORTHWEST QUARTER 1330.50 FEET TO THE NORTHWEST CORNER OF THE SOUTH ONE-HALF OF SAID NORTHWEST QUARTER, THENCE SOUTH 87 DEGREES 40 MINUTES 35 SECONDS EAST, ALONG THE NORTH LINE OF SAID SOUTH ONE-HALF 2657.85 FEET TO THE NORTHEAST CORNER OF SAID SOUTH ONE-HALF, THENCE SOUTH 87 DEGREES 41 MINUTES 31 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTH ONE-HALF OF SAID NORTHEAST QUARTER 2654.44 FEET TO THE NORTHEAST CORNER OF SAID SOUTH ONE-HALF; THENCE SOUTH 2 DEGREES 46 MINUTES 08 SECONDS WEST, ALONG THE EAST LINE OF SAID NORTHEAST QUARTER 1323.83 FEET TO THE SOUTHEAST CORNER OF SAID NORTHEAST QUARTER; THENCE NORTH 87 DEGREES 45 MINUTES 23 SECONDS WEST, ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER, 2653.42 FEET TO THE SOUTHWEST CORNER OF SAID NORTHEAST QUARTER; THENCE SOUTH 2 DEGREES 43 MINUTES 24 SECONDS WEST, (DEED-SOUTH 2 DEGREES 41 MINUTES 49 SECONDS WEST), ALONG THE EAST LINE OF SAID SOUTHWEST QUARTER, 1138.42 FEET TO THE CENTERLINE OF MOUSE CREEK, AS NOW ESTABLISHED; THENCE NORTH 25 DEGREES 51 MINUTES 18 WEST (DEED-NORTH 25 DEGREES 52 MINUTES 53 WEST), ALONG SAID CENTERLINE, 73.83 FEET; THENCE NORTH 67 DEGREES 53 MINUTES 09 SECONDS WEST (DEED-NORTH 67 DEGREES 54 MINUTES 44 SECONDS WEST), ALONG SAID CENTERLINE, 379.20 FEET; THENCE SOUTH 39 DEGREES 00 MINUTES 27 SECONDS WEST (DEED-SOUTH 38 DEGREES 58 MINUTES 52 SECONDS WEST), ALONG SAID CENTERLINE, 187.72 FEET; THENCE NORTH 48 DEGREES 37 MINUTES 07 SECONDS WEST (DEED-NORTH 48 DEGREES 38 MINUTES 42 SECONDS WEST), ALONG SAID CENTERLINE, 131.31 FEET; THENCE NORTH 73 DEGREES 28 MINUTES 23 SECONDS WEST (DEED-NORTH 73 DEGREES 29 MINUTES 58 SECONDS WEST), ALONG SAID CENTERLINE, 279.90 FEET THENCE NORTH 26 DEGREES 34 MINUTES 47 SECONDS WEST (DEED-NORTH 26 DEGREES 36 MINUTES 22 SECONDS WEST), ALONG SAID CENTERLINE, 312.25 FEET; THENCE NORTH 62 DEGREES 29 MINUTES 46 SECONDS WEST (DEED-NORTH 62 DEGREES 31 MINUTES 21 SECONDS WEST), ALONG SAID CENTERLINE, 134.47 FEET; THENCE SOUTH 52 DEGREES 10 MINUTES 15 SECONDS WEST (DEED-SOUTH 52 DEGREES 08 MINUTES 40 SECONDS WEST), ALONG SAID CENTERLINE, 85.16 FEET; THENCE SOUTH 19 DEGREES 37 MINUTES 09 SECONDS WEST (DEED-SOUTH 19 DEGREES 35 MINUTES 34 SECONDS WEST), ALONG SAID CENTERLINE, 142.83 FEET; THENCE SOUTH 79 DEGREES 21 MINUTES 39 SECONDS WEST (DEED-SOUTH 79 DEGREES 20 MINUTES 04 SECONDS WEST), ALONG SAID CENTERLINE, 68.92 FEET; THENCE NORTH 73 DEGREES 27 MINUTES 48 SECONDS WEST (DEED-NORTH 73 DEGREES 29 MINUTES 23 SECONDS WEST), ALONG SAID CENTERLINE, 114.02 FEET; THENCE NORTH 25 DEGREES 46 MINUTES 28 SECONDS WEST (DEED-NORTH 25 DEGREES 48 MINUTES 03 SECONDS WEST), ALONG SAID CENTERLINE, 73.12 FEET; THENCE NORTH 87 DEGREES 30 MINUTES 19 SECONDS WEST (DEED-NORTH 87 DEGREES 31 MINUTES 54 SECONDS WEST), ALONG SAID CENTERLINE, 473.33 FEET; THENCE NORTH 49 DEGREES 45 MINUTES 48 SECONDS WEST (DEED-NORTH 49 DEGREES 47 MINUTES 23 SECONDS WEST), ALONG SAID CENTERLINE, 343.23 FEET; THENCE NORTH 56 DEGREES 22 MINUTES 25 SECONDS WEST (DEED-NORTH 56 DEGREES 24 MINUTES 00 SECONDS WEST), ALONG SAID CENTERLINE, 277.94 FEET; THENCE NORTH 65 DEGREES 42 MINUTES 49 SECONDS WEST (DEED-NORTH 65 DEGREES 44 MINUTES 24 SECONDS WEST), ALONG SAID CENTERLINE, 182.37 FEET; THENCE NORTH 22 DEGREES 55 MINUTES 55 SECONDS WEST (DEED-NORTH 22 DEGREES 57 MINUTES 30 SECONDS WEST), ALONG SAID CENTERLINE, 65.99 FEET TO ITS INTERSECTION WITH THE WEST LINE OF SAID SOUTHWEST QUARTER; THENCE NORTH 2 DEGREES 36 MINUTES 17 SECONDS EAST (DEED-NORTH 2 DEGREES 34 MINUTES 42 SECONDS EAST), ALONG SAID WEST LINE, 239.42 FEET TO THE POINT OF BEGINNING.
 (SHOWN FOR CONVENIENCE IN REPORTING.)



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	7/17/2020	CITY COMMENTS

COVER SHEET
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS
 LEE'S SUMMIT, MO
 2020

drawn by: EM
 checked by: EM
 designed by: RB
 QA/QC by: NH
 project no.: 019-4059
 drawing no.: C_TTL00_0194059
 date: 4/20/2020

SHEET C400

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 USER: mhaiser
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GENERAL NOTES:

1. THE INTENT OF THIS LAND DISTURBANCE PLAN IS TO ASSIST THE DEVELOPER IN HIS RESPONSIBILITY TO PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR NECESSARY TO CONTROL EROSION, SILTATION AND DISCHARGES OF SOIL MATERIAL (SEDIMENT) INTO DOWNSTREAM SYSTEMS OR RECEIVING CHANNELS. THIS SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION AND UNTIL SUITABLE GROUND COVER IS ESTABLISHED FOR ALL DISTURBED AREAS. IF ANY METHOD OF CONTROL FAILS, THE DEVELOPER SHALL NOTIFY THE OWNER IMMEDIATELY, SO THAT THE OWNER OR HIS AGENT CAN REVIEW THE DEVELOPER'S PROPOSED METHOD OF REPAIR.

THIS PLAN INDICATES THE CRITICAL AREA(S) OF CONCERN AND THESE AREA(S) WILL BE CONTROLLED AS A MINIMUM. THE CONTROL MAY CONSIST OF TEMPORARY CONTROL MEASURES AS SHOWN ON THE PLANS OR ORDERED BY THE OWNER DURING THE LIFE OF THE CONTRACT TO CONTROL EROSION OR WATER POLLUTION, THROUGH THE USE OF BERMS, DIKES, DAMS, SEDIMENT BASINS, FIBER MATS, NETTING, STRAW BALES, GRAVEL, MULCHES, GRASSES, SLOPE DRAINS, DIVERSION SWALES OR OTHER EROSION CONTROL DEVICES OR METHODS. THE OWNER HAS THE AUTHORITY TO LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY THE CONSTRUCTION OPERATIONS AND TO DIRECT THE DEVELOPER TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, OR OTHER AREAS OF WATER IMPOUNDMENT OR CONVEYANCES.

THE TEMPORARY POLLUTION CONTROL PROVISIONS CONTAINED HEREIN SHALL BE COORDINATED WITH ANY PERMANENT EROSION CONTROL FEATURES SPECIFIED ELSEWHERE IN THE CONTRACT TO THE EXTENT PRACTICAL TO ASSURE ECONOMICAL EFFECTIVE AND CONTINUOUS EROSION CONTROL THROUGHOUT THE CONSTRUCTION AND POST CONSTRUCTION PERIOD.

2. THIS SEDIMENTATION CONTROL PLAN MAKES USE OF THE FOLLOWING APPLICATIONS:

- ___X_PRESERVATION OF EXISTING VEGETATION
- ___X_SEDIMENT BARRIERS
- ___X_SEDIMENT TRAPS
- ___X_INLET PROTECTION
- ___X_OUTLET PROTECTION
- ___SOIL RETAINING SYSTEMS
- ___SLOPE DRAINS
- ___SUBSURFACE DRAINS

PHYSICAL DESCRIPTION OF EACH SPECIFIC SEDIMENT CONTROL DEVICE TO BE UTILIZED IS CALLED OUT ON THE PLANS WITH INSTALLATION PROCEDURES, CONSTRUCTION SPECIFICATIONS AND MAINTENANCE ARRANGEMENT AS CALLED FOR ON THE DETAIL SHEET. IN ADDITION TO THE MEASURES SPECIFIED, THE FOLLOWING GENERAL PRACTICES SHALL BE ADHERED TO WHEN APPLICABLE.

A. CLEARING AND GRUBBING WITHIN 50' OF A DEFINED DRAINAGE COURSE SHOULD BE AVOIDED WHEN POSSIBLE. WHERE CHANGES TO A DEFINED DRAINAGE COURSE OCCUR, WORK SHOULD BE DELAYED UNTIL ALL MATERIALS AND EQUIPMENT NECESSARY TO PROTECT AND COMPLETE THE DRAINAGE CHANGE ARE ON SITE. CHANGES SHALL BE COMPLETED AS QUICKLY AS POSSIBLE ONCE THE WORK HAS BEEN INITIATED. THE AREA IMPACTED BY THE CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED OR PROTECTED FROM EROSION AS SOON AS POSSIBLE. AREAS WITHIN 50' OF A DEFINED DRAINAGE WAYS SHOULD BE RECONTOURED AS NEEDED OR OTHERWISE PROTECTED WITHIN FIVE (5) WORKING DAYS AFTER GRADING HAS CEASED.

B. WHERE SOIL DISTURBING ACTIVITIES CEASE IN AN AREA FOR MORE THAN 14 DAYS, THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL MEASURES. IF THE SLOPE OF THE AREA IS GREATER THAN 3:1 OR IF THE SLOPE IS GREATER THAN 3% AND GREATER THAN 150 FEET IN LENGTH, THEN THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL MEASURES IF ACTIVITIES CEASE FOR MORE THAN SEVEN (7) DAYS.

C. EXISTING VEGETATION SHALL BE PRESERVED TO THE EXTENT AND WHERE PRACTICAL. IN NO CASE SHALL DISTURBED AREAS REMAIN WITHOUT VEGETATIVE GROUND COVER FOR A PERIOD IN EXCESS OF 60 DAYS.

D. ADDITIONAL SITE MANAGEMENT PRACTICES WHICH SHALL BE ADHERED TO DURING THE CONSTRUCTION PROCESS SHALL INCLUDE:

SOLID AND HAZARDOUS WASTE MANAGEMENT INCLUDING PROVIDING TRASH CONTAINERS AND REGULAR SITE CLEAN UP FOR PROPER DISPOSAL OF SOLID WASTE SUCH AS BUILDING MATERIAL, PRODUCT/MATERIAL SHIPPING WASTE, FOOD CONTAINERS AND CUPS, AND PROVIDING CONTAINERS FOR THE PROPER DISPOSAL OF WASTE PAINTS SOLVENTS, AND CLEANING COMPOUNDS.

PROVISIONS OF PORTABLE TOILETS FOR PROPER DISPOSAL OF SANITARY SEWAGE.

STORAGE OF CONSTRUCTION MATERIALS AWAY FROM DRAINAGE COURSES AND LOW AREAS.

INSTALLATION OF CONTAINMENT BERMS AND USE OF DRIP PANS AT PETROLEUM PRODUCT AND LIQUID STORAGE TANKS AND CONTAINERS.

3. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED AND MULCHED, OR SODDED, IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS ADOPTED BY THE CITY OF LEE'S SUMMIT AND GOOD ENGINEERING PRACTICES. THIS SHALL BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER COMPLETING THE WORK, IN ANY AREA, IF THIS IS OUTSIDE OF THE SEEDING PERIOD, SILT BARRIERS OR OTHER SIMILARLY EFFECTIVE MEASURES SHALL BE PROVIDED UNTIL SUCH TIME THAT THE AREAS CAN BE SEEDED.

4. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL CURRENT STANDARDS AND SPECIFICATIONS ADOPTED BY THE CITY OF LEE'S SUMMIT. THE DEVELOPER WILL BE RESPONSIBLE FOR DETERMINING ALL ADDITIONAL STANDARDS, SPECIFICATIONS OR REQUIREMENTS WHICH ARE REQUIRED BY GOVERNING AGENCIES (INCLUDING LOCAL, STATE AND FEDERAL AUTHORITIES) HAVING JURISDICTION OVER THE WORK PROPOSED BY THESE CONSTRUCTION DRAWINGS.

