

DWG: Z:\2021\04001-04054\021-04054-1\40-design\AutoCAD\final plans\GNCV\SITE DISTURBANCE PLANS\C_TTL01_A2104054.dwg
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USER: emayo

RAINTREE VILLAGE SITE DISTURBANCE PLANS

1501 SW ARBORWALK BLVD.
LEE'S SUMMIT, MO

DISTURBED AREA = 12.85 AC

PROJECT CONTACTS

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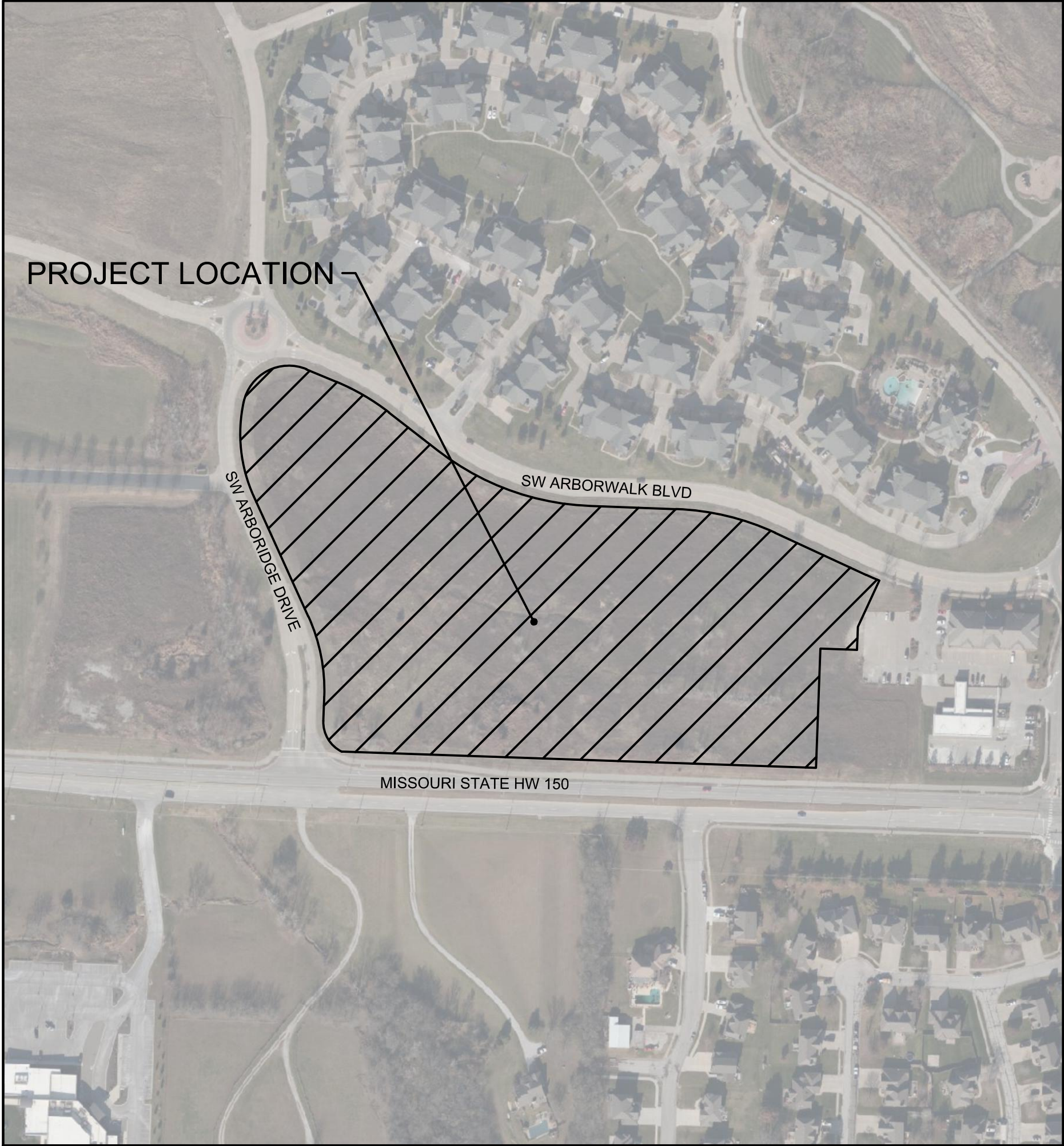
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VICINITY MAP

PROPERTY DESCRIPTION:

TITLE COMMITMENT NO. 210232

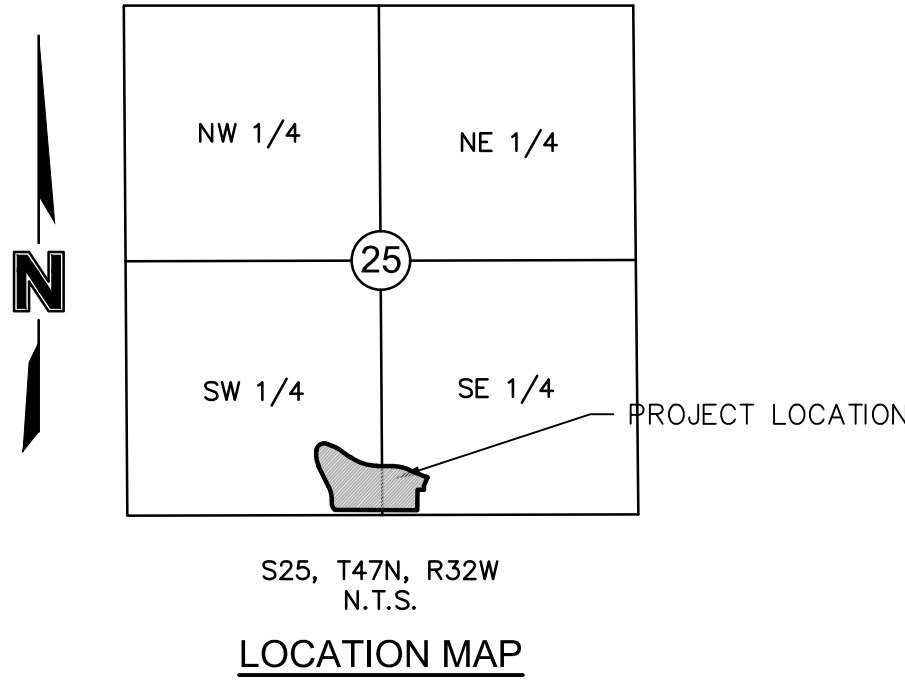
PROPERTY DESCRIPTION PER CHICAGO TITLE INSURANCE COMPANY'S ALTA
COMMITMENT FOR TITLE INSURANCE NO. 210232 UPDATE 7/15/2021, DATED JUNE
30, 2021 AT 08:00 AM.

