



SECTION 30, TOWNSHIP 48N, RANGE 31W  
IN LEE'S SUMMIT, JACKSON COUNTY, MO

☐ NOT FOR CONSTRUCTION

☒ REVIEWED FOR CONSTRUCTION



AS PROVIDED BY STEWART TITLE GUARANTY COMPANY:  
TRACT OF LAND IN THE NORTHEAST QUARTER OF SECTION 30 TOWNSHIP 48 NORTH, RANGE 31 WEST OF THE 5TH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI BEING BOUNDED AND DESCRIBED AS FOLLOWS; COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER SECTION; THENCE SOUTH 01 DEGREES 37 MINUTES 50 SECONDS WEST, ON THE WEST LINE OF SAID QUARTER SECTION, 853.75 FEET TO A POINT ON THE SOUTHEAST LOT LINE OF LOT 1, LEE'S SUMMIT ROAD PUMP STATION, A SUBDIVISION RECORDED IN BOOK 1 51 AT PAGE  
90 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE NORTH 50 DEGREES 41 MINUTES 15 SECONDS EAST, ON SAID SOUTHEAST LOT LINE, 59.22 FEET; TO THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE CONTINUING NORTH 50 DEGREES 41 MINUTES 15 SECONDS EAST ALONG SAID LINE, 116.89 FEET; THENCE NORTH 44 DEGREES 49 MINUTES 51 SECONDS EAST, 792.38 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF NW LEE'S SUMMIT ROAD AS ESTABLISHED BY DOCUMENT NUMBER 2015E0017982 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE ON SAID WESTERLY RIGHT-OF-WAY LINE, SOUTH 54 DEGREES 34 MINUTES 12 SECONDS EAST, 95.69 FEET; THENCE SOUTHEASTERLY ALONG A CURVE TO THE RIGHT BEING TANGENT TO THE LAST DESCRIBED COURSE WITH A RADIUS OF 1,142.00 FEET, A CENTRAL ANGLE OF 56 DEGREES 01 MINUTES 43 SECONDS AND AN ARC DISTANCE OF 1,116.74 FEET; THENCE SOUTH 01 DEGREES 27 MINUTES 31 SECONDS WEST, 322.27 FEET; THENCE LEAVING SAID RIGHT-OF-WAY LINE, NORTH 88 DEGREES 32 MINUTES 29 SECONDS WEST, 375.74 FEET; THENCE NORTH 01 DEGREES 27 MINUTES 27 SECONDS EAST, 62.94 FEET; THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, 195.68 FEET; THENCE NORTH 45 DEGREES 00 MINUTES 00 SECONDS WEST, 889.18 FEET TO THE POINT OF BEGINNING, SUBJECT TO THAT PART, IF ANY, IN STREETS, ROADWAYS, HIGHWAYS OR OTHER PUBLIC RIGHT-OF-WAYS.

**BMK 1**  
LOCATED NEAR SE CORNER OF COLBERN RD. & DOUGLAS ST. INTERSECTION.  
N: 1012195.53  
E: 282382.89  
EL: 982.46

**BMK 2**  
LOCATED ON LIGHTPOLE BASE AT NE CORNER OF LEE'S SUMMIT RD. & DOUGLAS ST INTERSECTION.  
N: 1014699.72  
E: 2823025.86  
EL: 932.31

**BMK 5**  
N: 1014159.31  
E: 2822030.75  
EL: 908.88

THE ENTIRE SITE IS LOCATED WITHIN ZONE X, "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM THE 1% ANNUAL CHANCE FLOOD" AS DEPICTED ON THE FEMA FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 29095C0409G, REVISION DATE JANUARY 20, 2017.

SHEET  
C100



File: F:\2019\0001-0500\019-0012-B\40-Design\AutoCAD\Final Plans\Sheets\GNCV\Site Disturbance\C\_GEN01\_ B190012.dwg ~ Layout: GENERAL NOTES ~ Last Saved By: mdlbolit ~ Plot Date: 2019.10.01 03:03 PM

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:

- \_\_\_ PRESERVATION OF EXISTING VEGETATION
- ☒ \_X\_ SEDIMENT BARRIERS
- ☒ \_X\_ SEDIMENT TRAPS
- ☒ \_X\_ INLET PROTECTION
- \_\_\_ 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 DRAWNGS.

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.

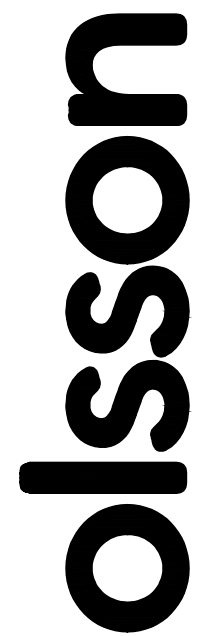
7. THE DEVELOPER MUST REMOVE AT HIS COST ANY BAD SUBSURFACE SOIL WHICH WOULD NOT BE ABLE TO SUPPORT ANY PROPOSED PUBLIC IMPROVEMENT. BACKFILL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL SECTIONS 2100 AND 2201 ENTITLED "GRADING AND SITE PREPARATION"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

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

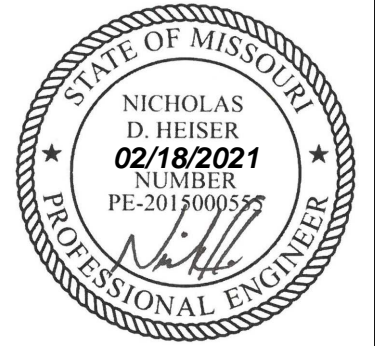
9. TREE CLEARING TO HAPPEN BETWEEN NOVEMBER 1 AND MARCH 31. TREES CLEARED BETWEEN APRIL 1 AND OCTOBER 31 MUST BE TREES GREATER THAN 1,000 FEET FROM FORESTED OR WOODED AREAS OR TREES LESS THAN 3 INCHES IN DIAMETER, AT BREAST HEIGHT, AND NOT MIXED WITH LARGER TREES. IF LARGER TREES NEED TO BE CLEARED, 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				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
PRIVATE GRADING				
1	EXCAVATION	C.Y.	119,922	
2	EMBANKMENT	C.Y.	77,247	
PUBLIC GRADING				
3	EXCAVATION	C.Y.	853	
4	EMBANKMENT	C.Y.	4,803	
SITE DISTURBANCE				
5	INLET PROTECTION	EA.	90	
6	SILT FENCE	L.F.	2,463	
7	DIVERSION BERM	L.F.	2,991	
8	VEHICLE TRACKING CONTROL	EA.	2	
9	CONCRETE WASHOUT	EA.	2	
10	ROCK DITCH CHECK	EA.	74	
11	SEDIMENT TRAP	EA.	7	
12	SOIL STABILIZATION BLANKET	S.Y.	10,010	
13	SEED & MULCH	AC.	12.79	
14	DISTURBED AREA	AC.	24.55	
15	TREE CLEARING	AC.	1.60	

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.



OLSSON - CIVIL ENGINEERING  
NO. CERTIFICATE OF AUTHORITY #001562  
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NICHOLAS D. HEISER, P.E.  
MO# 2015000555

GENERAL NOTES SITE GRADING & SITE DISTURBANCE PLANS	NO. REV.	DATE	REVISIONS DESCRIPTION	BY
ARIA APARTMENTS PHASE 1				
LEE'S SUMMIT, MO				2020