5. ALL EROSION CONTROL MEASURES, TEMPORARY OR PERMANENT, REQUIRE MAINTENANCE TO PRESERVE THEIR EFFECTIVENESS. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED IMMEDIATELY AFTER EACH HEAVY RAINSTORM AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY. ALL COSTS ASSOCIATED WITH THE REPAIR WORK INCLUDING RELATED INCIDENTALS WILL BE THE DEVELOPER'S RESPONSIBILITY AND SHALL BE INCLUDED IN THE DEVELOPER'S BID FOR THE PROPOSED WORK.

6. ALL EROSION CONTROL MEASURES TO BE PER APWA KANSAS CITY METRO CHAPTER STANDARD DETAILS.

7. THE DEVELOPER MUST REMOVE AT HIS COST ANY BAD SUBSURFACE SOIL WHICH WOULD NOT BE ABLE TO SUPPORT ANY PROPOSED PUBLIC IMPROVEMENT. BACKFILL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTIONS 2100 AND 2201 ENTITLED "GRADING AND SITE PREPARATION" AND "SUBGRADE PREPARATION" OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.

8. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTORS 48 HOURS PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200

9. TREE CLEARING TO HAPPEN BETWEEN NOVEMBER 1 AND MARCH 31. TREES CLEARED BETWEEN APRIL 1 AND OCTOBER 31 MUST BE TREES GREATER THAN 1,000 FEET FROM FORESTED OR WOODED AREAS OR TREES LESS THAN 3 INCHES IN DIAMETER, AT BREST HEIGHT, AND NOT MIXED WITH LARGER TREES. IF LARGER TREES NEED TO BE CLEARED, A SURVEY OF THE TREES MUST BE CONDUCTED TO MAKE SURE THERE ARE NO BAT ROOSTS IN THE TREES. TREE CLEARING TO BE CONDUCTED BY CUTTING DOWN AND MULCHING OR BY PUSHING OVER AND MULCHING. TREES SHALL NOT BE BURNED DOWN.

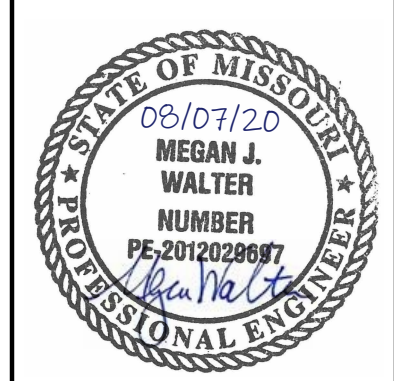
ESTIMATE OF QUANTITIES				
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PRIVATE GRADING				
1	EXCAVATION	C.Y.	66789	
2	EMBANKMENT	C.Y.	33695	
PUBLIC GRADING				
3	EXCAVATION	C.Y.	21637	
4	EMBANKMENT	C.Y.	8047	
SITE DISTURBANCE				
5	CONSTRUCTION ENTRANCE	EA.	2	
6	CONCRETE WASHOUT	EA.	1	
7	TREE CLEARING	AC.	1.35	
8	CURB INLET PROTECTION	EA.	16	
9	AREA INLET PROTECTION	EA.	5	
10	SILT FENCE	L.F.	2880	
11	OFFSITE SILT FENCE	L.F.	2427	
12	DIVERSION BERM	L.F.	2055	
13	ROCK CHECK DAMS	EA.	1	
14	SEDIMENT TRAP	EA.	4	
15	DISTURBED AREA	AC.	23	
16	OFFSITE DISTURBED AREA	AC.	6.85	
17	TURF GRASS SEEDING	AC.	20	
18	SLOPE PROTECTION	S.F.	855	

SUMMARY OF QUANTITIES AS INDICATED ABOVE AND ANY QUANTITIES AS SHOWN WITHIN THE PLANS HAVE BEEN PROVIDED FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR USE IN PREPARATION OF CONTRACT DOCUMENTS. QUANTITIES INTENDED FOR, BUT NOT LIMITED TO, THE PREPARATION OF PROPOSALS AND BID DOCUMENTS SHALL BE INDEPENDENTLY EVALUATED BY THE ESTIMATING PARTY BASED UPON THE CONTENTS OF THESE PLANS.

RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson

1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	6-24-2020	CITY COMMENTS	
2	8-7-2020	CITY COMMENTS	

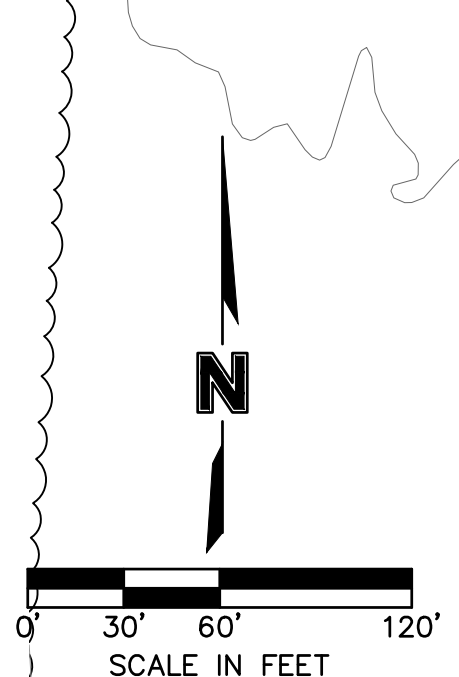
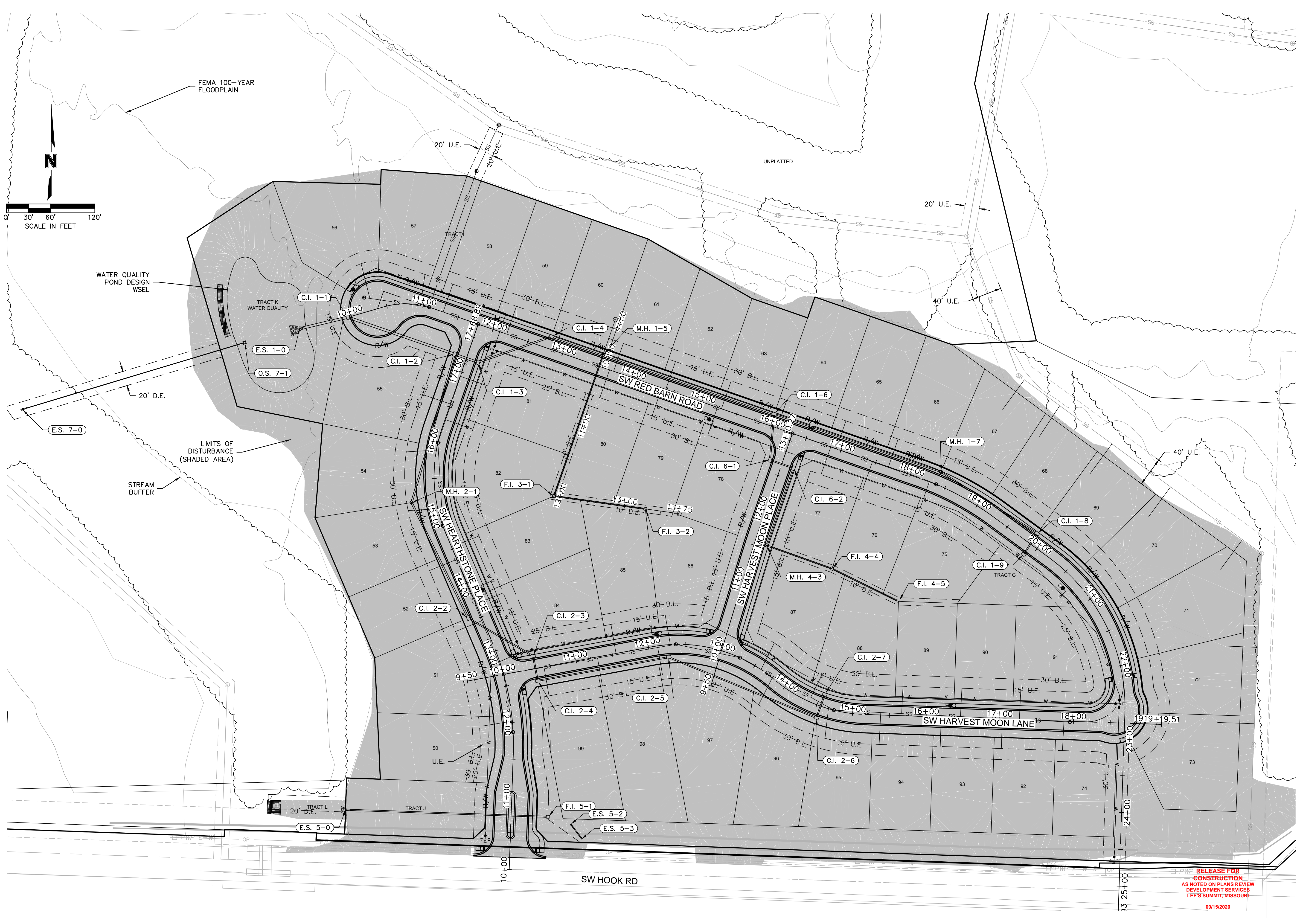
GENERAL NOTES
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

2020

LEE'S SUMMIT, MO

SHEET C401

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 C:\FBASE_0194059



RELEASE FOR
 CONSTRUCTION
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7/17/20
 MEGAN J. WALTER
 NUMBER
 PE-2012028697
 Professional Engineer

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	7/17/2020	CITY COMMENTS	

GENERAL LAYOUT
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

2020

REVISIONS

drawn by: EM	checked by: EM
designed by: RB	QA/QC by: NH
project no.: 019-4059	date: 4/20/2020
drawing no.: C_GEN02_0194059	

SHEET C402

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GENERAL NOTES:

- CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEE'S SUMMIT (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED RIGHT-OF-WAY.
- AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND OR TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE GEOTECHNICAL ENGINEER AND OR TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AT HIS EXPENSE.
- ALL EMBANKMENT OUTSIDE OF RIGHT-OF-WAY SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 8". EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF -0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

LEGEND	
100-	EXISTING INDEX CONTOURS
100-	EXISTING INTERMEDIATE CONTOURS
100-	PROPOSED INDEX CONTOURS
100-	PROPOSED INTERMEDIATE CONTOURS

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	21637	8047
SITE	66789	33695
TOTAL	88426	41742

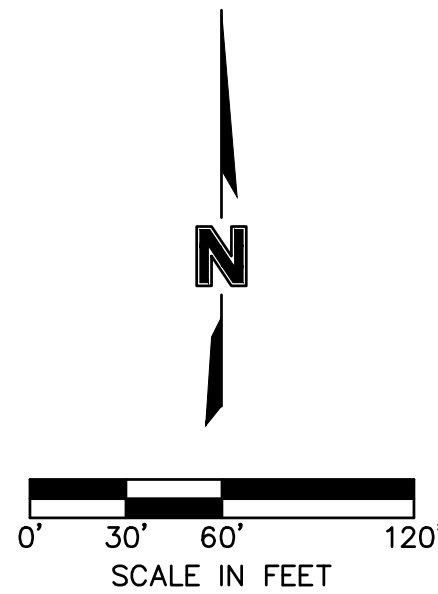
NOTES:

- ONE OIL OR GAS WELL IS LOCATED ON THE PROPERTY (DRY HOLE, ABANDONED AS OF 5/11/1928).
 COORDINATES: 38.87019N, -94.41911W
 INFORMATION VERIFIED VIA MISSOURI DNR:
<https://dnr.mo.gov/geology/geoserv/oilandgas.htm>
 (UPDATED AUGUST 2018)
- EARTHWORK QUANTITIES NOTES:
 1. EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
 2. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.