TRACT 1:

ALL THAT PART OF THE SOUTH HALF OF SECTION 25, TOWNSHIP 47, RANGE 32, IN LEE'S
SUMMIT, JACKSON COUNTY, MISSOURI, LYING NORTH OF THE NORTH LINE OF MISSOURI
HIGHWAY 150, AS PRESENTLY ESTABLISHED, LYING EAST OF THE EAST LINE OF SW
ARBORIDGE DRIVE AND SOUTH OF THE SOUTH LINE OF SW ARBORWALK BOULEVARD AS
SHOWN ON THE PLAT OF ARBORWALK 4TH PLAT, A SUBDIVISION IN LEE'S SUMMIT, JACKSON
COUNTY, MISSOURI, AND LYING WEST OF THE WEST LINE OF TRACT 6-A, AMENDED
ARBORWALK 6TH PLAT, LOTS 3001 THRU 3003 AND TRACT "6-A", A SUBDIVISION IN LEE'S
SUMMIT, JACKSON COUNTY, MISSOURI. (SHOWN FOR CONVENIENCE IN REPORTING; SEE
SCHEDULE B-1 #15 HEREIN)

SHEET LIST	
NO.	TITLE
SD1.0	TITLE SHEET
SD1.1	GENERAL NOTES
SD1.2	SITE DISTURBANCE NOTES
SD2.0	EXISTING CONDITIONS & DEMOLITION PLAN
SD3.0	EROSION CONTROL PLAN - STAGE A
SD3.1	EROSION CONTROL PLAN - STAGE B
SD3.2	EROSION CONTROL PLAN - STAGE C & D
SD3.3	SITE DISTURBANCE DETAILS

ESTIMATE OF QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
SITE DISTURBANCE			
1	VEHICLE TRACKING CONTROL	EA.	1
2	SILT FENCE INLET PROTECTION	EA.	4
3	FILTER SOCK INLET PROTECTION	EA.	30
4	SILT FENCE	L.F.	2,600
5	EOSION CONTROL BLANKET	S.Y.	11,568
6	SEDIMENT BASIN	EA.	3
7	DIVERSION BERM	L.F.	1,462
8	CONCRETE WASHOUT	EA.	1



TITLE SHEET

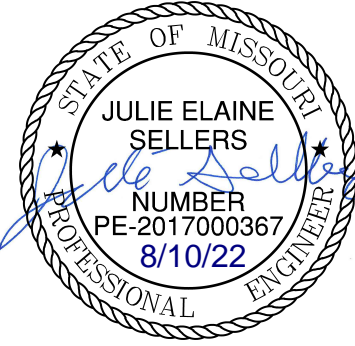
RAINTREE VILLAGE
FINAL DEVELOPMENT PLAN

LEE'S SUMMIT, MO

2022

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY



olsson

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Missouri Certificate of Authority #
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drawn by: CSM
checked by: CSM
approved by: JS
QA/QC by: JS
project no.: A21-04054
drawing no.: C_TTL01_A2104054
date: 08.10.2022

SHEET
SD1.0

GENERAL NOTES

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 OWNERS. 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. ARCHITECTURAL AND STRUCTURAL ELEMENTS SHOWN IN THESE PLANS ARE FOR REFERENCE ONLY. CONTRACTORS AND SURVEYORS SHALL REFERENCE THEIR RESPECTIVE PLANS FOR DESIGN INFORMATION.
2. THE CONTRACTOR SHALL ADHERE TO THE SITE PREPARATION AND STRUCTURAL FILL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AS PROVIDED BY THE GEOTECHNICAL ENGINEER INCLUDING ALL CURRENT ADDENDUMS. THE STANDARDS AND SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI SHALL ALSO APPLY AND TAKE PRECEDENCE WHEN STRICTER THAN THE GEOTECHNICAL REPORT OR WHEN NO GEOTECHNICAL REPORT IS GIVEN.
3. 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.
3. IN ADDITION TO THE CONDITIONS OF THE GEOTECHNICAL REPORT AND AS A MINIMUM THE CONTRACTOR SHALL PERFORM THE GRADING AS FOLLOWS:
 - A. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY BUILDING AND PAVING. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON SITE IN AREAS DESIGNATED BY THE OWNER. CONTRACTOR SHALL REMOVE EXCESS STRIPPINGS AND EXCESS EXCAVATION WITHIN 30 DAYS OF COMPLETION OF GRADING OPERATIONS.
 - B. AREAS TO RECEIVE FILL AND AREAS CUT TO SUBGRADE LEVEL SHALL BE SCARIFIED AND THE TOP 8-INCH DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. THE SUBGRADE SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS. ANY UNSUITABLE AREAS SHALL BE UNDERCUT AND REPLACED WITH SUITABLE MATERIAL BEFORE ANY FILL MATERIAL CAN BE APPLIED.
 - C. FILL SHALL BE PLACED IN MAXIMUM OF 8 INCH LIFTS.
 - D. TOPSOIL SHALL BE PLACED TO A MINIMUM DEPTH OF 6 INCHES OVER ALL AREAS DISTURBED BY THE WORK. LARGE STONES, STICKS AND LUMPS SHALL BE REMOVED OR BROKEN UP, AND THE TOPSOIL SHALL BE LEVELED AND RAKED. ALL DISTURBED AREAS SHALL BE LANDSCAPED PER LANDSCAPE PLANS OR SHALL BE SEED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED.
 - E. CONTRACTOR SHALL PROVIDE COMPACTION TEST RESULTS AS REQUIRED.
4. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.
5. 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.
6. THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

SHOP DRAWINGS

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING A MINIMUM OF 7 DAYS PRIOR TO THE REQUESTED DATE OF APPROVAL. ENGINEER SHALL REVIEW SHOP DRAWINGS OR SAMPLES CONFORMANCE WITH THE DESIGN FOR THIS PROJECT AS DESCRIBED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS. THE ENGINEER'S REVIEW SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS NOTIFIED ENGINEER OF EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND OBTAINED ENGINEER'S WRITTEN APPROVAL OF EACH SUCH VARIATION. PRIOR TO SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE REVIEWED AND VERIFIED:
 - A. ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT THERETO.
 - B. ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION PERTAINING TO THE PERFORMANCE OF THE WORK;
 - C. ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO;
 - D. CONTRACTOR SHALL ALSO HAVE REVIEWED AND COORDINATED EACH SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES, AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.
 - E. ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY COMPLETED THE ABOVE TASKS.
2. SHOP DRAWINGS AS DESCRIBED ABOVE ARE REQUIRED FOR, BUT NOT LIMITED TO, THE FOLLOWING:
 - A. ALL STORM SEWER STRUCTURES TO BE INSTALLED WITH THIS PROJECT.
 - B. ALL SANITARY SEWER STRUCTURES TO BE INSTALLED WITH THIS PROJECT.
 - C. ALL SITE FENCING AND RAILING INCLUDING ANY GATES.
 - D. ALL LANDSCAPE AND RETAINING WALLS.
 - E. ANY ITEMS IN THESE PLANS THAT ALLOW FOR AN 'APPROVED EQUAL' ALTERNATIVE.

