



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

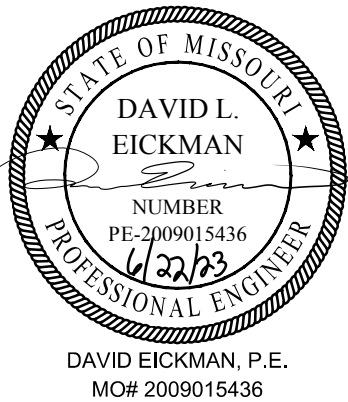
USER: bmccarthy

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.

[illegible]

TITLE SHEET		2023
ZONE 4 MASS GRADING		
THE VILLAGE AT DISCOVERY PARK & ARIA APARTMENTS NW COLBERN RD & NE DOUGLAS ST		
LEE'S SUMMIT, MISSOURI		2023

drawn by: _____ BM
checked by: _____ JN
approved by: _____ DE
QA/QC by: _____ DE
project no.: _____ D21-04643
drawing no.: C TTL04 D2104643
date: _____ 06.14.2023

SHEET
C-Z4-120

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION ARE THE MOST CURRENT VERSION ISSUED, ARE FULLY COORDINATED WITH ALL SUBCONTRACTORS, AND PRESENT ON SITE AT ALL TIMES. CURRENT PLANS PREPARED BY OLSSON MAY BE OBTAINED AT THE DIRECTION OF OLSSON'S CLIENT. DIRECT REQUESTS TO OLSSON MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR INFORMATION.
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.

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.

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.

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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, SPODE DRAINS, DITCHES, SWALES, OR OTHER EROSION CONTROL DEVICES OR METHODS. THE OWNER HAS THE AUTHORITY TO LIMIT THE CRITICAL AREA OF A ERODIBLE EARTH MATERIALS EXPOSED DURING 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 IMPONDMENT OR CONVEYANCES.

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

2. THIS SEDIMENTATION CONTROL PLAN MAKES USE OF THE FOLLOWING APPLICATIONS:
- X PRESERVATION OF EXISTING VEGETATION
 - X SEDIMENT BARRIERS
 - X SEDIMENT TRAPS
 - ___ 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. WHEN 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.	671.35
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.

<p>GENERAL NOTES</p> <p>ZONE 4 MASS GRADING</p>		<p>THE VILLAGE AT DISCOVERY PARK & ARIA APARTMENTS</p> <p>NW COLBERN RD & NE DOUGLAS ST</p>		<p>LEE'S SUMMIT, MISSOURI</p>		<p>2023</p>	
<p>drawn by: _____</p> <p>checked by: _____</p> <p>approved by: _____</p> <p>QA/QC by: _____</p> <p>project no.: _____</p> <p>drawing no.: C-TTL04-D21-04643</p> <p>date: _____</p>		<p>BM _____</p> <p>JN2 _____</p> <p>DE _____</p> <p>DE _____</p> <p>D21-04643</p> <p>06.14.2023</p>		<p>BY</p>		<p>REV. NO.</p>	
<p>REVISIONS DESCRIPTION</p>		<p>DATE</p>		<p>REVISIONS</p>		<p>BY</p>	