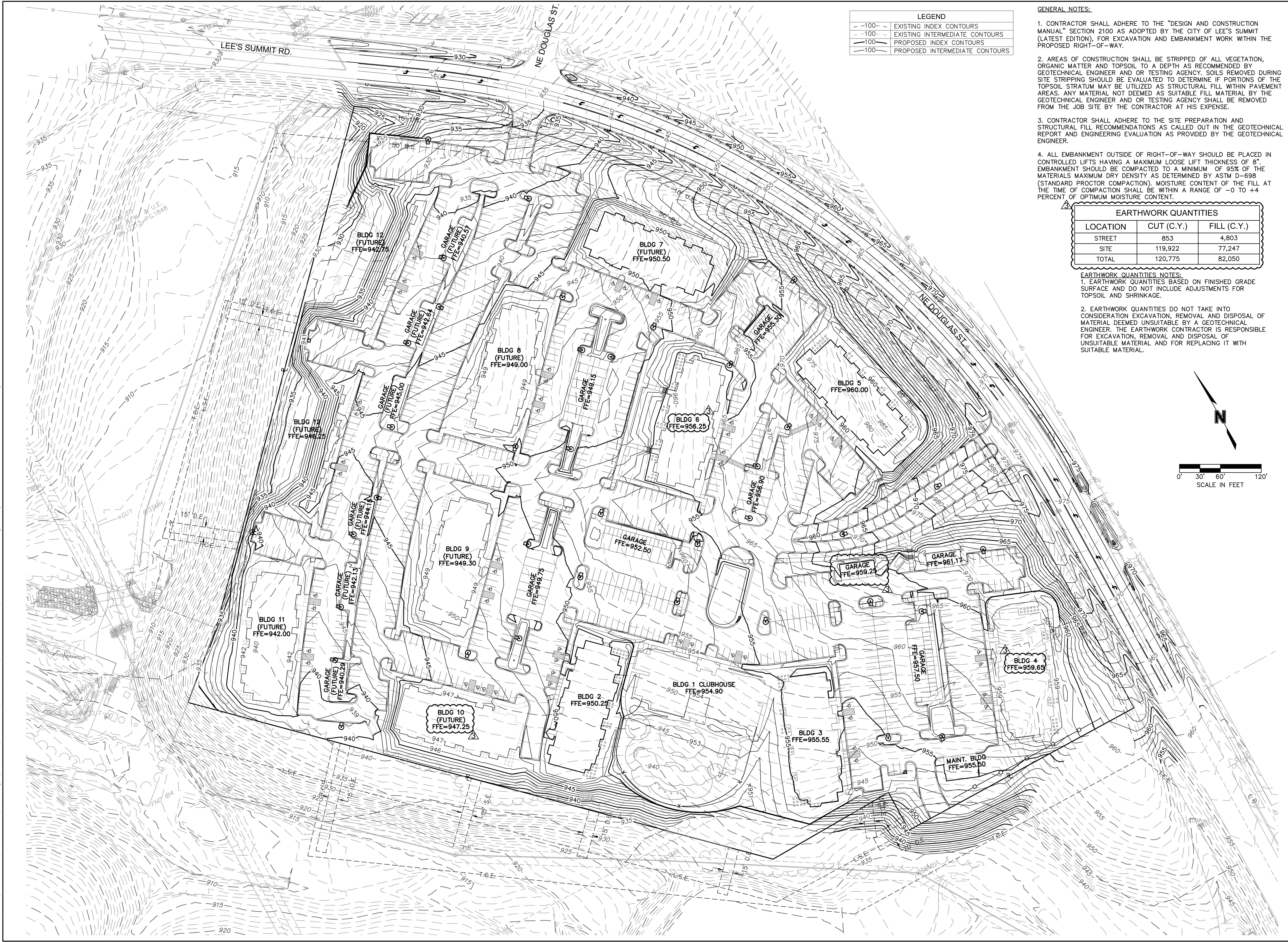
drawn by: \_\_\_\_\_ M.J.D.  
checked by: \_\_\_\_\_ N.D.H.  
designed by: \_\_\_\_\_ M.J.D.  
QA/QC by: \_\_\_\_\_ N.D.H.  
project no.: 019-0012-B  
date: 2020.06.12

SHEET  
C101



<p>GENERAL LAYOUT SITE GRADING &amp; SITE DISTURBANCE PLANS</p>	<p>ARIA APARTMENTS PHASE 1</p>	<p>LEE'S SUMMIT, MO</p>	<p>2020</p>
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LEGEND	
-100-	EXISTING INDEX CONTOURS
100	EXISTING INTERMEDIATE CONTOURS
-100-	PROPOSED INDEX CONTOURS
100	PROPOSED INTERMEDIATE CONTOURS

GENERAL NOTES:

1. 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.
2. 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.
3. CONTRACTOR SHALL ADHERE TO THE SITE PREPARATION AND STRUCTURAL FILL RECOMMENDATIONS AS CALLED OUT IN THE GEOTECHNICAL REPORT AND ENGINEERING EVALUATION AS PROVIDED BY THE GEOTECHNICAL ENGINEER.
4. 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.

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	853	4,803
SITE	119,922	77,247
TOTAL	120,775	82,050

- 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.

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STATE OF MISSOURI  
NICHOLAS D. HEISER  
02/18/2021  
NUMBER  
PE-2015000555  
PROFESSIONAL ENGINEER

NICHOLAS D. HEISER, P.E.  
MO# 2015000555

BY

REVISIONS DESCRIPTION

NO. REV. DATE

1 2020.07.22 REVISIONS PER CITY COMMENTS

2 2020.08.27 REVISED GRADING PER CITY COMMENTS

3 2020.02.24 REVISED GRADING AND EROSION CONTROL

2020

GRADING PLAN  
SITE GRADING & SITE DISTURBANCE PLANS





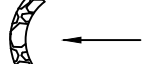
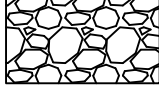



ARIA APARTMENTS  
PHASE 1


LEE'S SUMMIT, MO

drawn by: M.J.D.  
checked by: N.D.H.  
designed by: M.J.D.  
QA/QC by: N.D.H.  
project no.: 019-0012-B  
date: 2020.06.12

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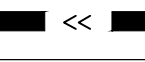
PROPOSED		LEGEND
		SILT FENCE
		STORM DRAIN INLET PROTECTION
		TEMPORARY DIVERSION BERM
		CONCRETE WASHOUT
		ROCK DITCH CHECK
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		SEED/SOD/LANDSCAPE
		SOIL STABILIZATION BLANKETS & MATTING
		SEDIMENT TRAP DRAINAGE BOUNDARY

drawn by: _____ M.J.D. checked by: _____ N.D.H. designed by: _____ M.J.D. QA/QC by: _____ N.D.H. project no.: _____ 018-0012-B date: _____ 2020.06.12		erosion control plan - phase 1 site grading & site disturbance plans		NO. REV.		DATE		REVISIONS DESCRIPTION		BY	
		ARIA APARTMENTS PHASE 1		1		2020.07.22		REVISIONS PER CITY COMMENTS			
2				2020.08.27		REVISED GRADING PER CITY COMMENTS					
3				2020.09.27		REVISED GRADING AND EROSION CONTROL					
4				2020.10.24		REVISED GRADING AND EROSION CONTROL					
LEE'S SUMMIT, MO		2020									
REVISIONS											
											
OLSSON - CIVIL ENGINEERING 1111 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 TEL: 816.381.1177 www.olsson.com											
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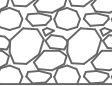

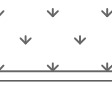
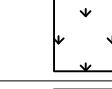






A north arrow pointing upwards with the letter 'N' in the center. Below it is a scale bar marked from 0' to 40' in feet, with major ticks every 10' and minor ticks every 2'.

LEGEND	
<b>PROPOSED</b>	
 SF 	SILT FENCE
 << 	TEMPORARY DIVERSION BERM
	SEDIMENT TRAP ROCK SPILLWAY



LEGEND		
EXISTING	PROPOSED	
 SF	 SF	SILT FENCE
 	 	STORM DRAIN INLET PROTECTION
 <<	 <<	TEMPORARY DIVERSION BERM
		CONCRETE WASHOUT
 	 	ROCK DITCH CHECK
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		SEED/SOD/LANDSCAPE
		SOIL STABILIZATION BLANKETS & MATTING

NOTE:  
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.

