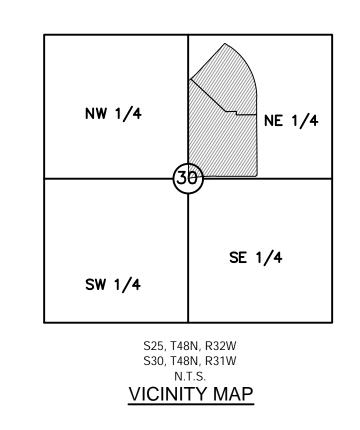
SECTION 25, TOWNSHIP 48N, RANGE 32W SECTION 30, TOWNSHIP 48N, RANGE 31W IN LEE'S SUMMIT, JACKSON COUNTY, MO



PROJECT TEAM & UTILITY CONTACT	LIST
OWNER/DEVELOPER INTRINSIC DEVELOPMENT 3622 ENDEAVOR AVE. STE. 101 COLUMBIA, MO 65201 CONTACT: JOHN ODLE PHONE: 573.615.2252	UTILITY SERVICE NUMBERS  NAME: LEE'S SUMMIT PUBLIC WORKS PHONE: 816-969-1800  NAME: LEE'S SUMMIT WATER UTILITIES PHONE: 816-969-1900
ENGINEER OLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: DAVID EICKMAN PHONE: 816.854.9315 EMAIL: DEICKMAN@OLSSON.COM	NAME: SPIRE PHONE: 314-342-0500  NAME: AT&T PHONE: 800-286-8313  NAME: EVERGY PHONE: 816-471-5275  NAME: SPECTRUM
SURVEYOR OLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JASON ROUDEBUSH PHONE: 816.361.1177 EMAIL: JROUDEBUSH@OLSSON.COM	PHONE: 877-772-2253  NAME: GOOGLE FIBER PHONE: 877-454-6959



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## OIL/GAS WELLS:

NO OIL OR GAS WELLS ARE LOCATED WITHIN PROJECT LIMITS.
INFORMATION OBTAINED FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES,
GEOLOGICAL SURVEY GEOSCIENCES TECHNICAL RESOURCE ASSESSMENT TOOL (GEOSTRAT).

## FLOOD CERTIFICATION:

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.

## PROPERTY DESCRIPTION

ARIA FIRST PLAT LOT 1:

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 I 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, CONTAINING 979,968 SQUARE FEET OR 22.50 ACRES, MORE OR LESS

DISCOVERY PARK ZONE 1: A 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°37'50" 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 I 51 AT PAGE 90 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE, AND THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE NORTH 50°41'15" EAST, ON SAID SOUTHEAST LOT LINE, 59.22 FEET; THENCE LEAVING SAID LOT LINE, SOUTH 45°00'00" EAST, 889.18 FEET; THENCE NORTH 90°00'00" EAST, 195.68 FEET; THENCE SOUTH 01°27'27" WEST, 62.94 FEET; THENCE SOUTH 88°32'29" EAST, 375.74 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF NE DOUGLAS STREET AS ESTABLISHED BY DOCUMENT NUMBER 2015E0017982 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE ON SAID WESTERLY RIGHT-OF-WAY LINE, SOUTH 01°27'31" WEST, 1,114.58 FEET; THENCE SOUTH 46°40'17" WEST, 35.22 FEET TO THE INTERSECTION OF THE NORTHERLY RIGHT-OF-WAY LINE OF NE COLBURN ROAD AS ESTABLISHED BY A SURVEY PROVIDED BY HAMILTON STERRETT AND DOOLEY, PROJECT NUMBER 99021; THENCE ON SAID NORTHERLY RIGHT-OF-WAY LINE NORTH 88°06'56" WEST, 730.85 FEET; THENCE WESTERLY ALONG A CURVE TO THE LEFT HAVING AN INITIAL TANGENT BEARING OF NORTH 87°33'04" WEST WITH A RADIUS OF 2,904.93 FEET, A CENTRAL ANGLE OF 10°06'02" AND AN ARC DISTANCE OF 512.10 FEET TO THE SOUTHWEST CORNER OF THE SAID NORTHEAST QUARTER; THENCE NORTH 01°37'22" EAST, ON THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 30, A DISTANCE OF 1,328.05 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SAID NORTHEAST QUARTER; THENCE CONTINUING ON THE SAID WEST LINE, NORTH 01°37'50" EAST, 473.96 FEET TO THE POINT OF BEGINNING. CONTAINING 1,717,197 SQUARE FEET OR 39.42 ACRES, MORE OR LESS.



- Civil Engineering ri Certificate of Authority #001592

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ВУ										
REVISIONS DESCRIPTION									REVISIONS	

EDIMENT CONTROL PLANS
ZONE 1 & ARIA APARTMENTS
E DOUGLAS ST

RADING & EROSION AND SEDIMENT CC
AGE AT DISCOVERY PARK ZONE 1 & AR
NW COLBERN RD & NE DOUGLAS

drawn by: GS/OS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C\_TTL01\_D2104643

- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
- 3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
- 7. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
- 8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY THROUGHOUT THE PROJECT AND NOT BE LIMITED BY WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
- 9. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
- 12. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

### **REFERENCES**

- 1. UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL
- A. ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.
- B. ALL CONSTRUCTION IN MODOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MODOT
- C. ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- D. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES..E. ALL EXTERIOR PAVEMENT (PCC, ASPHALT, ETC.) SHALL BE IN CONFORMANCE WITH
- THE SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DELIVERY MANAGER AND COORDINATING ANY MAILBOXES THAT MAY BE DISTURBED. FAILURE TO DO SO MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.

### **EXISTING CONDITIONS**

- 1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN INVESTIGATIONS AND MAKING THEIR OWN ASSUMPTIONS REGARDING SITE SURFACE AND SUBSURFACE CONDITIONS. THIS INCLUDES THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. CONTACT THE ENGINEER REGARDING ANY DISCREPANCIES THAT MAY AFFECT THE ABILITY TO CONSTRUCT FROM THESE PLANS AS DESIGNED.
- 3. EXISTING CONDITIONS WERE DETERMINED THROUGH A VARIETY OF METHODS THAT MAY INCLUDE SURVEY, AERIAL IMAGERY, AVAILABLE RECORDS, GIS DATA, ETC. SUBSURFACE CONDITIONS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES AND OTHER SITE IMPROVEMENTS PRESENT ON SITE. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS WHEN CONFLICTS AND DISCREPANCIES ARE FOUND.

### CONSTRUCTION

- 1. THE CONTRACTOR SHALL INSTALL TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY AS SHOWN IN THESE PLANS. IF PLANS ARE NOT PROVIDED, CONTRACTOR SHALL COORDINATE AND PROVIDE CONTROLS TO THE SATISFACTION OF THE RIGHT-OF-WAY OWNER.
- 2. THE CONTRACTOR SHALL PROTECT ALL TREES OVER 3" CALIPER FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
- 3. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF—SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.
- 4. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED. NOT ALL ADJUSTMENTS ARE INDICATED IN THE PLANS.
- 5. THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

#### **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:
  - $\underline{X}$ \_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 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 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-BUIL1					
SITE DISTURBANCE									
1	EXCAVATION	C.Y.	230,615						
2	EMBANKMENT	C.Y.	464,762						
3	15" HDPE	L.F.	160.20						
4	24" HDPE	L.F.	157.42						
5	36" HDPE	L.F.	146.35						
6	5'x6' RCB	L.F.	161.81						
7	15" END SECTION	EA.	2						
8	24" END SECTION	EA.	2						
9	36" END SECTION	EA.	2						
10	RIPRAP	S.Y.	92.80						
11	4'x4' INSIDE FIELD INLET	EA.	4						
12	EXTRA DEPTH ON 4'x4'	V.F.	24.42						
13	5'x5' INSIDE FIELD INLET	EA.	2						
14	EXTRA DEPTH ON 5'x5'	V.F.	3.80						
15	7'x4' INSIDE FIELD INLET	EA.	1						
16	EXTRA DEPTH ON 7'x4'	V.F.	5.38						
17	9'x12' INSIDE OUTLET STRUCTURE	EA.	1						
18	RIPRAP BASIN ROCK	TON	3288.00						
19	CONNECT TO EXISTING STRUCTURES	EA.	1						
20	VEHICLE TRACKING DEVICE	EA.	1						
21	SEDIMENT TRAP	EA.	15						
22	DIVERSION BERM	L.F.	7831.42						
23	SILT FENCE	L.F.	3004.42						
24	ROCK DITCH CHECK	EA.	19						
25	TREE CLEARING	AC.	27.75						
26	INLET PROTECTION	EA.	26						
27	EROSION CONTROL BLANKET	S.Y.	4563						
28	TURF REINFORCEMENT MAT	S.Y.	10626						
29	SEED & MULCH	AC.	58.45						
30	NATIVE SEED MIX	AC.	2.20						

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.

SSS Civil Engineering

DAVID L.

EICKMAN

NUMBER

PE-2009015436

DAVID EICKMAN, P.E.

MO# 2009015436

GENERAL NOTES
ING & EROSION AND SEDIMENT CONTROL PLANS
AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBERN RD & NE DOUGLAS ST
SOURI

drawn by:

checked by:
approved by:
QA/QC by:
project no.:

GS/OS/JN

AR/JN

AR/JN

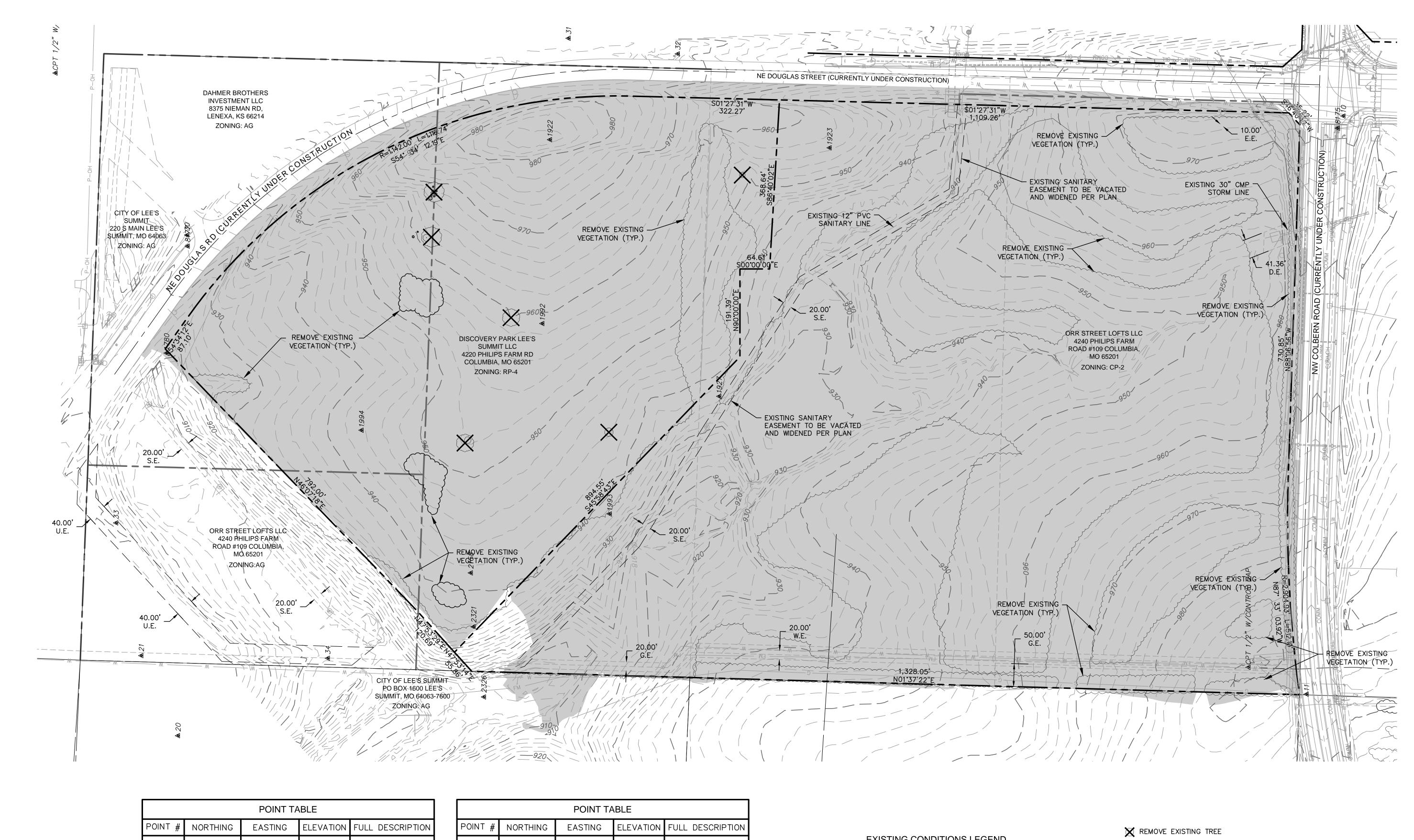
DE

QA/QC by:
D21-04643

drawing no.: C GEN01\_D2104643

SHEET C301

08.07.2023



	POINT TABLE								
POINT #	NORTHING	EASTING	ELEVATION	FULL DESCRIPTION					
10	1012183.1810	2823309.3060	982.032	CTL IB3CONCAP					
11	1012263.3886	2822050.3556	984.472	CTL IB3CONCAP					
20	1014720.8109	2821959.9084	931.642	CTL 60D					
21	1014800.6805	2822134.3364	938.619	CTL 60D					
30	1014700.8927	2823050.0451	932.433	CTL IB3CAP					
31	1013870.3509	2823478.4777	981.044	CTL IB3CAP					
32	1013632.5713	2823444.5928	972.448	CTL IB3CAP					
33	1014855.4436	2822423.2331	929.324	CTL IB3CAP					
34	1014394.5412	2822128.5531	907.079	CTL IB3CAP					
35	1014607.4024	2821781.3351	902.219	CTL IB3CAP					
1780	1014745.6930	2822793.1640	922.175	CTL 60D					

			POINT TA	BLE	
	POINT #	NORTHING	EASTING	ELEVATION	FULL DESCRIPTION
	1922	1013910.9320	2823257.7240	986.639	CTL 60D
	1923	1013301.9140	2823240.0500	956.352	CTL 60D
	1927	1013542.2660	2822698.8750	936.292	CTL 60D
	1992	1013927.5320	2822857.4500	959.400	CTL 60D
	1993	1013780.6490	2822442.8070	937.257	CTL 60D
	1994	1014321.2550	2822625.1060	944.103	CTL 60D
	2158	1014083.2650	2822314.4510	941.622	CTL 60D
	2321	1014077.0070	2822196.9780	937.570	CTL 60D
	2326	1014054.6210	2822044.3360	905.594	CTL 60D
	8175	1012195.5307	2823282.8905	982.458	ВМК
	8177	1014699.7206	2823025.8627	932.314	ВМК

# **EXISTING CONDITIONS LEGEND**

\*THIS LEGEND APPLIES TO ALL SHEETS UNLESS EXPLICITLY SHOWN OTHERWISE ON EACH SHEET.

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		P-UG -		
	W —		- W	
	Τ —		- T	
		— G —		

PROPERTY BOUNDARIES EASEMENT/SETBACK LINE EXISTING STORM SEWER EXISTING PRESSURE PIPE EXISTING SANITARY SEWER EXISTING POWER SERVICE EXISTING WATER PIPE EXISTING TELECOM SERVICE EXISTING NATURAL GAS PIPE

LIMITS OF DISTURBANCE

 EXISTING LIGHT POLE TEXISTING SIGN

**S** EXISTING SPRINKLER BOX

4 EXISTING SPRINKLER CONTROL VALVE + EXISTING WATER VALVE

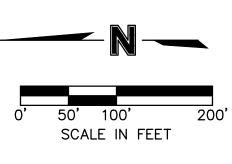
- EXISTING FIRE HYDRANT

**EXISTING WATER METER** 

**E** EXISTING ELECTRIC BOX **EVI EXISTING ELECTRIC VAULT** 

EM EXISTING ELECTRIC METER ER EXISTING ELECTRIC RISER

EXISTING ELECTRIC MANHOLE \*SCALE MAY AFFECT THE SIZE OF SURVEY SYMBOLS IN PLAN, BUT SHAPE WILL BE RETAINED.



drawn by: GS/OS/JN checked by: AR/JN approved by: QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C\_EXC01\_D2104643
date: 08.07.2023

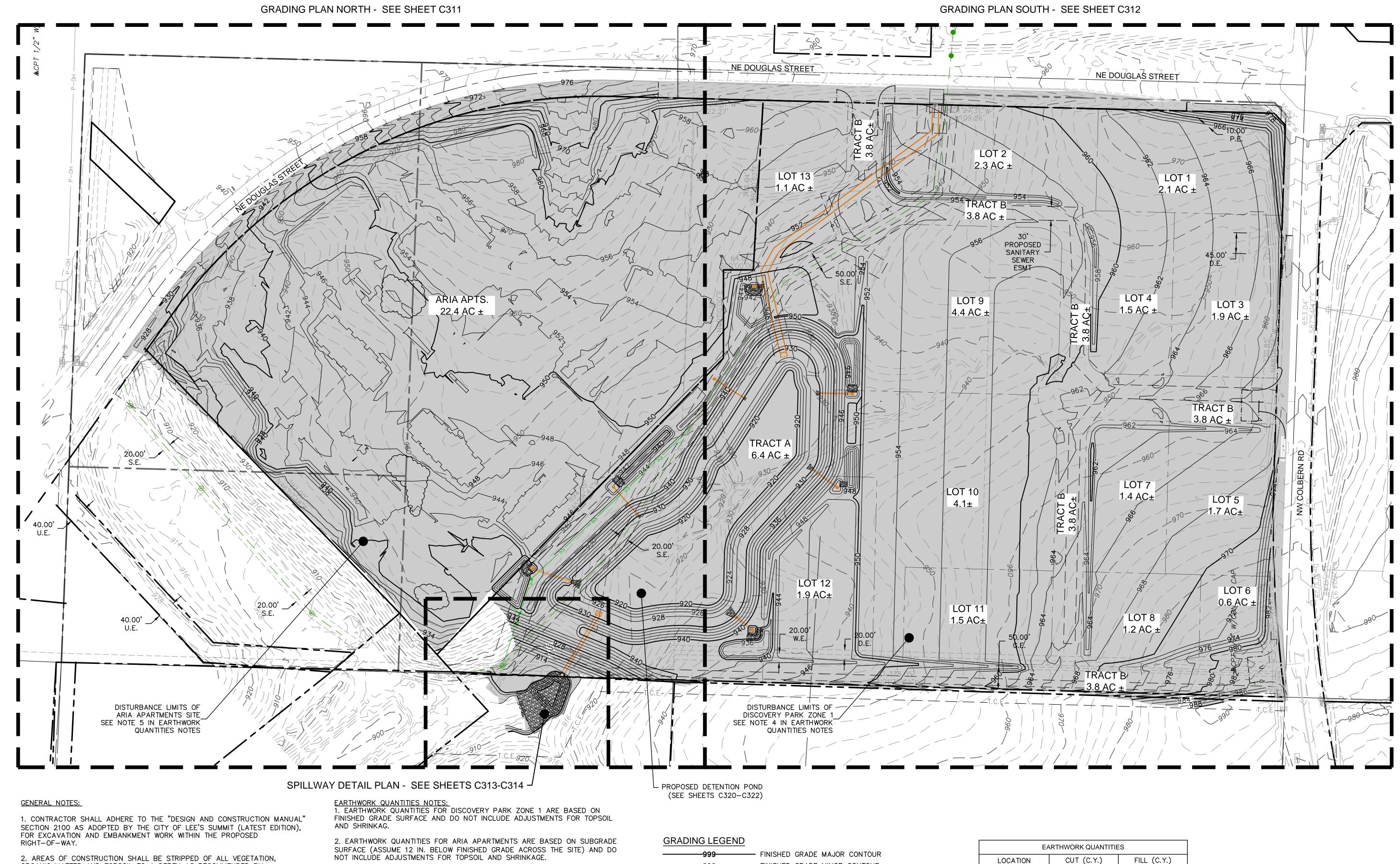
AT DISCOVERY PARK ZONE 1 & ARIA NW COLBERN RD & NE DOUGLAS ST

EXISTING CONDITIONS EROSION AND SEDIMENT

EICKMAN

NUMBER

DAVID EICKMAN, P.E. MO# 2009015436



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. 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.