SITE PLAN NOTES

1. ALL PAVEMENT DIMENSIONS ARE TO BACK OF CURB, OR EDGE OF PAVEMENT WHERE NO CURB IS PRESENT, UNLESS OTHERWISE NOTED. DIMENSIONED TIES BETWEEN PROPERTY LINES AND BUILDING FACES OR PAVEMENT ARE AS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS NECESSARY FOR FOUNDATIONS, BEDDING EXTENSIONS, SURCHARGING, ETC.
2. INSTALLED PAVEMENT SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT TO PROVIDE SMOOTH SURFACE TRANSITIONS. INSTALLED CURB & GUTTER SHALL MATCH EXISTING CURB & GUTTER IN SIZE AND TYPE OR CONTRACTOR SHALL INCLUDE A TRANSITION FROM NEW TO EXISTING OF NO LESS THAN 5' AS MEASURED ALONG BACK OF CURB.
3. ALL ASPHALT PAVING SHALL BE IN CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. WHERE NOT COVERED BY THE ABOVE, ASPHALT PAVING SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF MoDOT.
4. ALL PCC PAVING SHALL BE IN CONFORMANCE WITH LOCAL CODES AND ORDINANCES AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. WHERE NOT COVERED BY THE ABOVE, PCC PAVING SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF MoDOT.
5. CONCRETE PAVEMENT JOINTS SHALL BE CONSTRUCTED AS FOLLOWS (REFER TO HARDSCAPE PLANS FOR SPECIFIC TREATMENT OF THESE AREAS):
 - A. CONTROL JOINTS SPACED AS SHOWN IN THESE PLANS OR AT INTERVALS NOT GREATER THAN 1.5x PANEL WIDTH OR 12 FEET (WHICHEVER IS SMALLER).
 - B. CONTROL JOINTS SHALL BE TOOLED OR SAWCUT TO ¼ THE SLAB THICKNESS. LOCAL STANDARDS AND SPECIFICATIONS SHALL TAKE PRECEDENCE WHERE MORE STRICT THAN THOSE LISTED HERE.
 - C. CONSTRUCTION JOINTS PLACED AT THE END OF EACH POUR AND WHEN PAVING OPERATIONS ARE SUSPENDED FOR 30 MINUTES OR MORE.
 - D. ISOLATION JOINTS PLACED WHERE THE PAVEMENT ABUTS THE BUILDING, DRAINAGE STRUCTURES AND OTHER FIXED STRUCTURES, CONSTRUCTED WITH A 1/2" NON-EXTRUDING FILLER, CLOSED-CELL FOAM RUBBER OR A BITUMEN-TREATED FIBER-BOARD, AND WITH A THICKENED EDGE, INCREASED BY 20 PERCENT, TAPERED TO THE REGULAR THICKNESS IN 5 FEET.
 - E. ALL EXPANSION JOINTS SHALL BE FILLED AND SEALED WITH A PLASTIC JOINT SEALANT MATERIAL.
6. ACCESSIBLE PARKING
 - A. STALLS SHALL BE SIGNED WITH CITY/ADA APPROVED SIGN AND CONSTRUCTED IN STRICT ACCORDANCE WITH CITY/ADA CODES AND ORDINANCES.
 - B. ACCESSIBLE PARKING STALLS SHALL NOT EXCEED 2.00 PERCENT IN ANY DIRECTION. ACCESSIBLE SIDEWALKS HAVE A MAXIMUM CROSS SLOPE OF 2 PERCENT AND A MAXIMUM LONGITUDINAL SLOPE OF 5 PERCENT.
 - C. STALLS SHALL BE MARKED BY THE INTERNATIONAL HANDICAPPED SYMBOL AT INDICATED PARKING SPACES. USE A SUITABLE TEMPLATE THAT WILL PROVIDE A PAVEMENT MARKING WITH SHARP EDGES AND ENDS.
7. PAVEMENT MARKINGS SHALL NOT BE APPLIED UNTIL LAYOUT, COLORS AND PLACEMENT HAVE BEEN VERIFIED WITH THE ARCHITECT AND ENGINEER. THE INSTALLED PAVEMENT IS ALLOWED TO AGE AS RECOMMENDED BY THE MANUFACTURER (MINIMUM OF 24 HOURS), AND THE PAVEMENT SURFACE HAS BEEN SWEEP AND CLEANED.
8. PAVEMENT MARKINGS SHALL INCLUDE TRAFFIC LANES, PARKING BAYS, AREAS RESTRICTED TO HANDICAPPED PERSONS, CROSSWALKS, AND OTHER DETAIL PAVEMENT MARKINGS SHOWN IN THESE PLANS.
9. ALL PARKING LOT STRIPING SHALL BE SINGLE LINE 4" WIDE WHITE STRIPES UNLESS OTHERWISE INDICATED WITHIN THESE PLANS. ALL ROAD STRIPING SHALL BE AS INDICATED WITHIN THESE PLANS.
10. CURBS AT FIRE LANES AS DESIGNATIONS BY THE FIRE MARSHAL SHALL BE PAINTED OR OTHERWISE INDICATED PER CITY OF CITY CODES AND ORDINANCES.
11. PAINT FOR MARKING PAVEMENT SHALL CONFORM TO FEDERAL HIGHWAY MARKING STANDARDS (FHMS) AND CITY OF CITY CODES AND ORDINANCES. USE FLAT BLACK, WHITE, OR YELLOW AS DIRECTED WITHIN PLANS OR IN CONFORMANCE WITH THE FHMS, UNLESS OTHERWISE SPECIFIED USE LATEX, WATER-BASE EMULSION, READY-MIXED, COMPLYING WITH FS TT-P-1952 WITH DRYING TIME OF LESS THAN 45 MINUTES.
12. APPLY ALL MARKINGS USING APPROVED MECHANICAL EQUIPMENT (WITH PROVISIONS FOR CONSTANT AGITATION OF PAINT), CAPABLE OF APPLYING THE MARKING WIDTHS AS SHOWN AND A MINIMUM WET FILM THICKNESS OF 15 MILS. USE PNEUMATIC SPRAY GUNS FOR HAND APPLICATION OF PAINT. ALL PAINTING EQUIPMENT AND OPERATIONS SHALL BE UNDER THE CONTROL OF EXPERIENCED TECHNICIANS THOROUGHLY FAMILIAR WITH EQUIPMENT AND MATERIALS AND MARKING LAYOUTS.

GRADING PLAN NOTES

1. THE CONTOUR LINES, SPOT ELEVATIONS AND BUILDING FLOOR ELEVATIONS SHOWN ARE TO FINISH GRADE, SURFACE OF PAVEMENT, TOP OF CURBS, ETC. REFER TO TYPICAL SECTIONS FOR PAVING, SLAB AND AGGREGATE BASE THICKNESS TO DEDUCT PAVEMENT DEPTH FROM ELEVATIONS SHOWN.
2. THE CONTRACTOR SHALL FINISH GRADE SLOPES AS SHOWN NO STEEPER THAN 1 FOOT VERTICAL IN 3 FEET HORIZONTAL.
3. THE CONTRACTOR SHALL GRADE LANDSCAPED AREAS TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING AND SIDEWALKS WHEN FINISH LANDSCAPE MATERIALS ARE IN PLACE.
4. SPOT ELEVATIONS ARE TO EDGE OF PAVEMENT, LIP OF CURB, OR FINISHED GRADE UNLESS OTHERWISE INDICATED. (SEE LEGEND)

STORM SEWER PLAN NOTES

1. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH LEE'S SUMMIT, MISSOURI.
2. ALL PIPE LENGTHS AND ELEVATIONS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING THE BOX DURING INSTALLATION.
4. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF STORM SEWER.
5. STORM SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
6. STRUCTURE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO ½ THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE STRUCTURE.
7. PIPE PENETRATIONS SHALL BE GROUTED TO ENSURE WATERTIGHT SEALS.

SANITARY SEWER PLAN NOTES

1. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH LEE'S SUMMIT, MISSOURI.
2. ALL PIPE LENGTHS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING THE LID DURING INSTALLATION.
4. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF SANITARY SEWER.
5. SANITARY SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
6. MANHOLE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO ½ THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE MANHOLE.
7. PIPE PENETRATIONS SHALL BE USE GASKETS TO ENSURE WATERTIGHT SEALS.
8. TRACING TAPE SHALL BE INSTALLED ALONG ALL NON-METALLIC SURFACES OR AS DIRECTED BY LOCAL CODES AND ORDINANCES.
9. SEWER LINE INSPECTIONS AND TESTING MUST BE SCHEDULED A MINIMUM OF TWO FULL BUSINESS DAYS IN ADVANCE. CONTRACTOR SHALL FURNISH ALL TESTING EQUIPMENT. TESTING SHALL INCLUDE
 - A. MANDREL TEST OF ALL GRAVITY SEWERS. IF THE MANDREL TEST FAILS ON ANY SECTION OF PIPE, THAT SECTION SHALL BE UNCOVERED AND REPLACED.
 - B. AIR PRESSURE TEST OF ALL GRAVITY SEWERS.
 - C. VACUUM TEST OF ALL MANHOLES.
10. GRAVITY SANITARY SEWER AND WATER LINES SHALL BE SEPARATED BY A MINIMUM OF 10' HORIZONTALLY WHEN PARALLEL AND 2' VERTICALLY WHEN CROSSING. WATER LINES SHALL CROSS ABOVE SANITARY SEWERS.