THIRD PARTY TESTING REQUIRED FOR WATER QUALITY BASIN:

- REMOVE TOPSOIL AND ORGANIC MATERIAL FROM THE AREA
- PROOF ROLL TO CHECK THE SUBGRADE
 - REMOVE OR REPAIR ANY UNSTABLE AREA IN ACCORDANCE WITH THIRD-PARTY TESTER
- PLACE 9" LOOSE LIFTS OF 9" MATERIAL WITH LL=50 AND PI=25 OR GREATER. EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF -0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

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STATE OF MISSOURI
7/17/20
MEGAN J. WALTER
NUMBER
PE-201202887
Professional Engineer

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	7/17/2020	CITY COMMENTS	

GRADING PLAN
SITE DISTURBANCE PLANS

THE RETREAT AT HOOK FARMS
CONSTRUCTION DOCUMENTS

LEE'S SUMMIT, MO

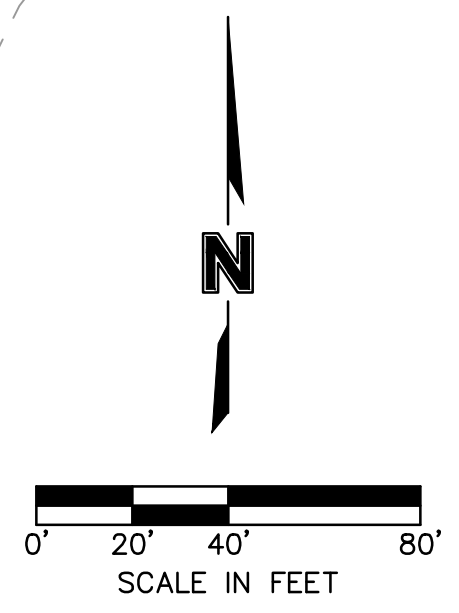
2020

REVISIONS

drawn by:	EM	checked by:	EM
designed by:	RB	QA/QC by:	NH
project no.:	019-4059	drawing no.:	C_GRD01_0194059
date:	4/20/2020		

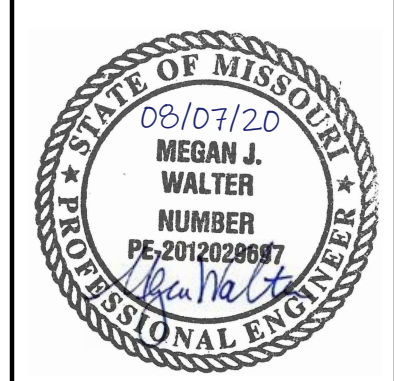
SHEET C403

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1	6-24-2020	CITY COMMENTS	
2	8-7-2020	CITY COMMENTS	

OFFSITE GRADING PLAN
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

LEE'S SUMMIT, MO 2020

drawn by: EM
 checked by: EM
 designed by: RB
 QA/QC by: NH
 project no.: 019-4059
 drawing no.: C_GRD03_0194059
 date: 4/20/2020

SHEET C404

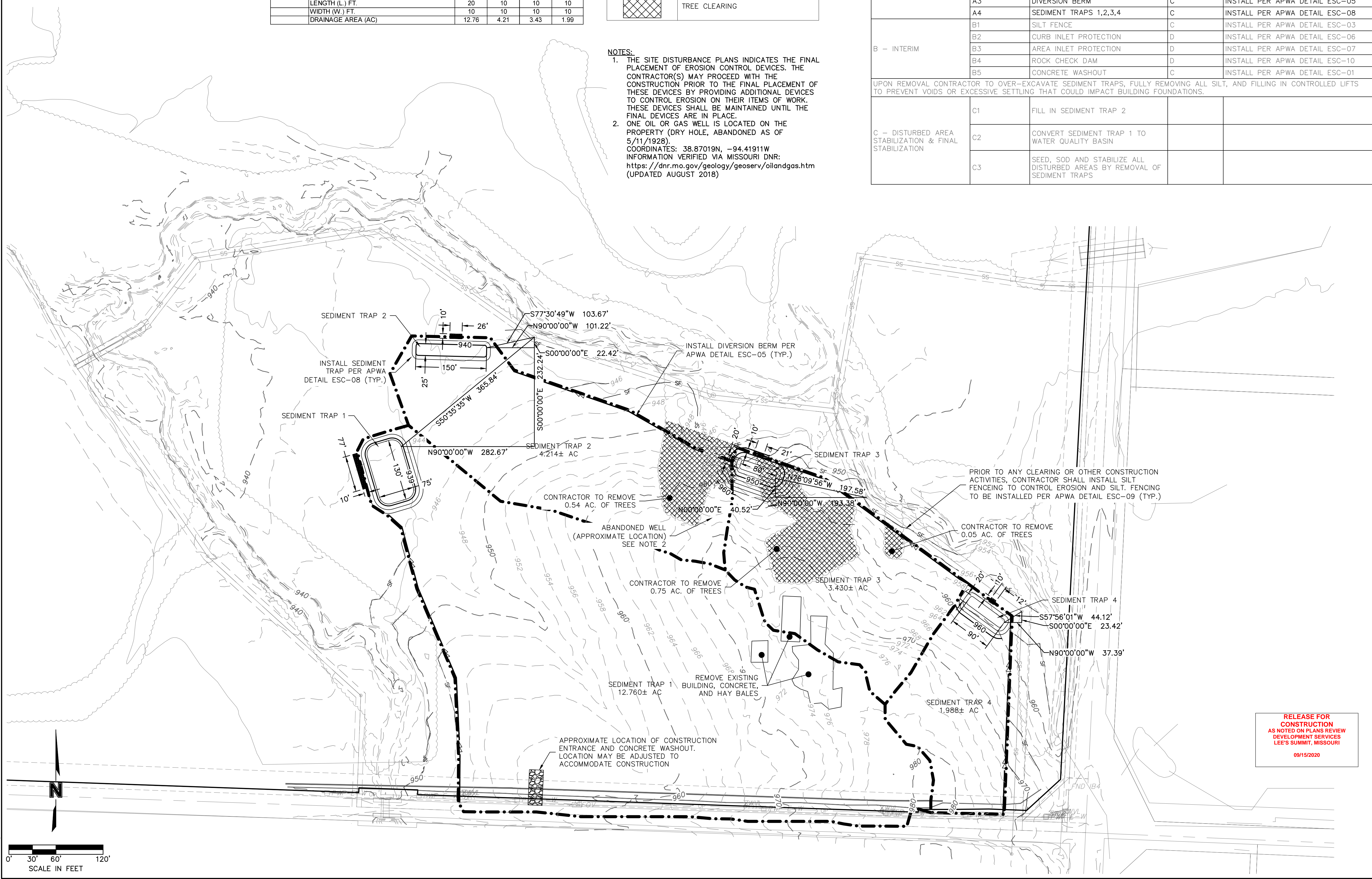
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TEMPORARY SEDIMENT TRAP	1	2	3	4
POND AND PRINCIPAL SPILLWAY DATA:				
DAM TOP ELEVATION	944	944	951	958
EMERGENCY SPILLWAY ELEVATION	943	943	950	957
WET STORAGE VOLUME ELEVATION				
WET STORAGE VOLUME ELEVATION	941	941	948	955
CLEANOUT ELEVATION	940.0	940.9	947.3	945.4
DRY BOTTOM ELEVATION	939	940	946	954
VOL. REQ'D @ 134CY/ACRE	1701	562	457	265
VOL. PROVIDED BELOW OUTLET CREST (CY)	1312	657	500	724
CLEANOUT VOLUME (CY)	425	140	114	66
STONE OUTLET DATA:				
LENGTH (L.) FT.	20	10	10	10
WIDTH (W.) FT.	10	10	10	10
DRAINAGE AREA (AC)	12.76	4.21	3.43	1.99

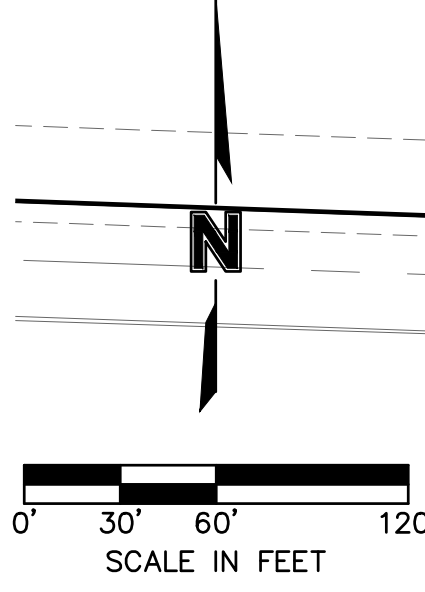
LEGEND	
	PHASE 1
	TEMPORARY DIVERSION BERM
	SILT FENCE
	TEMPORARY STONE CONSTRUCTION ENTRANCE
	TREE CLEARING

EROSION CONTROL STAGING CHART				
PROJECT STAGE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	C	INSTALL PER APWA DETAIL ESC-01
	A2	SILT FENCE	B	INSTALL PER APWA DETAIL ESC-03
	A3	DIVERSION BERM	C	INSTALL PER APWA DETAIL ESC-05
	A4	SEDIMENT TRAPS 1,2,3,4	C	INSTALL PER APWA DETAIL ESC-08
B - INTERIM	B1	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03
	B2	CURB INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-06
	B3	AREA INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-07
	B4	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC-10
	B5	CONCRETE WASHOUT	C	INSTALL PER APWA DETAIL ESC-01
UPON REMOVAL CONTRACTOR TO OVER-EXCAVATE SEDIMENT TRAPS, FULLY REMOVING ALL SILT, AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR EXCESSIVE SETTLING THAT COULD IMPACT BUILDING FOUNDATIONS.				
C - DISTURBED AREA STABILIZATION & FINAL STABILIZATION	C1	FILL IN SEDIMENT TRAP 2		
	C2	CONVERT SEDIMENT TRAP 1 TO WATER QUALITY BASIN		
	C3	SEED, SOD AND STABILIZE ALL DISTURBED AREAS BY REMOVAL OF SEDIMENT TRAPS		

NOTES:
 1. THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.
 2. ONE OIL OR GAS WELL IS LOCATED ON THE PROPERTY (DRY HOLE, ABANDONED AS OF 5/11/1928).
 COORDINATES: 38.87019N, -94.41911W
 INFORMATION VERIFIED VIA MISSOURI DNR:
<https://dnr.mo.gov/geology/geoserv/oilandgas.htm>
 (UPDATED AUGUST 2018)



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SITE DISTURBANCE PLAN - STAGE A
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

2020
 REVISIONS

drawn by:	EM
checked by:	EM
designed by:	RB
QA/QC by:	NH
project no.:	019-4059
drawing no.:	C.ERC02_0194059
date:	4/20/2020

SHEET

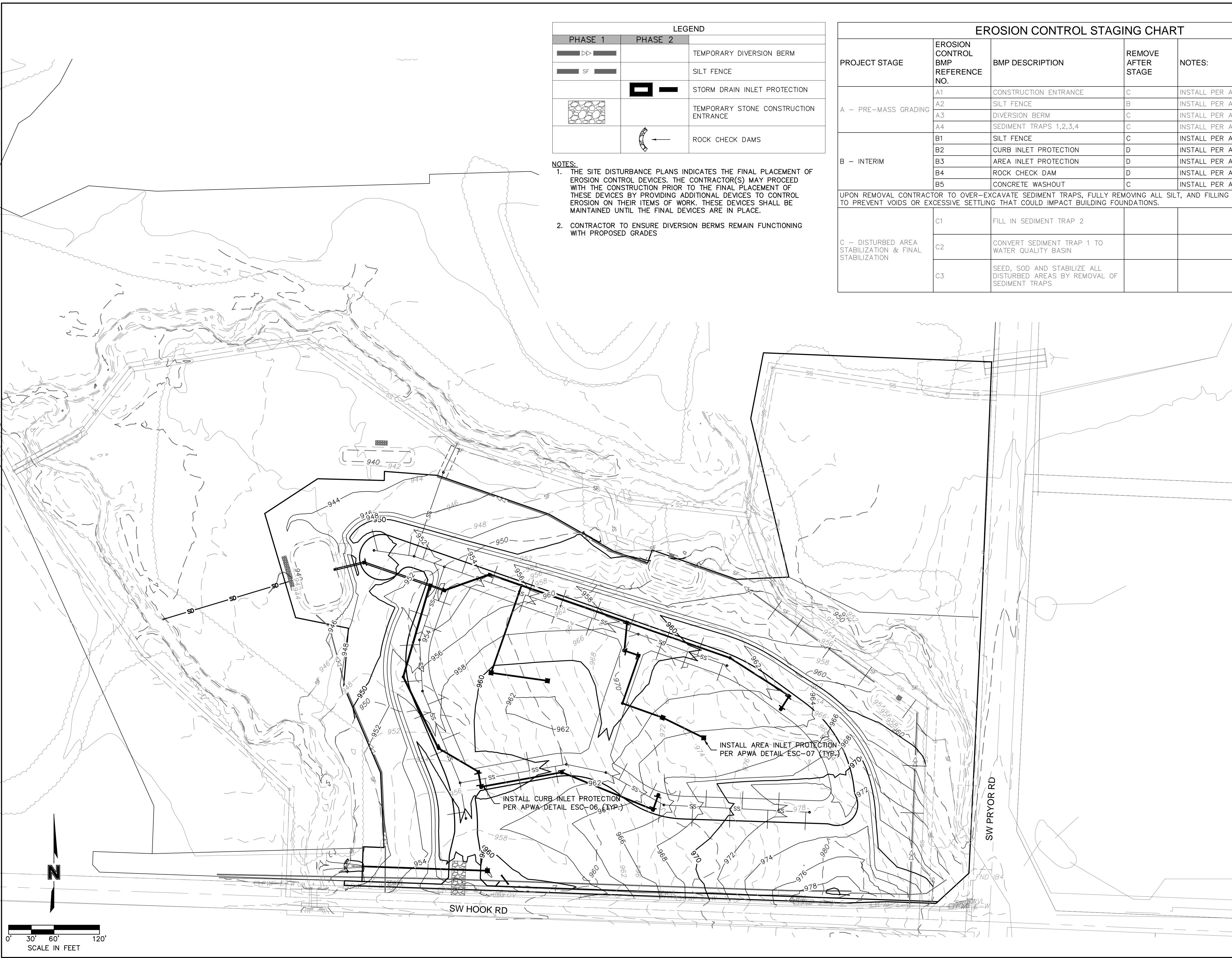
C405

LEGEND		
PHASE 1	PHASE 2	
		TEMPORARY DIVERSION BERM
		SILT FENCE
		STORM DRAIN INLET PROTECTION
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		ROCK CHECK DAMS

- NOTES:**
- THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.
 - CONTRACTOR TO ENSURE DIVERSION BERMS REMAIN FUNCTIONING WITH PROPOSED GRADES

EROSION CONTROL STAGING CHART				
PROJECT STAGE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	C	INSTALL PER APWA DETAIL ESC-01
	A2	SILT FENCE	B	INSTALL PER APWA DETAIL ESC-03
	A3	DIVERSION BERM	C	INSTALL PER APWA DETAIL ESC-05
	A4	SEDIMENT TRAPS 1,2,3,4	C	INSTALL PER APWA DETAIL ESC-08
B - INTERIM	B1	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03
	B2	CURB INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-06
	B3	AREA INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-07
	B4	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC-10
	B5	CONCRETE WASHOUT	C	INSTALL PER APWA DETAIL ESC-01
UPON REMOVAL CONTRACTOR TO OVER-EXCAVATE SEDIMENT TRAPS, FULLY REMOVING ALL SILT, AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR EXCESSIVE SETTLING THAT COULD IMPACT BUILDING FOUNDATIONS.				
C - DISTURBED AREA STABILIZATION & FINAL STABILIZATION	C1	FILL IN SEDIMENT TRAP 2		
	C2	CONVERT SEDIMENT TRAP 1 TO WATER QUALITY BASIN		
	C3	SEED, SOD AND STABILIZE ALL DISTURBED AREAS BY REMOVAL OF SEDIMENT TRAPS		