4. PAVEMENT AND OTHER INFRASTRUCTURE IMPROVEMENTS NOT EXPLICITLY DETAILED WITHIN THIS PLAN SET ARE SHOWN FOR REFERENCE ONLY AND WILL BE REVIEWED AND PERMITTED SEPARATELY.

3. 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.

4. ELEVATIONS SHOWN ON DISCOVERY PARK ZONE 1 ARE TO TOP OF PAVEMENT OR FINISHED GRADE. VOLUMES SHOWN DO NOT REFLECT PAVEMENT DEPTHS, SPOILS, TRENCH FILL, OR ANY OTHER ADJUSTMENTS. SEE SHEET C230 ON PRIVATE SITE DEVELOPMENT PLANS FOR PAVEMENT SECTION DETAILS.

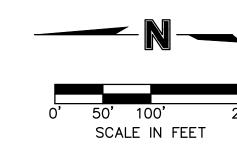
5. ELEVATIONS SHOWN ON ARIA APARTMENTS ARE TO SUBGRADE (12 IN. BELOW FINISHED GRADE ACROSS THE SITE). VOLUMES APPROXIMATELY REFLECT PAVEMENT DEPTHS, BUT DO NOT REFLECT SPOILS, TRENCH FILL, OR ANY OTHER ADJUSTMENTS. SEE SEPARATE SITE DEVELOPMENT PLANS FOR ARIA APARTMENTS FOR MORE DETAILS.

999	FINISHED GRADE MAJOR CONTOUR
999	FINISHED GRADE MINOR CONTOUR
— — —999— — —	EXISTING GRADE MAJOR CONTOUR
— — — 999— — —	EXISTING GRADE MINOR CONTOUR
	PROPOSED STORM SEWER
SS	PROPOSED SANITARY SEWER TO BE RELOCATED
~	EVICTING CANITADY CEWED

 $\bigcirc = = = = = \bigcirc$  Existing sanitary sewer

LIMITS OF DISTURBANCE

EARTHWORK QUANTITIES					
LOCATION	CUT (C.Y.)	FILL (C.Y.)			
ARIA APARTMENTS	139,557	70,893			
ZONE 1	91,058	393,869			



drawn by: GS/OS/JN checked by: AR/JN approved by: DE QA/QC by: JS/NH project no.: D21-04643 drawing no.: C\_GRD01\_D2104643 date: 07.14.2023

K ZONE 1 & ARIA /

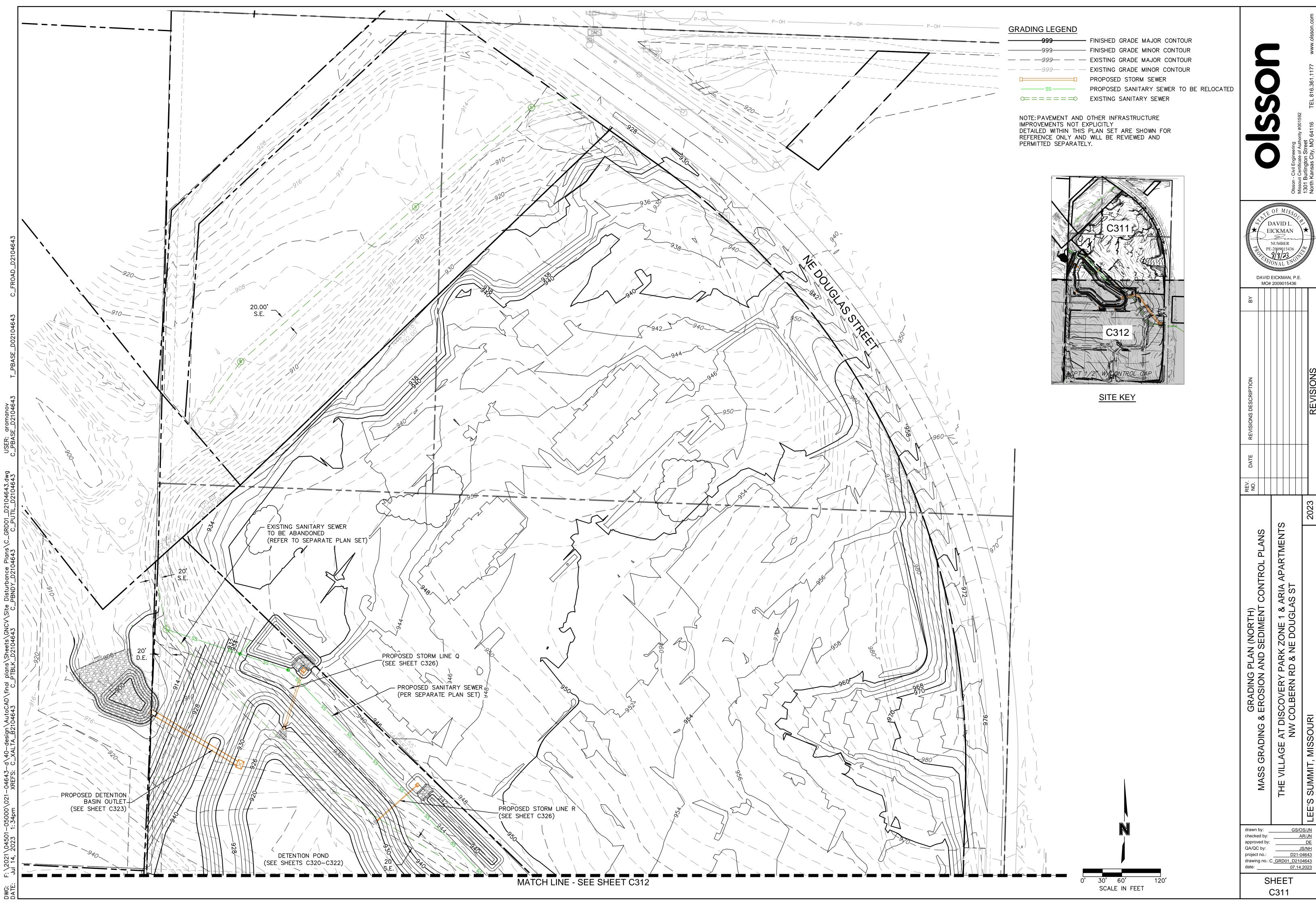
AT DISCOVERY PAR NW COLBERN RD &

GRADING PLAN EROSION AND SEDIMENT

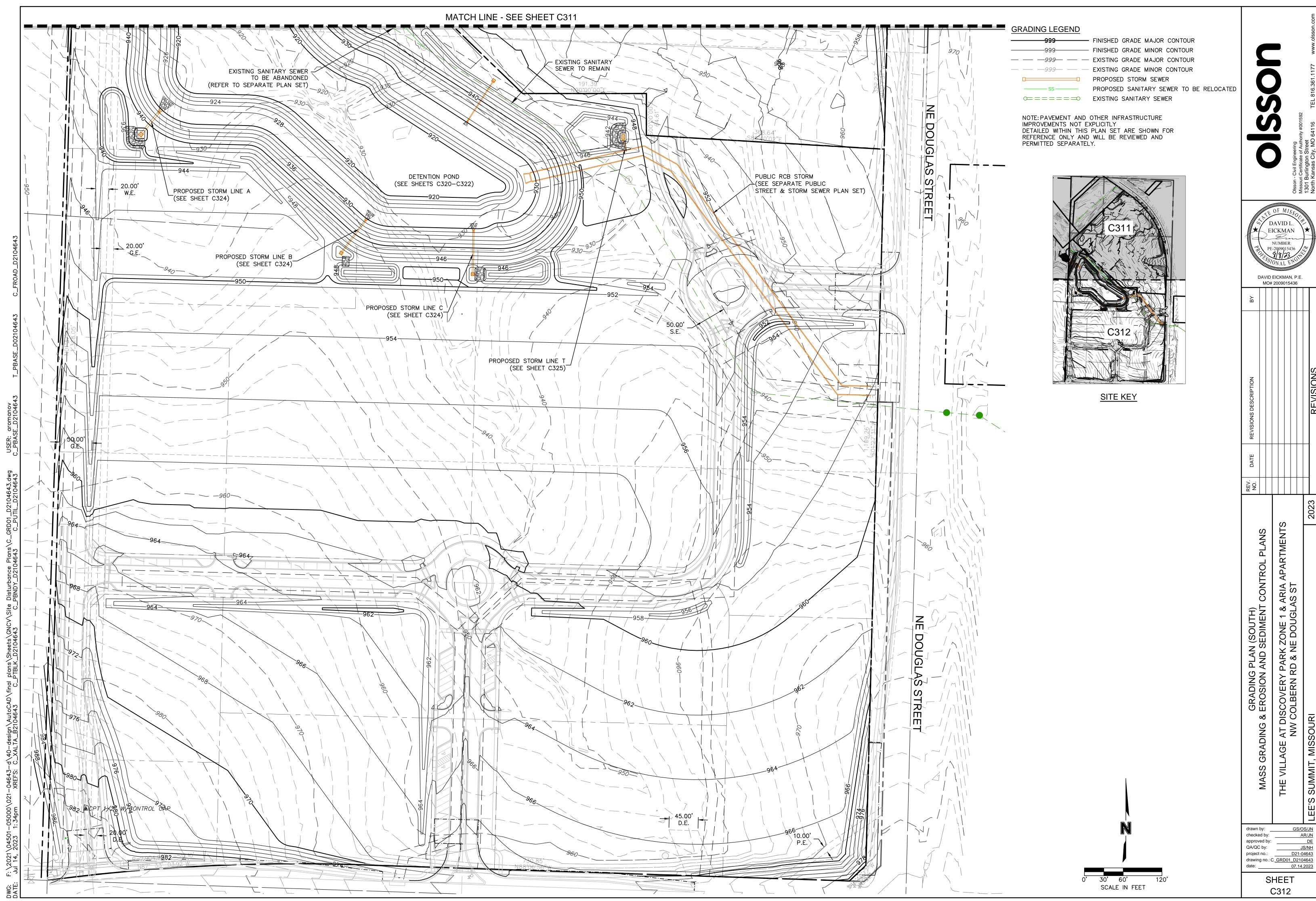
EICKMAN

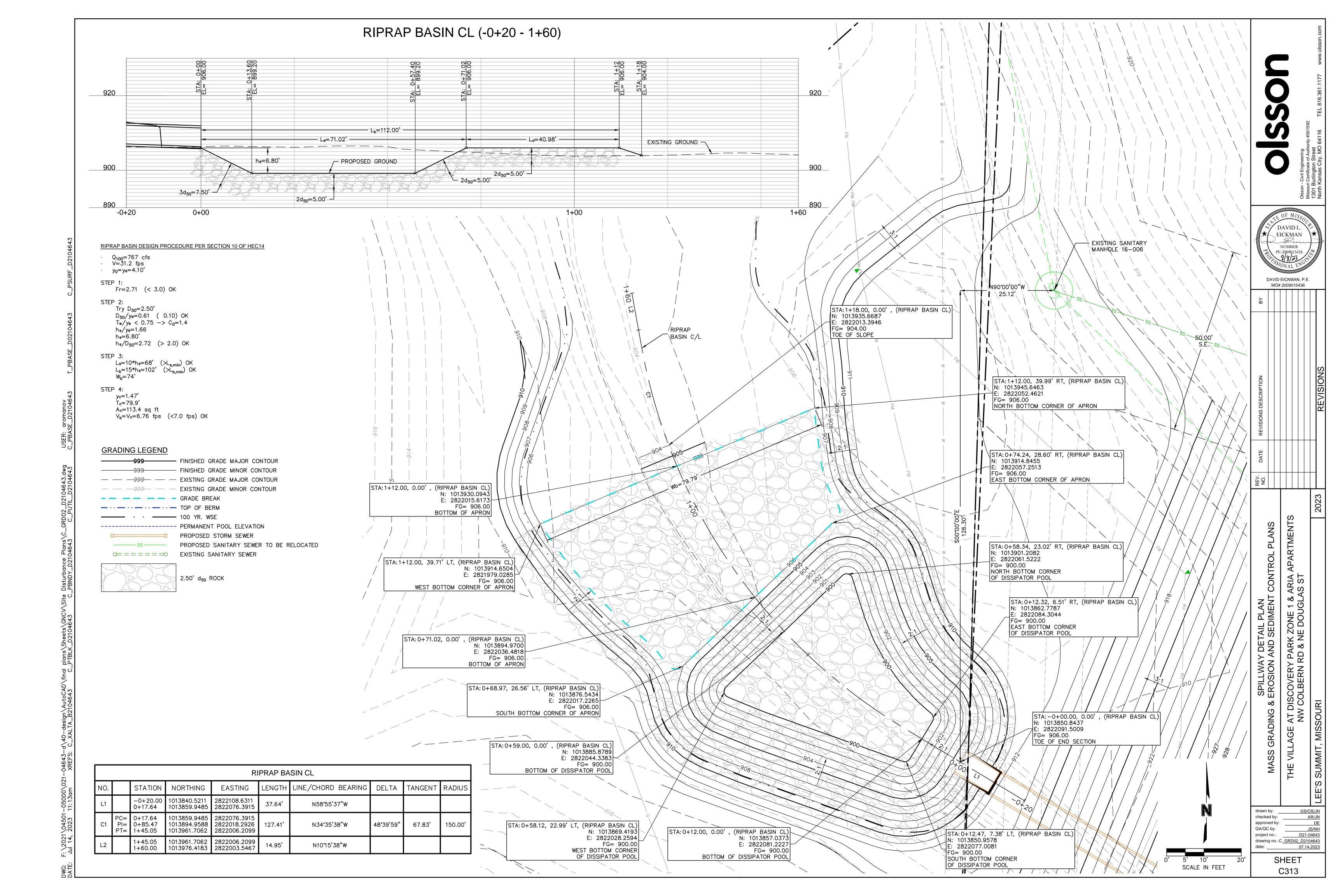
DAVID EICKMAN, P.E.