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

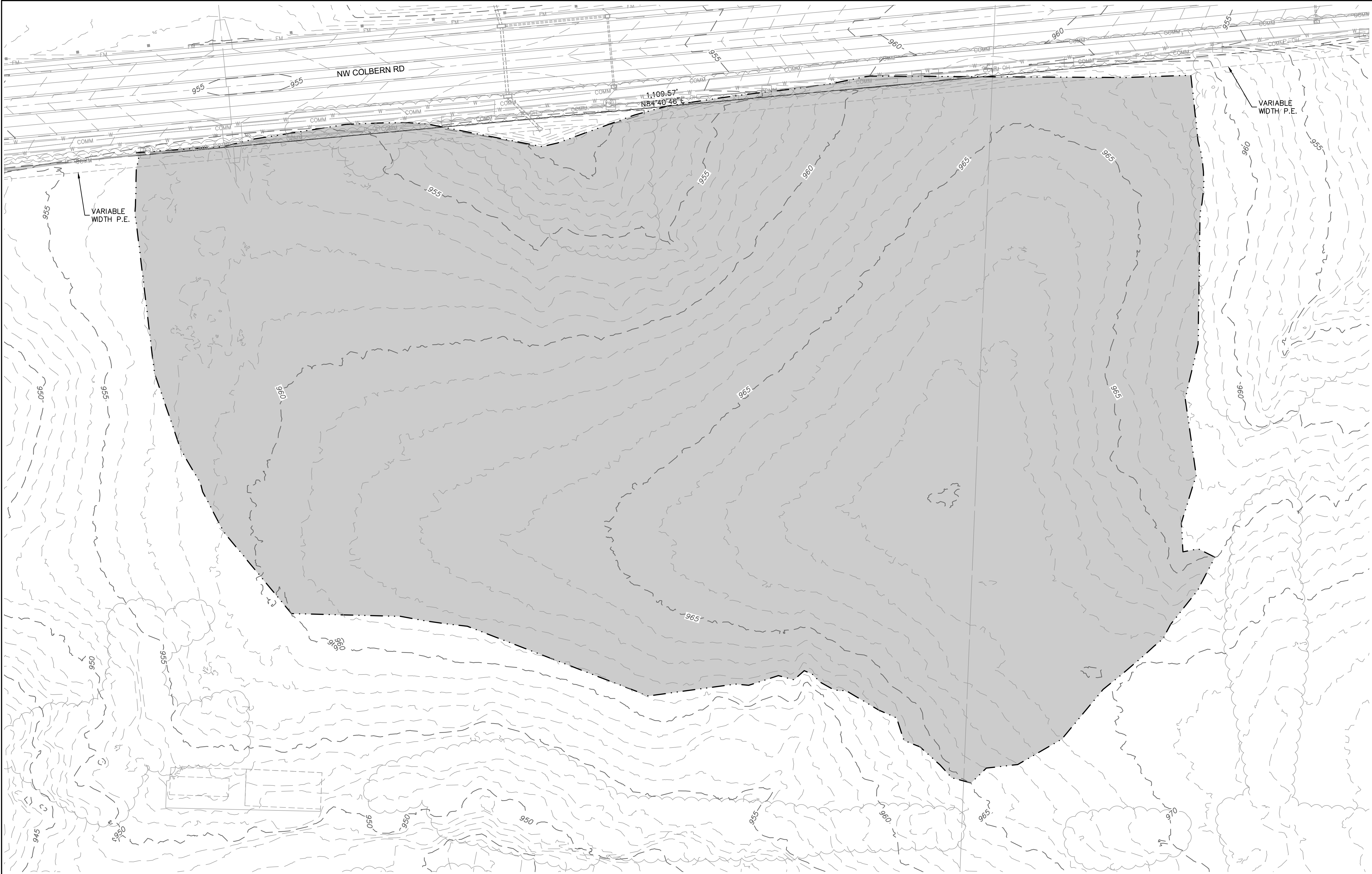
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SHEET

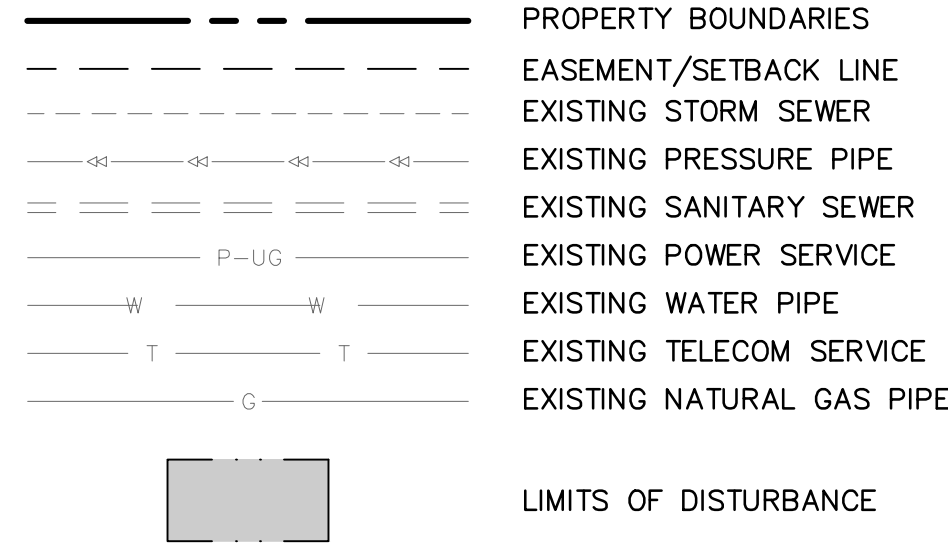
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DWG: F:\2021\04501-05000\021-04643-D\40-Design\AutoCAD\Final Plans\Sheets\GNCV\Zone 4 Mass Grading\C_EXC04_D2104643.dwg
DATE: Jun 14, 2023 11:45am XREFS: C_PTBLK_D2104643 C_XALTA_B2104643 C_FROAD_D2104643 Discovery Control