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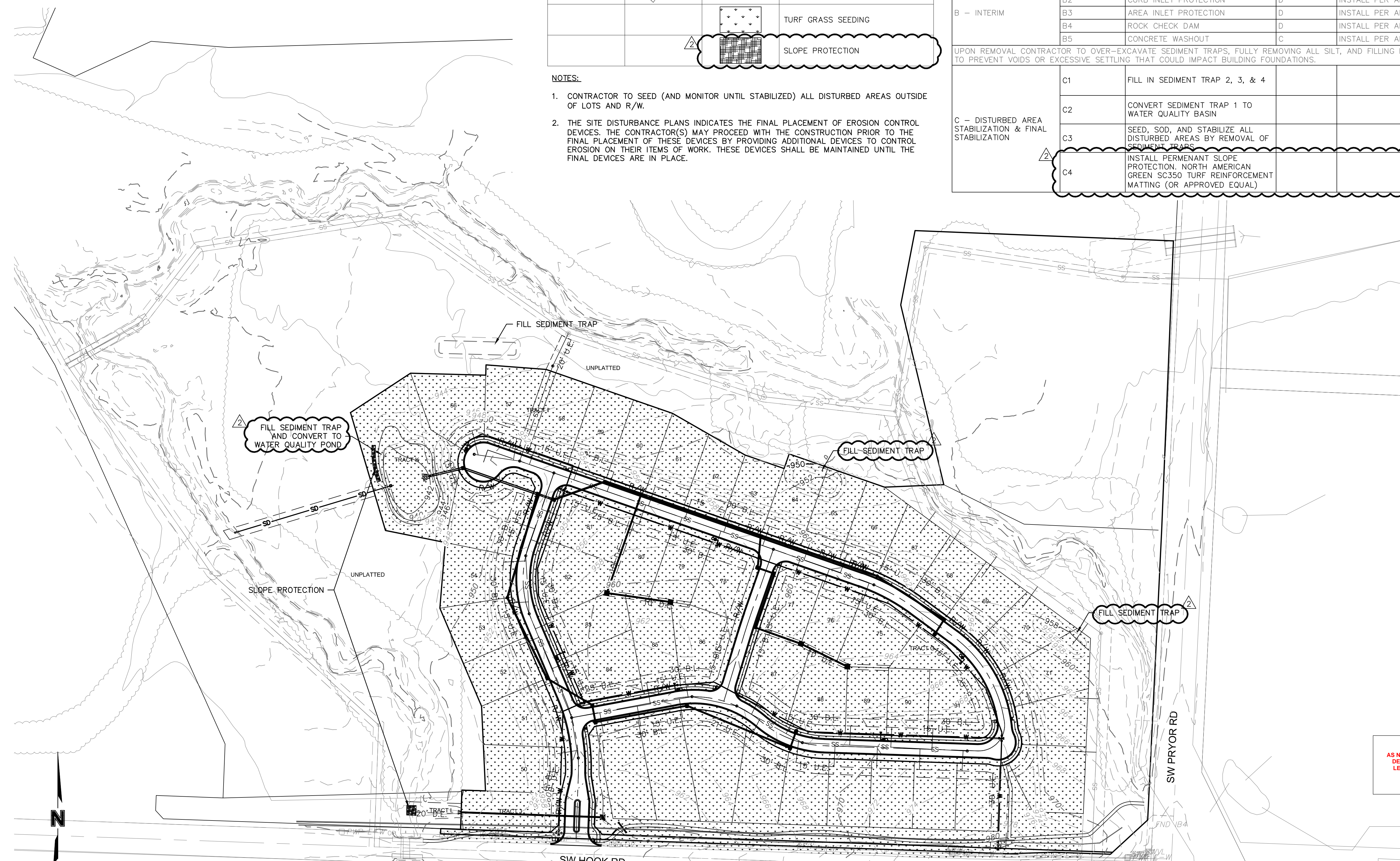
SITE DISTURBANCE PLAN - STAGE B
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

LEE'S SUMMIT, MO 2020

drawn by: EM
 checked by: EM
 designed by: RB
 QA/QC by: NH
 project no.: 019-4059
 drawing no.: C.ERC03_0194059
 date: 4/20/2020

SHEET C406

DWG: F:\2019\4001-4500\019-4059\40-DESIGN\AUTOCAD\FINAL PLANS\019-4059\019-4059.dwg USER: emorton
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LEGEND			
PHASE 1	PHASE 2	PHASE 3	
			TEMPORARY DIVERSION BERM
			SILT FENCE
			STORM DRAIN INLET PROTECTION
			TEMPORARY STONE CONSTRUCTION ENTRANCE
			ROCK CHECK DAMS
			TURF GRASS SEEDING
			SLOPE PROTECTION

- NOTES:**
- CONTRACTOR TO SEED (AND MONITOR UNTIL STABILIZED) ALL DISTURBED AREAS OUTSIDE OF LOTS AND R/W.
 - THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

EROSION CONTROL STAGING CHART				
PROJECT STAGE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	C	INSTALL PER APWA DETAIL ESC-01
	A2	SILT FENCE	B	INSTALL PER APWA DETAIL ESC-03
	A3	DIVERSION BERM	C	INSTALL PER APWA DETAIL ESC-05
	A4	SEDIMENT TRAPS 1,2,3,4	C	INSTALL PER APWA DETAIL ESC-08
B - INTERIM	B1	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03
	B2	CURB INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-06
	B3	AREA INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-07
	B4	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC-10
	B5	CONCRETE WASHOUT	C	INSTALL PER APWA DETAIL ESC-01
C - DISTURBED AREA STABILIZATION & FINAL STABILIZATION	C1	FILL IN SEDIMENT TRAP 2, 3, & 4		
	C2	CONVERT SEDIMENT TRAP 1 TO WATER QUALITY BASIN		
	C3	SEED, SOD, AND STABILIZE ALL DISTURBED AREAS BY REMOVAL OF SEDIMENT TRAPS		
	C4	INSTALL PERMANENT SLOPE PROTECTION, NORTH AMERICAN GREEN SC350 TURF REINFORCEMENT MATTING (OR APPROVED EQUAL)		

UPON REMOVAL CONTRACTOR TO OVER-EXCAVATE SEDIMENT TRAPS, FULLY REMOVING ALL SILT, AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR EXCESSIVE SETTLING THAT COULD IMPACT BUILDING FOUNDATIONS.

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2	8-7-2020	CITY COMMENTS	

SITE DISTURBANCE PLAN - STAGE C
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

REVISIONS

LEE'S SUMMIT, MO

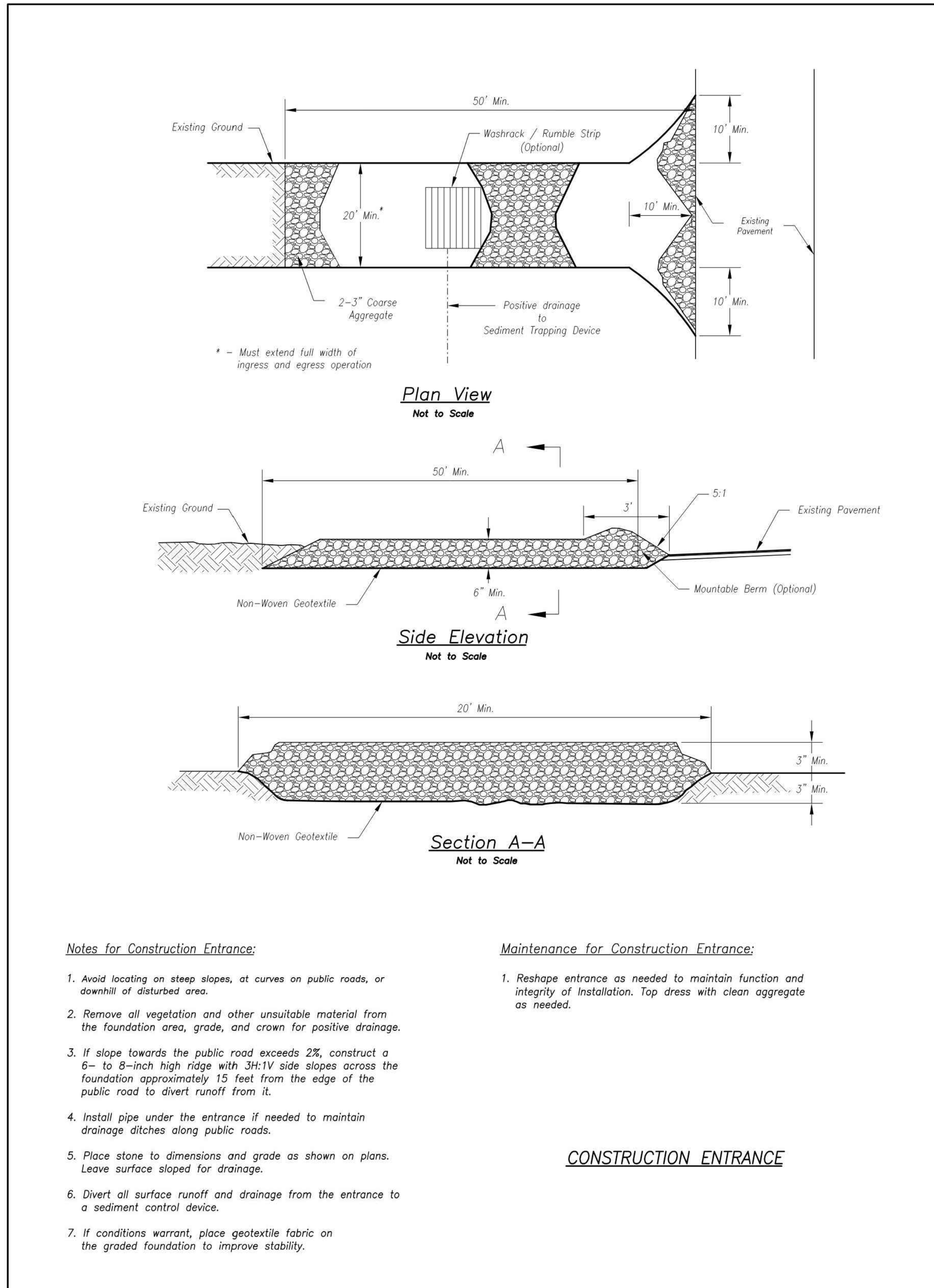
2020

drawn by:	EM
checked by:	EM
designed by:	RB
QA/QC by:	NH
project no.:	019-4059
drawing no.:	C.ERC04_0194059
date:	4/20/2020

SHEET

C407

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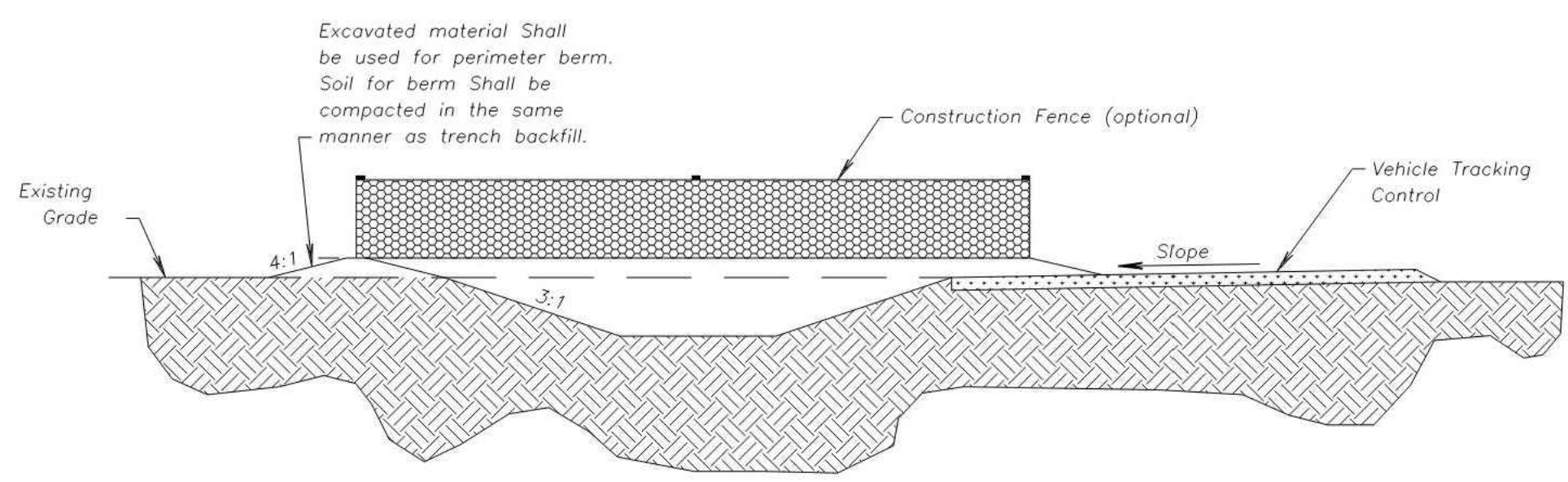
Notes for Construction Entrance:

- Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
- Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
- If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
- Install pipe under the entrance if needed to maintain drainage ditches along public roads.
- Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
- Divert all surface runoff and drainage from the entrance to a sediment control device.
- If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

- Reshape entrance as needed to maintain function and integrity of Installation. Top dress with clean aggregate as needed.