WATER PLAN NOTES

1. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH UTILITY OWNER.
2. ALL PIPE LENGTHS ARE CALCULATED LINEARLY FROM CENTER OF FITTING OR WALL OF VAULT.
3. COORDINATES ARE PROVIDED ALONG PIPE CENTERLINE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING INSTALLATIONS.
4. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF WATER.
5. WATER PIPE TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
6. ALL PRIVATE WATER LINES SHALL BE A MINIMUM OF 48 INCHES AND MAXIMUM OF 60 INCHES BELOW THE FINISHED GRADE ELEVATIONS SHOWN HEREIN UNLESS OTHERWISE NOTED.
7. IF AN AS-BUILT OF A WATER LINE IS REQUIRED OR EXPECTED THE CONTRACTOR SHALL NOT BACKFILL THE TRENCH UNTIL AN AS-BUILT SURVEY IS CONDUCTED.
8. DISINFECTION AND PRESSURE TESTING OF WATER LINES SHALL BE PERFORMED AND PAID FOR BY THE CONTRACTOR AND AS REQUIRED BY THE UTILITY OWNER.
9. BALL EXISTING FIRE HYDRANTS ON SITE OR IN THE RIGHT-OF-WAY BETWEEN PROPERTY AND ROADWAY SHALL BE REPAINTED PER LOCAL CODES AND ORDINANCES.
10. TRACING TAPE SHALL BE INSTALLED ALONG ALL NON-METALLIC SURFACES OR AS DIRECTED BY LOCAL CODES AND ORDINANCES.

DEMOLITION PLAN NOTES

1. ALL NECESSARY DEMOLITION IS EXPECTED TO BE PERFORMED AS INDICATED IN THE SITE DISTURBANCE, MASS GRADING, AND PUBLIC IMPROVMENT PLANS. CONTRACTOR SHALL CONTACT ENGINEER AND OWNER PRIOR TO PERFORMING ANY ADDITIONAL DEMOLITION ACTIVITIES.
2. THE CONTRACTOR SHALL COORDINATE ALL ITEMS TO BE SALVAGED AND/OR PROTECTED WITH SITE OWNER AND UTILITY OWNERS.
3. THE CONTRACTOR SHALL NOT INTERRUPT ANY UTILITY SERVICES TO ANY ADJACENT PROPERTIES. SHOULD ANY INTERRUPTIONS BECOME NECESSARY, THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY AND UTILITY OWNER AND MINIMIZE THE LENGTH OF TIME THE UTILITY IS INTERRUPTED TO THE GREATEST EXTENT POSSIBLE.
4. SECONDARY WIRING, SERVICES, IRRIGATION AND OTHER MINOR SITE IMPROVEMENTS THAT ARE NOT TO REMAIN IN SERVICE ARE TO BE DEMOLISHED AND REMOVED.
5. ALL PAVEMENT SAWCUTS ARE TO BE MADE IN STRAIGHT, CLEAN LINES LEAVING A CLEAN AND STABLE EDGE AT FULL PAVEMENT DEPTH.
6. ALL PCC PAVEMENT AND ALL CURB SHALL BE REMOVED TO NEAREST JOINT.
7. ALL MATERIALS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN STRICT CONFORMANCE WITH LOCAL CODES AND ORDINANCES.
8. ALL TREE REMOVAL SHALL INCLUDE STUMPS AND ROOTS. DEPRESSIONS GREATED SHALL BE FILLED TO PROVIDE DRAINAGE.

DRY UTILITY PLAN NOTES

1. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH UTILITY OWNER.
2. ALL ON-SITE WIRING AND CABLES SHALL BE PLACED UNDERGROUND AND WITHIN CONDUIT UNLESS OTHERWISE SPECIFIED IN THESE PLANS. IF NOT SPECIFIED, ALL CONDUIT SHALL BE IN CONFORMANCE WITH UTILITY OWNER STANDARDS AND SPECIFICATIONS.
3. TELEPHONE AND COMMUNICATION SERVICE ROUTING AND CONDUITS, IF SHOWN AT ALL, ARE SUGGESTED ALIGNMENTS ONLY. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AS REQUIRED BY MEP AND RELATED PLANS AS WELL AS SERVICE PROVIDER PRIOR TO PAVEMENT INSTALLATION.
4. ALL CONDUIT SHALL BE SCHEDULE 40 PVC PIPE AND SIZED PER MEP PLANS OR AS NOTED. CONDUIT SHALL BE SUFFICIENTLY FLEXIBLE TO ALLOW IT TO CONFORM TO MINOR CHANGES IN TRENCH DIRECTION OR ELEVATION. ALL OTHER BENDS SHALL BE MADE USING PRE-FORMED SWEEPS.

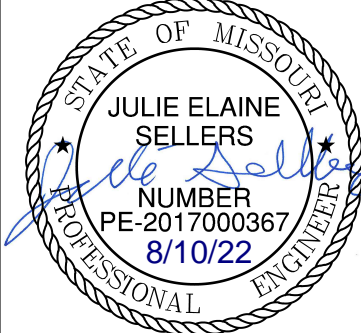
GENERAL NOTES

RAINTREE VILLAGE
FINAL DEVELOPMENT PLAN

LEE'S SUMMIT, MO

drawn by: CSM
checked by: CSM
approved by: JS
QA/QC by: JS
project no.: A21-04054
drawing no.: C_TTL01_A2104054
date: 08.10.2022

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GENERAL NOTES:

1. THE INTENT OF THIS LAND DISTURBANCE PLAN IS TO ASSIST THE DEVELOPER IN HIS RESPONSIBILITY TO PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR NECESSARY TO CONTROL EROSION, SILTATION AND DISCHARGES OF SOIL MATERIAL (SEDIMENT) INTO DOWNSTREAM SYSTEMS OR RECEIVING CHANNELS. THIS SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION AND UNTIL SUITABLE GROUND COVER IS ESTABLISHED FOR ALL DISTURBED AREAS. IF ANY METHOD OF CONTROL FAILS, THE DEVELOPER SHALL NOTIFY THE OWNER IMMEDIATELY, SO THAT THE OWNER OR HIS AGENT CAN REVIEW THE DEVELOPER'S PROPOSED METHOD OF REPAIR.

THIS PLAN INDICATES THE CRITICAL AREA(S) OF CONCERN AND THESE AREA(S) WILL BE CONTROLLED AS A MINIMUM. THE CONTROL MAY CONSIST OF TEMPORARY CONTROL MEASURES AS SHOWN ON THE PLANS OR ORDERED BY THE OWNER DURING THE LIFE OF THE CONTRACT TO CONTROL EROSION OR WATER POLLUTION, THROUGH THE USE OF BERMS, DIKES, DAMS, SEDIMENT BASINS, FIBER MATS, NETTING, STRAW BALES, GRAVEL, MULCHES, GRASSES, SLOPE DRAINS, DIVERSION SWALES OR OTHER EROSION CONTROL DEVICES OR METHODS. THE OWNER HAS THE AUTHORITY TO LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY THE CONSTRUCTION OPERATIONS AND TO DIRECT THE DEVELOPER TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, OR OTHER AREAS OF WATER IMPOUNDMENT OR CONVEYANCES.

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

2. THIS SEDIMENTATION CONTROL PLAN MAKES USE OF THE FOLLOWING APPLICATIONS:
- ___ PRESERVATION OF EXISTING VEGETATION
 - ☒ SEDIMENT BARRIERS
 - ☒ 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. 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 REVIEWING GOVERNING AGENCY 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 REVIEWING GOVERNING AGENCY. 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.

