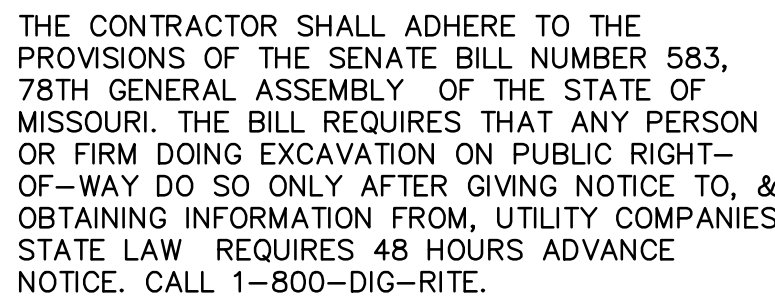
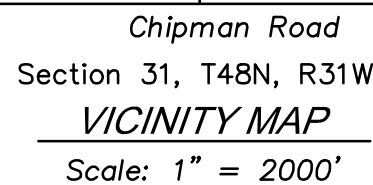


AN UNPLATTED PARCEL IN THE WEST HALF OF SECTION 31, TOWNSHIP 48
NORTH, RANGE 31 WEST, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY,
MISSOURI

DEVELOPMENT TEAM CONTACT INFORMATION	
OWNER/DEVELOPER	
SHAUN COFER SCANNELL PROPERTIES #436, LLC	8801 RIVER CROSSING BLVD SUITE 300 INDIANAPOLIS, IN 46240 PH: 317-218-1648 EMAIL: shauncoc@scannellproperties.com
CIVIL ENGINEER	
SETH REECE/LUKE MOORE CJ SHIPWRIGHT, PE OLSSON	7301 W. 133RD STREET SUITE 200 OVERLAND PARK, KS 66213 PH: 913.381.1170 EMAIL: sreece@olsson.com / lmoore@olsson.com EMAIL: cshipwright@olsson.com



TRACT 1:

THE NORTH 25.5 ACRES OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 LYING EAST OF MISSOURI PACIFIC RAILROAD RIGHT-OF-WAY IN SECTION 31, TOWNSHIP 48, RANGE 31, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, EXCEPT A TRACT DESCRIBED AS FOLLOWS:

ALL THAT PORTION OF THE NORTH 25.5 ACRES OF THE NORTHEAST 1/4 OF SOUTHWEST 1/4, LYING EAST OF MISSOURI-PACIFIC RAILROAD RIGHT-OF-WAY IN SECTION 31, TOWNSHIP 48, RANGE 31, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF THE NORTHEAST 1/4 OF SOUTHWEST 1/4 OF SECTION 31, TOWNSHIP 48, RANGE 31, IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI; THENCE SOUTH ALONG THE EAST LINE OF SAID 1/4 1/4 SECTION, A DISTANCE OF 914.5 FEET; THENCE WEST PARALLEL TO THE NORTH LINE OF SAID 1/4 1/4 SECTION, 411.0 FEET TO THE TRUE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED, SAID TRUE POINT OF BEGINNING BEING IN THE NORTH LINE OF PUBLIC ROAD; THENCE NORTH 31 DEGREES 00 MINUTES WEST ALONG AND WITH THE WESTERLY LINE OF PUBLIC ROAD, A DISTANCE OF 267.0 FEET TO A POINT 688.75 FEET SOUTH OF THE NORTH LINE OF SAID NORTHEAST 1/4 OF SOUTHWEST 1/4 SECTION; THENCE WEST PARALLEL TO SAID NORTH LINE OF 1/4 1/4 SECTION, 731.4 FEET TO A POINT IN THE EASTERLY LINE OF MISSOURI-PACIFIC RAILROAD RIGHT OF WAY; THENCE SOUTHEASTERLY WITH SAID RAILROAD RIGHT OF WAY, ALONG A CURVE TO THE RIGHT (HAVING A RADIUS OF 3175.4 FEET), A DISTANCE OF 234.0 FEET TO A POINT 914.5 FEET SOUTH OF THE NORTH LINE OF SAID NORTHEAST 1/4 OF SOUTHWEST 1/4 SECTION; THENCE EAST ALONG THE SOUTH LINE OF SAID 1/4 SECTION, 812.7 FEET TO THE TRUE POINT OF BEGINNING, AND EXCEPT THAT PART IN STREETS AND ROADS.

TRACT 2:

ALL THAT PART OF LOT 2 OF THE SOUTHEAST QUARTER (SW 1/4) (AS SHOWN ON THE GOVERNMENT SURVEY) OF SECTION 31, TOWNSHIP 48, RANGE 31, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, LYING EAST OF THE MISSOURI PACIFIC RAILROAD COMPANY RIGHT-OF-WAY, EXCEPT THAT PART IN STREETS AND ROADS.

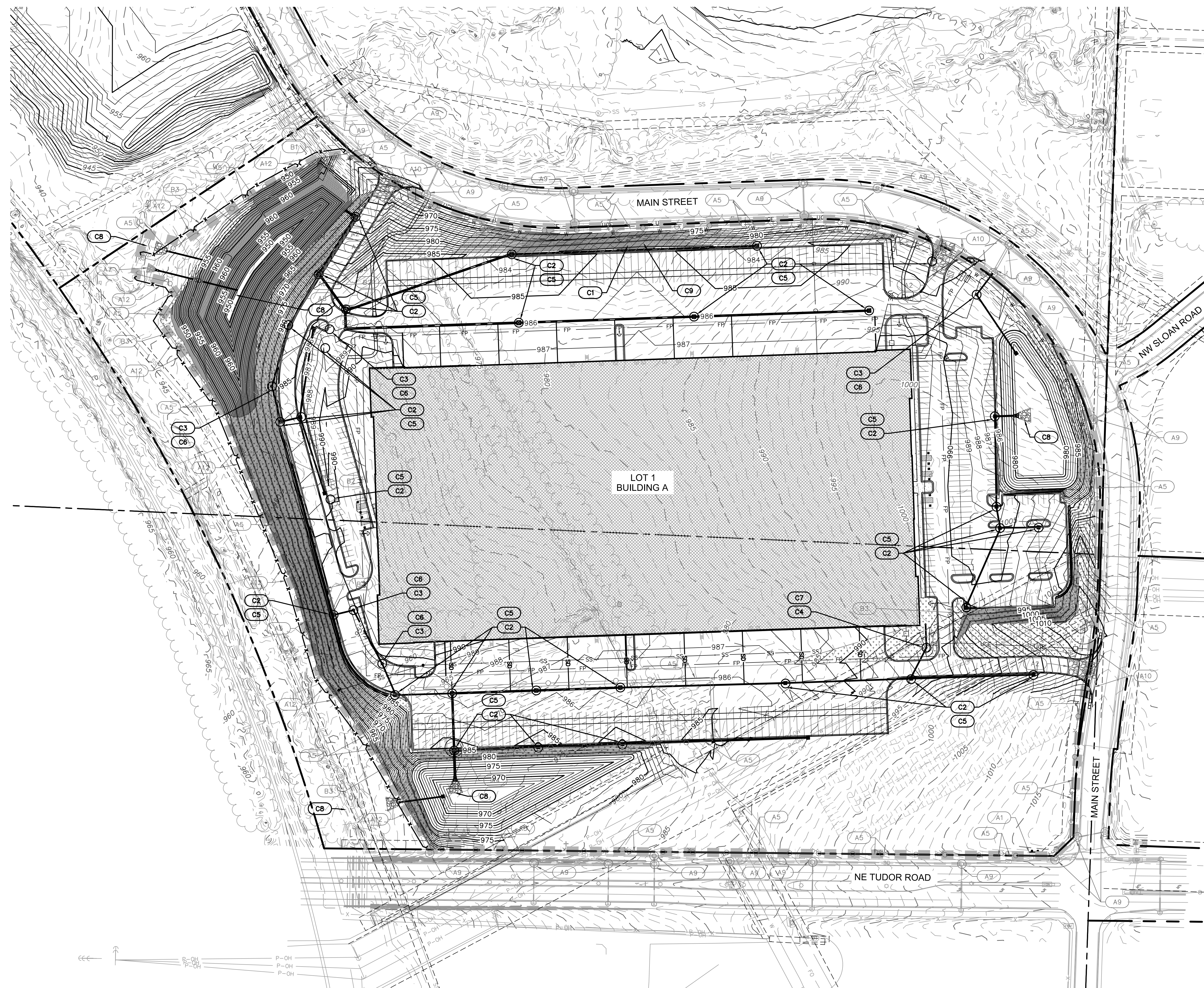
TRACT 3:

ALL OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 LYING EAST OF RAILROAD RIGHT-OF-WAY IN SECTION 31, TOWNSHIP 48, RANGE 31, IN SUMMIT, JACKSON COUNTY, MISSOURI, EXCEPT THAT PART IN STREETS AND ROADS.



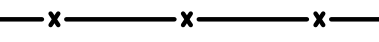










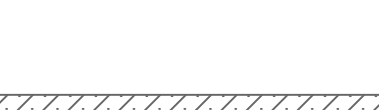

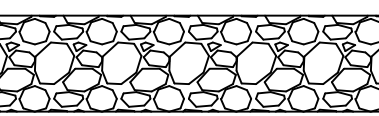
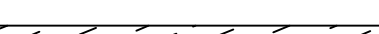
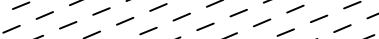
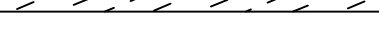
☐ NOT FOR CONSTRUCTION

☒ REVIEWED FOR CONSTRUCTION

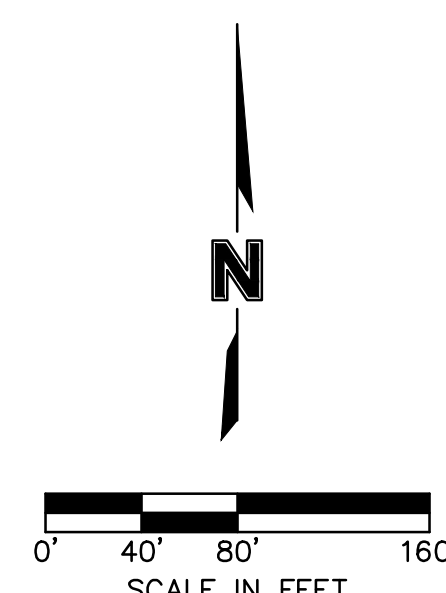
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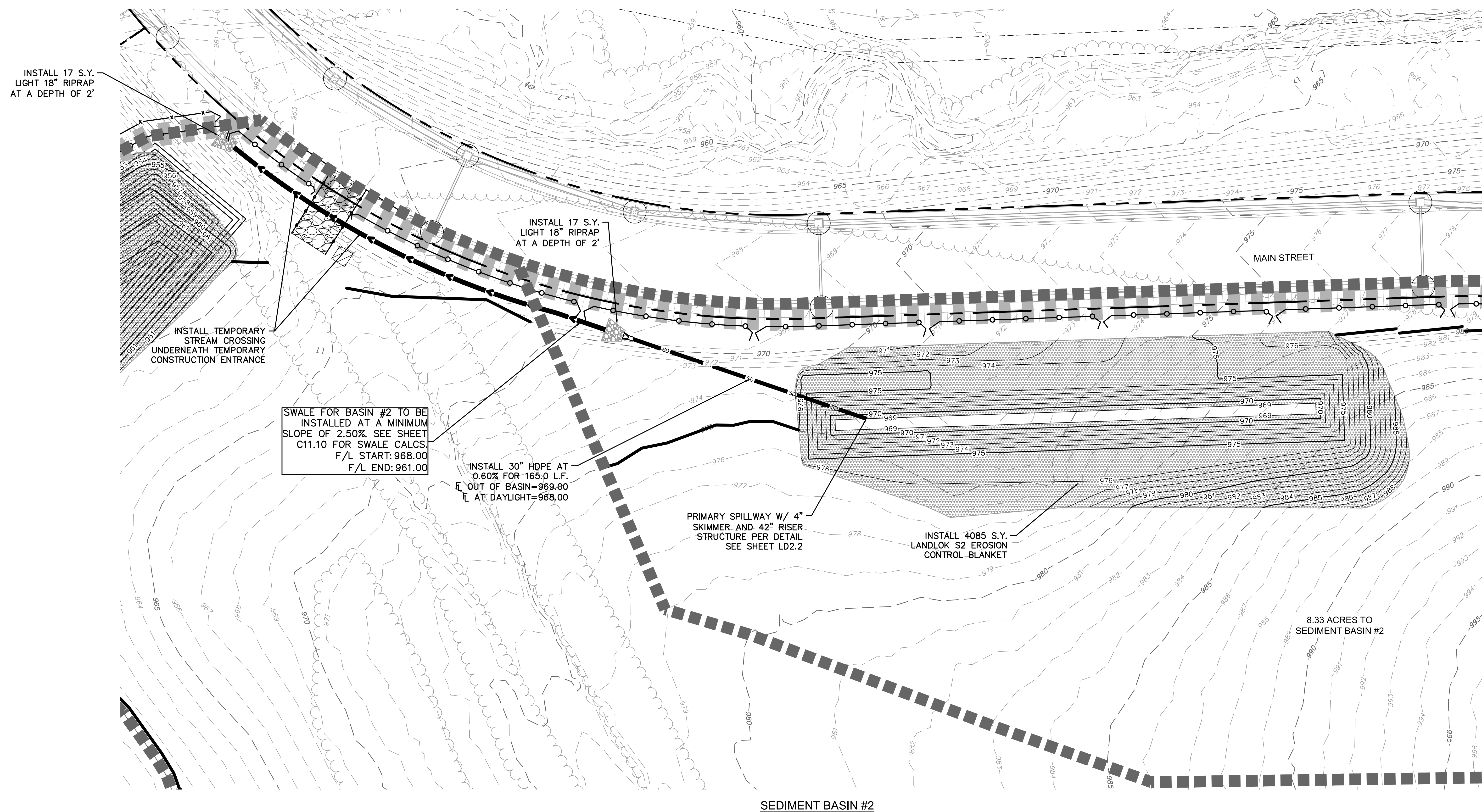


LEGEND

	PROPERTY LINE
	SURROUNDING PROPERTY LINES
	EXISTING CONTOUR
	PROPOSED CONTOUR
	TEMPORARY SEDIMENT FENCE
	INSTALL TEMPORARY REINFORCED SILT FENCE SLOPE BARRIER
	INSTALL TEMPORARY WATTLE/BIODEGRADABLE LOG
	LIMITS OF DISTURBANCE (34.2+ ACRES)
	DRAINAGE BOUNDARIES
	TEMPORARY DIVERSION BERM (REFERENCE DETAILS) (18" DEEP BERM W/ "ECB S32
	INSTALL TEMPORARY SWALE
	STABILIZATION, "LANDLOK (S2)" (EROSION CONTROL BLANKET) SHALL BE USED OR APPROVED EQUAL. CONTACTOR TO SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. SEED WITH PERENNIAL SEEDING TO MEET SWPPP REQUIREMENTS. INSTALL PER DETAIL AND MANUFACTURER RECOMMENDATIONS
	STABILIZATION, "LANDLOK (S2)" (EROSION CONTROL BLANKET) SHALL BE USED OR APPROVED EQUAL. CONTACTOR TO SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. SEED WITH PERENNIAL SEEDING TO MEET SWPPP REQUIREMENTS. INSTALL PER DETAIL AND MANUFACTURER RECOMMENDATIONS
	STABILIZATION, "LANDLOK (S2)" (EROSION CONTROL BLANKET) SHALL BE USED OR APPROVED EQUAL. CONTACTOR TO SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. SEED WITH PERENNIAL SEEDING TO MEET SWPPP REQUIREMENTS. INSTALL PER DETAIL AND MANUFACTURER RECOMMENDATIONS
	TEMPORARY CONSTRUCTION ENTRANCE
	TEMPORARY STAGING/STOCKPILE AREA
	CONCRETE WASHOUT
	TEMPORARY GRAVEL FILTER BAGS
	EROSION CONTROL REFERENCE NUMBER

EROSION CONTROL STAGING CHART				
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A – PRE–CONSTRUCTION	A1	INSTALL SWPPP SIGN	D	INSTALL AS INDICATED ON PLANS
	A2	TEMPORARY CONSTRUCTION ENTRANCE	C	INSTALL AS INDICATED ON PLANS
	A3	TEMPORARY CONCRETE WASHOUT	C	INSTALL AS INDICATED ON PLANS
	A4	TEMPORARY STAGING/STOCKPILE AREA	C	INSTALL AS INDICATED ON PLANS
	A5	TEMPORARY SEDIMENT FENCE	C	INSTALL AS INDICATED ON PLANS
	A6	TEMPORARY SEDIMENT BASIN	C	INSTALL AS SHOWN. SEE SHEETS LD1.4 & LD1.5 FOR DETAILS.
	A7	END SECTION PROTECTION (RIPRAP)	C	INSTALL AS SHOWN. SEE SHEETS LD1.4 & LD1.5 FOR DETAILS.
	A8	TEMPORARY SLOPE STABILIZATION (EROSION CONTROL BLANKET)	C	INSTALL AS INDICATED ON PLANS
	A9	EXISTING INLET PROTECTION (CONDITION B)	C	INSTALL AS INDICATED ON PLANS
	A10	TEMPORARY WATTLE/BIODEGRADABLE LOG	C	INSTALL AS INDICATED ON PLANS
	A11	TEMPORARY DIVERSION BERM	C	INSTALL AS INDICATED ON PLANS
	A12	TEMPORARY REINFORCED SILT FENCE SLOPE BARRIER	C	INSTALL AS INDICATED ON PLANS
	A13	TEMPORARY SWALE	B	INSTALL AS SHOWN. SEE SHEETS LD1.4 & LD1.5 FOR DETAILS.
	A14	TEMPORARY STREAM CROSSING	B	INSTALL AS INDICATED ON PLANS
B – CLEARING, MASS GRADING, AND CONSTRUCTION OF SANITARY SEWER	B1	TEMPORARY DIVERSION BERM	B	INSTALL AS INDICATED ON PLANS
	B2	TEMPORARY SEDIMENT FENCE	C	INSTALL AS INDICATED ON PLANS
	B3	TEMPORARY SLOPE STABILIZATION (EROSION CONTROL BLANKET)	C	INSTALL AS INDICATED ON PLANS
	C1	TEMPORARY SLOPE STABILIZATION (EROSION CONTROL BLANKET)	C	INSTALL AS INDICATED ON PLANS
	C2	TEMPORARY CURB INLET PROTECTION (CONDITION A)	C	INSTALL AS INDICATED ON PLANS
C – CONSTRUCTION: BUILDING, PAVEMENT & STORM SEWER AND UTILITIES	C3	TEMPORARY AREA INLET/JUNCTION BOX PROTECTION (CONDITION A)	C	INSTALL AS INDICATED ON PLANS
	C4	TEMPORARY LANDSCAPE DRAIN PROTECTION (CONDITION A)	C	INSTALL AS INDICATED ON PLANS
	C5	TEMPORARY CURB INLET PROTECTION (CONDITION B)	C	INSTALL AS INDICATED ON PLANS
	C6	TEMPORARY AREA INLET/JUNCTION BOX PROTECTION (CONDITION B)	C	INSTALL AS INDICATED ON PLANS
	C7	TEMPORARY LANDSCAPE DRAIN PROTECTION (CONDITION B)	C	INSTALL AS INDICATED ON PLANS
	C8	END SECTION PROTECTION (RIPRAP)	N/A	REFERENCE STORM SEWER SHEETS FOR DESIGN AND INSTALLATION INFORMATION
	C9	REMOVE SEDIMENT BASIN	N/A	INSTALL AS INDICATED ON PLANS
D – POST CONSTRUCTION: FINAL STABILIZATION	D1	CONVERT SEDIMENT BASINS TO FINAL CONDITION (DRY DETENTION BASIN)	N/A	REFERENCE GRADING AND STORM SHEETS FOR FINAL DESIGN INFORMATION
	D2	REPLACE TOP SOIL, SEED MULCH, SOD, LANDSCAPE	N/A	ESTABLISH PERENNIAL VEGETATION WITH A 70% DENSITY OVER 100% OF THE DISTURBED AREA. REFERENCE LANDSCAPE UNDERSTORY PLANS FOR DETAILS INTERNAL TO THE LIMITS OF SEEDING PER THE LEGEND ABOVE.





