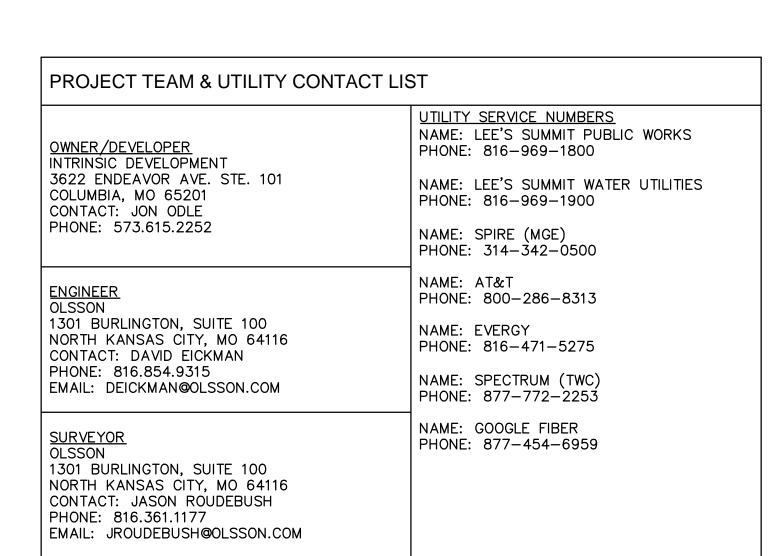
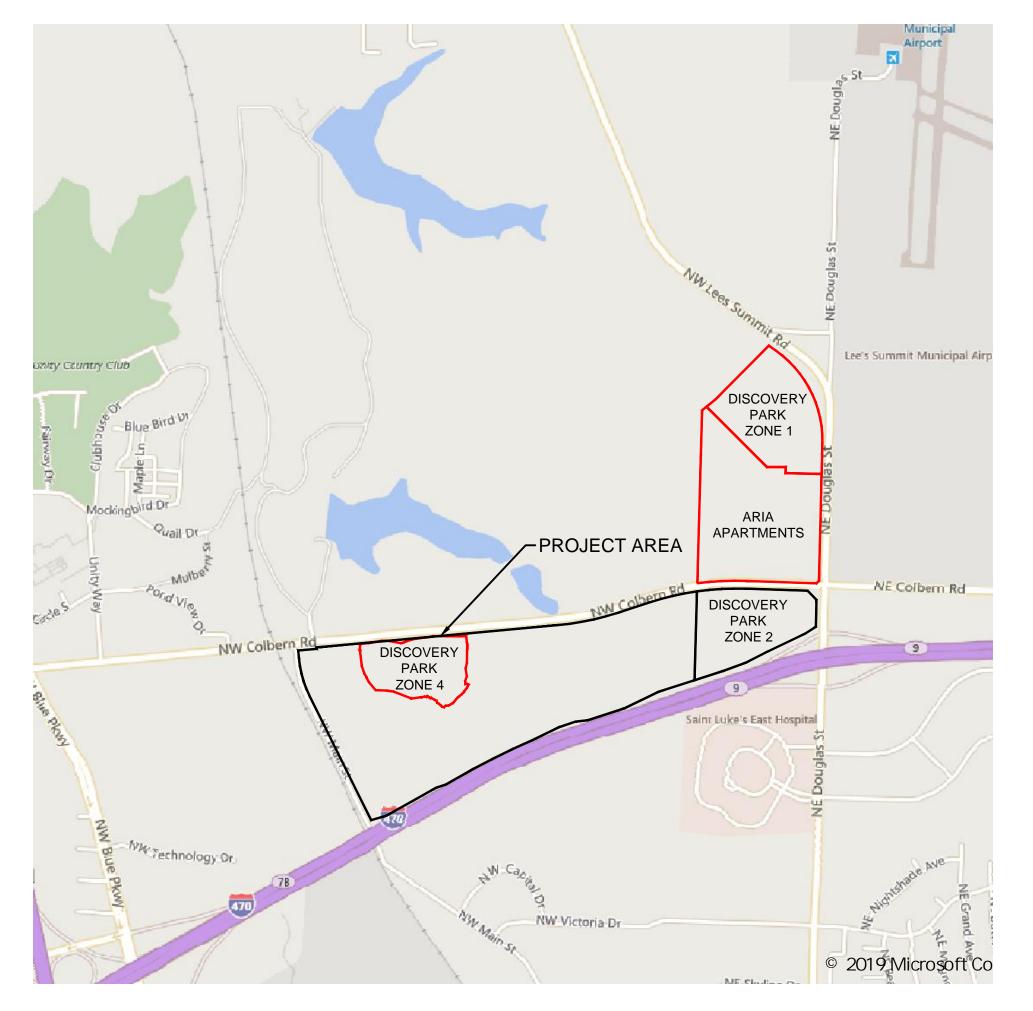
THE VILLAGE AT DISCOVERY PARK ZONE 4 MASS GRADING PLANS

SECTION 25, TOWNSHIP 48N, RANGE 32W SECTION 30, TOWNSHIP 48N, RANGE 31W IN LEE'S SUMMIT, JACKSON COUNTY, MO **ZONE 4 DISTURBED AREA=14.53 ACRES**





PROPERTY DESCRIPTION

DISCOVERY PARK ZONE 3 & 4:

A TRACT OF LAND IN THE SOUTHEAST QUARTER OF SECTION 25 AND THE NORTHEAST QUARTER OF SECTION 36, ALL IN TOWNSHIP 48 NORTH, RANGE 32 WEST OF THE 5TH PRINCIPAL MERIDIAN AND THE SOUTHWEST QUARTER OF SECTION 30 TOWNSHIP 48 NORTH AND RANGE 31 WEST OF THE 5TH PRINCIPAL MERIDIAN IN THE CITY OF UNITY VILLAGE AND THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI BEING BOUNDED AND DESCRIBED BY OR UNDER THE DIRECT SUPERVISION OF JASON S ROUDEBUSH, P.L.S. 2002014092 AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 30; THENCE NORTH 01°36'54" EAST ON THE EAST LINE OF SAID SOUTHWEST QUARTER, SAID LINE ALSO BEING THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 30, 1,633.15 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY NO. 470 AS ESTABLISHED BY THE REPORT OF COMMISSIONERS, CASE 741042, RECORDED AS DOCUMENT NO. 197110086010, IN BOOK 1258 AT PAGE 1207, SAID POINT ALSO BEING THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED: THENCE SOUTH 72°07'30" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE, 388.59 FEET; THENCE SOUTH 64°17'45" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE, 403.76 FEET; THENCE SOUTH 72°07'30" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE, 400.00 FEET; THENCE SOUTH 83°46'34" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE, 123.79 FEET; THENCE WESTERLY ON SAID NORTHERLY RIGHT-OF-WAY LINE, ON A CURVE TO THE LEFT HAVING AN INITIAL TANGENT BEARING OF SOUTH 72°07'29" WEST WITH A RADIUS OF 5,879.58 FEET, A CENTRAL ANGLE OF 01°47'15" AND AN ARC DISTANCE OF 183.44 FEET; THENCE SOUTH 64°11'08" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE, 308.18 FEET; THENCE SOUTHWESTERLY ON SAID NORTHERLY RIGHT-OF-WAY LINE, ON A CURVE TO THE LEFT HAVING AN INITIAL TANGENT BEARING OF SOUTH 67°20'14" WEST WITH A RADIUS OF 5,854.58 FEET, A CENTRAL ANGLE OF 06°45'11" AND AN ARC DISTANCE OF 690.04 FEET; THENCE SOUTH 60°35'03" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE, 324.69 FEET; THENCE SOUTH 71°53'38" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE, 101.98 FEET; THENCE SOUTH 60°35'03" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE, 600.00 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY NO. 470 AS ESTABLISHED BY DOCUMENT NO. 197010073237, IN BOOK 1220 AT PAGE 1331, THENCE SOUTH 73°58'35" WEST, ON SAID NORTHERLY RIGHT-OF-WAY LINE 164.60 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF NW MAIN STREET ALSO KNOWN AS OLD LEE'S SUMMIT ROAD AS NOW ESTABLISHED; THENCE NORTH 26°17'46" WEST, ON SAID EASTERLY RIGHT-OF-WAY LINE, 1,447.40 FEET; THENCE NORTHERLY, ON SAID EASTERLY RIGHT-OF-WAY LINE, ON A CURVE TO THE RIGHT BEING TANGENT TO THE LAST DESCRIBED COURSE WITH A RADIUS OF 1,116.30 FEET, A CENTRAL ANGLE OF 21°01'41" AND AN ARC DISTANCE OF 409.69 FEET: THENCE NORTH 05°16'05" WEST, ON SAID EASTERLY RIGHT-OF-WAY LINE, 77.50 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF NW COLBERN ROAD AS NOW ESTABLISHED; THENCE NORTH 84°43'55" EAST, ON SAID SOUTHERLY RIGHT-OF-WAY LINE, 193.00 FEET; THENCE NORTH 05°16'05" WEST, ON SAID SOUTHERLY RIGHT-OF-WAY LINE, 15.00 FEET; THENCE NORTH 84°43'55" EAST, ON SAID SOUTHERLY RIGHT-OF-WAY LINE, 2,519.90 FEET; THENCE EASTERLY, ON SAID SOUTHERLY RIGHT-OF-WAY LINE, ON A CURVE TO THE LEFT BEING TANGENT TO THE LAST DESCRIBED COURSE WITH A RADIUS OF 2,904.93 FEET, A CENTRAL ANGLE OF 12°44'58" AND AN ARC DISTANCE OF 646.40 FEET; THENCE NORTH 71°58'57" EAST, ON SAID SOUTHERLY RIGHT-OF-WAY LINE, 349.26 FEET: THENCE EASTERLY, ON SAID SOUTHERLY RIGHT-OF-WAY LINE, ON A CURVE TO THE RIGHT BEING TANGENT TO THE LAST DESCRIBED COURSE WITH A RADIUS OF 2,924.93 FEET, A CENTRAL ANGLE OF 09°51'58" AND AN ARC DISTANCE OF 503.66 FEET TO A POINT ON THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 30, SAID POINT ALSO BEING ON THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 30; THENCE SOUTH 01°36'54" WEST, ON THE EAST LINE OF SAID SOUTHWEST QUARTER AND ON THE WEST LINE OF SAID SOUTHEAST QUARTER, 925.47 FEET TO THE POINT OF BEGINNING. CONTAINING 5,064,487 SQUARE FEET OR 116.264 ACRES, MORE OR LESS.

SHEET N	IO. SHEET TITLE
C200	TITLE SHEET
C201	GENERAL NOTES
C202	EXISTING CONDITIONS
C210	GRADING PLAN
C220	EROSION CONTROL PLAN (PHASE A)
C221	EROSION CONTROL PLAN (PHASE B)
C222	PHASE B SEDIMENT TRAP DETAILS
C223	EROSION CONTROL PLAN (PHASE C)
C230	DETAIL SHEET

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.



ŒR, RD

checked by: QA/QC by: project no.: D21-04643 drawing no.: C_TTL04_D2104643

SHEET

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- 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
 - APPLY;
 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.
- 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: _X_PRESERVATION OF EXISTING VEGETATION
- _X_SEDIMENT BARRIERS
- <u>X</u>_SEDIMENT TRAPS
 <u>INLET PROTECTION</u>
- ___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				
	SITE DISTURBANCE						
1	DIVERSION BERM	L.F.	418.04				
2	SILT FENCE	L.F.	2553.74				
3	SEDIMENT TRAPS	QTY.	2				
4	TREE CLEARING	AC.	0.89				

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.