EXISTING CONDITIONS LEGEND

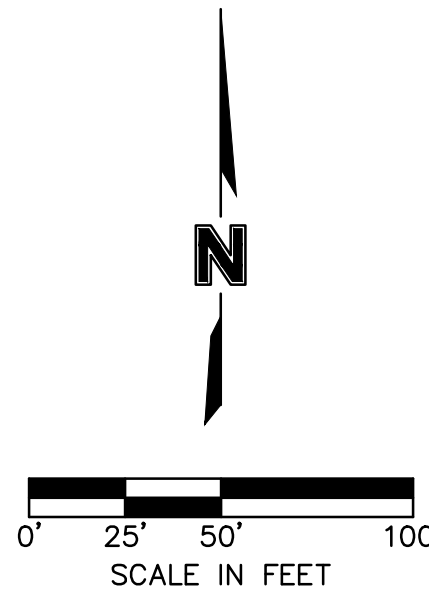
*THIS LEGEND APPLIES TO ALL SHEETS UNLESS
EXPLICITLY SHOWN OTHERWISE ON EACH SHEET.

☒ REMOVE EXISTING TREE

- ☼ EXISTING LIGHT POLE
- Ⓢ EXISTING SIGN
- Ⓢ EXISTING SPRINKLER BOX
- ⚡ EXISTING SPRINKLER CONTROL VALVE
- ⚡ EXISTING WATER VALVE
- ⚡ EXISTING FIRE HYDRANT
- Ⓜ EXISTING WATER METER
- Ⓛ EXISTING ELECTRIC BOX
- Ⓛ EXISTING ELECTRIC VAULT
- Ⓜ EXISTING ELECTRIC METER
- Ⓛ EXISTING ELECTRIC RISER
- EXISTING ELECTRIC MANHOLE

P.E. POWER EASEMENT
S.E. SANITARY EASEMENT
D.E. STORM EASEMENT
W.E. WATER EASEMENT

*SCALE MAY AFFECT THE SIZE OF SURVEY
SYMBOLS IN PLAN, BUT SHAPE WILL BE RETAINED



EXISTING CONDITIONS ZONE 4 MASS GRADING

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

LEE'S SUMMIT, MISSOURI

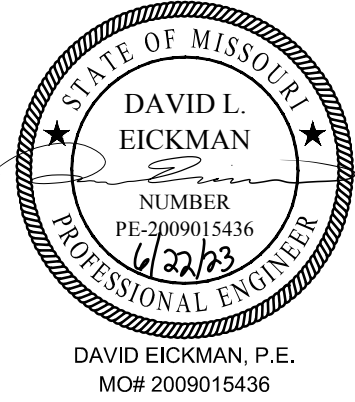
2023

BY

REVISIONS DESCRIPTION

DATE _____

REV.