INSTALL TEMPORARY
STREAM CROSSING
UNDERNEATH TEMPORARY
CONSTRUCTION ENTRANCE

SWALE FOR BASIN #2 TO BE
INSTALLED AT A MINIMUM
SLOPE OF 2.50%. SEE SHEET
C11.10 FOR SWALE CALCS.
F/L START: 968.00
F/L END: 961.00

INSTALL 30" HDPE AT
0.60% FOR 165.0 L.F.
OUT OF BASIN=969.00
AT DAYLIGHT=968.00













PRIMARY SPILLWAY W/ 4" SKIMMER AND 42" RISER STRUCTURE PER DETAIL SEE SHEET LD2.2

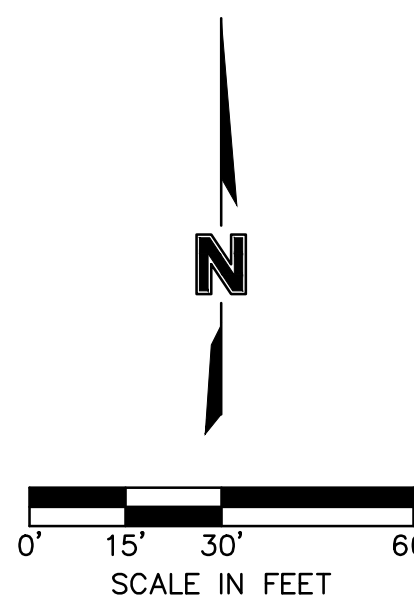
INSTALL 4085 S.Y. -
LANDLOK S2 EROSION
CONTROL BLANKET

8.33 ACRES TO
SEDIMENT BASIN #.

SEDIMENT BASIN #2

LEGEND

	PROPERTY LINE
	SURROUNDING PROPERTY LINES
	EXISTING CONTOUR
	PROPOSED CONTOUR
	TEMPORARY SEDIMENT FENCE
	INSTALL TEMPORARY REINFORCED SILT FENCE SLOPE BARRIER
	INSTALL TEMPORARY WATTLE/Biodegradable LOG
	LIMITS OF DISTURBANCE (34.24 ACRES)
	DRAINAGE BOUNDARIES
	TEMPORARY DIVERSION BERM (REFERENCE DETAILS) (18" DEEP BERM W/ "ECB S32
	INSTALL TEMPORARY SWALE
	STABILIZATION, "LANDLOK (S2)" (EROSION CONTROL BLANKET) SHALL BE USED OR APPROVED EQUAL
	CONTRACTOR TO SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. SEED WITH PERENNIAL SEEDING TO MEET SWPPP REQUIREMENTS. INSTALL PER DETAIL AND MANUFACTURER RECOMMENDATION