O Civil Engineering

DAVID L.
EICKMAN

NUMBER
PE-2009015436

PAVID EICKMAN, P.E.
MO# 2009015436

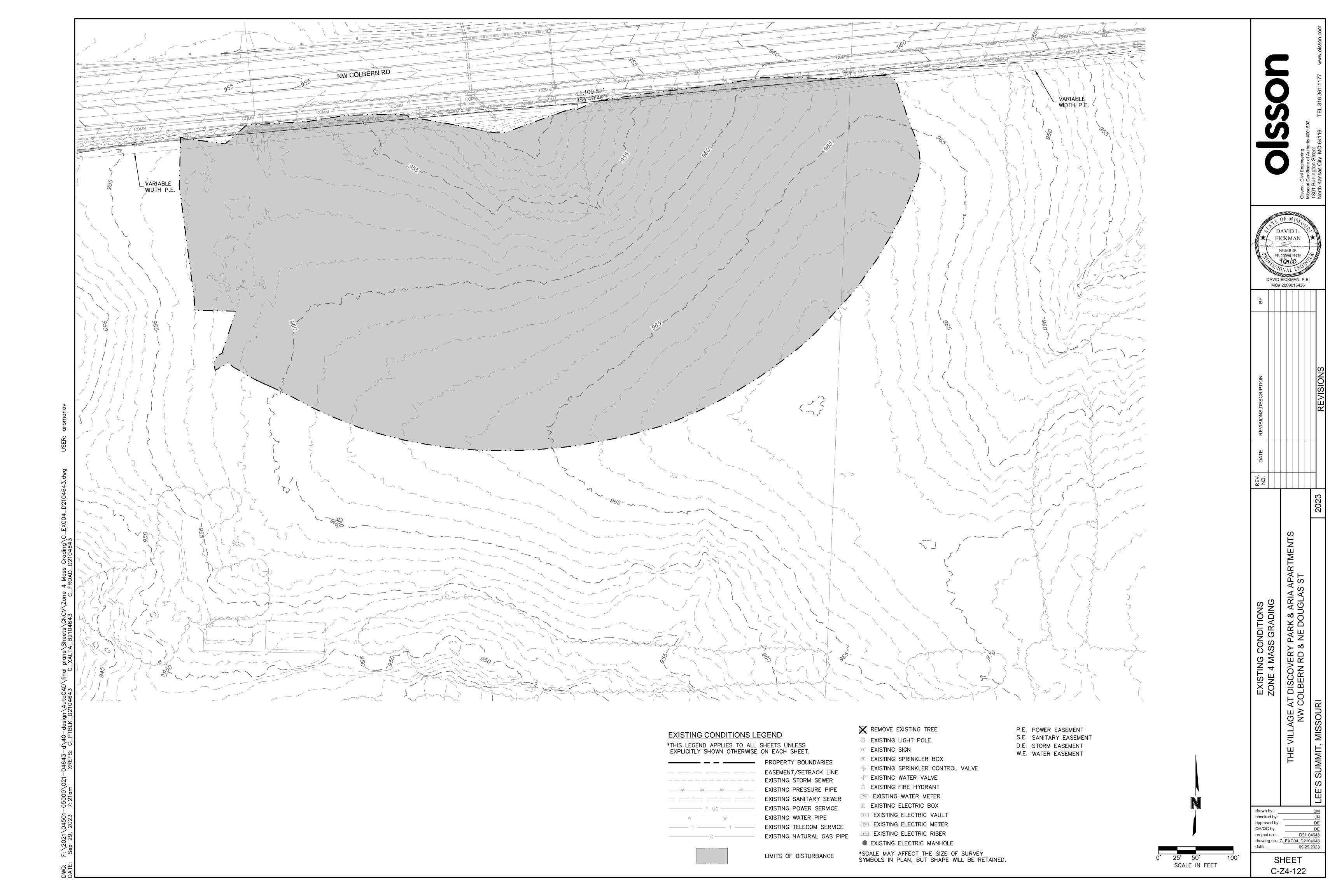
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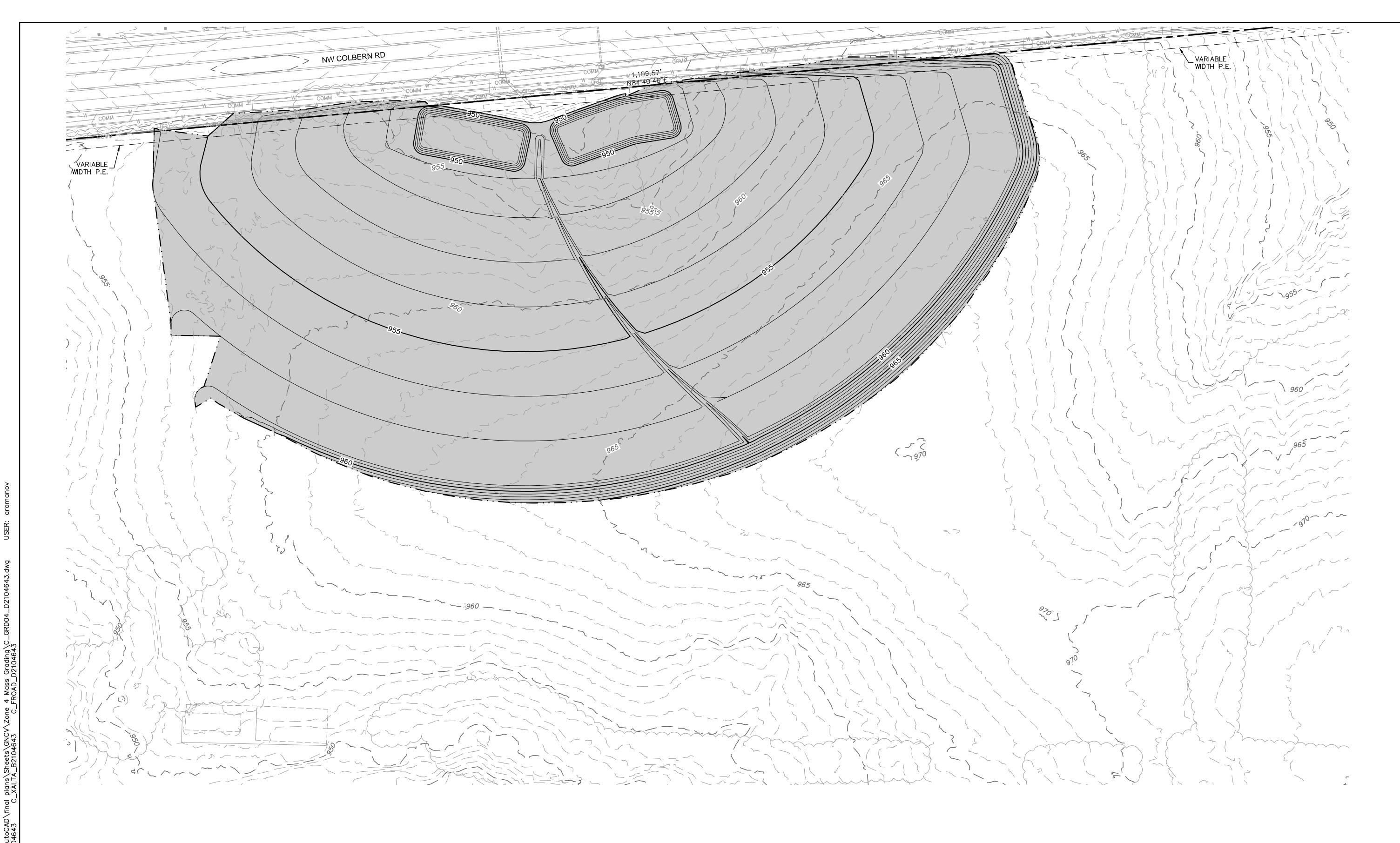
GENERAL NOTES
ZONE 4 MASS GRADING
VILLAGE AT DISCOVERY PARK & ARIA APAF
NW COLBERN RD & NE DOUGLAS ST

drawn by: BM
checked by: JN
approved by: DE
QA/QC by: DE
project no.: D21-04643
drawing no.: C_TTL04_D2104643

SHEET C-Z4-121

09.29.2023





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. 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.

	E	ARTHWORK QUANTITIE	S
ſ	LOCATION	CUT (C.Y.)	FILL (C.Y.)
Γ	ZONE 2	78,387	32

GRADING LEGEND

999	_	FINISHED	GRADE	MAJOR	CONTOU
999		FINISHED	GRADE	MINOR	CONTOUR
— — —999— —	—	EXISTING	GRADE	MAJOR	CONTOU
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LIMITS OF DISTURBANCE

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.

3. ELEVATIONS SHOWN ARE TO TOP OF PAVEMENT OR FINISHED GRADE. VOLUMES SHOWN DO NOT REFLECT PAVEMENT DEPTHS, SPOILS, TRENCH FILL, OR ANY OTHER ADJUSTMENTS.