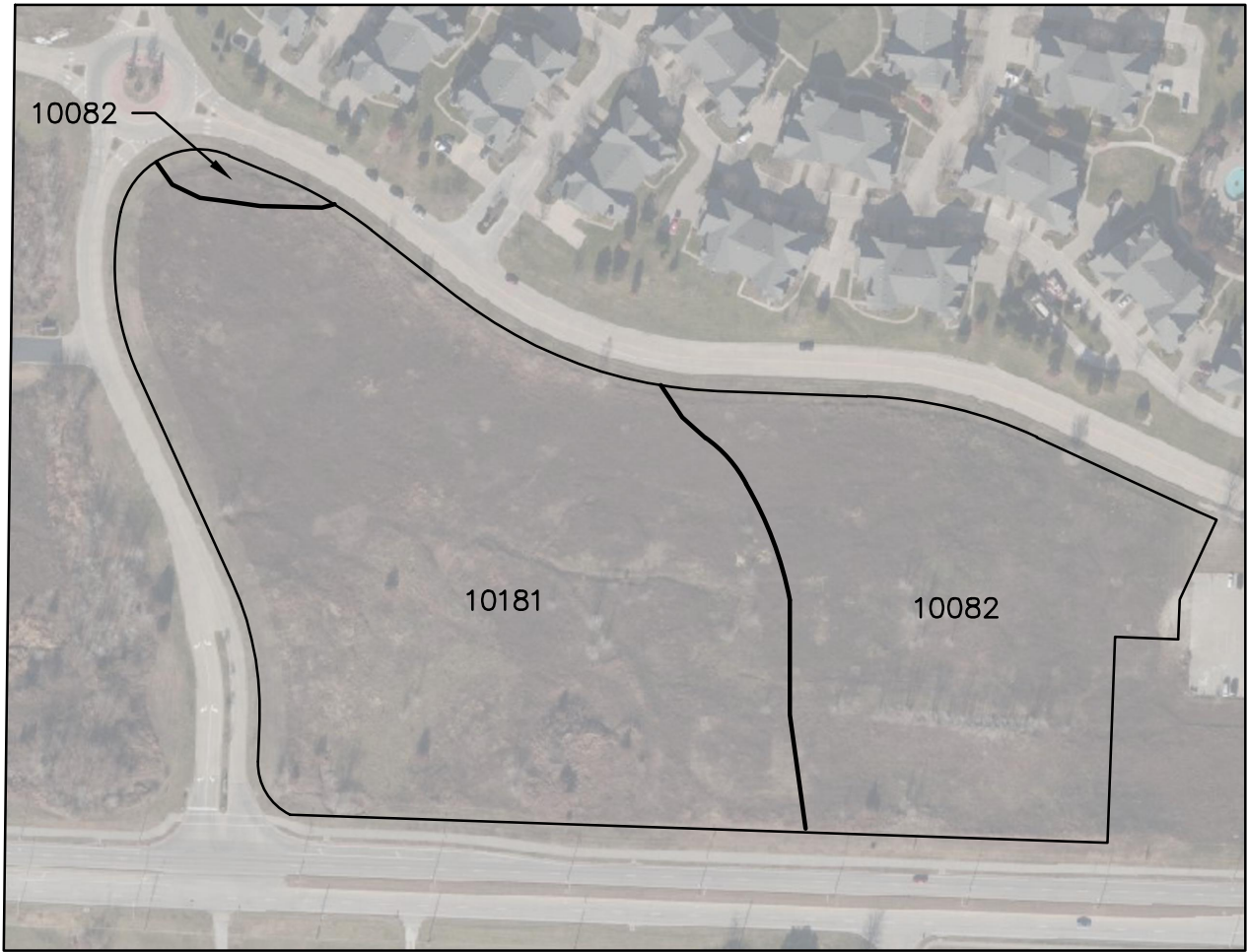
5. ALL EROSION CONTROL MEASURES, TEMPORARY OR PERMANENT, REQUIRE MAINTENANCE TO PRESERVE THEIR EFFECTIVENESS. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED IMMEDIATELY AFTER EACH HEAVY RAINSTORM AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY. ALL COSTS 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 KANSAS CITY, MISSOURI 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 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.



SOIL CLASSIFICATION FROM SOIL MAPS PUBLISHED IN THE SOIL SURVEYS OF CLAY AND RAY COUNTIES, MISSOURI, CATEGORIZE SOIL IN THIS WATERSHED AS:

HYDROLOGIC SOIL GROUP - D
URBAN LAND COMPLEX

SYMBOL - 10082
1 TO 5% SLOPES

HYDROLOGIC SOIL GROUP - D
URBAN LAND-SAMPLES COMPLEX

SYMBOL - 10181
5 TO 19% SLOPES

OPINION OF PROBABLE CONSTRUCTION SCHEDULE

CONSTRUCTION ACTIVITY	MONTH											
	1	2	3	4	5	6	7	8	9	10	11	12
ALL EXISTING EROSION CONTROL MEASURES LEFT IN PLACE AFTER MASS GRADING HAS BEEN COMPLETED SHALL REMAIN IN PLACE AND MAINTAINED PER SWPPP.												
PRIVATE UTILITY CONSTRUCTION												
BUILDING CONSTRUCTION												
PAVING & CURBS												
PUBLIC ROW IMPROVEMENTS												
SEEDING & MULCHING												
ESTABLISH VEGETATION (TO OCCUR MARCH/APRIL OR SEPTEMBER/OCTOBER PER CODE OF ORDINANCE SEC 63-31												

NOTE:
THIS SCHEDULE DOES NOT ADDRESS WEATHER DELAYS OR THE SEEDING SEASON. SCHEDULE IS PRELIMINARY FOR DESIGN USE ONLY AND MAY NEED MODIFIED DUE TO CONSTRUCTION AND CONTRACTOR AVAILABILITY. SCHEDULE MAY FLUCTUATE DUE TO MARKET DEMAND AND AS DETERMINED BY THE DEVELOPER AND IS TO BE USED AS A GUIDELINE ONLY. SEEDING IS NOT TO OCCUR DURING THE WINTER MONTHS. IF STABILIZATION IS TO OCCUR DURING THIS TIME, EROSION CONTROL MAT IS TO BE IN PLACE TO STABLIZE DISTURBED AREA.

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STATE OF MISSOURI
JULIE ELAINE
SELLERS
NUMBER
PE-2017000367
8/10/22
PROFESSIONAL ENGINEER

BY

REV. NO.