SEDIMENT BASIN #2 DETAIL
LAND DISTURBANCE PLANS

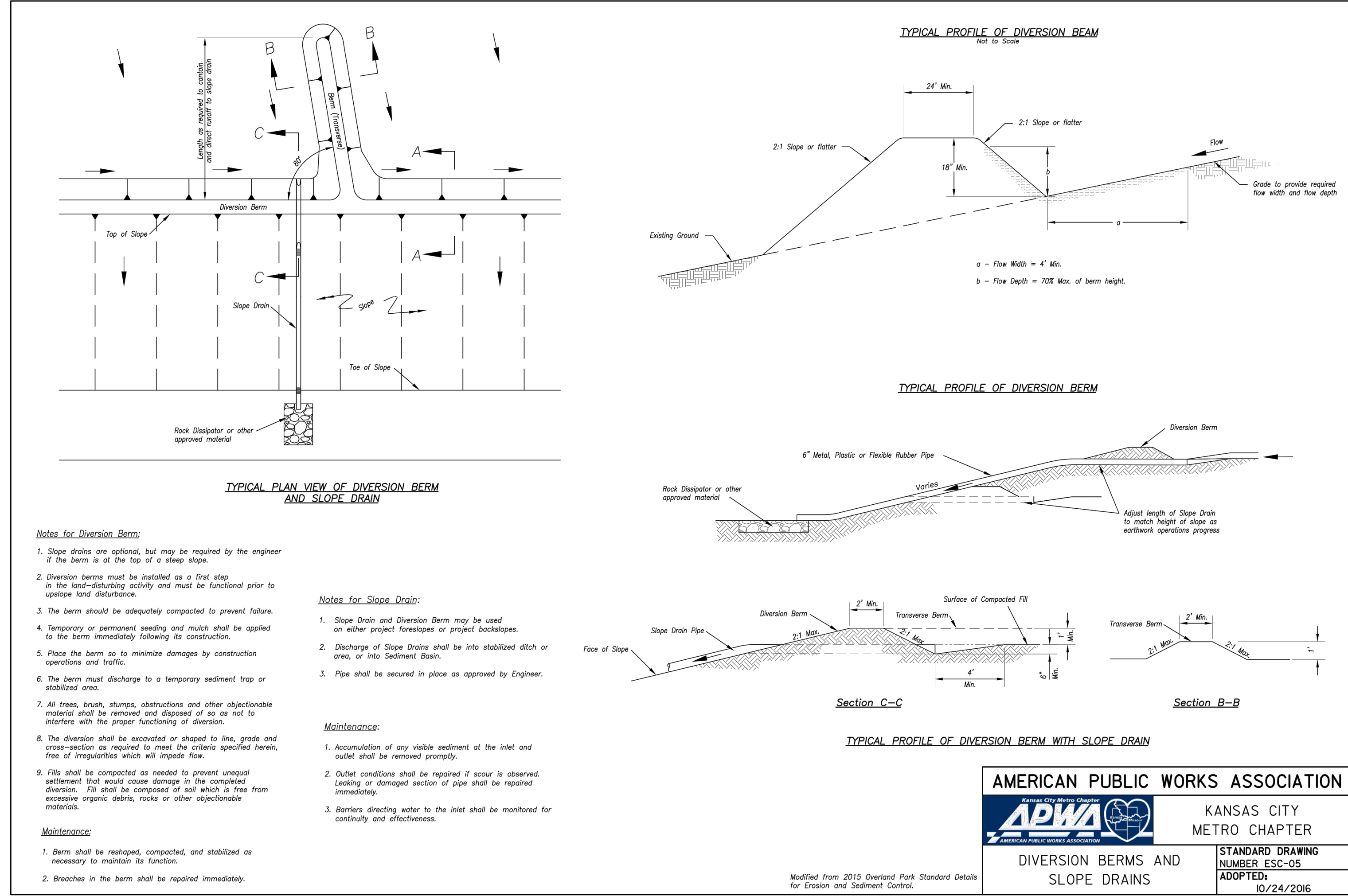
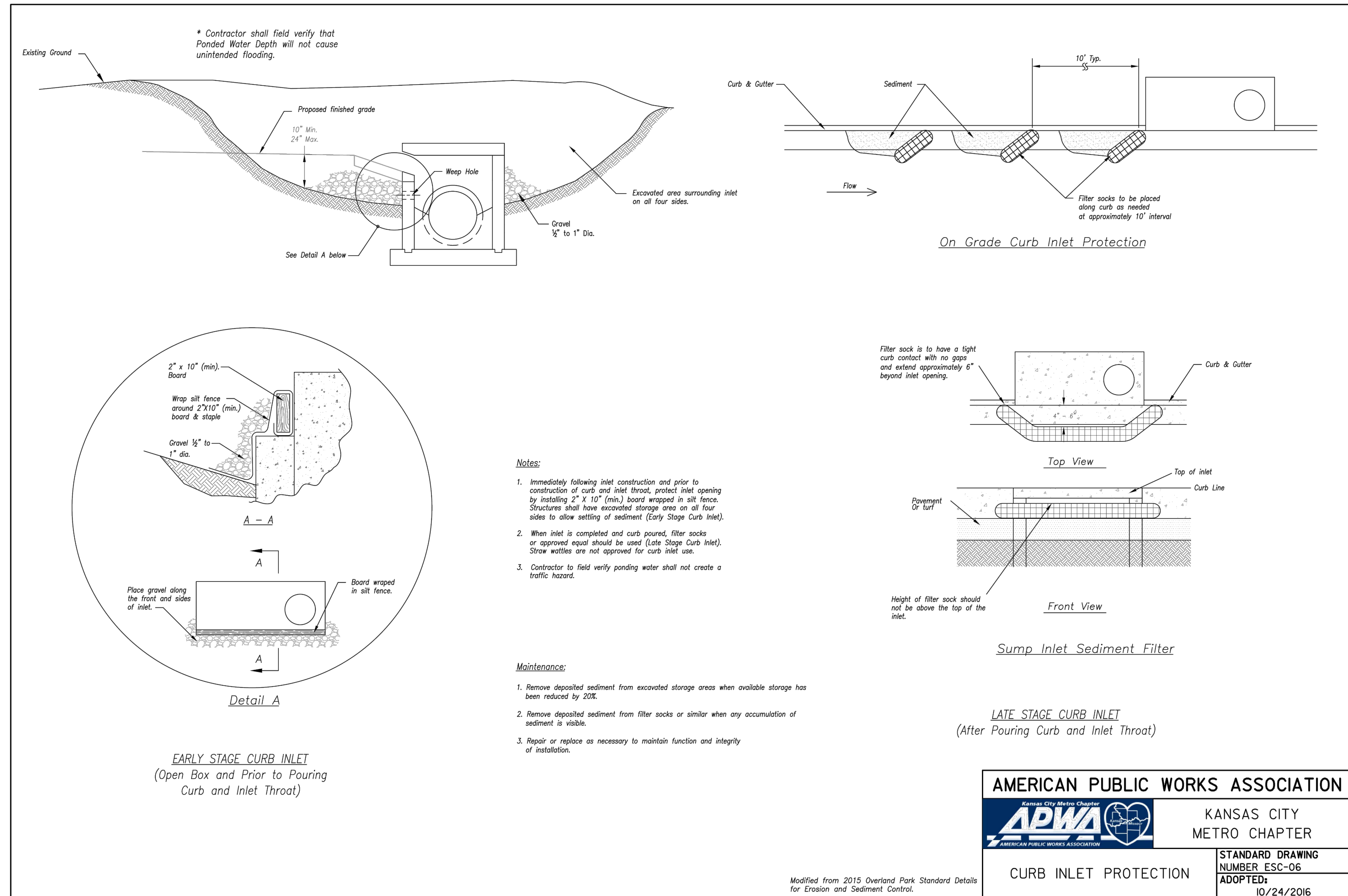
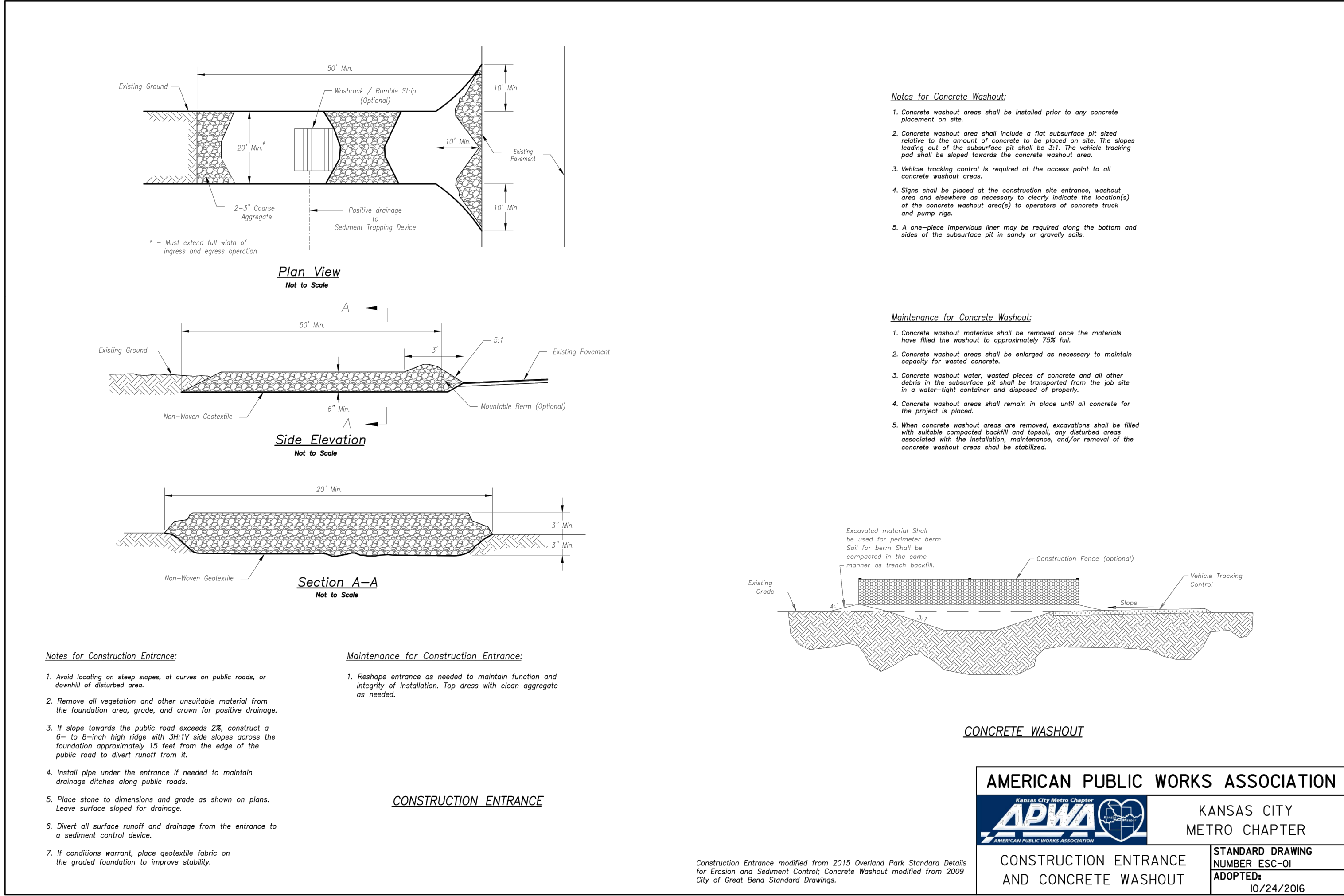
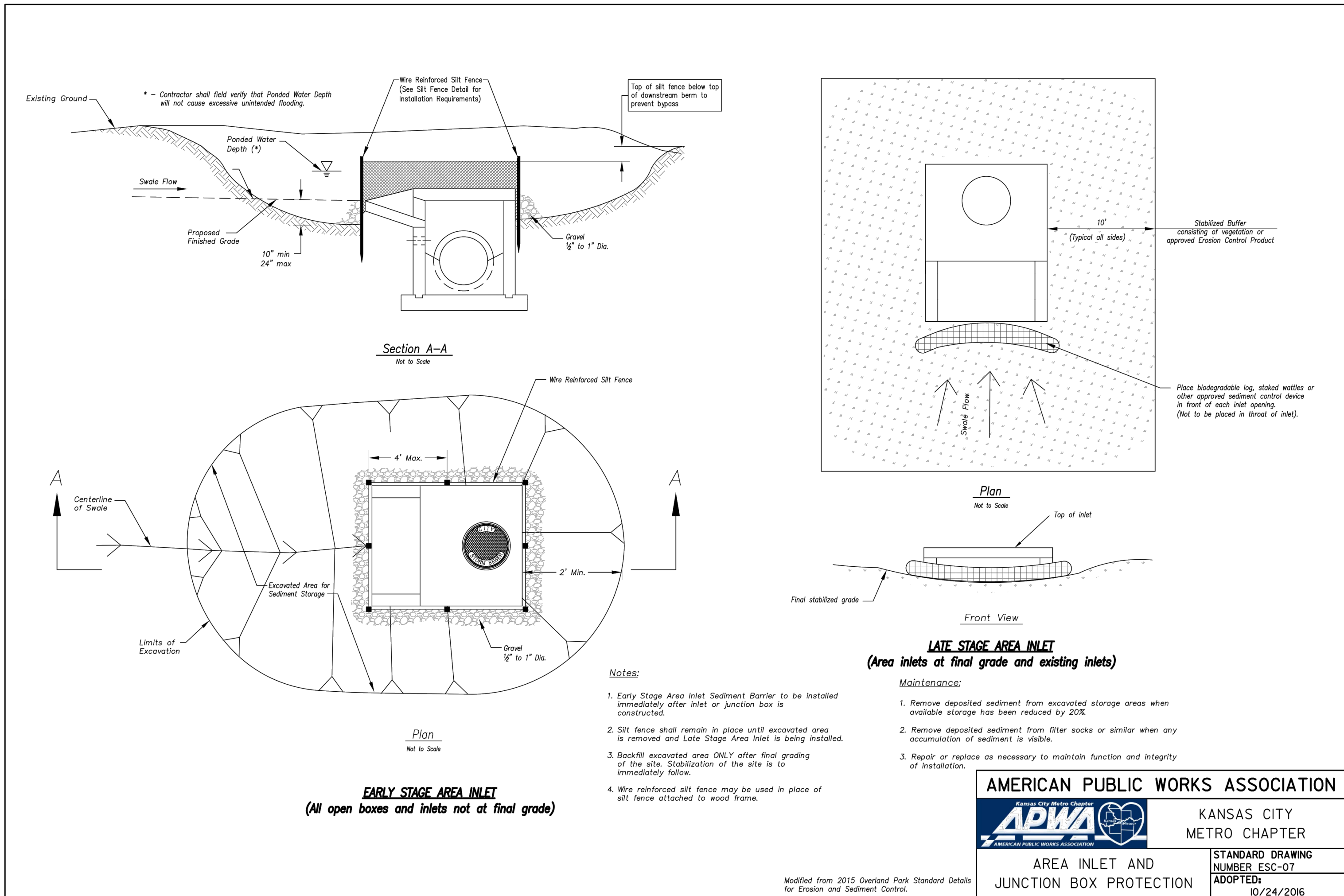
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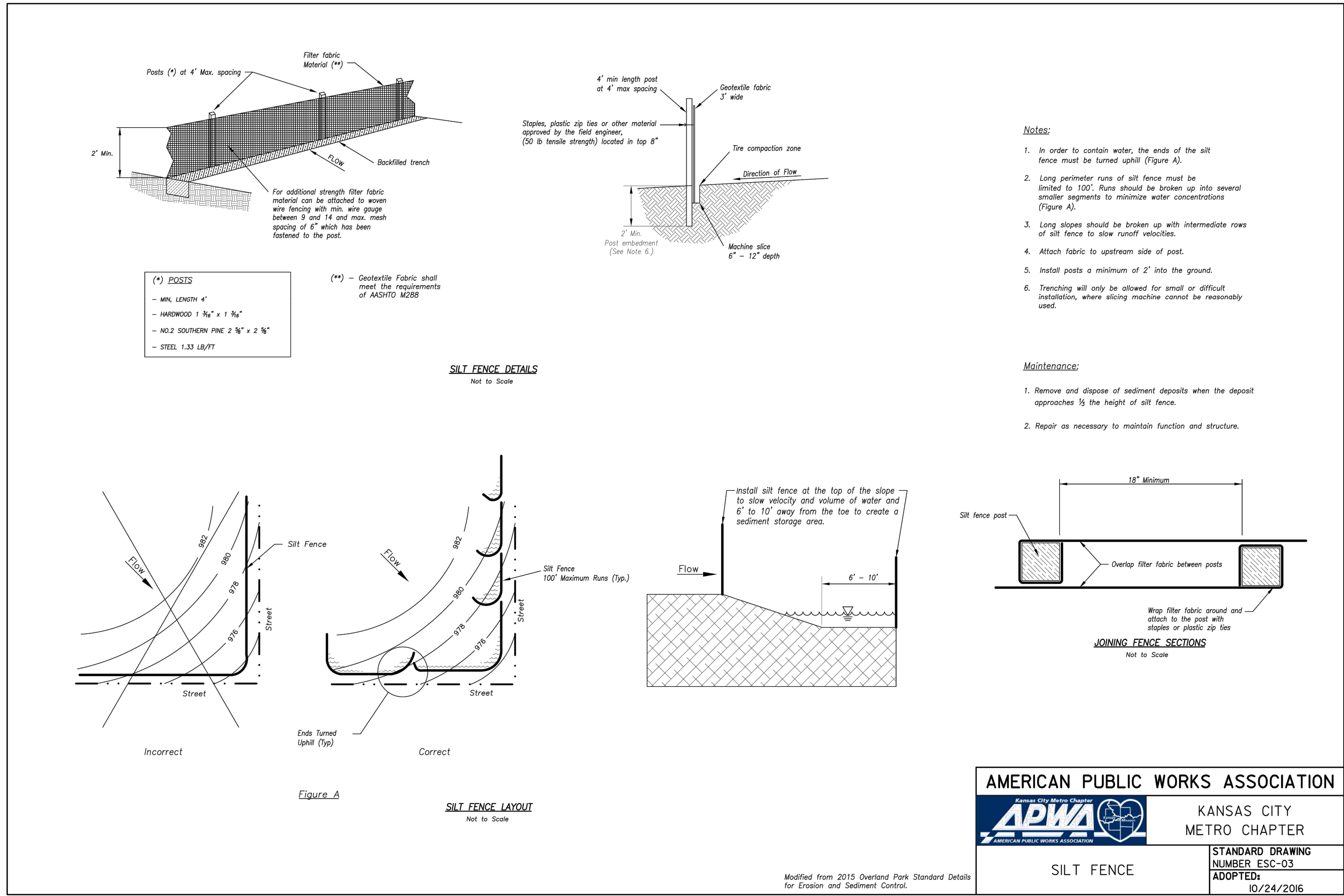
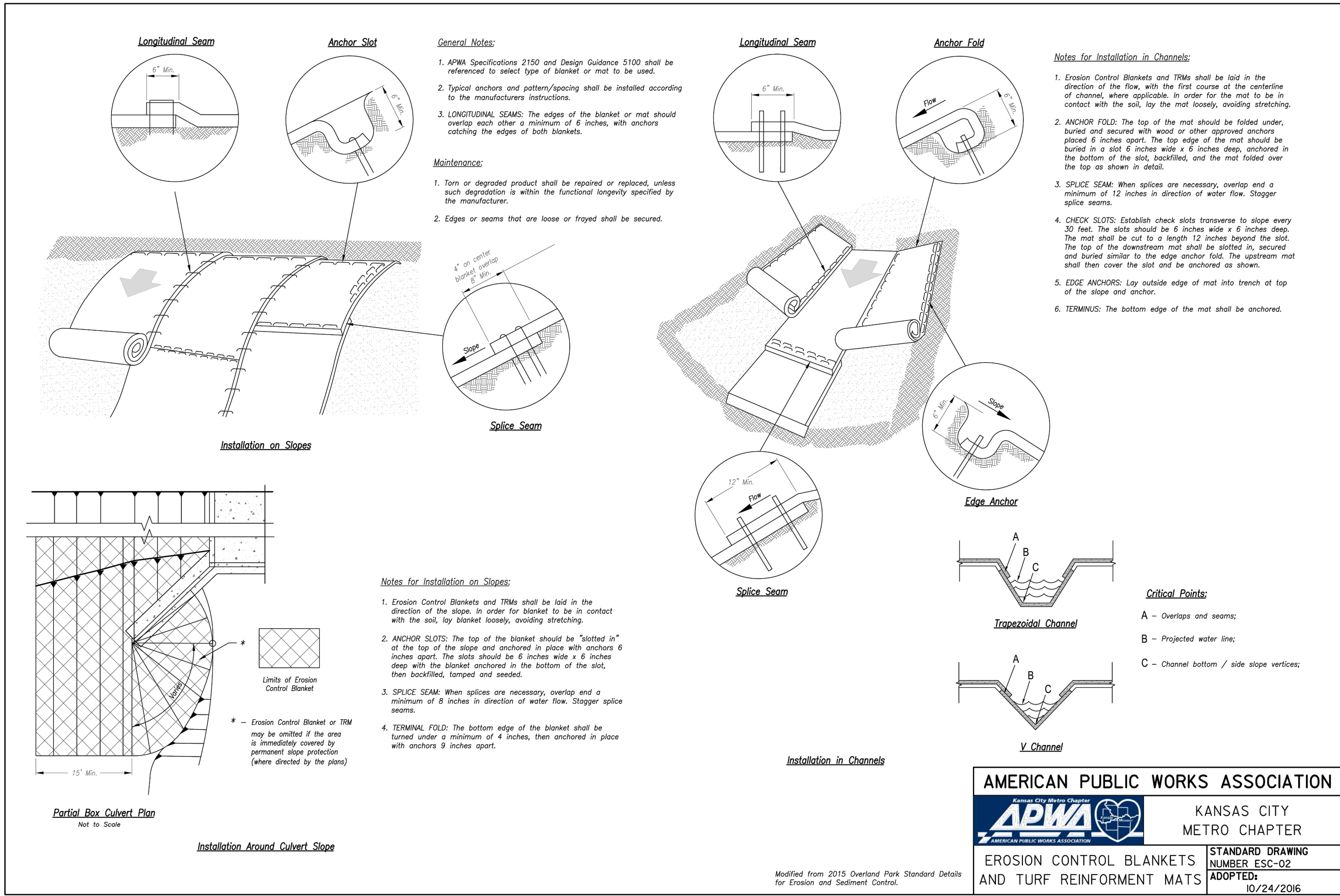
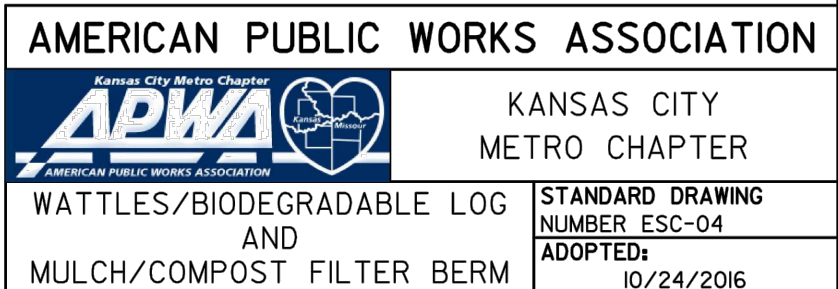
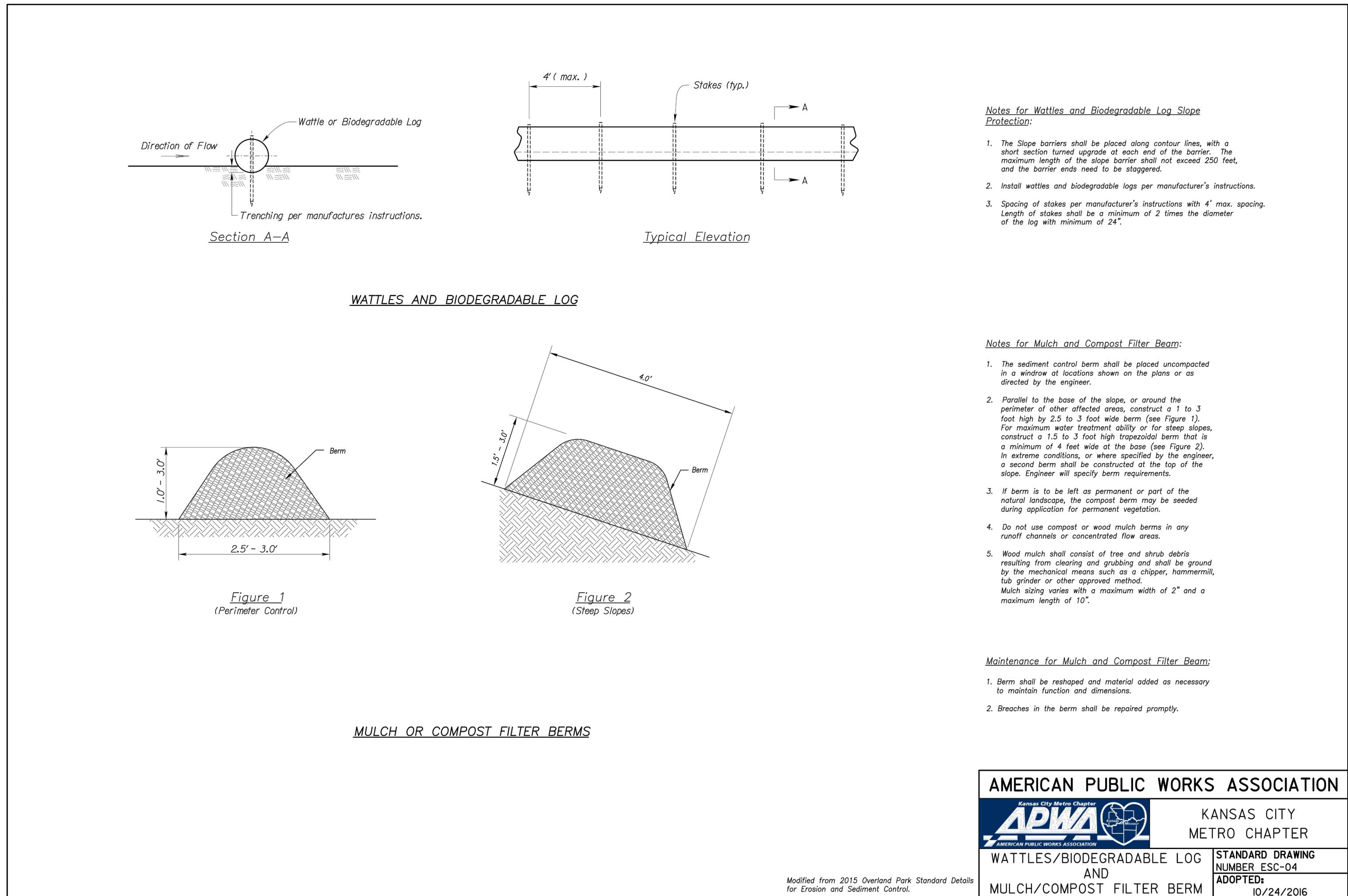
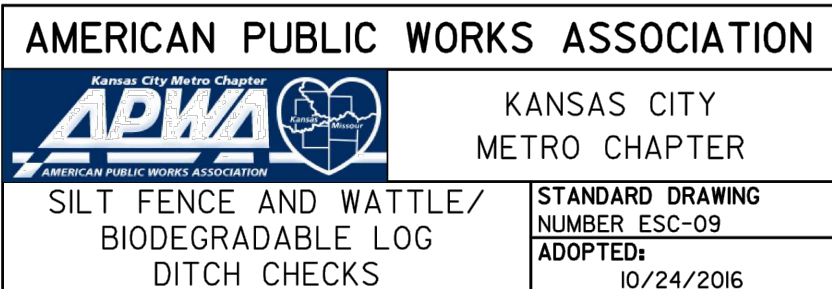
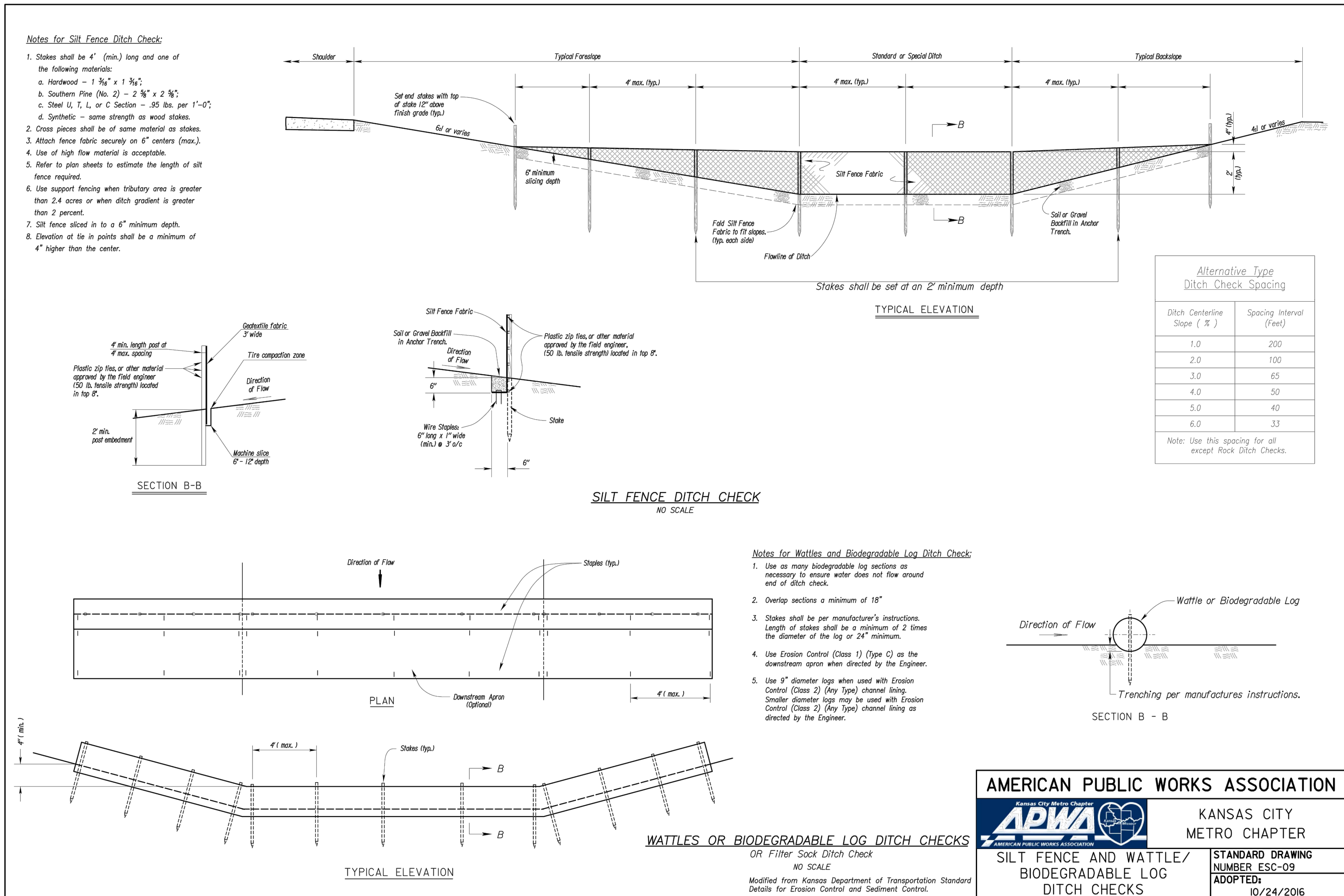
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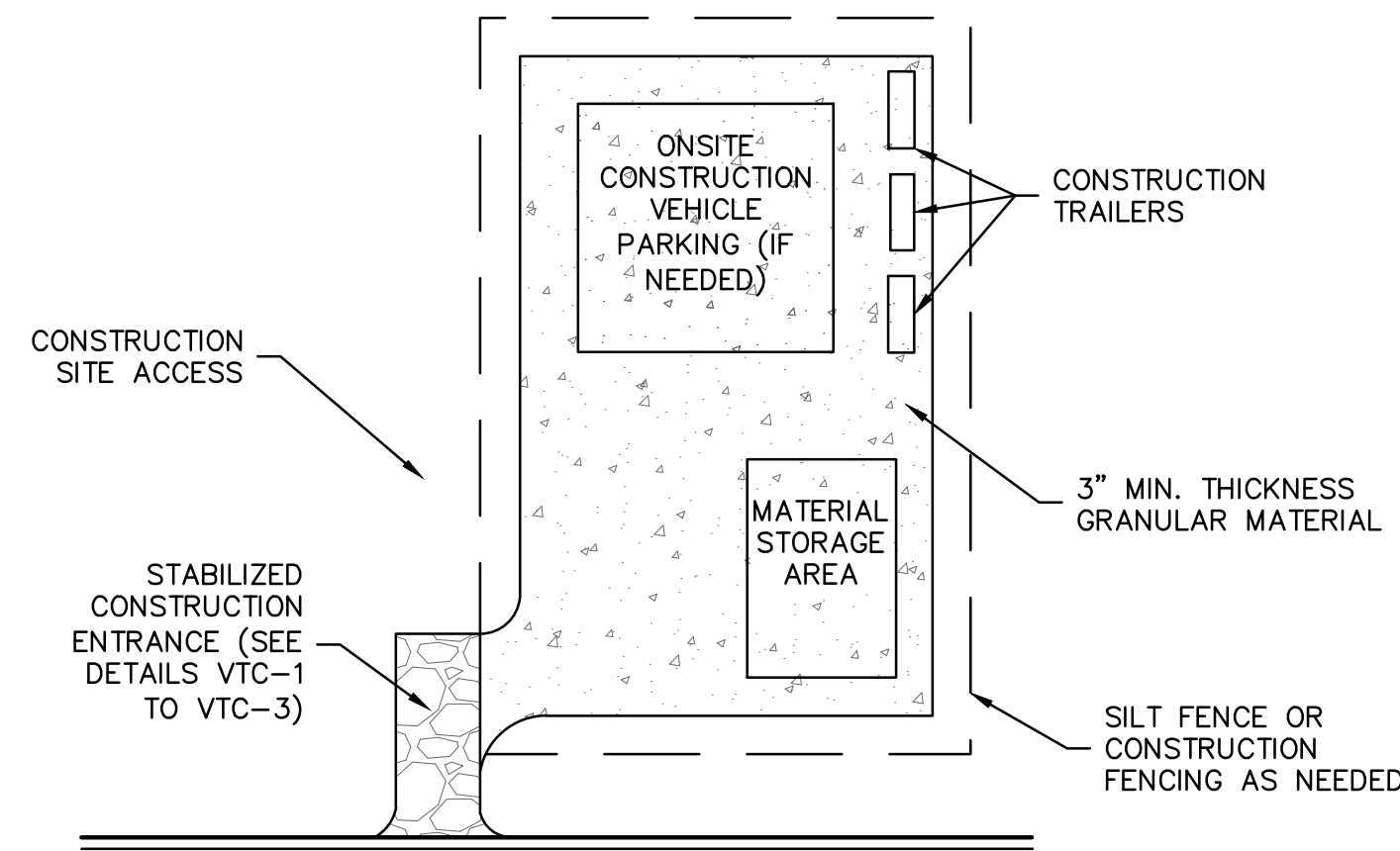
SCANNELL
PROPERTIES