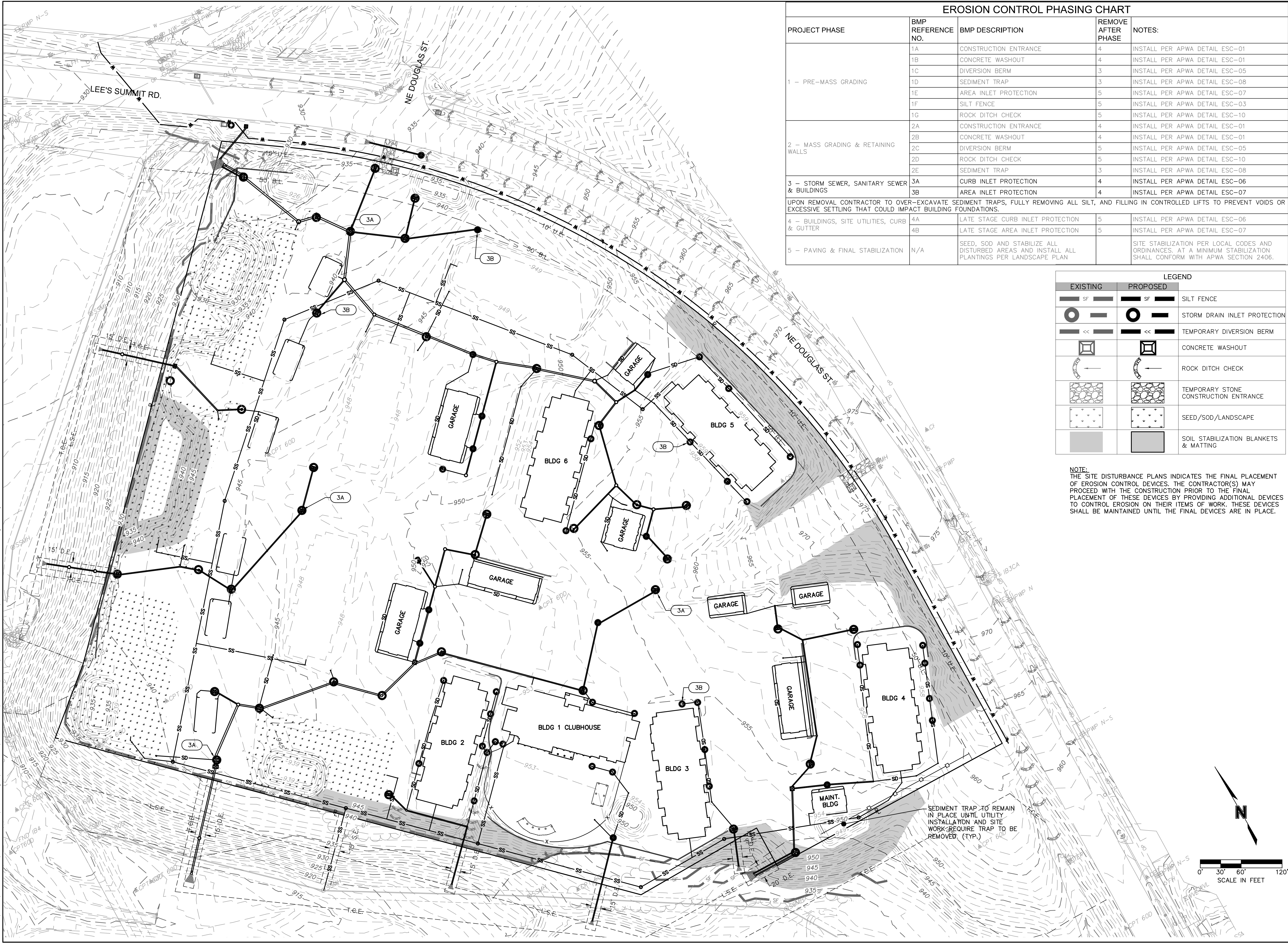
<div style="display: flex; justify-content: space-between;"> <div> <p>drawn by: _____ M.J.D.</p> <p>checked by: _____ N.D.H.</p> <p>designed by: _____ M.J.D.</p> <p>QA/QC by: _____ N.D.H.</p> <p>project no.: _____ 019-00012-B</p> <p>date: _____ 2020.06.12</p> </div> <div style="text-align: right;"> <p>www.olsson.com</p> </div> </div>		<div style="display: flex; justify-content: space-between;"> <div> <p>EROSION CONTROL PLAN - PHASE 2</p> <p>SITE GRADING &amp; SITE DISTURBANCE PLANS</p> </div> <div> <p>ARIA APARTMENTS</p> <p>PHASE 1</p> </div> <div> <p>2020</p> </div> </div>	
<p>LEE'S SUMMIT, MO</p>		<p>2020</p>	
<p>NO. REV.</p>		<p>DATE</p>	
<p>1</p>		<p>2020.07.22</p>	
<p>2</p>		<p>2020.08.27</p>	
<p>3</p>		<p>2020.10.24</p>	
<p>REVISIONS PER CITY COMMENTS</p>		<p>REVISIONS DESCRIPTION</p>	
<p>REVISED GRADING PER CITY COMMENTS</p>		<p>REVISIONS</p>	
<p>REVISED GRADING AND EROSION CONTROL</p>		<p>REVISIONS</p>	
<p>PE-2019-00055</p>		<p>PE-2019-00055</p>	
<p>02/18/2021</p>		<p>02/18/2021</p>	
<p>NICHOLAS D. HEISER</p>		<p>NICHOLAS D. HEISER</p>	
<p>PROFESSIONAL ENGINEER</p>		<p>PROFESSIONAL ENGINEER</p>	
<p>STATE OF MISSOURI</p>		<p>STATE OF MISSOURI</p>	
<p>OLSSON - CIVIL ENGINEERING</p>		<p>OLSSON - CIVIL ENGINEERING</p>	
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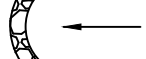
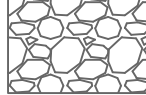
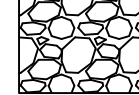
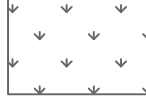
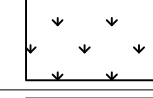




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EROSION CONTROL PHASING CHART

PROJECT PHASE	BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
1 - PRE-MASS GRADING	1A	CONSTRUCTION ENTRANCE	4	INSTALL PER APWA DETAIL ESC-01
	1B	CONCRETE WASHOUT	4	INSTALL PER APWA DETAIL ESC-01
	1C	DIVERSION BERM	3	INSTALL PER APWA DETAIL ESC-05
	1D	SEDIMENT TRAP	3	INSTALL PER APWA DETAIL ESC-08
	1E	AREA INLET PROTECTION	5	INSTALL PER APWA DETAIL ESC-07
	1F	SILT FENCE	5	INSTALL PER APWA DETAIL ESC-03
	1G	ROCK DITCH CHECK	5	INSTALL PER APWA DETAIL ESC-10
2 - MASS GRADING & RETAINING WALLS	2A	CONSTRUCTION ENTRANCE	4	INSTALL PER APWA DETAIL ESC-01
	2B	CONCRETE WASHOUT	4	INSTALL PER APWA DETAIL ESC-01
	2C	DIVERSION BERM	5	INSTALL PER APWA DETAIL ESC-05
	2D	ROCK DITCH CHECK	5	INSTALL PER APWA DETAIL ESC-10
	2E	SEDIMENT TRAP	3	INSTALL PER APWA DETAIL ESC-08
3 - STORM SEWER, SANITARY SEWER & BUILDINGS	3A	CURB INLET PROTECTION	4	INSTALL PER APWA DETAIL ESC-06
	3B	AREA INLET PROTECTION	4	INSTALL PER APWA DETAIL ESC-07
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.				
4 - BUILDINGS, SITE UTILITIES, CURB & GUTTER	4A	LATE STAGE CURB INLET PROTECTION	5	INSTALL PER APWA DETAIL ESC-06
	4B	LATE STAGE AREA INLET PROTECTION	5	INSTALL PER APWA DETAIL ESC-07
5 - PAVING & FINAL STABILIZATION	N/A	SEED, SOD AND STABILIZE ALL DISTURBED AREAS AND INSTALL ALL PLANTINGS PER LANDSCAPE PLAN		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2406.

LEGEND		
EXISTING	PROPOSED	
		SILT FENCE
		STORM DRAIN INLET PROTECTION
		TEMPORARY DIVERSION BERM
		CONCRETE WASHOUT
		ROCK DITCH CHECK
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		SEED/SOD/LANDSCAPE
		SOIL STABILIZATION BLANKETS & MATTING

NOTE:  
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 plan - phase 3  
site grading & site disturbance plans

aria apartments  
phase 1

lee's summit, mo

NO. REV.

DATE

REVISIONS DESCRIPTION

1 2020.07.22 REVISIONS PER CITY COMMENTS

2 2020.08.27 REVISED GRADING PER CITY COMMENTS

3 2020.10.24 REVISED GRADING AND EROSION CONTROL

drawn by: M.J.D.

checked by: M.J.D.

designed by: M.J.D.