DAVID EICKMAN, P
MO# 2009015436

REVISIONS

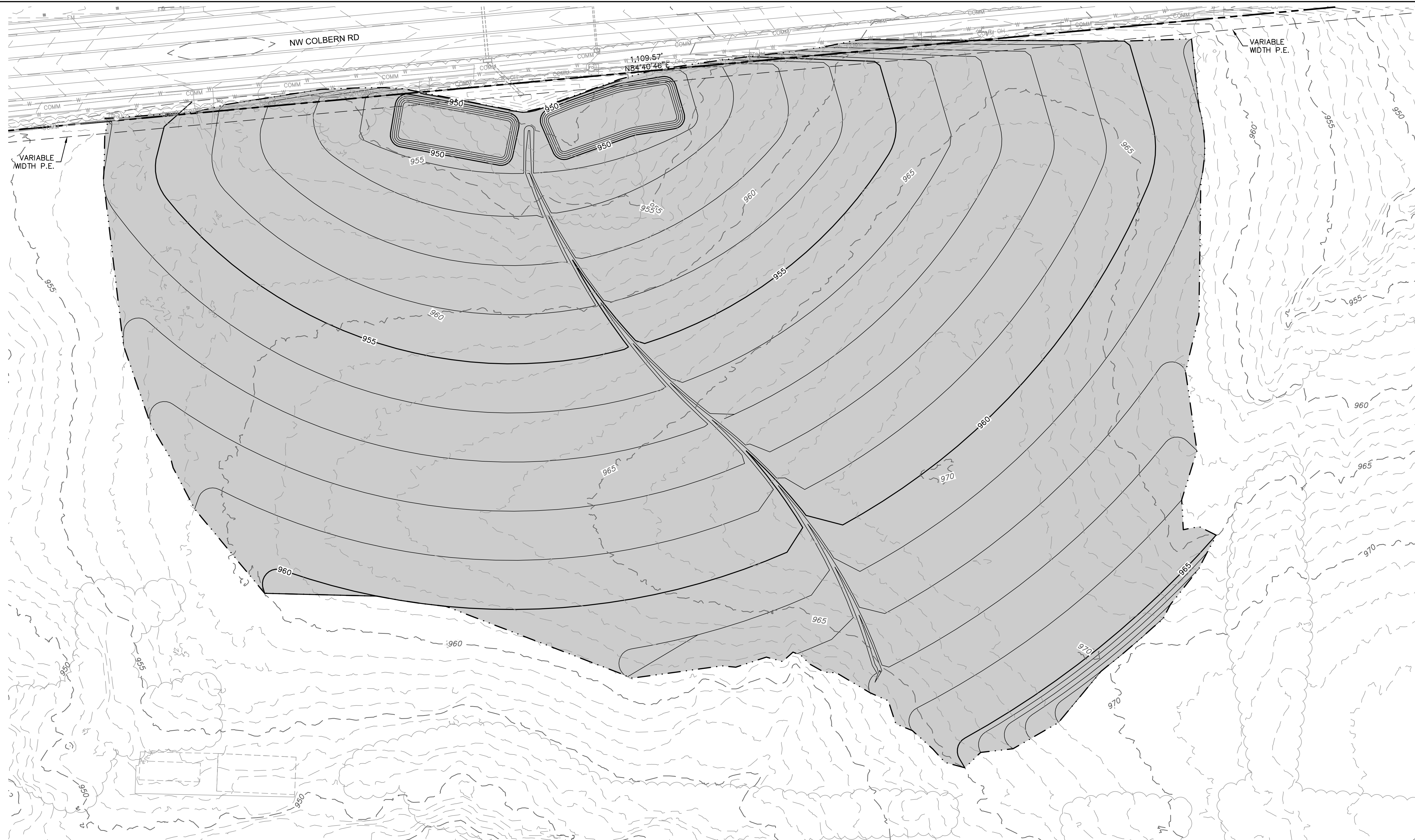
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SHEET
C-Z4-122

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Discovery Control



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.