Olsson

7301 West 133rd Street, Suite 200
Overland Park, KS 66213-4750
TEL 913.381.1170 www.olsson.com







SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

- SEE PLAN VIEW FOR
-LOCATION OF STAGING AREA(S)
-CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM LOCAL JURISDICTION
- STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
- STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
- THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703. AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
- ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

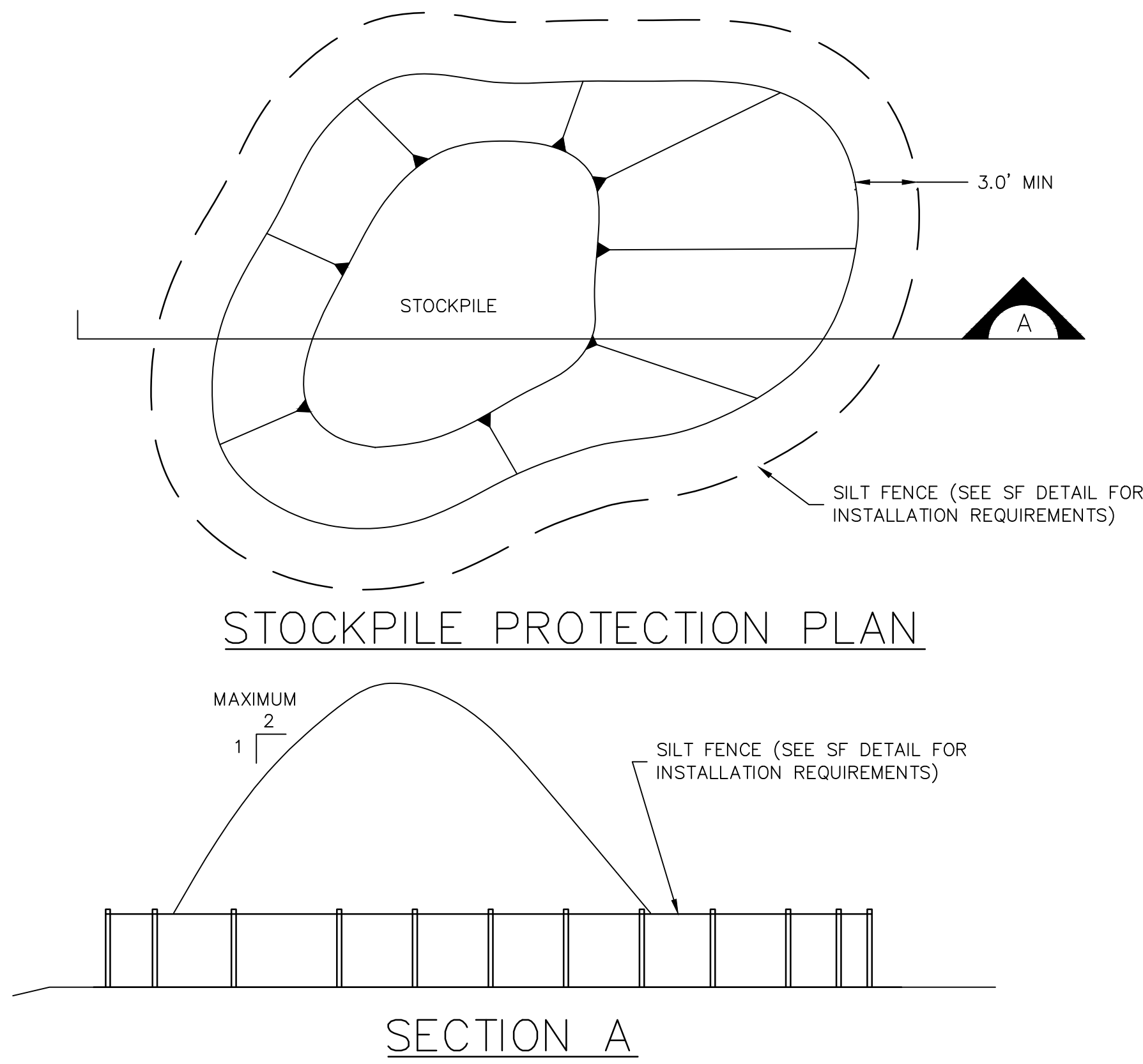
STABILIZED STAGING AREA MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITH 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SHALL BE REAPPLIED OR REGARDED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.
- STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE AND UNLOADING/LOADING OPERATIONS.
- THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

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

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)



URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
URBAN STORM DRAINAGE CRITERIA MANUAL VOLUME 3

STOCKPILE PROTECTION INSTALLATION NOTES

- SEE PLAN FOR:
-LOCATION OF STOCKPILES
-TYPE OF STOCKPILE PROTECTION
- INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENTS CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A Pervious OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
- STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
- FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

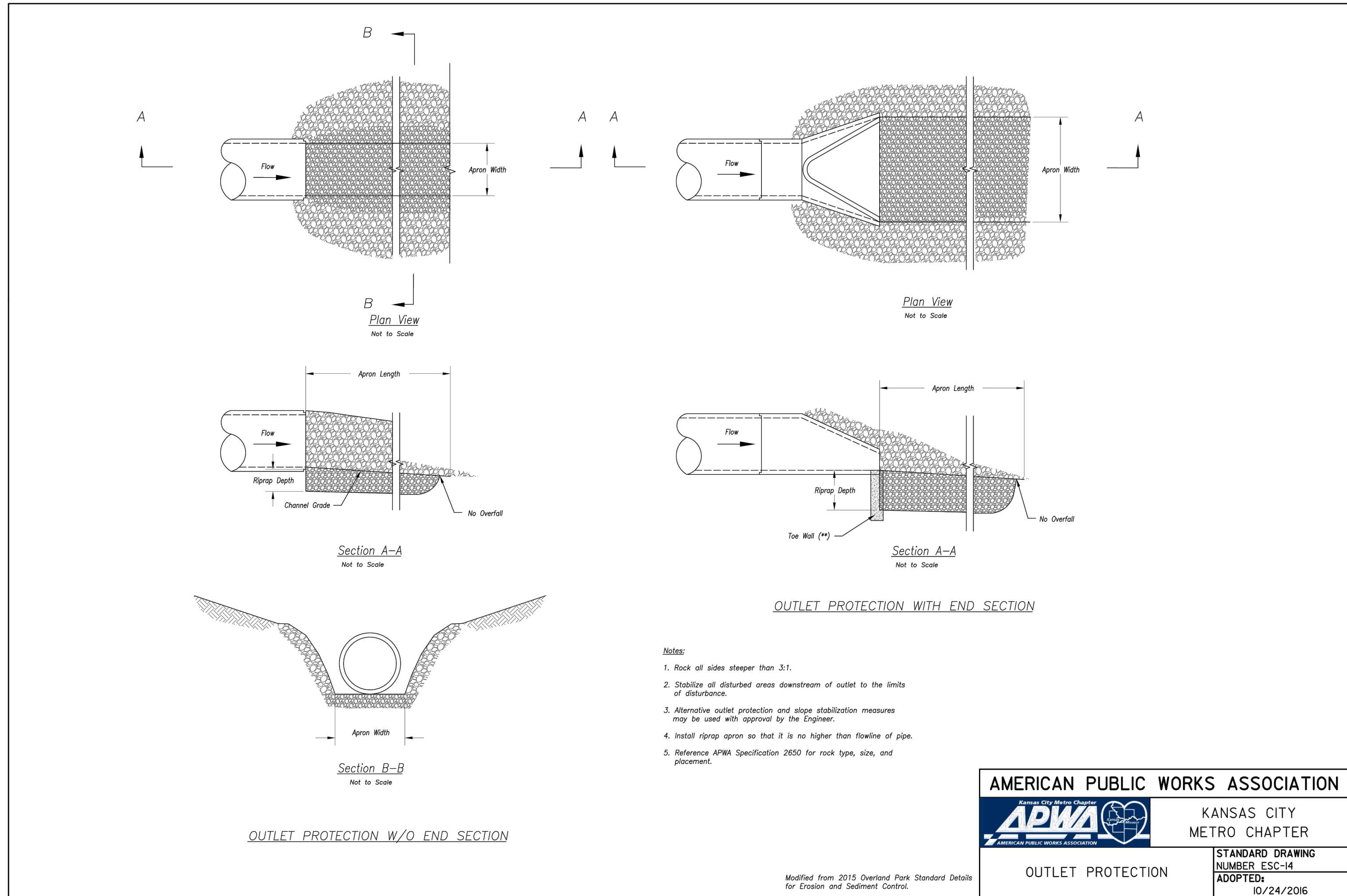
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

STOCKPILE PROTECTION MAINTENANCE NOTES

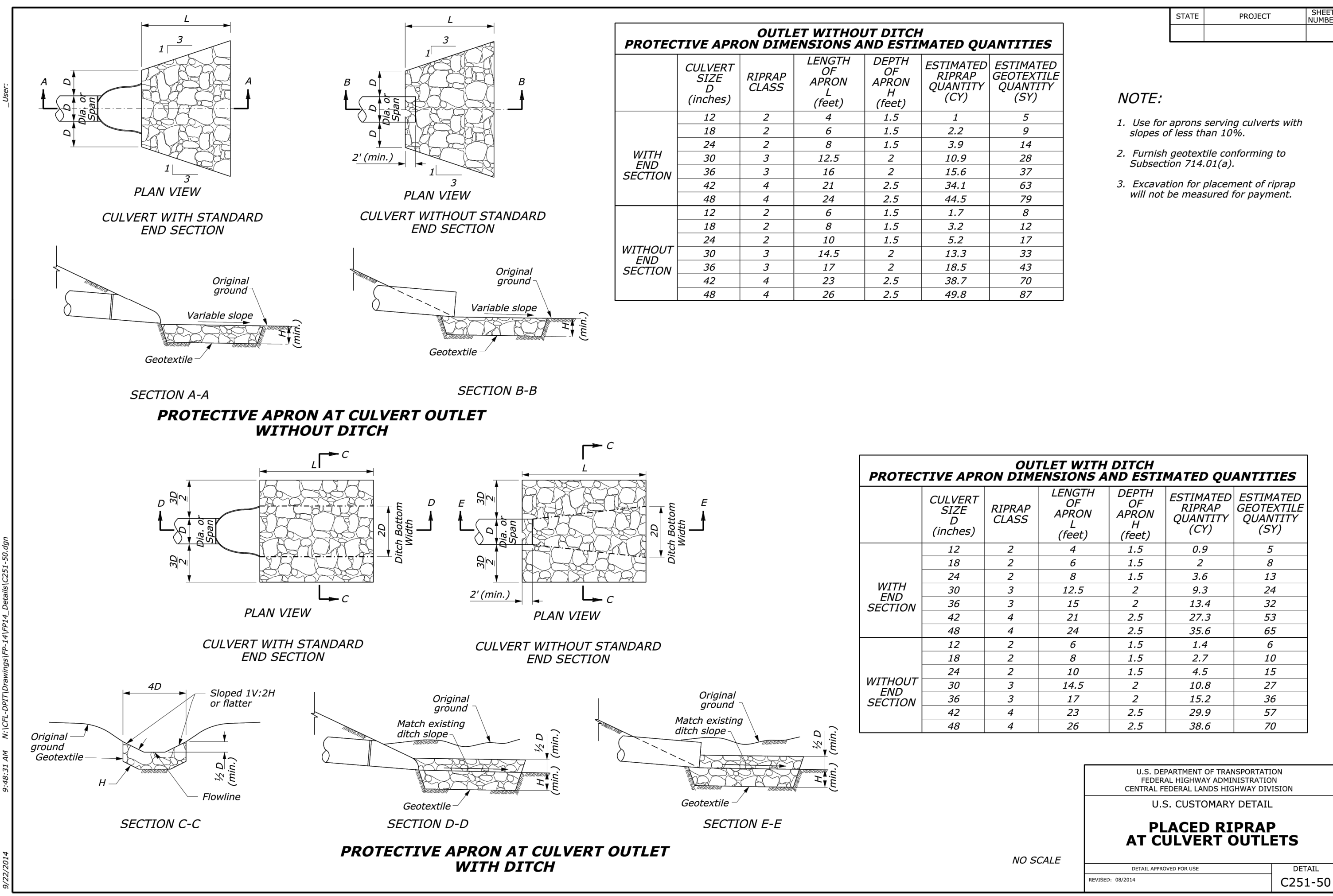
- IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROL BY THE END OF THE WORKDAY.
- STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO)

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



AMERICAN PUBLIC WORKS ASSOCIATION
KANSAS CITY METRO CHAPTER
STANDARD DRAWING NUMBER ESC-14 ADOPTED 10/24/2016
OUTLET PROTECTION



OUTLET WITHOUT DITCH PROTECTIVE APRON DIMENSIONS AND ESTIMATED QUANTITIES					
	CULVERT SIZE (inches)	RIPRAP CLASS	LENGTH OF APRON (feet)	DEPTH OF APRON (feet)	ESTIMATED RIPRAP QUANTITY (CY)
WITH END SECTION	12	2	1.5	1	5
	18	2	6	1.5	2.2
	24	2	8	1.5	3.9
	30	3	12.5	2	10.9
	36	3	16	2	15.6
	42	4	21	2.5	34.1
WITHOUT END SECTION	12	2	6	1.5	1.7
	18	2	8	1.5	3.2
	24	2	10	1.5	5.2
	30	3	14.5	2	13.3
	36	3	17	2	18.5
	42	4	23	2.5	38.7

- NOTE:
- Use for aprons serving culverts with slopes of less than 10%.
 - Furnish geotextile conforming to Subsection 714.01(a).
 - Excavation for placement of riprap will not be measured for payment.

OUTLET WITH DITCH PROTECTIVE APRON DIMENSIONS AND ESTIMATED QUANTITIES					
	CULVERT SIZE (inches)	RIPRAP CLASS	LENGTH OF APRON (feet)	DEPTH OF APRON (feet)	ESTIMATED RIPRAP QUANTITY (CY)
WITH END SECTION	12	2	4	1.5	0.9
	18	2	6	1.5	2
	24	2	8	1.5	3.6
	30	3	12.5	2	9.3
	36	3	15	2	13.4
	42	4	21	2.5	27.3
WITHOUT END SECTION	12	2	6	1.5	1.4
	18	2	8	1.5	2.7
	24	2	10	1.5	4.5
	30	3	14.5	2	10.8
	36	3	17	2	15.2
	42	4	23	2.5	29.9

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION
U.S. CUSTOMARY DETAIL
PLACED RIPRAP AT CULVERT OUTLETS
DETAIL NUMBER FOR USE: C251-50

DWG: F:\2021\04001-04500\021-04157\40-Design\AutoCAD\Final Plans\Sheets\GNV\PHASE 1\Land Disturbance\C_ERODTLO1_02104157.dwg
DATE: Jan 20, 2022 9:38pm
XREFS: C_PBASE_02104157 T_PSTRM_02104157 T_PBASE_02104157
USER: moore