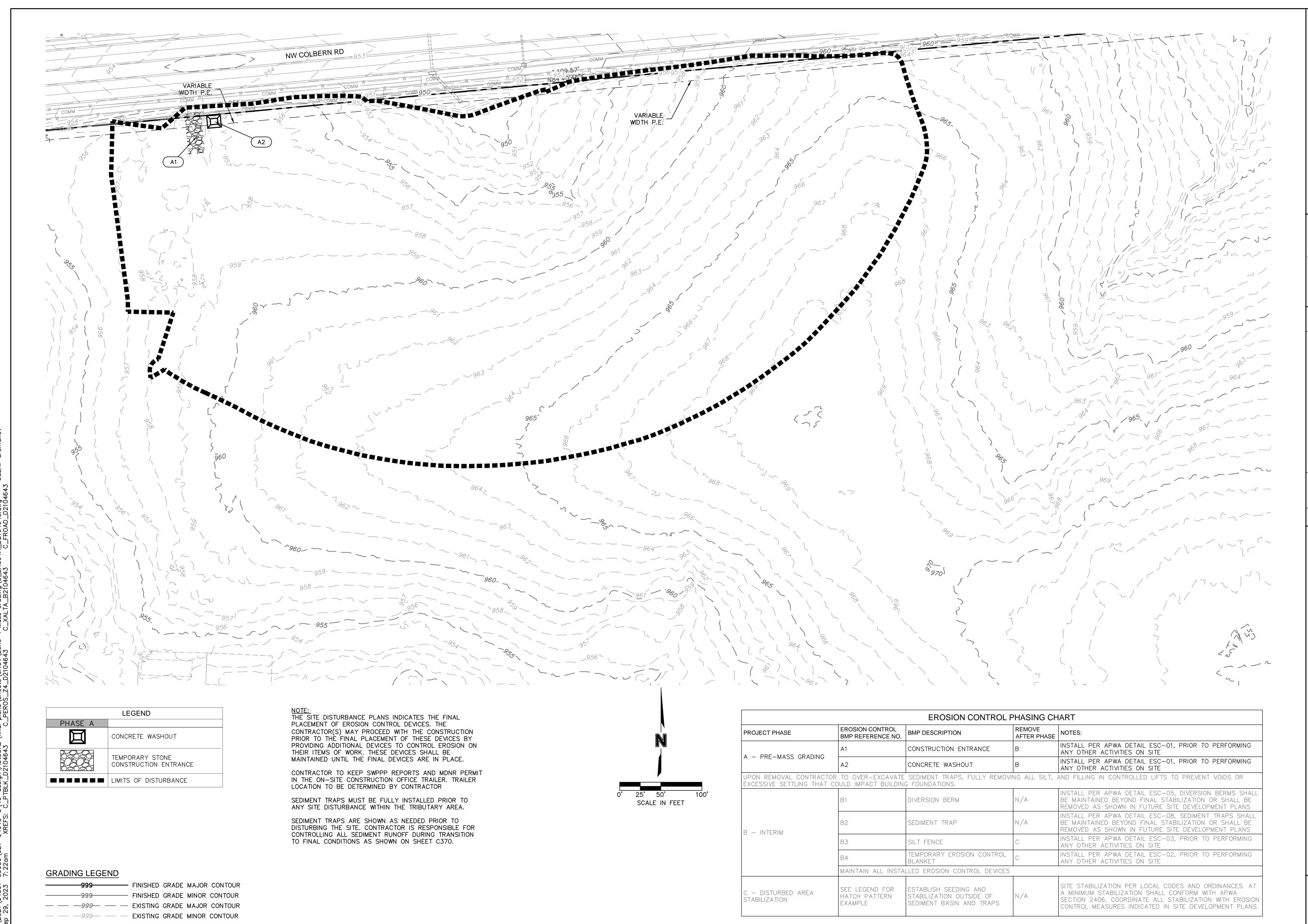
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GRADING PLAN ZONE 4 MASS GRADING

ÆR, RD

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DAVID EICKMAN, P.E. MO# 2009015436



Sson - Civil Engineering ssouri Certificate of Authority #001592

DAVID L.

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NUMBER

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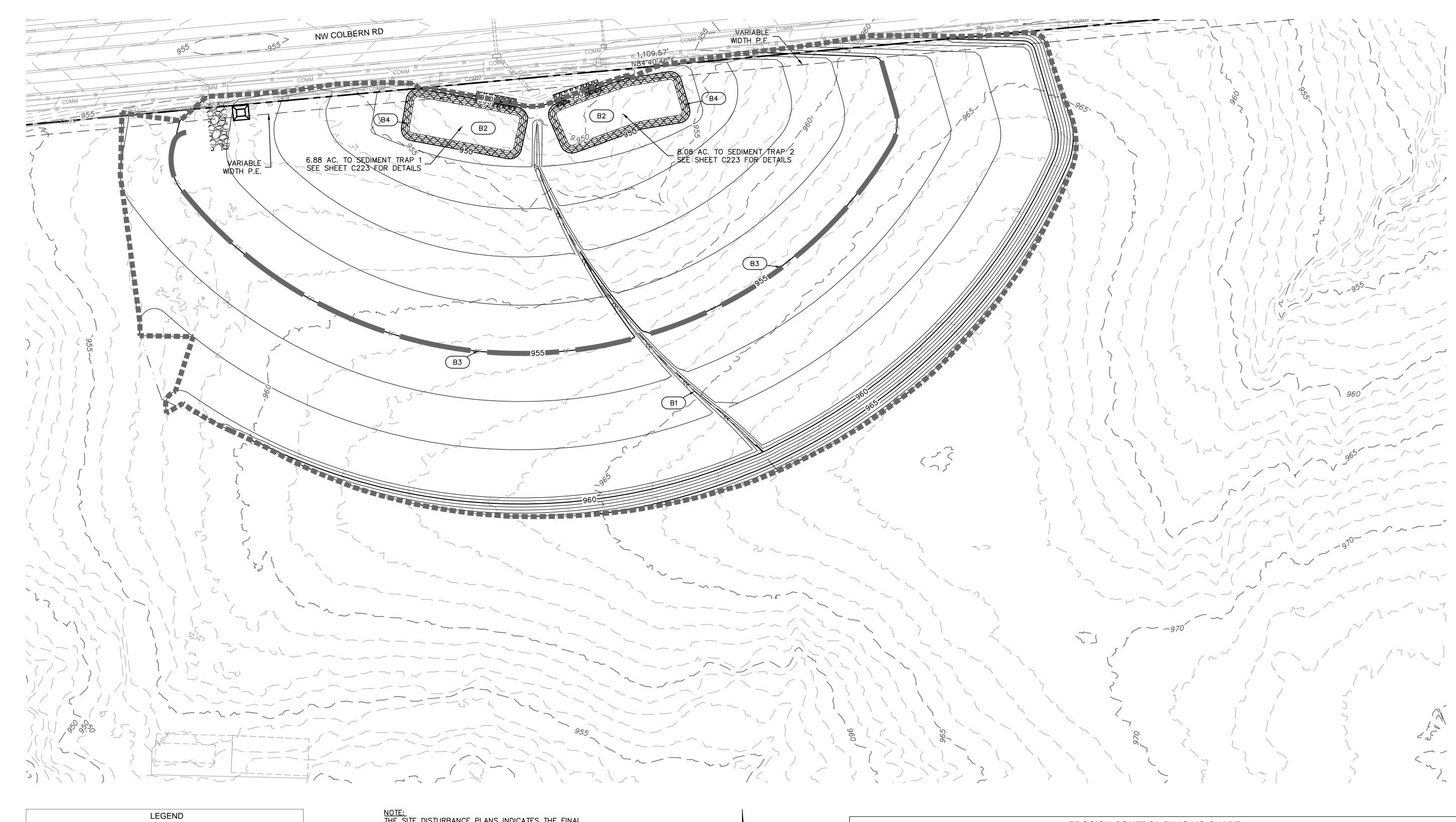
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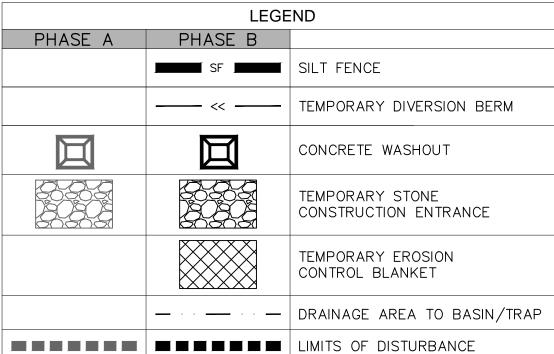
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	2023			REVISIONS	

drawn by: BM
checked by: JN
approved by: DE
QA/QC by: DE
project no.: D21-04643
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AT DISCOVERY F





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.