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
ZONE 2	127675.21	40.57

GRADING LEGEND

	999	FINISHED GRADE MAJOR CONTOUR
	999	FINISHED GRADE MINOR CONTOUR
	999	EXISTING GRADE MAJOR CONTOUR
	999	EXISTING GRADE MINOR CONTOUR
		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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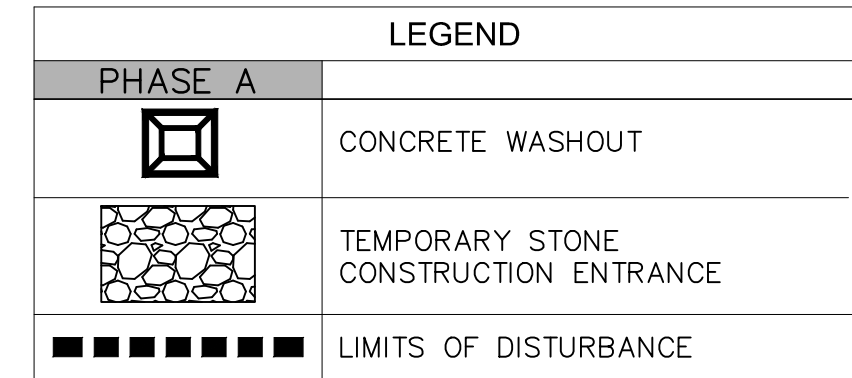
DAVID EICKMAN, P.E.
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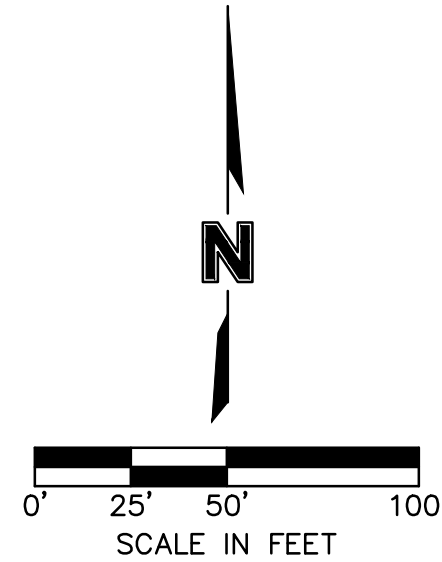
GRADING PLAN ZONE 4 MASS GRADING	0000
THE VILLAGE AT DISCOVERY PARK & ARIA APARTMENTS NW COLBERN RD & NE DOUGLAS ST	0000

drawn by: _____ B
checked by: _____ J
approved by: _____ D
QA/QC by: _____ D
project no.: _____ D21-0464
drawing no.: C GRD04 D210464
date: _____ 06.14.2021

SHEET
C-Z4-130



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.



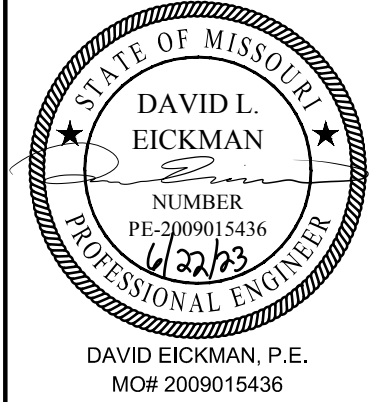
EROSION CONTROL PHASING CHART				
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
A – PRE–MASS GRADING	A1	CONSTRUCTION ENTRANCE	B	INSTALL PER APWA DETAIL ESC–01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	A2	CONCRETE WASHOUT	B	INSTALL PER APWA DETAIL ESC–01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
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.				
B – INTERIM	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
	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
	B3	SILT FENCE	C	INSTALL PER APWA DETAIL ESC–03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	MAINTAIN ALL INSTALLED 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.

GRADING LEGEND

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

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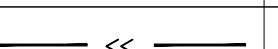


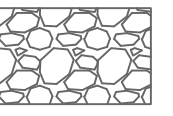
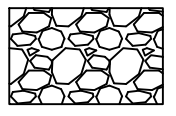



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EROSION CONTROL PLAN (PHASE A) ZONE 4 MASS GRADING	
THE VILLAGE AT DISCOVERY PARK & ARIA APARTMENTS NW COLBERN RD & NE DOUGLAS ST	
LEE'S SUMMIT, MISSOURI	2023

drawn by: _____ BM
checked by: _____ JN
approved by: _____ DE
QA/QC by: _____ DE
project no.: _____ D21-04643
drawing no. C_ERC04A_D2104643
date: _____ 06.14.2023

SHEET
C-Z4-140

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USER: brnccorlty
Discovery Control

LEGEND		
PHASE A	PHASE B	
		SILT FENCE
		TEMPORARY DIVERSION BERM
		CONCRETE WASHOUT
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		DRAINAGE AREA TO BASIN/TRAP
		LIMITS OF DISTURBANCE

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.