Channel Report

Hydrowflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

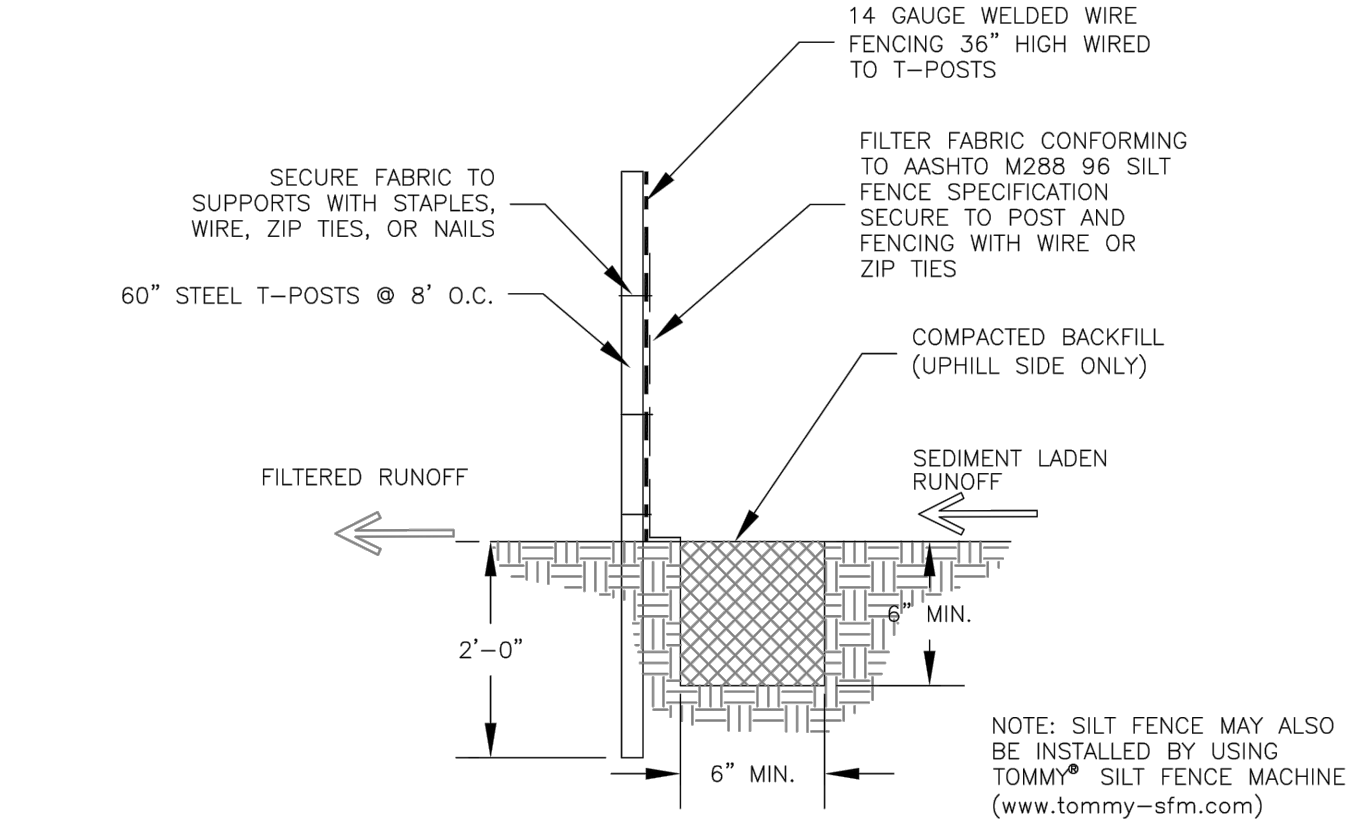
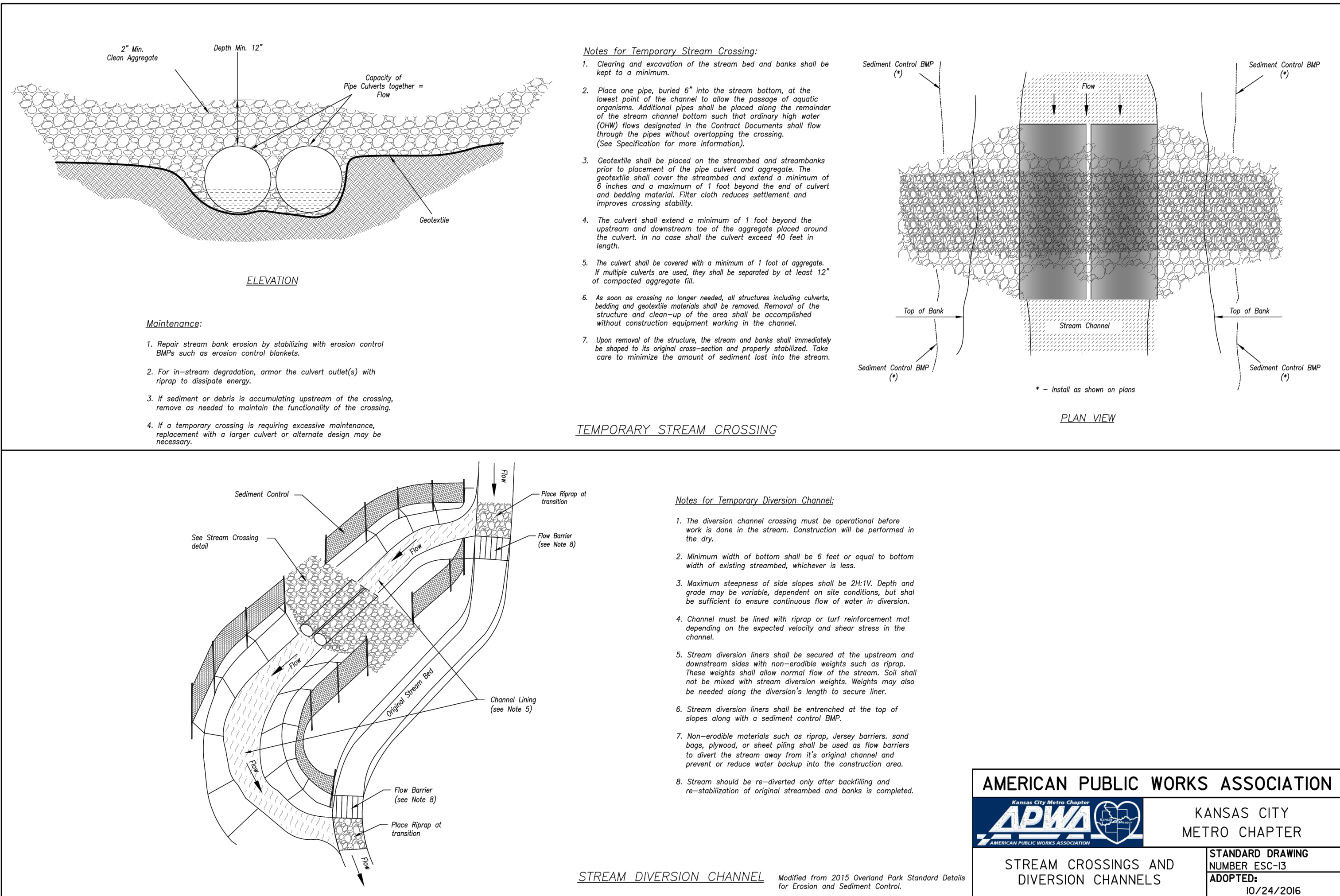
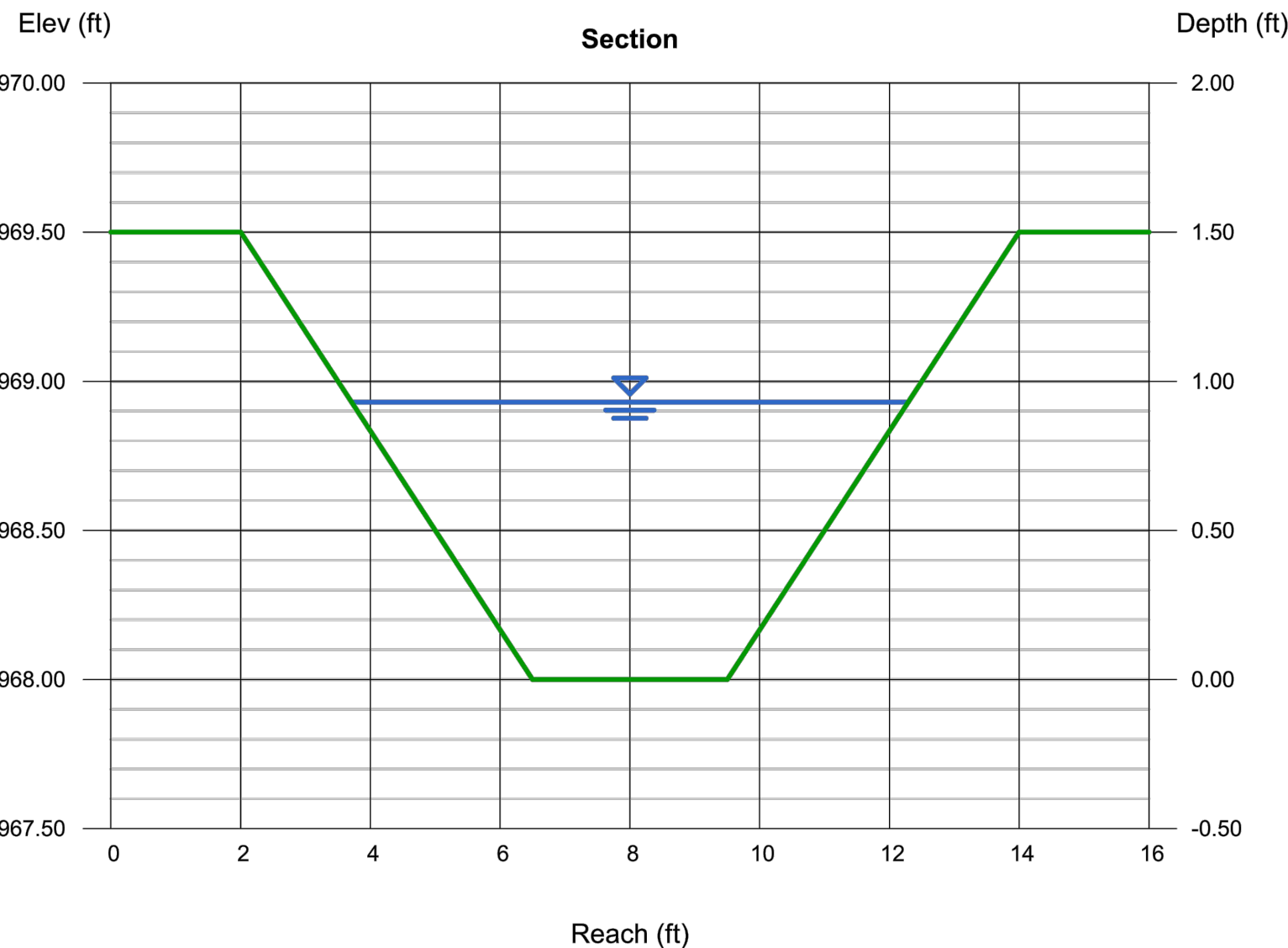
Friday, Oct 8 2021

Swale for Basin #2

Trapezoidal
Bottom Width (ft) = 3.00
Side Slopes (z:1) = 3.00, 3.00
Total Depth (ft) = 1.50
Invert Elev (ft) = 968.00
Slope (%) = 2.50
N-Value = 0.030

Calculations
Compute by: Known Q
Known Q (cfs) = 30.00

Highlighted
Depth (ft) = 0.93
Q (cfs) = 30.00
Area (sqft) = 5.38
Velocity (ft/s) = 5.57
Wetted Perim (ft) = 8.88
Crit Depth, Yc (ft) = 1.05
Top Width (ft) = 8.58
EGL (ft) = 1.41



REINFORCED SILT FENCE SLOPE BARRIER DETAIL
NO SCALE

EROSION CONTROL NOTES:

- ALL WORK IN PUBLIC EASEMENTS AND RIGHT-OF-WAY AND ALL EROSION CONTROL WORK MUST COMPLY WITH THE LATEST EDITION OF THE TECHNICAL PROVISIONS & STANDARD DRAWINGS FOR ROADS AND SEWERS, OF THE UNIFIED GOVERNMENT OF WYANDOTTE COUNTY/KANSAS CITY, KANSAS. IF ANY OF THE GENERAL NOTES CONFLICT WITH THE TECHNICAL PROVISIONS & STANDARD DRAWINGS FOR ROADS AND SEWERS, OF THE UNIFIED GOVERNMENT OF WYANDOTTE COUNTY/KANSAS CITY, KANSAS (THE UG), THE UG'S STANDARDS SHALL OVERRIDE.
- THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT, AND LABOR AS NECESSARY TO INSTALL AND MAINTAIN ADEQUATE EROSION CONTROL, KEEP THE STREETS CLEAN OF MUD AND DEBRIS, AND PREVENT SOIL FROM LEAVING THE PROJECT SITE. THE CONTRACTOR'S EROSION CONTROL MEASURES SHALL CONFORM TO THE UNIFIED GOVERNMENT OF WYANDOTTE COUNTY, KANSAS CITY, KS TECHNICAL PROVISIONS SPECIFICATIONS, AND THE PROJECT'S STORMWATER POLLUTION PREVENTION PLAN, A COPY OF WHICH SHALL BE MAINTAINED AND UPDATED ON SITE AT ALL TIMES.
- CONTRACTOR SHALL INSTALL EROSION CONTROL DEVICES BEFORE STARTING ANY CONSTRUCTION ACTIVITY. REFERENCE PRE-CONSTRUCTION PHASE IN STAGING TABLE.
- GOOD HOUSEKEEPING, INCLUDING SPILL RESPONSE SHALL BE PERFORMED IN ACCORDANCE WITH THE KANSAS CITY CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION STANDARD SPECIFICATIONS, SECTION 2150.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL EROSION CONTROL MEASURES OR MODIFICATIONS IF THE PLAN FAILS TO SUBSTANTIALLY CONTROL EROSION OR OFFSITE SEDIMENTATION.
- THE CONTRACTOR SHALL TEMPORARILY SEED, MULCH, OR OTHERWISE STABILIZE ANY DISTURBED AREA WHERE THE LAND DISTURBANCE ACTIVITY HAS CEASED FOR A PERIOD OF FOURTEEN (14) CALENDAR DAYS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL DEVICES AND REMOVING SEDIMENT UNTIL A MINIMUM OF 70% OF PERMANENT VEGETATION HAS BECOME STABILIZED AND ESTABLISHED. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE 70% ESTABLISHED VEGETATION IS MET, OR THE DURATION OF THE PROJECT, WHICHEVER IS THE LATER DATE.
- THE CONTRACTOR SHALL HAVE A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON SITE AT ALL TIMES. INSPECTION LOGS AND ANY CHANGES TO EROSION CONTROL MEASURES SHALL BE ADDED TO THE SWPPP.
- REMOVE SEDIMENT AND RESTORE THE SEDIMENT BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO 20% OF THE STORAGE CAPACITY. CONTRACTOR SHALL CLEAN OUT SEDIMENT BASIN BEFORE FINAL GRADING OF DETENTION BASIN AND DRY DETENTION BASINS. CONTRACTOR TO HAVE DETENTION BASIN AND DRY DETENTION BASINS STAKED BEFORE FINAL GRADING PER GRADING PLAN. AFTER CONTRACTOR HAS COMPLETED FINAL GRADING, AS-BUILT SHOTS AND VOLUME STORAGE CAPACITY CALCULATIONS SHALL BE PROVIDED TO THE ENGINEER TO CONFIRM COMPLIANCE WITH DESIGN PLANS AND UG STANDARDS.
- REMOVE SEDIMENT AND RESTORE THE SEDIMENT TRAP TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO 20% OF THE STORAGE CAPACITY.

BY

REV. NO.

DATE

REVISIONS DESCRIPTION

EROSION CONTROL DETAILS
LAND DISTURBANCE PLANS

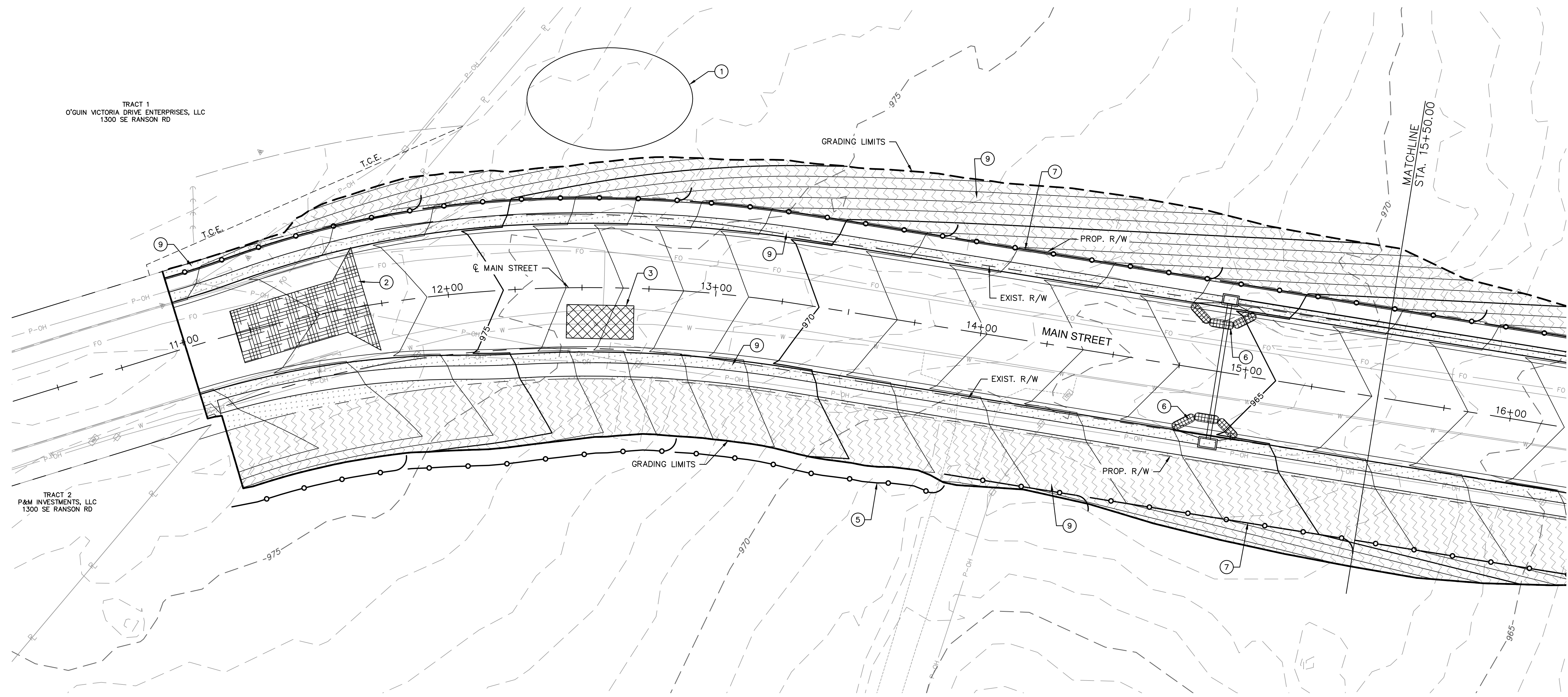
SCANNELL DEVELOPMENT LEE'S SUMMIT LOGISTICS
NORTHWEST CORNER OF TUDOR ROAD AND MAIN STREET
LEE'S SUMMIT, MISSOURI

2021

drawn by: OLSSON
checked by: ENG
approved by: ENG
GNV by: ENG
project no.: 021-04157
drawn by: F:\2021\04001-04500\021-04157\40-Design\AutoCAD\Final Plans\Sheets\GNV\PHASE 1\Land Disturbance\C_ERODTLO1_02104157.dwg
date:

SHEET
LD2.4

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USER: arjohnson



EROSION AND SEDIMENT CONTROL STAGING CHART				
PROJECT STAGE	EROSION CONTROL PLAN BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
I - STORM SEWER AND RCP INSTALLATION PRIOR TO ROADWAY GRADING	1	STAGING AREA	III	
	2	TEMPORARY CONSTRUCTION ENTRANCE	III	
	3	CONCRETE WASHOUT	III	
	4	DIVERSION BERM	IV	INSTALL BEFORE RCB INSTALLATION (SEE SHEET 58)
	5	SILT FENCE/OR BIODEGRADABLE LOGS (9")	IV	
	6	CURB INLET PROTECTION	III	PER CURB INLET DETAIL
II - ROADWAY GRADING & SWALE GRADING	7	SILT FENCE/OR BIODEGRADABLE LOGS (9")	IV	
III - PAVING	8	CURB INLET/AREA INLET PROTECTION	IV	GRAVEL FILTER BAGS
IV - STABILIZE SITE	9	SOD/SEED	N/A	