DATE

REVISIONS DESCRIPTION

SITE DISTURBANCE NOTES

RAINTREE VILLAGE
FINAL DEVELOPMENT PLAN

LEE'S SUMMIT, MO

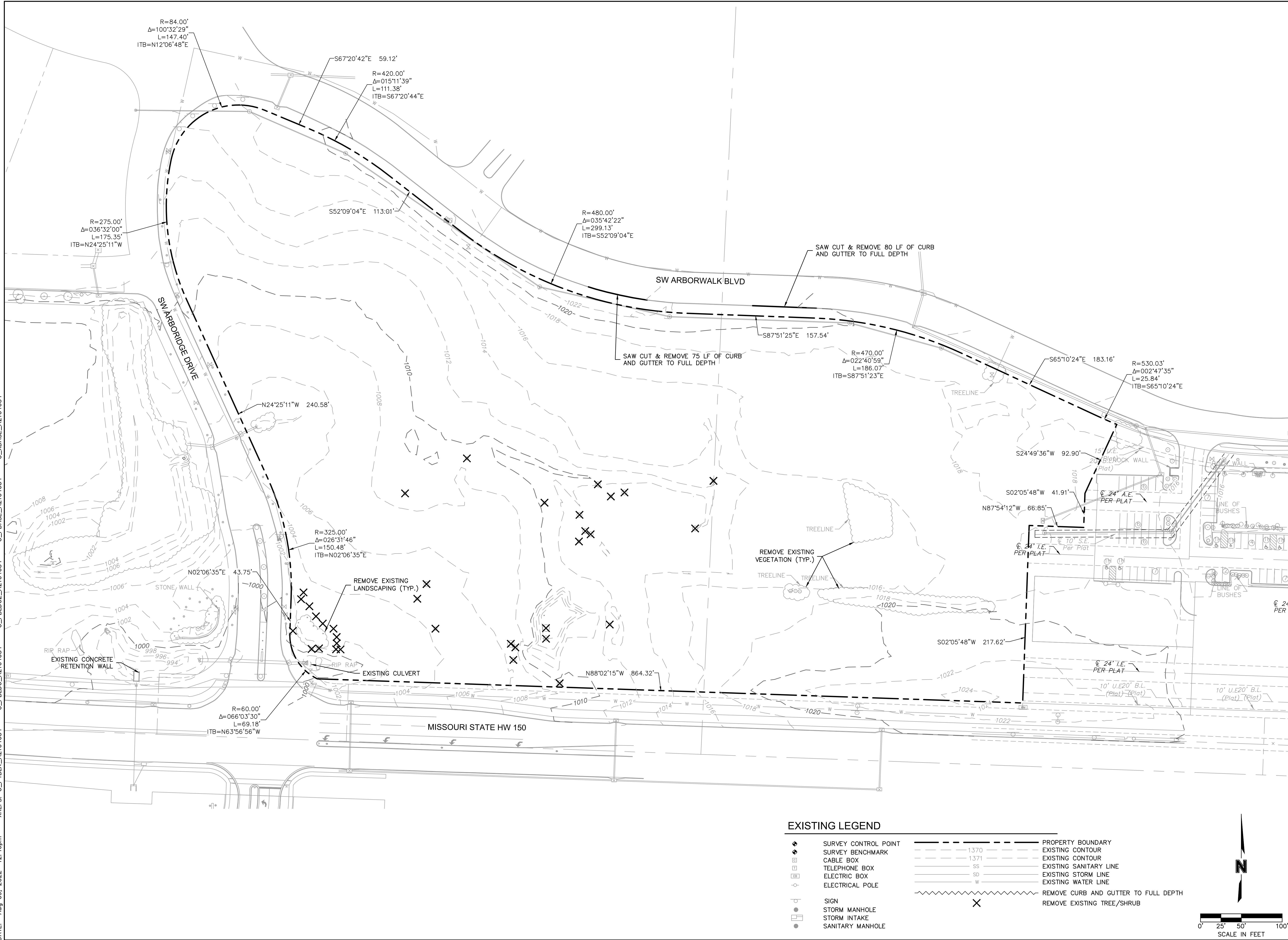
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REVISIONS

drawn by: CSM
checked by: CSM
approved by: JS
QA/QC by: JS
project no.: A21-04054
drawing no.: C_TTL01_A2104054
date: 08.10.2022

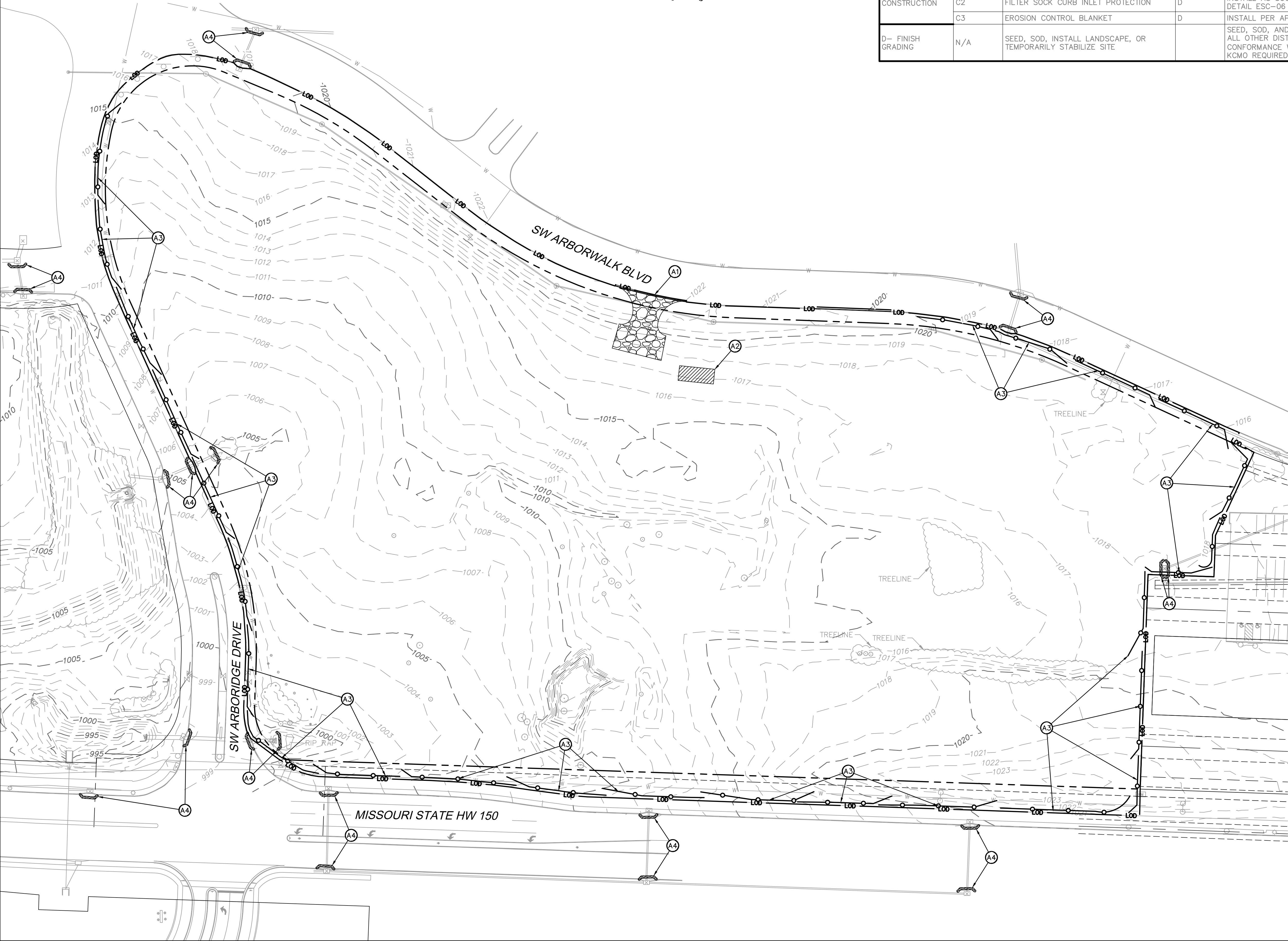
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drawn by: _____ CSM checked by: _____ CSM approved by: _____ JBS QA/QC by: _____ JBS project no.: _____ A21-04054 drawing no.: C_EX001 A2104054 date: _____ 08.10.2022		EXISTING CONDITIONS & DEMOLITION PLAN		REV. NO.		DATE	REVISIONS DESCRIPTION	BY
		RAINTREE VILLAGE FINAL DEVELOPMENT PLAN						
LEE'S SUMMIT, MO		2022				REVISIONS		
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EROSION CONTROL PLAN LEGEND

- EXISTING GRADE INDEX CONTOUR
- EXISTING GRADE MINOR CONTOUR
- FINISHED GRADE INDEX CONTOUR
- FINISHED GRADE MINOR CONTOUR
- CONSTRUCTION ENTRANCE
SEE NOTE
- CONCRETE WASHOUT
SEE NOTE
- SILT FENCE
- FILTER SOCK CURB INLET PROTECTION