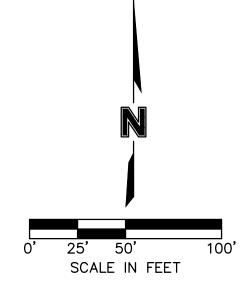
CONTRACTOR TO KEEP SWPPP REPORTS AND MDNR PERMIT IN THE ON-SITE CONSTRUCTION OFFICE TRAILER. TRAILER LOCATION TO BE DETERMINED BY CONTRACTOR

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 SHEET C370.

GRADING LEGEND

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



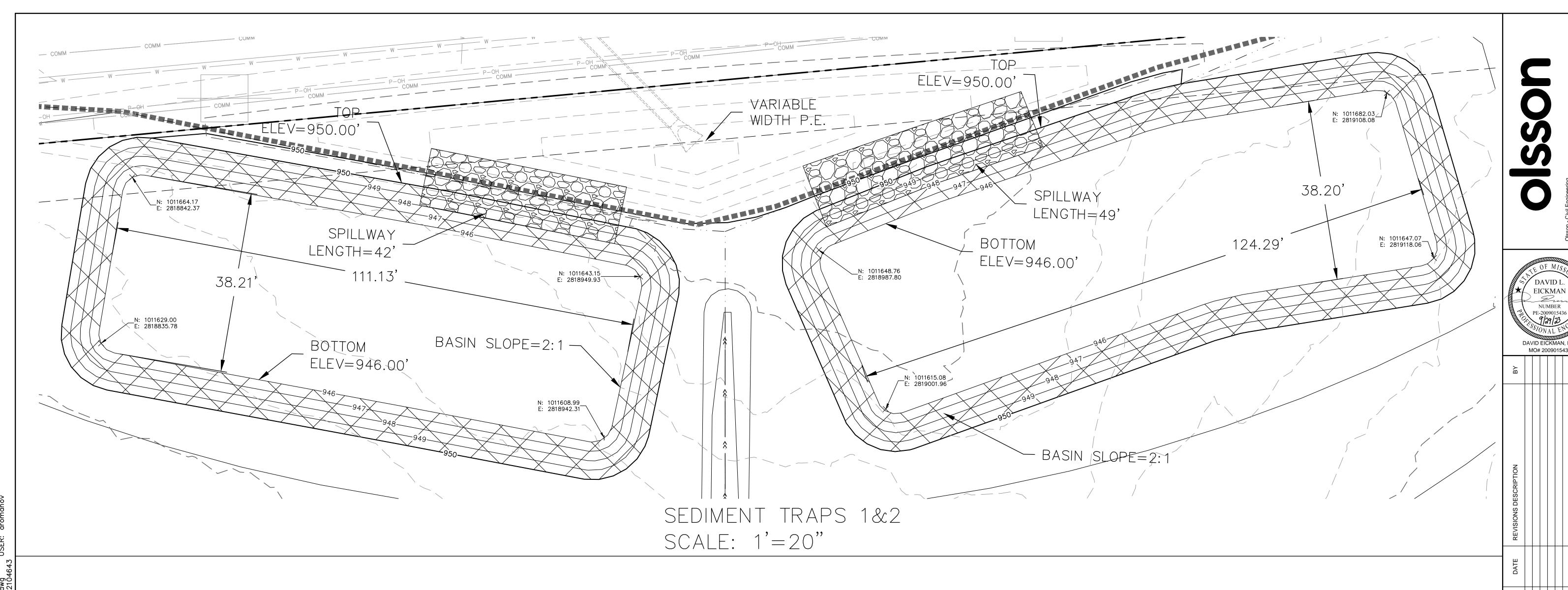
		EROSION CONTROL	PHASING CH	IART			
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:			
A DDE MACC CDADING	A1	CONSTRUCTION ENTRANCE	В	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE			
A - PRE-MASS GRADING	A2	CONCRETE WASHOUT	В	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE			
UPON REMOVAL CONTRACTO EXCESSIVE SETTLING THAT (ING ALL SILT,	AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR			
	B1	DIVERSION BERM	N/A	INSTALL PER APWA DETAIL ESC-05, DIVERSION BERMS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS			
B — INTERIM	B2	SEDIMENT TRAP	N/A	INSTALL PER APWA DETAIL ESC-08, SEDIMENT TRAPS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS			
TIVI LIXIIVI	B3	SILT FENCE	С	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE			
	B4	TEMPORARY EROSION CONTROL BLANKET	С	INSTALL PER APWA DETAIL ESC-02, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE			
	MAINTAIN ALL INSTA	LLED EROSION CONTROL DEVICES					
C — DISTURBED AREA STABILIZATION	SEE LEGEND FOR HATCH PATTERN EXAMPLE	ESTABLISH SEEDING AND STABILIZATION OUTSIDE OF SEDIMENT BASIN AND TRAPS	N/A	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.			

Son - Civil Engineering

0 2 4 2
DAVID L. EICKMAN NUMBER PE-2009015436 DAVID EICKMAN, P.E. MO# 2009015436

EROSION CONTROL PLAN (PHASE B)	REV. NO.	DATE	REVISIONS DESCRIPTION	BY
ZONE 4 MASS GRADING				
THE VILLAGE AT DISCOVERY PARK ZONE 1				
NW COLBERN RD & NE DOUGLAS ST				
AISSOURI 2023	3		REVISIONS	

drawn by: BM
checked by: JN
approved by: DE
QA/QC by: DE
project no.: D21-04643
drawing no.C_ERC04B_D2104643
date: 09.29.2023



TRAP	TRIBUTARY AREA	REQUIRED VOLUME	BERM HEIGHT "H"	SPILLWAY HEIGHT "HO"	STORAGE VOLUME	BERM TOP WIDTH "W"	BOTTOM ELEVATION	RIPRAP ELEVATION	TOP OF BERM ELEVATION	SPILLWAY LENGTH	EXCAVATED 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.)
1	6.88	12382.98	2.0	1.0	15482.12	2.0	946	950.00	951.00	42	2.0	5152.38	3096.42	946.68
2	8.08	14550.79	2.0	1.0	17490.06	2.0	946	950.00	951.00	49	2.0	5821.69	3498.01	946.68

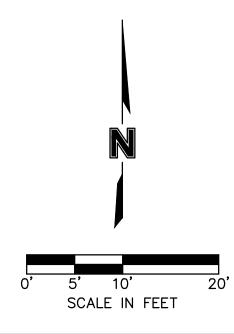
EROSION CONTROL PLAN LEGEND

———— << ——— DIVERSION BERM

999 FINISHED GRADE MAJOR CONTOUR 999 FINISHED GRADE MINOR CONTOUR — — —999— — EXISTING GRADE MAJOR CONTOUR — — —999— — EXISTING GRADE MINOR CONTOUR — · · · — · · · — DRAINAGE AREA — SF — SILT FENCE