QA/QC by: M.J.D.

project no.: 019-0012-B

date: 2020.06.12

SHEET  
C108

olsson

NICHOLAS D. HEISER, P.E.  
MO# 2015000555











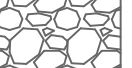


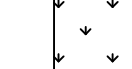


STATE OF MISSOURI  
NICHOLAS D. HEISER  
02/18/2021  
NUMBER  
PE-2015000555  
PROFESSIONAL ENGINEER

REVISIONS

2020

OLSSON - CIVIL ENGINEERING  
NO. CERTIFICATE OF AUTHORITY #001582  
NORTH KANSAS CITY, MO 64116  
TEL 816.361.1177  
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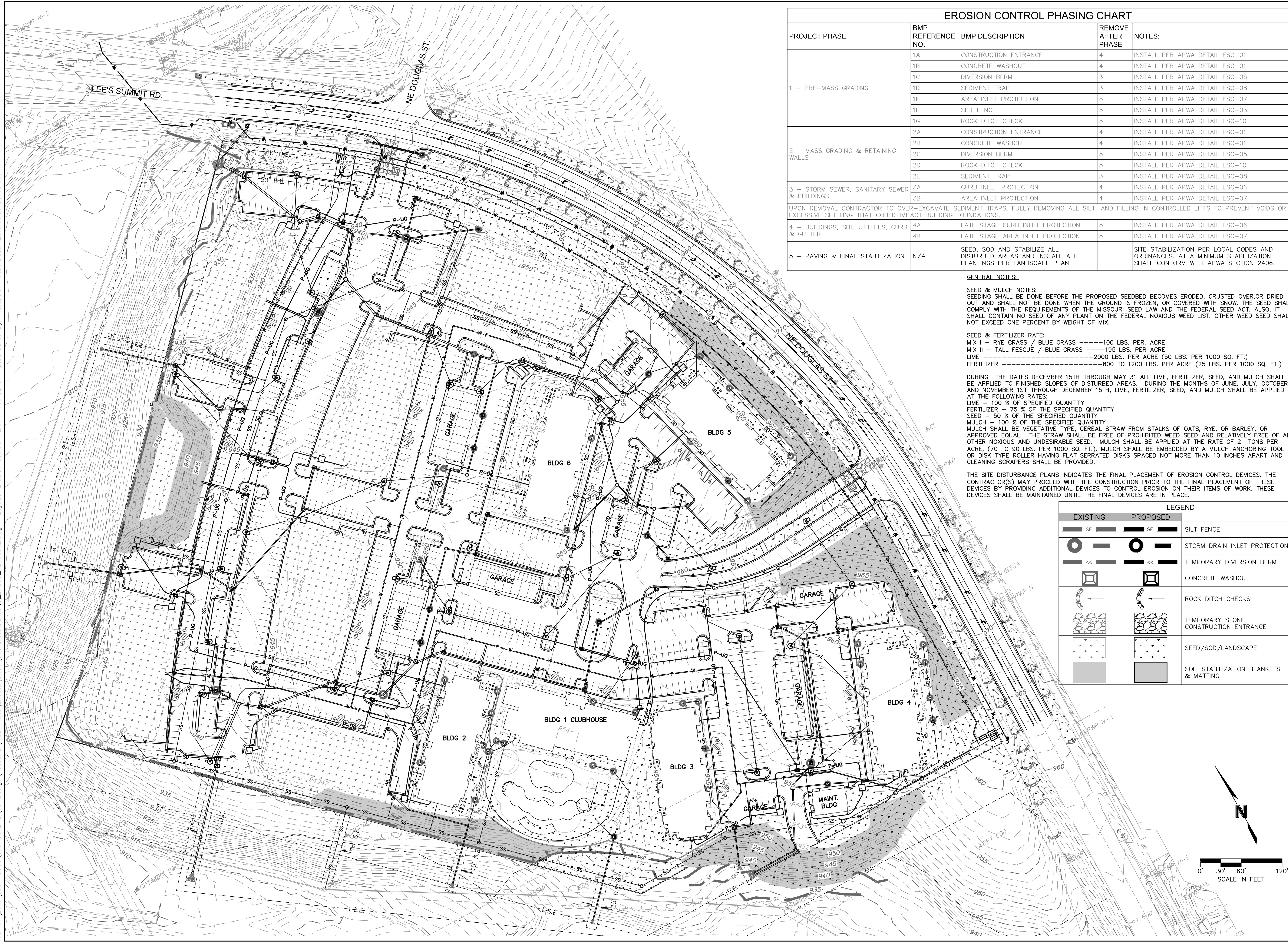
LEGEND		
EXISTING	PROPOSED	
 SF	 SF	SILT FENCE
		STORM DRAIN INLET PROTECTION
 <<	 <<	TEMPORARY DIVERSION BERM
		CONCRETE WASHOUT
		ROCK DITCH CHECK
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		SEED/SOD/LANDSCAPE
		SOIL STABILIZATION BLANKETS & MATTING

**NOTE:**  
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.

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EROSION CONTROL PHASING CHART

PROJECT PHASE	BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
1 - PRE-MASS GRADING	1A	CONSTRUCTION ENTRANCE	4	INSTALL PER APWA DETAIL ESC-01
	1B	CONCRETE WASHOUT	4	INSTALL PER APWA DETAIL ESC-01
	1C	DIVERSION BERM	3	INSTALL PER APWA DETAIL ESC-05
	1D	SEDIMENT TRAP	3	INSTALL PER APWA DETAIL ESC-08
	1E	AREA INLET PROTECTION	5	INSTALL PER APWA DETAIL ESC-07
	1F	SILT FENCE	5	INSTALL PER APWA DETAIL ESC-03
	1G	ROCK DITCH CHECK	5	INSTALL PER APWA DETAIL ESC-10
2 - MASS GRADING & RETAINING WALLS	2A	CONSTRUCTION ENTRANCE	4	INSTALL PER APWA DETAIL ESC-01
	2B	CONCRETE WASHOUT	4	INSTALL PER APWA DETAIL ESC-01
	2C	DIVERSION BERM	5	INSTALL PER APWA DETAIL ESC-05
	2D	ROCK DITCH CHECK	5	INSTALL PER APWA DETAIL ESC-10
	2E	SEDIMENT TRAP	3	INSTALL PER APWA DETAIL ESC-08
3 - STORM SEWER, SANITARY SEWER & BUILDINGS	3A	CURB INLET PROTECTION	4	INSTALL PER APWA DETAIL ESC-06
	3B	AREA INLET PROTECTION	4	INSTALL PER APWA DETAIL ESC-07
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.				
4 - BUILDINGS, SITE UTILITIES, CURB & GUTTER	4A	LATE STAGE CURB INLET PROTECTION	5	INSTALL PER APWA DETAIL ESC-06
	4B	LATE STAGE AREA INLET PROTECTION	5	INSTALL PER APWA DETAIL ESC-07
5 - PAVING & FINAL STABILIZATION	N/A	SEED, SOD AND STABILIZE ALL DISTURBED AREAS AND INSTALL ALL PLANTINGS PER LANDSCAPE PLAN		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2406.

GENERAL NOTES:

SEED & MULCH NOTES:  
SEEDING SHALL BE DONE BEFORE THE PROPOSED SEEDBED BECOMES ERODED, CRUSTED OVER, OR DRIED OUT AND SHALL NOT BE DONE WHEN THE GROUND IS FROZEN, OR COVERED WITH SNOW. THE SEED SHALL COMPLY WITH THE REQUIREMENTS OF THE MISSOURI SEED LAW AND THE FEDERAL SEED ACT. ALSO, IT SHALL CONTAIN NO SEED OF ANY PLANT ON THE FEDERAL NOXIOUS WEED LIST. OTHER WEED SEED SHALL NOT EXCEED ONE PERCENT BY WEIGHT OF MIX.

SEED & FERTILIZER RATE:  
MIX I - RYE GRASS / BLUE GRASS -----100 LBS. PER ACRE  
MIX II - TALL FESCUE / BLUE GRASS -----195 LBS. PER ACRE  
LIME -----2000 LBS. PER ACRE (50 LBS. PER 1000 SQ. FT.)  
FERTILIZER -----800 TO 1200 LBS. PER ACRE (25 LBS. PER 1000 SQ. FT.)