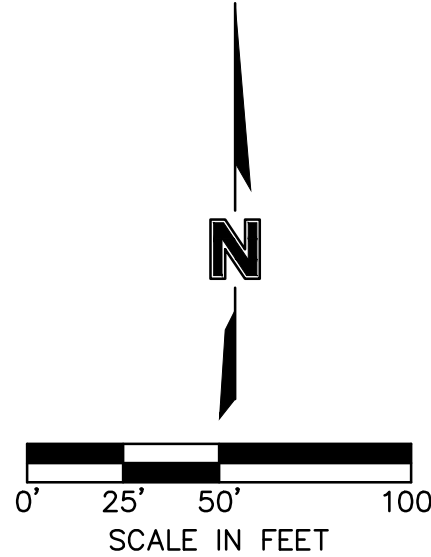
CONTRACTOR TO KEEP SWPPP REPORTS AND MDNR PERMIT IN THE ON-SITE CONSTRUCTION OFFICE TRAILER. TRAILER LOCATION TO BE DETERMINED BY CONTRACTOR

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

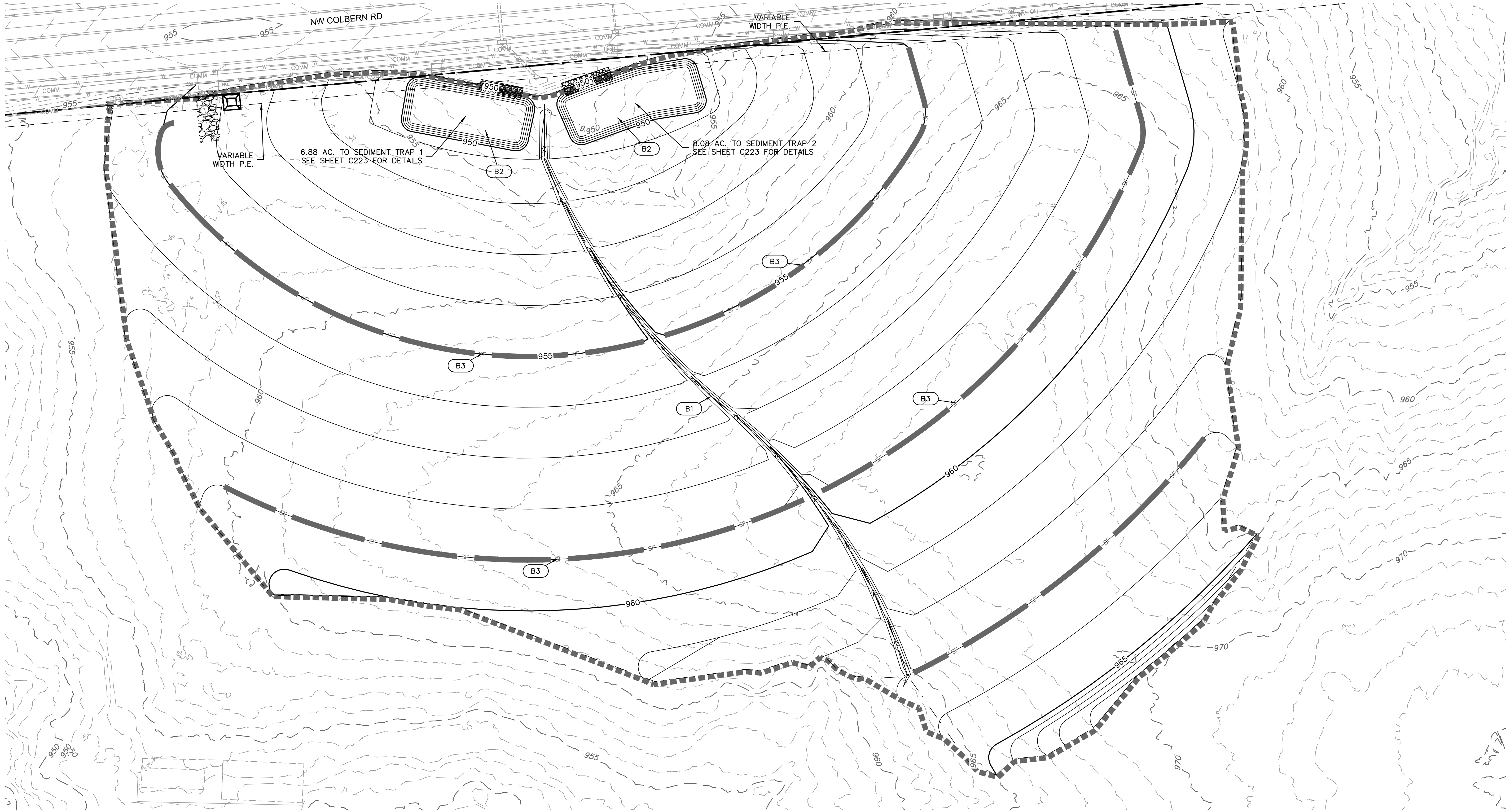
SEDIMENT TRAPS ARE SHOWN AS NEEDED PRIOR TO DISTURBING THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL SEDIMENT RUNOFF DURING TRANSITION TO FINAL CONDITIONS AS SHOWN ON SHEET C370.