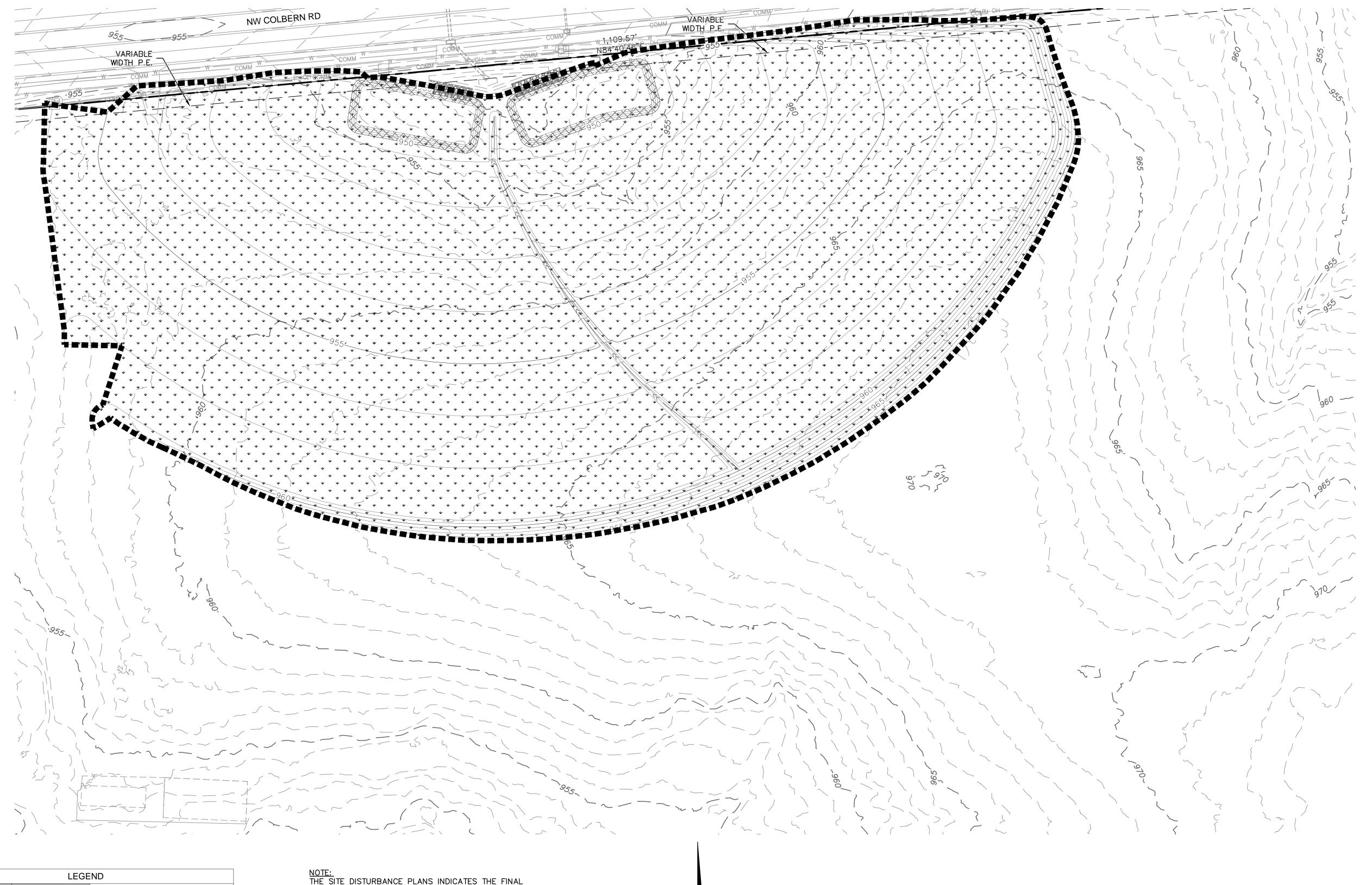
- NOTES

 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.



checked by: QA/QC by: project no.: D21-04643
drawing no.C_ERC04S_D2104643
date: 09.29.2023

VILLAGE AT DISCOVERY PARK & ARIA APARTMENTS NW COLBERN RD & NE DOUGLAS ST



	LEGE	END
PHASE A, & B	PHASE C	
——————————————————————————————————————		SILT FENCE
<<		TEMPORARY DIVERSION BERM
□		CONCRETE WASHOUT
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		TEMPORARY EROSION CONTROL BLANKET
		DRAINAGE AREA TO BASIN/TRAP
		LIMITS OF DISTURBANCE
	\(\psi\) \(\psi\) \(\psi\)	SEEDING AND STABILIZATION

NOTE:
THE SITE DISTURBANCE PLANS INDICATES THE FINAL
PLACEMENT OF EROSION CONTROL DEVICES. THE
CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION
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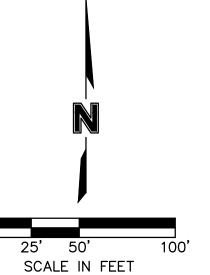
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GRADING LEGEND

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



		EROSION CONTROL F	PHASING CH	IART
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
A — PRE—MASS GRADING	A1	CONSTRUCTION ENTRANCE	В	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
A - PRE-MASS GRADING	A2	CONCRETE WASHOUT	В	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
UPON REMOVAL CONTRACTOR EXCESSIVE SETTLING THAT C			ING ALL SILT,	AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR
	B1	DIVERSION BERM	N/A	INSTALL PER APWA DETAIL ESC-05, DIVERSION BERMS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS
B — INTERIM	B2	SEDIMENT TRAP	N/A	INSTALL PER APWA DETAIL ESC-08, SEDIMENT TRAPS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS
D IIII	В3	SILT FENCE	С	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	B4	TEMPORARY EROSION CONTROL BLANKET	С	INSTALL PER APWA DETAIL ESC-02, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
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DO - Civil Engineering

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OSION CONTROL PLAN (PHASE C)	REV.	DATE	REVISIONS DESCRIPTION	
S & EROSION AND SEDIMENT CONTROL PLANS				
III AGE AT DISCOVERY PARK 70NF 1				
/ COLBERN RD & NE DOUGLAS ST				
JRI	2023		REVISIONS	