DURING THE DATES DECEMBER 15TH THROUGH MAY 31 ALL LIME, FERTILIZER, SEED, AND MULCH SHALL BE APPLIED TO FINISHED SLOPES OF DISTURBED AREAS. DURING THE MONTHS OF JUNE, JULY, OCTOBER, AND NOVEMBER 1ST THROUGH DECEMBER 15TH, LIME, FERTILIZER, SEED, AND MULCH SHALL BE APPLIED AT THE FOLLOWING RATES:  
LIME - 100 % OF SPECIFIED QUANTITY  
FERTILIZER - 75 % OF THE SPECIFIED QUANTITY  
SEED - 50 % OF THE SPECIFIED QUANTITY  
MULCH - 100 % OF THE SPECIFIED QUANTITY  
MULCH SHALL BE VEGETATIVE TYPE, CEREAL STRAW FROM STALKS OF OATS, RYE, OR BARLEY, OR APPROVED EQUAL. THE STRAW SHALL BE FREE OF PROHIBITED WEED SEED AND RELATIVELY FREE OF ALL OTHER NOXIOUS AND UNDESIRABLE SEED. MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE (70 TO 90 LBS. PER 1000 SQ. FT.). MULCH SHALL BE EMBEDDED BY A MULCH ANCHORING TOOL OR DISK TYPE ROLLER HAVING FLAT SERRATED DISKS SPACED NOT MORE THAN 10 INCHES APART AND CLEANING SCRAPERS SHALL BE PROVIDED.

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.

LEGEND	
EXISTING	PROPOSED

NICHOLAS D. HEISER  
D. HEISER  
02/18/2021  
N. 101813  
PE-2015000555

NICHOLAS D. HEISER, P.E.  
MO# 2015000555

NO.	REV.	DATE	REVISIONS DESCRIPTION
1		2020.07.22	REVISIONS PER CITY COMMENTS
2		2020.08.27	REVISED GRADING PER CITY COMMENTS
3		2020.02.24	REVISED GRADING AND EROSION CONTROL