EROSION CONTROL PHASING CHART

PROJECT PHASE	BMP NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRE-DEMOLITION	A1	CONSTRUCTION ENTRANCE	D	INSTALL PER APWA DETAIL ESC-01. REMOVE DURING STAGE C AS REQUIRED FOR PAVEMENT INSTALLATION.
	A2	CONCRETE WASHOUT	D	INSTALL PER APWA DETAIL ESC-01. REMOVE DURING STAGE C AS REQUIRED FOR PAVEMENT INSTALLATION.
	A3	SILT FENCE	D	INSTALL PER APWA DETAIL ESC-03
	A4	FILTER SOCK CURB INLET PROTECTION	D	INSTALL AT ALL EXISTING INLETS WHERE INDICATED. INSTALL PER APWA DETAIL ESC-06
B - INTERIM	B1	SEDIMENT TRAP	D	INSTALL PER APWA DETAIL ESC-08. REMOVE DURING STAGE C AS REQUIRED FOR CONSTRUCTION
	B2	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC-05. REMOVE DURING STAGE C AS REQUIRED FOR CONSTRUCTION
C- CONSTRUCTION	C1	SILT FENCE INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-07
	C2	FILTER SOCK CURB INLET PROTECTION	D	INSTALL AS SOON AS PROPOSED INLETS ARE INSTALLED. INSTALL PER APWA DETAIL ESC-06
	C3	EROSION CONTROL BLANKET	D	INSTALL PER APWA DETAIL ESC-02
D- FINISH GRADING	N/A	SEED, SOD, INSTALL LANDSCAPE, OR TEMPORARILY STABILIZE SITE		SEED, SOD, AND LANDSCAPING SHALL BE INSTALLED PER LANDSCAPE PLANS. ALL OTHER DISTURBED AREAS MUST BE TEMPORARILY STABILIZED IN CONFORMANCE WITH KCMO/APWA SEPCIFICATION 2406.4. FINAL ACCEPTANCE BY KCMO REQUIRED.

EROSION CONTROL PLAN - STAGE A

RAINTREE VILLAGE
FINAL DEVELOPMENT PLAN

LEE'S SUMMIT, MO

2022

REVISIONS

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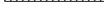
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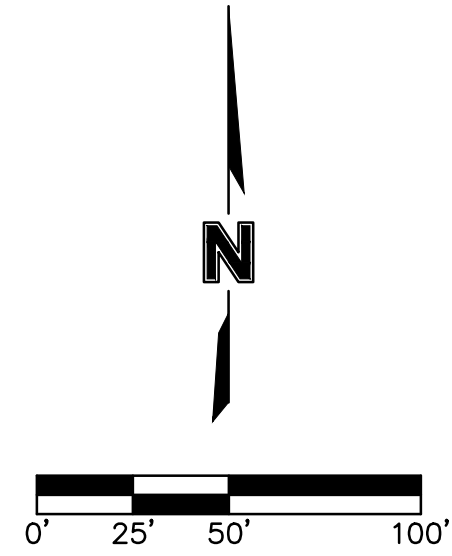
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	CONSTRUCTION ENTRANCE SEE NOTE
	CONCRETE WASHOUT SEE NOTE
	SILT FENCE
	DIVERSION BERM
	SWALE
	SEDIMENT TRAP BOUNDARY
	DRAINAGE AREA
	FILTER SOCK CURB INLET PROTECTION

PROJECT PHASE	BMP NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
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	A3	SILT FENCE	D	INSTALL PER APWA DETAIL ESC-03
	A4	FILTER SOCK CURB INLET PROTECTION	D	INSTALL AT ALL EXISTING INLETS WHERE INDICATED. INSTALL PER APWA DETAIL ESC-06
B – INTERIM	B1	SEDIMENT TRAP	D	INSTALL PER APWA DETAIL ESC-08. REMOVE DURING STAGE C AS REQUIRED FOR CONSTRUCTION
	B2	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC-05. REMOVE DURING STAGE C AS REQUIRED FOR CONSTRUCTION
C- CONSTRUCTION	C1	SILT FENCE INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-07
	C2	FILTER SOCK CURB INLET PROTECTION	D	INSTALL AS SOON AS PROPOSED INLETS ARE INSTALLED. INSTALL PER APWA DETAIL ESC-06
	C3	EROSION CONTROL BLANKET	D	INSTALL PER APWA DETAIL ESC-02
D- FINISH GRADING	N/A	SEED, SOD, INSTALL LANDSCAPE, OR TEMPORARILY STABILIZE SITE		SEED, SOD, AND LANDSCAPING SHALL BE INSTALLED PER LANDSCAPE PLANS. ALL OTHER DISTURBED AREAS MUST BE TEMPORARILY STABILIZED IN CONFORMANCE WITH KCMO/APWA SEPCIFICATION 2406.4. FINAL ACCEPTANCE BY KCMO REQUIRED.

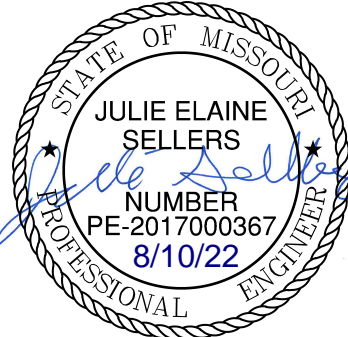


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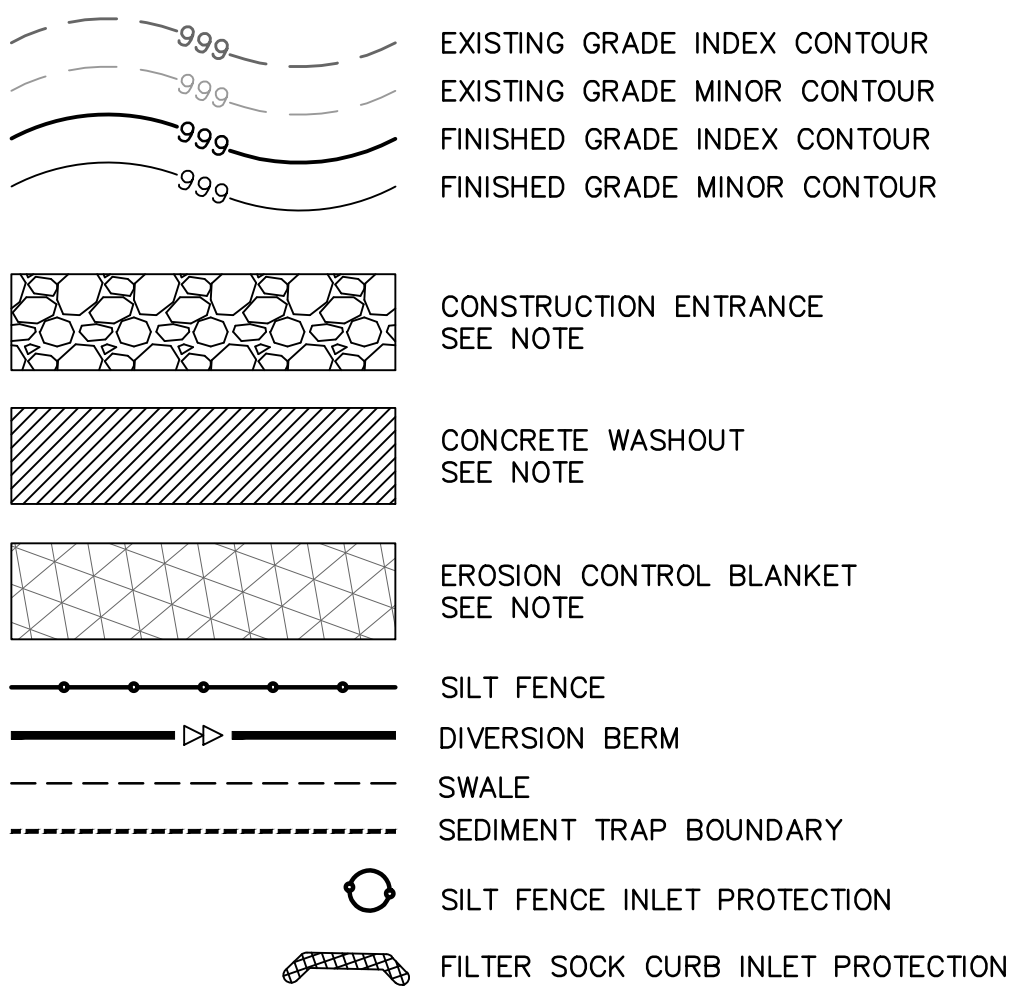
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checked by: _____ CSM
approved by: _____ JS
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drawing no.: C ERC02 A2104054
date: _____ 08.10.2022