CONSTRUCTION ENTRANCE



CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION
 Kansas City Metro Chapter
APWA
 AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

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7/17/20
 MEGAN J. WALTER
 NUMBER
 PE-2012028697
 PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	7/17/2020	CITY COMMENTS	

SITE DISTURBANCE DETAILS
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

2020

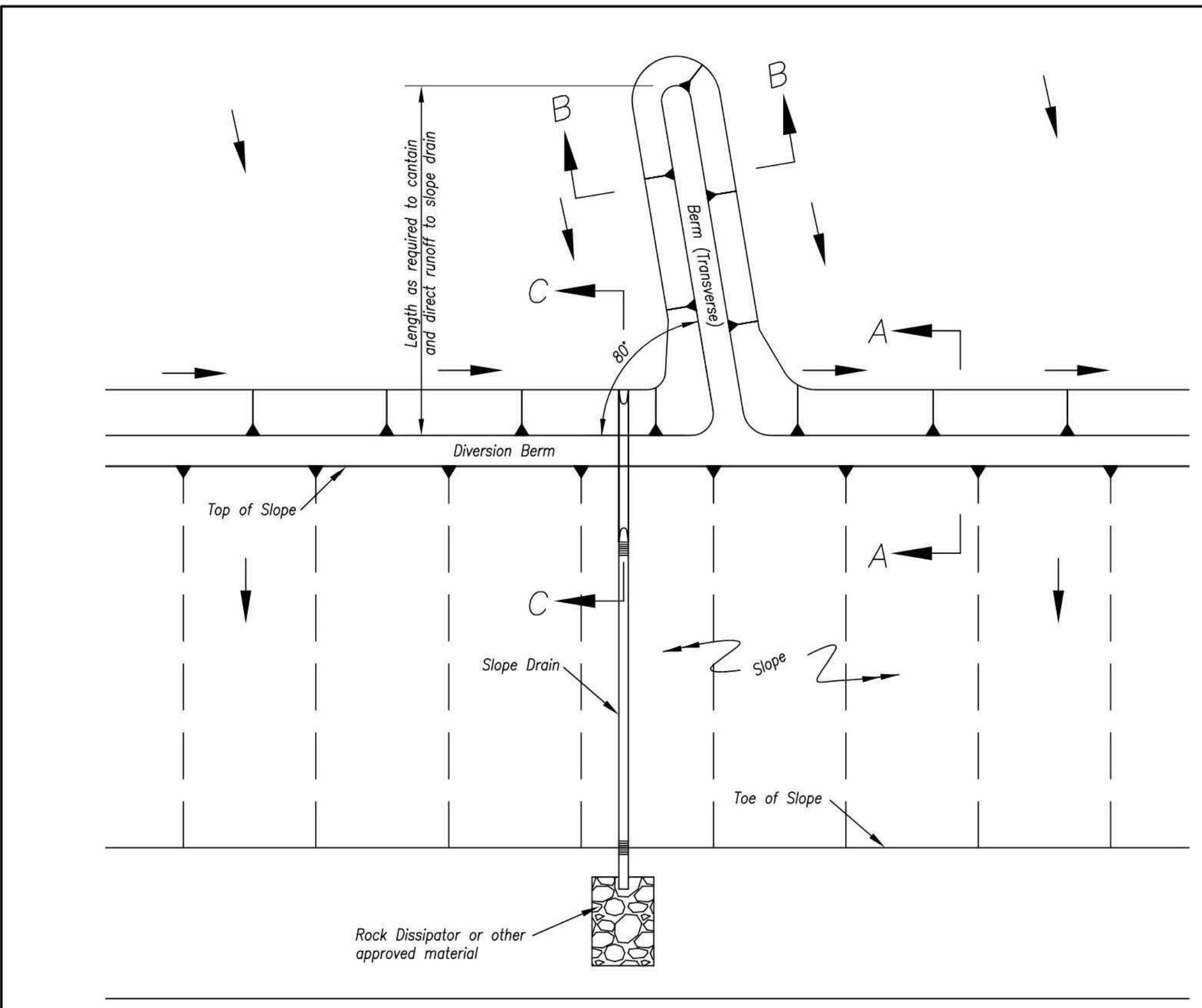
LEE'S SUMMIT, MO

REVISIONS

drawn by: EM
 checked by: EM
 designed by: RB
 QA/QC by: NH
 project no.: 019-4059
 drawing no.: C_DTL00_0194059
 date: 4/20/2020

SHEET C408

DWG: F:\2019\4001-4500\019-4059\40-DESIGN\AUTOCAD\FINAL PLANS\SHEETS\GNVC\C.DTL00_0194059.dwg
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TYPICAL PLAN VIEW OF DIVERSION BERM AND SLOPE DRAIN

Notes for Diversion Berm:

- Slope drains are optional, but may be required by the engineer if the berm is at the top of a steep slope.
- Diversion berms must be installed as a first step in the land-disturbing activity and must be functional prior to upslope land disturbance.
- The berm should be adequately compacted to prevent failure.
- Temporary or permanent seeding and mulch shall be applied to the berm immediately following its construction.
- Place the berm so to minimize damages by construction operations and traffic.
- The berm must discharge to a temporary sediment trap or stabilized area.
- All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of diversion.
- The diversion shall be excavated or shaped to line, grade and cross-section as required to meet the criteria specified herein, free of irregularities which will impede flow.
- Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the completed diversion. Fill shall be composed of soil which is free from excessive organic debris, rocks or other objectionable materials.

Maintenance:

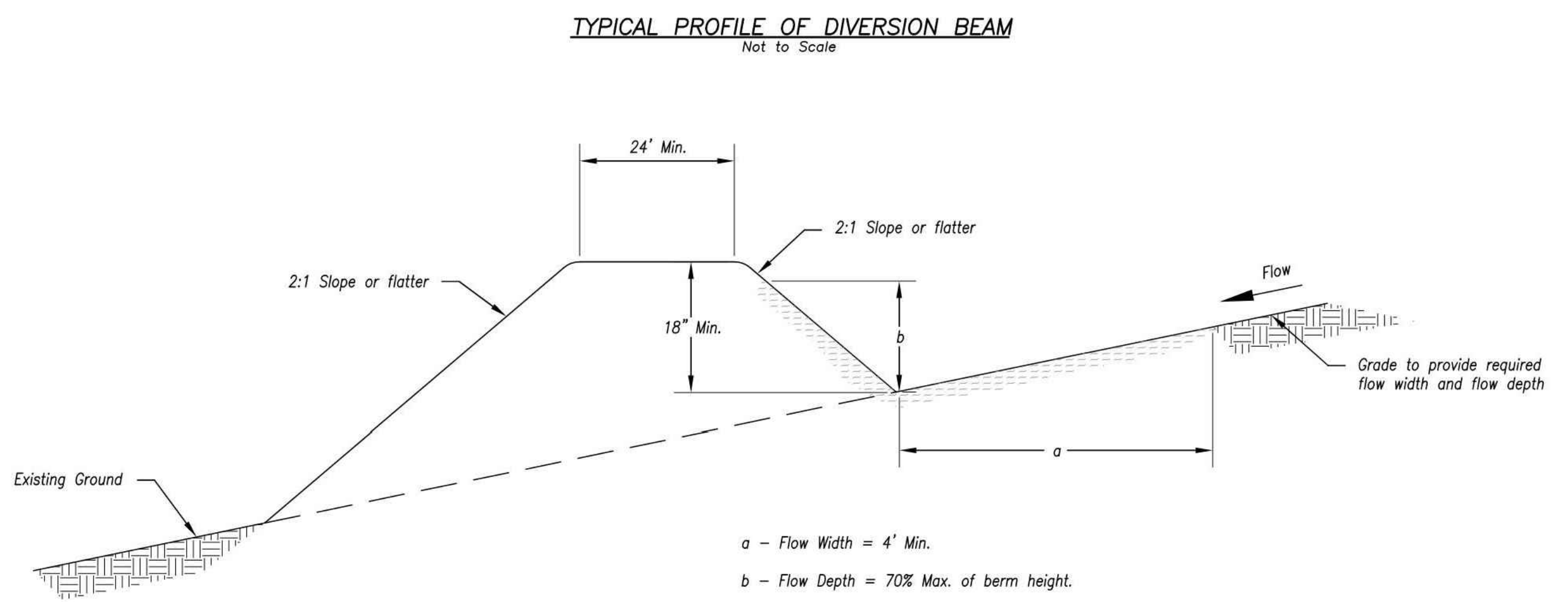
- Berm shall be reshaped, compacted, and stabilized as necessary to maintain its function.
- Breaches in the berm shall be repaired immediately.

Notes for Slope Drain:

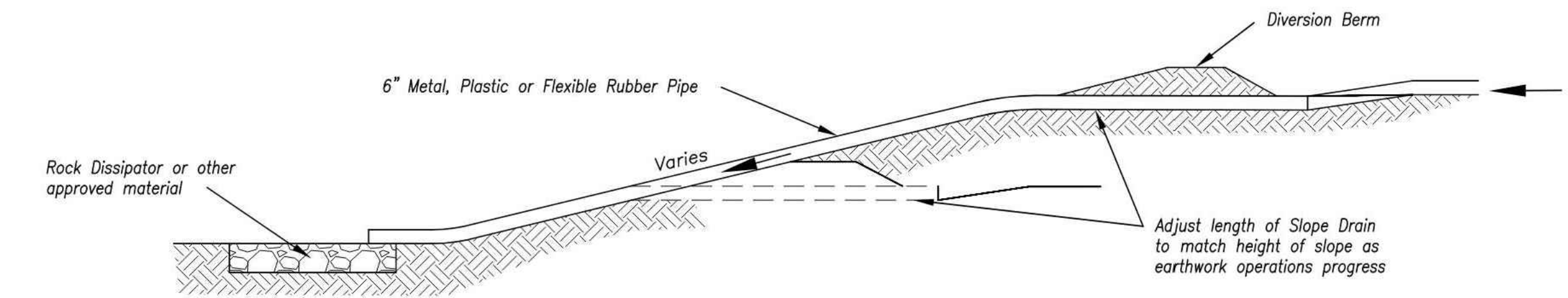
- Slope Drain and Diversion Berm may be used on either project foreslopes or project backslopes.
- Discharge of Slope Drains shall be into stabilized ditch or area, or into Sediment Basin.
- Pipe shall be secured in place as approved by Engineer.

Maintenance:

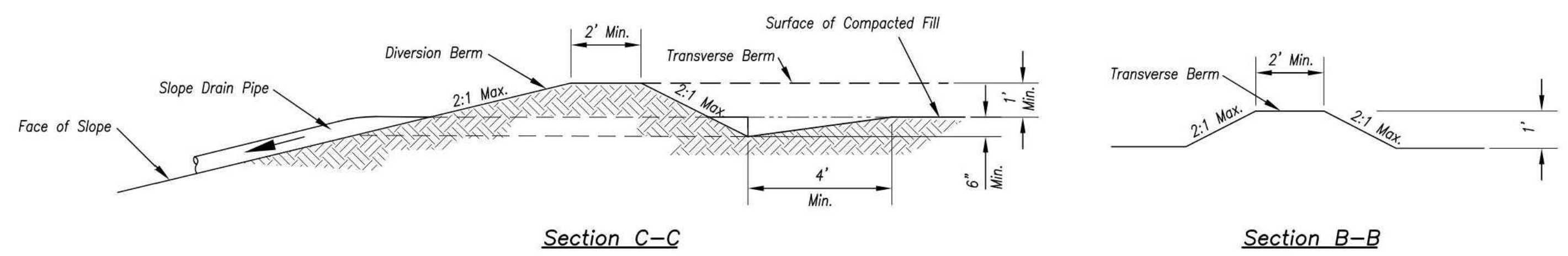
- Accumulation of any visible sediment at the inlet and outlet shall be removed promptly.
- Outlet conditions shall be repaired if scour is observed. Leaking or damaged section of pipe shall be repaired immediately.
- Barriers directing water to the inlet shall be monitored for continuity and effectiveness.