EROSION CONTROL PLAN - PHASE 5  
SITE GRADING & SITE DISTURBANCE PLANS

ARIA APARTMENTS  
PHASE 1

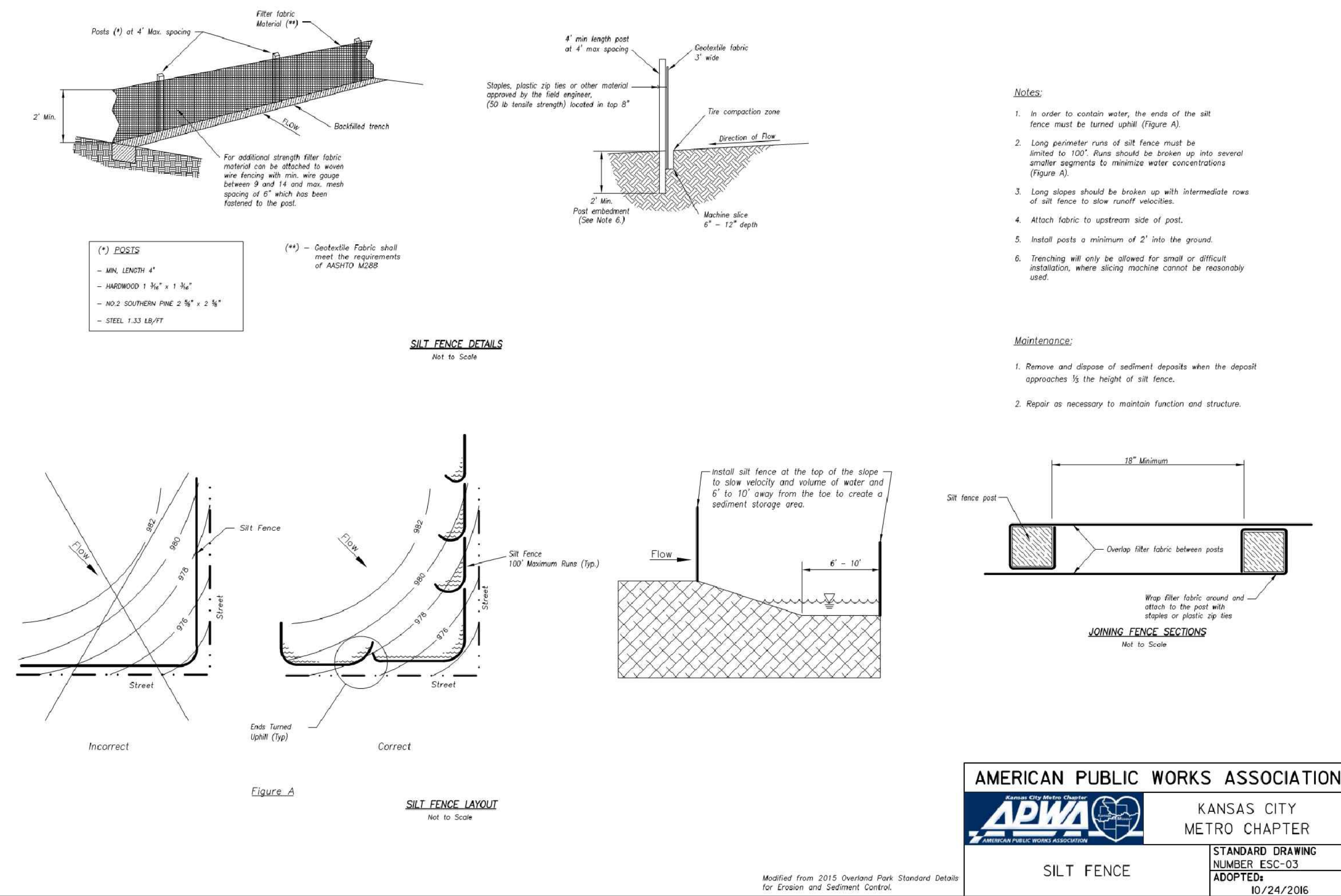
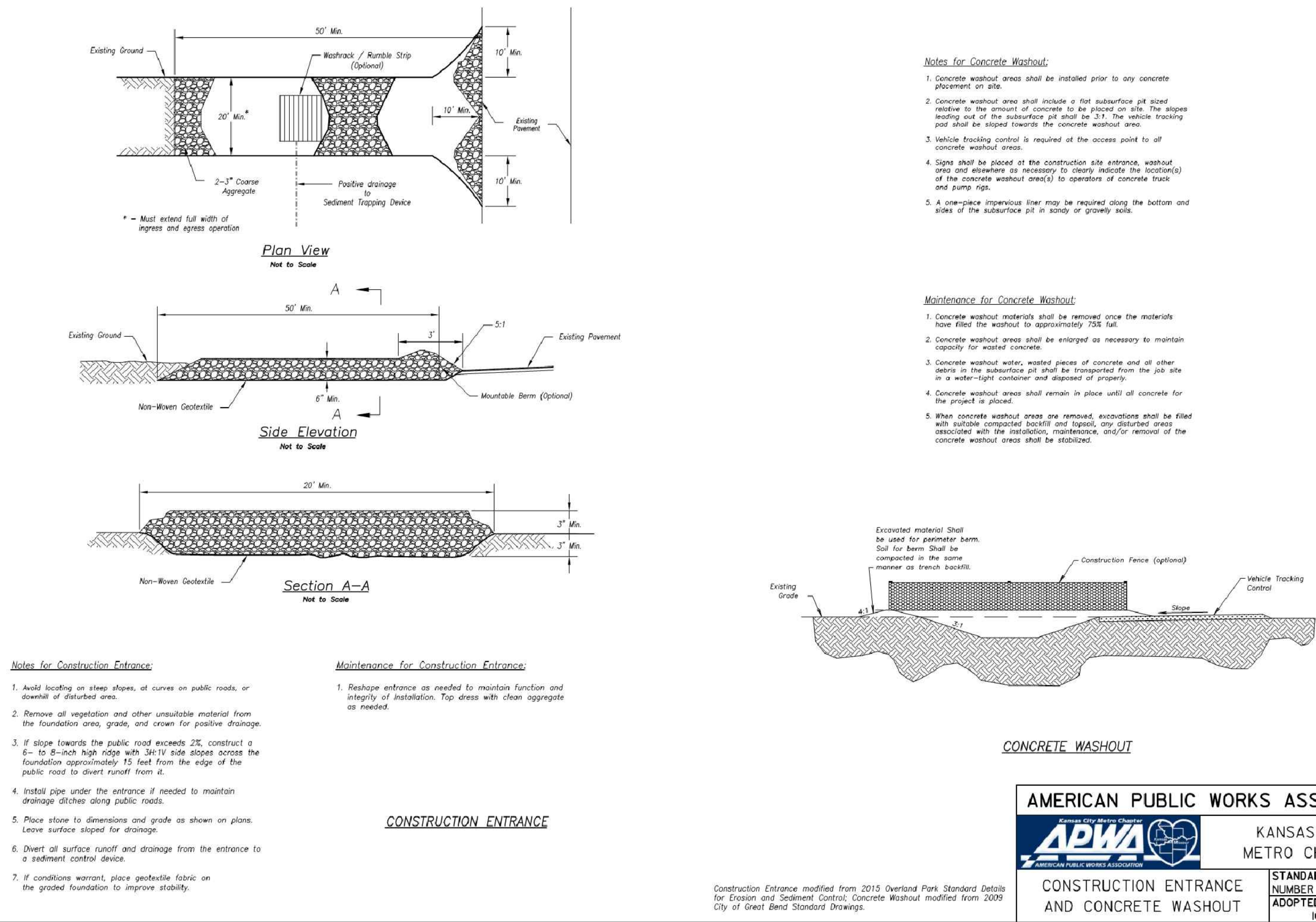
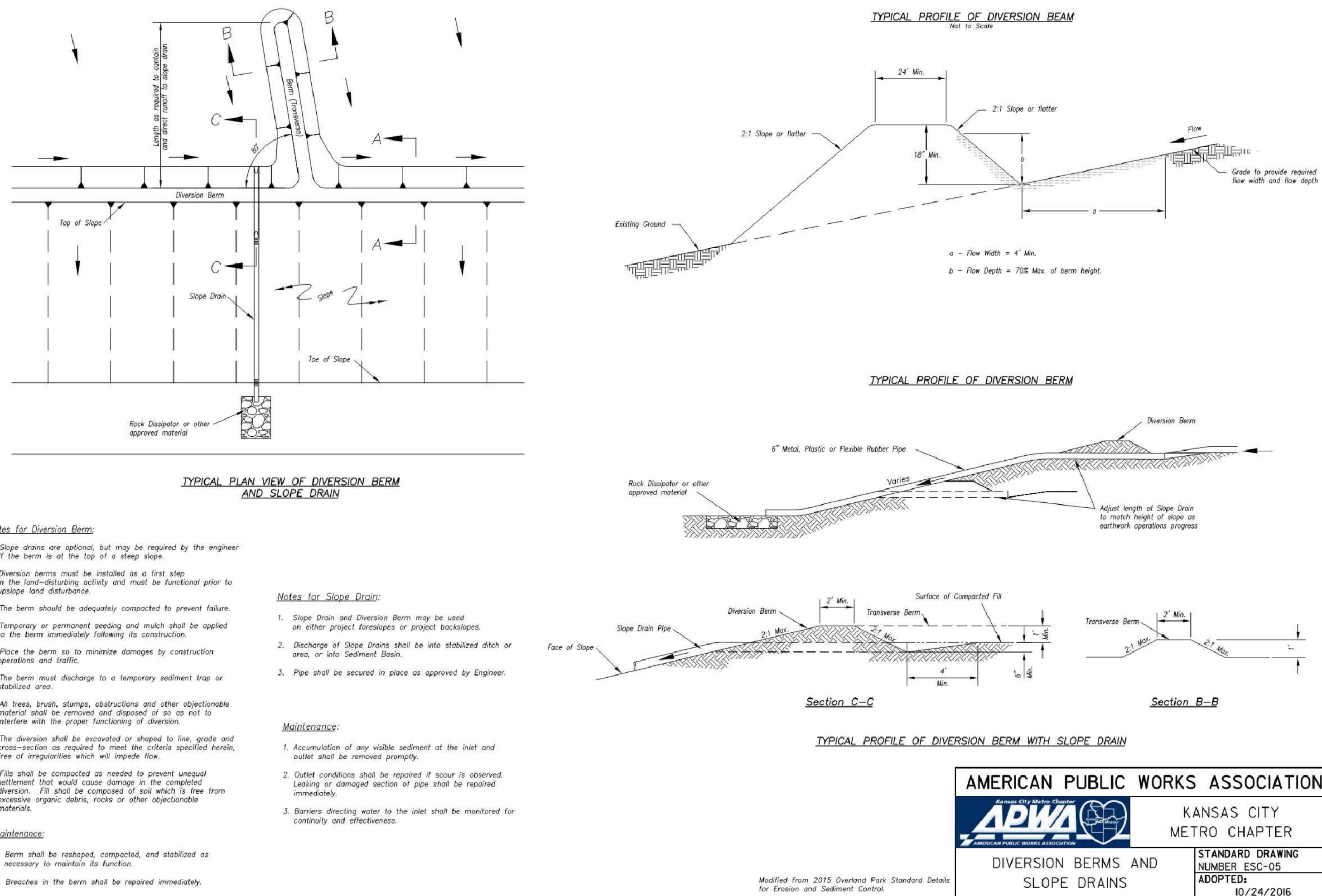
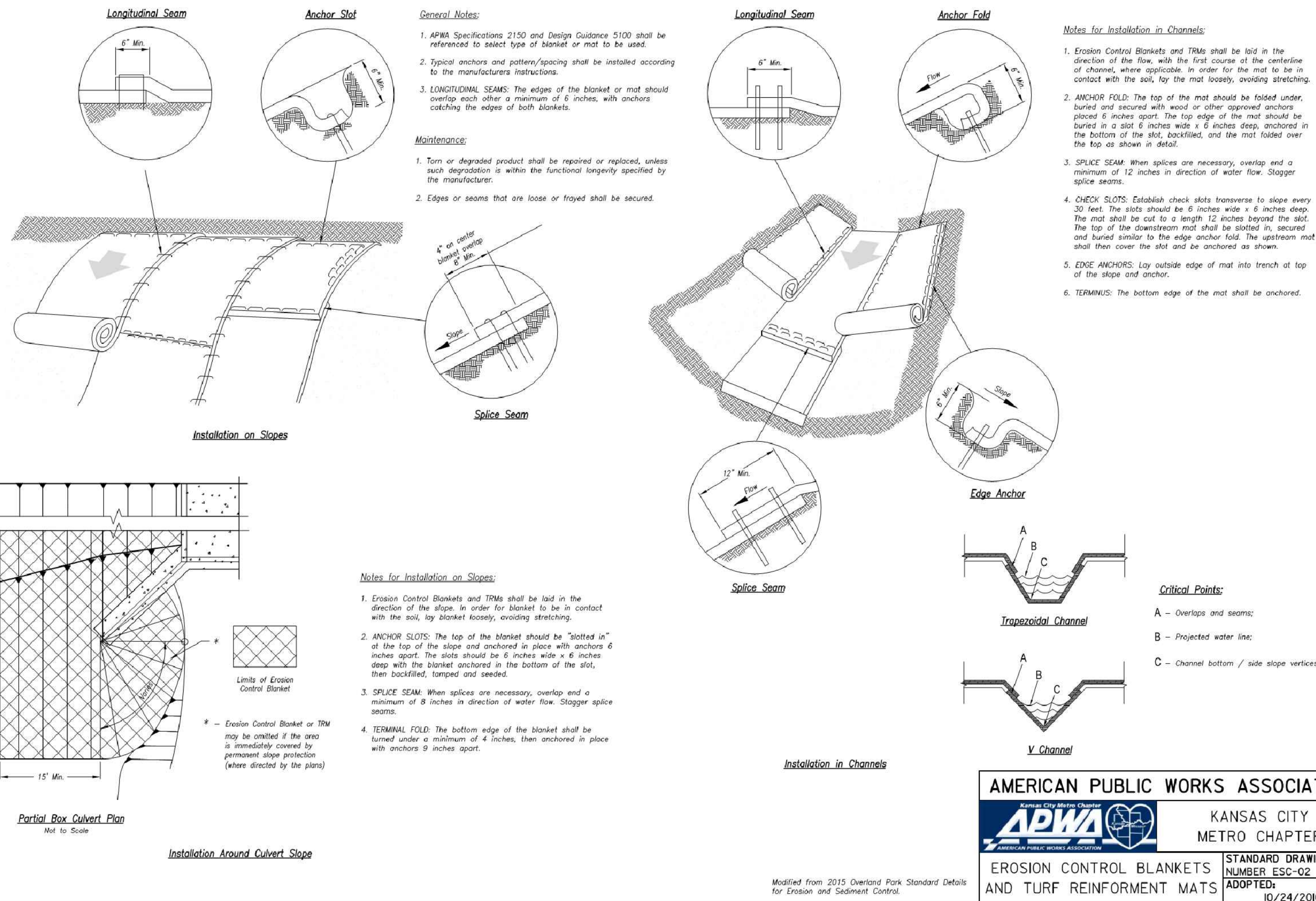
LEE'S SUMMIT, MO