LEGEND

SILT FENCE

INLET PROTECTION

TEMPORARY ROCK DITCH CHECKS

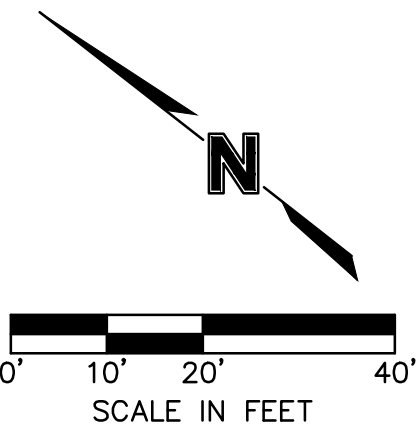
CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

SOD

SEED

REFERENCE APPROVED
PUBLIC IMPROVEMENT
PLANS



olsson

Olsson Engineering - MO State Certificate of Authority #001592
7301 West 133rd Street, Suite 200
Overland Park, KS 66213-4760
TEL 913.381.1170
FAX 913.381.1174
www.olson.com

RYAN B. FLEMING
MO. NO. PE-2002003161

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	11/16/2021	CITY COMMENTS	ARJ

EROSION CONTROL PLAN

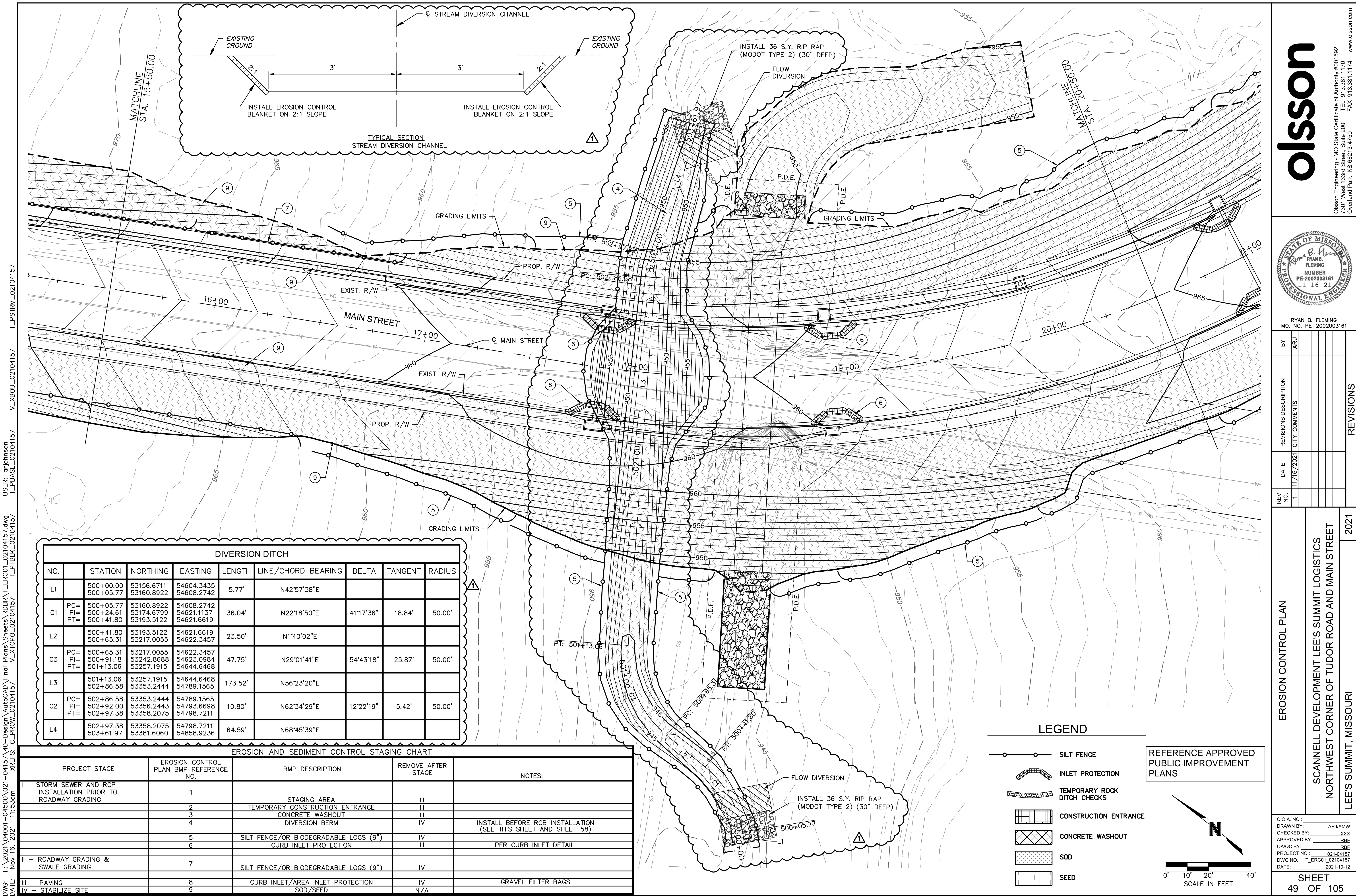
SCANNELL DEVELOPMENT LEE'S SUMMIT LOGISTICS
NORTHWEST CORNER OF TUDOR ROAD AND MAIN STREET

LEE'S SUMMIT, MISSOURI

2021

C.O.A. NO.:
DRAWN BY: ARJ/AMW
CHECKED BY: XXX
APPROVED BY: RBE
QA/QC BY: RBE
PROJECT NO.: 021-04157
DWG NO.: T_ERC01_02104157
DATE: 2021-10-12

SHEET
48 OF 105



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STATE OF MISSOURI
RYAN B. FLEMING
NUMBER
PE-2002003161
11-16-21
PROFESSIONAL ENGINEER

RYAN B. FLEMING
MO. NO. PE-2002003161

BY	REV. NO.	DATE	REVISIONS DESCRIPTION	CITY COMMENTS
ARJ	1	11/16/2021		

REVISIONS

EROSION CONTROL PLAN

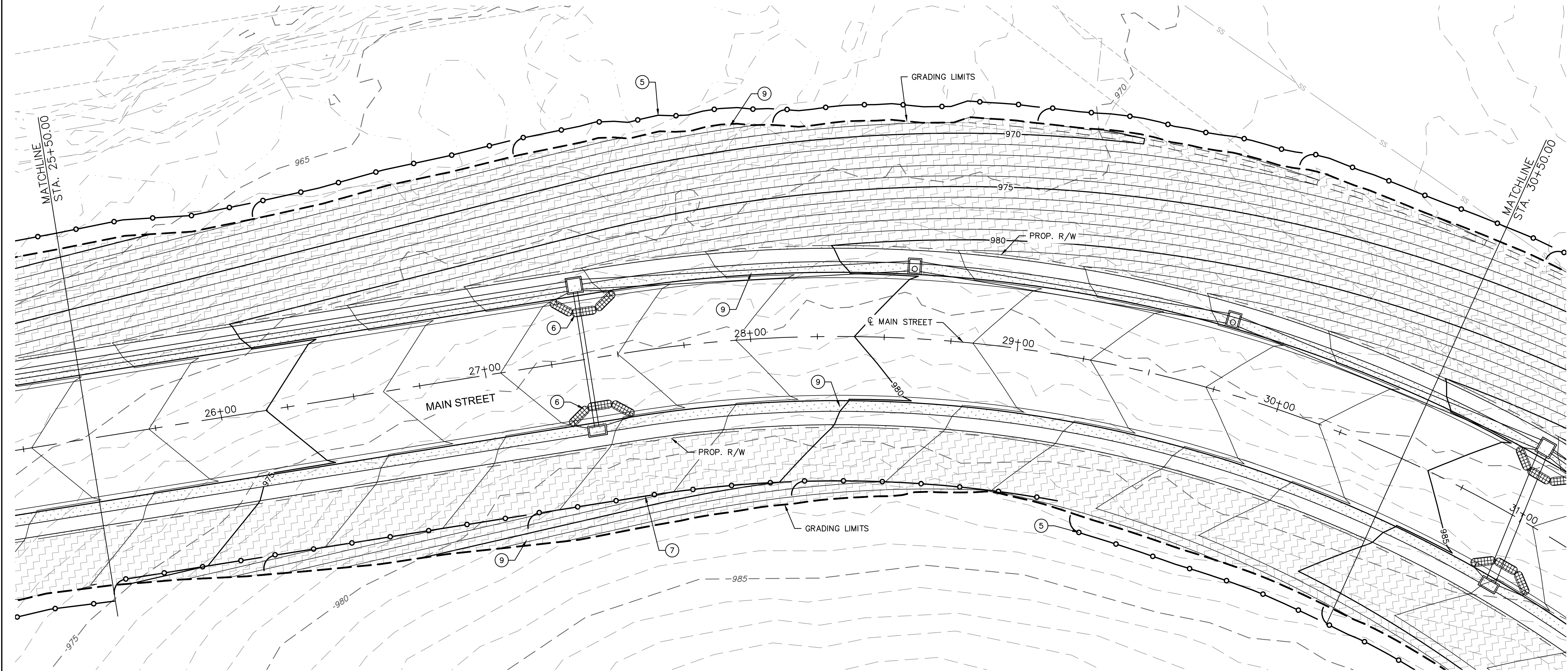
SCANNELL DEVELOPMENT LEE'S SUMMIT LOGISTICS
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DWG NO.: T_ERC01_02104157
DATE: 2021-10-12

SHEET
49 OF 105

DWG: F:\2021\04001-04500\021-04157\40-Design\AutoCAD\Final Plans\Sheets\ROBR T_ERC01_02104157.dwg
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USER: arjohnson



EROSION AND SEDIMENT CONTROL STAGING CHART				
PROJECT STAGE	EROSION CONTROL PLAN BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
I - STORM SEWER AND RCP INSTALLATION PRIOR TO ROADWAY GRADING	1	STAGING AREA	III	
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IV - STABILIZE SITE	9	SOD/SEED	N/A	

LEGEND

SILT FENCE

INLET PROTECTION

TEMPORARY ROCK DITCH CHECKS

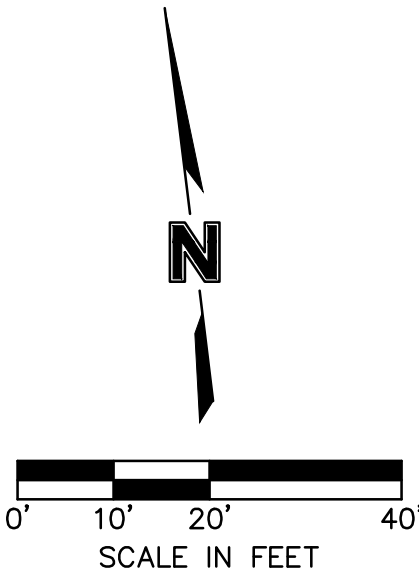
CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

SOD

SEED

REFERENCE APPROVED
PUBLIC IMPROVEMENT
PLANS



Olsson Engineering - MO State Certificate of Authority #001592
7301 West 133rd Street, Suite 200
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RYAN B. FLEMING
MO. NO. PE-2002003161

BY	ARJ
REVISIONS DESCRIPTION	
DATE	
REV. NO.	
1	11/16/2021

EROSION CONTROL PLAN

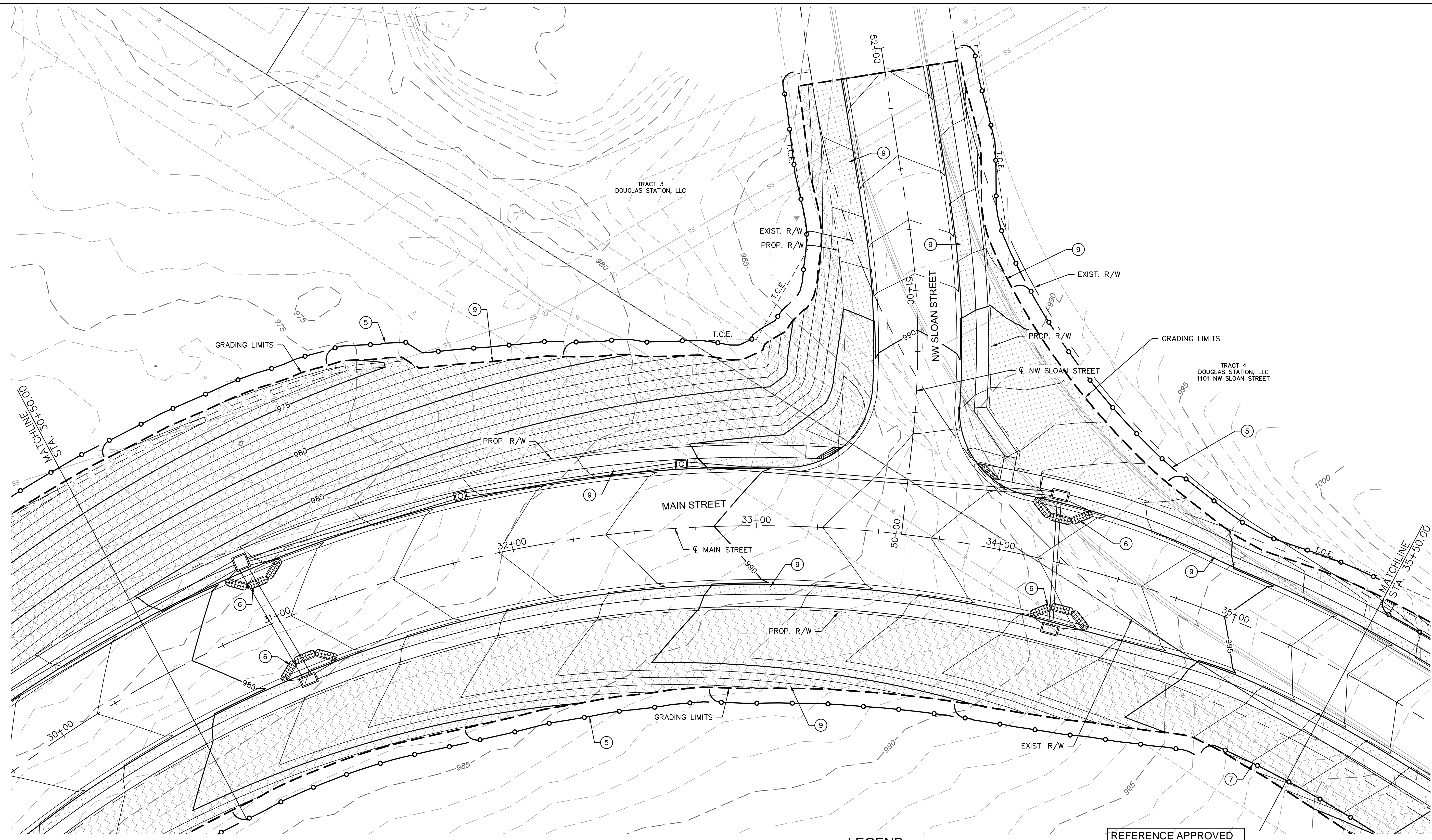
SCANNELL DEVELOPMENT LEE'S SUMMIT LOGISTICS
NORTHWEST CORNER OF TUDOR ROAD AND MAIN STREET
LEE'S SUMMIT, MISSOURI

2021

C.O.A. NO.:
DRAWN BY: ARJ/AMW
CHECKED BY: XXX
APPROVED BY: RBE
QA/QC BY: RBE
PROJECT NO.: 021-04157
DWG NO.: T_ERC01_02104157
DATE: 2021-10-12








SHEET
51 OF 105

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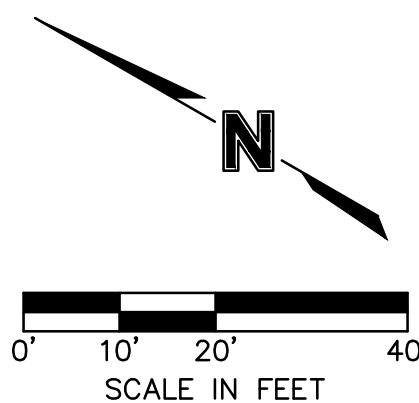


EROSION AND SEDIMENT CONTROL STAGING CHART				
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IV – STABILIZE SITE	9	SOD/SEED	N/A	

LEGEND

- | | |
|---|--------------------------------|
|  | SILT FENCE |
|  | INLET PROTECTION |
|  | TEMPORARY ROCK
DITCH CHECKS |
|  | CONSTRUCTION ENTRANCE |
|  | CONCRETE WASHOUT |
|  | SOD |
|  | SEED |