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 CHART				
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
A – PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	B	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	A2	CONCRETE WASHOUT	B	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
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.				
B – INTERIM	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
	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
	B3	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	MAINTAIN ALL INSTALLED 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.



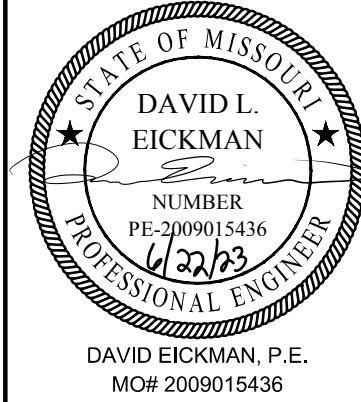
EROSION CONTROL PLAN (PHASE B)
ZONE 4 MASS GRADING

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

LEE'S SUMMIT, MISSOURI

drawn by: _____ BM
checked by: _____ JN
approved by: _____ DE
QA/QC by: _____ DE
project no.: D21-04643
drawing no. C_ERC04B_D2104643
date: 06/14/2023

SHEET
C-Z4-150



REV. NO.	DATE	REVISIONS DESCRIPTION	BY

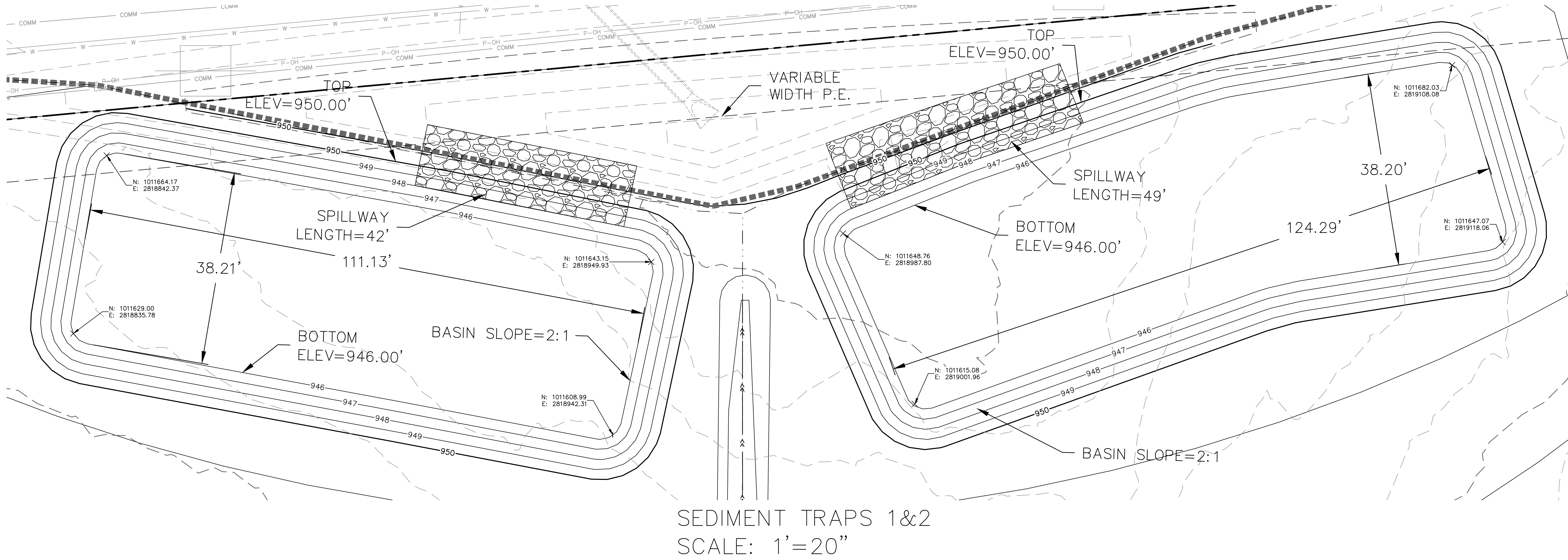
REVISIONS

2023

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Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