QA/QC by: DE
project no.: D21-04643
drawing no.: 01.20.2023

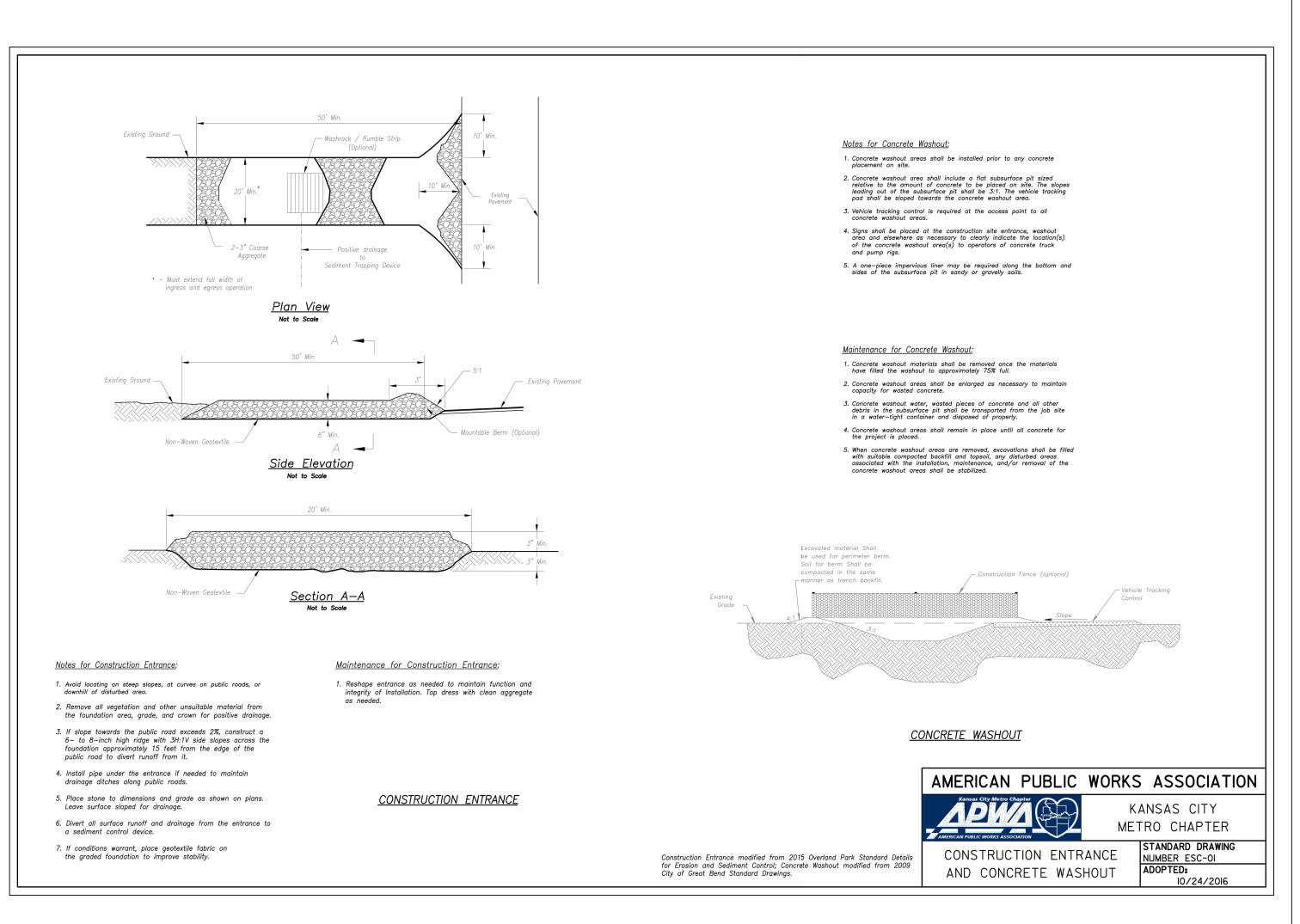
SHEET

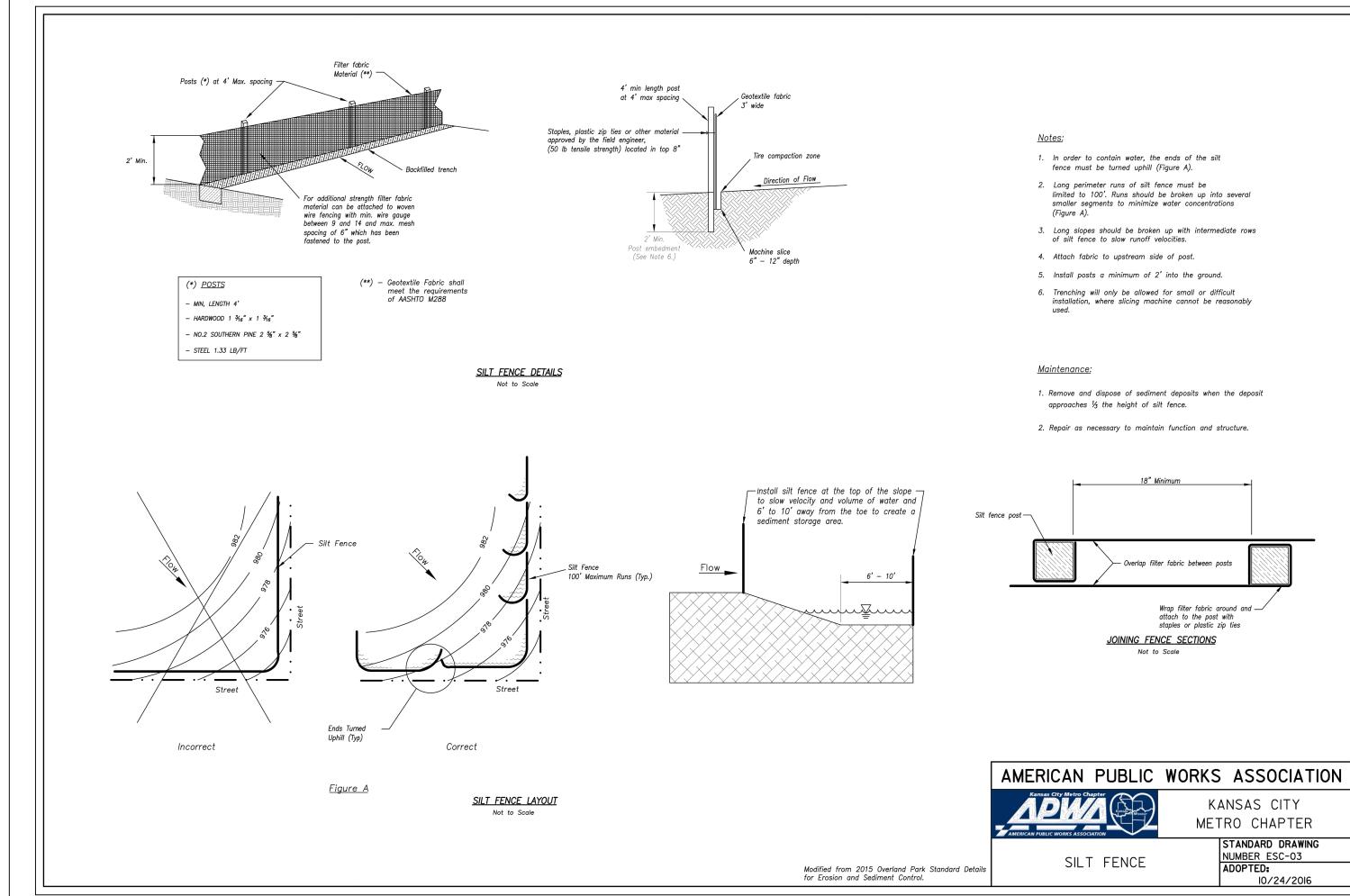
GS/OS/JN

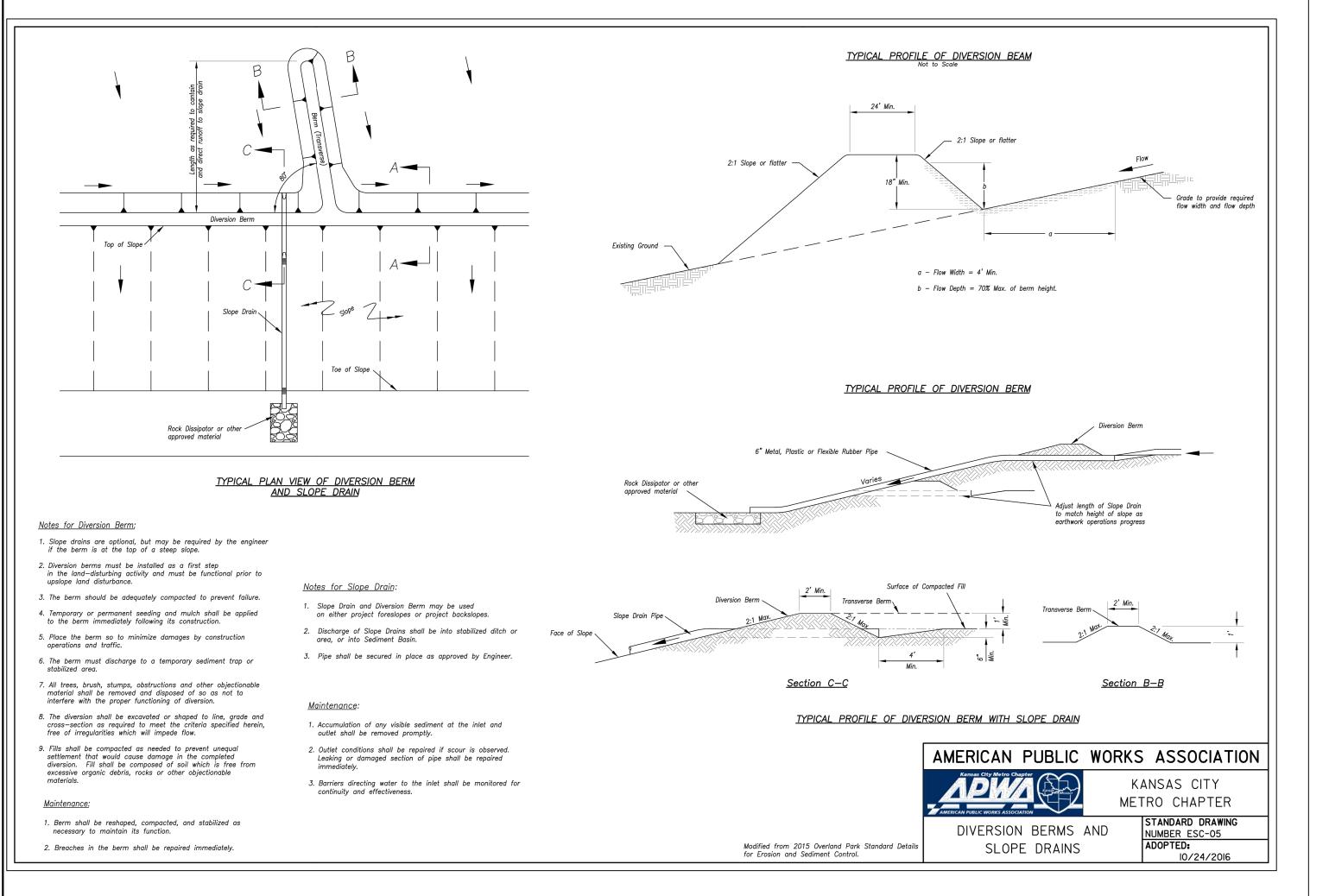
SHEET C-Z4-160

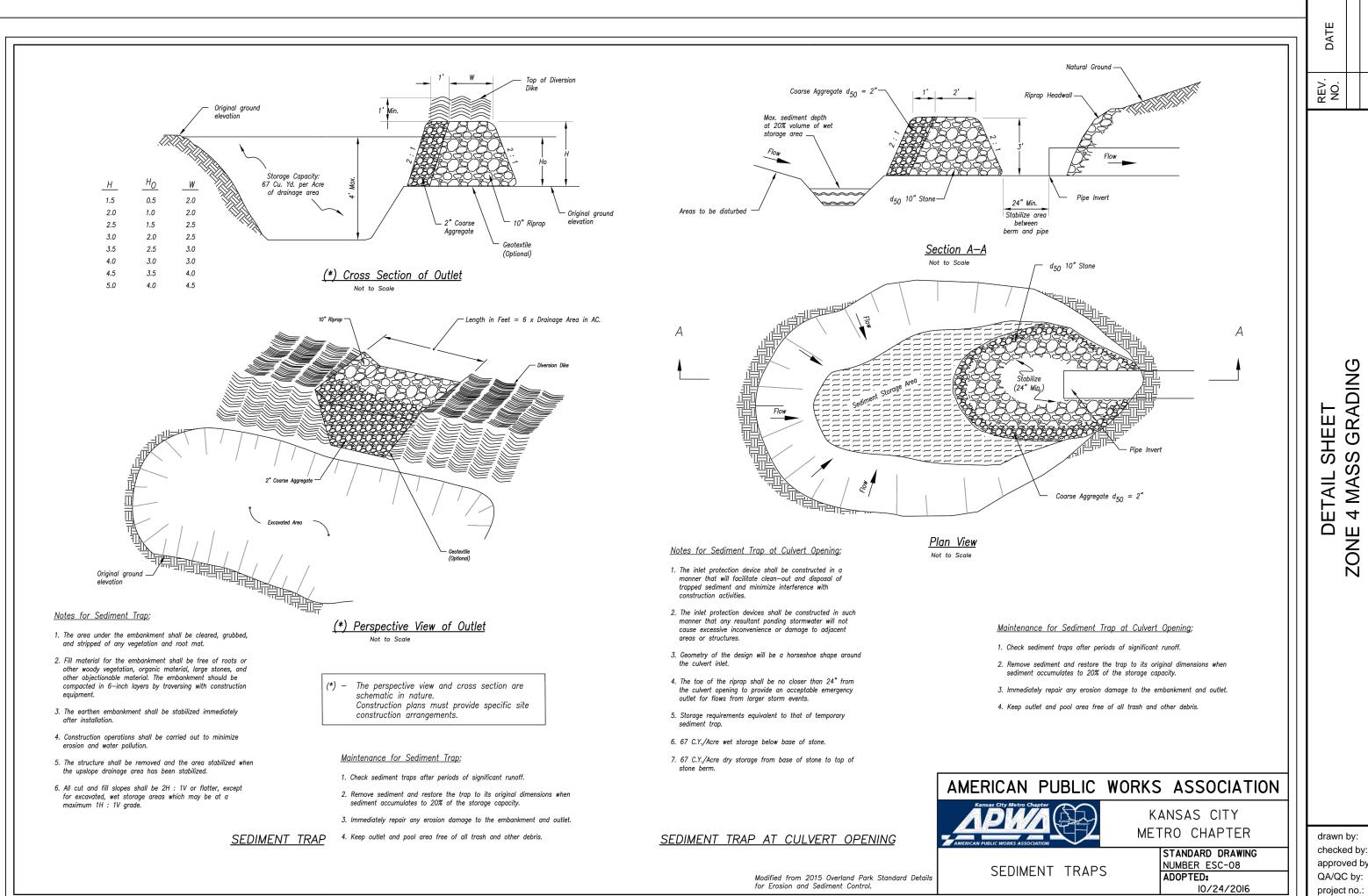
drawn by:

checked by:









EICKMAN NUMBER PE-2009015436 DAVID EICKMAN, P.E. MO# 2009015436 'ER' RD drawn by: checked by: approved by: QA/QC by: D21-04643

drawing no.: C_DTL04_D2104643

SHEET

C-Z4-170

09.29.2023