TYPICAL PROFILE OF DIVERSION BEAM



TYPICAL PROFILE OF DIVERSION BERM



TYPICAL PROFILE OF DIVERSION BERM WITH SLOPE DRAIN

AMERICAN PUBLIC WORKS ASSOCIATION	
<small>Kansas City Metro Chapter</small> APWA <small>AMERICAN PUBLIC WORKS ASSOCIATION</small>	KANSAS CITY METRO CHAPTER
DIVERSION BERMS AND SLOPE DRAINS	STANDARD DRAWING NUMBER ESC-05
	ADOPTED: 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

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STATE OF MISSOURI
 7/17/2020
 MEGAN J. WALTER
 NUMBER
 PE-2012028687
 Professional Engineer

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	7/17/2020	CITY COMMENTS	

SITE DISTURBANCE DETAILS
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

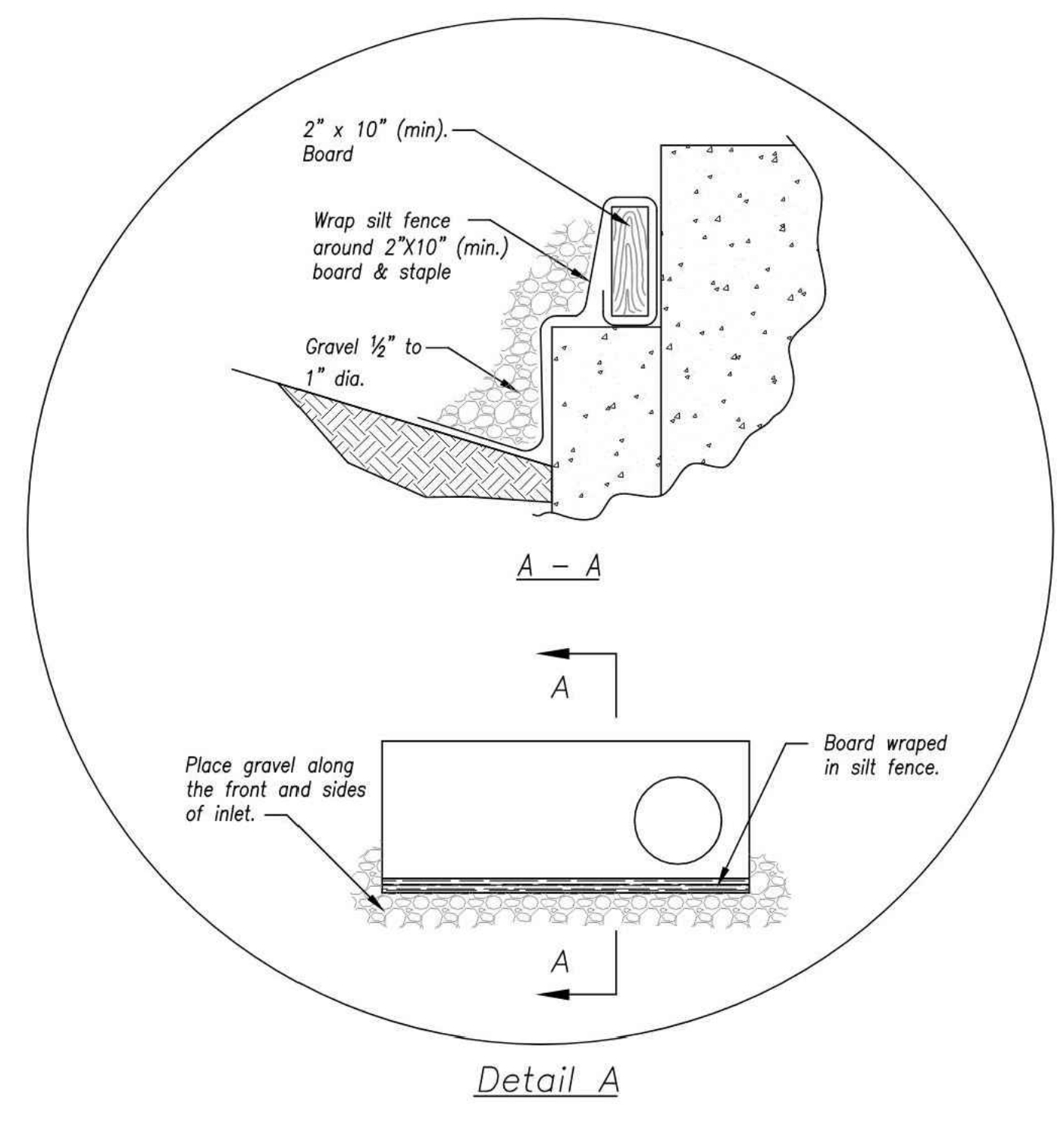
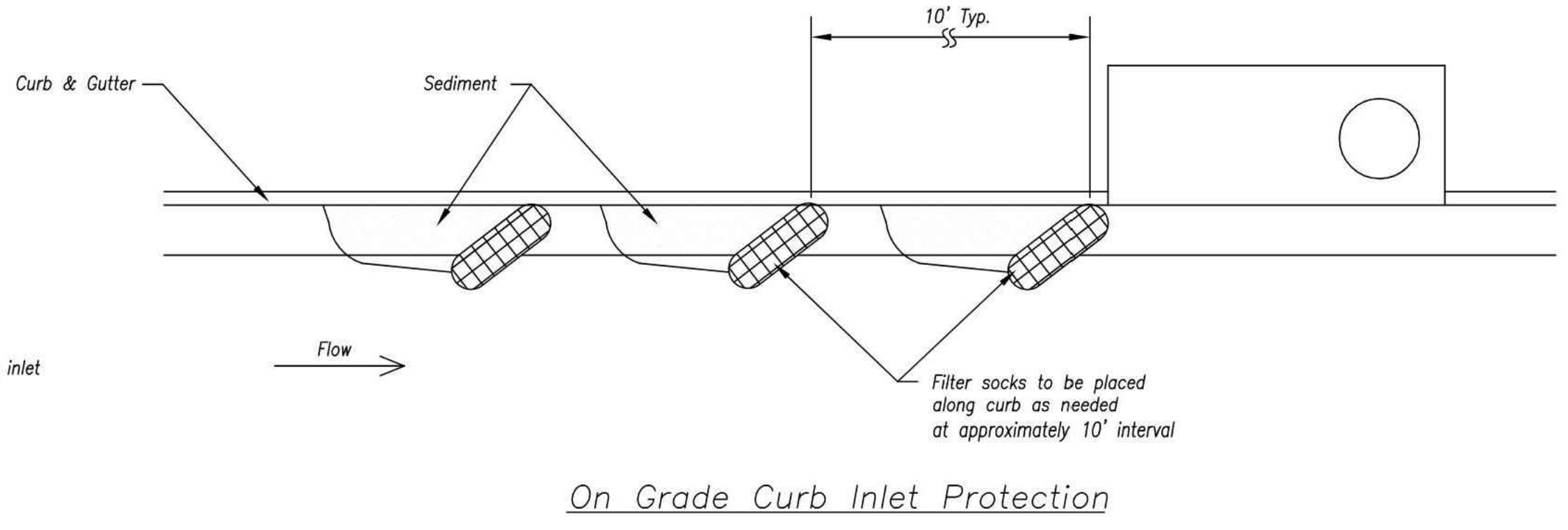
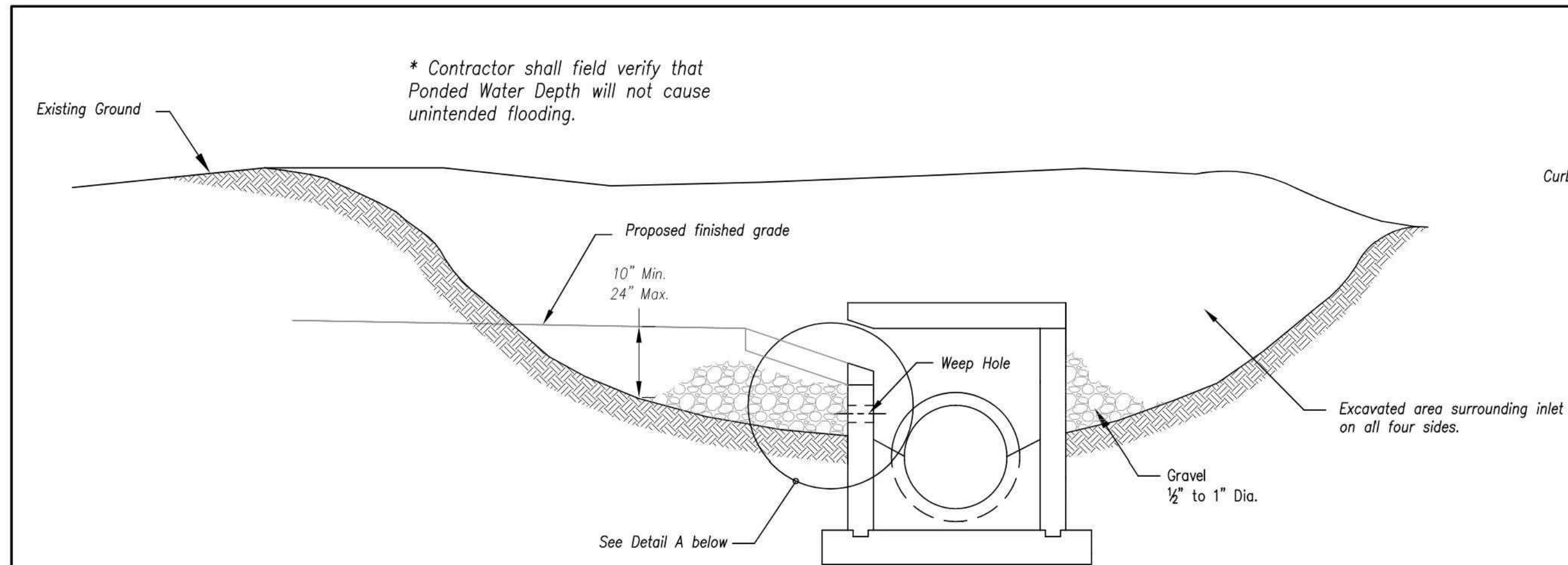
REVISIONS

LEE'S SUMMIT, MO

2020

drawn by: _____ EM checked by: _____ EM designed by: _____ RB QA/QC by: _____ NH project no.: 019-4059 drawing no.: C_DTL00_0194059 date: 4/20/2020	SHEET C409
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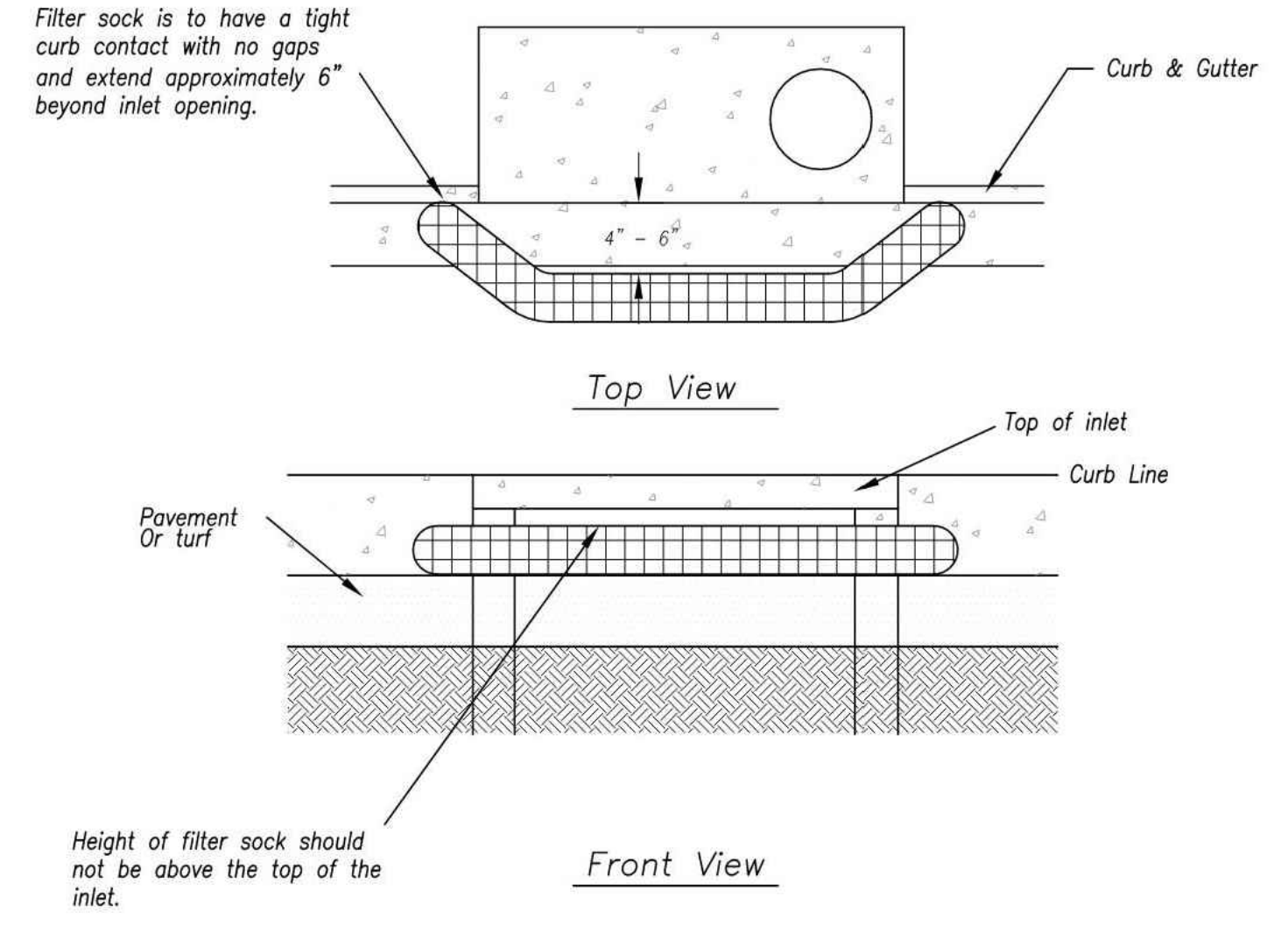
DWG: F:\2019\4001-4500\019-4059\40-DESIGN\AUTOCAD\FINAL PLANS\SHEETS\GNV\C.DTL00_0194059.dwg
 DATE: Jul 16, 2020 10:02am XREFS: C_PTBK_0194059_34x22 C_PBASE_0194059 USER: emorton



EARLY STAGE CURB INLET
 (Open Box and Prior to Pouring Curb and Inlet Throat)

- Notes:**
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" X 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow setting of sediment (Early Stage Curb Inlet).
 2. When inlet is completed and curb poured, filter socks or approved equal should be used (Late Stage Curb Inlet). Straw wattles are not approved for curb inlet use.
 3. Contractor to field verify ponding water shall not create a traffic hazard.