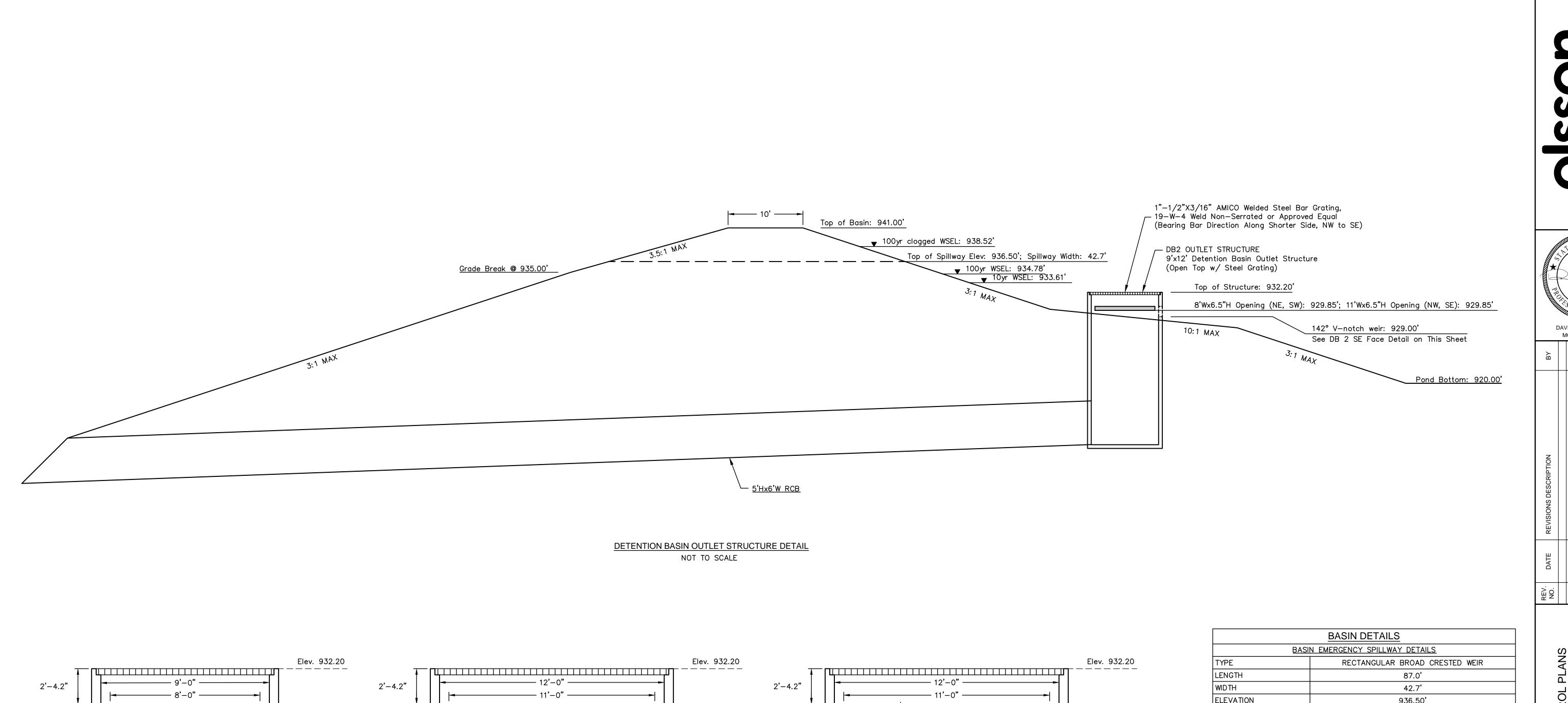
MO# 2009015436

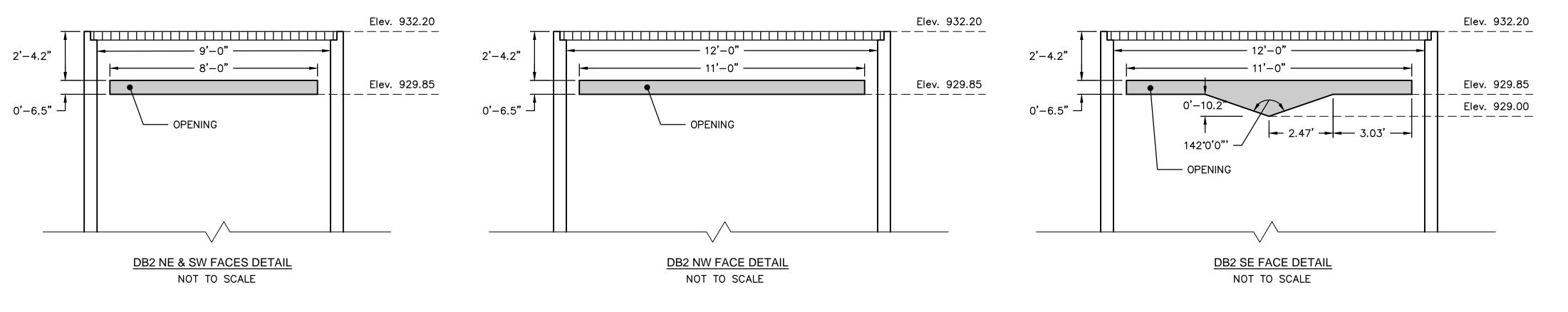


GS/OS/JN AR/JN





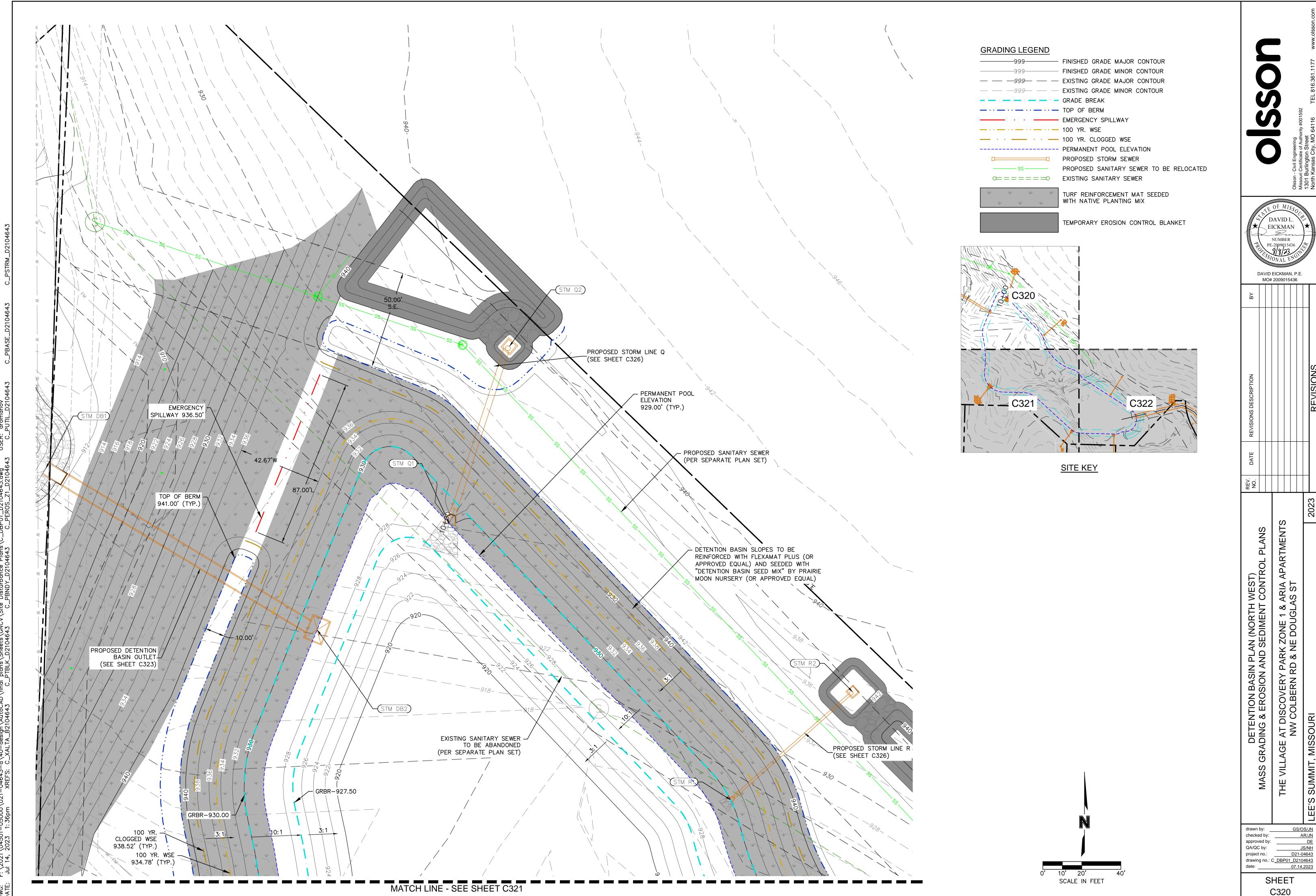




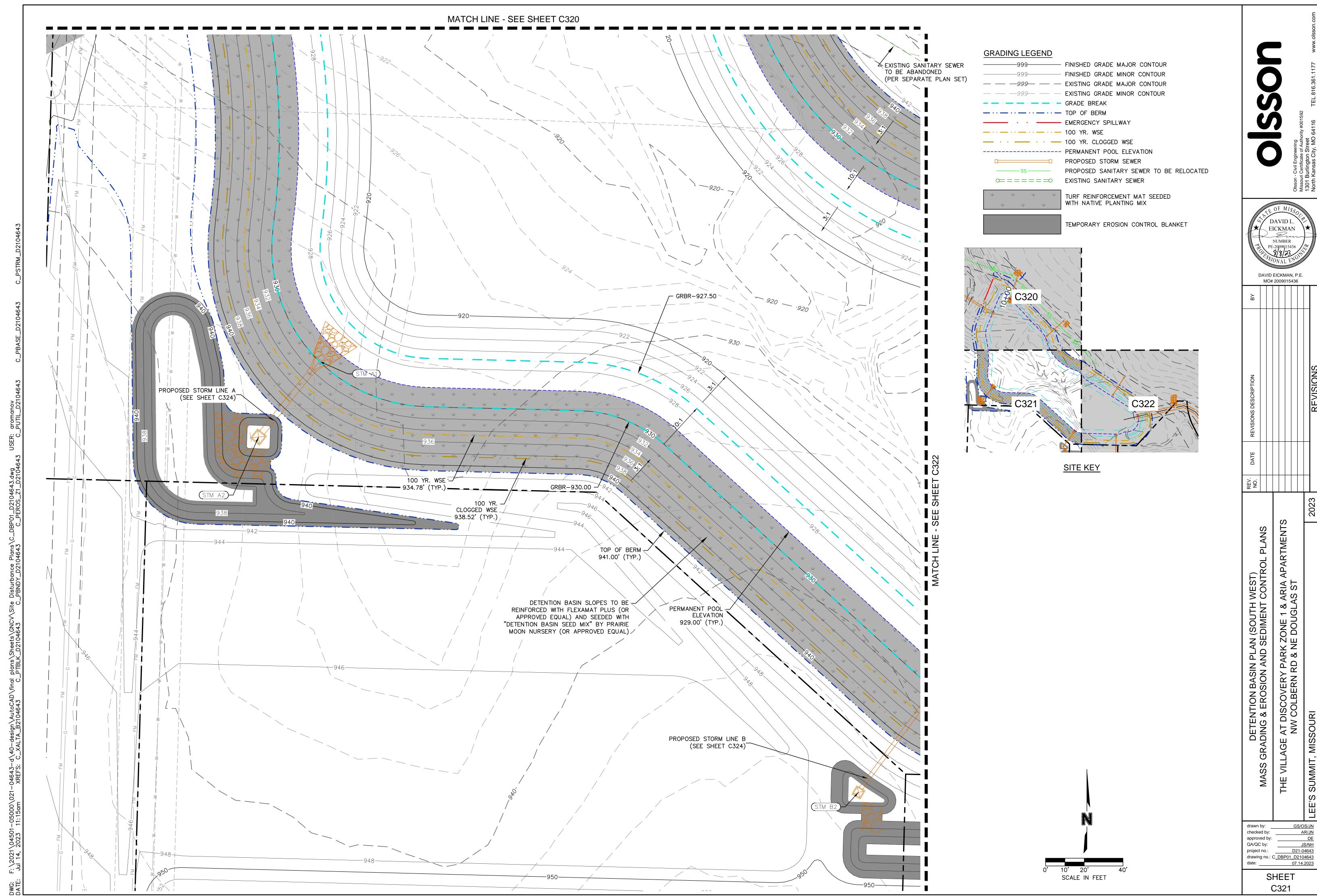
BASIN DETAILS						
BASIN EMERGENCY SPILLWAY DETAILS						
TYPE	RECTANGULAR BROAD CRESTED WEIR					
LENGTH	87.0'					
WIDTH	42.7'					
ELEVATION	936.50'					
DEPTH	4.50'					
TOP ELEVATION	941.00'					
100-YR FLOW	0.00 CFS					
100-YR CLOGGED FLOW	750.46 CFS (AT 2.02' FLOW DEPTH)					
	BASIN HYDROLOGIC DETAILS					
PERMANENT POOL ELEVATION	929.00'					
10—YR FLOW, WSEL, DEPTH, STORAGE	423.35 CFS, 933.61', 4.61 FT, 16.83 AC-FT					
100—YR FLOW, WSEL, DEPTH, STORAGE	767.11 CFS, 934.78', 5.78 FT, 21.71 AC-FT					
100—YR CLOGGED FLOW, WSEL, DEPTH, STORAGE	750.46 CFS, 938.52', 9.52 FT, 38.45 AC-FT					

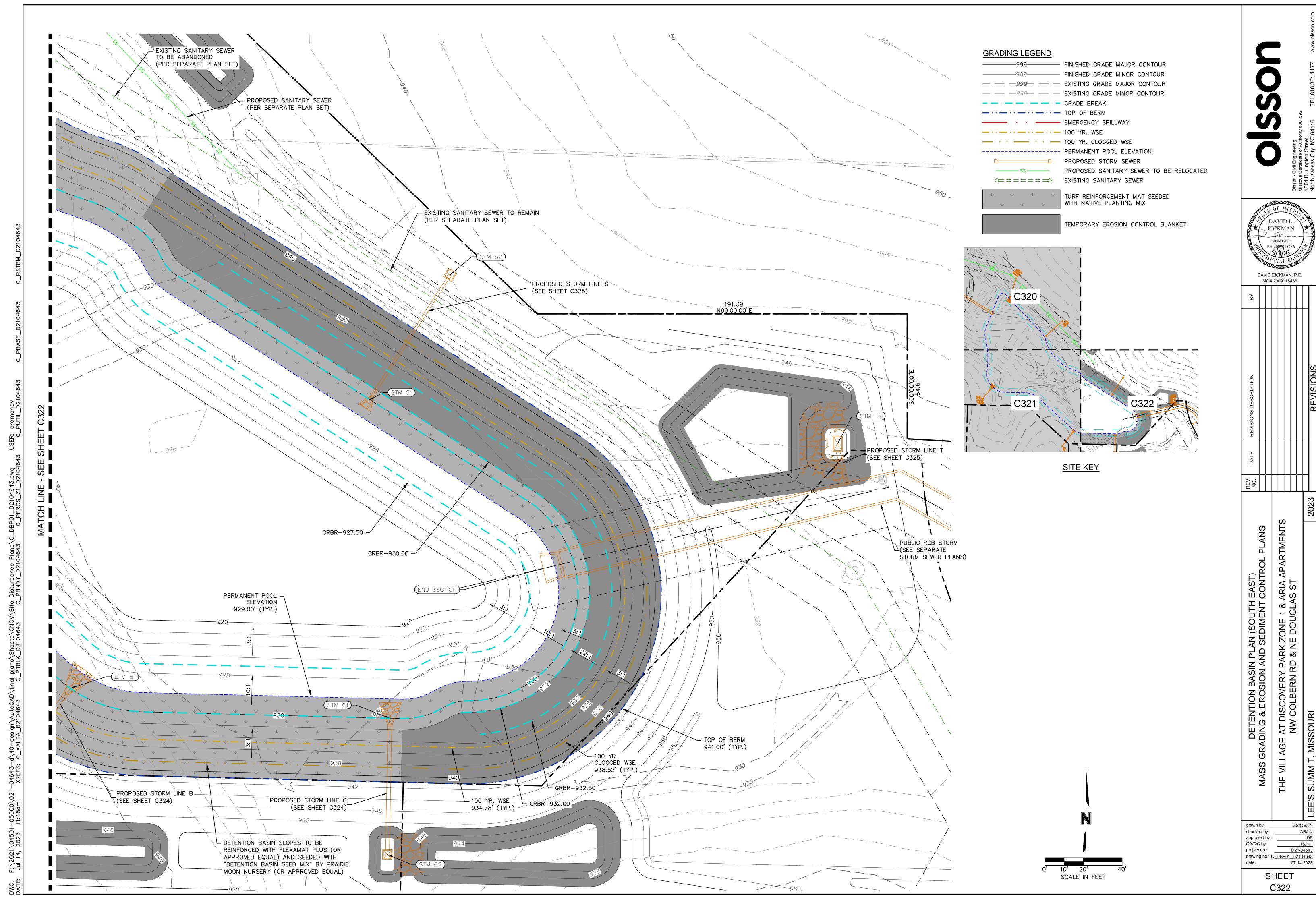
EICKMAN NUMBER DAVID EICKMAN, P.E. MO# 2009015436 AT DISCOVERY PARK ZONE 1 & ARIA NW COLBERN RD & NE DOUGLAS ST

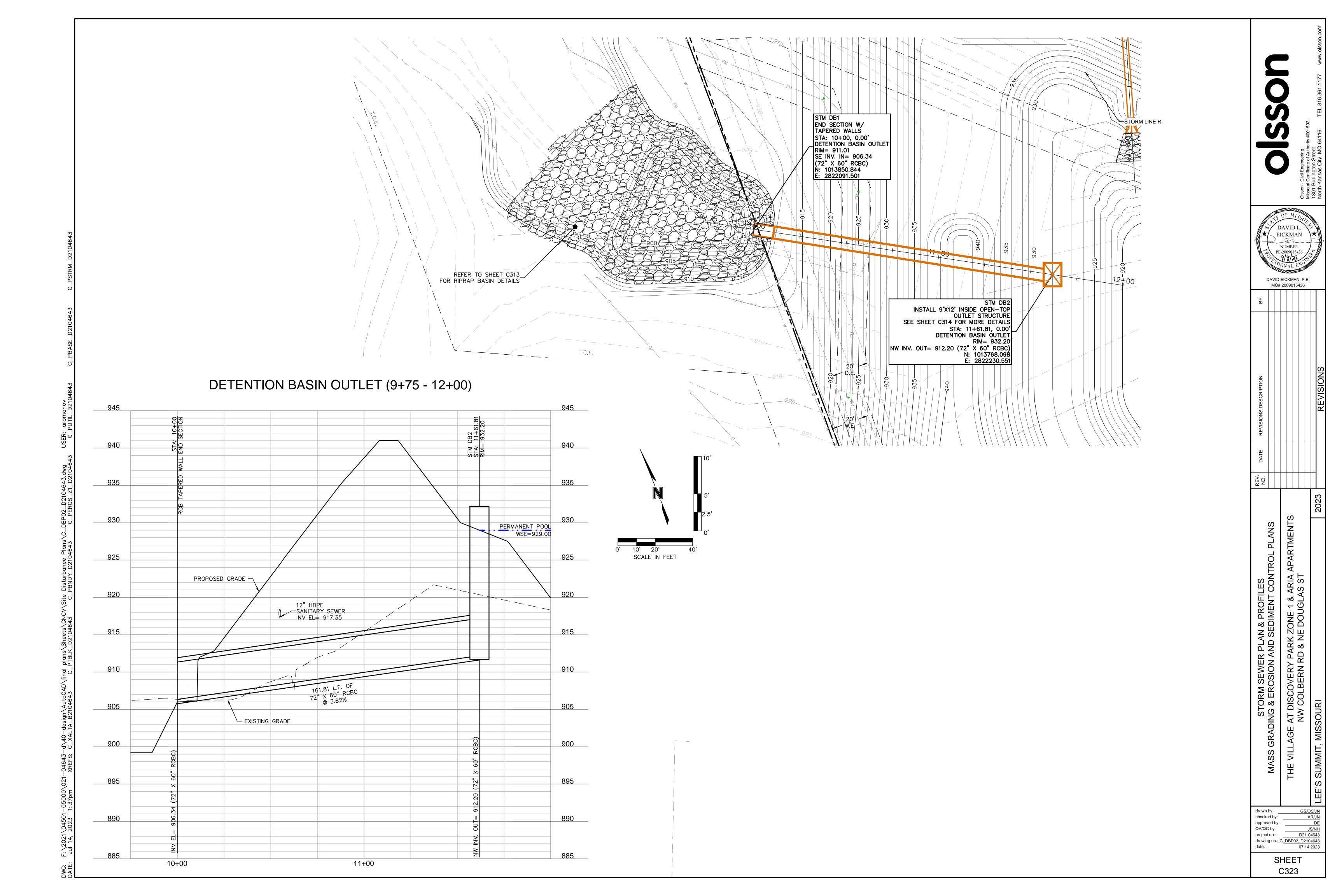
drawn by: GS/OS/JN checked by: AR/JN approved by: DE QA/QC by: JS/NH project no.: D21-04643 drawing no.: C\_GRD02\_D2104643 date: 07.14.2023