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DWG: F:\2021\04501-05000\021-04643-0\40-Design\AutoCAD\Final Plans\Sheets\CHCV\Zone 4_Mass Grading\C_ERC04S_D2104643.dwg
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USER: brnccorby
Discovery Control



SEDIMENT TRAPS 1&2
SCALE: 1' = 20'

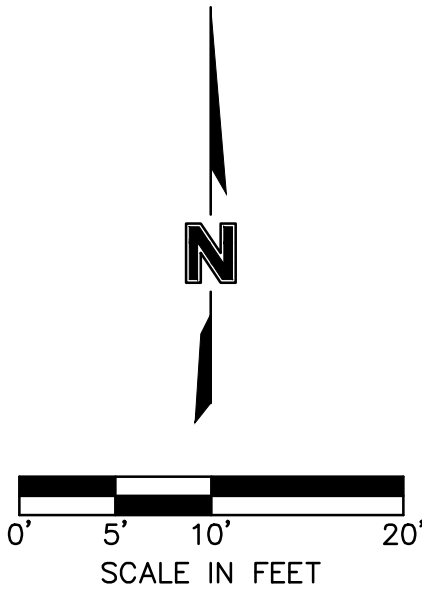
EROSION CONTROL PLAN LEGEND

- 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
- << DIVERSION BERM

NOTES

- 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.
- 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.

TRAP	TRIBUTARY AREA (AC.)	REQUIRED VOLUME (C.F.)	BERM HEIGHT "H" (FT.)	SPILLWAY HEIGHT "HO" (FT.)	STORAGE VOLUME (C.F.)	BERM TOP WIDTH "W" (FT.)	BOTTOM ELEVATION (FT.)	RIPRAP ELEVATION (FT.)	TOP OF BERM ELEVATION (FT.)	SPILLWAY LENGTH (FT.)	EXCAVATED DEPTH (FT.)	EXCAVATED VOLUME (C.F.)	SEDIMENT CLEANOUT VOLUME (C.F.)	SEDIMENT CLEANOUT ELEVATION (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



PHASE B SEDIMENT TRAP DETAILS
ZONE 4 MASS GRADING

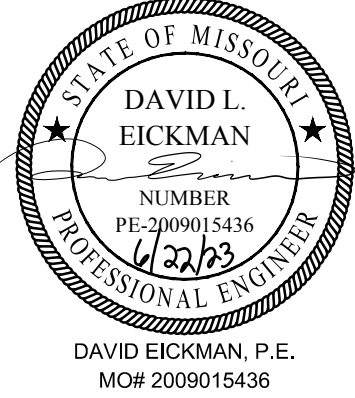
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SHEET
C-Z4-151



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