2020

drawn by: M.J.D.  
checked by: N.D.H.  
designed by: M.J.D.  
QA/QC by: N.D.H.  
project no.: 019-0012-B  
date: 2020.06.12

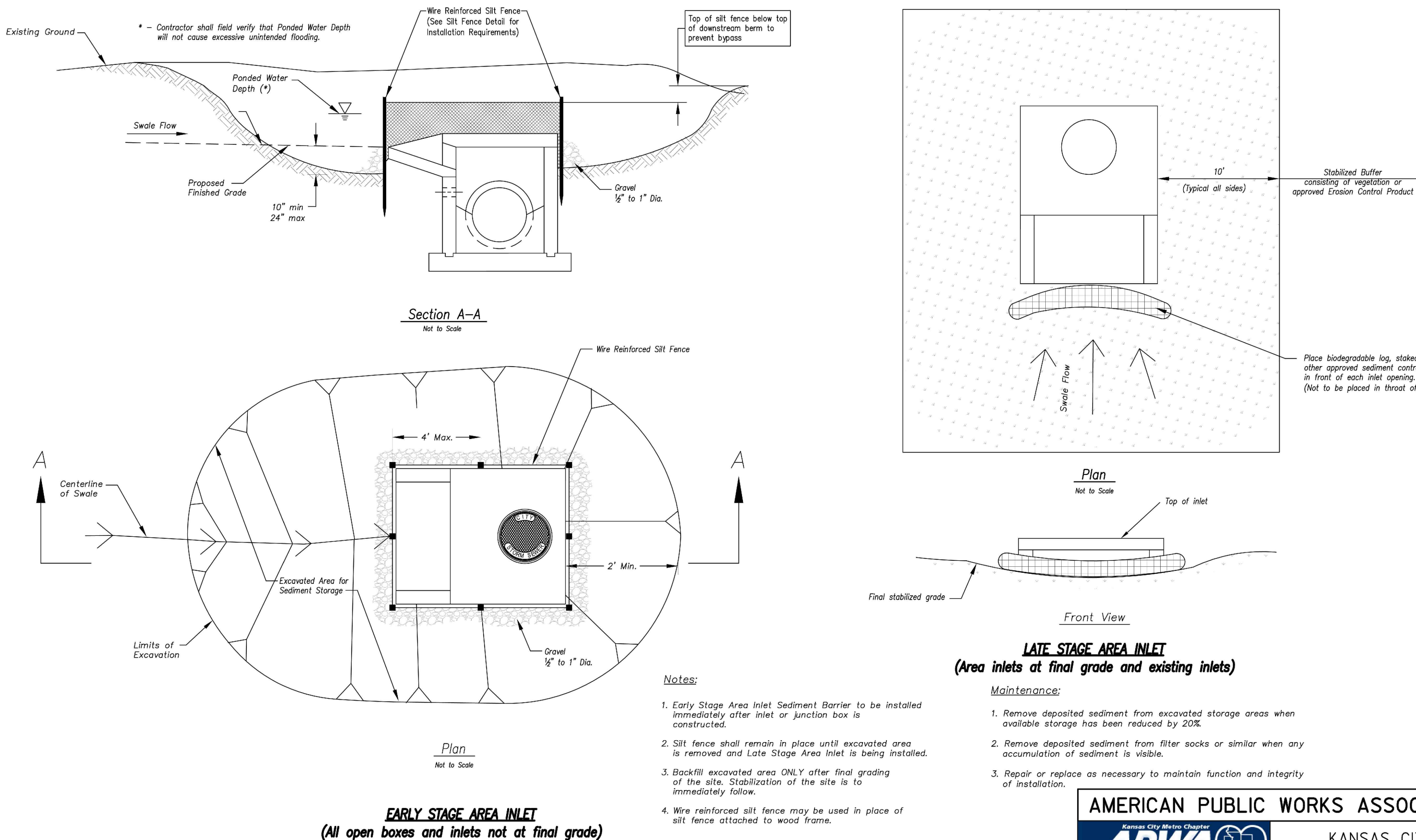
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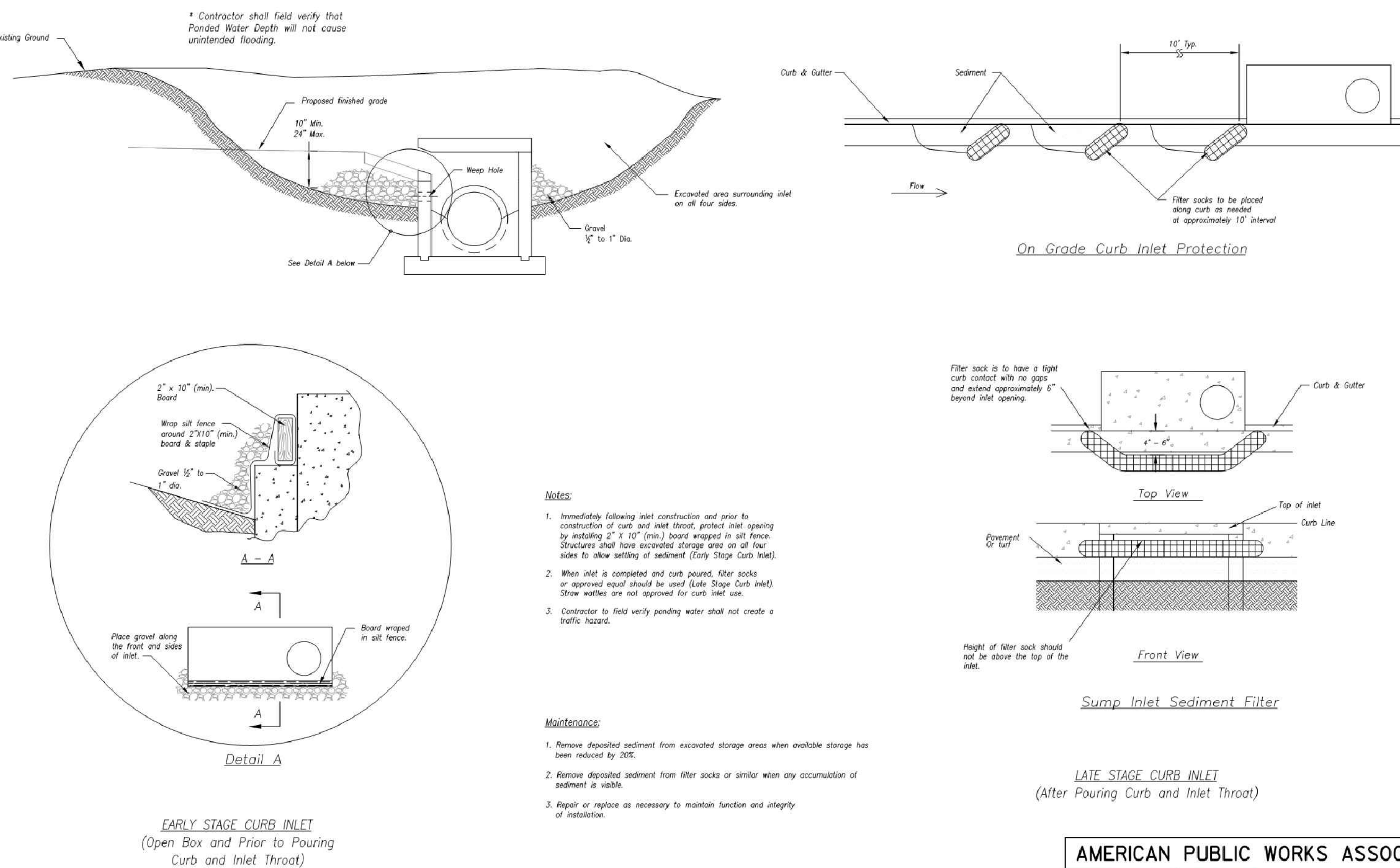