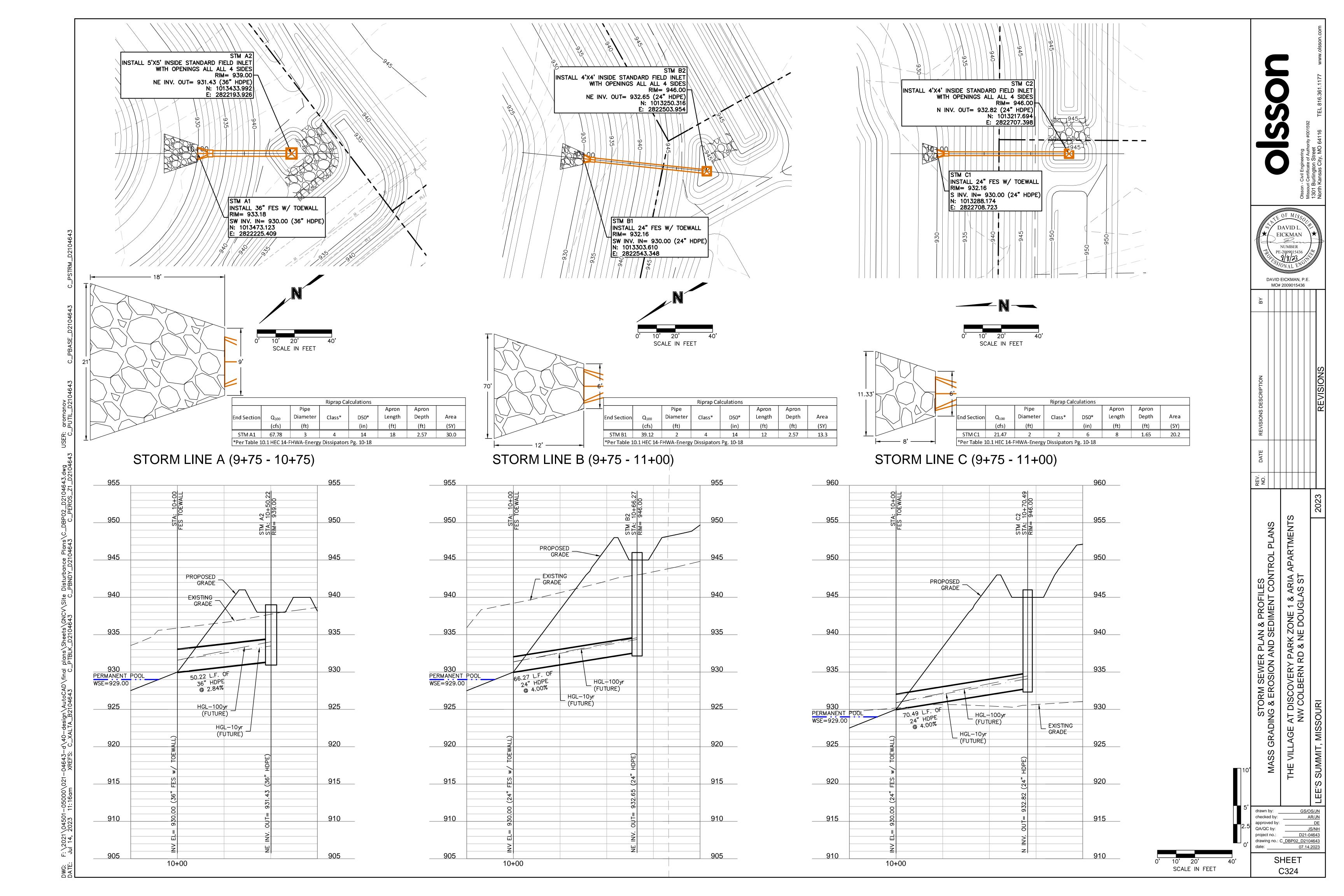


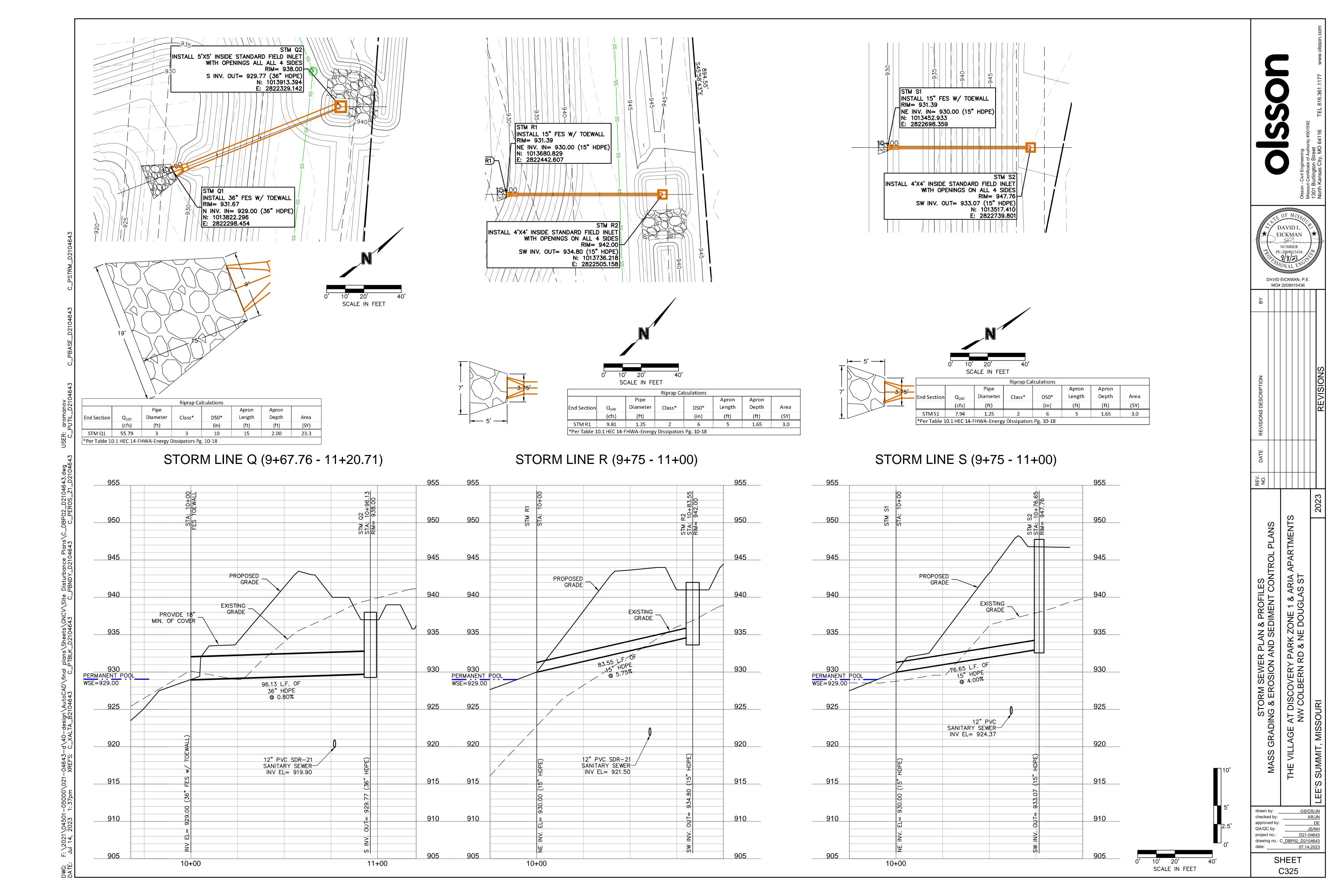
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DATE					
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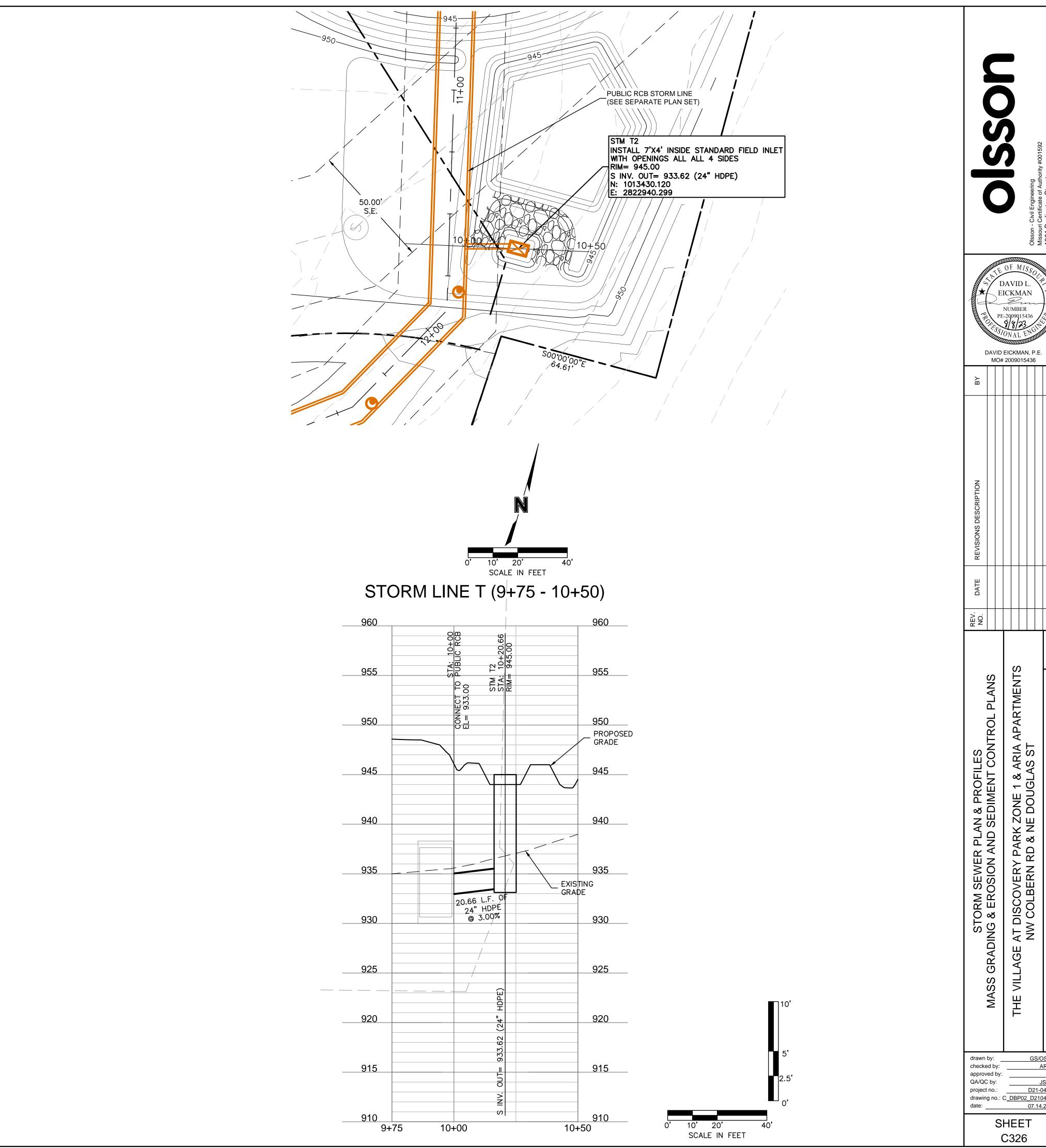












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DATE								
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THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBERN RD & NE DOUGLAS ST
SUMMIT, MISSOURI