- Maintenance:**
1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
 2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
 3. Repair or replace as necessary to maintain function and integrity of installation.



Sump Inlet Sediment Filter

LATE STAGE CURB INLET
 (After Pouring Curb and Inlet Throat)

AMERICAN PUBLIC WORKS ASSOCIATION

Kansas City Metro Chapter

APWA

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

CURB INLET PROTECTION

STANDARD DRAWING NUMBER ESC-06 ADOPTED: 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

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 09/15/2020

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REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	7/17/2020	CITY COMMENTS	

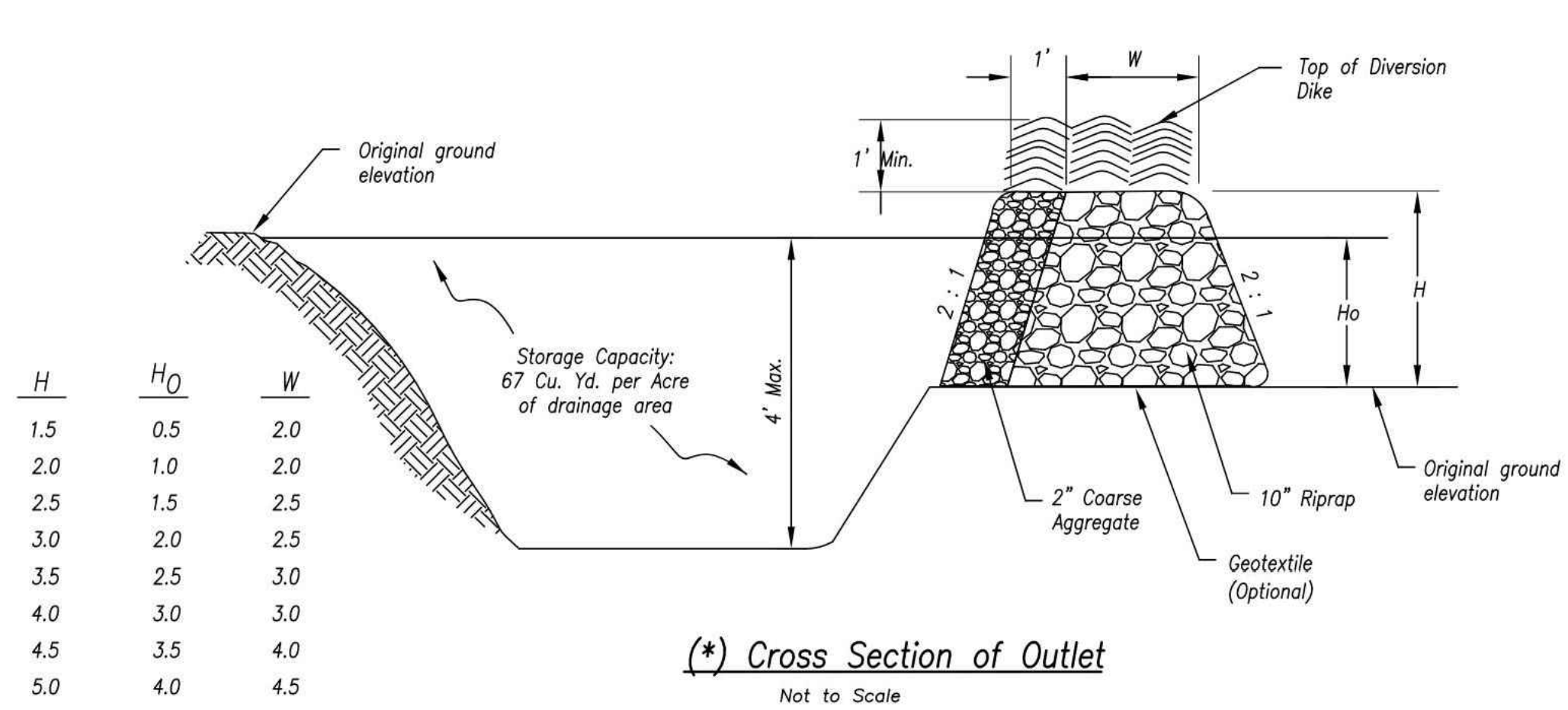
SITE DISTURBANCE DETAILS
 SITE DISTURBANCE PLANS
 THE RETREAT AT HOOK FARMS
 CONSTRUCTION DOCUMENTS

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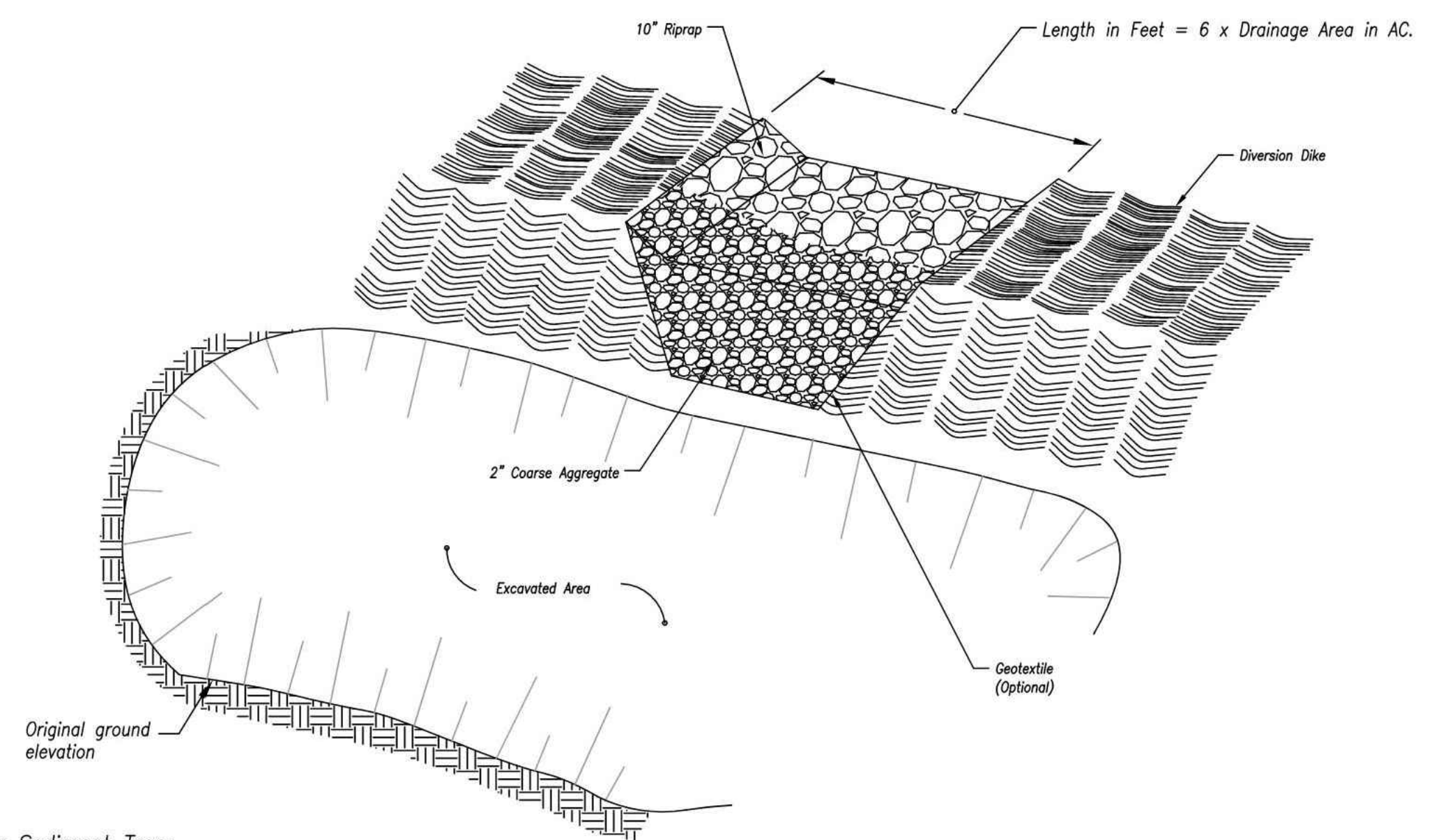
LEE'S SUMMIT, MO

drawn by: EM
 checked by: EM
 designed by: RB
 QA/QC by: NH
 project no.: 019-4059
 drawing no.: C_DTL00_0194059
 date: 4/20/2020

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 DATE: Jul 16, 2020 10:02am
 USER: emorton
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(* Cross Section of Outlet
Not to Scale



(* Perspective View of Outlet
Not to Scale

Notes for Sediment Trap:

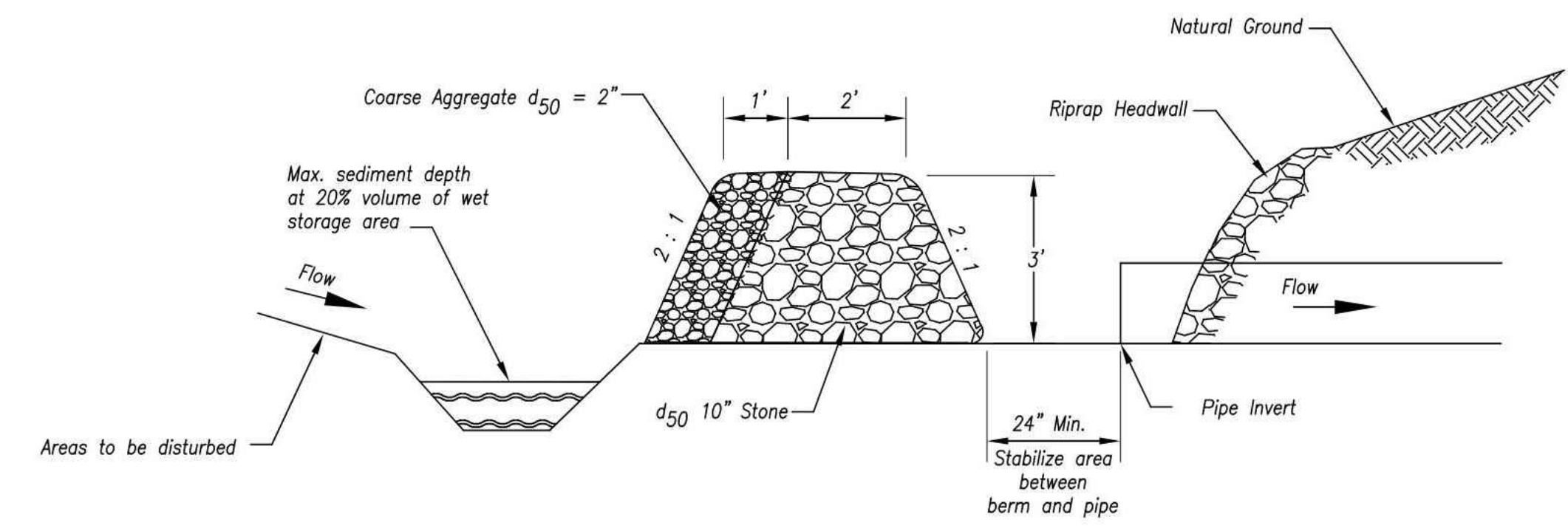
- The area under the embankment shall be cleared, grubbed, and stripped of any vegetation and root mat.
- Fill material for the embankment shall be free of roots or other woody vegetation, organic material, large stones, and other objectionable material. The embankment should be compacted in 6-inch layers by traversing with construction equipment.
- The earthen embankment shall be stabilized immediately after installation.
- Construction operations shall be carried out to minimize erosion and water pollution.
- The structure shall be removed and the area stabilized when the upslope drainage area has been stabilized.
- All cut and fill slopes shall be 2H : 1V or flatter, except for excavated, wet storage areas which may be at a maximum 1H : 1V grade.