REFERENCE APPROVED
PUBLIC IMPROVEMENT
PLANS



EROSION CONTROL PLAN

SCANNELL DEVELOPMENT LEE'S SUMMIT LOGISTICS NORTHWEST CORNER OF TUDOR ROAD AND MAIN STREET	2017
LEE'S SUMMIT, MISSOURI	

LEE'S SUMMIT, MISSOURI

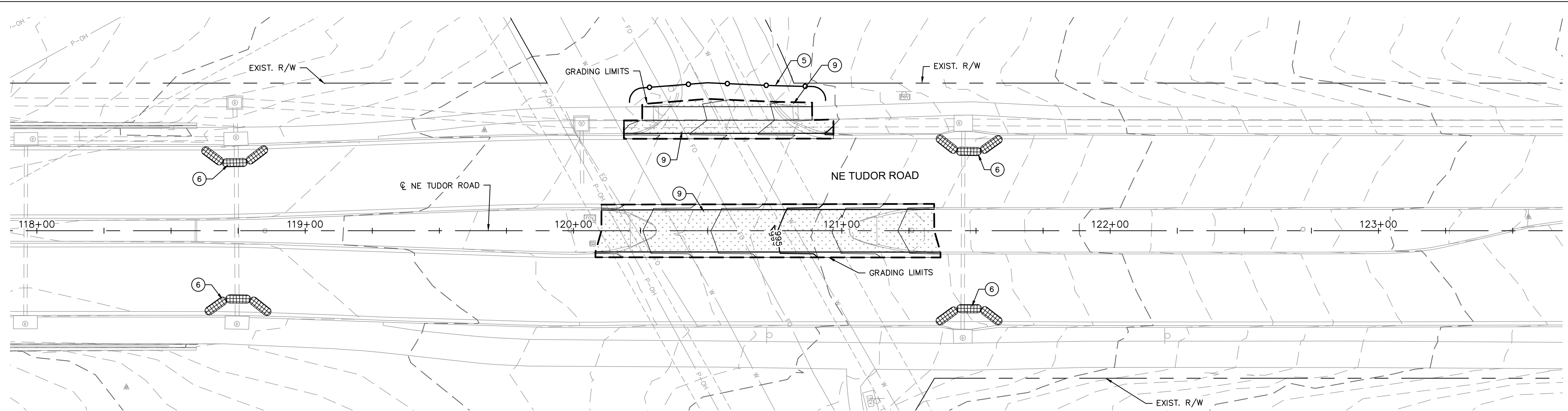
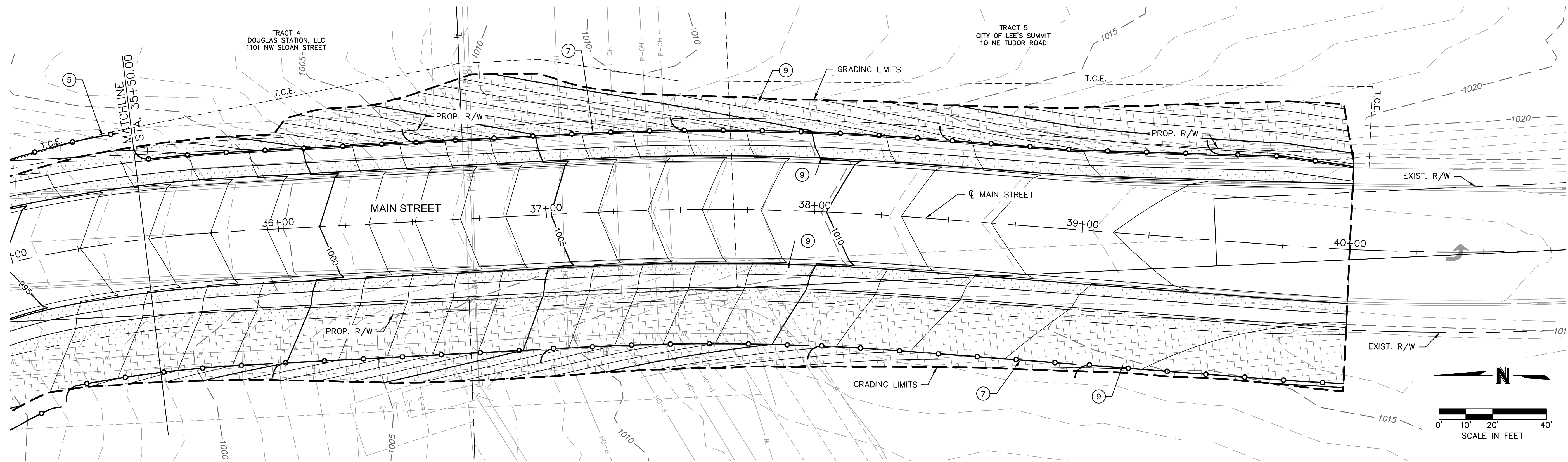
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RYAN B. FLEMING
NUMBER
PE-2002003161
11-16-21

olson








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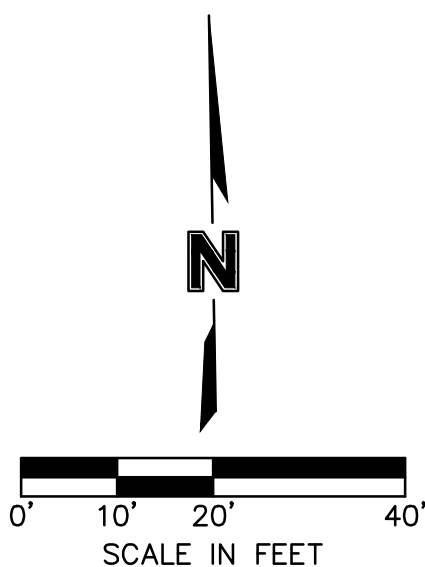


EROSION AND SEDIMENT CONTROL STAGING CHART				
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IV – STABILIZE SITE	9	SOD/SEED	N/A	

LEGEND

-
-  SILT FENCE
-  INLET PROTECTION
-  TEMPORARY ROCK DITCH CHECKS
-  CONSTRUCTION ENTRANCE
-  CONCRETE WASHOUT
-  SOD
-  SEED

REFERENCE APPROVED
PUBLIC IMPROVEMENT
PLANS



EROSION CONTROL PLAN

SCANNELL DEVELOPMENT LEE'S SUMMIT LOGISTICS NORTHWEST CORNER OF TUDOR ROAD AND MAIN STREET	201
LEE'S SUMMIT, MISSOURI	

C.O.A. NO.: _____
DRAWN BY: _____ ARJ/AMW
CHECKED BY: _____ XXX
APPROVED BY: _____ RBF
QA/QC BY: _____ RBF
PROJECT NO.: _____ 021-04157
DWG NO.: T_ERC01_02104157
DATE: _____ 2021-10-12

SHEET
3 OF 105

RYAN B. FLEMING
 NUMBER
 PE-2002003161
 11-16-21
 PROFESSIONAL ENGINEER

RYAN B. FLEMING
MO. NO. PE-2002003161

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	11/16/2021	CITY COMMENTS	ARJ

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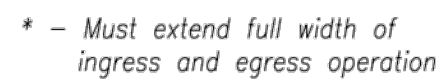
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C.O.A. NO.: _____
DRAWN BY: _____ AR 11/AMW

CHECKED BY: XXX
APPROVED BY: RBF
QA/QC BY: RBF

PROJECT NO.: 021-04157
DWG NO.: T_ERC01_02104157
DATE: 2021-10-12

SHEET
53 OF 105



Not to Scale



Not to Scale



Not to Scale

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


CONSTRUCTION ENTRANCE

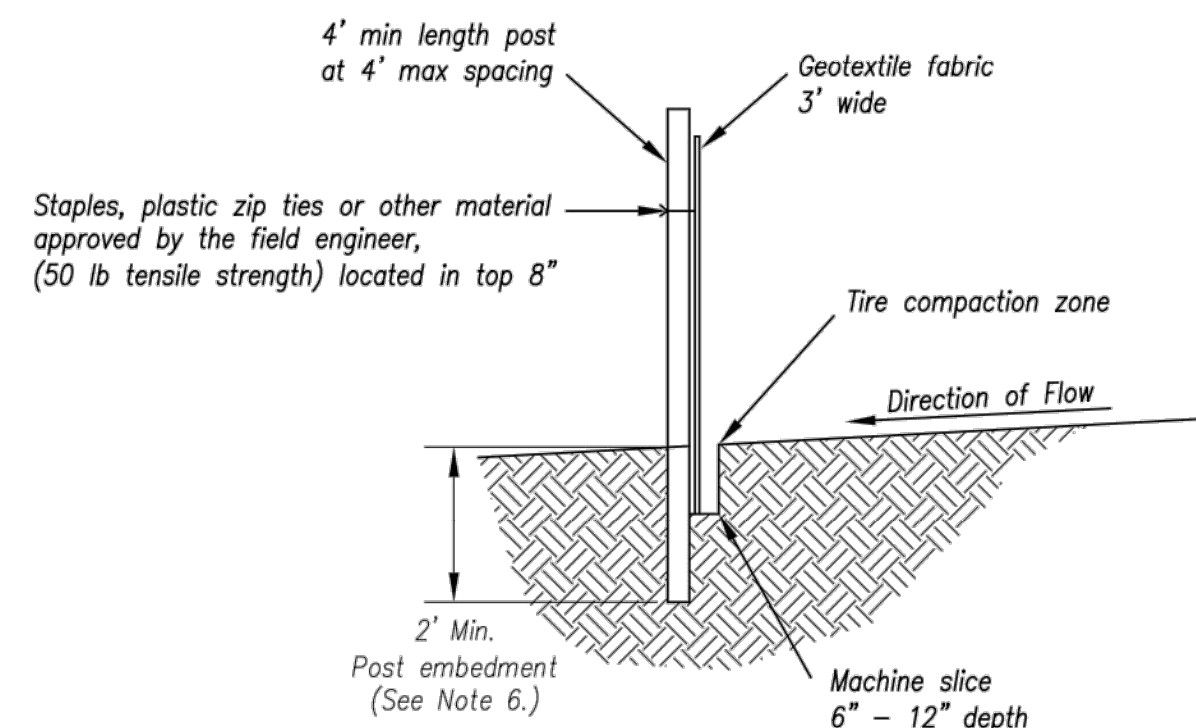
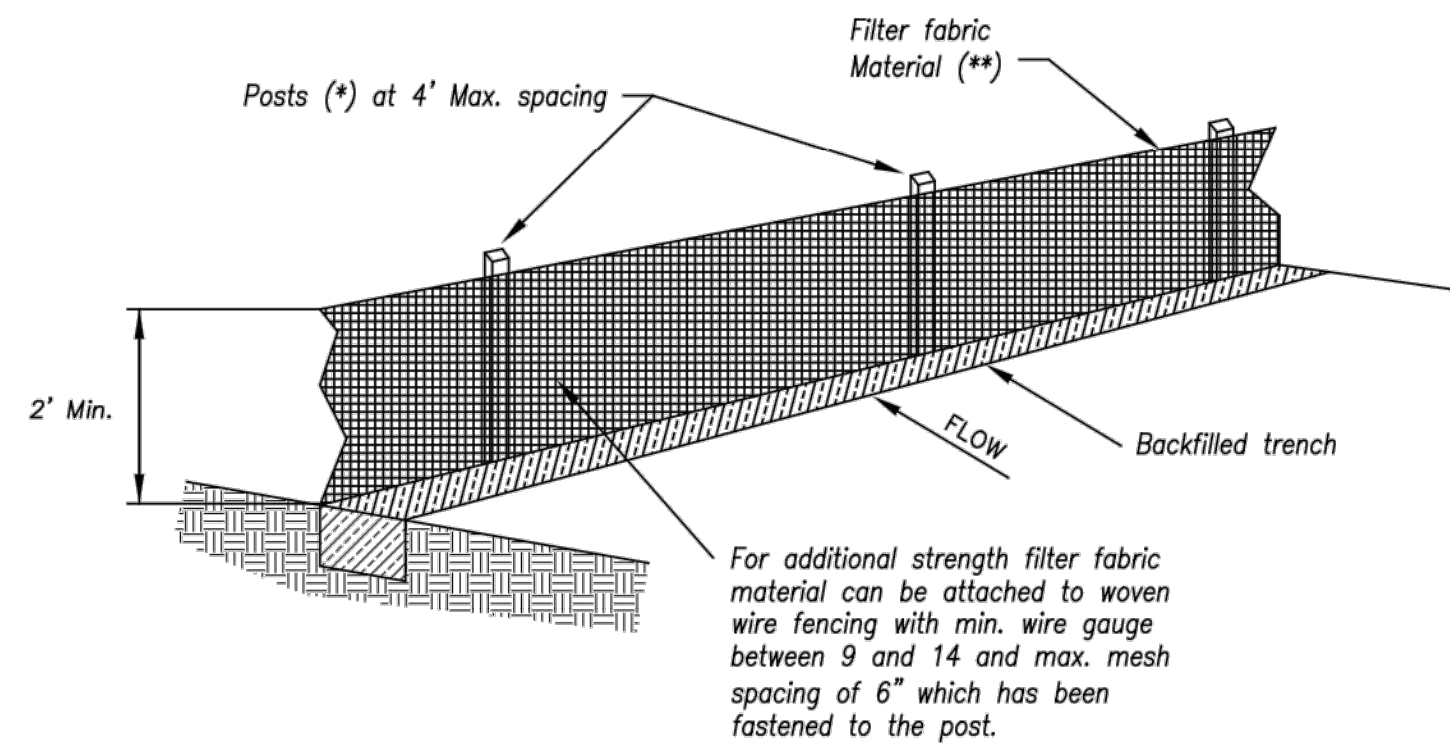
Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

Excavated material Shall
be used for perimeter berm.
Soil for berm Shall be
compacted in the same
manner as trench backfill.

CONCRETE WASHOUT

REFERENCE APPROVED
PUBLIC IMPROVEMENT
PLANS

<h1 style="text-align: center;">AMERICAN PUBLIC WORKS ASSOCIATION</h1> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p><small>Kansas City Metro Chapter</small></p>  <p><small>AMERICAN PUBLIC WORKS ASSOCIATION</small></p> </div> <div style="text-align: center;"> <h2>KANSAS CITY METRO CHAPTER</h2> </div> </div>	
<h2>CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT</h2>	<p>STANDARD DRAWING NUMBER ESC-01</p> <p>ADOPTED: 10/24/2016</p>



- (*) POSTS
- MIN, LENGTH 4'
 - HARDWOOD 1 $\frac{3}{16}$ " x 1 $\frac{3}{16}$ "
 - NO.2 SOUTHERN PINE 2 $\frac{5}{8}$ " x 2 $\frac{5}{8}$ "
 - STEEL 1.33 LB/FT

(**) - Geotextile Fabric shall meet the requirements of AASHTO M288

SILT FENCE DETAILS

Not to Scale

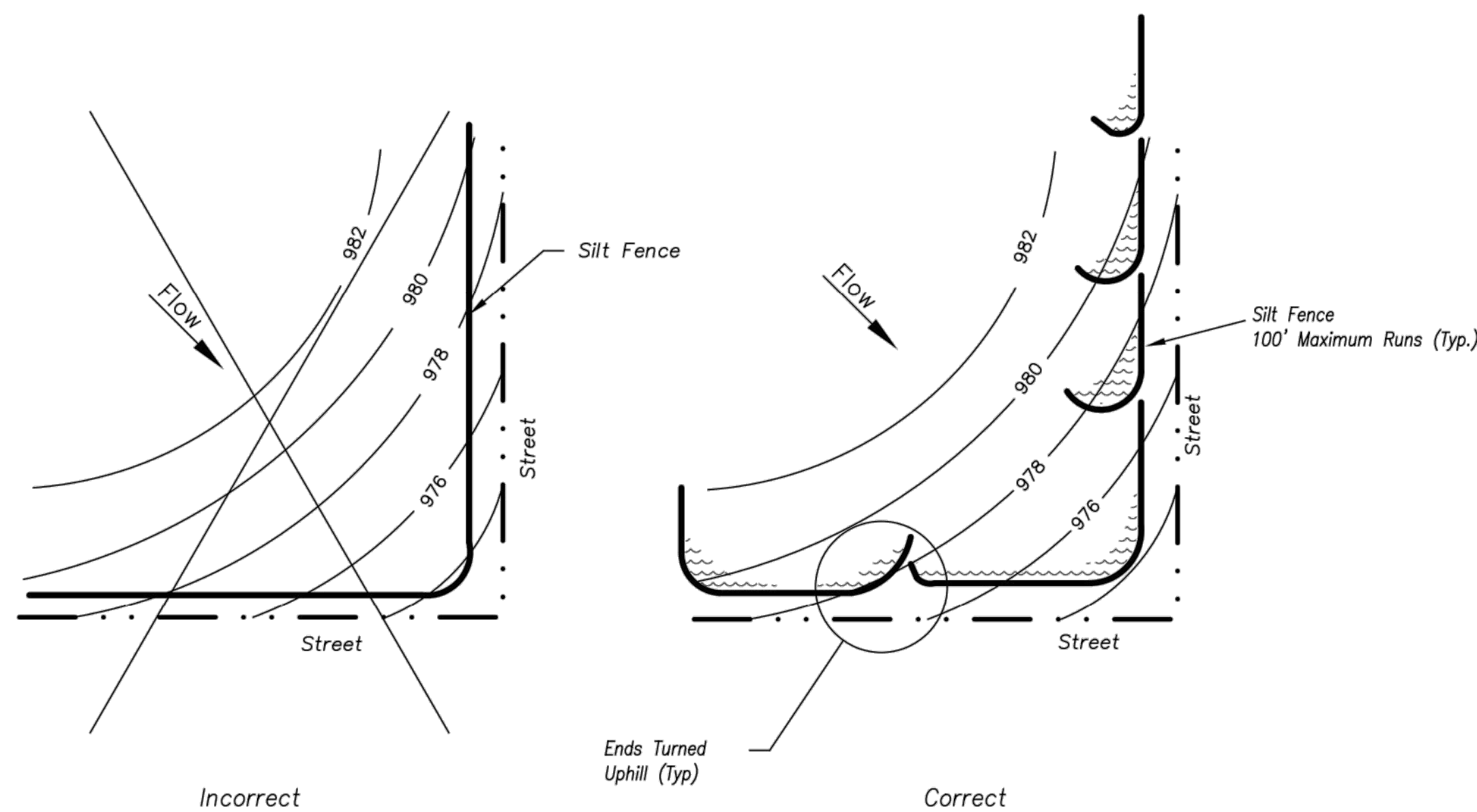
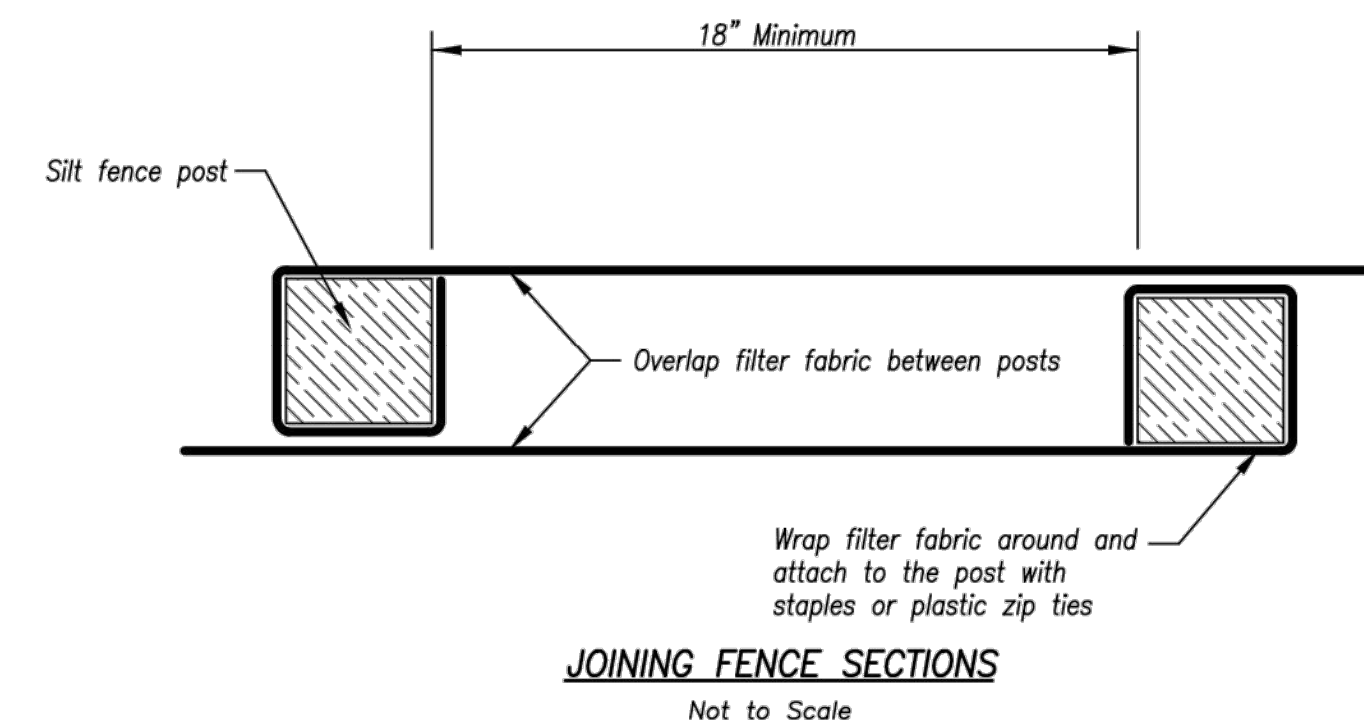
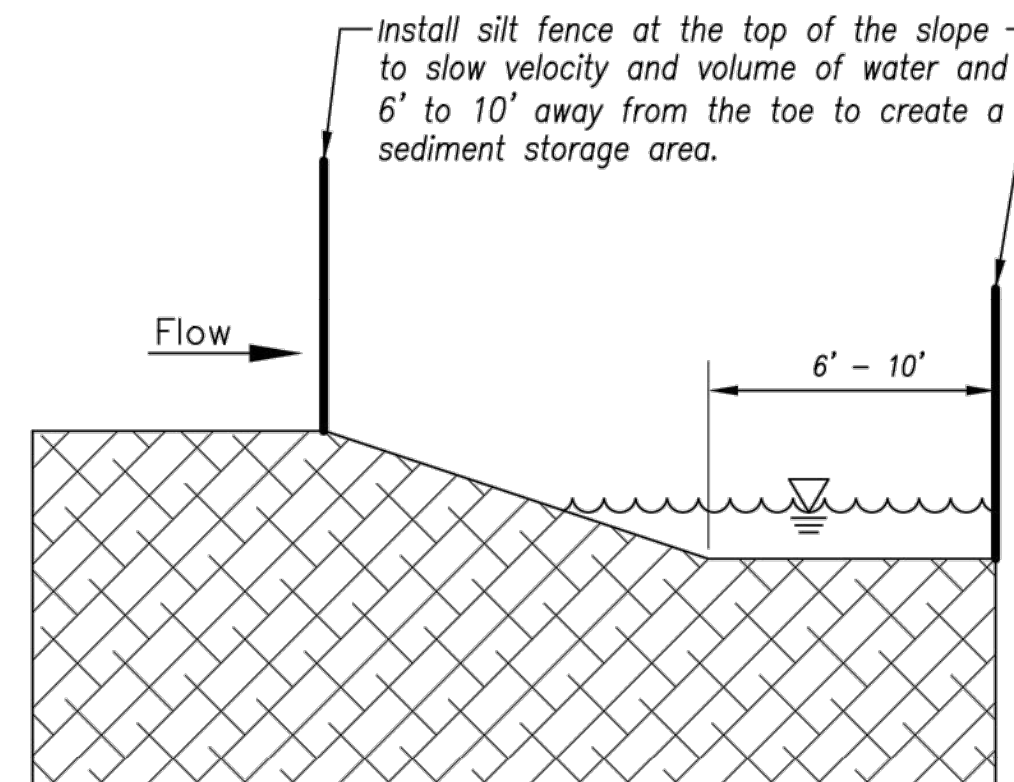