 drawn by:
 GS/OS/JN

 checked by:
 AR/JN

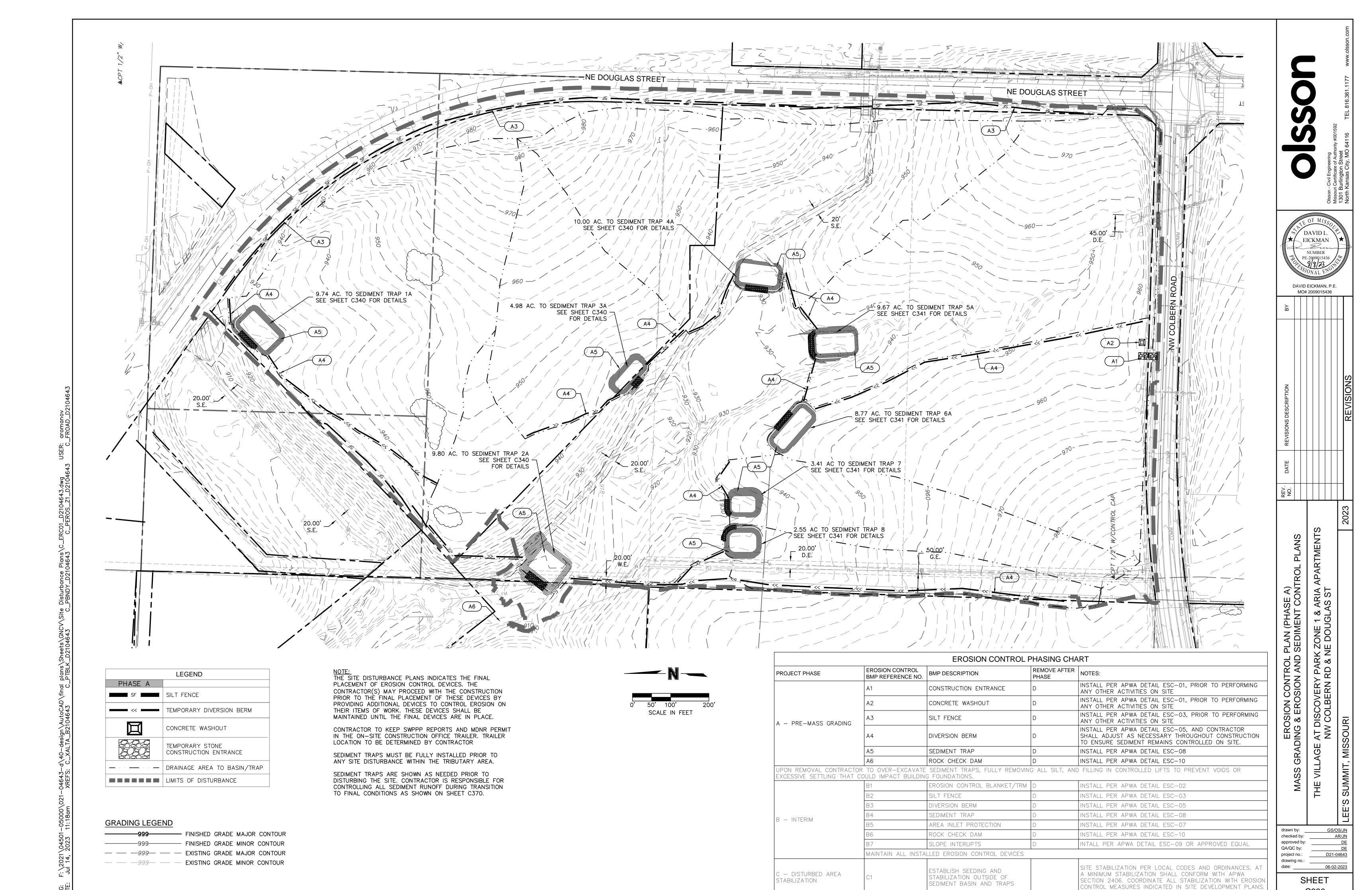
 approved by:
 DE

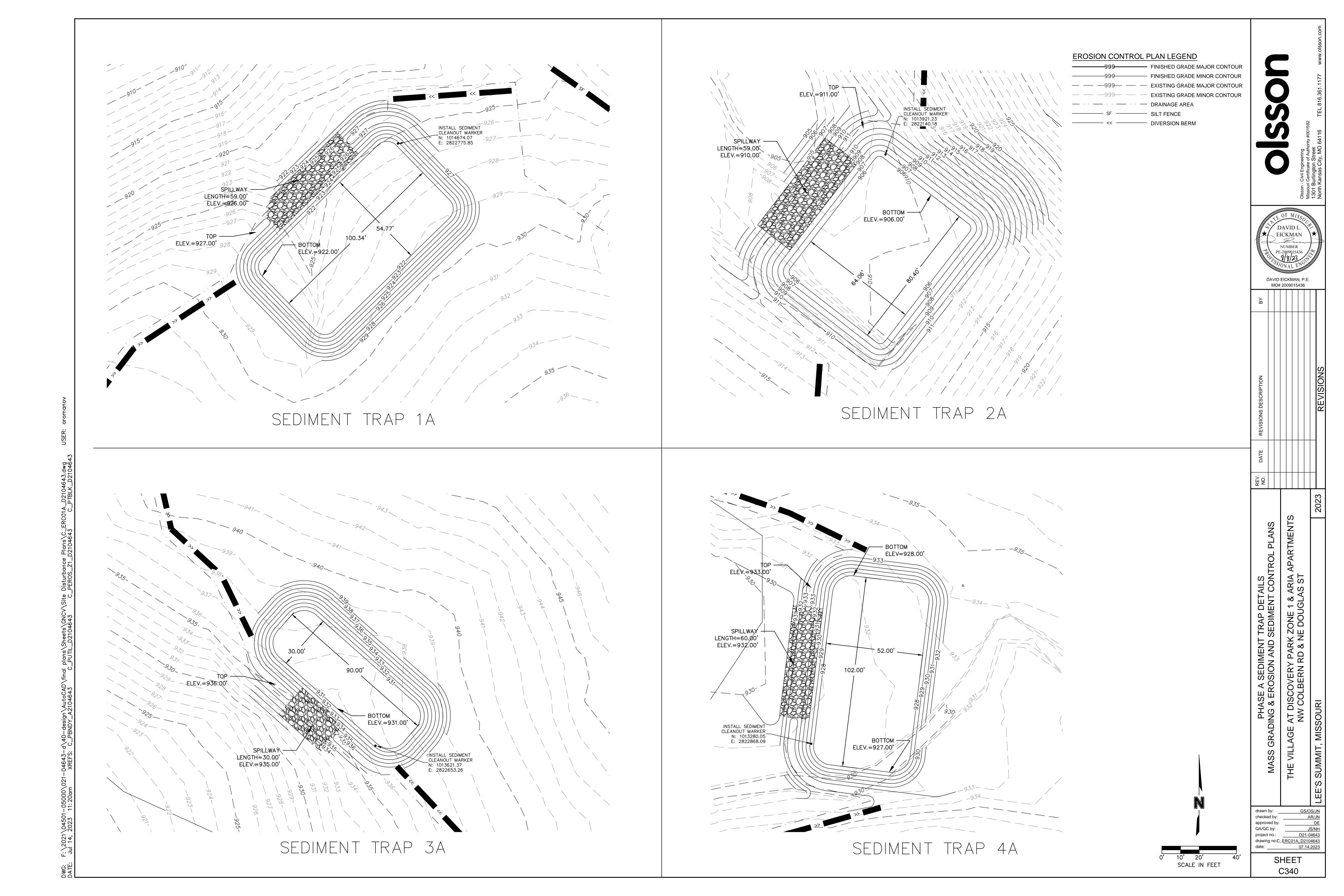
 QA/QC by:
 JS/NH

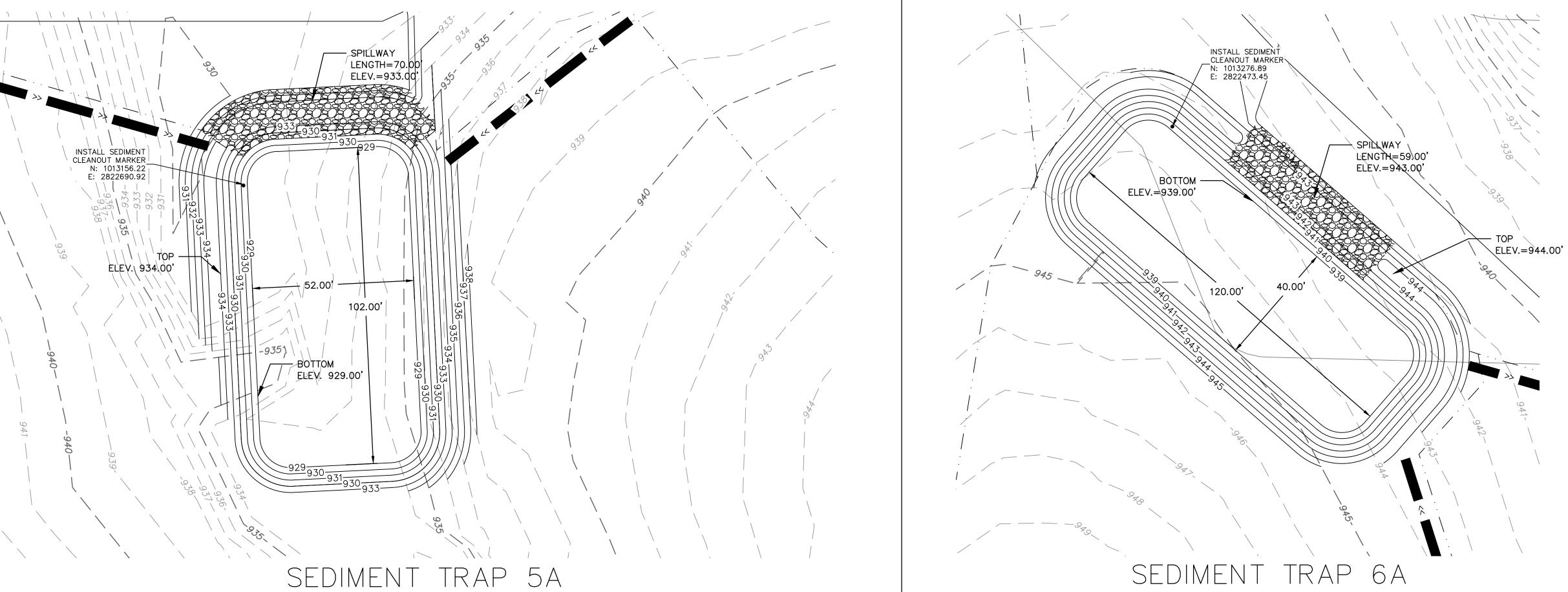
 project no.:
 D21-04643

 drawing no.:
 C\_DBP02\_D2104643

 date:
 07.14.2023







EROSION CONTROL PLAN LEGEND

FINISHED GRADE MAJOR CONTOUR — FINISHED GRADE MINOR CONTOUR EXISTING GRADE MINOR CONTOUR

— DIVERSION BERM

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PE-2009015436  PE-3009015436  DAVID EICKMAN, P.E. MO# 2009015436											
ВУ											

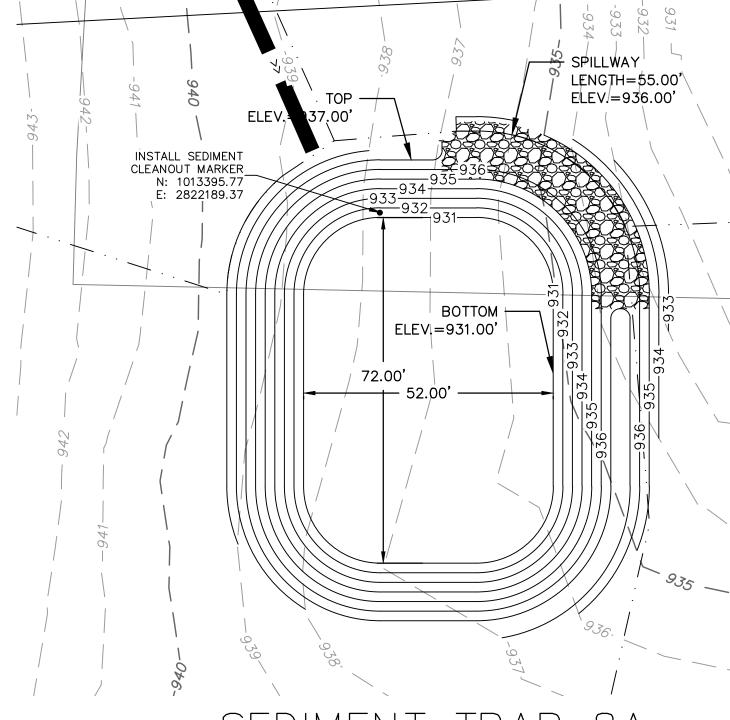
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REVISIONS DESCRIPTION					REVISIONS
DATE					
REV. NO.					

IE SITE DISTURBANCE PLANS INDICATE THE FINAL	
ACEMENT OF EROSION CONTROL DEVICES. THE	
DNTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION	10
RIOR TO FINAL PLACEMENT OF THESE DEVICES BY	
ROVIDING ADDITIONAL DEVICES O CONTROL EROSION (	10
HEIR ITEMS OF WORK. THESE DEVICES SHALL BE	

ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PER THE AMERICAN PUBLIC WORKS ASSOCIATION, KANSAS CITY METRO CHAPTER DIVISION III STANDARD DRAWINGS, EROSION AND SEDIMENT CONTROL, 2016 VERSION.

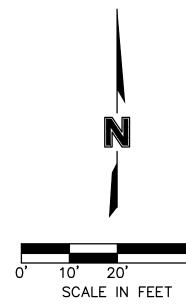
MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.





SEDIMENT	TRAP	88

				SPILLWAY					TOP OF				SEDIMENT	SEDIMENT
	TRIBUTARY	REQUIRED	BERM	HEIGHT	STORAGE	BERM TOP	BOTTOM	RIPRAP	BERM	SPILLWAY	EXCAVATED		CLEANOUT	CLEANOUT
TRAP	AREA	VOLUME	HEIGHT "H"	"H₀"	VOLUME	WIDTH "W"	ELEVATION	ELEVATION	ELEVATION	LENGTH	DEPTH	VOLUME	VOLUME	ELEVATION
	(AC.)	(C.F.)	(FT.)	(FT.)	(C.F.)	(FT.)	(FT.)	(FT.)	(FT.)	(FT.)	(FT.)	(C.F.)	(C.F.)	(FT.)
1A	9.74	17532.00	2.0	1.0	19154.11	2.0	922	926.00	927.00	59	2.0	6376.37	3830.82	922.67
2A	9.80	17640.00	2.0	1.0	19510.07	2.0	906	910.00	911.00	59	2.0	6484.88	3902.01	906.70
3A	4.98	8964.00	2.0	1.0	9958.15	2.0	931	935.00	936.00	30	2.0	3311.05	1991.63	931.70
4A	10.00	18000.00	2.0	1.0	18382.15	2.0	928	932.00	933.00	60	2.0	6118.89	3676.43	928.67
5A	9.67	17406.00	2.0	1.0	18382.15	2.0	929	933.00	934.00	59	2.0	6118.89	3676.43	929.67
6A	8.77	15786.00	2.0	1.0	16797.39	2.0	939	943.00	944.00	53	2.0	5562.39	3359.48	939.67
7A	3.41	6138.00	2.0	1.0	9947.05	2.0	927	931.00	932.00	21	2.0	6215.18	1989.41	927.69
8A	2.55	4590.00	3.0	2.0	19908.54	2.5	931	936.00	937.00	16	2.0	6988.13	3981.71	931.94



		L L
	drawn by: _	GS/OS/J
	checked by:	AR/J
	approved by:	D
	QA/QC by:	JS/N
	project no.:	D21-0464
	drawing no.C_	ERC01A_D210464
	date:	07.14.202
40'	SI	HEET

C341

PHASE A SEDIMENT TRAP DETAILS (CONT'D) GRADING & EROSION AND SEDIMENT CONTROL

AGE AT DISCOVERY PARK ZONE 1 & ARIA NW COLBERN RD & NE DOUGLAS ST

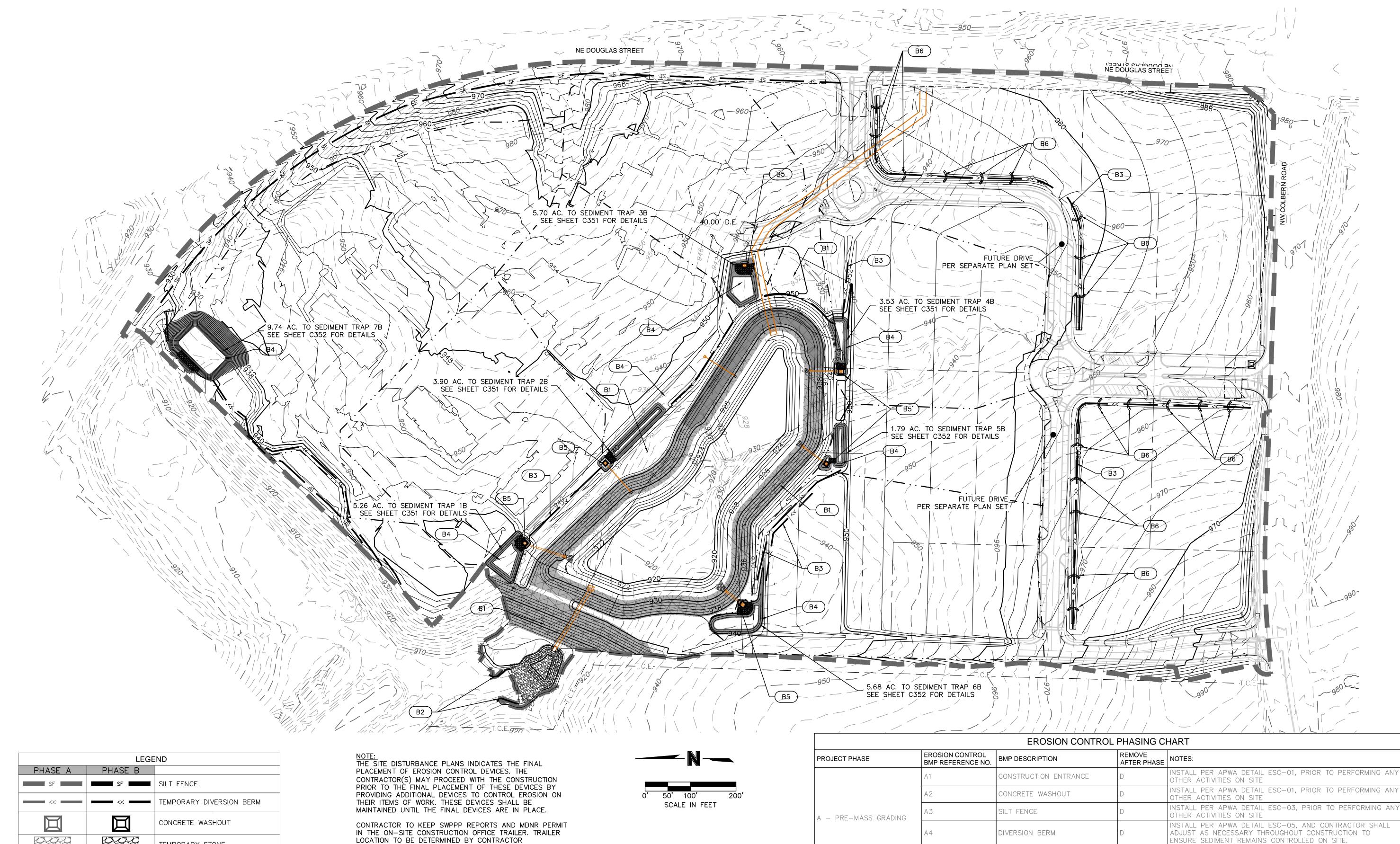
- SPILLWAY LENGTH=42.00 ELEV.=931.00

— BOTTOM -ELEV.≠927.00'/

TOP -ELEV.=932.00'

INSTALL SEDIMENT
CLEANOUT MARKER
N: 1013389.92
E: 2822311.88

SEDIMENT TRAP 7A



TEMPORARY STONE CONSTRUCTION ENTRANCE TURF REINFORCEMENT MAT (FLEXMAT PLUS SPECS) TEMPORARY EROSION CONTROL BLANKET — · · — · · — | — · · · — | DRAINAGE AREA TO BASIN/TRAP LIMITS OF DISTURBANCE

SEDIMENT TRAPS MUST BE FULLY INSTALLED PRIOR TO ANY SITE DISTURBANCE WITHIN THE TRIBUTARY AREA.

SEDIMENT TRAPS ARE SHOWN AS NEEDED PRIOR TO DISTURBING THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL SEDIMENT RUNOFF DURING TRANSITION TO FINAL CONDITIONS AS SHOWN ON SHEET C370.

## **GRADING LEGEND**

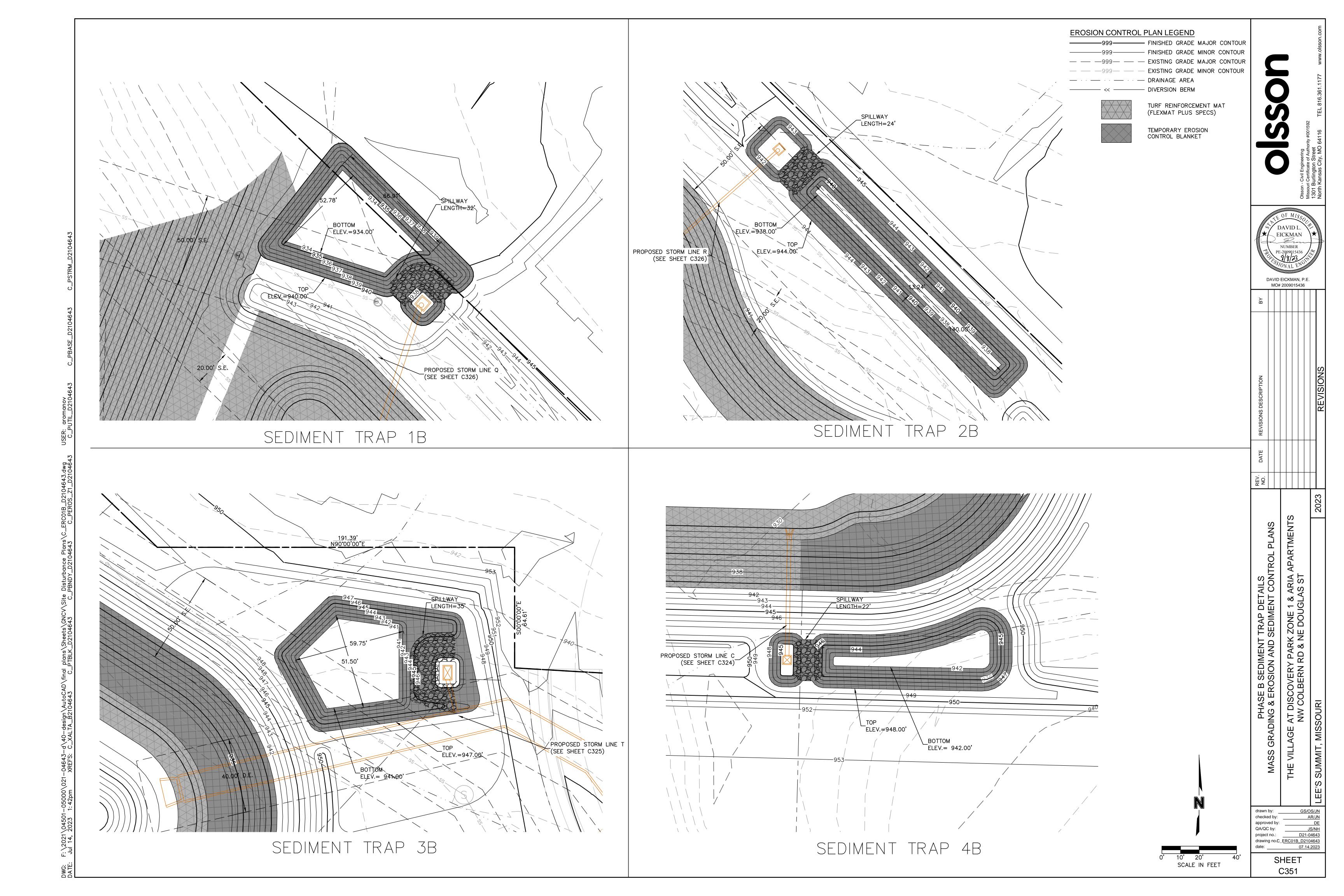
999——	FINISHED	GRADE	MAJOR	CONTOUR
999	FINISHED	GRADE	MINOR	CONTOUR
<i>— — —999</i> — <i>— —</i>	EXISTING	GRADE	MAJOR	CONTOUR
— — —999— — —	EXISTING	GRADE	MINOR	CONTOUR