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USER: cmjyo



EROSION CONTROL PLAN LEGEND



EROSION CONTROL PHASING CHART				
PROJECT PHASE	BMP NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A – PRE-DEMOLITION	A1	CONSTRUCTION ENTRANCE	D	INSTALL PER APWA DETAIL ESC-01. REMOVE DURING STAGE C AS REQUIRED FOR PAVEMENT INSTALLATION.
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	B2	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC-05. REMOVE DURING STAGE C AS REQUIRED FOR CONSTRUCTION
C- CONSTRUCTION	C1	SILT FENCE INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC-07
	C2	FILTER SOCK CURB INLET PROTECTION	D	INSTALL AS SOON AS PROPOSED INLETS ARE INSTALLED. INSTALL PER APWA DETAIL ESC-06
	C3	EROSION CONTROL BLANKET	D	INSTALL PER APWA DETAIL ESC-02
D- FINISH GRADING	N/A	SEED, SOD, INSTALL LANDSCAPE, OR TEMPORARILY STABILIZE SITE		SEED, SOD, AND LANDSCAPING SHALL BE INSTALLED PER LANDSCAPE PLANS. ALL OTHER DISTURBED AREAS MUST BE TEMPORARILY STABILIZED IN CONFORMANCE WITH KCMO/APWA SEPCIFICATION 2406.4. FINAL ACCEPTANCE BY KCMO REQUIRED.

EROSION CONTROL PLAN - STAGE C & D

RAINTREE VILLAGE FINAL DEVELOPMENT PLAN

LEE'S SUMMIT, MO

2022

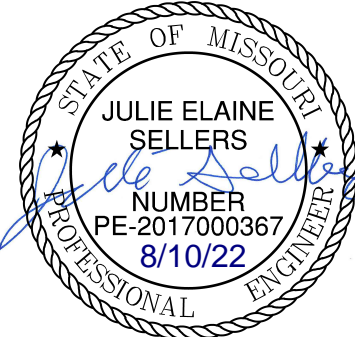
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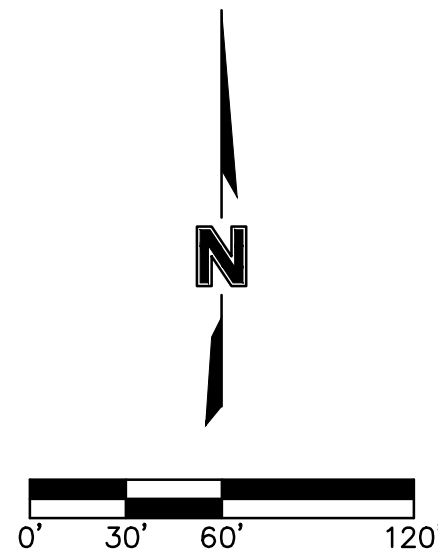
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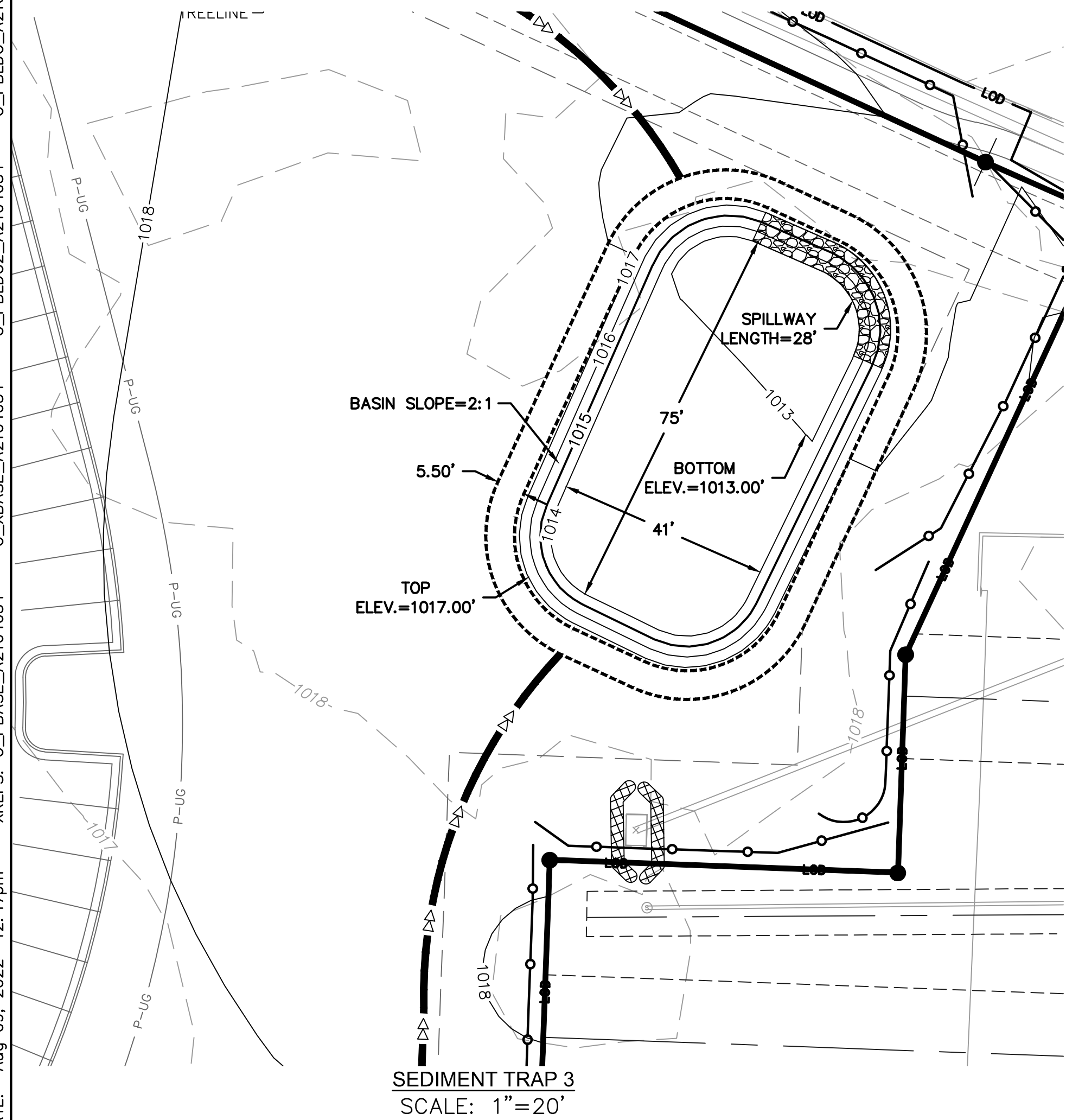


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NOTES

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 TO 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.

Q.	TRIBUTARY AREA	REQUIRED VOLUME	BERM HEIGHT "H"	SPILLWAY HEIGHT "H ₀ "	PROVIDED STORAGE VOLUME	BERM TOP WIDTH "W"	SPILLWAY LENGTH	EXCAVATED DEPTH	EXCAVATED VOLUME	BOTTOM OF TRAP	SEDIMENT CLEANOUT VOLUME	SEDIMENT CLEANOUT ELEVATION
	(AC.)	(C.F.)	(FT.)	(FT.)	(C.F.)	(FT.)	(FT.)	(FT.)	(C.F.)	(FT.)	(C.F.)	(FT.)
1	4.98	8964.00	1.5	0.5	13855.00	2	30	1.5	4568.00	999.50	1792.80	1000.74
2	2.29	4122.00	4	3	5484.20	3	14	3	2777.00	1005.00	1096.84	1006.35
3	4.56	8208.00	3	2	8747.44	2.5	28	2	3263.52	1014.00	1749.49	1014.99

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