SEDIMENT TRAP

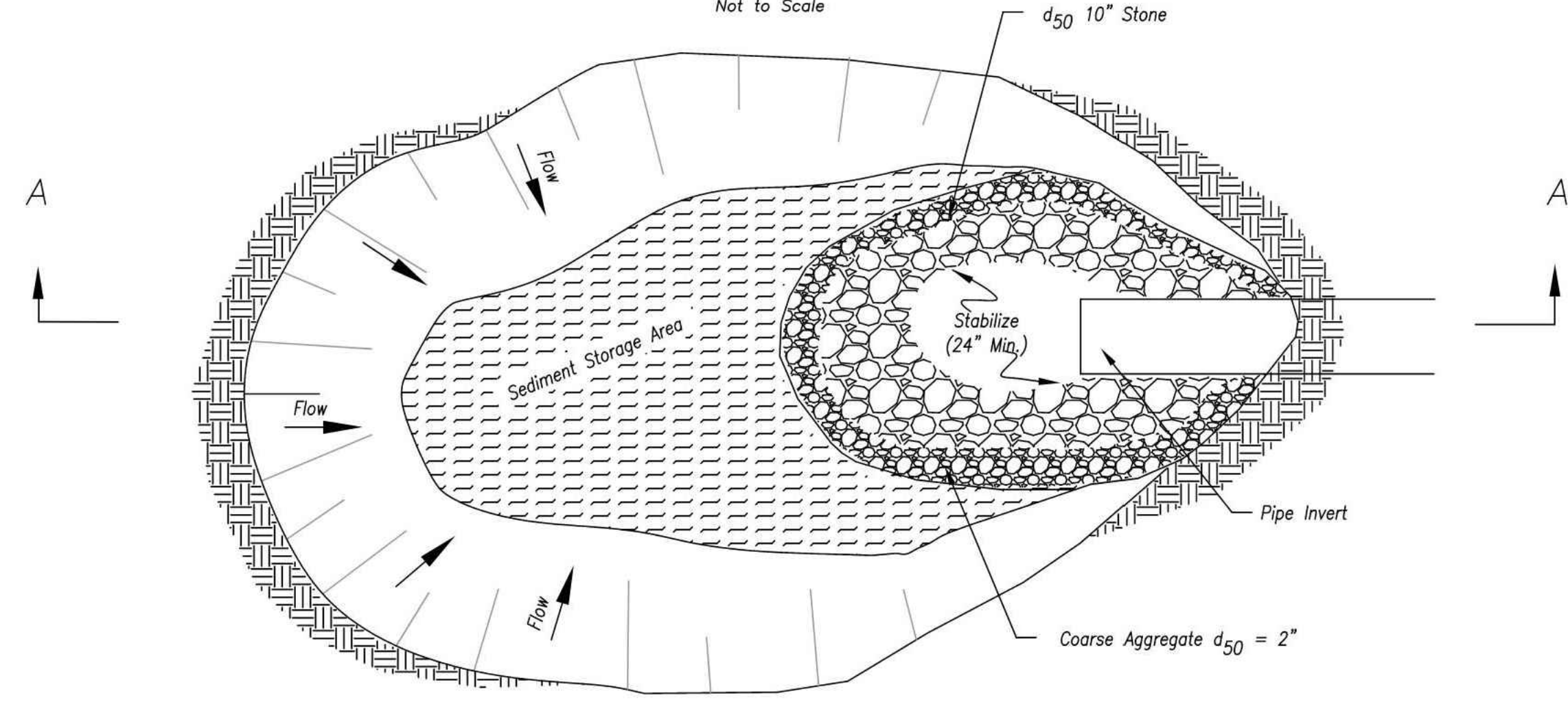
(* - The perspective view and cross section are schematic in nature. Construction plans must provide specific site construction arrangements.

Maintenance for Sediment Trap:

- Check sediment traps after periods of significant runoff.
- Remove sediment and restore the trap to its original dimensions when sediment accumulates to 20% of the storage capacity.
- Immediately repair any erosion damage to the embankment and outlet.
- Keep outlet and pool area free of all trash and other debris.



Section A-A
Not to Scale



Plan View
Not to Scale

Notes for Sediment Trap at Culvert Opening:

- The inlet protection device shall be constructed in a manner that will facilitate clean-out and disposal of trapped sediment and minimize interference with construction activities.
- The inlet protection devices shall be constructed in such manner that any resultant ponding stormwater will not cause excessive inconvenience or damage to adjacent areas or structures.
- Geometry of the design will be a horseshoe shape around the culvert inlet.
- The toe of the riprap shall be no closer than 24" from the culvert opening to provide an acceptable emergency outlet for flows from larger storm events.
- Storage requirements equivalent to that of temporary sediment trap.
- 67 C.Y./Acre wet storage below base of stone.
- 67 C.Y./Acre dry storage from base of stone to top of stone berm.

Maintenance for Sediment Trap at Culvert Opening:

- Check sediment traps after periods of significant runoff.
- Remove sediment and restore the trap to its original dimensions when sediment accumulates to 20% of the storage capacity.
- Immediately repair any erosion damage to the embankment and outlet.
- Keep outlet and pool area free of all trash and other debris.

SEDIMENT TRAP AT CULVERT OPENING

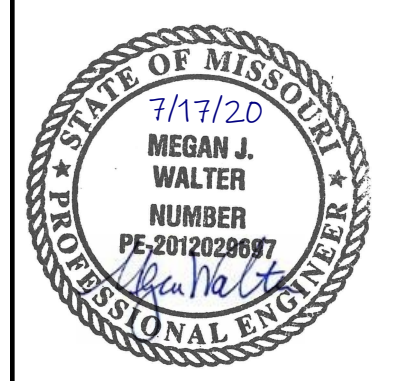
Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
<small>Kansas City Metro Chapter</small> APWA <small>AMERICAN PUBLIC WORKS ASSOCIATION</small>	KANSAS CITY METRO CHAPTER
SEDIMENT TRAPS	STANDARD DRAWING NUMBER ESC-08 ADOPTED: 10/24/2016

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/15/2020

olsson

1301 Burlington Street
North Kansas City, MO 64116
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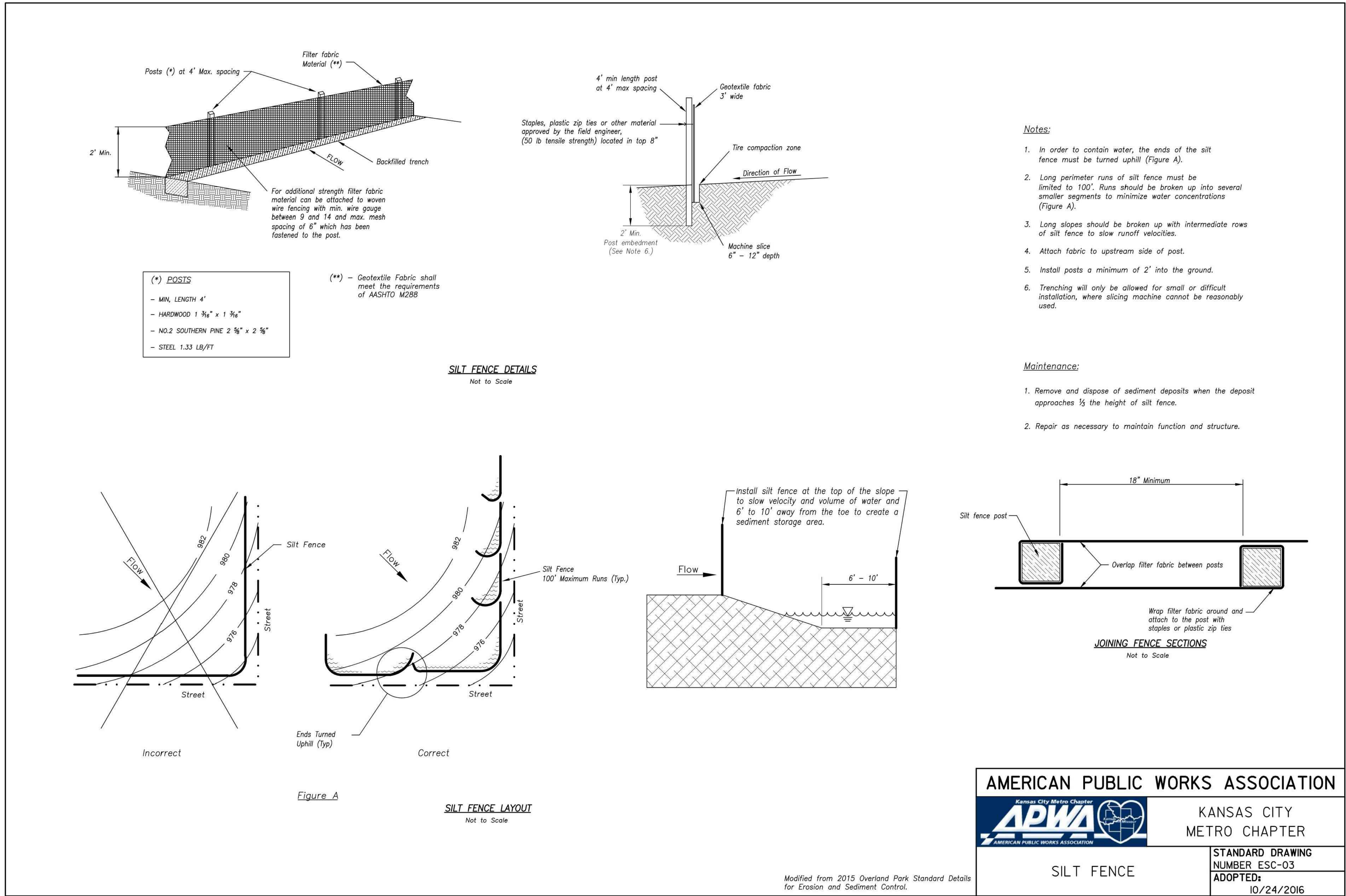
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 LEE'S SUMMIT, MO

drawn by: _____ EM
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 designed by: _____ RB
 QA/QC by: _____ NH
 project no.: 019-4059
 drawing no.: C_DTL00_0194059
 date: 4/20/2020

SHEET C411

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SILT FENCE

STANDARD DRAWING
 NUMBER ESC-03
 ADOPTED:
 10/24/2016

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7/17/20
 MEGAN J. WALTER
 NUMBER
 PE-2012028897
 Professional Engineer

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	7/17/2020	CITY COMMENTS	

REVISIONS

2020

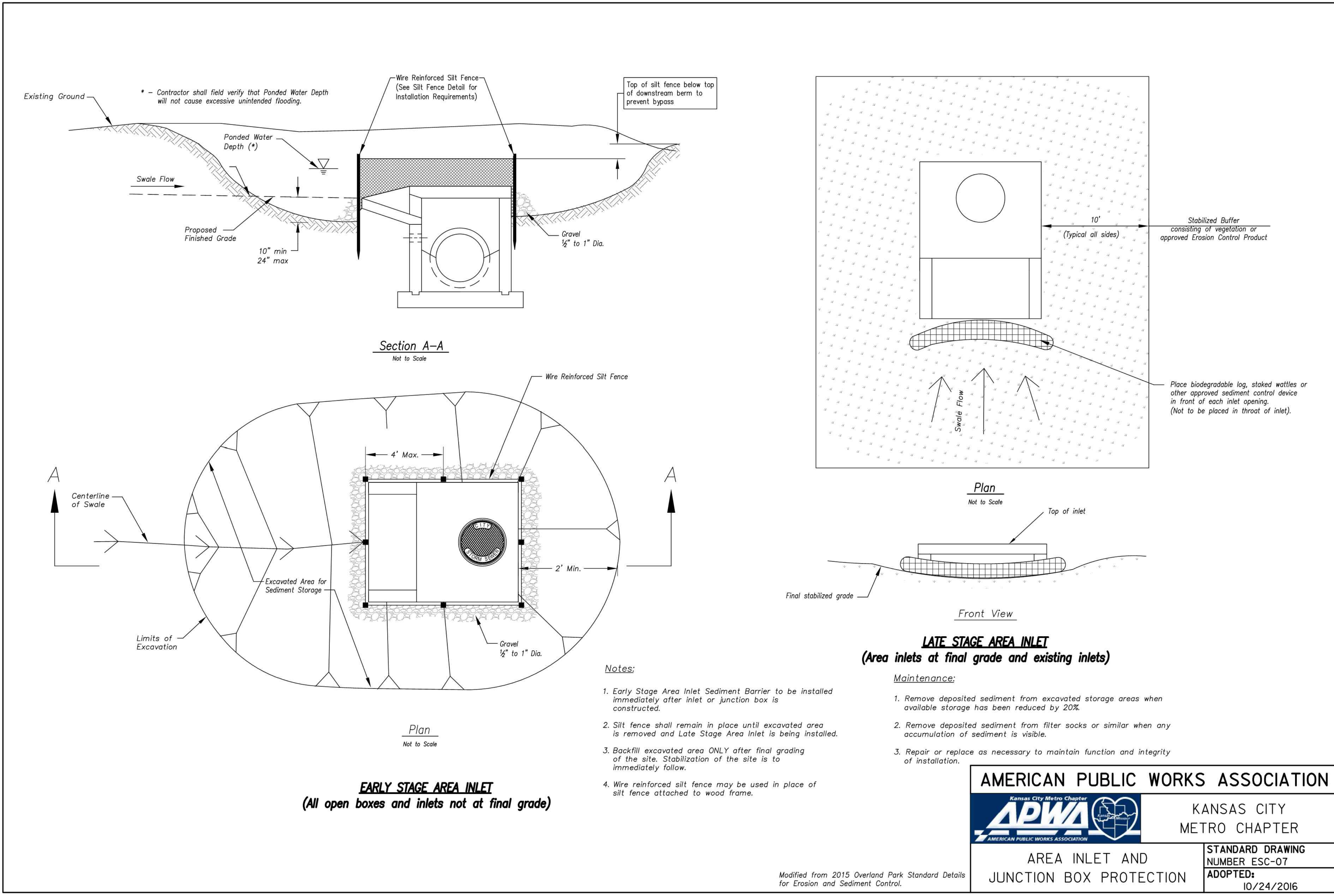
LEE'S SUMMIT, MO

SITE DISTURBANCE DETAILS
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drawn by: EM
 checked by: EM
 designed by: RB
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 drawing no.: C_DTL00_0194059
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SHEET C412

DWG: F:\2019\4001-4500\019-4059\40-DESIGN\AUTOCAD\FINAL PLANS\SHEETS\GNV\C.DTL00_0194059.dwg
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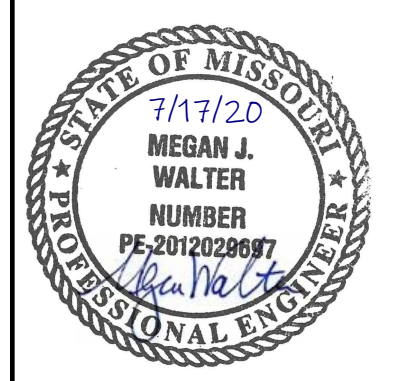
KANSAS CITY METRO CHAPTER

STANDARD DRAWING NUMBER ESC-07
ADOPTED:
 10/24/2016

AREA INLET AND JUNCTION BOX PROTECTION

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