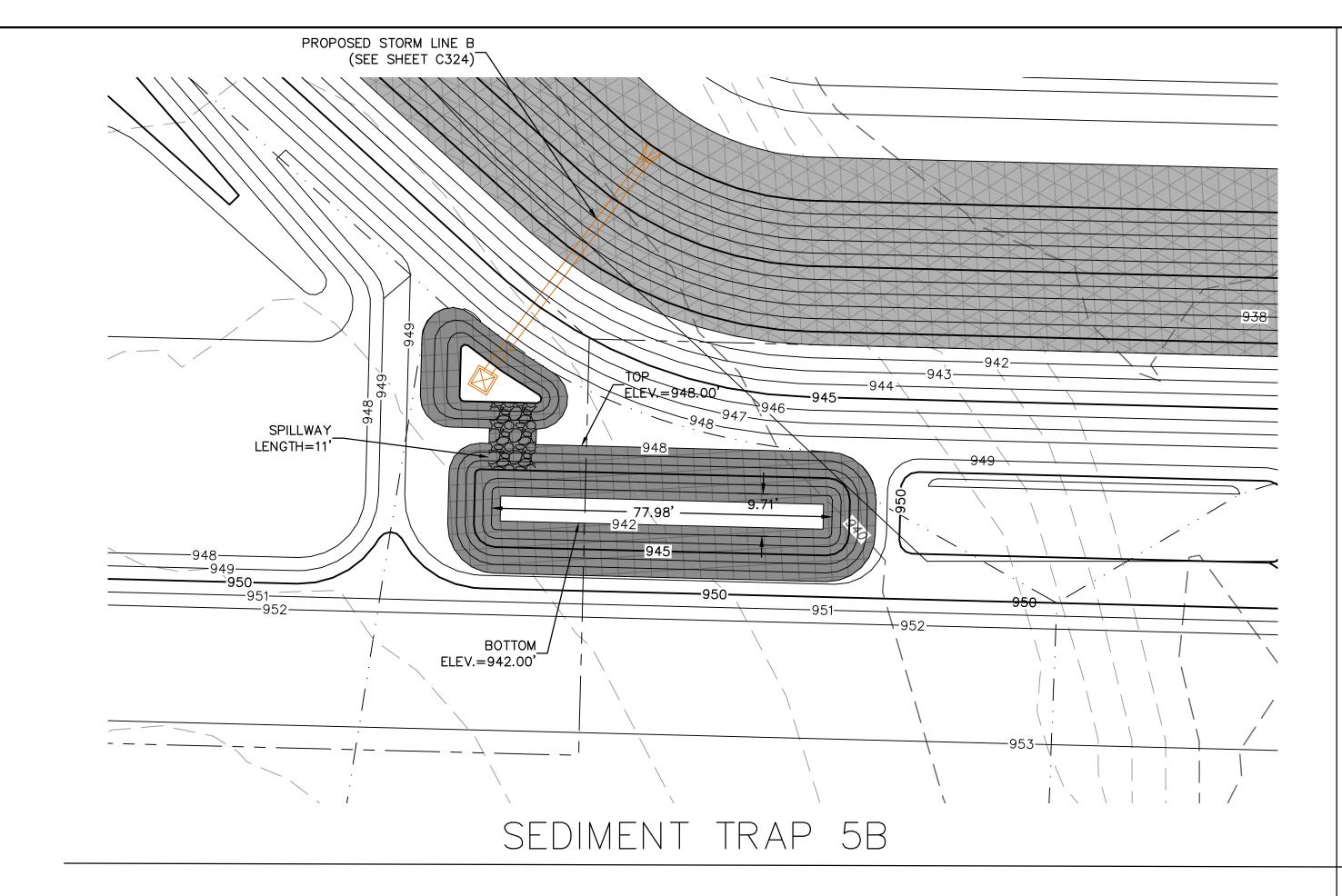
1		<b>EROSION CONTROL</b>	PHASING CI	HART
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
	A1	CONSTRUCTION ENTRANCE	D	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	A2	CONCRETE WASHOUT	D	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
A - PRE-MASS GRADING	А3	SILT FENCE	D	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	A4	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC-05, AND CONTRACTOR SHALL ADJUST AS NECESSARY THROUGHOUT CONSTRUCTION TO ENSURE SEDIMENT REMAINS CONTROLLED ON SITE.
	A5	SEDIMENT TRAP	D	INSTALL PER APWA DETAILS ESC-08
	A6	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC-10
EXCESSIVE SETTLING THAT (	BT TO OVER—EXCAVATE COULD IMPACT BUILDING B1	SEDIMENT TRAPS, FULLY REMOVING FOUNDATIONS.  EROSION CONTROL BLANKET/TRM		INSTALL PER APWA DETAIL ESC-02
	B2	SILT FENCE	D	INSTALL PER APWA DETAIL ESC-03
	В3	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC-05
B - INTERIM (64.66 AC DISTURBED)	B4	SEDIMENT TRAP	D	INSTALL PER APWA DETAIL ESC-08
(UT.UU AU DISTURDED)	B5	AREA INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-07
	B6	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC-10
	B7	SLOPE INTERUPTS	D	INTALL PER APWA DETAIL ESC-09 OR APPROVED EQUAL
	MAINTAIN ALL INSTA	LLED EROSION CONTROL DEVICES		
C — DISTURBED AREA STABILIZATION	C1	ESTABLISH SEEDING AND STABILIZATION OUTSIDE OF SEDIMENT BASIN AND TRAPS		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2406. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.

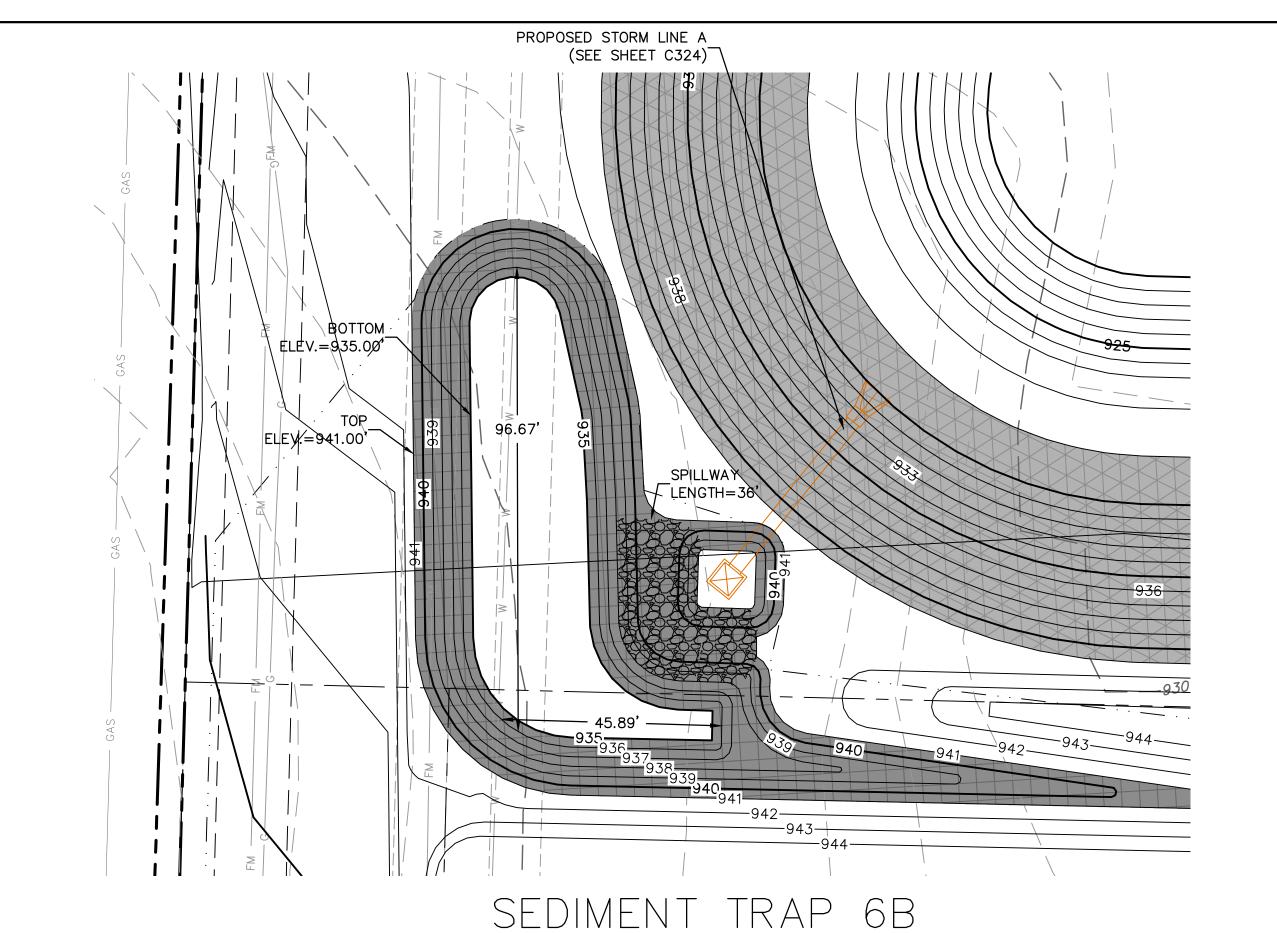
EICKMAN NUMBER DAVID EICKMAN, P.E. MO# 2009015436

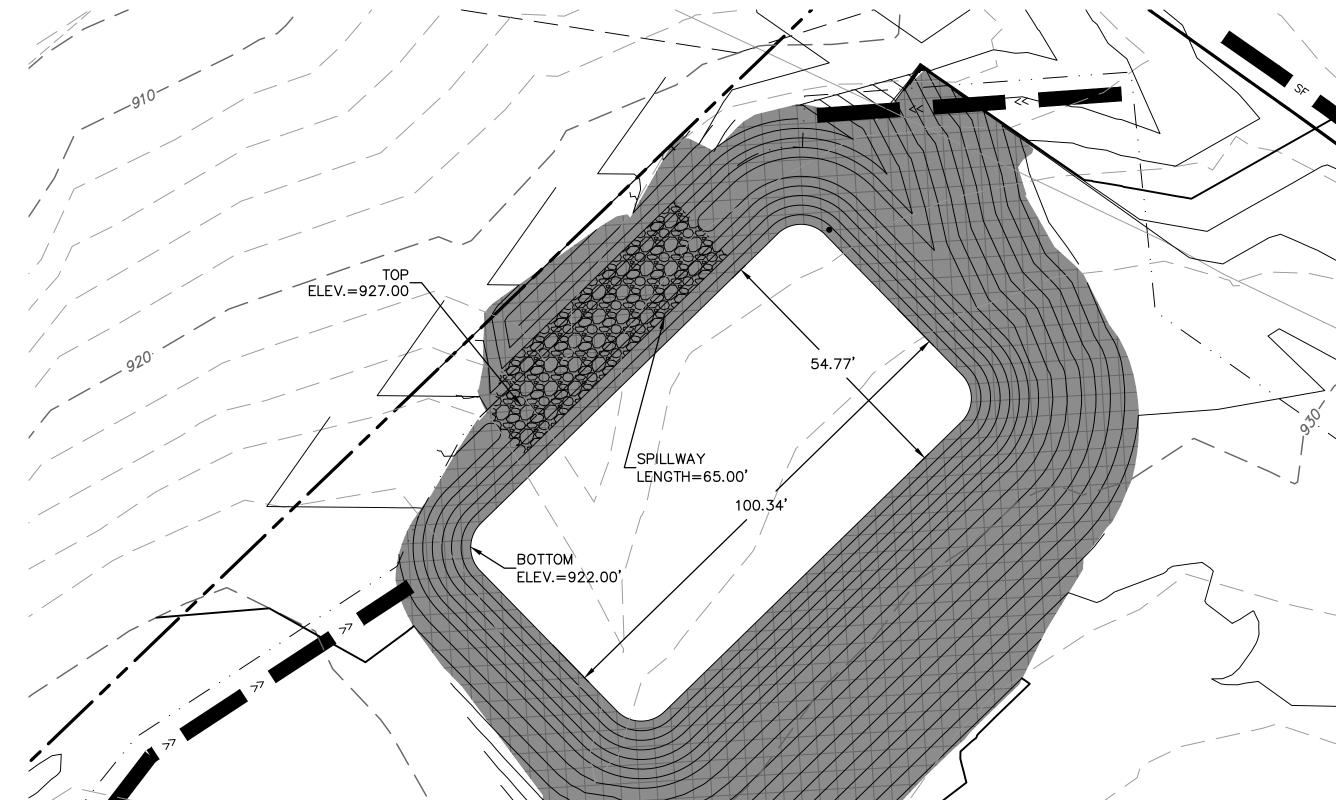
EROSION CONTROL PLAN (PHASE B) GRADING & EROSION AND SEDIMENT CONTROL AT DISCOVERY PARK ZONE 1 & ARIA NW COLBERN RD & NE DOUGLAS ST

drawn by: GS/OS/JN checked by: AR/JN QA/QC by: JS/NH project no.: D21-04643 drawing no.: C\_ERC02\_D2104643 07.14.2023







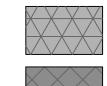


NOTES

1. THE SITE DISTURBANCE PLANS INDICATE THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES O CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

2. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PER THE AMERICAN PUBLIC WORKS ASSOCIATION, KANSAS CITY METRO CHAPTER DIVISION III STANDARD DRAWINGS, EROSION AND SEDIMENT CONTROL, 2016 VERSION.

## EROSION CONTROL PLAN LEGEND

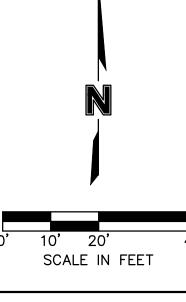


TURF REINFORCEMENT MAT (FLEXMAT PLUS SPECS)

TEMPORARY EROSION CONTROL BLANKET

SEDIMENT	TRAP	7B

TRAP	TRIBUTARY AREA	REQUIRED VOLUME	BERM HEIGHT "H"	SPILLWAY HEIGHT "HO"	STORAGE VOLUME	BERM TOP WIDTH "W"	BOTTOM ELEVATION		TOP OF BERM ELEVATION	SPILLWAY LENGTH	DEPTH	EXCAVATED VOLUME	SEDIMENT CLEANOUT VOLUME	SEDIMENT CLEANOUT ELEVATION
	(AC.)	(C.F.)	(FT.)	(FT.)	(C.F.)	(FT.)	(FT.)	(FT.)	(FT.)	(FT.)	(FT.)	(C.F.)	(C.F.)	(FT.)
1B	5.26	9468.00	3.0	2.0	11330.23	2.5	934	939.00	940.00	32	2.0	2552.39	2266.05	935.07
2B	3.90	7020.00	3.0	2.0	7671.54	2.5	938	943.00	944.00	24	2.0	1586.32	1534.31	939.55
3B	5.70	10260.00	3.0	2.0	11310.59	2.5	941	946.00	947.00	35	2.0	2524.23	2262.12	942.05
4B	3.53	6354.00	3.0	2.0	5023.13	2.5	943	948.00	949.00	22	2.0	1061.98	1004.63	944.37
5B	1.79	3222.00	3.0	2.0	4531.10	2.5	942	947.00	948.00	11	2.0	931.18	906.22	943.56
6B	5.86	10548.00	3.0	2.0	13902.40	2.5	935	940.00	941.00	36	2.0	3122.75	2780.48	936.08
7B	9.74	17532.00	3.0	2.0	25790.63	2.5	936	941.00	942.00	59	2.0	3742.39	5158.13	936.83



n - Civil Engineering
uni Certificate of Authority #001592
Burlington Street

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ВҮ										
REVISIONS DESCRIPTION									REVISIONS	
DATE										
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SHEET

C352



	LEGE	END
PHASE A, & B	PHASE C	
SF SF		SILT FENCE
		TEMPORARY DIVERSION BERM
		CONCRETE WASHOUT
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		DRAINAGE AREA TO BASIN/TRAP
		LIMITS OF DISTURBANCE
	* * * * * * * * * * * * * * * * * * *	SEEDING AND STABILIZATION

# **GRADING LEGEND**

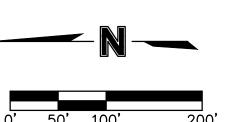
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999	FINISHED	GRADE	MINOR	CONTOUR
— — —999— — —	EXISTING	GRADE	MAJOR	CONTOUR
— — —999— — —	EXISTING	GRADE	MINOR	CONTOUR

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 KEEP SWPPP REPORTS AND MDNR PERMIT IN THE ON-SITE CONSTRUCTION OFFICE TRAILER. TRAILER LOCATION TO BE DETERMINED BY CONTRACTOR

SEDIMENT TRAPS MUST BE FULLY INSTALLED PRIOR TO ANY SITE DISTURBANCE WITHIN THE TRIBUTARY AREA.

SEDIMENT TRAPS ARE SHOWN AS NEEDED PRIOR TO DISTURBING THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL SEDIMENT RUNOFF DURING TRANSITION TO FINAL CONDITIONS AS SHOWN ON THIS SHEET.