Figure A

SILT FENCE LAYOUT

Not to Scale




- Notes:

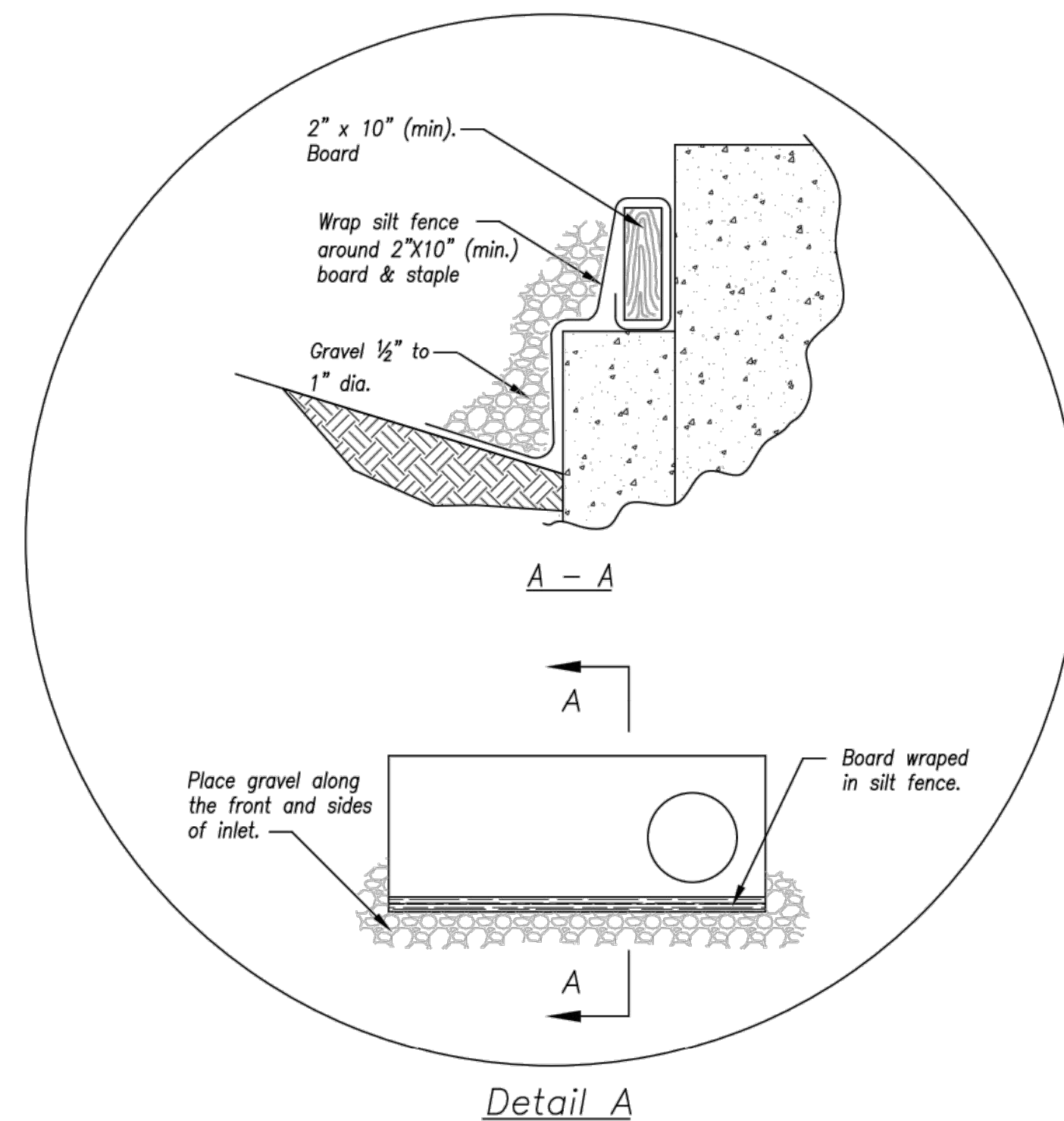
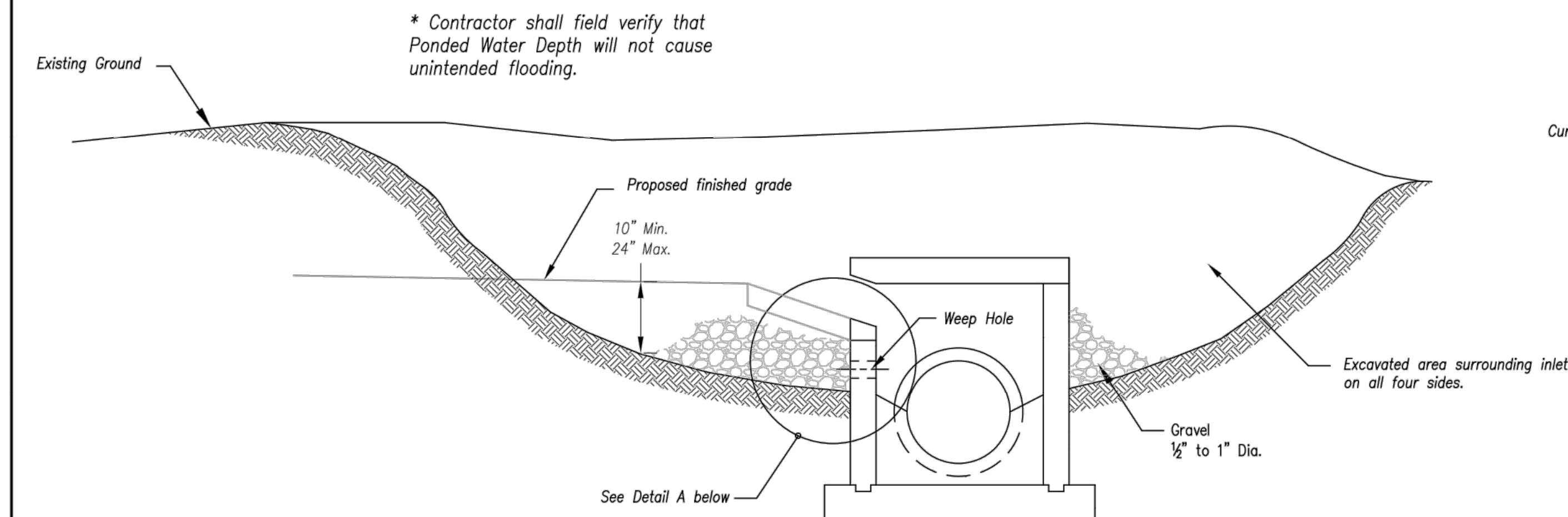
1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches $\frac{1}{3}$ the height of silt fence.
2. Repair as necessary to maintain function and structure.

REFERENCE APPROVED
PUBLIC IMPROVEMENT
PLANS

		KANSAS CITY METRO CHAPTER	
SILT FENCE		STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016	



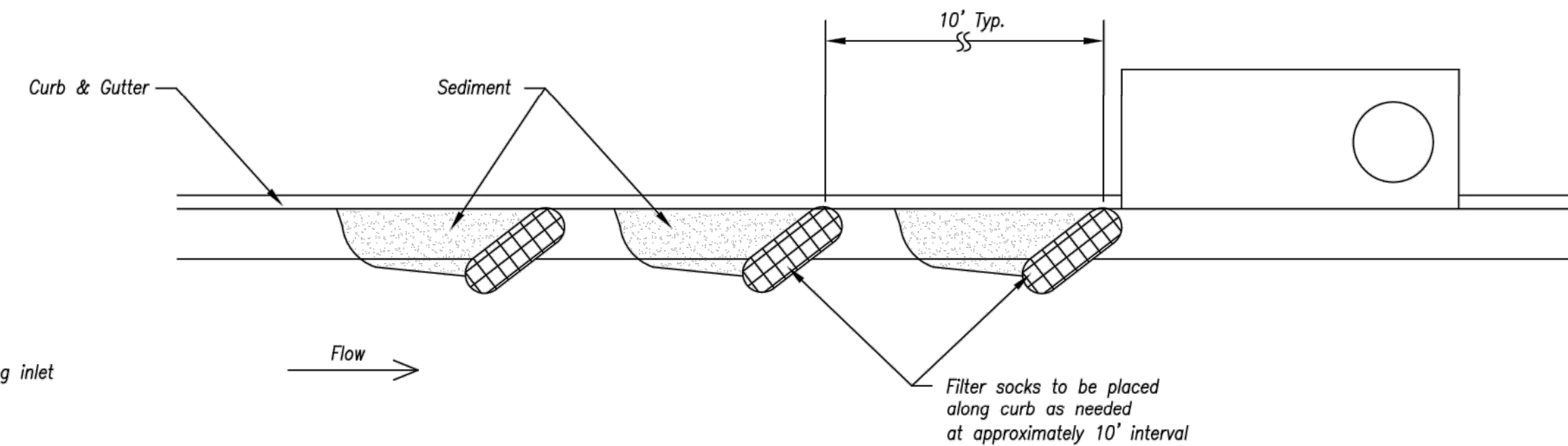
EARLY STAGE CURB INLET
(Open Box and Prior to Pouring
Curb and Inlet Throat)

- Notes:

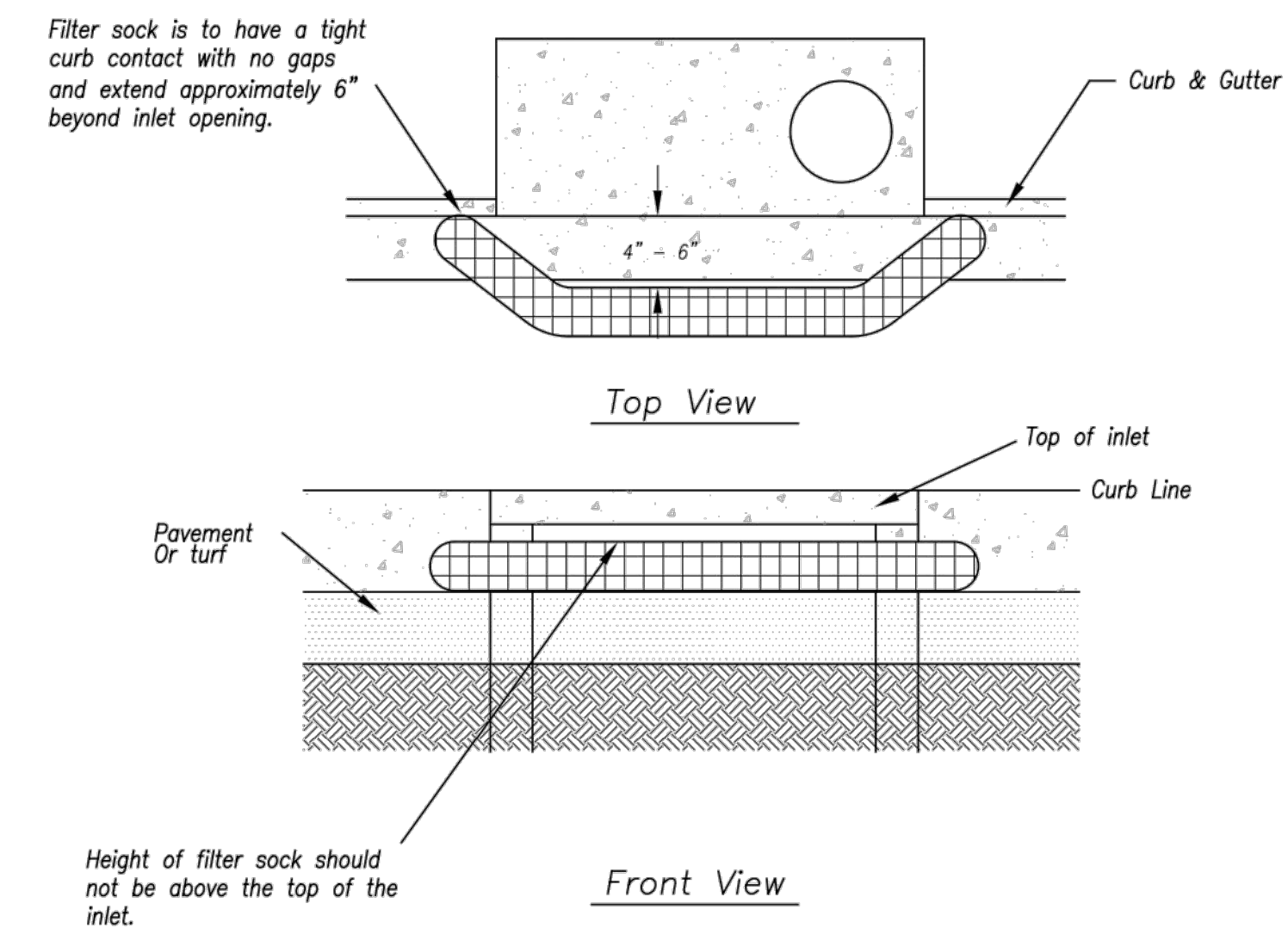
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" X 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
2. When 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.



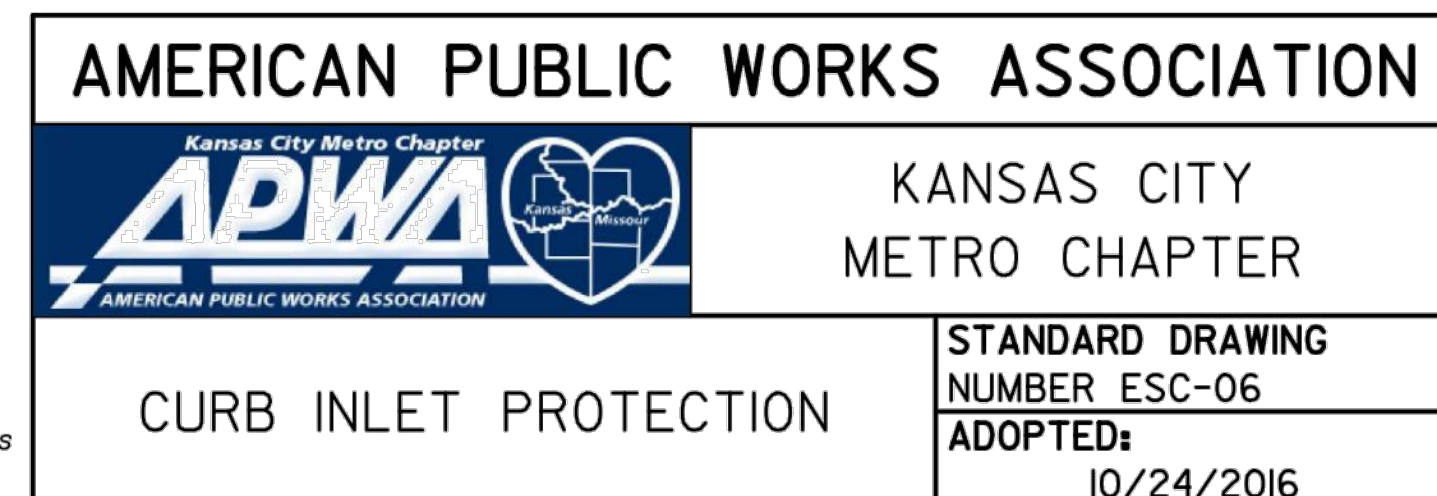
On Grade Curb Inlet Protection



Sump Inlet Sediment Filter

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

REFERENCE APPROVED
PUBLIC IMPROVEMENT
PLANS



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

RYAN B. FLEMING
MO. NO. PE-2002003161

[illegible]

REVISIONS

EROSION CONTROL DETAILS

SCANNELL DEVELOPMENT LEE'S SUMMIT LOGISTICS NORTHWEST CORNER OF TUDOR ROAD AND MAIN STREET LEE'S SUMMIT, MISSOURI	2021
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C.O.A. NO.: _____ -
DRAWN BY: _____ ARJ/AMW
CHECKED BY: _____ XXX
APPROVED BY: _____ RBF
QA/QC BY: _____ RBF
PROJECT NO.: _____ 021-04157
DWG NO.: _____ T_ERCD_02104157
DATE: _____ 2021-10-14