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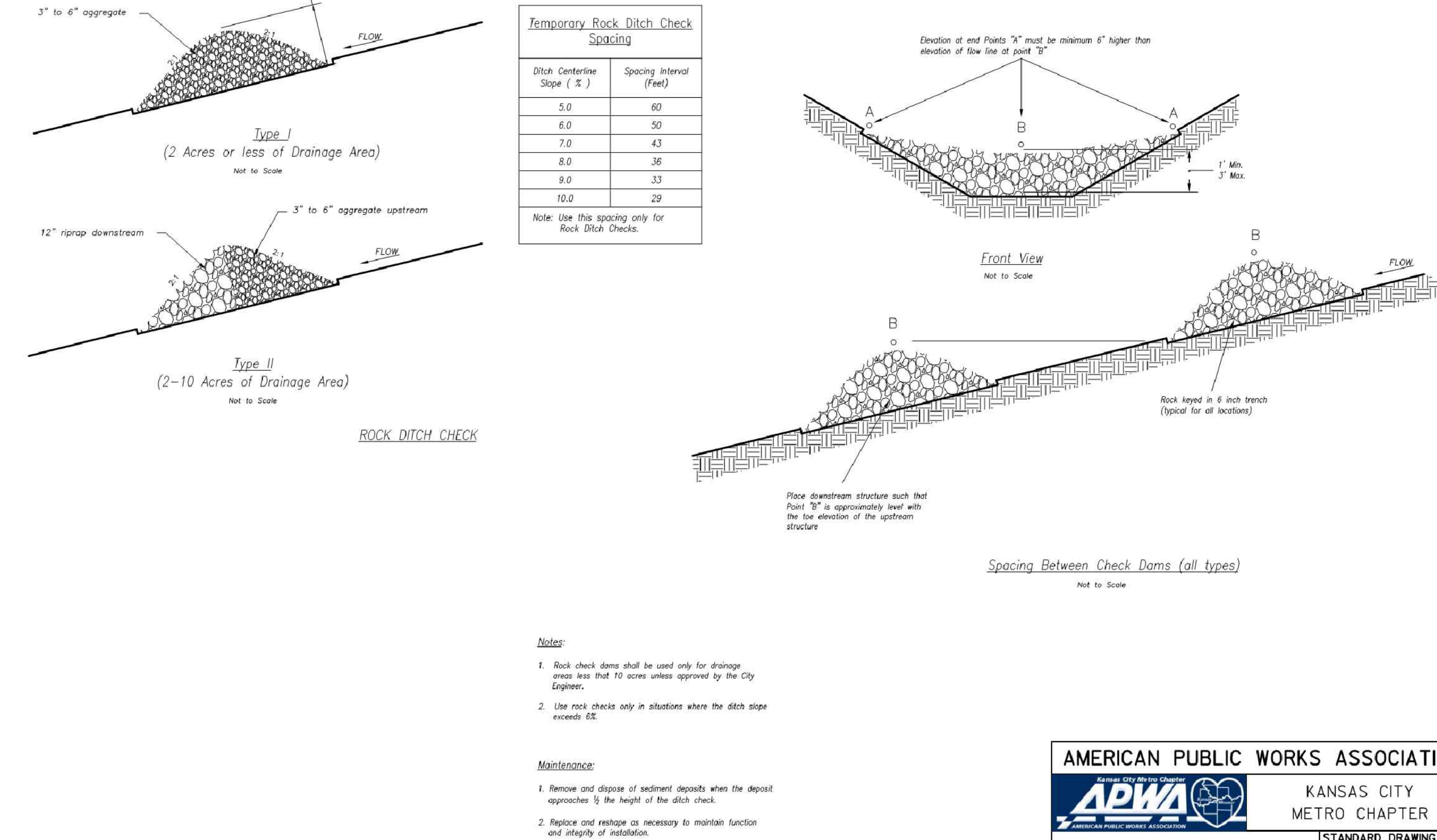
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Kansas City Metro Chapter  
KANSAS CITY METRO CHAPTER  
AREA INLET AND JUNCTION BOX PROTECTION  
STANDARD DRAWING NUMBER ESC-07  
ADOPTED: 10/24/2016

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



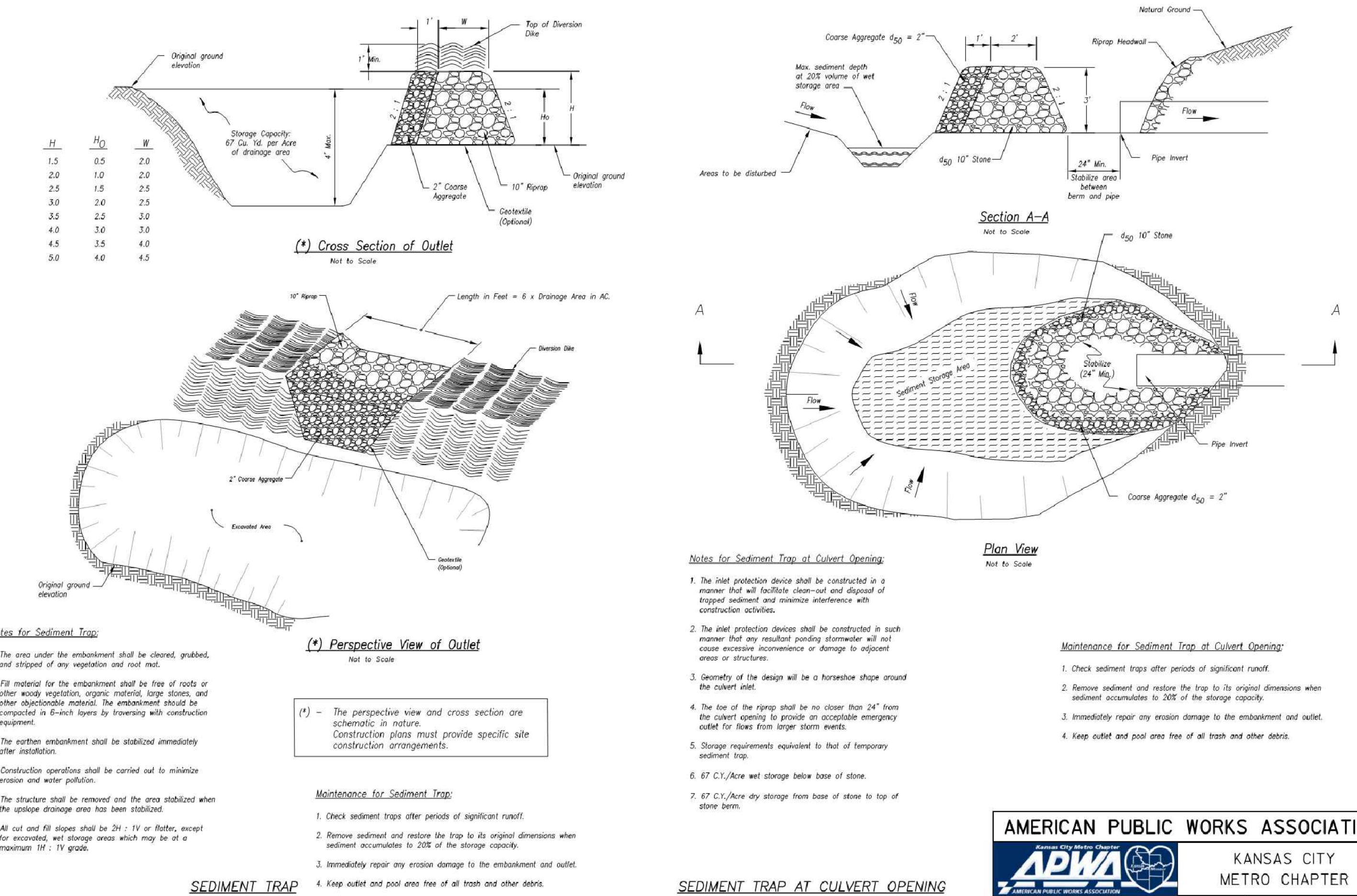
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Kansas City Metro Chapter  
KANSAS CITY METRO CHAPTER  
CURB INLET PROTECTION  
STANDARD DRAWING NUMBER ESC-06  
ADOPTED: 10/24/2016

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



AMERICAN PUBLIC WORKS ASSOCIATION  
Kansas City Metro Chapter  
KANSAS CITY METRO CHAPTER  
ROCK DITCH CHECKS  
STANDARD DRAWING NUMBER ESC-10  
ADOPTED: 10/24/2016

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



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

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

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NICHOLAS D. HEISER, P.E.  
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STATE OF MISSOURI  
NICHOLAS D. HEISER  
02/18/2021  
NUMBER  
PE-2015000555  
PROFESSIONAL ENGINEER  
BY  
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SHEET  
C112