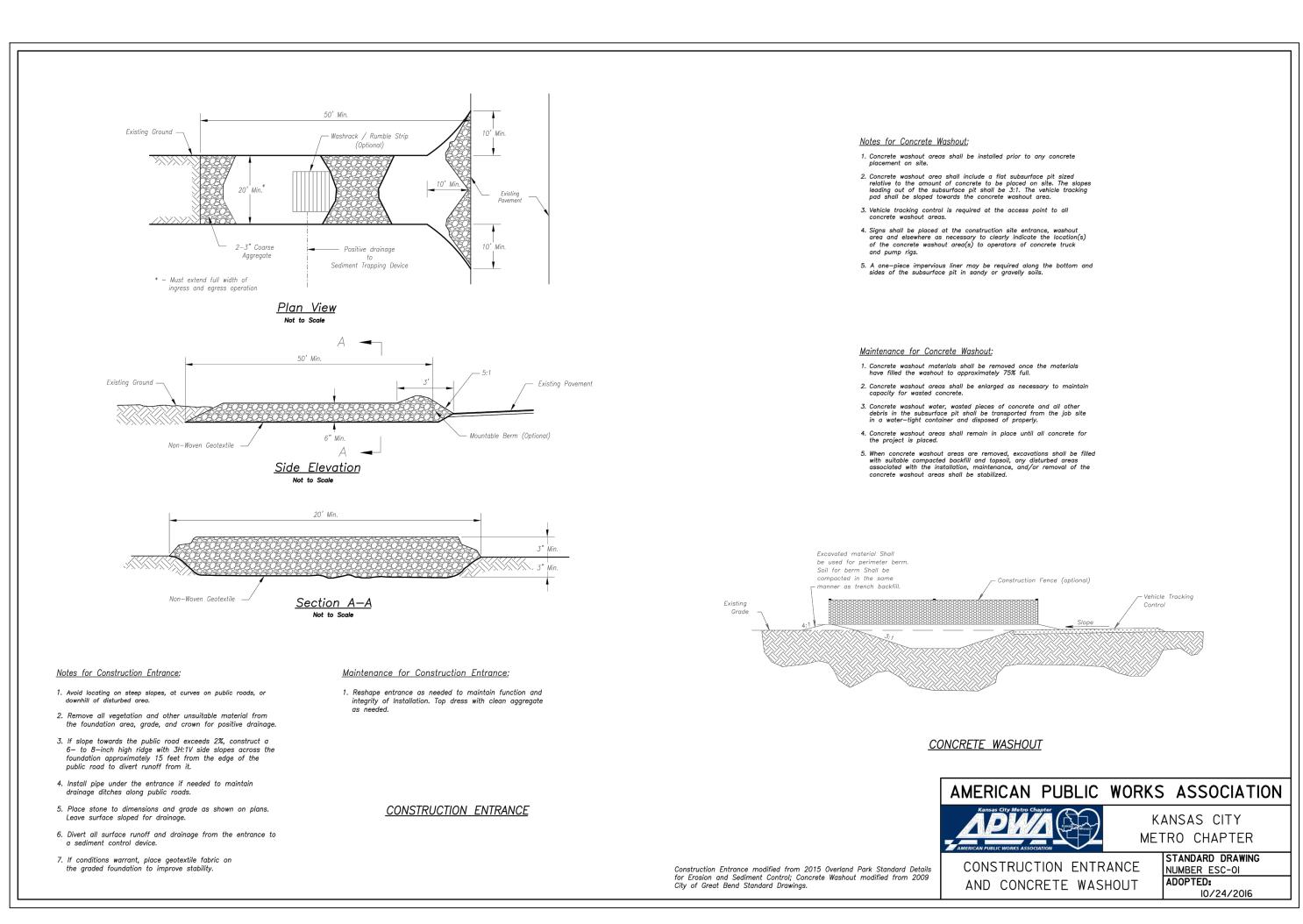
SCALE IN FEET

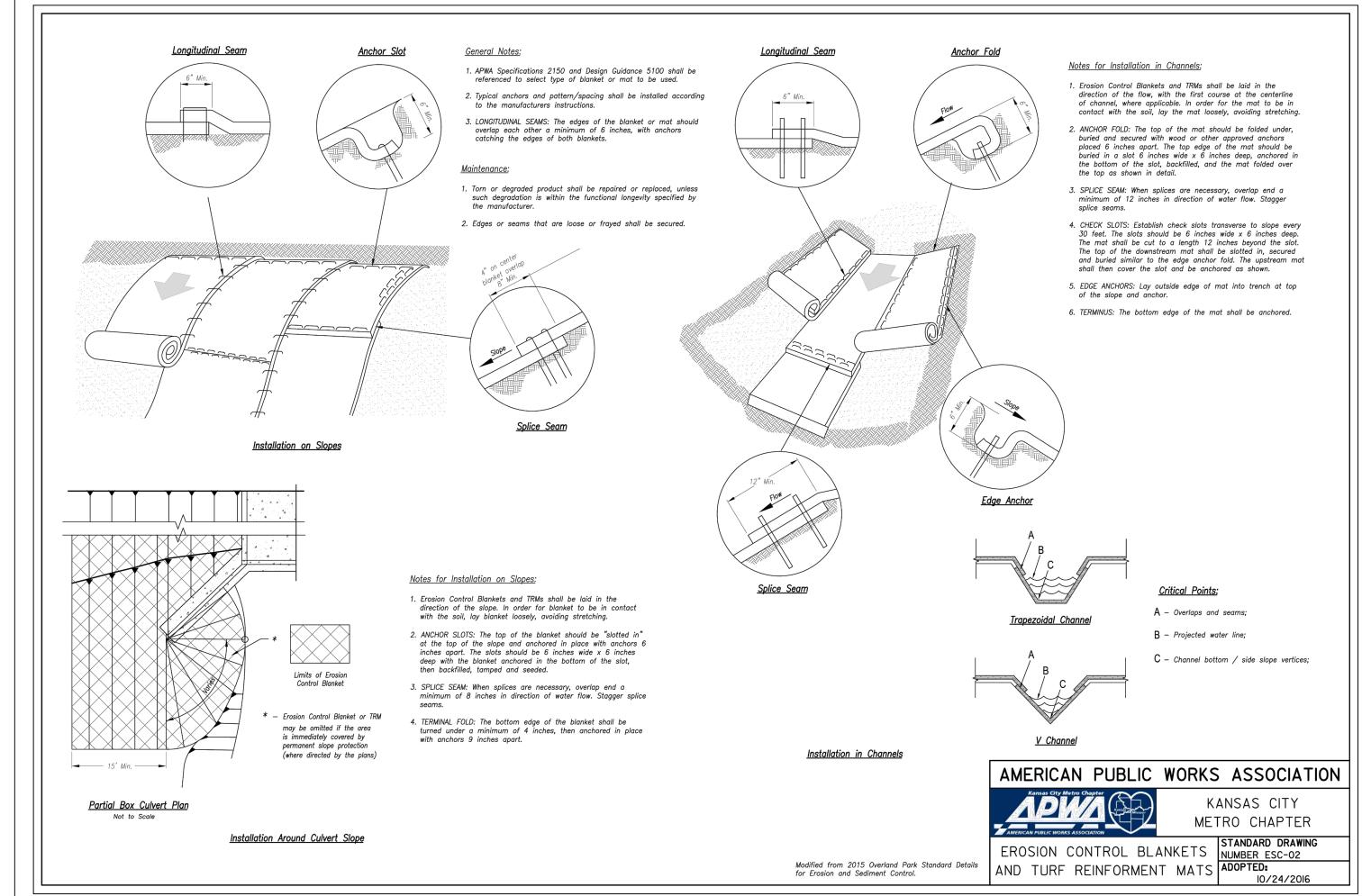
		<b>EROSION CONTROL</b>	PHASING CI	HART
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
	A1	CONSTRUCTION ENTRANCE	D	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING AN OTHER ACTIVITIES ON SITE
	A2	CONCRETE WASHOUT	D	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING AN OTHER ACTIVITIES ON SITE
A - PRE-MASS GRADING	А3	SILT FENCE	D	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING AN OTHER ACTIVITIES ON SITE
., ., ., .	A4	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC-05, AND CONTRACTOR SHALL ADJUST AS NECESSARY THROUGHOUT CONSTRUCTION TO ENSURE SEDIMENT REMAINS CONTROLLED ON SITE.
	A5	SEDIMENT TRAP	D	INSTALL PER APWA DETAIL ESC-08
	A6	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC-10
UPON REMOVAL CONTRACTOR			G ALL SILT, A	ND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR
	B1	EROSION CONTROL BLANKET/TRM	D	INSTALL PER APWA DETAIL ESC-02
	B2	SILT FENCE	D	INSTALL PER APWA DETAIL ESC-03
	В3	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC-05
B - INTERIM	B4	SEDIMENT TRAP	D	INSTALL PER APWA DETAIL ESC-08
B - INTERIM	B5	AREA INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-07
	B6	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC-10
	B7	SLOPE INTERUPTS	D	INTALL PER APWA DETAIL ESC-09 OR APPROVED EQUAL
	MAINTAIN ALL INSTA	LLED EROSION CONTROL DEVICES		
C — DISTURBED AREA STABILIZATION	C1	ESTABLISH SEEDING AND STABILIZATION OUTSIDE OF SEDIMENT BASIN AND TRAPS		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2406. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.

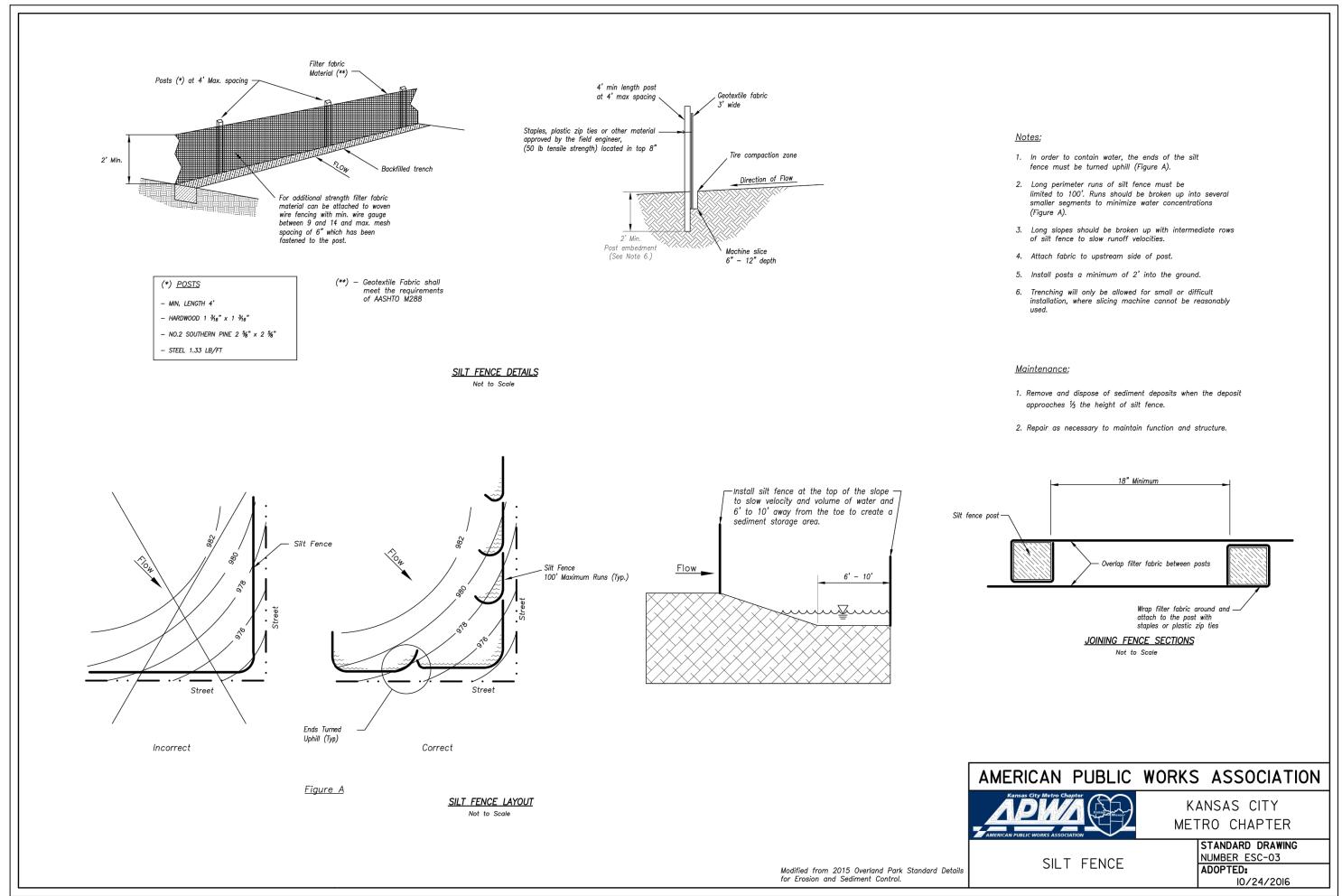
DAVID EICKMAN, P.E. MO# 2009015436								
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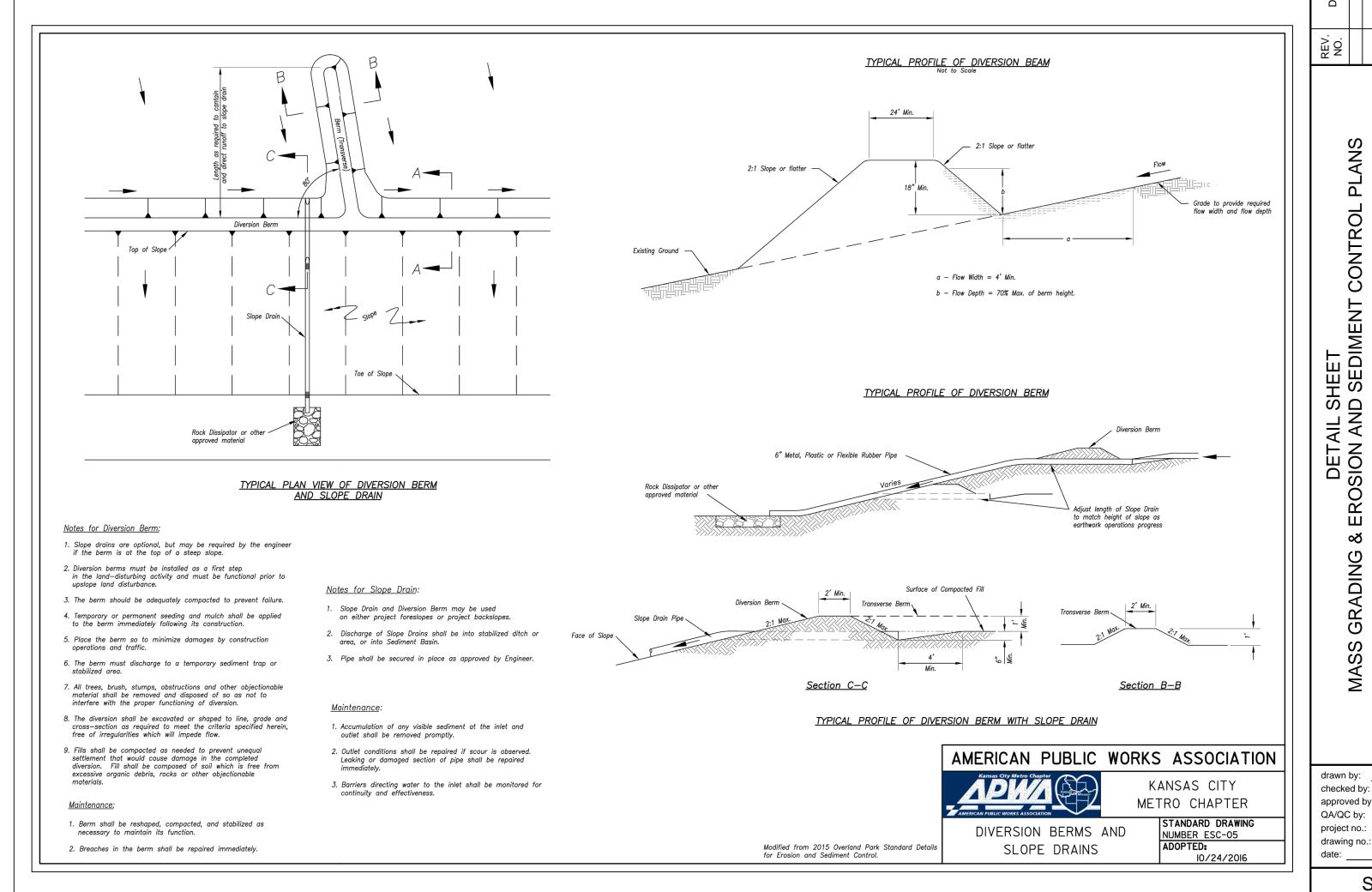
	EROSION CONTROL PLAN (PHASE C) MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS
0.515	THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS NW COLBERN RD & NE DOUGLAS ST
	LEE'S SUMMIT, MISSOURI

drawn by: checked by: QA/QC by: JS/NH project no.: D21-04643 drawing no.C\_ERC01C\_D2104643 date: 07.14.2023









Sson - Civil Engineering

DAVID L.
EICKMAN

NUMBER
PE-2009015436

DAVID EICKMAN, P.E.
MO# 2009015436

DAVID EICKMAN, P.E. MO# 2009015436

REVISIONS DESCRIPTION

BY

STONAL ENGINEERS

DAVID EICKMAN, P.E. MO# 2009015436

ENT CONTROL PLANS

1 & ARIA APARTMENTS

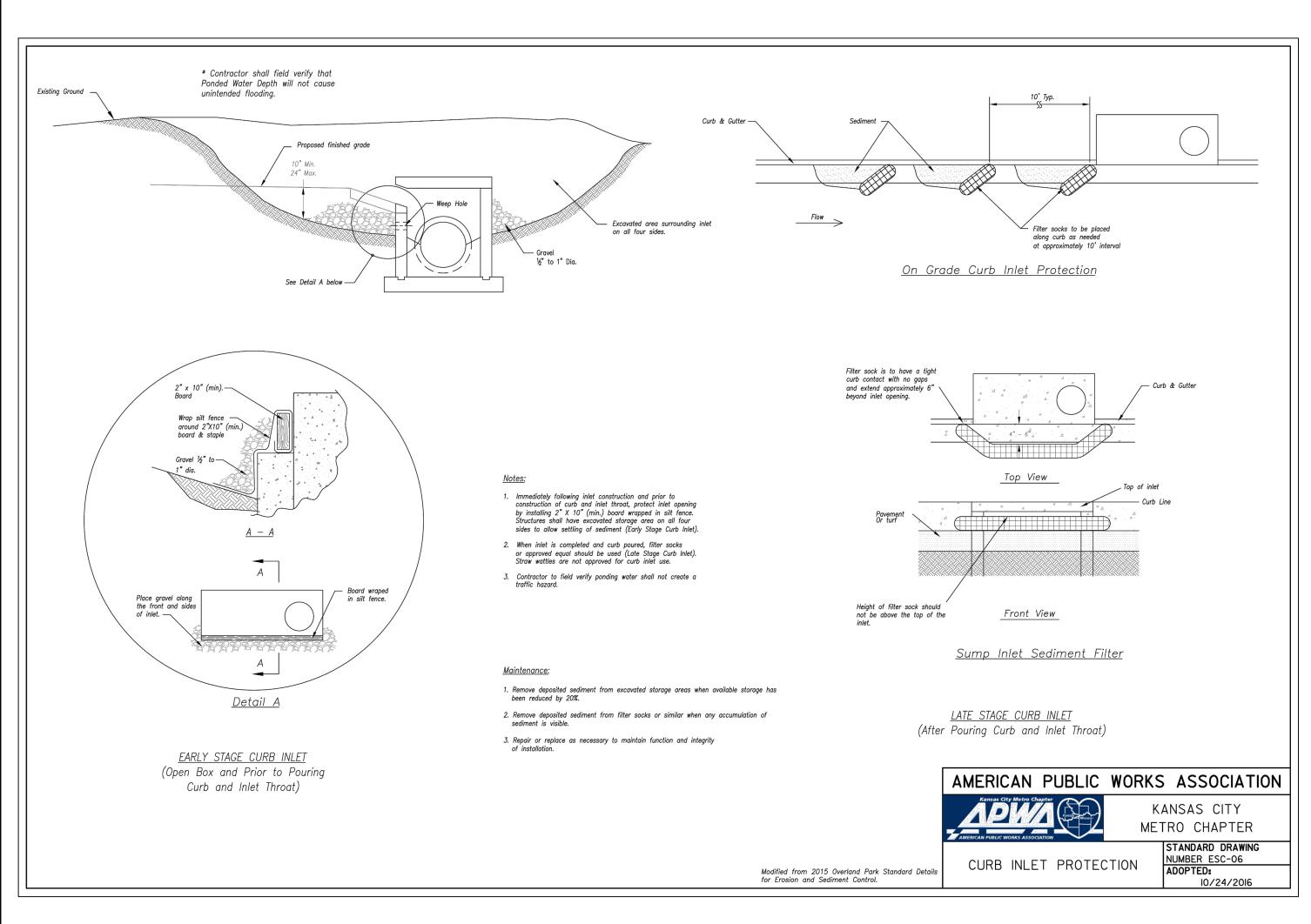
GLAS ST

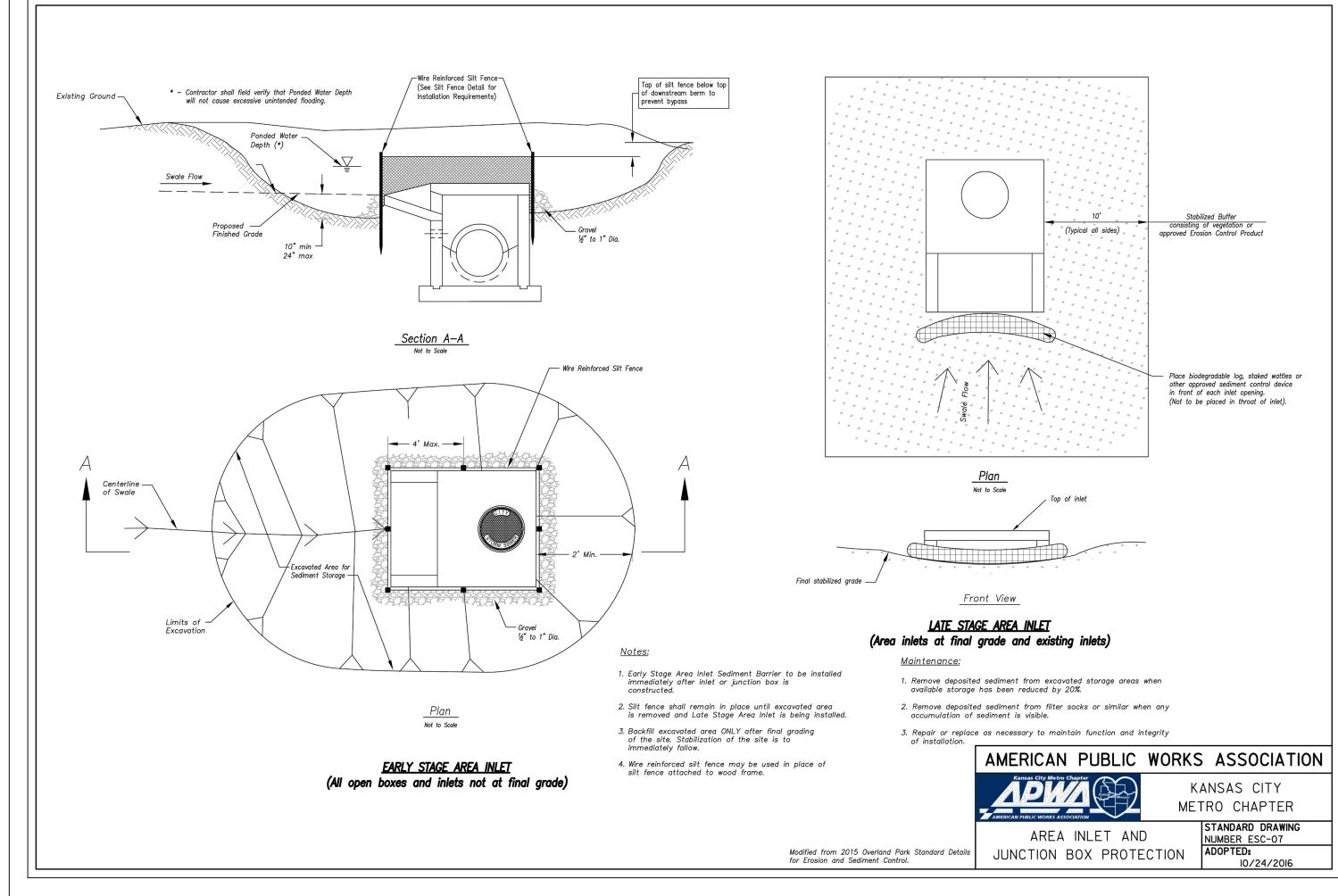
DETAIL SHEET
EROSION AND SEDIMENT CONTRO
SCOVERY PARK ZONE 1 & ARIA AP,
OLBERN RD & NE DOUGLAS ST

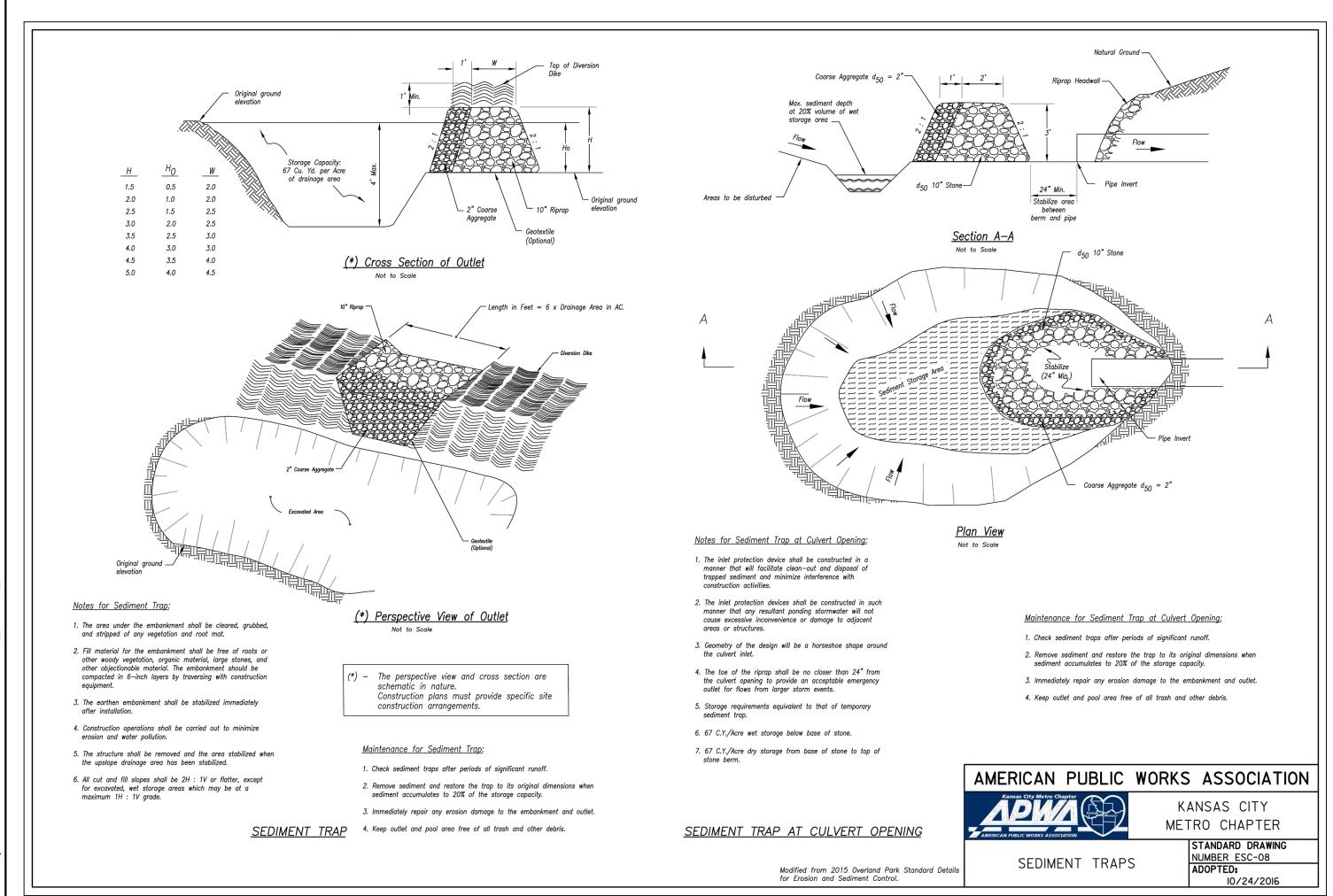
MASS GRADING & EROSION AND THE VILLAGE AT DISCOVERY PAR NW COLBERN RD &

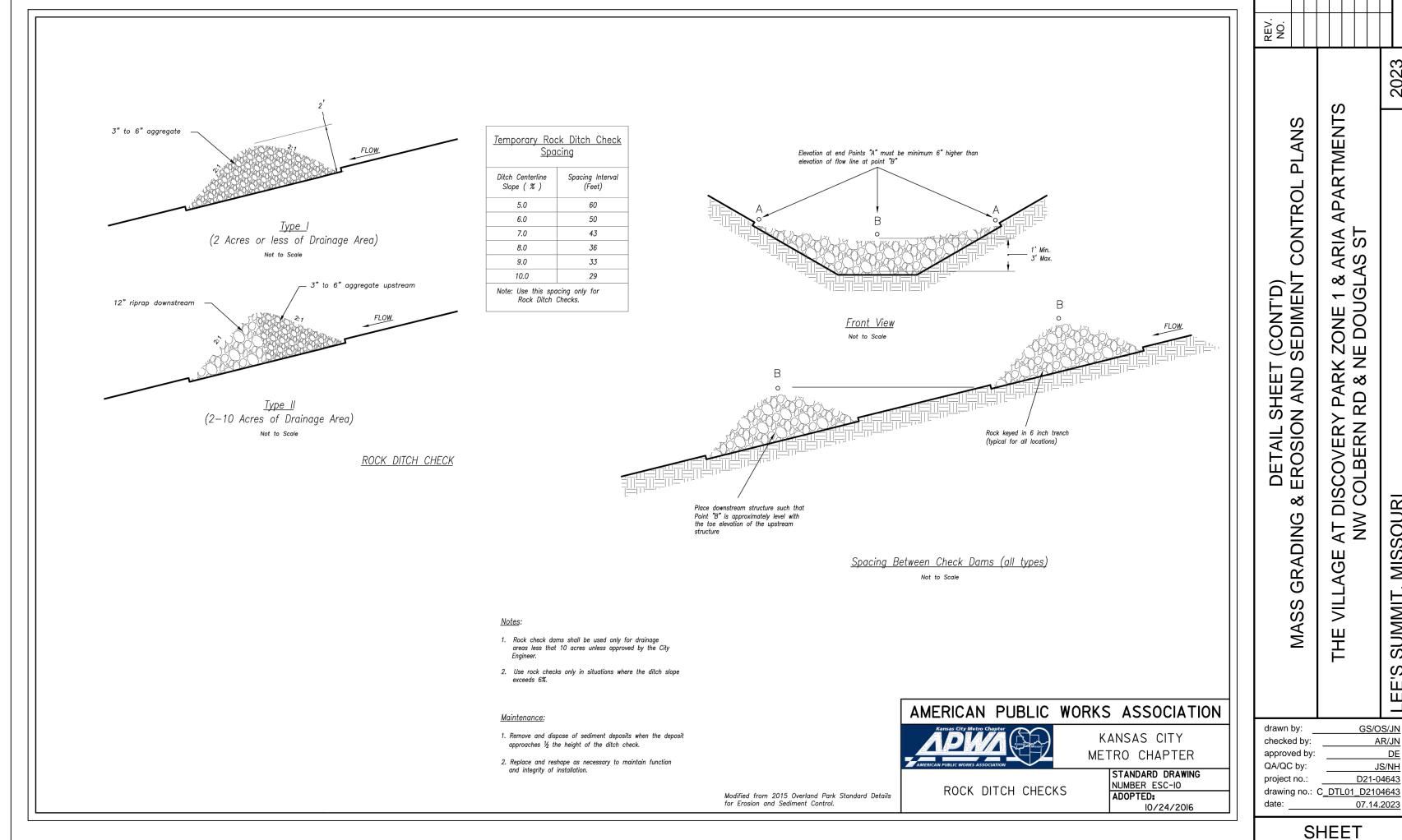
drawn by: GS/OS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
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NW COLBERN RD & NE DOUGLAS ST		
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LEE'S SUMMIT, MISSOURI	2023	

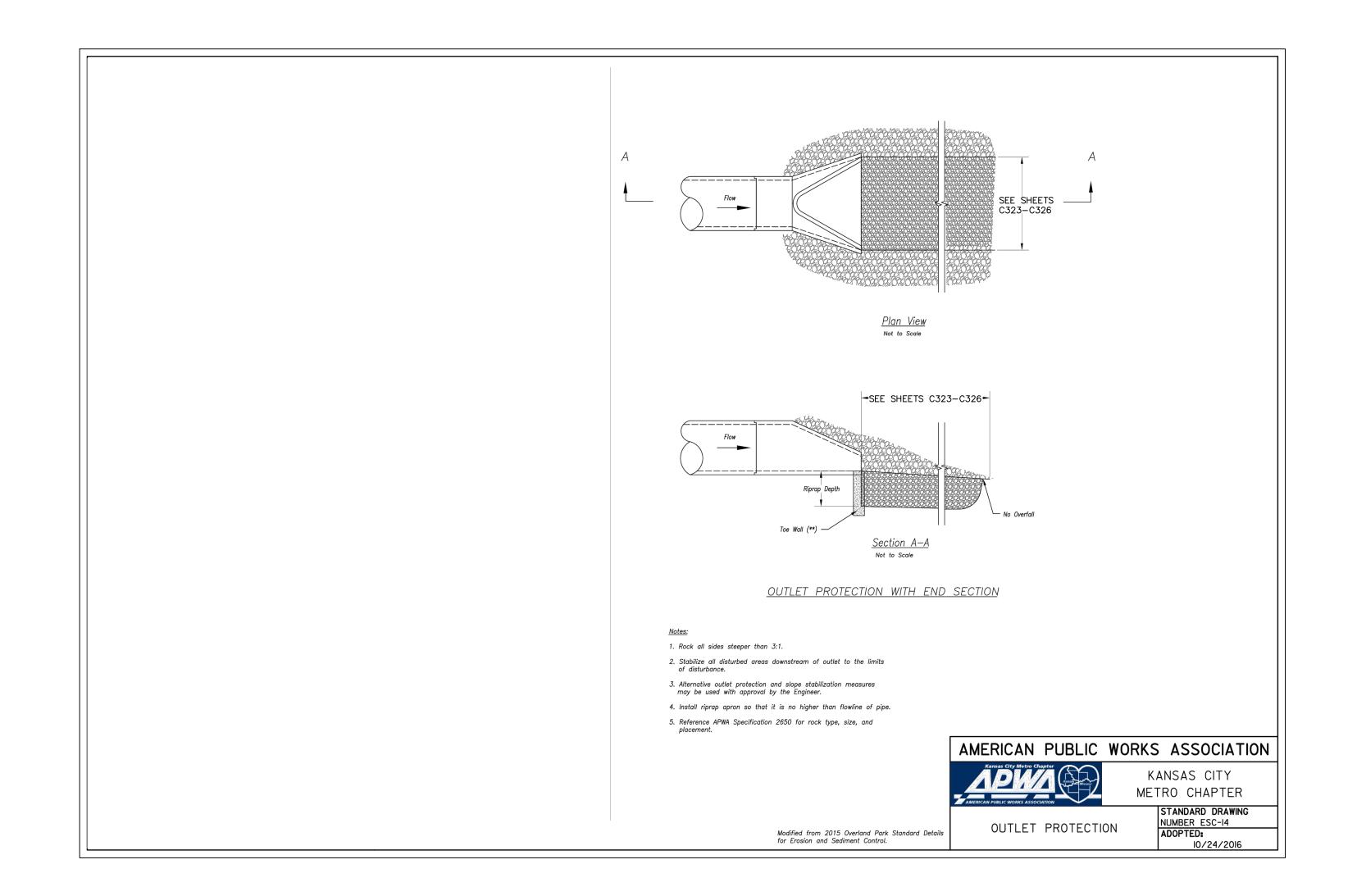
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	DING & EROSION AND SEDIMENT CONTROL PLANS

GS/OS/JN AR/JN

QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C\_DTL01\_D2104643
date: 07.14.2023

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drawn by: checked by: approved by:

QA/QC by: