HIGHLAND MEADOWS - 5TH PLAT STREET, STORM SEWER, AND EROSION CONTROL PLANS

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SEC. 10, TWP. 47N, RNG. 32W

DATE: 3/15/2021

VICINITY MAP

SECTION 10, TOWNSHIP 47, RANGE 32 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

LEGAL DESCRIPTION:

THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 47 NORTH, RANGE 32 WEST, EXCEPT THOSE PARTS PLATTED AS HIGHLAND MEADOWS FIRST PLAT, HIGHLAND MEADOWS SECOND PLAT, HIGHLANDS MEADOWS THIRD PLAT, HIGHLAND MEADOWS 4TH PLAT, SUBDIVISIONS IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI.

OIL AND GAS WELL NOTES.

IDENTIFIED WITHIN THE PROPERTY LIMITS OF THE PROPOSED CONSTRUCTION ACTIVITIES, PER THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) PERMITTED OIL AND GAS DATABASE. DATED





UTILITY CONTACTS:

SANITARY & WATER: CITY OF LEE'S SUMMIT JEFF THORN 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE (816) 969-1900

<u>STREETS:</u> CITY OF LEE'S SUMMIT MICHAEL PARK

220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE (816) 969-1900

EVERGY: DOUG DAVIN 1300 SE HAMBLEN ROAD LEE'S SUMMIT, MO 64081 PHONE (816) 347-4320

KANSAS CITY, MO 64106 PHONE (816) 275-1550

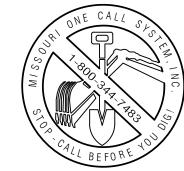
MISSOURI GAS ENERGY: RICHARD FROCK 3025 SW CLOVER DRIVE LEE'S SUMMIT, MO 64082 PHONE (816) 472-3489

FEMA FLOOD INFORMATION:

THE SITE IS LOCATED IN ZONE X, AREA OF MINIMAL FLOOD HAZARD, PER FEMA FIRM MAP 29095C0418G: EFFECTIVE DATE OF JANUARY 20, 2017. NO LETTERS OF MAP AMENDMENT OR REVISIONS ARE BEING PROPOSED.

BENCHMARK:

BM #1 N=999843.9665 E=2898946.9717 ELEV=935.04 DESCRIPTION = "JA-148" REFERENCE SYSTEM MONUMENT



STORMWATER:

CITY OF LEE'S SUMMIT PUBLIC WORKS 220 SE GREEN STREET LEE'S SUMMIT. MO 64063 PHONE (816) 969-1800

RONALD GIPFERT 500 E 8TH STREET

COUNTY, MISSOURI, GEOGRAPHIC REFERENCE SYSTEM MONUMENT JA-148 (2003 ADJUSTMENT).

GRS DISK SET IN CONCRETE FLUSH WITH THE GROUND AND STAMPED "JA-148, 2002" LOCATED ON THE NORTH SIDE OF 3RD STREET, 12.5 FEET NORTH OF A SIDEWALK AND 102.5 FEET WEST OF THE PARKING LOT EXIT OF CEDAR CREEK ELEMENTARY SCHOOL.

"JA-148" - STANDARD KC METRO ALUMINUM

WATERSHED: LITTLE BLUE RIVER

AT REFERENCE MONUMENT JA-148.

COORDINATES ARE BASED ON THE MISSOURI

STATE PLANE COORDINATE SYSTEM, WEST ZONE,

USING JACKSON COUNTY, MISSOURI, GEOGRAPHIC

REFERENCE SYSTEM MONUMENT JA-148 (2003

UTILIZING A GRID SCALE FACTOR OF 0.9999020

PROJECT ELEVATIONS ARE BASED ON JACKSON

ADJUSTMENT) AND ARE MODIFIED FROM GRIS

COORDINATES TO GROUND COORDINATES BY

SURVEY CONTROL:

GENERAL NOTES:

- CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE EXISTING CONDITIONS OF THE SITE AND HAVE ALL UTILITIES MARKED PRIOR TO COMMENCING CONSTRUCTION.
- 2. CONTRACTOR SHALL POTHOLE ALL CONNECTION POINTS TO EXISTING UTILITIES AND POTENTIAL UTILITY CONFLICT LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT OR DISCREPANCY EXISTS.
- 3. CONTRACTOR SHALL PROTECT EXISTING STRUCTURES TO REMAIN FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION. ANY DAMAGE SHALL BE REPAIRED / REPLACED TO PRE-CONSTRUCTION CONDITION AT CONTRACTOR'S EXPENSE.
- 4. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

C101 - TYPICAL SECTIONS FINAL STABILIZATION EROSION CONTROL PLAN - ADA RAMP CROSS SECTIONS CONSTRUCTION ENTRANCE DETAILS

PROJECT SPECIFICATIONS:

C609 - OUTLET PROTECTION DETAILS

THE SPECIFICATIONS FOR THIS PROJECT SHALL BE THE FOLLOWING:

— STEEP SLOPE PROTECTION DETAILS

1. MOST CURRENT VERSION OF THE DESIGN AND CONSTRUCTION MANUAL OF THE CITY OF LEE'S SUMMIT AS ADOPTED BY ORDINANCE 5813.

THE STANDARD SPECIFICATIONS THROUGH AND INCLUDING THE LATEST AMENDMENTS SHALL BE PART OF THESE PROJECT DRAWINGS AND SPECIFICATIONS AND ARE INCORPORATED HEREIN BY REFERENCE. THE MORE STRINGENT OF THESE STANDARD SPECIFICATIONS AND THOSE PREPARED BY THE ENGINEER PREPARING THESE PLANS SHALL GOVERN.

PREPARED & SUBMITTED BY:

ANDERSON ENGINEERING INC. KANSAS CITY, MISSOURI

DISTURBED AREA: 15.3 AC

LOTS: 134-159 (26 TOTAL)

ZACH MYERS ANDERSON ENGINEERING, INC. 941 W 141ST TERR KANSAS CITY, MO 64145 ZMYERS@ANDERSONENGINEERINGINC.COM

DEVELOPER:

SUMMIT HOMES KC

(816) 927–9711

(816) 380-4821

120 SE 30TH STREET

CIVIL ENGINEER:

LEE'S SUMMIT, MO 64082

BRADLEY@SUMMITHOMESKC.COM

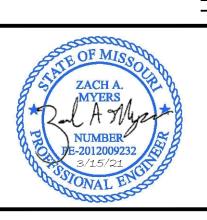
BRAD KEMPF

ZACH MYERS, P.E. MISSOURI P.E. NO. 2012009232 DATE

RELEASE FOR CONSTRUCTION **AS NOTED ON PLANS REVIEW** DEVELOPMENT SERVICES **LEE'S SUMMIT, MISSOURI** 04/16/2021

| | REVISIONS | | | DR/ | DRAWING INFO. |
|-----|---|------|------------------|------------------------|---------------|
| NO. | DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | GC |
| 1. | REVISED PER CITY COMMENTS | CC | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| 2. | REVISED PER CITY COMMENTS | GC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-2012009232 |
| 3. | REVISED PER CITY COMMENTS | CC | GC 3/10/21 DATE: | DATE: | 12/2/2020 |
| 4. | REVISED PER CITY COMMENTS | CC | 3/15/21 | GC 3/15/21 ISSUED FOR: | FOR REVIEW |
| | | | | JOB NUMBER: | 20KC10057 |
| | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |

SH



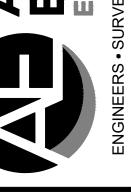
SHEET NUMBER <u>of 40</u>

GENERAL NOTES

- 1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE ALL STATE AND CITY PERMITS, INCLUDING PERMITS REQUIRED BY OTHER GOVERNING BODIES, REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT.
- 2. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND NOTIFYING ALL UTILITY COMPANIES AND SHALL FIELD VERIFY ALL UTILITIES THAT MAY BE ENCOUNTERED. THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR COMPLETE. IN THE EVENT THAT EXISTING UTILITIES ARE CONTACTED, DISRUPTED, OR IN ANY WAY ALTERED, CONTACT THE RESPECTIVE UTILITY COMPANY IMMEDIATELY. IN CASE OF EMERGENCY, DIAL 911.
- 3. THE CONTRACTOR SHALL PROVIDE EROSION AND SILT PROTECTION AS REQUIRED DURING CONSTRUCTION AND SHALL BE RESPONSIBLE FOR KEEPING EXISTING STREET AND ADJACENT LAND FEATURES AND PROPERTY FREE OF MUD AND SILT. SEE "EROSION CONTROL PLAN" FOR MINIMUM EROSION CONTROL MEASURES REQUIRED BY THESE PLANS. EROSION CONTROLS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ONCE CONSTRUCTION BEGINS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES AND SHALL PROMPTLY REPAIR ANY AREA REQUIRING ATTENTION UNTIL SUBSTANTIAL COMPLETION.
- 4. WARRANTY/DISCLAIMER: THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO CERTIFY THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER OBSERVES AND CONTROLS THE PHYSICAL CONSTRUCTION AND THE CONTINUAL BASIS AT THE SITE.
- 5. ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.
- 6. THE CONTRACTOR SHALL PROVIDE AT LEAST ONE (1) CHEMICALLY TREATED PORTABLE TOILET UNIT, "SATELLITE CORPORATION", OR EQUAL FOR EVERY 20 WORKMEN ON THE JOB SITE. IN NO CASE SHALL LESS THAN ONE (1) BE PROVIDED. THE UNITS(S) SHALL REMAIN ON THE SITE DURING ALL ACTIVE PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL ENFORCE THE USE OF THE PUBLIC VIEW TO THE GREATEST EXTENT PRACTICABLE.
- 7. ALL AREA TO BE FILLED AND SUBGRADES UNDER PAVEMENTS SHALL BE PROOF—ROLLED WITH A LOADED, RUBBER TIRED TRUCK PRIOR TO FILL PLACEMENT OR ROADWAY PAVING OPERATIONS BEGIN. SOFT OR UNSTABLE AREA SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL.
- 8. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A COPY OF AND BECOME FAMILIAR WITH THE GEOTECHNICAL REPORT BY ANDERSON ENGINEERING INC., UNLESS SPECIFICALLY NOTED ON THE PLANS. THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT ARE HEREBY INCORPORATED INTO THE PROJECT REQUIREMENTS AND SPECIFICATIONS.
- 9. THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION LAYOUT AND STAKING FOR THIS PROJECT.
- 10. ALL PIPE LENGTHS ARE SHOWN FROM STRUCTURE CENTER TO STRUCTURE CENTER.
- 11. ALL STRUCTURE STATION AND OFFSET CALLOUTS ARE TO THE CENTER OF STRUCTURE.
- 12. ALL CURB STATIONS, OFFSETS AND ELEVATIONS ARE TO THE TOP BACK OF CURB UNLESS OTHERWISE NOTED.
- 13. ALL CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE <u>SUBSIDIARY</u> TO NEW DRAINAGE CONSTRUCTION.
- 14. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ACCESS TO ALL PROPERTIES IS AVAILABLE DURING CONSTRUCTION OF THE PROJECT.
- 15. ALL SAW CUTS SHOWN ON THE PLANS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED <u>SUBSIDIARY</u> TO OTHER ITEMS OF THE CONTRACT. THE DEPTH OF THE CUT SHALL BE FULL DEPTH.
- 16. EXISTING CONCRETE PAVEMENT AND EXISTING BITUMINOUS PAVEMENT THAT IS REMOVED WILL BECOME THE PROPERTY OF THE CONTRACTOR & DISPOSED OF AT HIS EXPENSE.
- 17. EXISTING DRAINAGE STRUCTURES THAT ARE REMOVED, INCLUDING END SECTIONS, SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS.
- 18. CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE ELEVATIONS.
- 19. CHANNELS SHALL BE CUT AT BOX CULVERTS (UNLESS OTHERWISE NOTED) TO FLOW LINE ELEVATIONS AND TO A WIDTH OF ONE FOOT OUTSIDE OF EACH OUTSIDE WALL AND WITH SLOPES OF 2 TO 1 PRIOR TO CONSTRUCTION OF THE CULVERT.
- 20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE UTILITY OWNERS TO LOCATE AND FLAG ALL RELOCATED UNDERGROUND UTILITIES PRIOR TO EXCAVATION TO AVOID DAMAGING THE UTILITIES. THE LOCATIONS SHOWN ON THE PLANS ARE THE ORIGINAL SURVEYED LOCATION, PRIOR TO RELOCATION IN SOME CASES. THE INFORMATION SHOWN IN THESE PLANS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL—INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES PROVIDED FOR FIELD LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL COORDINATE WITH THE PROPER UTILITY OWNERS DURING CONSTRUCTION OF THE PROPOSED STORM SEWER SYSTEM TO AVOID DAMAGES TO EXISTING FACILITIES. DAMAGE TO ANY FACILITIES WILL BE PAID FOR AT THE CONTRACTOR'S EXPENSE.
- 21. ALL TREES, SHRUBS, BUSHES, AND BRUSH WITHIN THE GRADING LIMITS SHALL BE REMOVED BY THE CONTRACTOR UNLESS SPECIFICALLY INDICATED TO BE SAVED ON THE PLANS.
- 22. ALL SIGNS REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CITY, UNLESS NOT DESIRED BY CITY. IF NOT DESIRED BY CITY, CONTRACTOR SHALL REMOVE AND DISPOSE OF SIGNS AT HIS EXPENSE.
- 23. DRAINAGE STRUCTURES WHICH ARE TO REMAIN, WHETHER EXTENDED OR NOT, SHALL BE CLEANED OUT BY THE CONTRACTOR, AS DIRECTED BY THE CITY.
- 24. CONTRACTOR SHALL ACCOMPANY A DESIGNATED CITY REPRESENTATIVE DURING A PHOTOGRAPHY & VIDEO TOUR BEFORE ANY CONSTRUCTION BEGINS TO RECORD EXISTING CONDITIONS.
- 25. THE CONTRACTOR SHALL THOROUGHLY REVIEW AND BECOME FAMILIAR WITH THE PROJECT PLANS, SPECIFICATIONS AND ANY SPECIAL CONDITIONS OF THE CONTRACT DOCUMENTS PRIOR TO BEGINNING CONSTRUCTION OF THIS PROJECT.

- 26. DRIVEWAYS, SIDEWALKS, PARKING LOTS, YARD LIGHTS, FENCES, SPRINKLER SYSTEMS, UTILITY SERVICE LINE CONNECTIONS, LANDSCAPING, SEPTIC SYSTEMS, AND OTHER AREAS OUTSIDE THE CONSTRUCTION EASEMENTS THAT ARE DAMAGED BY THE CONTRACTOR SHALL BE RESTORED AT HIS EXPENSE TO A CONDITION EQUAL TO OR BETTER THAN EXISTING BEFORE DAMAGE OCCURRED.
- 27. ALL WORK SHALL BE CONFINED WITHIN THE EASEMENTS AND/OR GRADING LIMITS AS DIRECTED BY THE ENGINEER. ALL TEMPORARY CONSTRUCTION EASEMENTS SHALL BE STAKED BY THE CONTRACTOR PRIOR TO BEGINNING OF CONSTRUCTION. ALL GRADING LIMITS SHOWN ARE APPROXIMATE AND MAY BE EXTENDED OR REDUCED AT THE DIRECTION OF THE ENGINEER.
- 28. THE CONTRACTOR SHALL PROVIDE ADEQUATE SEDIMENT AND EROSION CONTROL TO PREVENT SEDIMENT AND/OR DEBRIS FROM ENTERING STREETS OPEN TO TRAFFIC THE COMPLETED STORM SEWER SYSTEM, OR YARDS OF ADJACENT RESIDENCES AND BUSINESSES.
- 29. ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST M.U.T.C.D. THE TRAFFIC CONTROL PLANS SHOWN ARE MINIMUM REQUIREMENTS ONLY AND DO NOT ATTEMPT TO ADDRESS IN DEPTH THE VARIETY OF SITUATIONS THAT MAY OCCUR ONCE CONSTRUCTION BEGINS. THE REQUIREMENTS SHOWN IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR SELECTING & IMPLEMENTING THE PROPER DEVICES AND PROCEDURES THAT WILL ASSURE THE SAFETY OF MOTORISTS, PEDESTRIANS, & WORKERS AT ALL TIMES.
- 30. LABOR, TOOLS, MATERIALS, AND EQUIPMENT REQUIRED FOR TEMPORARY CONNECTIONS TO MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION SHALL BE <u>SUBSIDIARY</u> TO OTHER PAY ITEMS.
- 31. REMOVAL OF EXISTING STRUCTURES SHALL INCLUDE, BUT NOT BE LIMITED TO, THE ITEMS NOTED IN THE PLANS AND IN THE SUMMARY OF QUANTITIES. WORK SHALL BE PAID FOR UNDER BID ITEM "REMOVAL OF EXISTING STRUCTURES". CONTRACTOR WILL DISPOSE OF EXISTING STRUCTURES AT HIS EXPENSE.
- 32. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPORTING AND PROTECTING ALL EXPOSED UTILITIES IN OPEN TRENCHES. WORK SHALL BE <u>SUBSIDIARY</u> TO OTHER PAY ITEMS.
- 33. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING STORM SEWER PIPES AND ADJUST THE PROPOSED FLOWLINE ELEVATIONS, PIPE LENGTHS, AND STRUCTURES AS EACH SECTION OF THE EXISTING DRAINAGE STRUCTURE IS REMOVED AND UNCOVERED.
- 34. EXCESS MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR DISPOSAL.
- 35. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY AT ALL TIMES.
- 36. CONTRACTOR RESPONSIBLE FOR CONSTRUCTION OF ALL ADA—ACCESSIBLE RAMPS, AS WELL AS ANY SIDEWALK ADJACENT TO TRACTS OR UNPLATTED LAND, AT THE TIME OF INFRASTRUCTURE IMPROVEMENTS.
- 37. CONTRACTOR TO CONSTRUCT STORMWATER MANAGEMENT FACILITIES, SPECIFICALLY THOSE FEATURES RELATED TO DETENTION, PRIOR TO ANY LAND DISTURBANCE OF THE SITE AND PRIOR TO THE CONSTRUCTION OF ANY OTHER SITE DEVELOPMENT WORK AS NOT TO EFFECT DOWNSTREAM NEIGHBORS WITH UNDETAINED STORMWATER DISCHARGE.
- 38. AN AS-GRADED AND AS-BUILT DRAWING SHALL BE SUBMITTED TO AND REVIEWED BY THE CITY FIR THE DETENTION BASIN. THIS SHALL BE REQUIRED PRIOR TO ISSUANCE OF A CERTIFICATE OF SUBSTANTIAL COMPLETION. ALL PRECAUTIONS SHOULD BE TAKEN TO ENSURE DETENTION POND AND OUTLET STRUCTURE ARE CONSTRUCTED ACCORDING TO THE APPROVED PLANS; VOLUMES AND ELEVATIONS ARE CRITICAL FOR AS-BUILT APPROVAL. THE CITY SHALL BE PROVIDED WITH AN AS-BUILT SURVEY OF THE DETENTION, OUTLET STRUCTURE INCLUDING ALL WEIR ELEVATIONS AND STORM SYSTEM INCLUDING ALL THE INVERTS, STAMPED BY A MISSOURI LICENSED ENGINEER.

ANDERSON ENGINEERIN EMPLOYEE OWNED



| | | REVISIONS | | | DR/ | DRAWING INFO. |
|----------|-----|---|------|---------|------------------------|---------------|
| Z | NO. | DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | 90 |
| ~ | 1. | REVISED PER CITY COMMENTS | CC | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| () | 2. | REVISED PER CITY COMMENTS | CC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-2012009232 |
| | | | | | DATE: | 12/2/2020 |
| | | | | | ISSUED FOR: | FOR REVIEW |
| | | | | | JOB NUMBER: 20KC10057 | 20KC10057 |
| | | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |

ENERAL NOTES

ZACH A.

MYERS

NUMBER

PE-2012009232

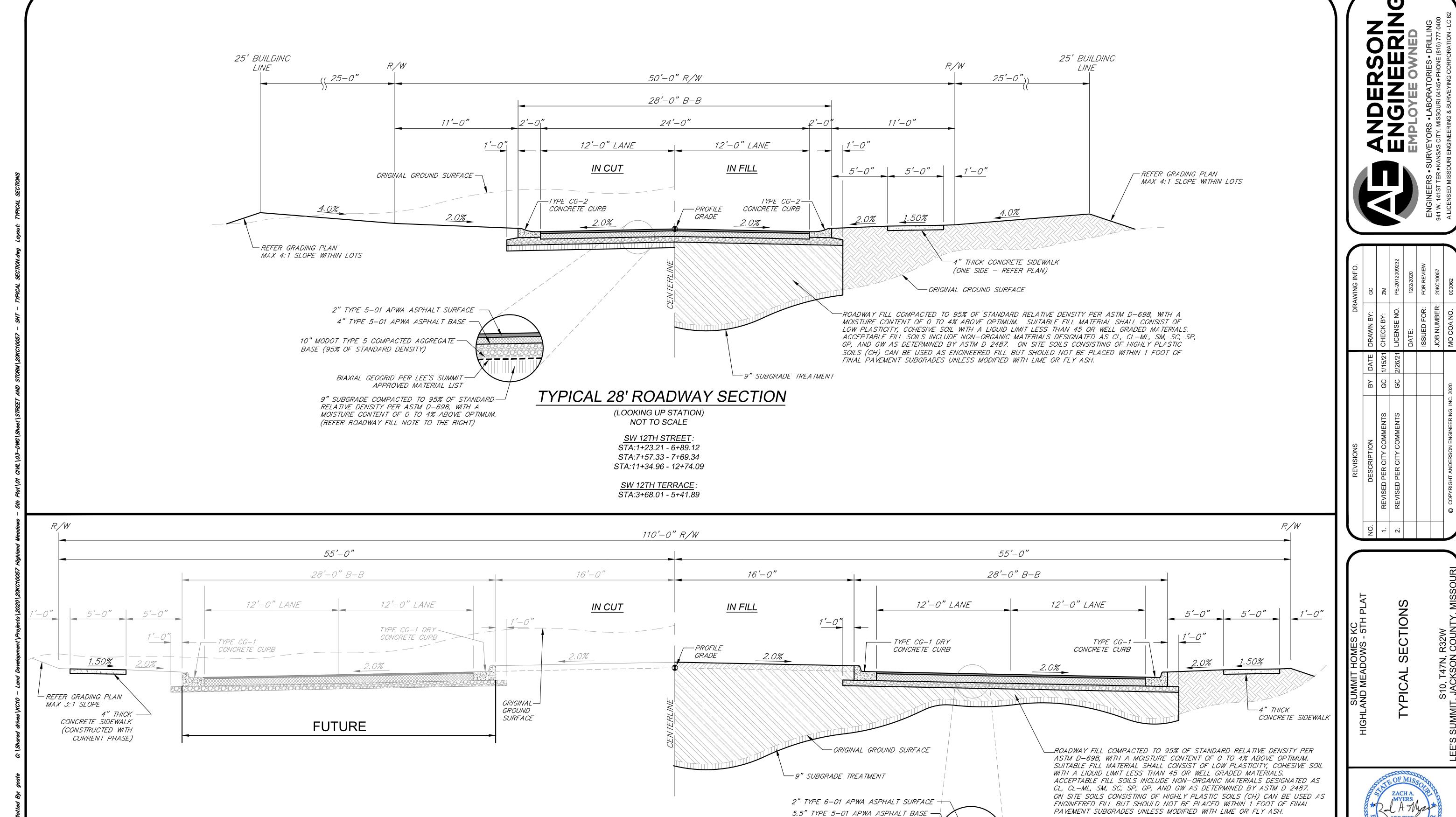
3/10/21

STONAL ENGINEER

SHEET NUMBER

COSO
2 OF 40

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI



TYPICAL LONGVIEW BLVD. SECTION

(LOOKING UP STATION)

NOT TO SCALE

LONGVIEW BOULEVARD:

STA:27+07.06 - 27+90.00

12" MODOT TYPE 5 COMPACTED

9" SUBGRADE COMPACTED TO 95% OF STANDARD-

MOISTURE CONTENT OF 0 TO 4% ABOVE OPTIMUM.

RELATIVE DENSITY PER ASTM D-698, WITH A

(REFER ROADWAY FILL NOTE TO THE RIGHT)

AGGREGATE BASE (95% OF

STANDARD DENSITY)

WORKS APPROVED MATERIALS LIST

BIAXIAL GEOGRID PER LEE'S SUMMIT PUBLIC -

| 1 | | | | | |
|------|---|-----|---------|------------------------|---------------|
| | REVISIONS | | | /YAG | DRAWING INFO. |
| 0. | DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | 29 |
| | REVISED PER CITY COMMENTS | ၁၅ | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| ا مi | REVISED PER CITY COMMENTS | CC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-201200923 |
| | | | | DATE: | 12/2/2020 |
| | | | | ISSUED FOR: | FOR REVIEW |
| | | | | JOB NUMBER: | 20KC10057 |
| | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 020 | | MO COA NO. | 000062 |
| | | | | | |

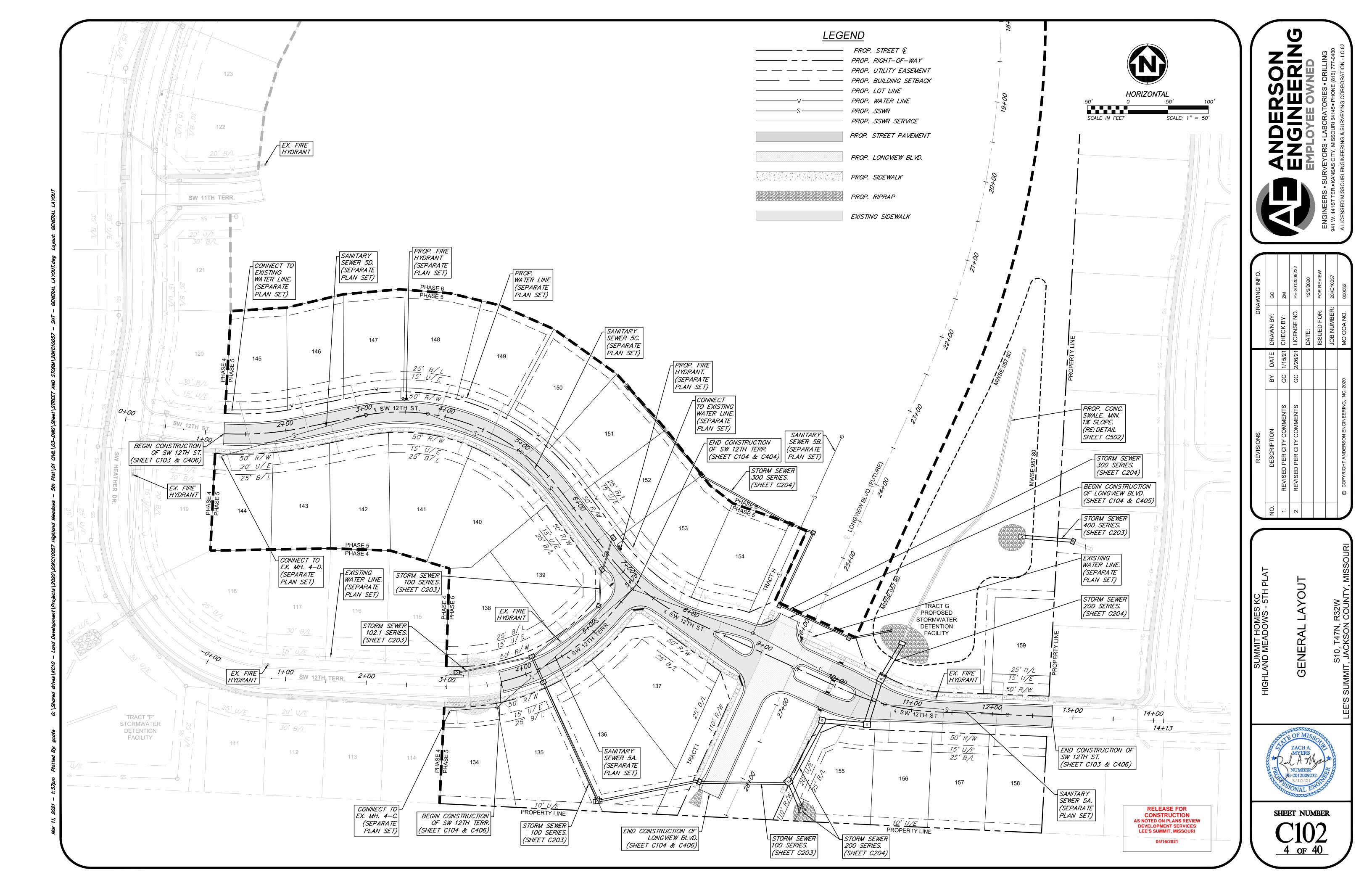
SHEET NUMBER 3 of 40

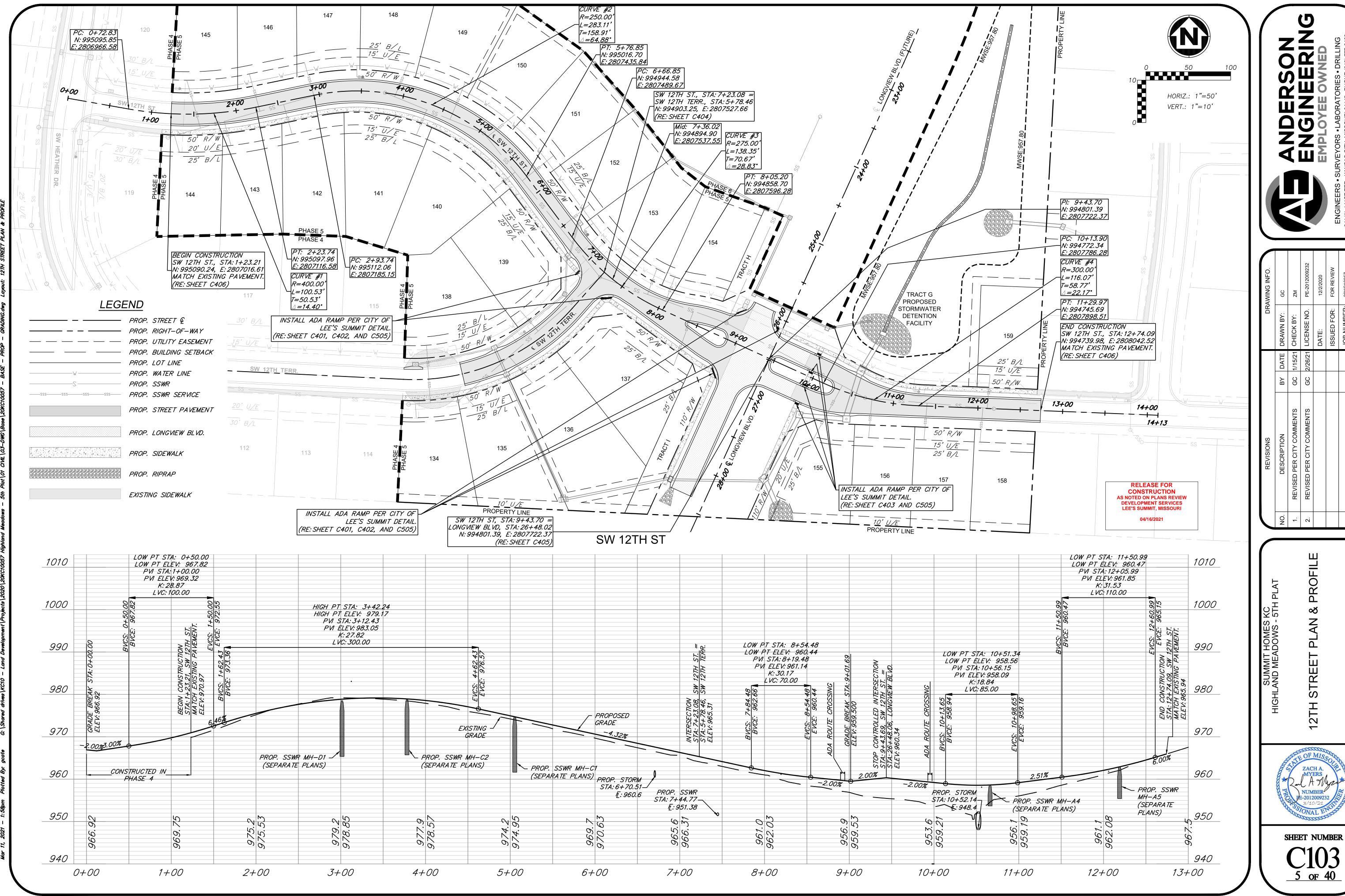
RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

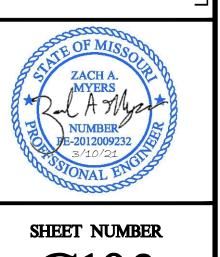
LEE'S SUMMIT, MISSOURI

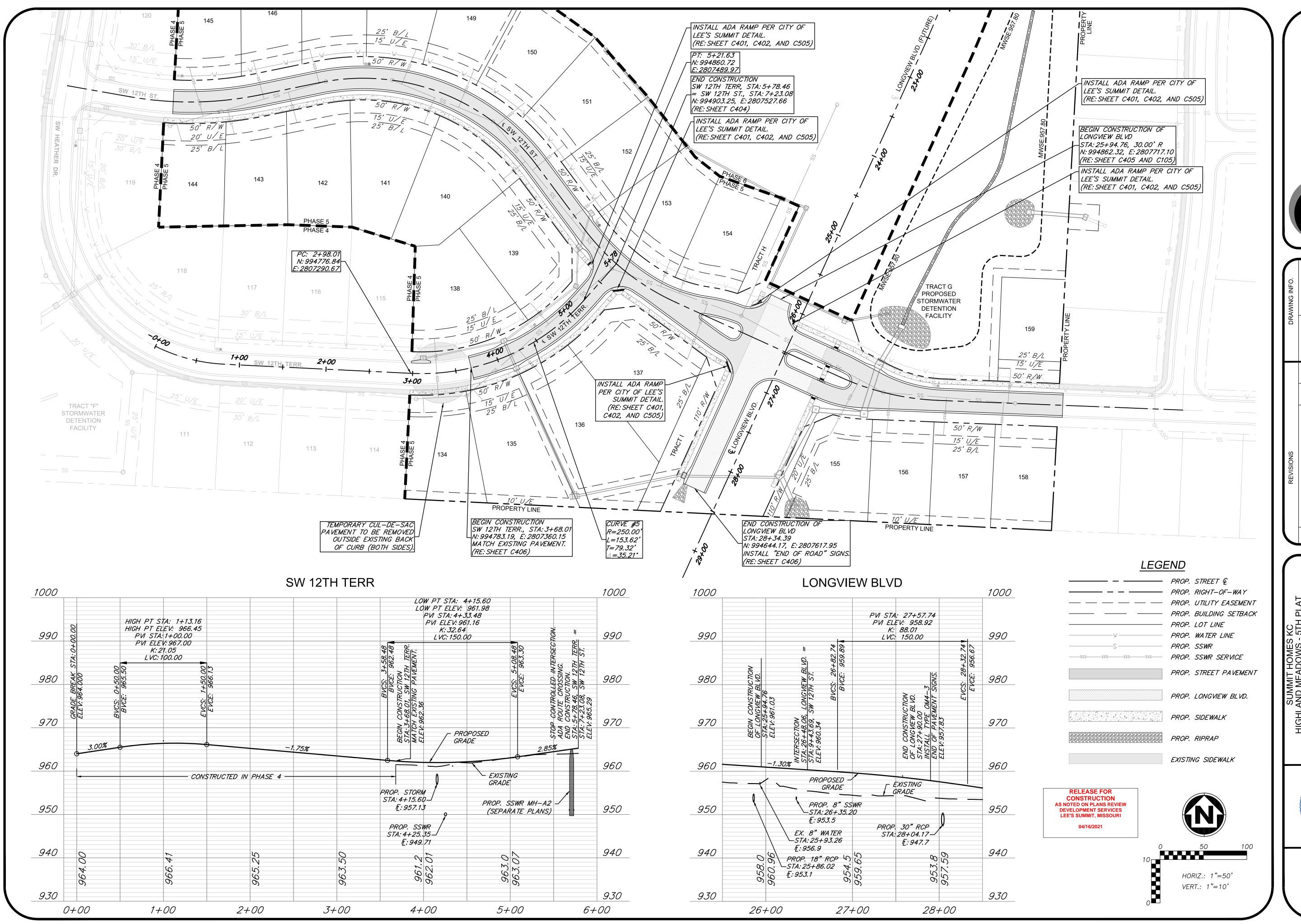
04/16/2021





| MO COA NC | | 2020 | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | | |
|-----------------------|---------|------|---|-----|--|
| JOB NUMBE | | | | | |
| ISSUED FOF | | | | | |
| DATE: | | | | | |
| GC 2/26/21 LICENSE NC | 2/26/21 | 29 | REVISED PER CITY COMMENTS | 2. | |
| GC 1/15/21 CHECK BY: | 1/15/21 | 29 | REVISED PER CITY COMMENTS | 1. | |
| DRAWN BY: | ву рате | ВУ | DESCRIPTION | NO. | |
| | | | REVISIONS | | |









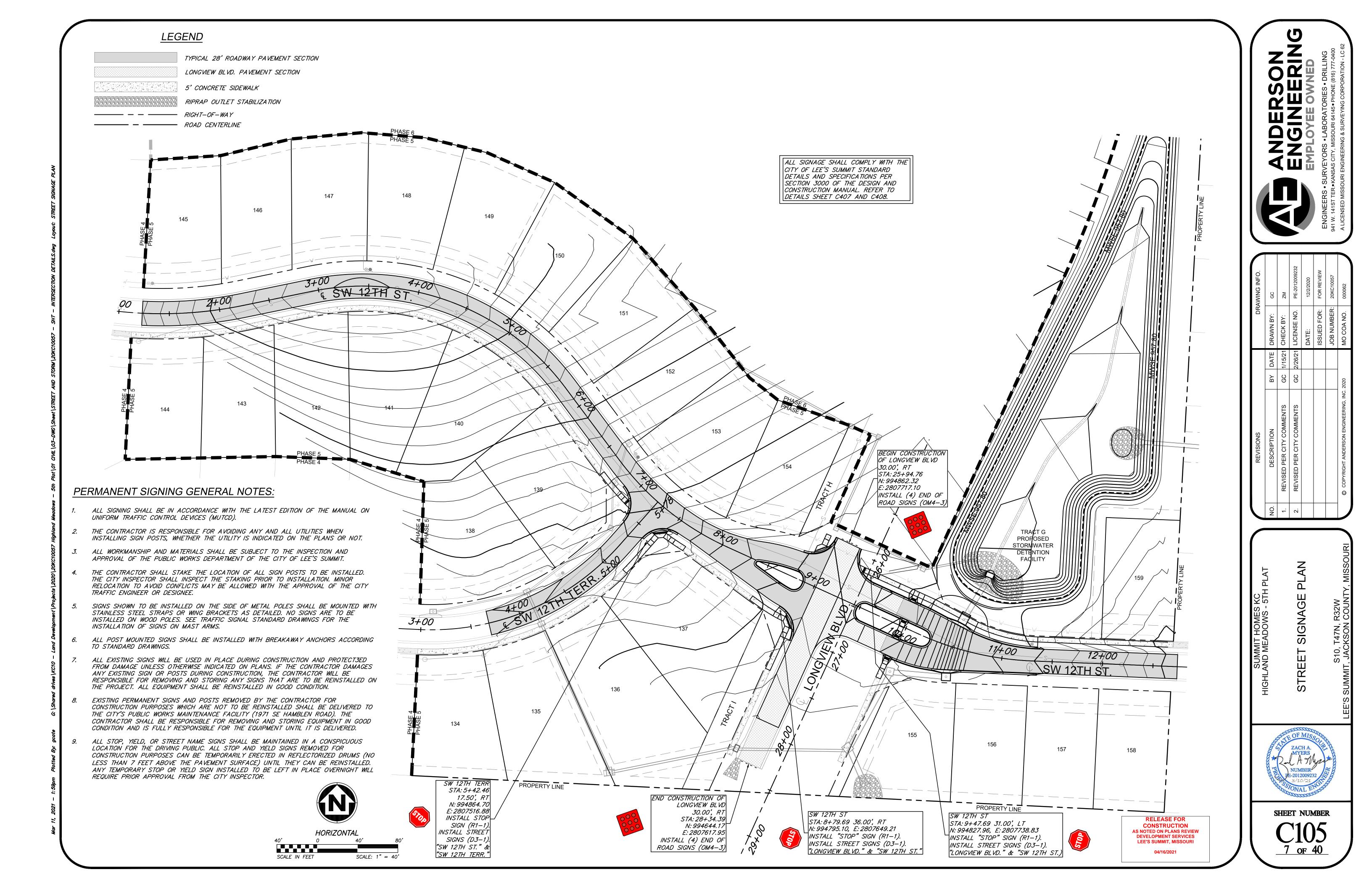
| | | | | | ļ |
|-----------|------------------------|---------|------|---|-----|
| 000062 | MO COA NO. | | 2020 | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | |
| 20KC10 | JOB NUMBER: | | | | |
| FOR RI | ISSUED FOR: | | | | |
| 12/2/20 | DATE: | | | | |
| PE-201 | GC 2/26/21 LICENSE NO. | 2/26/21 | CC | REVISED PER CITY COMMENTS | 2. |
| MZ | GC 1/15/21 CHECK BY: | 1/15/21 | 29 | REVISED PER CITY COMMENTS | 1. |
| GC | DATE DRAWN BY: | DATE | ВУ | DESCRIPTION | NO. |
| DRAWING I | 'AO | | | REVISIONS | |

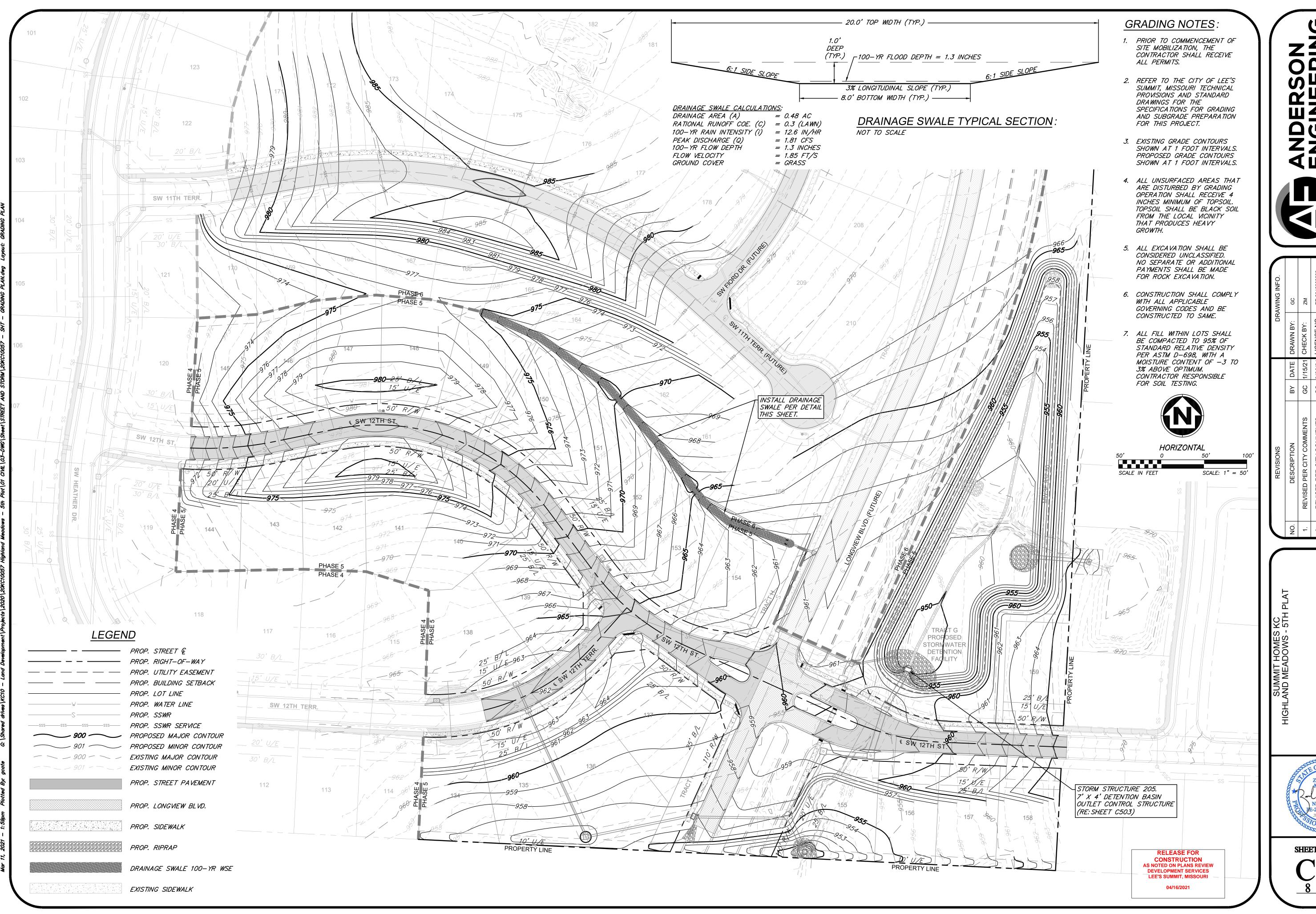
& LONGVIEW & PROFILE RR. & PLAN & **2TH**

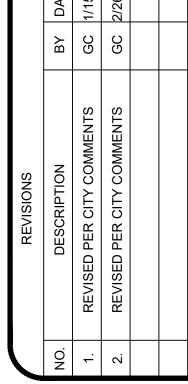
S10, T47N, F , JACKSON



SHEET NUMBER 6 of 40



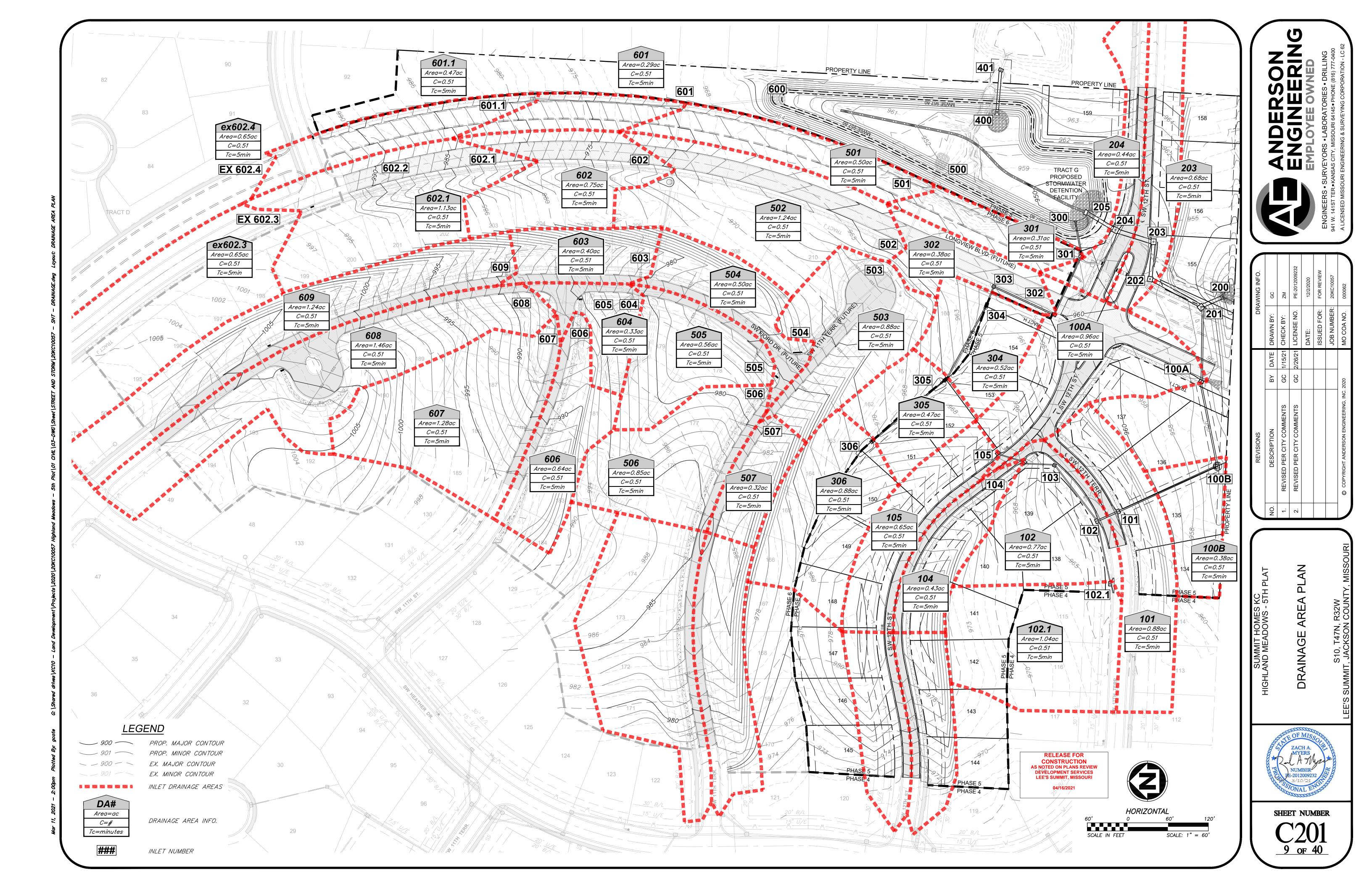




GRADING



SHEET NUMBER 8 of 40



| 10-Y | 'EAR | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|----------|------------------------|------------------|-----------------------|-----------|---------------|-------|--------------------|---------------------|---------------------|-----------------|---------------|-------|------------------------|---------------|---------------|--------|-------|---------|-------|------------------|-----------------|----------|-----------------|--------|--------|---------------|---------|-----------|--------|-------|-----------------|
| | | | | i | HYDROLOG | Υ | | | | | | | | | | | | HYDRA | ULICS | | | | | | | | | GUT | TER/INLET | DESIGN | | |
| Line No. | Inlet ID | Downstream Line No. | DrainageA rea | Runoff Coefficient | Local CxA | System CxA | Тс | Local Intensity | System Intensity | Incremental Flow | Total Runoff | Line No. | Line | U/S Ground Elev. | U/S Invert | D/S Invert | Length | Slope | Size | n | Capacity Full | Total Runoff | Velocity | Velocity Out | HGLUp | HGLDn | Line ID | Local Q | QBypass | | | Gutter Width |
| | | | (ac) | (C) | | | (min) | (in/hr) | (in/hr) | (cfs) | (cfs) | | | (ft) | (ft) | (ft) | (ft) | (%) | (in) | | (cfs) | (cfs) | (ft/s) | (ft/s) | (ft) | (ft) | | (cfs) | (cfs) | (%) | (ft) | (ft) |
| 1 | 401 | Outfall | 0.00 | 0.00 | 0 | 0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | LINE 401 | 401 | 967.50 | 958.15 | 952.20 | 59.49 | 10.00 | 36 | 0.013 | 210.92 | 0.00 | 9.01 | 9.01 | 960.54 | 954.59 | LINE 401 | **** | | | | |
| 2 | EX. DET. | 1 | 0.00 | 0.00 | 0 | 0 | 0.0 | 0.00 | 0.00 | 54.51 | 0.00 | LINE 402 (EX) | 402 | 969.00 | 963.77 | 963.22 | 22.98 | 2.39 | 36 | 0.012 | 111.78 | 0.00 | 12.36 | 15.71 | 966.16 | 964.70 | LINE 402 (EX) | | | | | |
| 3 | 201 | Outfall | 0.00 | 0.00 | 0 | 0 | 7.7 | 0.00 | 7.06 | 0.00 | 22.43 | LINE 201 | 201 | 957.83 | 946.93 | 946.77 | 31.01 | 0.50 | 54 | 0.013 | 141.26 | 22.43 | 9.71 | 9.71 | 950.10 | 949.94 | LINE 201 | | | | | |
| 4 | 100A | 3 | 0.96 | 0.51 | 0.49 | 0.49 | 7.2 | 8.34 | 7.26 | 4.09 | 18.92 | LINE 100A | 100A | 956.50 | 948.13 | 947.13 | 110.34 | 0.91 | 30 | 0.013 | 39.04 | 18.92 | 4.03 | 3.86 | 950.29 | 950.10 | LINE 100A | 1.64 | 5.41 | 0.020 | 11.76 | 2.00 |
| 5 | 100B | 4 | 0.38 | 0.51 | 0.19 | 0.19 | 6.7 | 8.34 | 7.45 | 1.62 | 15.77 | LINE 100B | 100B | 955.00 | 950.55 | 948.63 | 128.30 | 1.50 | 24 | 0.012 | 29.97 | 15.77 | 5.94 | 5.31 | 951.98 | 950.42 | LINE 100B | 1.62 | | Sag | | |
| 6 | 101 | 5 | 0.88 | 0.51 | 0.45 | 0.45 | 6.2 | 8.34 | 7.72 | 3.75 | 14.85 | LINE 101 | 101 | 962.13 | 954.29 | 951.05 | 162.07 | 2.00 | 24 | 0.013 | 31.98 | 14.85 | 8.19 | 9.99 | 955.68 | 952.01 | LINE 101 | 3.75 | | Sag | | |
| 7 | 102 | 6 | 0.77 | 0.51 | 0.39 | 0.39 | 6.0 | 8.34 | 7.80 | 3.28 | 11.50 | LINE 102 | 102 | 962.13 | 954.84 | 954.49 | 35.00 | 1.00 | 24 | 0.013 | 22.62 | 11.50 | 5.83 | 5.92 | 956.06 | 955.68 | LINE 102 | 7.60 | | Sag | | |
| 8 | 103 | 7 | 0.00 | 0.00 | 0 | 0 | 5.5 | 0.00 | 8.05 | 0.00 | 4.44 | LINE 103 | 103 | 964.01 | 956.63 | 955.59 | 104.21 | 1.00 | 15 | 0.012 | 6.99 | 4.44 | 5.50 | 6.03 | 957.48 | 956.31 | LINE 103 | | | | | |
| 9 | 104 | 8 | 0.43 | 0.51 | 0.22 | 0.22 | 5.3 | 8.34 | 8.17 | 1.83 | 4.50 | LINE 104 | 104 | 966.98 | 959.08 | 956.83 | 44.95 | 5.00 | 15 | 0.012 | 15.65 | 4.50 | 5.97 | 6.94 | 959.94 | 957.48 | LINE 104 | 0.65 | 1.18 | 0.050 | 5.34 | 2.00 |
| 10 | 105 | 9 | 0.65 | 0.51 | 0.33 | 0.33 | 5.0 | 8.34 | 8.34 | 2.77 | 2.77 | LINE 105 | 105 | 968.25 | 961.66 | 959.58 | 41.61 | 5.00 | 15 | 0.013 | 14.44 | 2.77 | 6.61 | 9.06 | 962.33 | 959.95 | LINE 105 | 0.81 | 1.95 | 0.050 | 6.50 | 2.00 |
| 11 | 102.1 | 7 | 1.04 | 0.51 | 0.53 | 0.53 | 5.0 | 8.34 | 8.34 | 4.43 | 4.43 | LINE 102.1 | 102.1 | 963.94 | 958.67 | 955.59 | 95.18 | 3.24 | 15 | 0.012 | 12.58 | 4.43 | 7.16 | 9.35 | 959.52 | 956.10 | LINE 102.1 | 1.28 | 3.14 | 0.020 | 9.73 | 2.00 |
| 12 | 202 | 3 | 0.00 | 0.00 | 0 | 0 | 5.3 | 0.00 | 8.17 | 0.00 | 4.66 | LINE 202 | 202 | 959.00 | 947.56 | 947.13 | 86.54 | 0.50 | 54 | 0.013 | 138.62 | 4.66 | 8.95 | 8.85 | 950.48 | 950.10 | LINE 202 | | | | | |
| 13 | 203 | 12 | 0.68 | 0.51 | 0.35 | 0.35 | 5.2 | 8.34 | 8.25 | 2.89 | 4.71 | LINE 203 | 203 | 958.63 | 948.04 | 947.76 | 55.83 | 0.50 | 54 | 0.013 | 139.27 | 4.71 | 9.28 | 9.50 | 950.96 | 950.56 | LINE 203 | 2.89 | | Sag | | |
| 14 | 204 | 13 | 0.44 | 0.51 | 0.22 | 0.22 | 5.0 | 8.34 | 8.34 | 1.87 | 1.87 | LINE 204 | 204 | 958.65 | 948.54 | 948.24 | 57.23 | 0.50 | 43 x 68 | 0.012 | 149.61 | 1.87 | 6.01 | 6.01 | 954.24 | 954.12 | LINE 204 | 2.65 | | Sag | | |
| 15 | 205 | 14 | 0.00 | 0.00 | 0 | 0 | 0.0 | 0.00 | 0.00 | 94.04 | 0.00 | LINE 205 | 205 | 958.30 | 949.00 | 948.74 | 51.16 | 0.50 | 54 | 0.013 | 140.16 | 0.00 | 5.91 | 5.91 | 954.64 | 954.52 | LINE 205 | | | | | |
| 16 | 302 | Outfall | 0.31 | 0.51 | 0.16 | 0.16 | 7.6 | 8.34 | 7.09 | 1.32 | 9.25 | LINE 301 | 301 | 960.84 | 952.42 | 950.58 | 45.96 | 4.00 | 18 | 0.013 | 21.01 | 9.25 | 6.23 | 6.23 | 953.60 | 951.76 | LINE 301 | 0.54 | 0.78 | 0.050 | 4.50 | 2.00 |
| 17 | 303 | 16 | 0.38 | 0.51 | 0.19 | 0.19 | 7.0 | 8.34 | 7.34 | 1.62 | 8.42 | LINE 302 | 302 | 960.57 | 953.57 | 952.62 | 95.01 | 1.00 | 24 | 0.013 | 22.62 | 8.42 | 5.34 | 5.54 | 954.60 | 953.60 | LINE 302 | 0.61 | 1.01 | 0.050 | 5.01 | 2.00 |
| 18 | 304 | 17 | 0.00 | 0.00 | 0 | 0 | 6.6 | 0.00 | 7.52 | 0.00 | 7.17 | LINE 303 | 303 | 962.04 | 955.55 | 954.07 | 98.87 | 1.50 | 18 | 0.012 | 13.92 | 7.17 | 6.72 | 7.93 | 956.59 | 954.83 | LINE 303 | | | | | |
| 19 | 305 | 18 | 0.52 | 0.51 | 0.27 | 0.27 | 6.5 | 8.34 | 7.57 | 2.21 | 7.22 | LINE 304 | 304 | 960.21 | 956.34 | 956.05 | 28.60 | 1.00 | 18 | 0.012 | 11.46 | 7.22 | 6.19 | 6.85 | 957.38 | 956.91 | LINE 304 | 2.21 | | Sag | | |
| 20 | 306 | 19 | 0.47 | 0.51 | 0.24 | 0.24 | 5.8 | 8.34 | 7.91 | 2.00 | 5.45 | LINE 305 | 305 | 964.74 | 959.07 | 956.54 | 126.66 | 2.00 | 18 | 0.012 | 16.08 | 5.45 | 5.14 | 5.35 | 959.97 | 957.38 | LINE 305 | 2.00 | | Sag | | |
| 21 | 307 | 20 | 0.88 | 0.51 | 0.45 | 0.45 | 5.0 | 8.34 | 8.34 | 3.75 | 3.75 | LINE 306 | 306 | 969.90 | 965.15 | 959.47 | 141.99 | 4.00 | 15 | 0.012 | 13.99 | 3.75 | 6.42 | 8.20 | 965.93 | 959.97 | LINE 306 | 3.75 | | Sag | | |
| 400.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | LAN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | I |
|----------|----------|------------------------|------------------|-----------------------|-----------|---------------|-------|--------------------|---------------------|---------------------|-----------------|---------------|-------|------------------------|---------------|---------------|--------|-------|---------|-------|------------------|-----------------|----------|-----------------|--------|--------|---------------|---------|-----------|--------|-------|-----------------|
| | | | | | HYDROLOG | iΥ | | | | | | | | | | | | HYDRA | ULICS | | | | | | | | | GUT | TER/INLET | DESIGN | | |
| Line No. | Inlet ID | Downstream Line No. | DrainageA rea | Runoff Coefficient | Local CxA | System CxA | Тс | Local Intensity | System Intensity | Incremental Flow | Total Runoff | Line No. | Line | U/S Ground Elev. | U/S Invert | D/S Invert | Length | Slope | Size | n | Capacity Full | Total Runoff | Velocity | Velocity Out | HGLUp | HGLDn | Line ID | Local Q | QBypass | | | Gutter Width |
| | | | (ac) | (C) | | | (min) | (in/hr) | (in/hr) | (cfs) | (cfs) | | | (ft) | (ft) | (ft) | (ft) | (%) | (in) | | (cfs) | (cfs) | (ft/s) | (ft/s) | (ft) | (ft) | | (cfs) | (cfs) | (%) | (ft) | (ft) |
| 1 | 401 | Outfall | 0.00 | 0.00 | 0 | 0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | LINE 401 | 401 | 967.50 | 958.15 | 952.20 | 59.49 | 10.00 | 36 | 0.013 | 210.92 | 0.00 | 15.99 | 15.99 | 961.08 | 955.13 | LINE 401 | | | | | |
| 2 | EX. DET. | 1 | 0.00 | 0.00 | 0 | 0 | 0.0 | 0.00 | 0.00 | 112.38 | 0.00 | LINE 402 (EX) | 402 | 969.00 | 963.77 | 963.22 | 22.98 | 2.39 | 36 | 0.012 | 111.78 | 0.00 | 17.01 | 18.02 | 966.70 | 965.69 | LINE 402 (EX) | | ••• | | **** | |
| 3 | 201 | Outfall | 0.00 | 0.00 | 0 | 0 | 6.8 | 0.00 | 11.18 | 0.00 | 35.51 | LINE 201 | 201 | 957.83 | 946.93 | 946.77 | 31.01 | 0.50 | 54 | 0.013 | 141.26 | 35.51 | 14.65 | 14.86 | 951.56 | 950.97 | LINE 201 | | | | | |
| 4 | 100A | 3 | 0.96 | 0.51 | 0.49 | 0.49 | 6.4 | 12.60 | 11.41 | 6.17 | 29.74 | LINE 100A | 100A | 956.50 | 948.13 | 947.13 | 110.34 | 0.91 | 30 | 0.013 | 39.04 | 29.74 | 6.06 | 6.06 | 955.15 | 954.57 | LINE 100A | 2.07 | 8.95 | 0.020 | 14.05 | 2.00 |
| 5 | 100B | 4 | 0.38 | 0.51 | 0.19 | 0.19 | 6.1 | 12.60 | 11.63 | 2.44 | 24.61 | LINE 100B | 100B | 955.00 | 950.55 | 948.63 | 128.30 | 1.50 | 24 | 0.012 | 29.97 | 24.61 | 7.83 | 7.83 | 956.73 | 955.43 | LINE 100B | 2.44 | | Sag | | |
| 6 | 101 | 5 | 0.88 | 0.51 | 0.45 | 0.45 | 5.8 | 12.60 | 11.93 | 5.65 | 22.94 | LINE 101 | 101 | 962.13 | 954.29 | 951.05 | 162.07 | 2.00 | 24 | 0.013 | 31.98 | 22.94 | 7.30 | 7.30 | 959.80 | 958.13 | LINE 101 | 5.65 | | Sag | | |
| 7 | 102 | 6 | 0.77 | 0.51 | 0.39 | 0.39 | 5.7 | 12.60 | 12.02 | 4.95 | 17.71 | LINE 102 | 102 | 962.13 | 954.84 | 954.49 | 35.00 | 1.00 | 24 | 0.013 | 22.62 | 17.71 | 5.64 | 5.64 | 960.43 | 960.21 | LINE 102 | 11.99 | | Sag | | |
| 8 | 103 | 7 | 0.00 | 0.00 | 0 | 0 | 5.3 | 0.00 | 12.29 | 0.00 | 6.77 | LINE 103 | 103 | 964.01 | 956.63 | 955.59 | 104.21 | 1.00 | 15 | 0.012 | 6.99 | 6.77 | 5.52 | 5.52 | 962.13 | 961.15 | LINE 103 | | | | | |
| 9 | 104 | 8 | 0.43 | 0.51 | 0.22 | 0.22 | 5.2 | 12.60 | 12.41 | 2.76 | 6.84 | LINE 104 | 104 | 966.98 | 959.08 | 956.83 | 44.95 | 5.00 | 15 | 0.012 | 15.65 | 6.84 | 5.57 | 5.57 | 962.93 | 962.50 | LINE 104 | 0.81 | 1.95 | 0.050 | 6.50 | 2.00 |
| 10 | 105 | 9 | 0.65 | 0.51 | 0.33 | 0.33 | 5.0 | 12.60 | 12.60 | 4.18 | 4.18 | LINE 105 | 105 | 968.25 | 961.66 | 959.58 | 41.61 | 5.00 | 15 | 0.013 | 14.44 | 4.18 | 3.40 | 3.40 | 963.34 | 963.17 | LINE 105 | 1.00 | 3.17 | 0.050 | 7.82 | 2.00 |
| 11 | 102.1 | 7 | 1.04 | 0.51 | 0.53 | 0.53 | 5.0 | 12.60 | 12.60 | 6.68 | 6.68 | LINE 102.1 | 102.1 | 963.94 | 958.67 | 955.59 | 95.18 | 3.24 | 15 | 0.012 | 12.58 | 6.68 | 5.45 | 5.45 | 962.02 | 961.15 | LINE 102.1 | 1.59 | 5.09 | 0.020 | 11.51 | 2.00 |
| 12 | 202 | 3 | 0.00 | 0.00 | 0 | 0 | 5.2 | 0.00 | 12.46 | 0.00 | 7.12 | LINE 202 | 202 | 959.00 | 947.56 | 947.13 | 86.54 | 0.50 | 54 | 0.013 | 138.62 | 7.12 | 12.65 | 12.65 | 955.47 | 954.57 | LINE 202 | | | | **** | |
| 13 | 203 | 12 | 0.68 | 0.51 | 0.35 | 0.35 | 5.1 | 12.60 | 12.53 | 4.37 | 7.15 | LINE 203 | 203 | 958.63 | 948.04 | 947.76 | 55.83 | 0.50 | 54 | 0.013 | 139.27 | 7.15 | 12.65 | 12.65 | 958.37 | 957.79 | LINE 203 | 4.37 | | Sag | **** | |
| 14 | 204 | 13 | 0.44 | 0.51 | 0.22 | 0.22 | 5.0 | 12.60 | 12.60 | 2.83 | 2.83 | LINE 204 | 204 | 958.65 | 948.54 | 948.24 | 57.23 | 0.50 | 43 x 68 | 0.012 | 149.61 | 2.83 | 12.34 | 12.34 | 965.04 | 964.54 | LINE 204 | 4.14 | | Sag | **** | |
| 15 | 205 | 14 | 0.00 | 0.00 | 0 | 0 | 0.0 | 0.00 | 0.00 | 194.00 | 0.00 | LINE 205 | 205 | 958.30 | 949.00 | 948.74 | 53.16 | 0.50 | 54 | 0.013 | 140.16 | 0.00 | 12.20 | 12.20 | 966.74 | 966.23 | LINE 205 | | | | | |
| 16 | 302 | Outfall | 0.31 | 0.51 | 0.16 | 0.16 | 6.7 | 12.60 | 11.21 | 1.99 | 14.64 | LINE 301 | 301 | 960.84 | 952.42 | 950.58 | 45.96 | 4.00 | 18 | 0.013 | 21.01 | 14.64 | 8.54 | 8.54 | 953.82 | 951.98 | LINE 301 | 0.68 | 1.31 | 0.050 | 5.56 | 2.00 |
| 17 | 303 | 16 | 0.38 | 0.51 | 0.19 | 0.19 | 6.3 | 12.60 | 11.50 | 2.44 | 13.19 | LINE 302 | 302 | 960.57 | 953.57 | 952.62 | 95.01 | 1.00 | 24 | 0.013 | 22.62 | 13.19 | 6.40 | 6.72 | 954.88 | 953.82 | LINE 302 | 0.76 | 1.68 | 0.050 | 6.13 | 2.00 |
| 18 | 304 | 17 | 0.00 | 0.00 | 0 | 0 | 6.0 | 0.00 | 11.70 | 0.00 | 11.16 | LINE 303 | 303 | 962.04 | 955.55 | 954.07 | 98.87 | 1.50 | 18 | 0.012 | 13.92 | 11.16 | 7.86 | 8.75 | 956.83 | 955.09 | LINE 303 | | | | | •••• |
| 19 | 305 | 18 | 0.52 | 0.51 | 0.27 | 0.27 | 6.0 | 12.60 | 11.76 | 3.34 | 11.22 | LINE 304 | 304 | 960.21 | 956.34 | 956.05 | 28.60 | 1.00 | 18 | 0.012 | 11.46 | 11.22 | 7.19 | 7.39 | 957.62 | 957.25 | LINE 304 | 3.34 | | Sag | | |
| 20 | 306 | 19 | 0.47 | 0.51 | 0.24 | 0.24 | 5.5 | 12.60 | 12.14 | 3.02 | 8.36 | LINE 305 | 305 | 964.74 | 959.07 | 956.54 | 126.66 | 2.00 | 18 | 0.012 | 16.08 | 8.36 | 6.03 | 6.14 | 960.19 | 957.62 | LINE 305 | 3.02 | | Sag | | |
| 21 | 307 | 20 | 0.88 | 0.51 | 0.45 | 0.45 | 5.0 | 12.60 | 12.60 | 5.65 | 5.65 | LINE 306 | 306 | 969.90 | 965.15 | 959.47 | 141.99 | 4.00 | 15 | 0.012 | 13.99 | 5.65 | 6.66 | 7.74 | 966.11 | 960.19 | LINE 306 | 5.65 | | Sag | | |

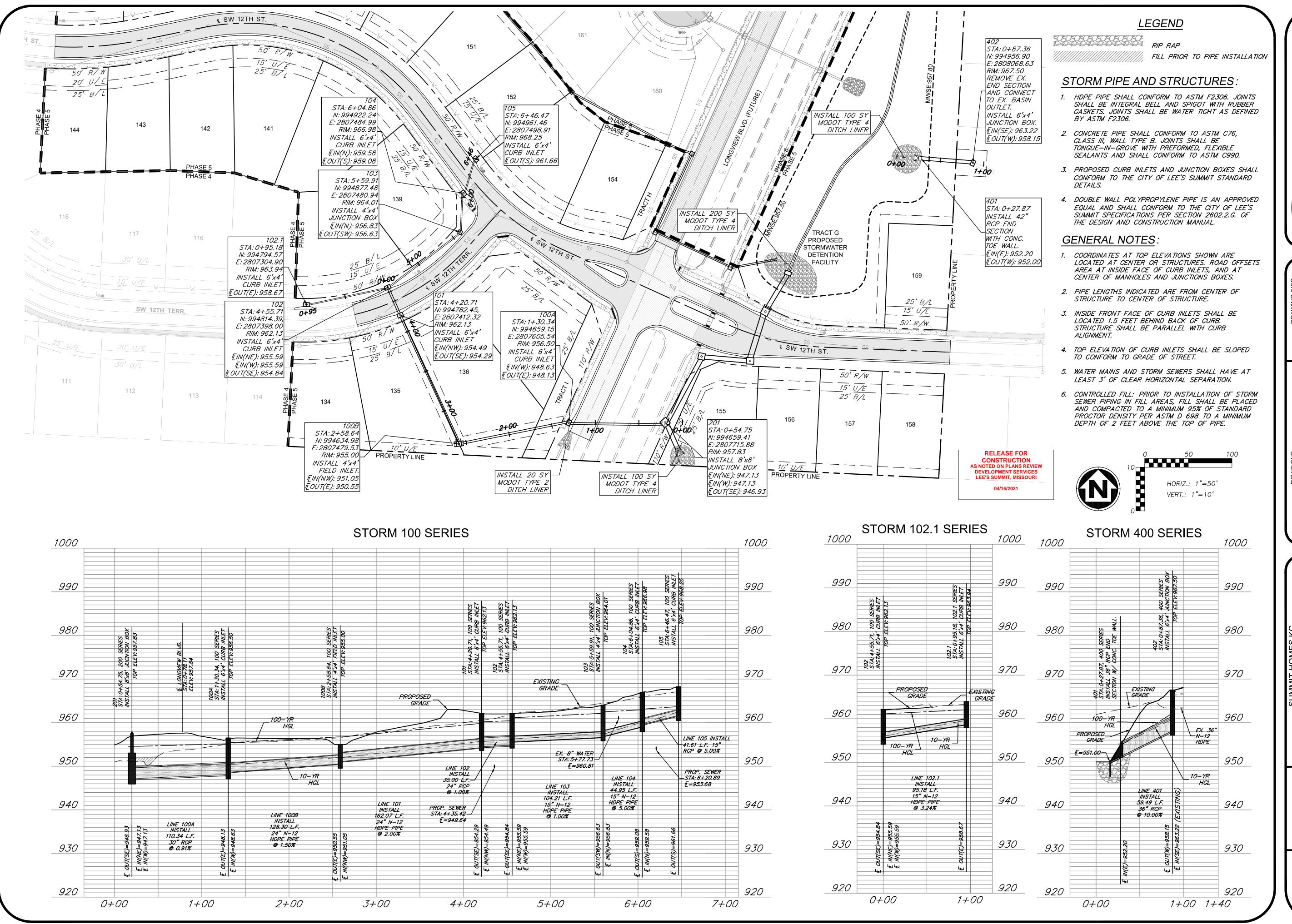
RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI 04/16/2021



| | REVISIONS | | | DR/ | DRAWING INFO |
|-----|---|------|---------|------------------------|--------------|
| NO. | DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | 90 |
| 1. | REVISED PER CITY COMMENTS | ЭĐ | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| 2. | REVISED PER CITY COMMENTS | GC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-2012009 |
| 3. | REVISED PER CITY COMMENTS | ЭĐ | 3/10/21 | GC 3/10/21 DATE: | 12/2/2020 |
| | | | | ISSUED FOR: | FOR REVIE |
| | | | | JOB NUMBER: | 20KC10057 |
| | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |
| | | | | | |



SHEET NUMBER



ANDERSON
ENGINEERING & SURVEYING CORPORATION - LC 62

ENGINEERS - SURVEY

| | REVISIONS | | | אַס | DRAWING INFO. |
|-----|---|------|---------|------------------------|---------------|
| NO. | DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | GC GC |
| 1. | REVISED PER CITY COMMENTS | 29 | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| 2. | REVISED PER CITY COMMENTS | 29 | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-201200923 |
| 3. | REVISED PER CITY COMMENTS | 29 | 3/10/21 | GC 3/10/21 DATE: | 12/2/2020 |
| 4. | REVISED PER CITY COMMENTS | 29 | 3/15/21 | GC 3/15/21 ISSUED FOR: | FOR REVIEW |
| | | | | JOB NUMBER: | 20KC10057 |
| | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |

STORM SEWER PLAN & PROFILE

ZACH A.
MYERS

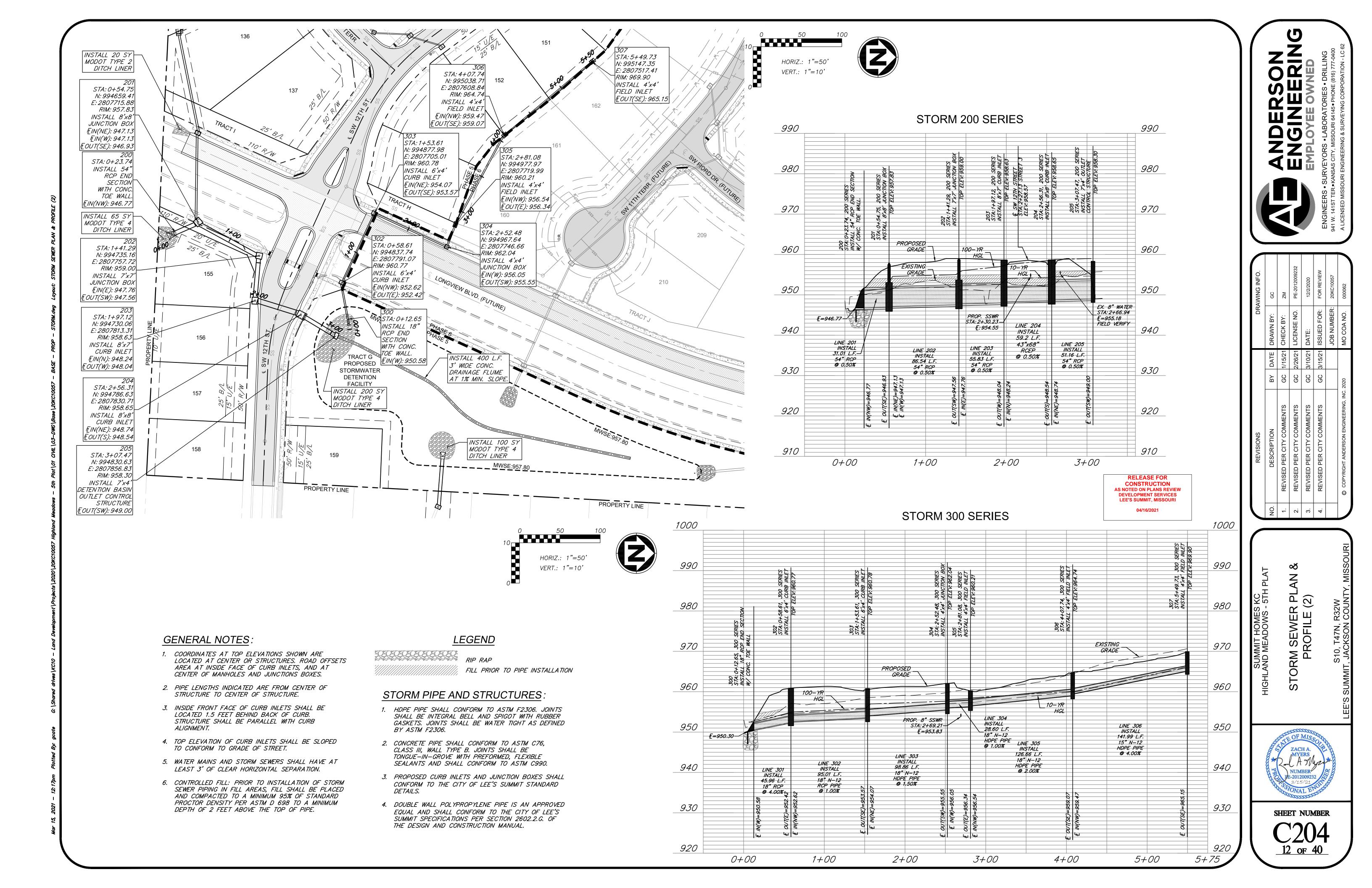
NUMBER

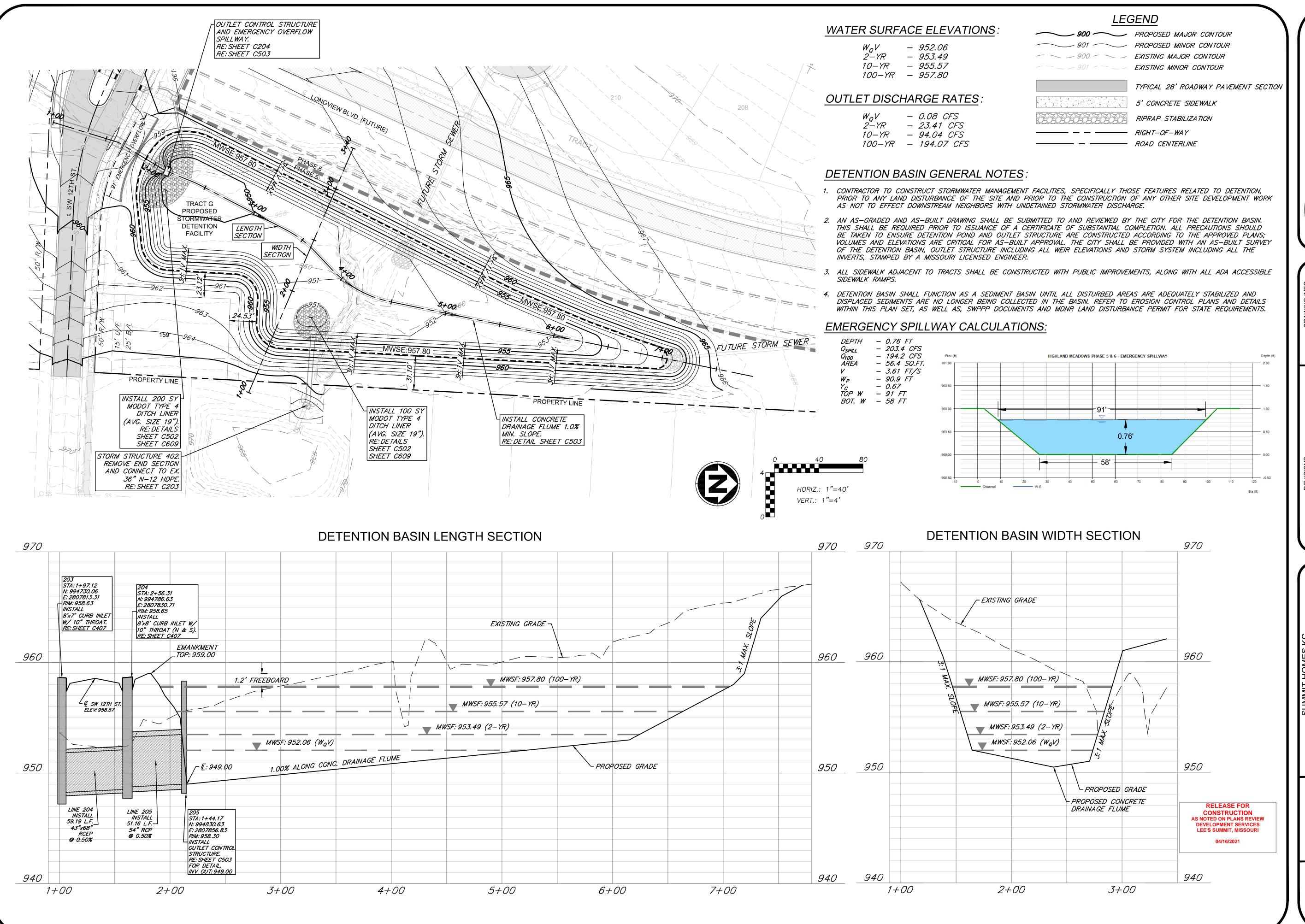
PE-2012009232

3/15/21

NONAL ENGINE

C203
11 of 40





ENGINEERS • SURVEYORS • LABORATORIES • DRILLING

141ST TER.• KANSAS CITY, MISSOURI 64145 • PHONE (816) 777-0400

NSED MISSOURI ENGINEERING & SURVEYING CORPORATION • LC 62

| | REVISIONS | | | DR/ | DRAWING INFO. |
|-----|---|------|------------------|------------------------|---------------|
| NO. | DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | OC OC |
| 1. | REVISED PER CITY COMMENTS | CC | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| 2. | REVISED PER CITY COMMENTS | GC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-2012009232 |
| 2. | REVISED PER CITY COMMENTS | CC | GC 3/10/21 DATE: | DATE: | 12/2/2020 |
| | | | | ISSUED FOR: | FOR REVIEW |
| | | | | JOB NUMBER: | 20KC10057 |
| | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |

DETENTION BASIN PLAN & PROFILE

ZACH A.

MYERS

NUMBER

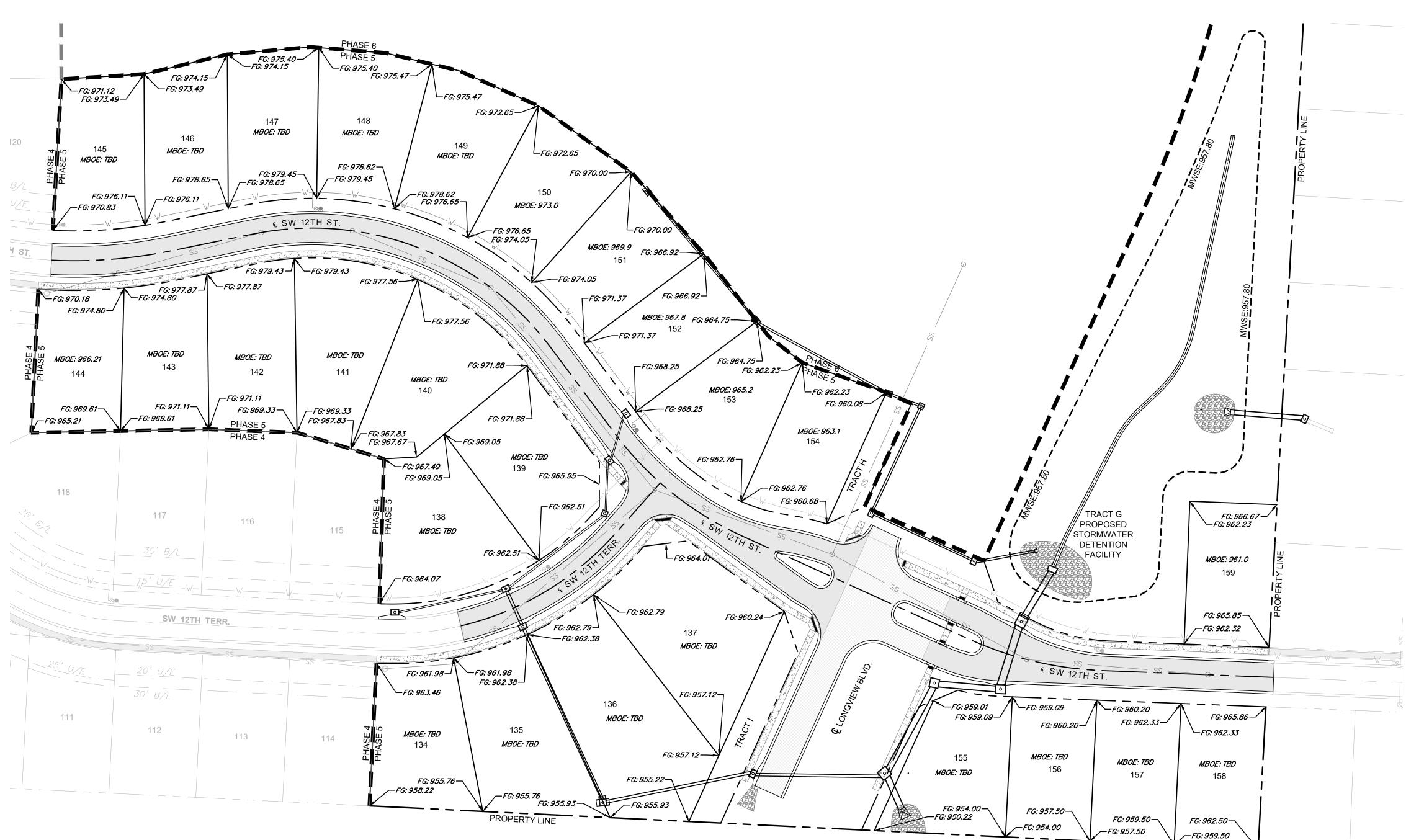
16-2012009232

3/10/21

SHEET NUMBER

C205

13 OF 40



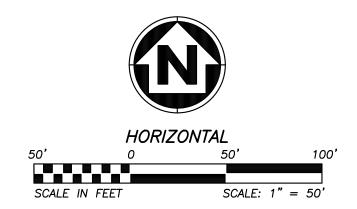
LEGEND

FG FINISH GRADE

MINIMUM BUILDING OPENING ELEVATION

GENERAL NOTES:

- 1. ALL LOTS SHALL BE ALLOWED TO HAVE WALKOUT BASEMENTS OR DAYLIGHT BASEMENTS AS DETERMINED BY HOME BUILDER AND/OR ENGINEER AT THE TIME OF PLOT PLAN AND BUILDING PERMIT APPLICATION SUBMITTAL. ALL PLOT PLANS SHALL MEET THE CITY OF LEE'S SUMMIT REQUIREMENTS AND BE SUBMITTED FOR CITY APPROVAL PRIOR TO CONSTRUCTION OF
- 2. MINIMUM BUILDING OPENING ELEVATIONS ON THIS PLAN HAVE BEEN DETERMINED BASED ON MAX. WATER SURFACE ELEVATION OF 1% DESIGN STORM PLUS (+) TWO (2) FEET, PER CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL SPECIFICATIONS.
- 3. FINISH GRADES ARE BASED ON MASS GRADING DESIGN FOR INSTALLATION OF PUBLIC IMPROVEMENTS. REAR LOT ELEVATIONS MAY VARY SLIGHTLY AFTER CONSTRUCTION OF HOMES, DEPENDING ON TYPE OF BASEMENT CONSTRUCTED AND OTHER UNFORESEEN FACTORS. HOMEBUILDER SHALL FOLLOW DRAINAGE PATTERNS DEPICTED IN THESE PLANS AND ENSURE PLOT PLAN MAINTAINS DRAINAGE PATTERNS SHOWN.



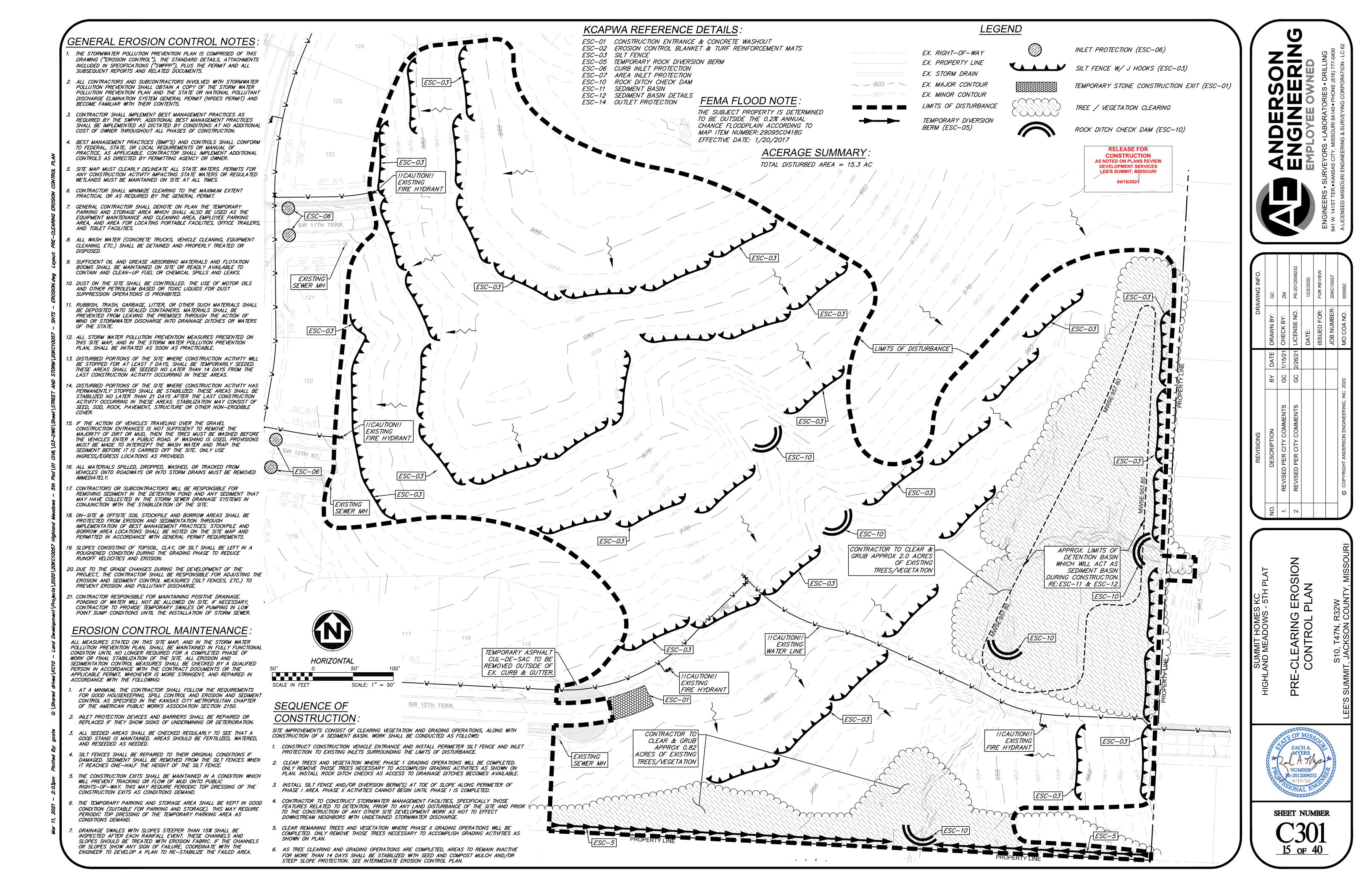
N - 2

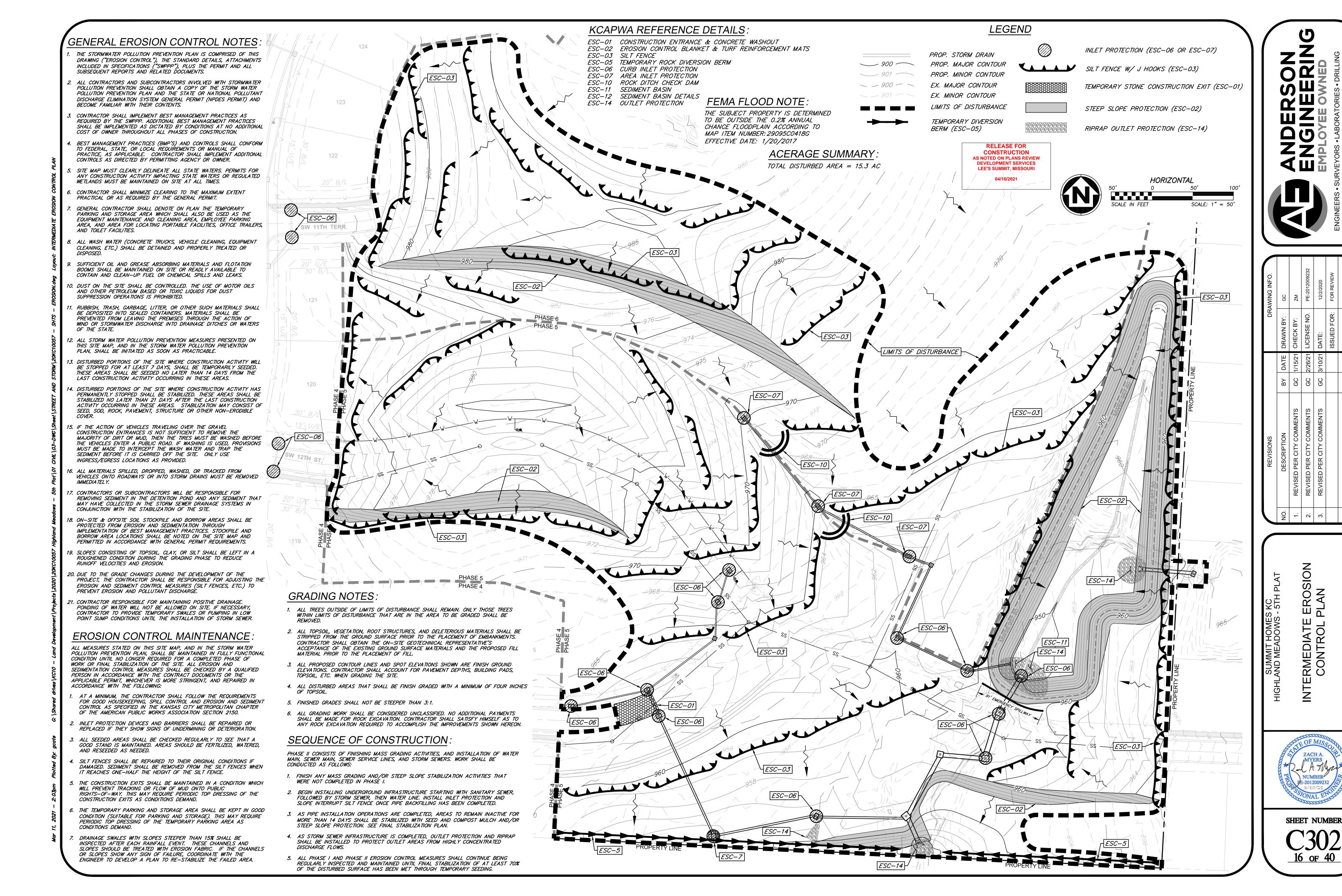
MINIMUM BUILDING OPENING PLAN

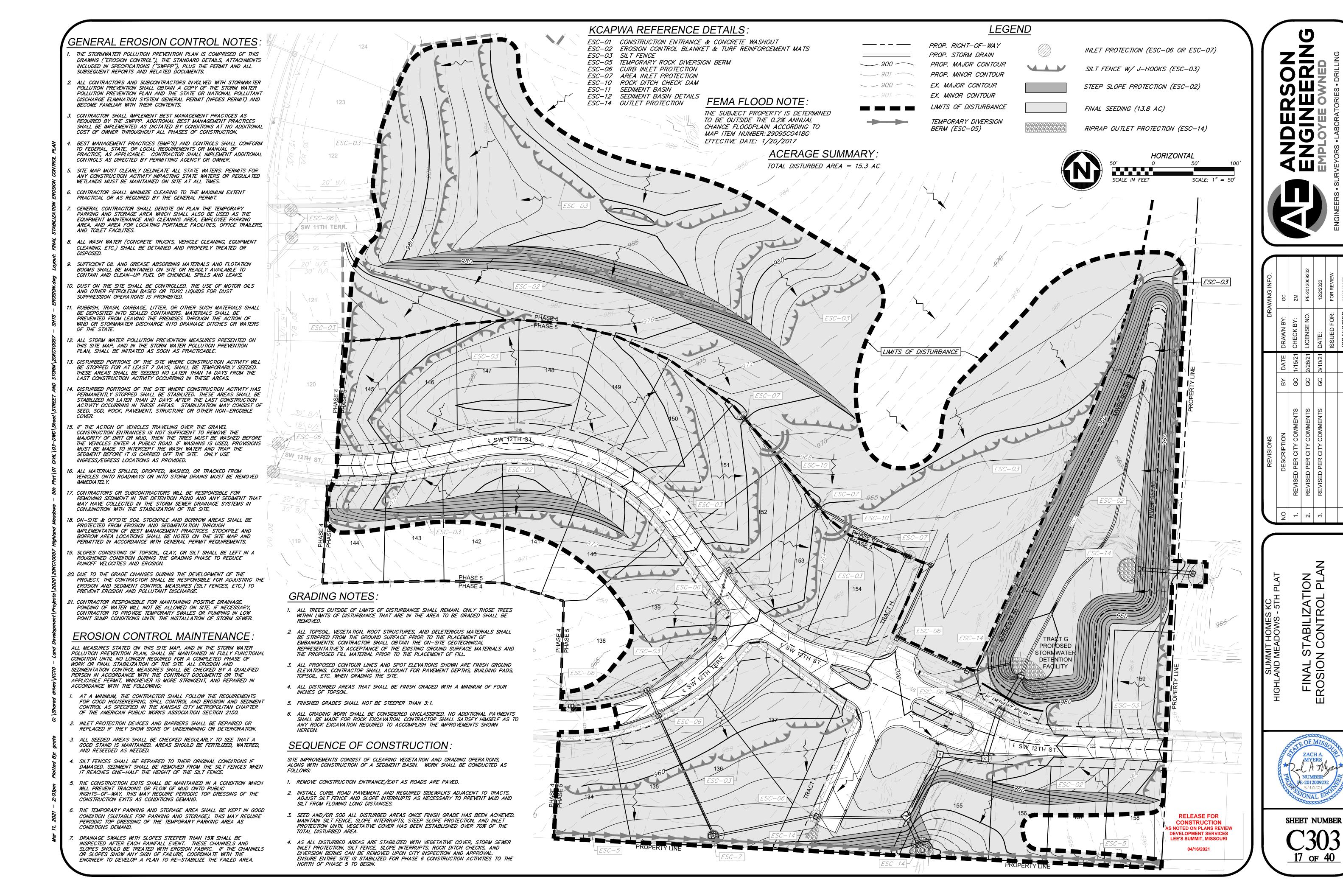


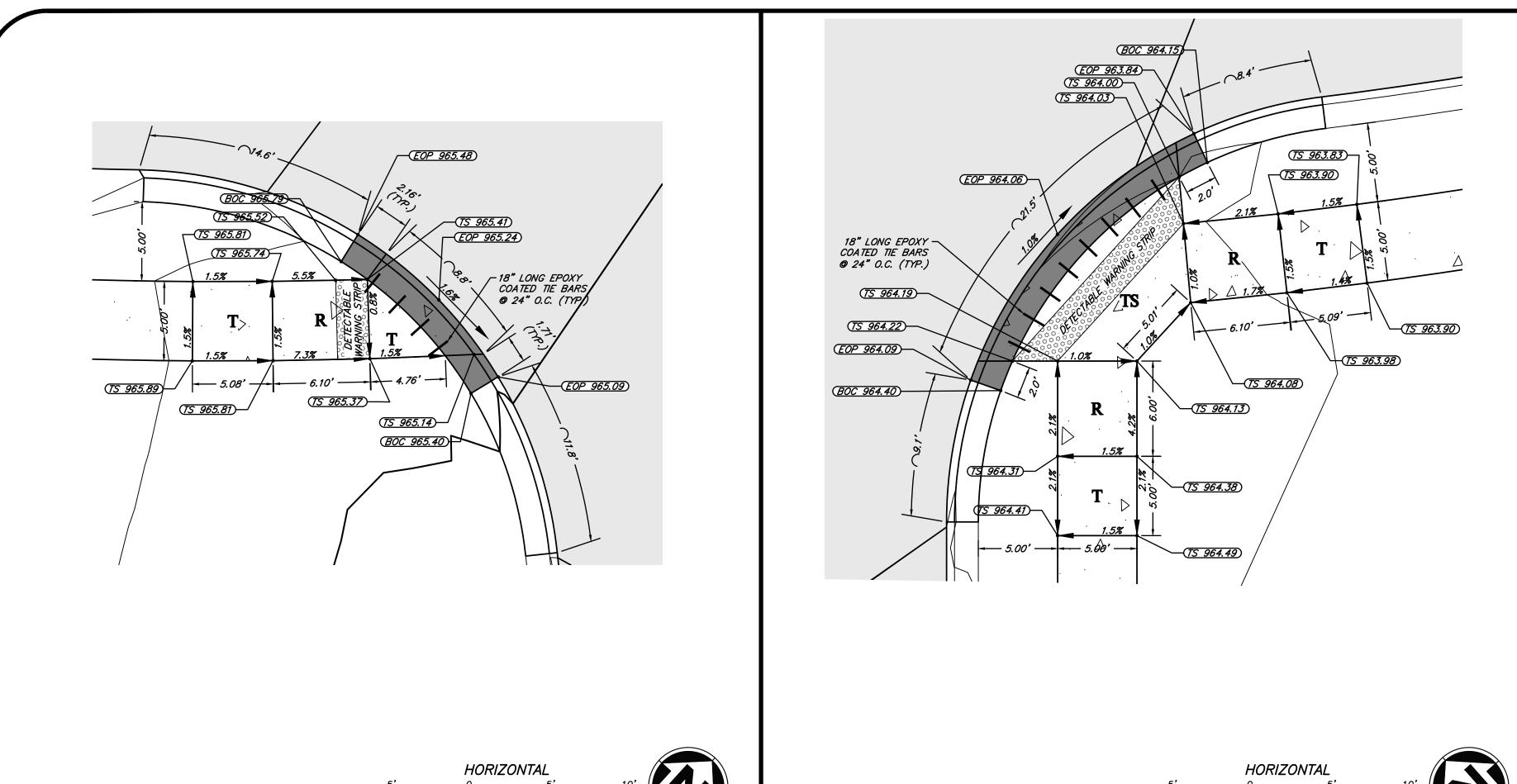
SHEET NUMBER 206
14 OF 40

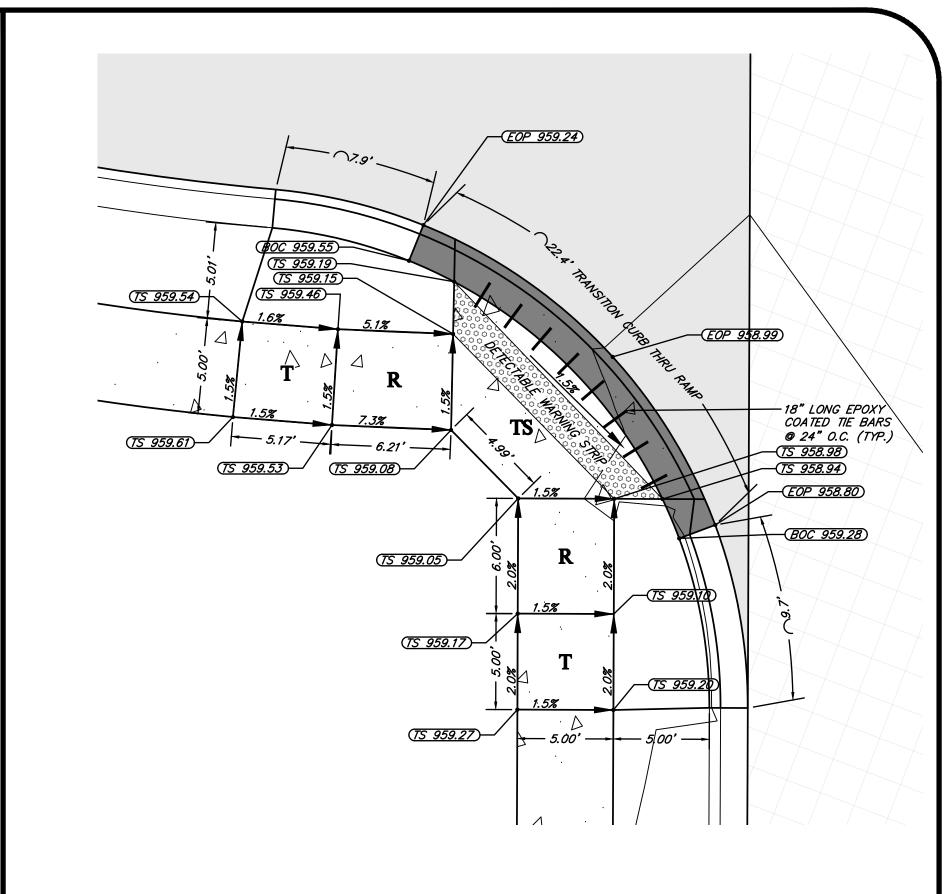
RELEASE FOR CONSTRUCTION **AS NOTED ON PLANS REVIEW** DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

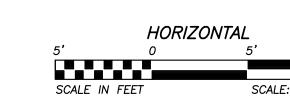














ADA RAMP #2



LEGEND EOP = EDGE OF PAVEMENT

ADA RAMP #3

= TOP OF SIDEWALK = TRANSITION

TS = TURNING SPACE

DRY CURB & GUTTER

DETECTIBLE WARNING STRIP TYPICAL 28' ROADWAY PAVEMENT SECTION

KCMMB4K CONCRETE SIDEWALK

SCALE: 1" = 100"

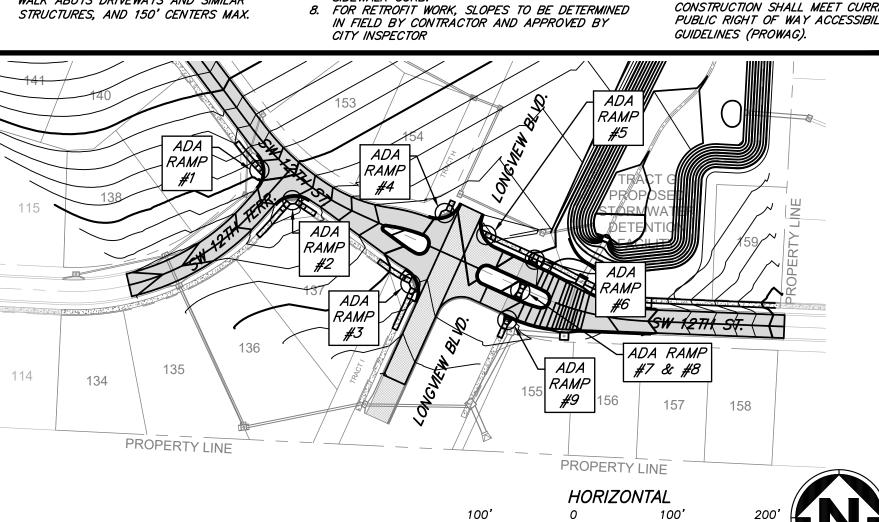
GENERAL NOTES:

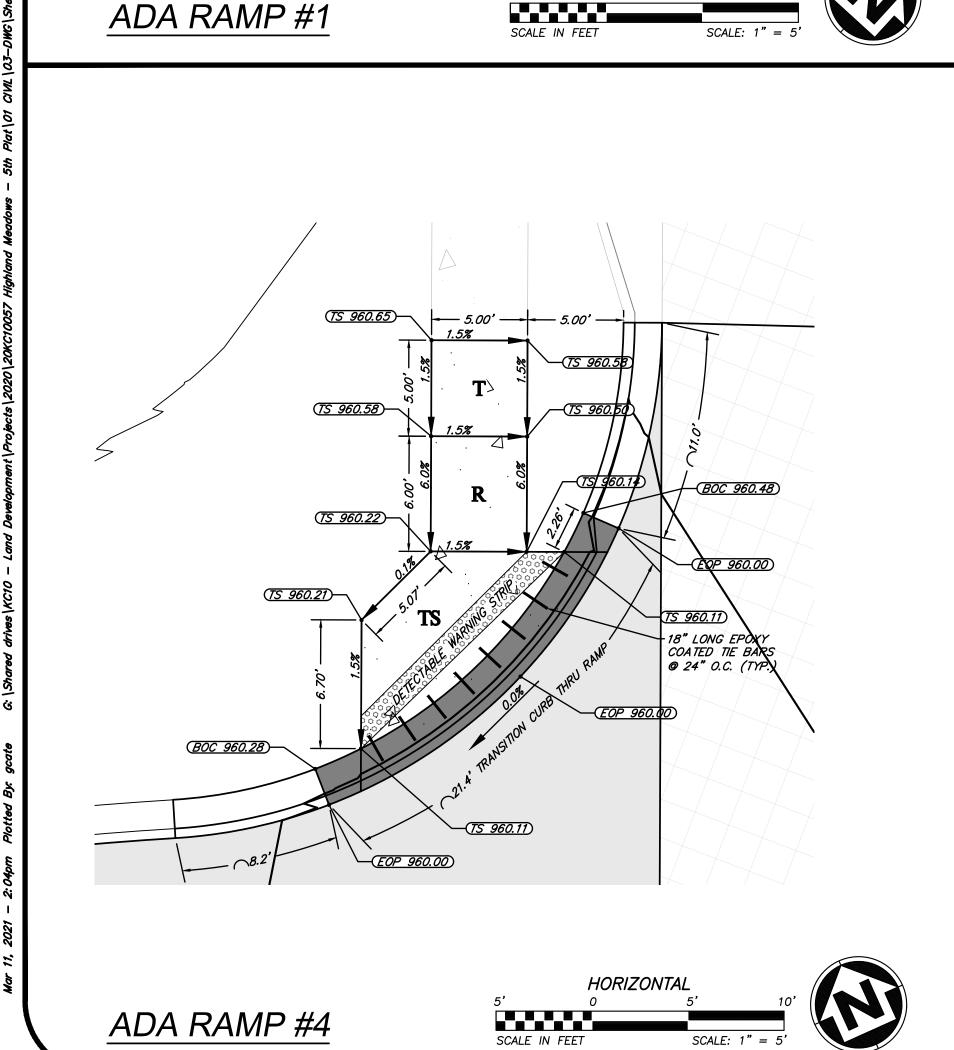
 $\mathbf{R} = RAMP$

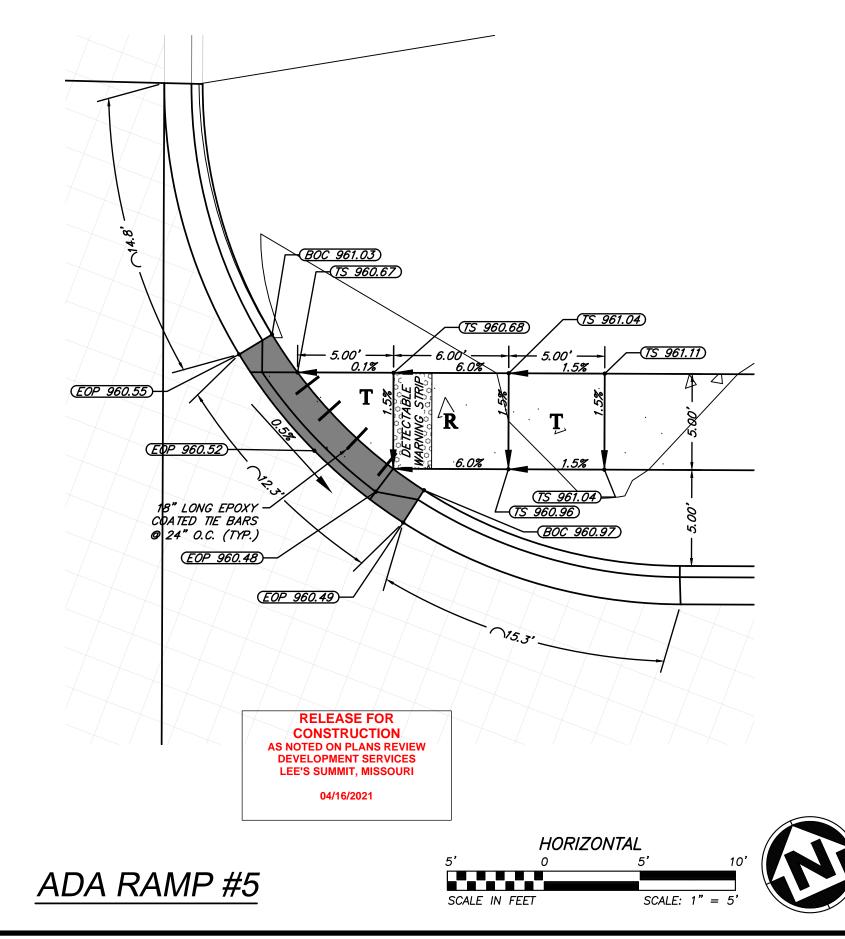
- CURB RAMP OPENING, NOT INCLUDING FLARES, 6. ADA MAXIMUM RAMP SLOPE = 8.33%, ADA SHALL MATCH EXISTING SIDEWALK WITH AN MAXIMUM CROSS SLOPE = 2.0%. OPENING SHALL BE AT LEAST 48" WIDE.
- . USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED THE BARS 9" IN EACH DIRECTION. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED
- EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR
- *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5% ±0.5%. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING
- 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.

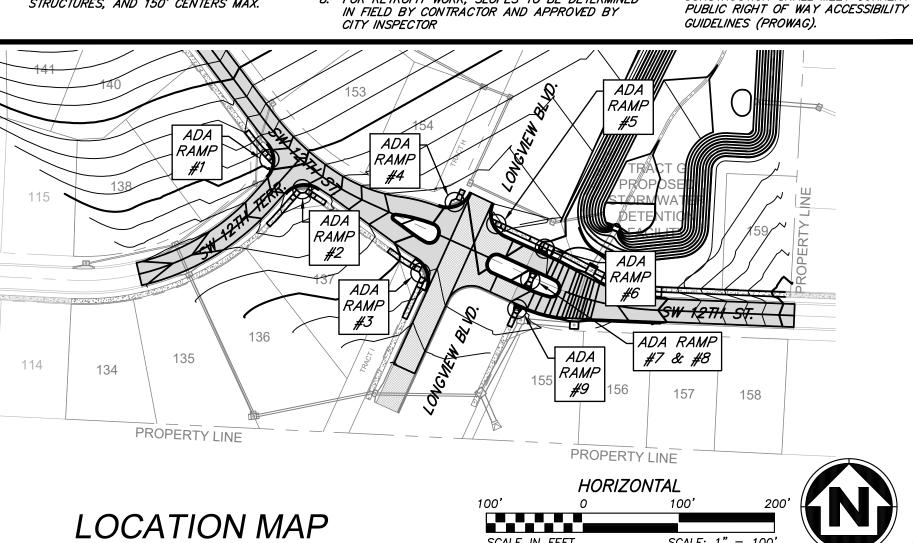
SPACES, WITH A SIDEWALK CURB, SHALL HAVE A

- 9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRASITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP
- EXTENSIONS SHALL BE A CONTINUOUS SLOPE. 10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT





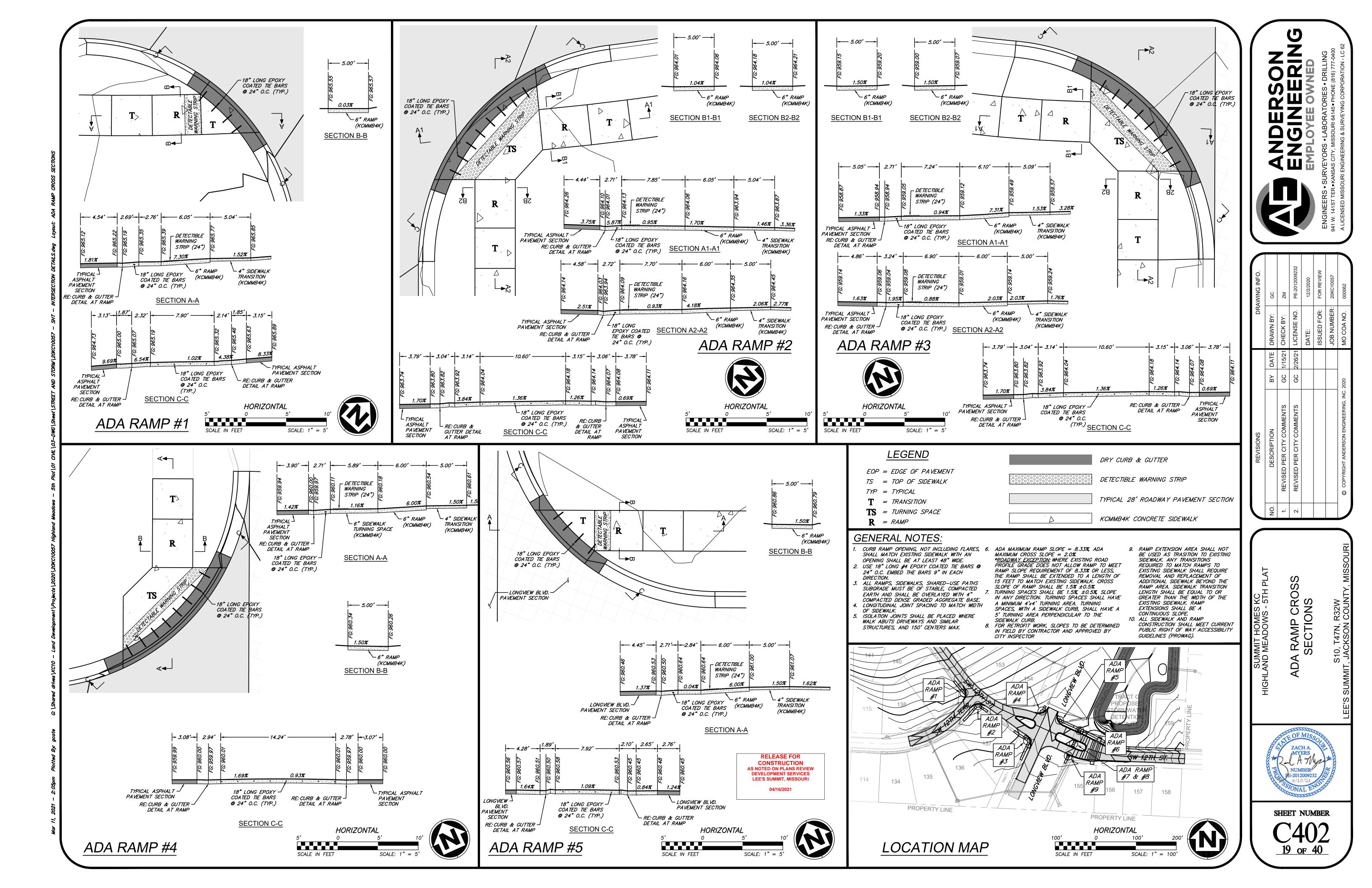


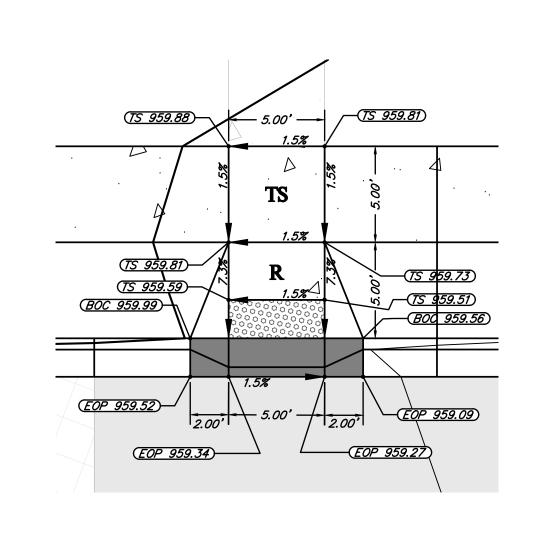


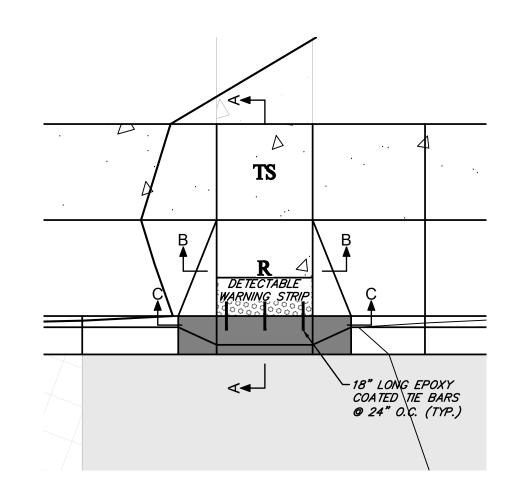
| KEVISIONS | | | Y O | JKAWING INFO |
|--|------|---------|------------------------|--------------|
| DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | 29 |
| SED PER CITY COMMENTS | CC | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| SED PER CITY COMMENTS | CC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-20120092 |
| | | | DATE: | 12/2/2020 |
| | | | ISSUED FOR: | FOR REVIEV |
| | | | JOB NUMBER: | 20KC10057 |
| YRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |

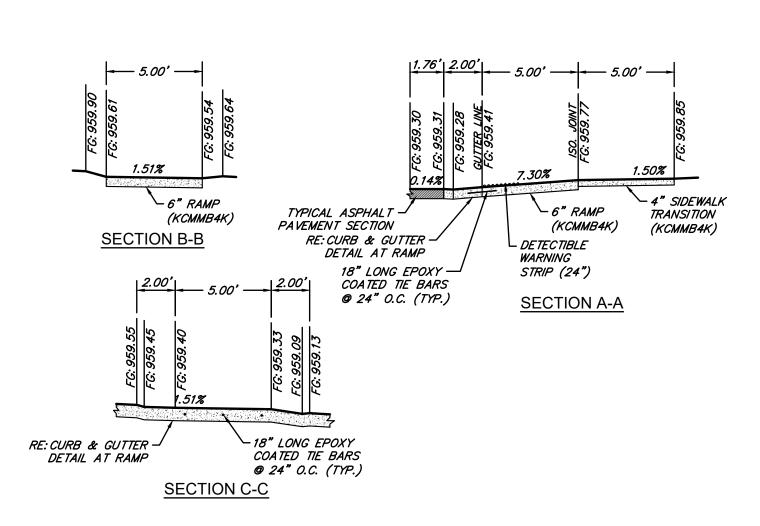
ADA

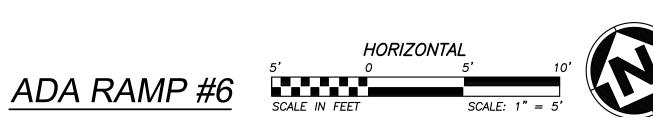


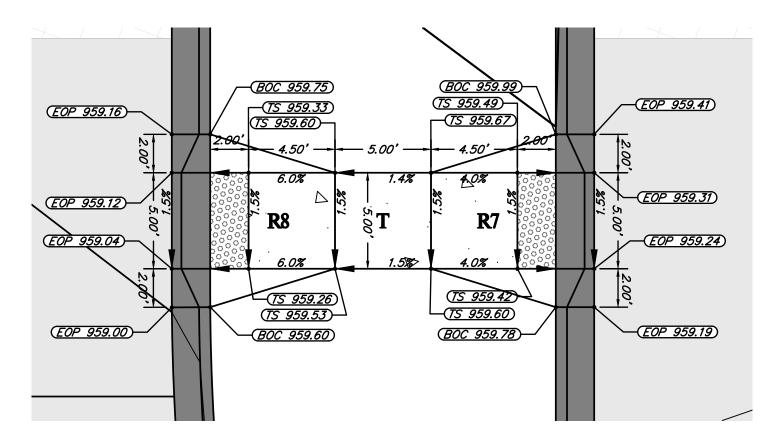


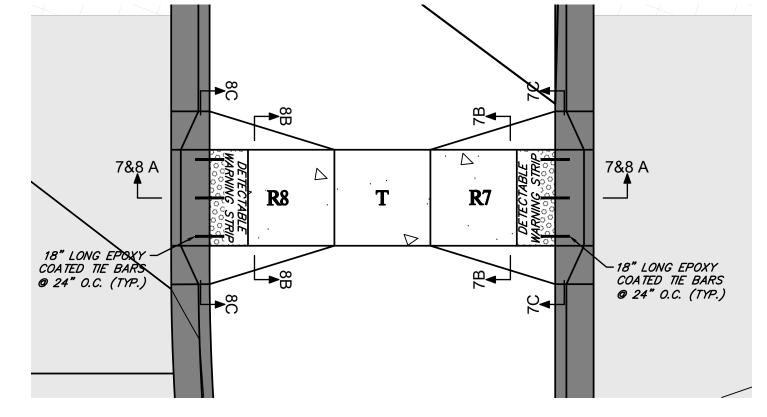


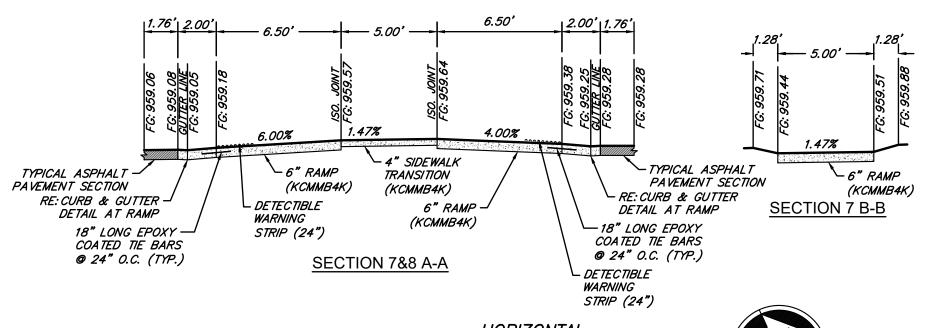












—(*BOC 959.09*)

—(*TS 958.93*)

—(*TS 959.23*)

—(*TS 959.30*)

6" RAMP

– DETECTIBLE

STRIP (24")

(KCMMB4K)

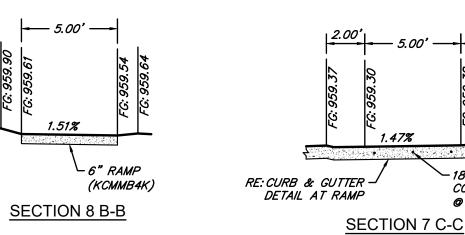
SECTION A-A

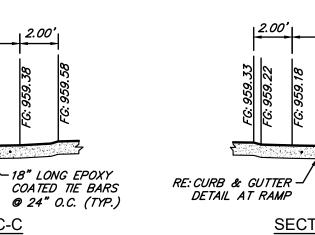
ADA RAMP #9

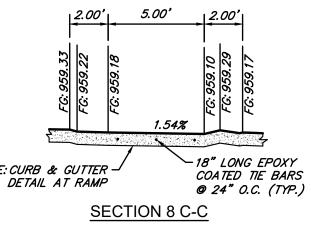
~ 4" SIDEWALK

TRANSITION

(KCMMB4K)









(BOC 959.34)—

(*TS 958.85*)-

(TS 959.15)—

(TS 959.23)—

TYPICAL ASPHALT —

RE: CURB & GUTTER -/ DETAIL AT RAMP

18" LONG EPOXY —

COATED TIE BARS @ 24" O.C. (TYP.)

PAVEMENT SECTION

1.76' 2.00' 2.00' |





- 18" LONG EPOXY COATED TIE BARS @ 24" O.C. (TYP.)

-18" LONG EPOXY

COATED TIE BARS

@ 24" O.C. (TYP.)

SECTION C-C

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

└▶⊳

RE: CURB & GUTTER -

6" RAMP (KCMMB4K)

SECTION B-B

DETAIL AT RAMP

| <u>LEGEND</u> | | DRY CURB & GUTTER |
|--|---|--------------------------------------|
| EOP = EDGE OF PAVEMENT TS = TOP OF SIDEWALK | | DETECTIBLE WARNING STRIP |
| $TYP = TYPICAL$ $\mathbf{T} = TRANSITION$ | | TYPICAL 28' ROADWAY PAVEMENT SECTION |
| TS = TURNING SPACE $R = RAMP$ | Δ | KCMMB4K CONCRETE SIDEWALK |

GENERAL NOTES:

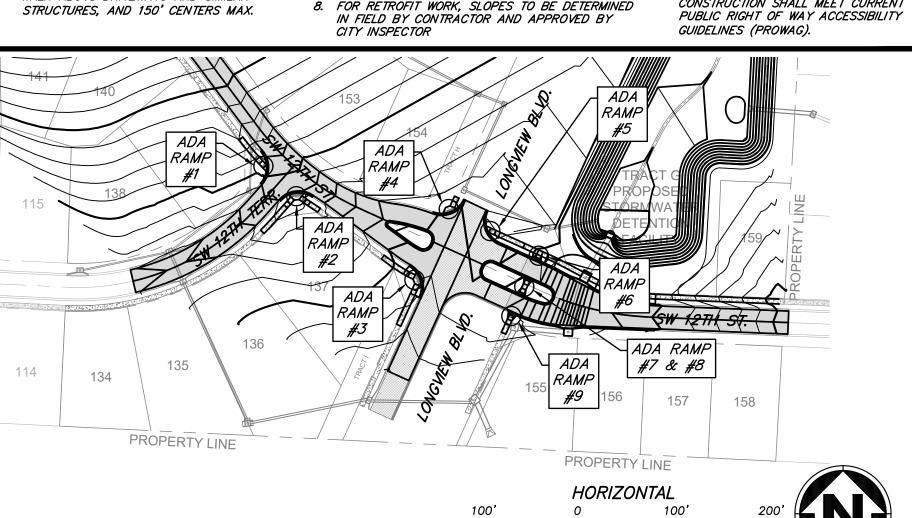
- CURB RAMP OPENING, NOT INCLUDING FLARES, 6. ADA MAXIMUM RAMP SLOPE = 8.33%, ADA SHALL MATCH EXISTING SIDEWALK WITH AN MAXIMUM CROSS SLOPE = 2.0%. OPENING SHALL BE AT LEAST 48" WIDE. . USE 18" LONG #4 EPOXY COATED TIE BARS @
- 24" O.C. EMBED THE BARS 9" IN EACH DIRECTION. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS
- LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
- THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5% ±0.5%. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE A MINIMUM 4'x4' TURNING AREA. TURNING 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.

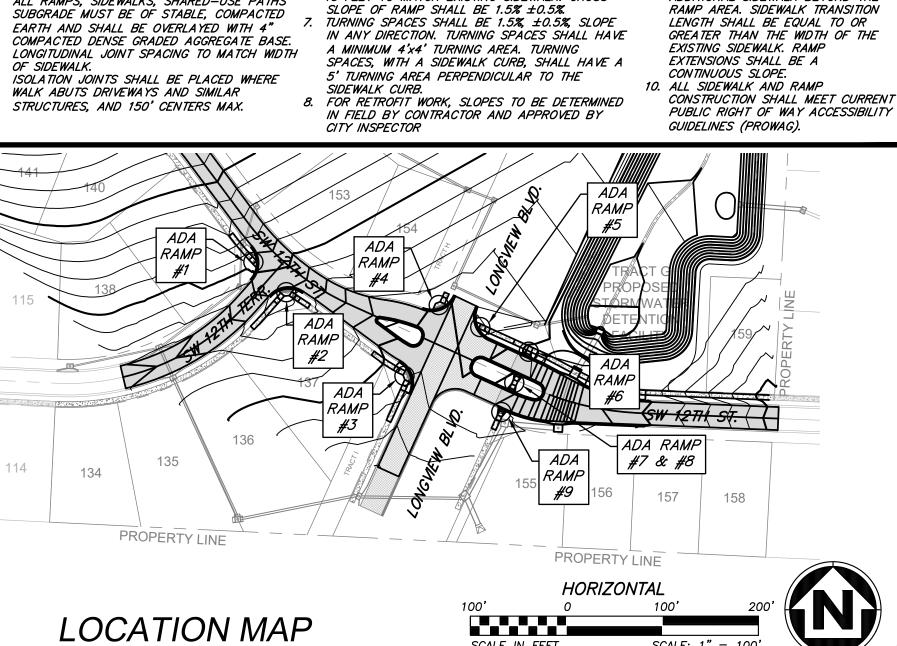
*ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET

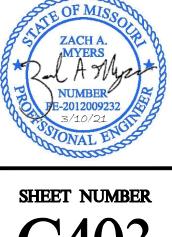
RAMP SLOPE REQUIREMENT OF 8.33% OR LESS,

9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRASITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A

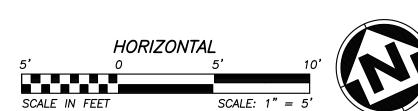
SCALE: 1" = 100"

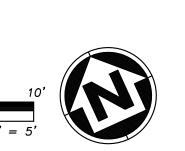






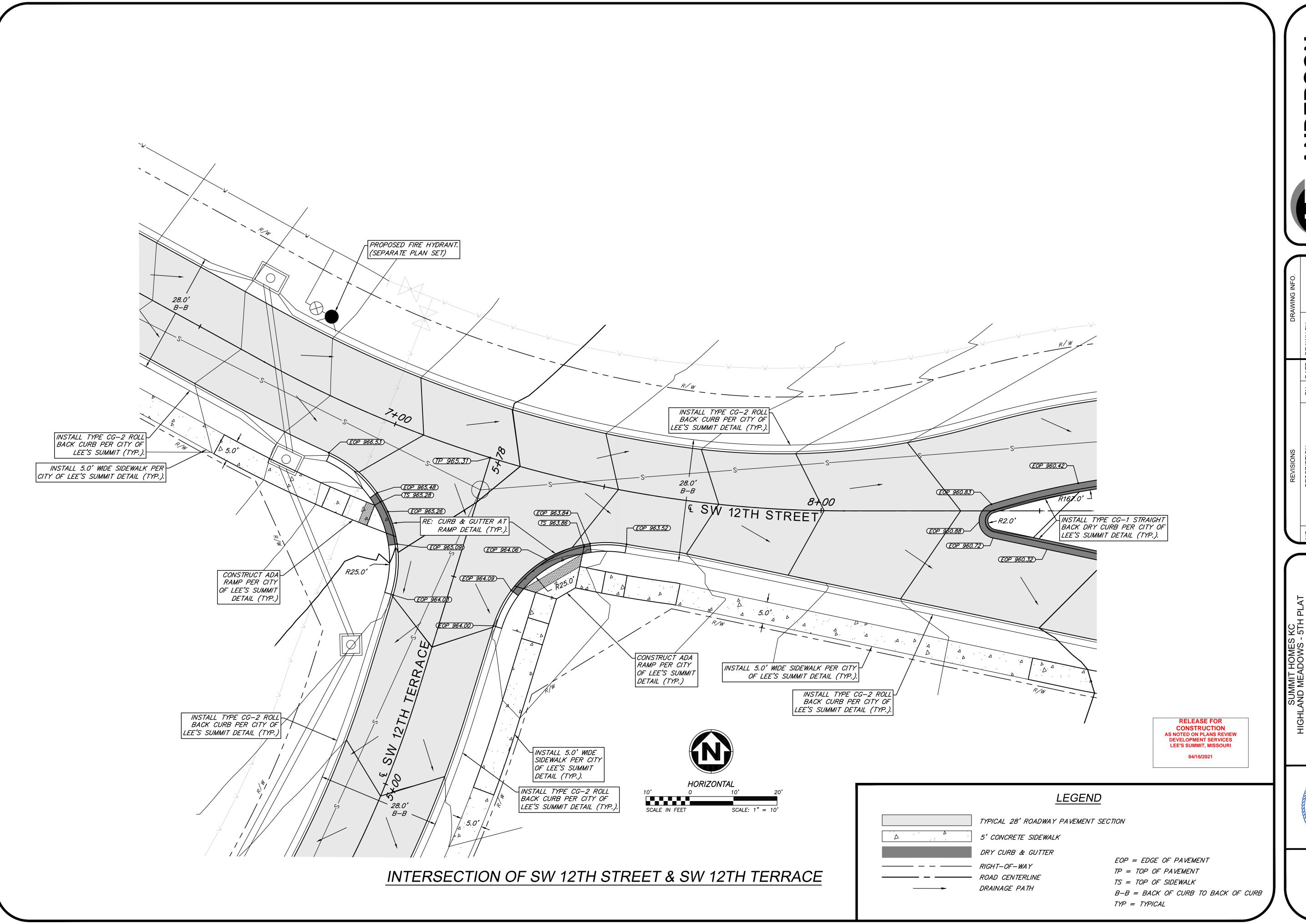
20 of 40







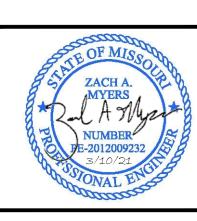




ENGINEERS • SURVEYORS • LABORATORIES • DRILLING
ALICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION • LC 62

| | REVISIONS | | | /NO | DRAWING INFO. |
|-----|---|------|---------|------------------------|---------------|
| NO. | DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | 9C |
| 1. | REVISED PER CITY COMMENTS | CC | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| 2. | REVISED PER CITY COMMENTS | CC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-2012009232 |
| | | | | DATE: | 12/2/2020 |
| | | | | ISSUED FOR: | FOR REVIEW |
| | | | | JOB NUMBER: | 20KC10057 |
| | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |

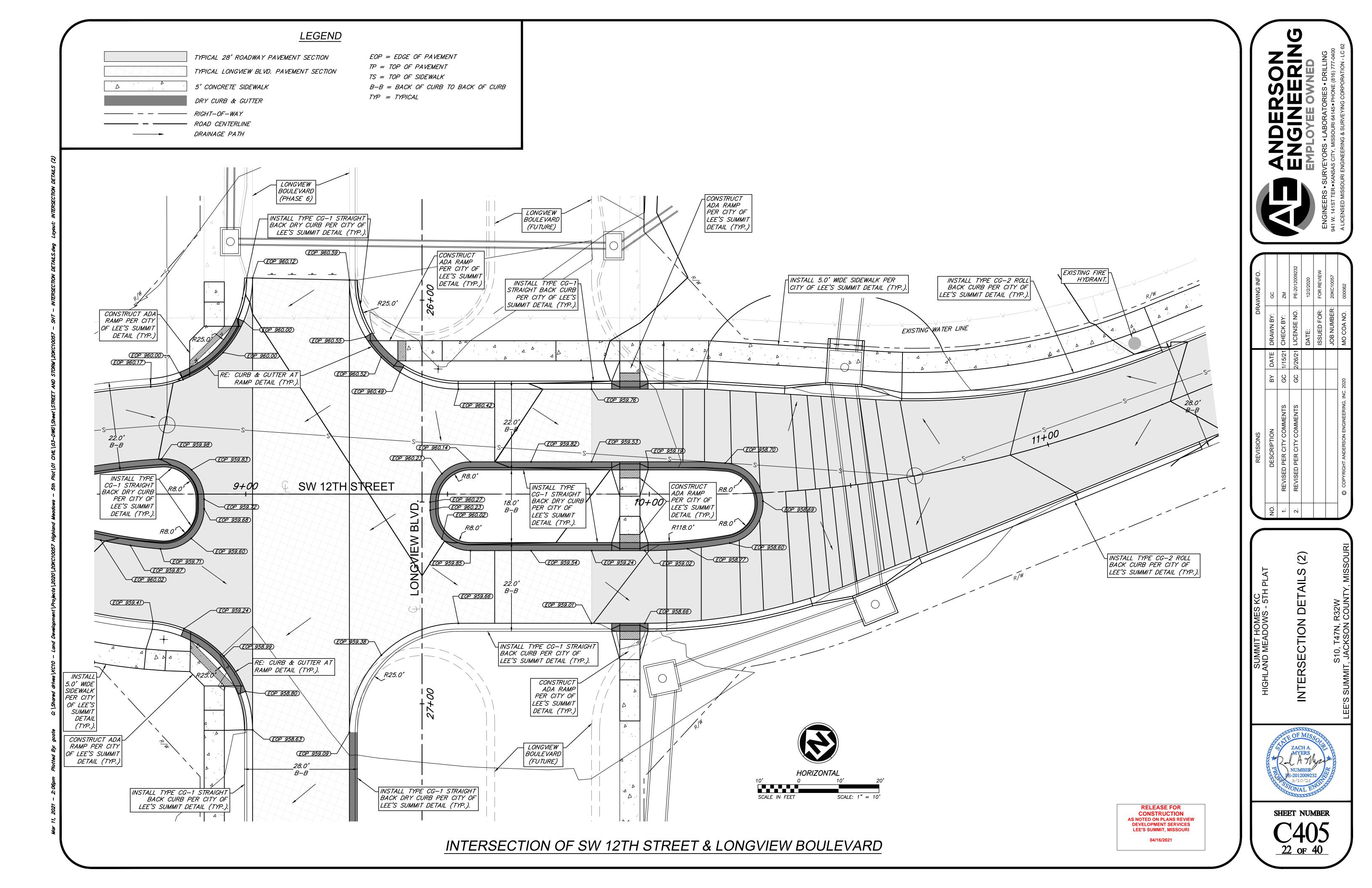
INTERSECTION DETAILS

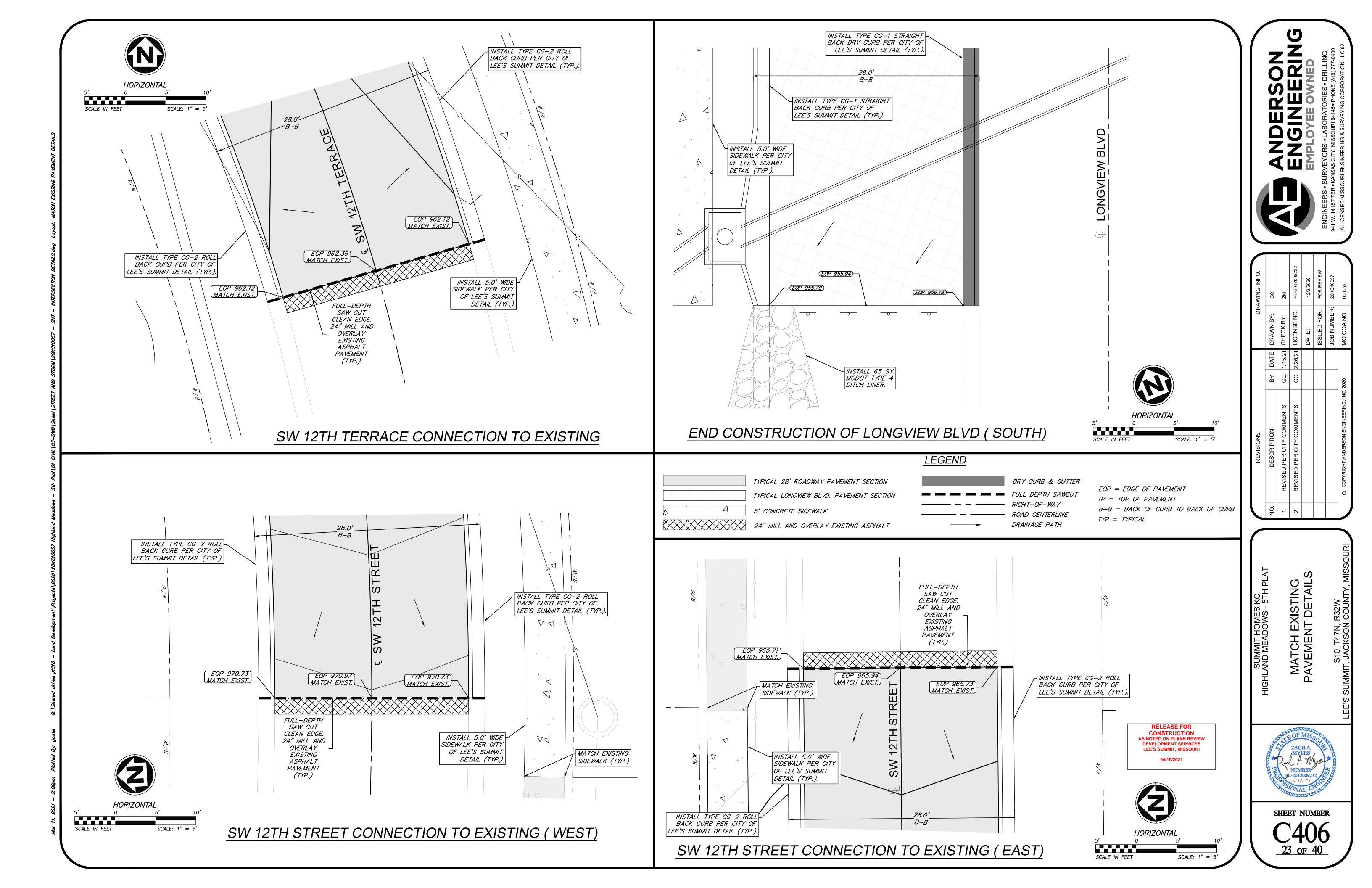


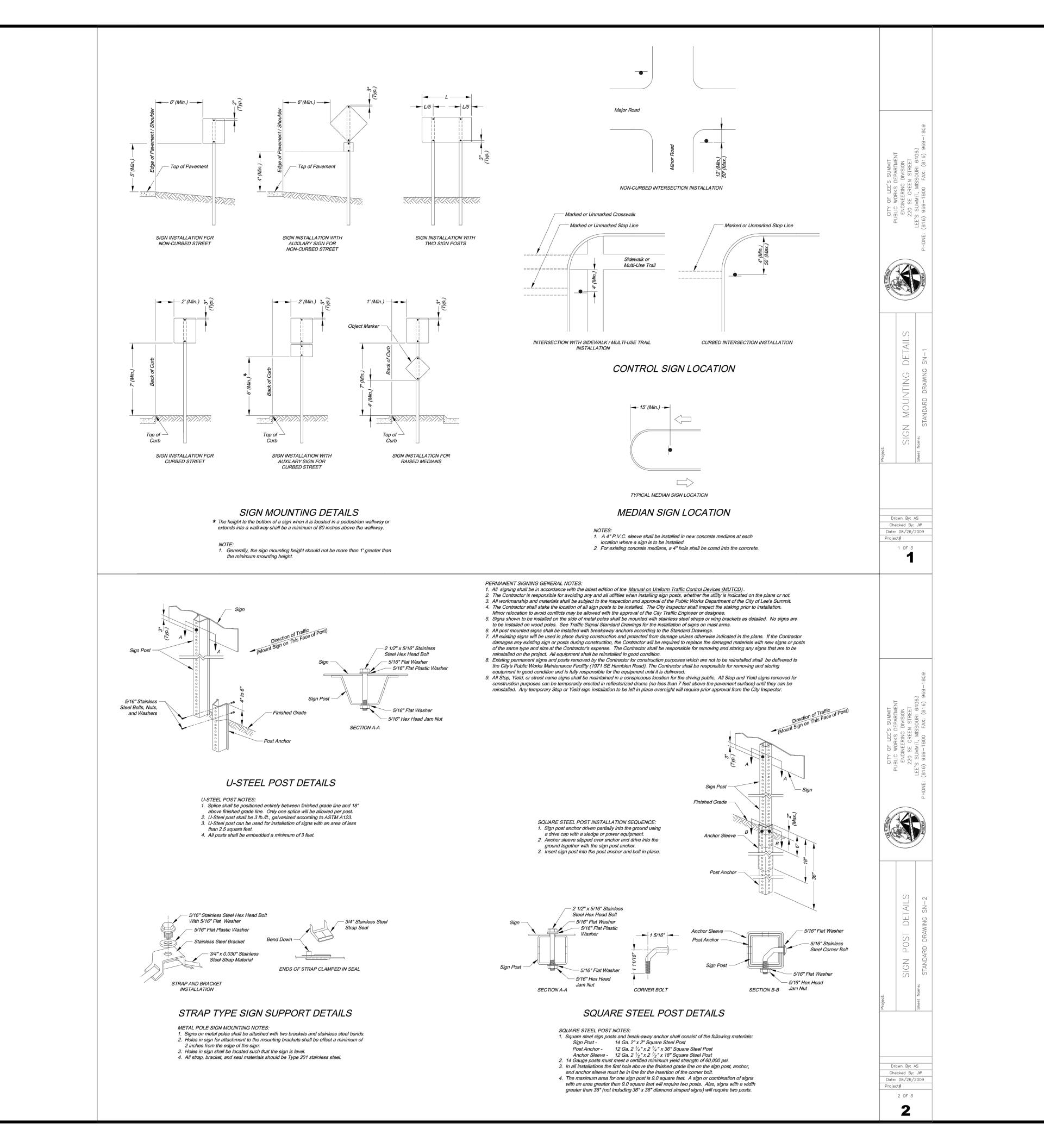
SHEET NUMBER

C 404

21 OF 40







 REVISIONS
 DRAWING INFO.

 DESCRIPTION
 BY
 DATE
 DRAWN BY:
 GC
 1/15/21
 CHECK BY:
 ZM

 D PER CITY COMMENTS
 GC
 2/26/21
 LICENSE NO.
 PE-2012009232
 PE-2012009232

 D PER CITY COMMENTS
 GC
 2/26/21
 LICENSE NO.
 PE-2012009232
 ENGINEEF

 D PER CITY COMMENTS
 GC
 2/26/21
 LICENSE NO.
 PE-2012009232
 ENGINEEF

 D PER CITY COMMENTS
 GC
 2/26/21
 LICENSE NO.
 FOR REVIEW
 ENGINEEF

 D SHT ANDERSON ENGINEERING, INC. 2020
 MO COA NO.
 000062
 A LICENSED NO.

SIGN POST & MOUNTING
DETAILS

ZACH A.

MYERS

NUMBER

FE-2012009232

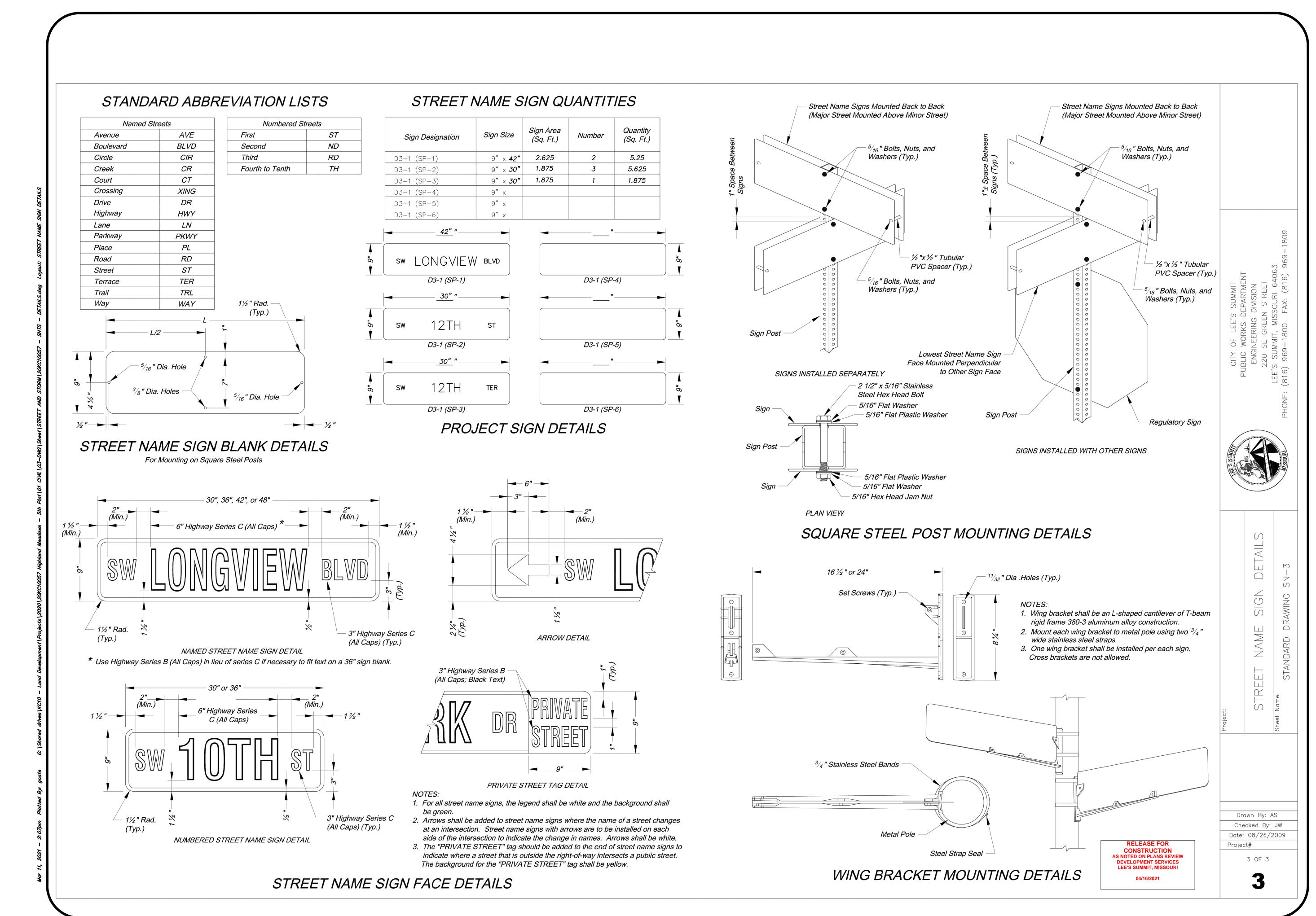
3/10/21

STONAL ENGINEER

SHEET NUMBER

C407
24 of 40

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI



ENGINE OWNED
SURVEYORS - LABORATORIES - DRILLING

ENGINEERS • SURVEYORS • LA

| REVISIONS | | | DR/ | DRAWING INFO. |
|---|------|---------|------------------------|---------------|
| DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | 90 |
| REVISED PER CITY COMMENTS | CC | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| REVISED PER CITY COMMENTS | CC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-2012009232 |
| | | | DATE: | 12/2/2020 |
| | | | ISSUED FOR: | FOR REVIEW |
| | | | JOB NUMBER: | 20KC10057 |
| S COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |

EET NAME SIGN DETAIL

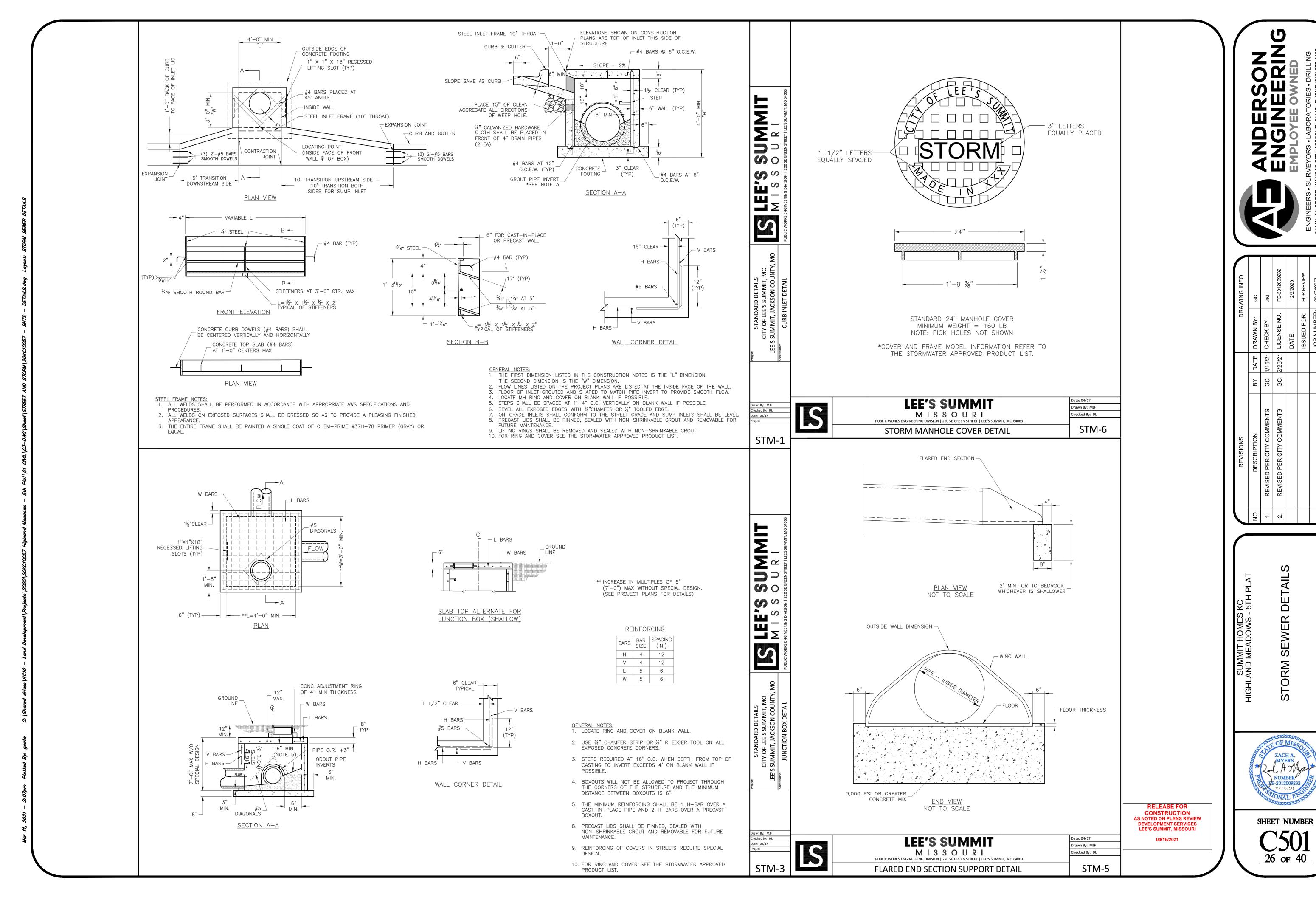
STREET NAME

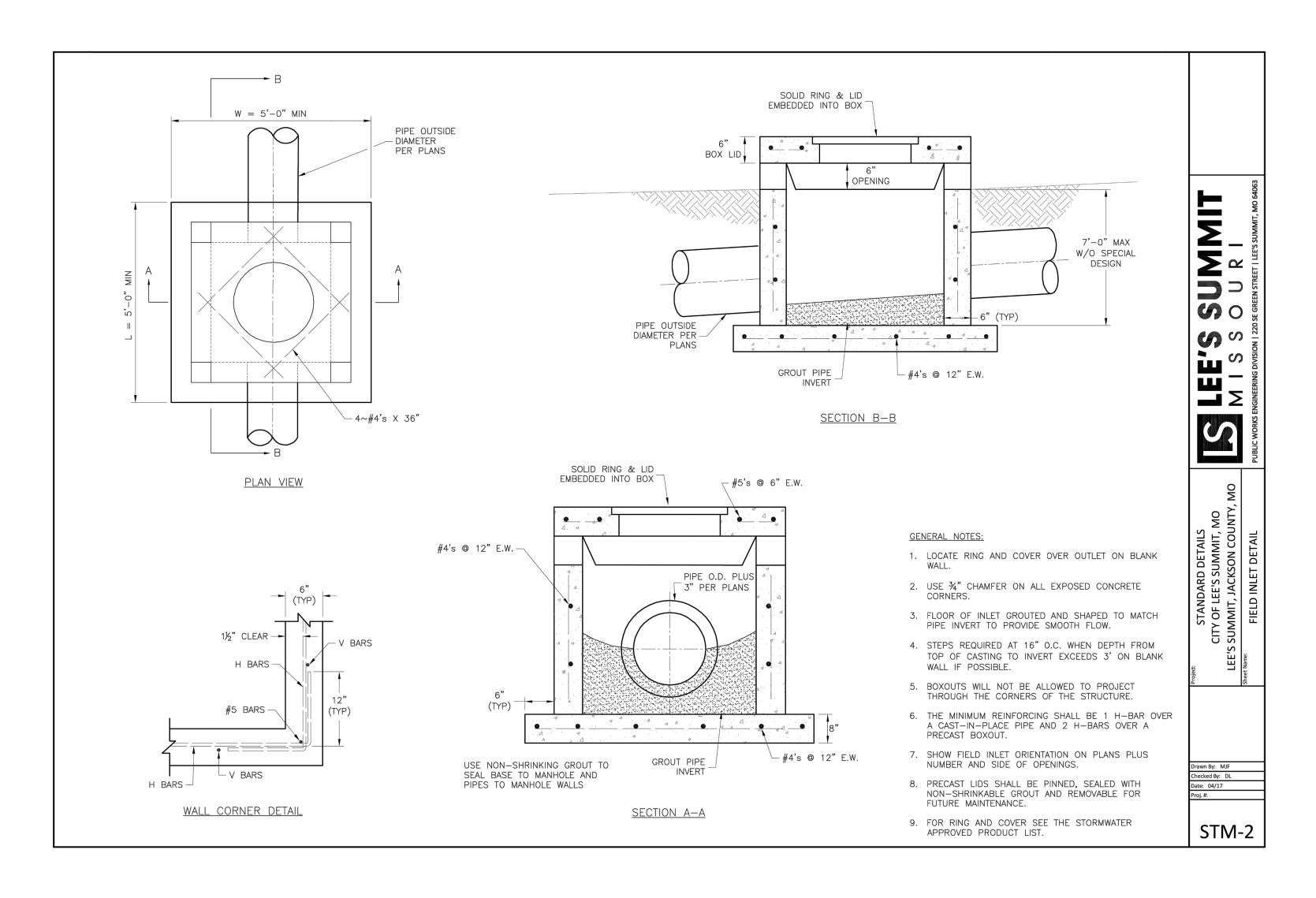


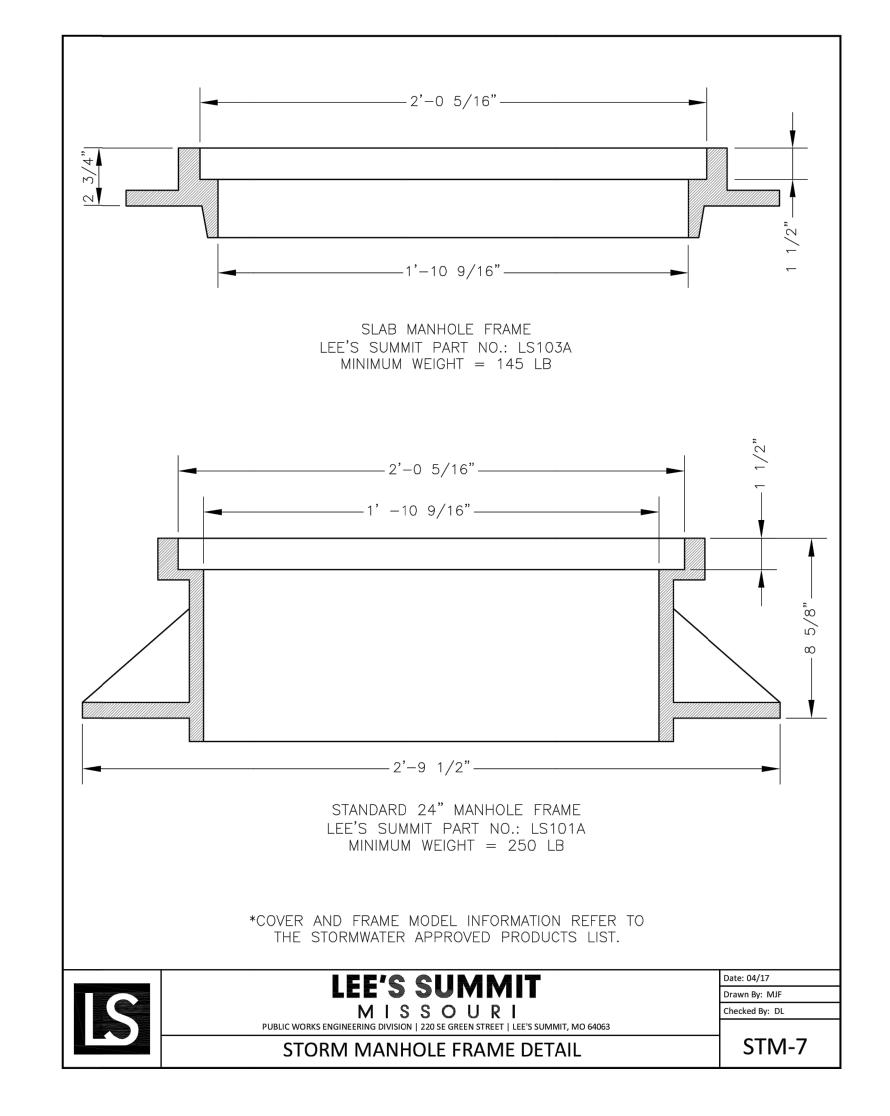
SHEET NUMBER

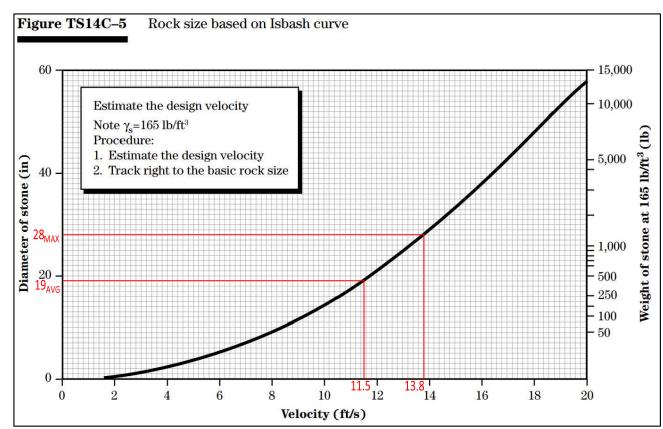
C408

25 OF 40









MAXIMUM 10−YR OUTLET VELOCITY PER DRAINAGE CALCULATIONS (SHEET C202) ≈ 9.71 FT/S.

PER TABLE ABOVE, 9.71 FT/S x 1.2 SAFETY FACTOR = 11.5 FT/S ≈ 19" AVERAGE STONE SIZE.

19" STONE ≈ MoDOT TYPE 4 DITCH LINER SPECIFICATION

"TYPE 4 ROCK DITCH LINER SHALL CONSIST OF MATERIAL WITH A PREDOMINAT ROCK SIZE OF 19 INCHES, A MAXIMUM ROCK SIZE OF 28 INCHES AND A GRADATION SUCH THAT NO MORE THAN 15% WILL BE LESS THAN 6 INCHES" PER SECTION 609.60.2.4 OF THE 2018 MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

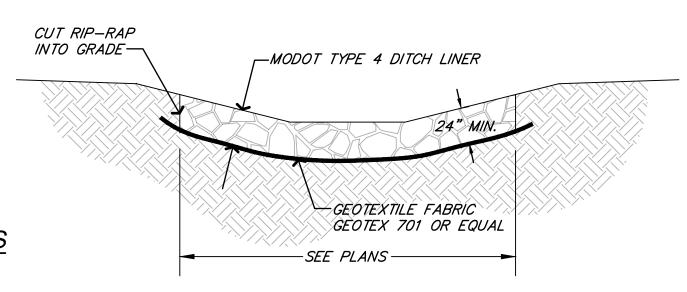
1. ROCK TO BE USED FOR RIP-RAP SHALL CONSIST OF INDIVIDUAL ROCK FRAGMENTS THAT ARE DENSE, SOUND, AND RESISTANT TO ABRASION. THE ROCK SHALL BE FREE OF CRACKS, SEAMS, AND OTHER DEFECTS THAT WOULD TEND TO INCREASE THE DESTRUCTION OF THE INDIVIDUAL ROCK FRAGMENTS DUE TO WATER AND FRONT ACTION. REFER APWA SECTION

2. RIP-RAP SHALL HAVE A MINIMUM THICKNESS OF 24" AT ALL LOCATIONS SHOWN ON THE PLANS. RIP-RAP SHALL BE PLACED ON GEOTEXTILE FABRIC AS SHOWN IN THE DETAIL.

3. 24" THICK RIP-RAP SHALL BE WELL-GRADED (D50 = 19") AND CONFORM TO THE TABLE BELOW:

> PERCENT LIGHTER WEIGHT, LBS. 700 100 *525 85–95 30–50 175* 0-15

4. A SAMPLE OF ALL ROCK TO BE PLACED SHALL BE SET ASIDE AT A QUARRY CHOSEN BY THE CONTRACTOR AND VISUALLY INSPECTED BY THE CONTRACTOR FOR QUALITY TO ENSURE ROCK MEETS ALL REQUIREMENTS PRIOR TO DELIVERY.



1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS

<u>INITIAL BACKFILL</u> -UNDER PAVED AREAS OR WITHIN 4' HORIZONTAL OF PAVED AREAS 1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS -UNDER OPEN AREAS

1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS FINAL BACKFILL

-UNDER PAVED AREAS OR WITHIN 4' HORIZONTAL OF PAVED AREAS ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE, ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8", COMPACTED TO 95% OF STANDARD DENSITY PER ASTM D-698 -UNDER OPEN AREAS

ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE, ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8", COMPACTED TO 90% OF STANDARD DENSITY PER ASTM D-698

| BEDDING DEPTH | BELOW PI | PE |
|---------------|----------|---------|
| PIPE DIAMETER | IN SOIL | IN ROCK |
| 24" AND LESS | 4" | 6" |
| 27" THRU 60" | 4" | 9" |

GRAVEL BEDDING (1/2"-3/4" CLEAN)

WIDTH SHALL NOT

EXCEED 21/2 TIMES THE OUTSIDE PIPE DIAMETER

BACKFILL

GRAVEL BACKFILL

(1/2"-3/4" CLEAN)

PIPE BEDDING DETAIL NOT TO SCALE

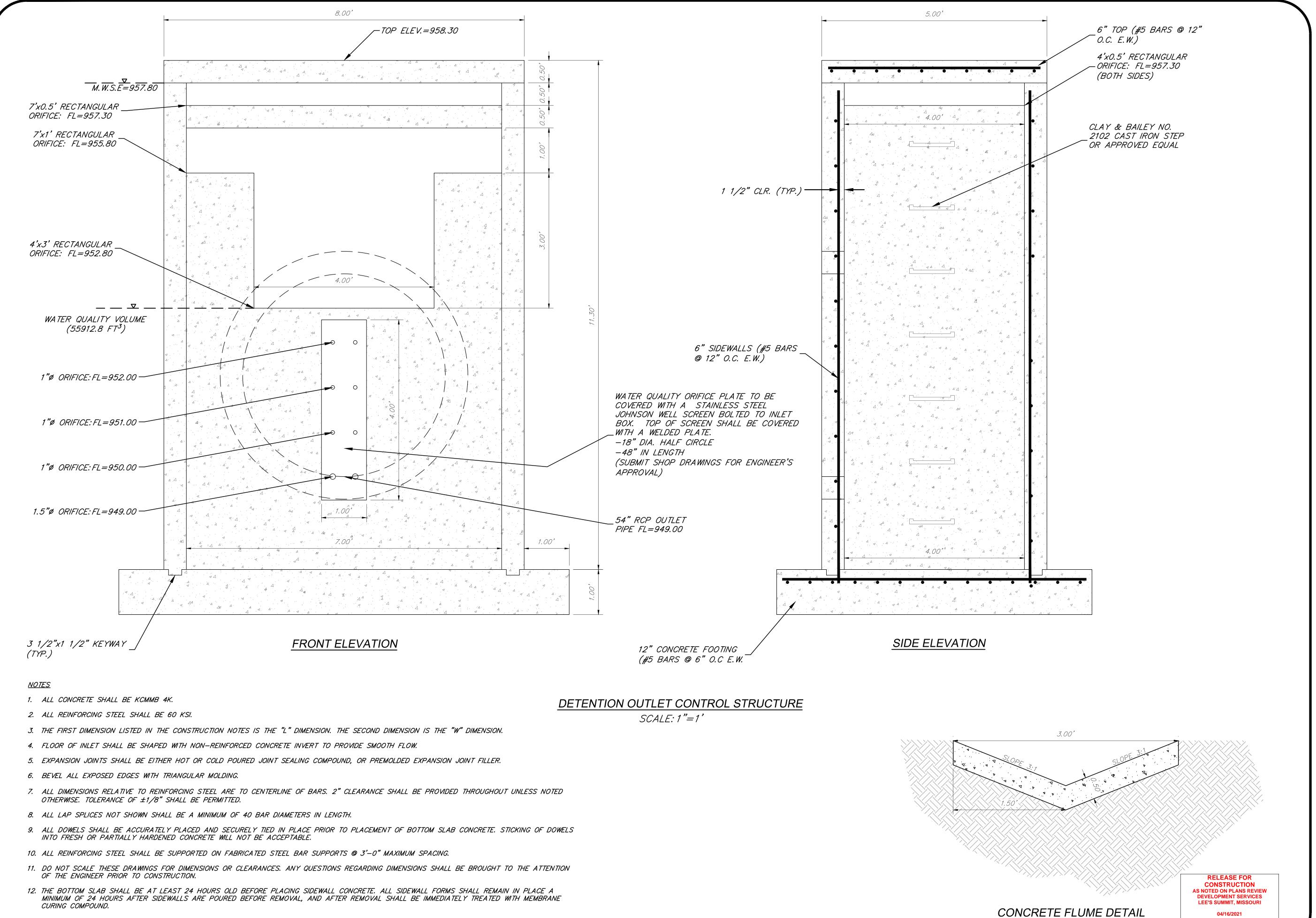
RELEASE FOR CONSTRUCTION **AS NOTED ON PLANS REVIEW** DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/16/2021



| DRAWING INFO. | 90 | ZM | PE-2012009232 | 12/2/2020 | FOR REVIEW | 20KC10057 | 000062 |
|---------------|-------------------|---------------------------|---------------------------|-----------|-------------|-------------|---|
| 'A'O | BY DATE DRAWN BY: | GC 1/15/21 CHECK BY: | GC 2/26/21 LICENSE NO. | DATE: | ISSUED FOR: | JOB NUMBER: | MO COA NO. |
| | DATE | 1/15/21 | 2/26/21 | | | | |
| | ВУ | 29 | 29 | | | | 2020 |
| REVISIONS | DESCRIPTION | REVISED PER CITY COMMENTS | REVISED PER CITY COMMENTS | | | | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 |
| | NO. | 1. | 2. | | | | |

SHEET NUMBER

RIPRAP DETAILS NOT TO SCALE



13. RCP CONNECTIONS TO PRECAST STRUCTURES SHALL HAVE A MINIMUM OF 6" OF CONCRETE AROUND THE ENTIRE PIPE WITHIN 2' OF THE STRUCTURE.

ANDERSON
ENGINEERING
EMPLOYEE OWNED
MERS SURVEYORS LABORATORIES DRILLING

ENSE NO. PE-2012009232

E: 12/2/2020

JED FOR: FOR REVIEW

ENGINEERS

941 W. 141ST TEF

NO. DESCRIPTION BY DATE DRAWN BY: GC

1. REVISED PER CITY COMMENTS GC 1/15/21 CHECK BY: ZN

2. REVISED PER CITY COMMENTS GC 2/26/21 LICENSE NO. PE

DATE: 12

ISSUED FOR: FO

JOB NUMBER: 20

STORM SEWER DETAILS (3)

ZACH A.

MYERS

NUMBER

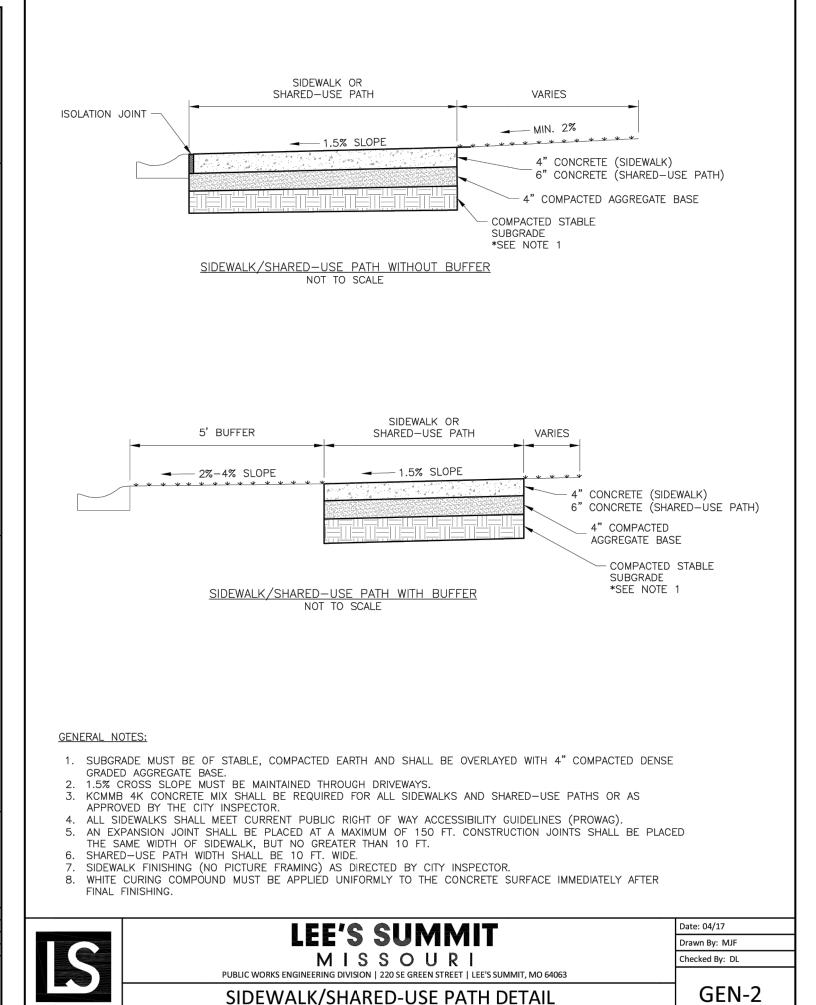
FE-2012009232

3/10/21

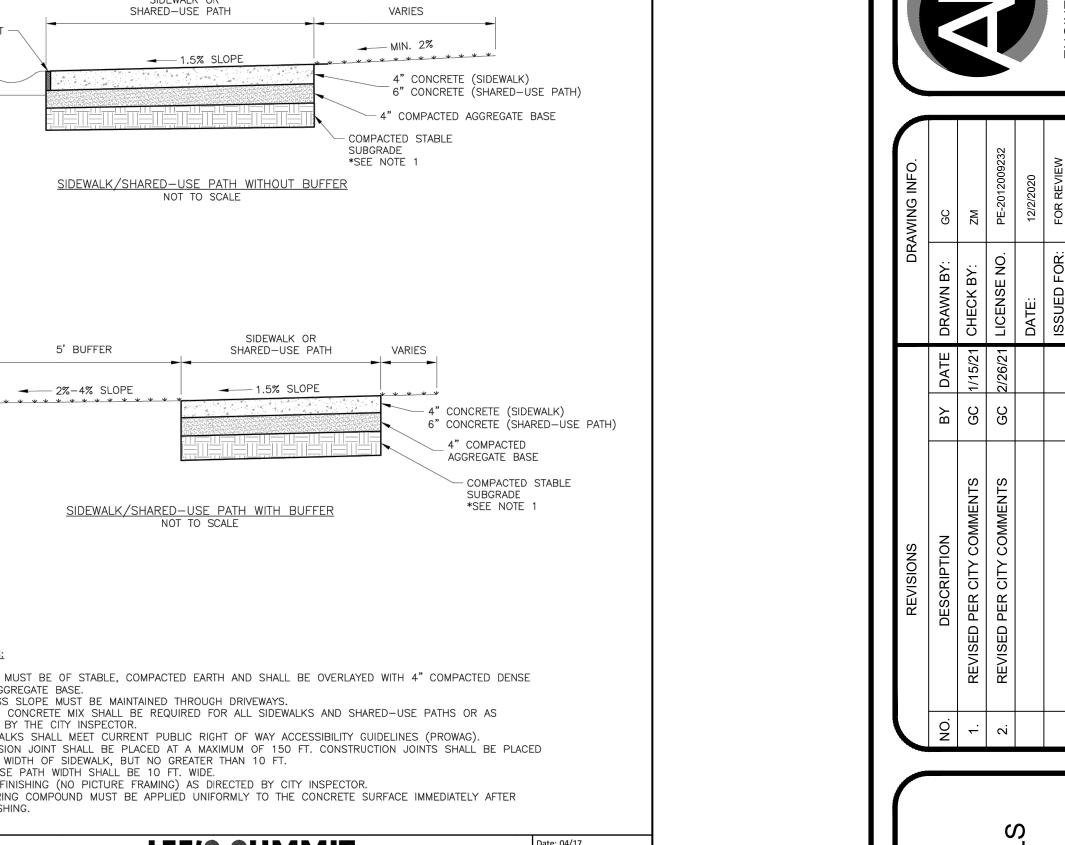
C503
28 of 40

NOT TO SCALE

7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.



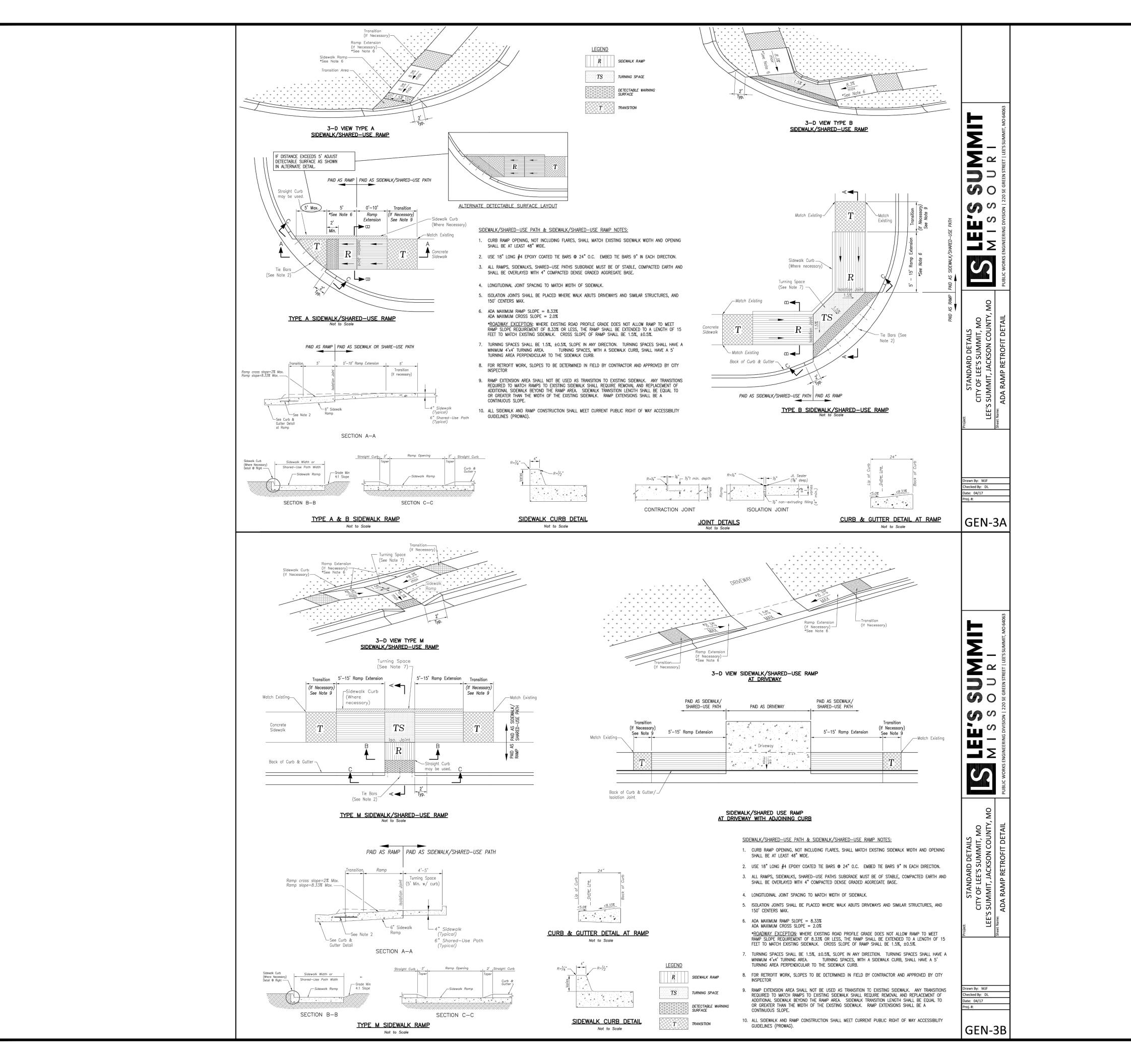
SIDEWALK/SHARED-USE PATH DETAIL

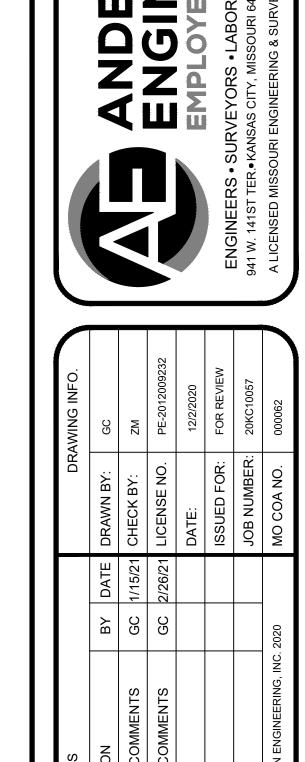


RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/16/2021

SIDEWAL ∞

SHEET NUMBER





S10,

SHEET NUMBER

RELEASE FOR

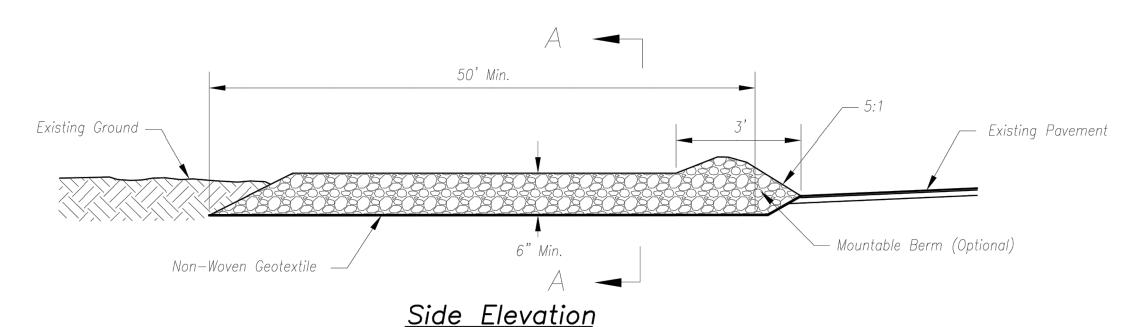
CONSTRUCTION

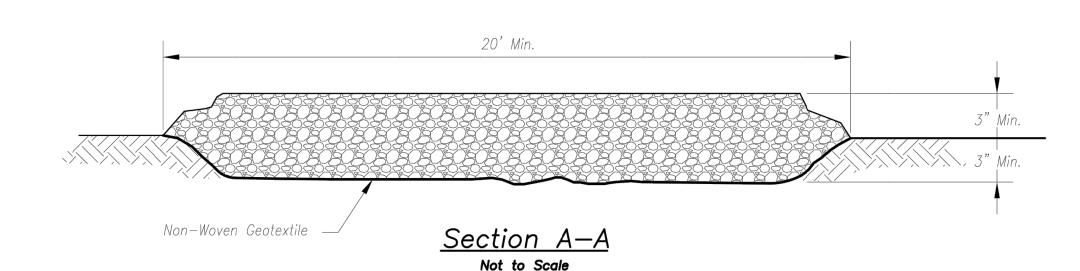
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/16/2021

<u>Plan View</u>





Not to Scale

Notes for Construction Entrance:

- Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
- Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
- 3. If slope towards the public road exceeds 2%, construct a 6— to 8—inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
- Install pipe under the entrance if needed to maintain drainage ditches along public roads.
- 5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
- 6. Divert all surface runoff and drainage from the entrance to a sediment control device.
- 7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

 Reshape entrance as needed to maintain function and integrity of Installation. Top dress with clean aggregate as needed.

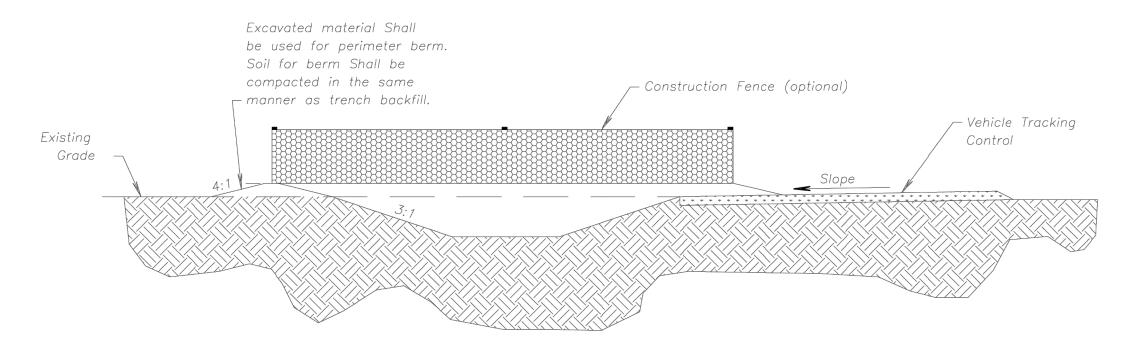
CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

- 1. Concrete washout areas shall be installed prior to any concrete placement on site.
- 2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
- 3. Vehicle tracking control is required at the access point to all concrete washout areas.
- 4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
- 5. A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

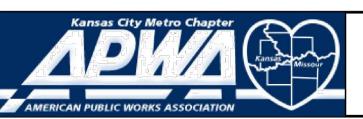
- Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
- 2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
- Concrete washout water, wasted pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water—tight container and disposed of properly.
- Concrete washout areas shall remain in place until all concrete for the project is placed.
- 5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.



CONCRETE WASHOUT

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/16/2021

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY METRO CHAPTER

CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

STANDARD DRAWING
NUMBER ESC-OI
ADOPTED:
10/24/2016

ANDERSON ENGINEERII

ENGINEERS • SURVEYC 941 W. 141ST TER.• KANSAS CIT

| DRAWING INFO. | 96 | MZ | PE-2012009232 | 12/2/2020 | FOR REVIEW | :: 20KC10057 | 000062 |
|---------------|----------------|---------------------------|---------------------------|-----------|-------------|-----------------------|---|
| ЭŪ | DATE DRAWN BY: | GC 1/15/21 CHECK BY: | GC 2/26/21 LICENSE NO. | DATE: | ISSUED FOR: | JOB NUMBER: 20KC10057 | MO COA NO. |
| | DATE | 1/15/21 | 2/26/21 | | | | |
| | ВУ | 29 | 29 | | | | 2020 |
| REVISIONS | DESCRIPTION | REVISED PER CITY COMMENTS | REVISED PER CITY COMMENTS | | | | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 |
| | NO. | 1. | 2. | | | | |

CONSTRUCTION NTRANCE DETAILS

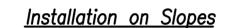
ENTRA

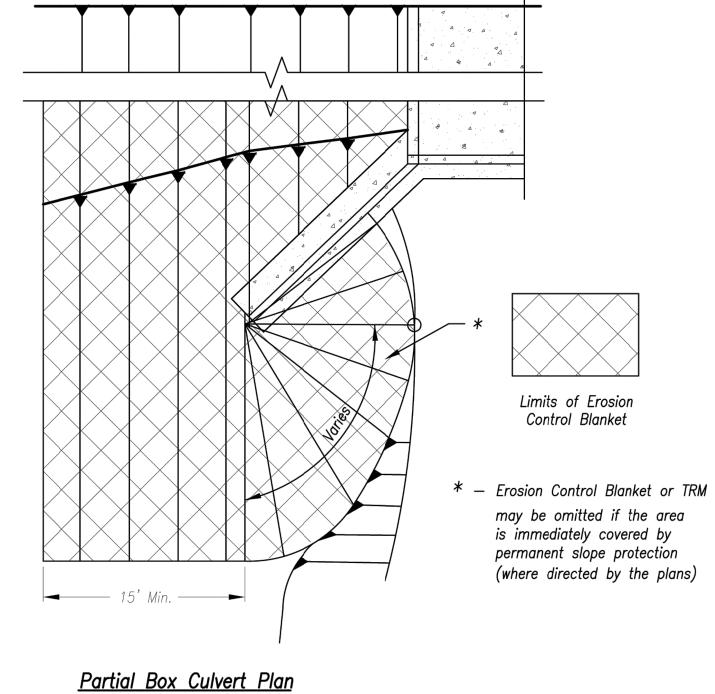


SHEET NUMBER

C601
31 of 40

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.



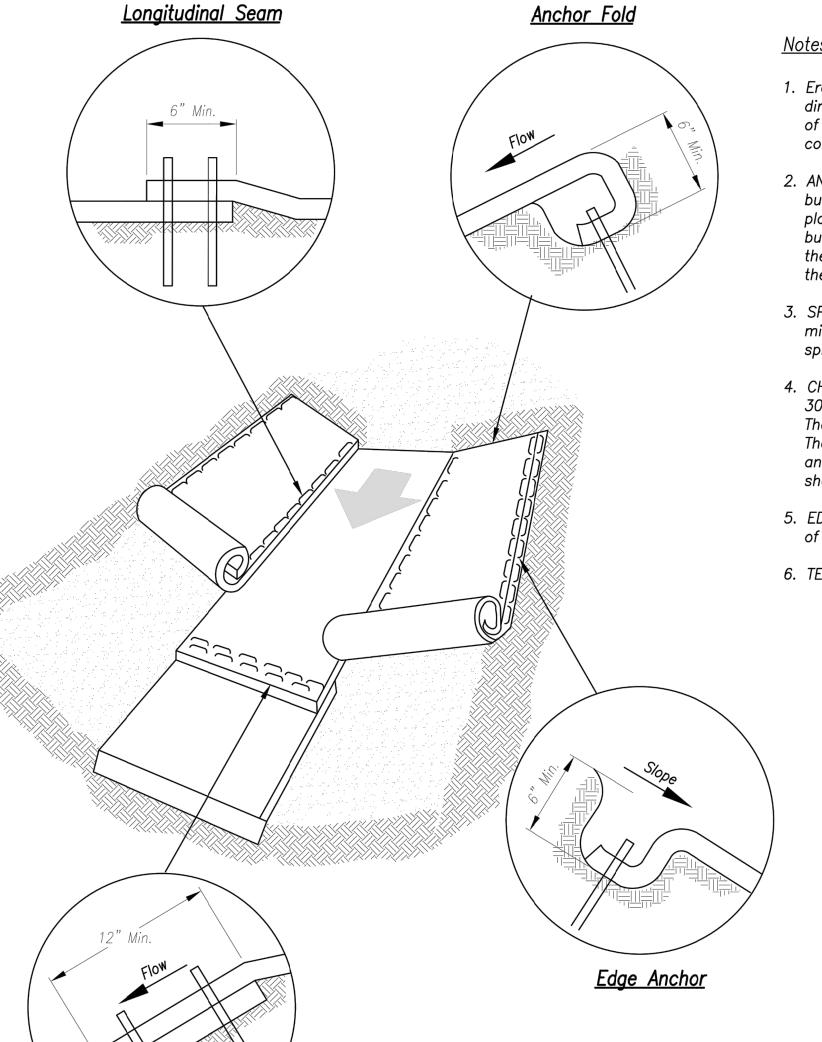


Not to Scale

Installation Around Culvert Slope

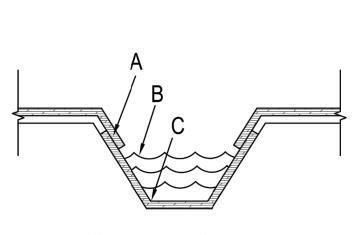
Notes for Installation on Slopes:

- 1. Erosion Control Blankets and TRMs shall be laid in the direction of the slope. In order for blanket to be in contact with the soil, lay blanket loosely, avoiding stretching.
- 2. ANCHOR SLOTS: The top of the blanket should be "slotted in" at the top of the slope and anchored in place with anchors 6 inches apart. The slots should be 6 inches wide x 6 inches deep with the blanket anchored in the bottom of the slot, then backfilled, tamped and seeded.
- 3. SPLICE SEAM: When splices are necessary, overlap end a minimum of 8 inches in direction of water flow. Stagger splice
- 4. TERMINAL FOLD: The bottom edge of the blanket shall be turned under a minimum of 4 inches, then anchored in place with anchors 9 inches apart.



Notes for Installation in Channels:

- 1. Erosion Control Blankets and TRMs shall be laid in the direction of the flow, with the first course at the centerline of channel, where applicable. In order for the mat to be in contact with the soil, lay the mat loosely, avoiding stretching.
- 2. ANCHOR FOLD: The top of the mat should be folded under, buried and secured with wood or other approved anchors placed 6 inches apart. The top edge of the mat should be buried in a slot 6 inches wide x 6 inches deep, anchored in the bottom of the slot, backfilled, and the mat folded over the top as shown in detail.
- 3. SPLICE SEAM: When splices are necessary, overlap end a minimum of 12 inches in direction of water flow. Stagger splice seams.
- 4. CHECK SLOTS: Establish check slots transverse to slope every 30 feet. The slots should be 6 inches wide x 6 inches deep. The mat shall be cut to a length 12 inches beyond the slot. The top of the downstream mat shall be slotted in, secured and buried similar to the edge anchor fold. The upstream mat shall then cover the slot and be anchored as shown.
- 5. EDGE ANCHORS: Lay outside edge of mat into trench at top of the slope and anchor.
- 6. TERMINUS: The bottom edge of the mat shall be anchored.



Trapezoidal Channel

Critical Points:

- A Overlaps and seams;
- B Projected water line;
- C Channel bottom / side slope vertices;

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI 04/16/2021

V Channel

<u>Installation in Channels</u>

Splice Seam

AMERICAN PUBLIC WORKS ASSOCIATION



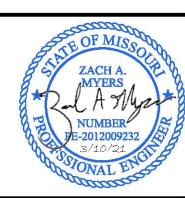
KANSAS CITY METRO CHAPTER

EROSION CONTROL BLANKETS AND TURF REINFORMENT MATS ADOPTED:

STANDARD DRAWING NUMBER ESC-02

10/24/2016

STEEP SLOPE ROTECTION DETAI



SHEET NUMBER 32 of 40

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

4' min length post Geotextile fabric at 4' max spacing 3' wide Staples, plastic zip ties or other material approved by the field engineer, (50 lb tensile strength) located in top 8" Tire compaction zone Direction of Flow 2' Min. Post embedment Machine slice (See Note 6.) 6" — 12" depth

(*) <u>POSTS</u>

- MIN, LENGTH 4'

- HARDWOOD 1 3/6" x 1 3/6" - NO.2 SOUTHERN PINE 2 %" x 2 %"

- STEEL 1.33 LB/FT

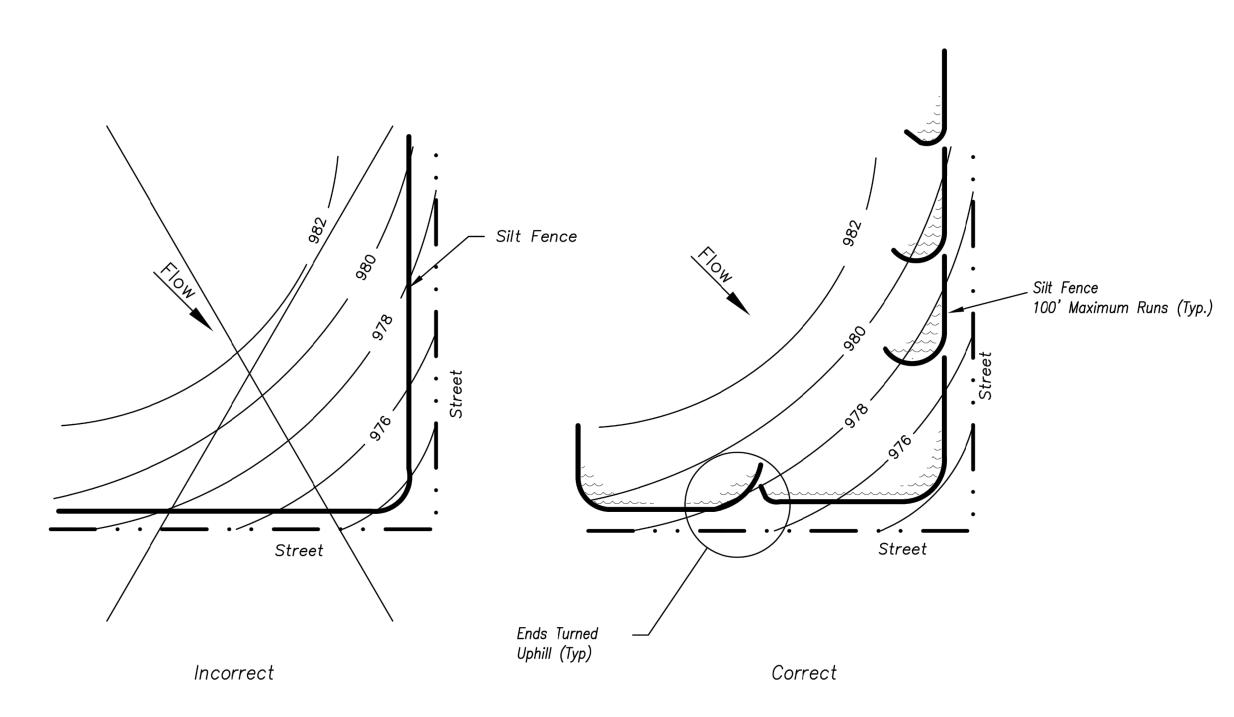
(**) — Geotextile Fabric shall meet the requirements of AASHTO M288

SILT FENCE DETAILS

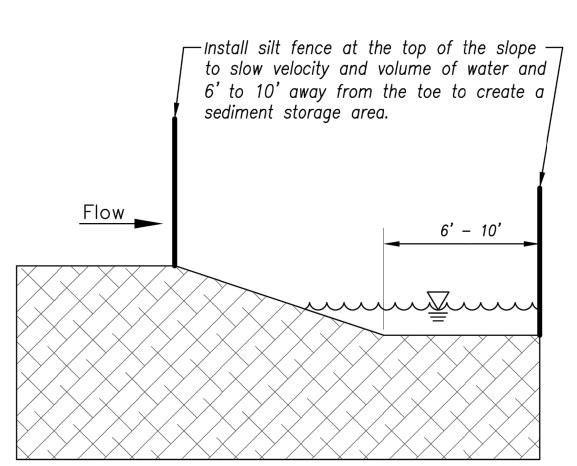
Not to Scale

SILT FENCE LAYOUT

Not to Scale



<u>Figure A</u>

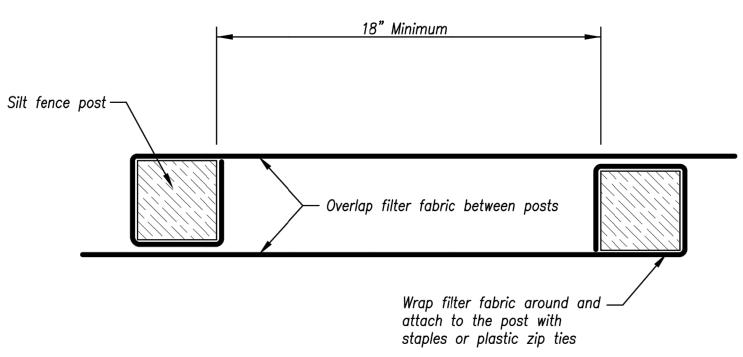


<u>Notes:</u>

- 1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
- 2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
- Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
- 4. Attach fabric to upstream side of post.
- 5. Install posts a minimum of 2' into the ground.
- 6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably

<u>Maintenance:</u>

- 1. Remove and dispose of sediment deposits when the deposit approaches 1/3 the height of silt fence.
- 2. Repair as necessary to maintain function and structure.



JOINING FENCE SECTIONS

Not to Scale

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW **DEVELOPMENT SERVICES** LEE'S SUMMIT, MISSOURI

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY METRO CHAPTER

STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

SILT FENCE

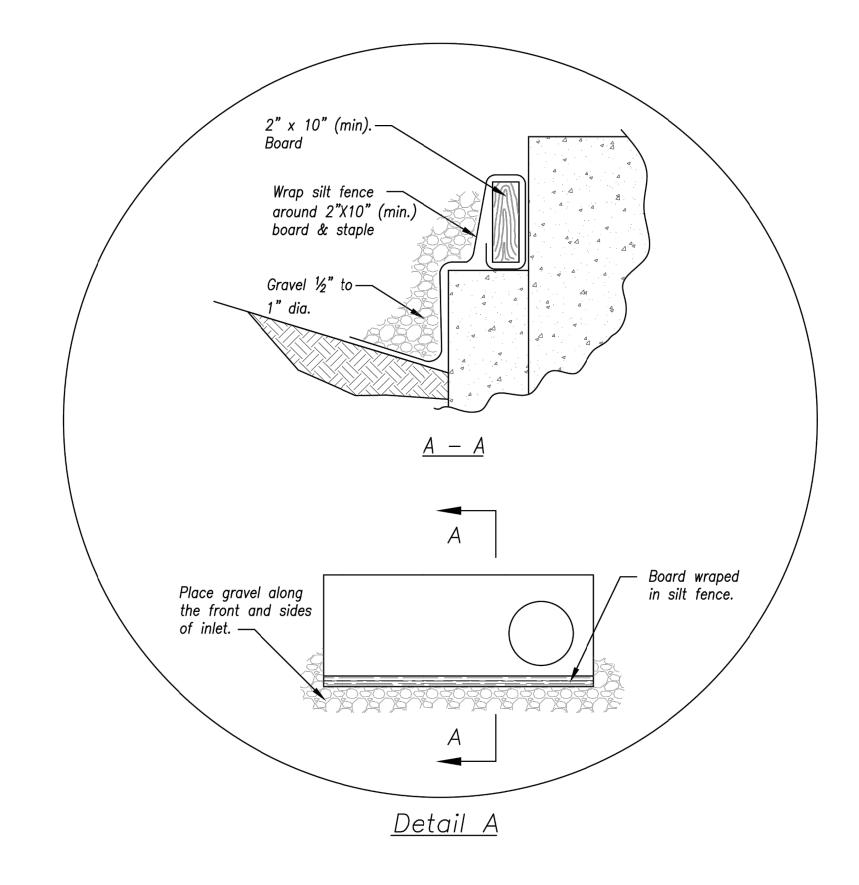
Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

| | | | | | • |
|------------|------------------------|---------|------|---|-----|
| 000062 | MO COA NO. | | 2020 | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | |
| 20KC10 | JOB NUMBER: | | | | |
| FOR RE | ISSUED FOR: | | | | |
| 12/2/20 | DATE: | | | | |
| PE-201; | GC 2/26/21 LICENSE NO. | 2/26/21 | 29 | REVISED PER CITY COMMENTS | 2. |
| MZ | GC 1/15/21 CHECK BY: | 1/15/21 | 29 | REVISED PER CITY COMMENTS | 1 |
| ЭS | DATE DRAWN BY: | | ВУ | DESCRIPTION | NO. |
| DRAWING II | ⁄aa | | | REVISIONS | |

DET, FENCE

SHEET NUMBER 33 of 40

On Grade Curb Inlet Protection



See Detail A below

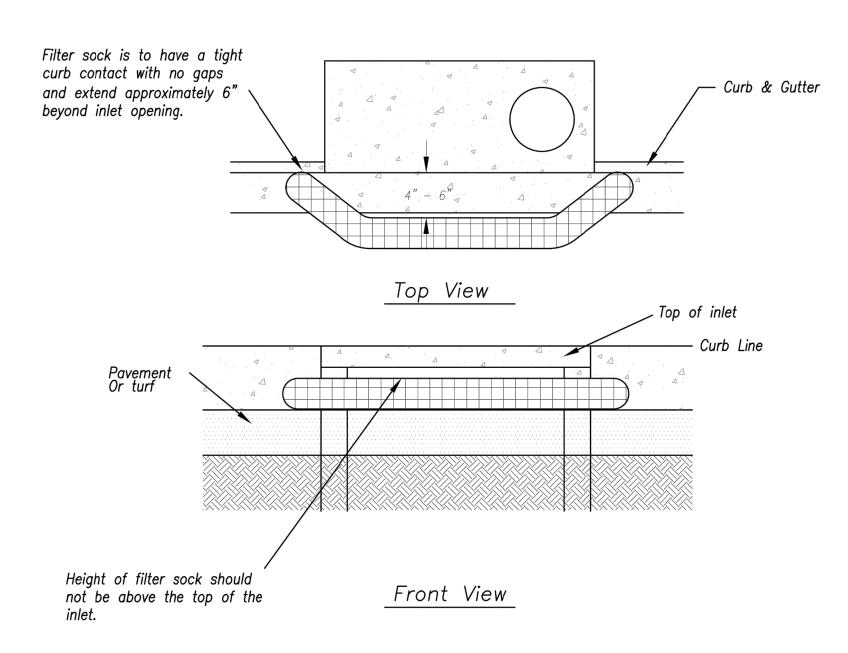
<u>EARLY STAGE CURB INLET</u> (Open Box and Prior to Pouring Curb and Inlet Throat)

<u>Notes:</u>

- Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" X 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
- When inlet is completed and curb poured, filter socks or approved equal should be used (Late Stage Curb Inlet). Straw wattles are not approved for curb inlet use.
- Contractor to field verify ponding water shall not create a traffic hazard.

<u>Maintenance:</u>

- Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
- Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
- 3. Repair or replace as necessary to maintain function and integrity of installation.



Sump Inlet Sediment Filter

<u>LATE STAGE CURB INLET</u> (After Pouring Curb and Inlet Throat) RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/16/2021

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY METRO CHAPTER

CURB INLET PROTECTION

STANDARD DRAWING
NUMBER ESC-06
ADOPTED:
10/24/2016

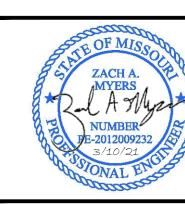
/ING

ANDERSON
ENCINEERS - SURVEYORS - LABORATORIES - DRILLING
W. 141ST TER: KANSAS CITY, MISSOURI 64145 - PHONE (816) 777-0400

| REVISIONS | | | DR | DRAWING INFO. |
|---|------|---------|------------------------|---------------|
| DESCRIPTION | ВУ | DATE | BY DATE DRAWN BY: | 29 |
| ISED PER CITY COMMENTS | 29 | 1/15/21 | GC 1/15/21 CHECK BY: | MZ |
| ISED PER CITY COMMENTS | 29 | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-201200923 |
| | | | DATE: | 12/2/2020 |
| | | | ISSUED FOR: | FOR REVIEW |
| | | | JOB NUMBER: | 20KC10057 |
| PYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 790000 |

CURB INLET
PROTECTION DETAILS

N - 2

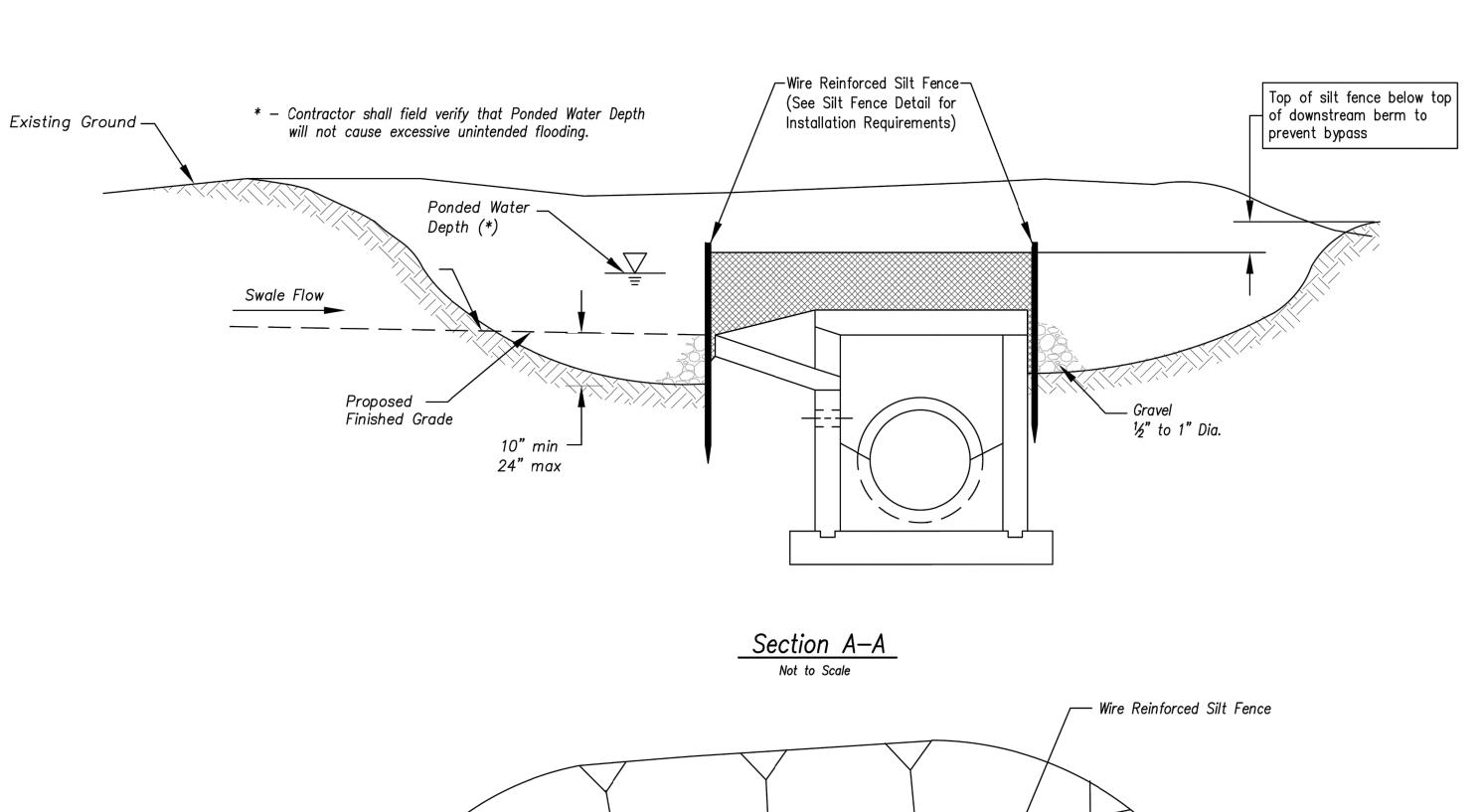


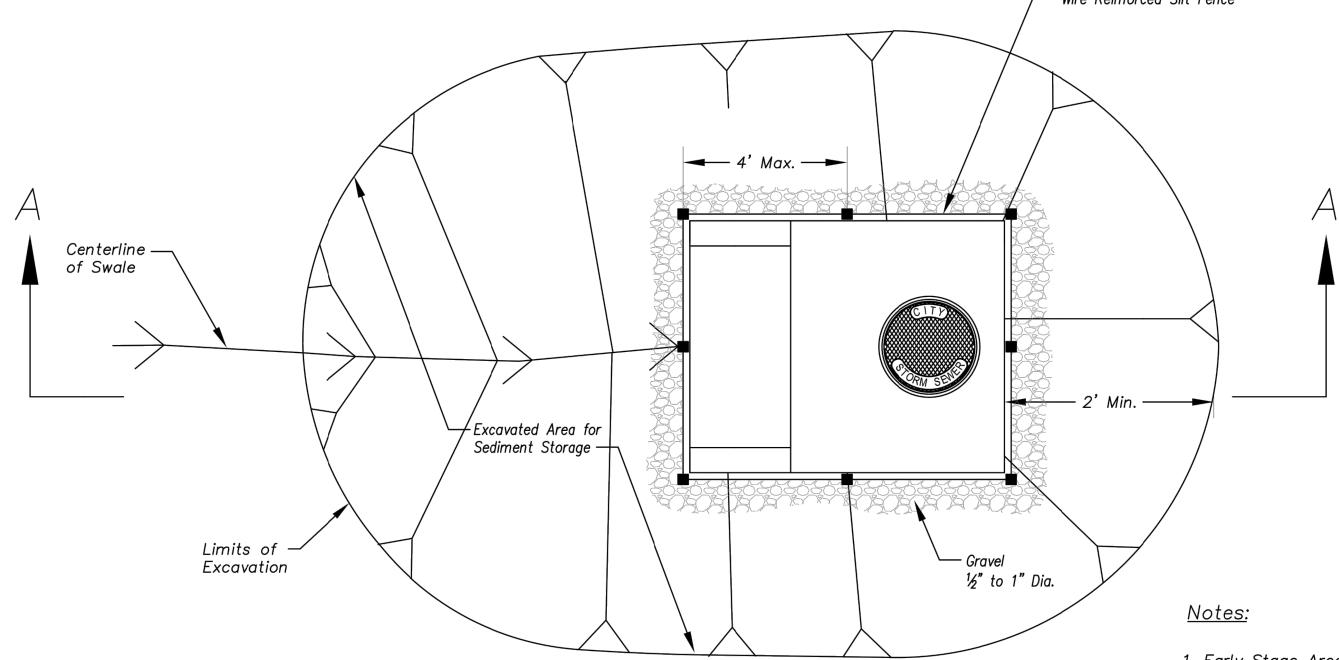
SHEET NUMBER

C604

34 OF 40

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





EARLY STAGE AREA INLET

(All open boxes and inlets not at final grade)

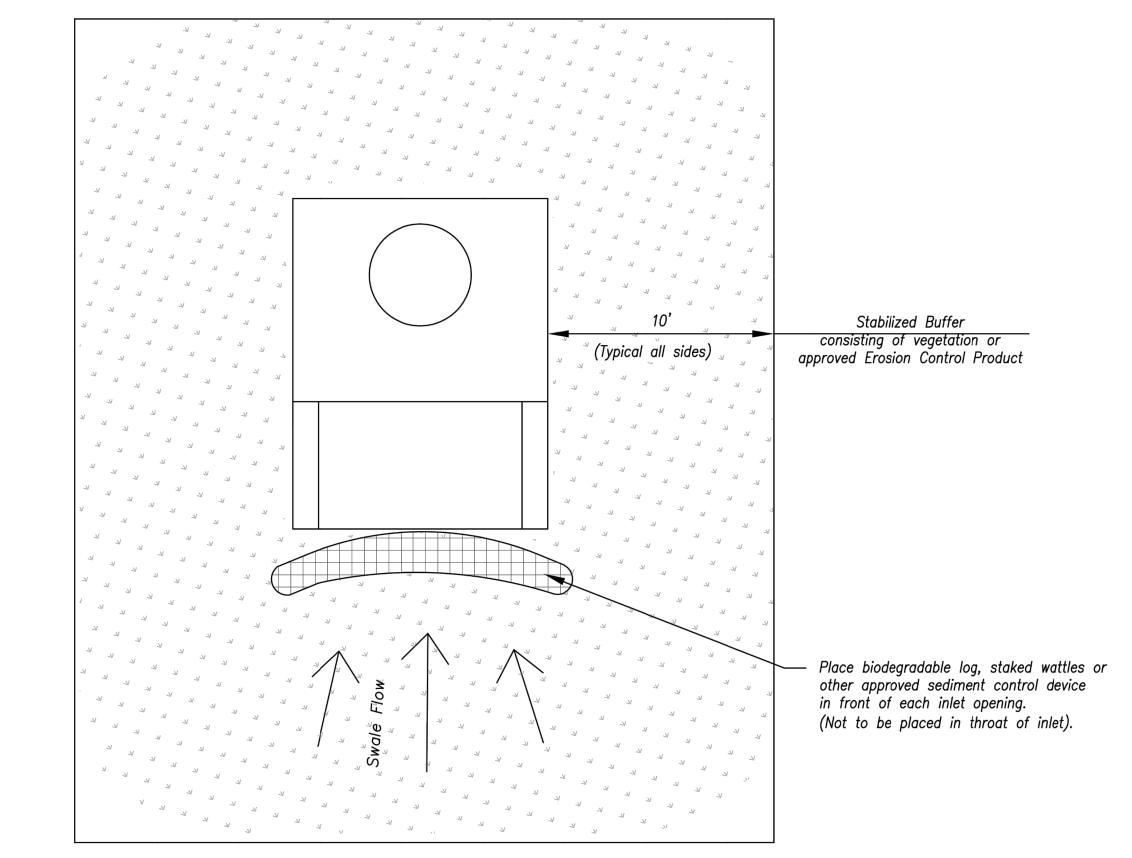
Not to Scale

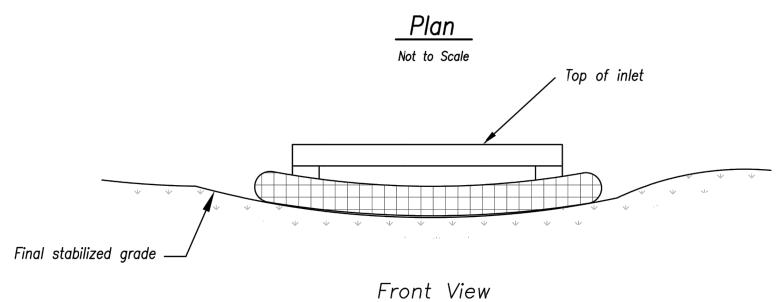
1. Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is

2. Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.

3. Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.

4. Wire reinforced silt fence may be used in place of silt fence attached to wood frame.





LATE STAGE AREA INLET (Area inlets at final grade and existing inlets)

<u>Maintenance:</u>

- 1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
- 2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
- 3. Repair or replace as necessary to maintain function and integrity of installation.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY METRO CHAPTER

AREA INLET AND JUNCTION BOX PROTECTION

STANDARD DRAWING NUMBER ESC-07 ADOPTED:

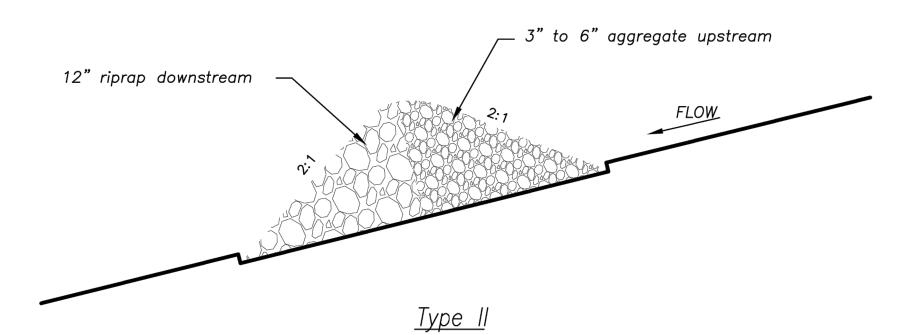
10/24/2016

| | REVISIONS | | | /NO | DRAWING INFC |
|----|---|------|---------|------------------------|--------------|
| Š. | DESCRIPTION | B√ | DATE | BY DATE DRAWN BY: | 29 |
| 1. | REVISED PER CITY COMMENTS | CC | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| 2 | REVISED PER CITY COMMENTS | ၁ဗ | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-2012009 |
| | | | | DATE: | 12/2/2020 |
| | | | | ISSUED FOR: | FOR REVIEN |
| | | | | JOB NUMBER: | 20KC10057 |
| | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |
| • | | | | | |

SHEET NUMBER 35 of 40

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

<u>Type</u> I (2 Acres or less of Drainage Area) Not to Scale

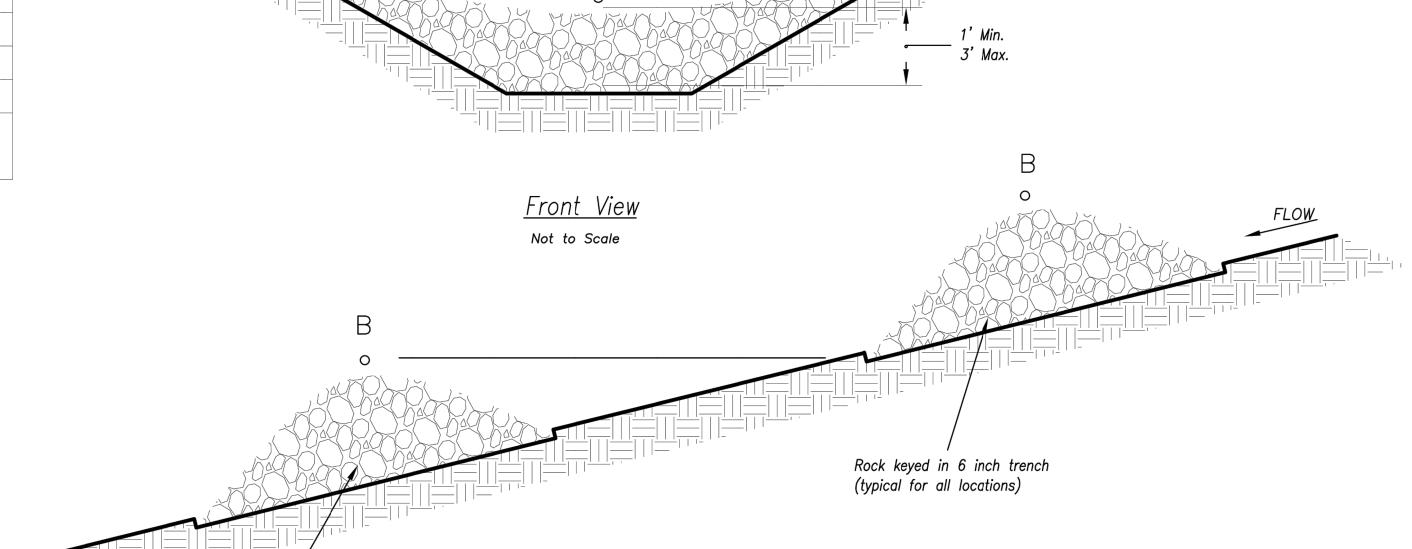


(2-10 Acres of Drainage Area)

Not to Scale

ROCK DITCH CHECK

| <u>Temporary Roc</u> <u>Spa</u> | ck Ditch Check cing | | |
|------------------------------------|----------------------------|--|--|
| Ditch Centerline Slope (%) | Spacing Interval (Feet) | | |
| 5.0 | 60 | | |
| 6.0 | 50 | | |
| 7.0 | 43 | | |
| 8.0 | 36 | | |
| 9.0 | 33 | | |
| 10.0 | 29 | | |
| Note: Use this spa Rock Ditch | | | |



Elevation at end Points "A" must be minimum 6" higher than elevation of flow line at point "B"

Place downstream structure such that Point "B" is approximately level with the toe elevation of the upstream structure

> Spacing Between Check Dams (all types) Not to Scale

<u>Notes:</u>

- 1. Rock check dams shall be used only for drainage areas less that 10 acres unless approved by the City Engineer.
- 2. Use rock checks only in situations where the ditch slope exceeds 6%.

<u>Maintenance:</u>

- 1. Remove and dispose of sediment deposits when the deposit approaches ½ the height of the ditch check.
- 2. Replace and reshape as necessary to maintain function and integrity of installation.

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY METRO CHAPTER

ROCK DITCH CHECKS

STANDARD DRAWING NUMBER ESC-10

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

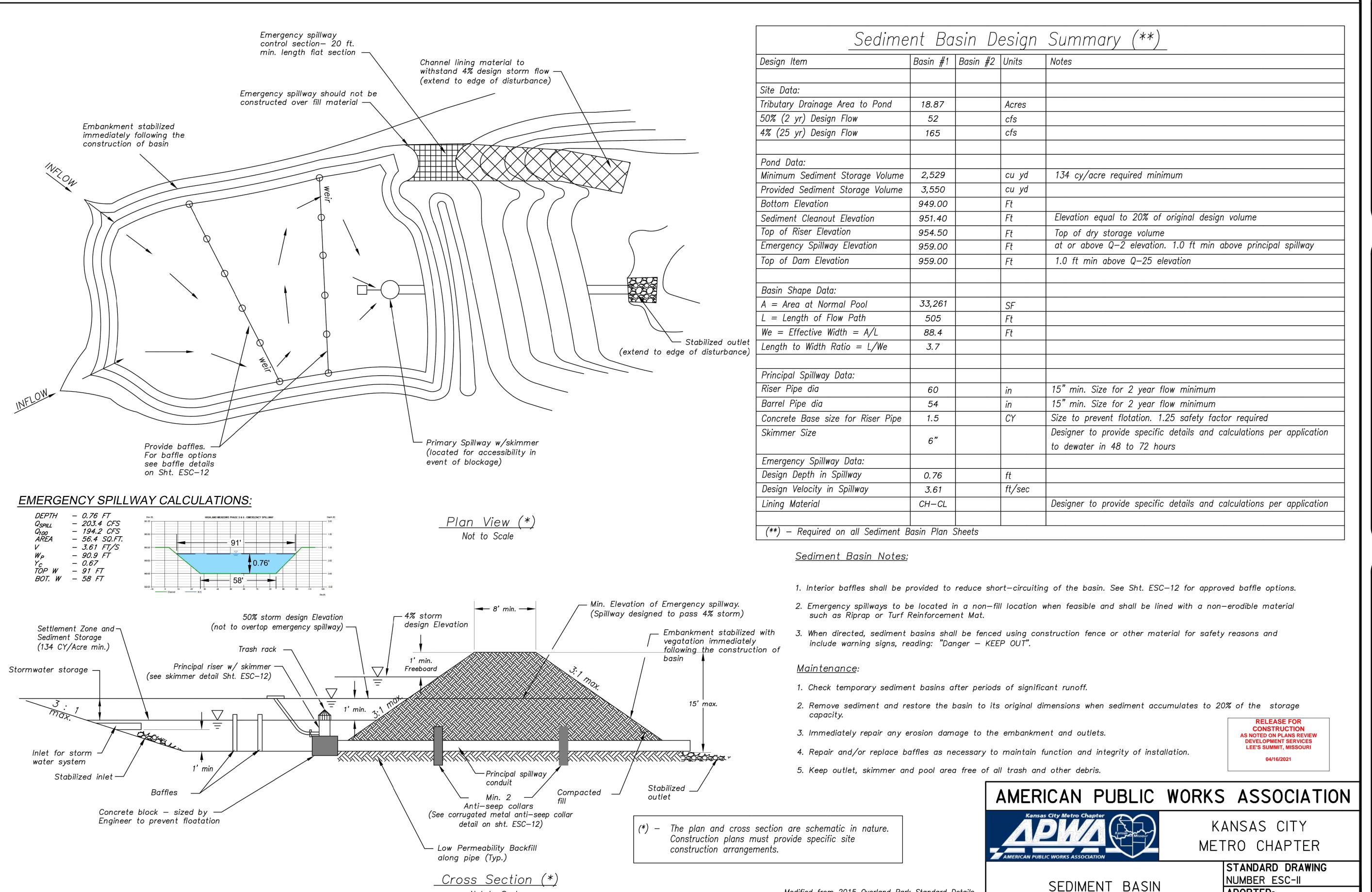
ADOPTED: 10/24/2016

N - 2

CHECKS ROCK DITCH

SHEET NUMBER C606 36 of 40

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



Not to Scale

Modified from 2015 Overland Park Standard Details

for Erosion and Sediment Control.

| | REVISIONS | | | DR/ | DRAWING INFO. |
|-----|---|------|------------------|------------------------|---------------|
| NO. | DESCRIPTION | ВУ | DATE | DATE DRAWN BY: | GC |
| 1. | REVISED PER CITY COMMENTS | CC | 1/15/21 | GC 1/15/21 CHECK BY: | ZM |
| 2. | REVISED PER CITY COMMENTS | GC | 2/26/21 | GC 2/26/21 LICENSE NO. | PE-2012009232 |
| 3. | REVISED PER CITY COMMENTS | O9 | GC 3/10/21 DATE: | DATE: | 12/2/2020 |
| | | | | ISSUED FOR: | FOR REVIEW |
| | | | | JOB NUMBER: | 20KC10057 |
| | © COPYRIGHT ANDERSON ENGINEERING, INC. 2020 | 2020 | | MO COA NO. | 000062 |
| | | | | | |

SIN SEDIMENT

ZACH A.

MYERS

A Myzy

SHEET NUMBER C607 37 of 40

ADOPTED:

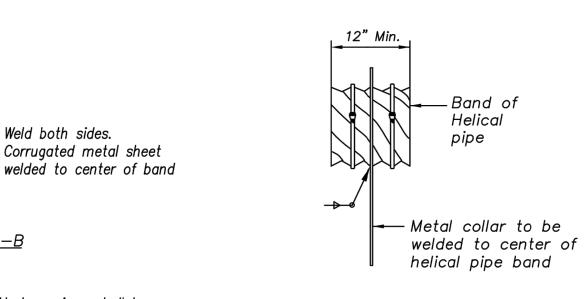
10/24/2016

PRINCIPAL SPILLWAY DETAIL

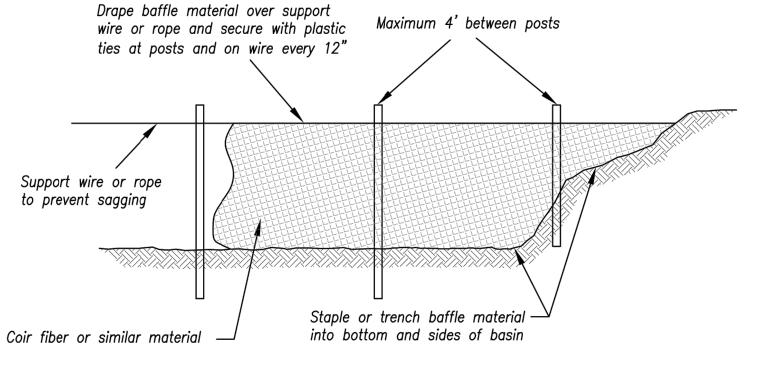
SKIMMER DETAIL (Typ.) *

to outlet pipe or riser

* Designer to provide specific details per application (e.g. pipe sizes, screen sizes, perforation, etc.) as required.



Baffle material shall be secured to the bottom and sides of basin by trenching or using 12" landscape staples Landscape Staple

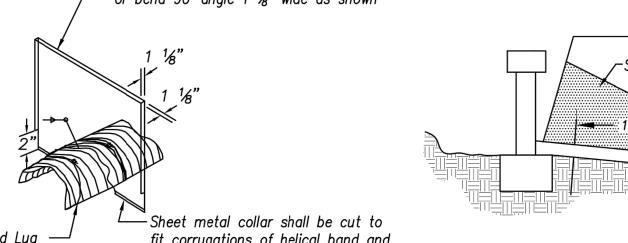


Size and spacing of slotted openings shall be the same as shown for CM collar. Use rods and lugs to clamp bands securely

SECTION B-B

PARTIAL ELEVATION

Weld 1 1/6" x 1 1/6" angles to collar or bend 90° angle 1 1/6" wide as shown



-Slotted Holes

at 8" C.C.

Concrete Ballast

Collar to be same gauge as

the pipe with which it is

 $-\frac{1}{2}$ " x 2" slotted holes

for 3/4" diameter bolts

-Saturated zone

Anti-Seepage Collar Notes:

- 2. P = projection distance. Sized as required to achieve at least a 10% increase in seepage
- 3. 14xP = Max. spacing between collars.
- 4. Collars shall generally be placed in the middle third of the embankment, and within the saturated zone.
- 5. All materials to be in accordance with construction material specifications.
- collars shall be in accordance with construction material specifications.
- 7. Unassembled collars shall be marked by

- 8. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at the time of
- 9. Each collar shall be furnished with two (2) ½" diameter rods with standard tank lugs for connecting the collars to the pipe.
- 10. For bands and collars, modification of the details shown may be used providing equal water tightness is maintained and detailed drawings are Submitted and approved by the Engineer prior to delivery.
- 11. Two other types of anti-seep collars are:
- a. Corrugated metal, similar to above, except shop welded to a 4 ft. section of the pipe and connected to the pipe with connecting bands.
- b. Concrete, 6 inches thick, formed around the pipe with #3 rebar spaced 15".

Modified from 2015 Overland Park Standard Details

for Erosion and Sediment Control.

KANSAS CITY

SEDIMENT BASIN - DETAILS

STANDARD DRAWING NUMBER ESC-12 ADOPTED: 10/24/2016



METRO CHAPTER

ZACH A.

MYYERS

A Mypt

Ŏ. ← 2

BASIN

EDIMENT

S10, T47N, I JACKSON

SHEET NUMBER 38 of 40

1. Connections between the anti-seepage collar and the barrel must be watertight.

6. When specified on the plans, coating of

painting or tagging to identify matching pairs.

Coir fiber draped

over support wire

<u> Option B - Coir Fiber Material</u>

BAFFLE DETAILS

Not to Scale

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/16/2021

AMERICAN PUBLIC WORKS ASSOCIATION



Rod and Lug fit corrugations of helical band and welded with continuous weld ISOMETRIC VIEW

Install collar with

corrugations vertical

Continuous —

Band

∠Continuous

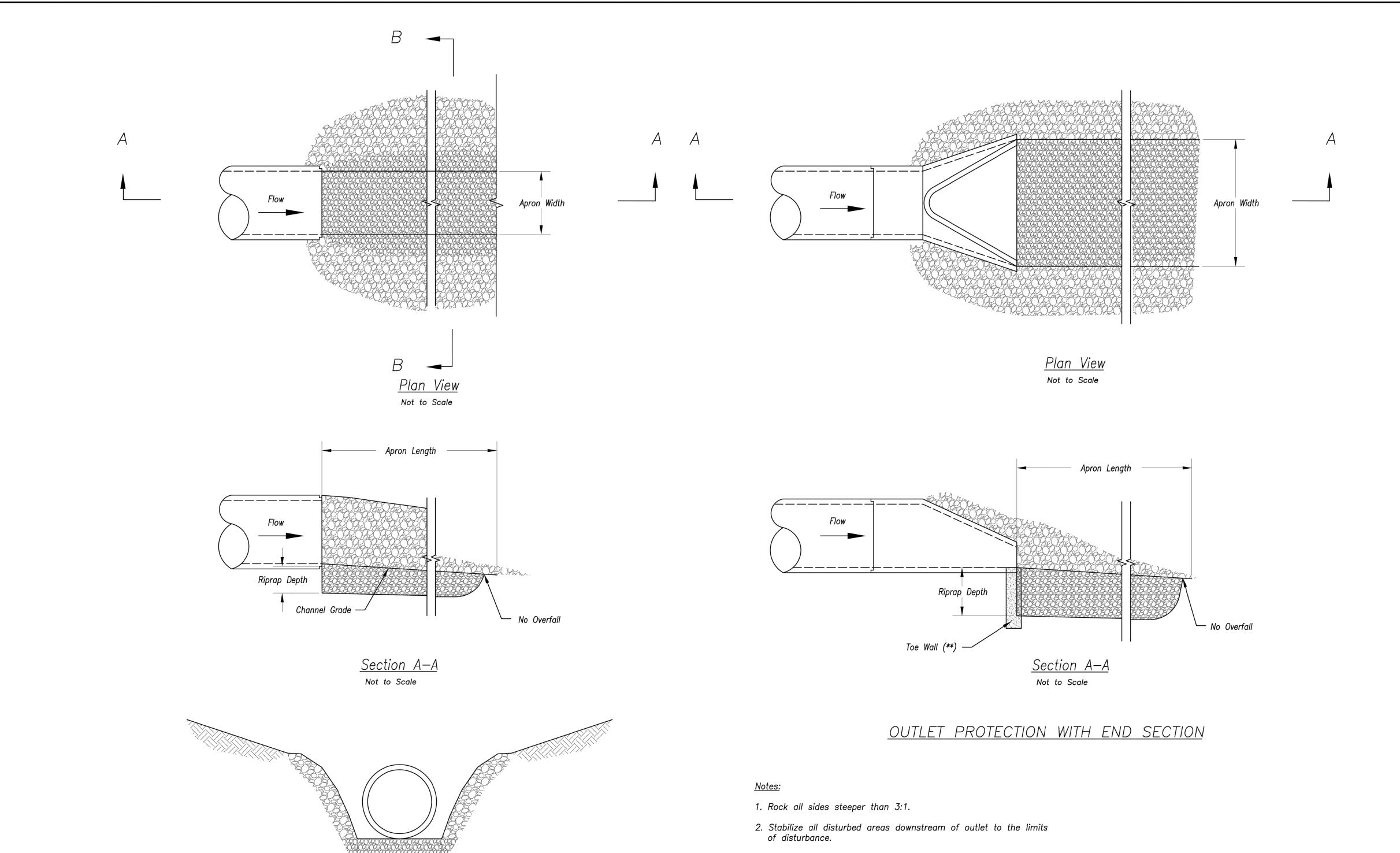
В ◀┛

Weld

ANTI-SEEPAGE COLLAR LOCATIONS

CORRUGATED METAL ANTI-SEEPAGE COLLAR DETAIL

Not to Scale



Apron Width

<u>Section B-B</u>

Not to Scale

OUTLET PROTECTION W/O END SECTION

- Alternative outlet protection and slope stabilization measures may be used with approval by the Engineer.
- 4. Install riprap apron so that it is no higher than flowline of pipe.
- Reference APWA Specification 2650 for rock type, size, and placement.

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY METRO CHAPTER

OUTLET PROTECTION

STANDARD DRAWING NUMBER ESC-14 ADOPTED:

10/24/2016

N - 2

DET

PROTECTION

SHEET NUMBER 39 of 40

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

TYPICAL PLAN VIEW OF DIVERSION BERM AND SLOPE DRAIN

Notes for Diversion Berm:

- 1. Slope drains are optional, but may be required by the engineer if the berm is at the top of a steep slope.
- 2. Diversion berms must be installed as a first step in the land-disturbing activity and must be functional prior to upslope land disturbance.
- 3. The berm should be adequately compacted to prevent failure.
- 4. Temporary or permanent seeding and mulch shall be applied to the berm immediately following its construction.
- 5. Place the berm so to minimize damages by construction operations and traffic.
- 6. The berm must discharge to a temporary sediment trap or stabilized area.
- 7. All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of diversion.
- 8. The diversion shall be excavated or shaped to line, grade and cross—section as required to meet the criteria specified herein, free of irregularities which will impede flow.
- 9. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the completed diversion. Fill shall be composed of soil which is free from excessive organic debris, rocks or other objectionable materials.

<u>Maintenance:</u>

- 1. Berm shall be reshaped, compacted, and stabilized as necessary to maintain its function.
- 2. Breaches in the berm shall be repaired immediately.

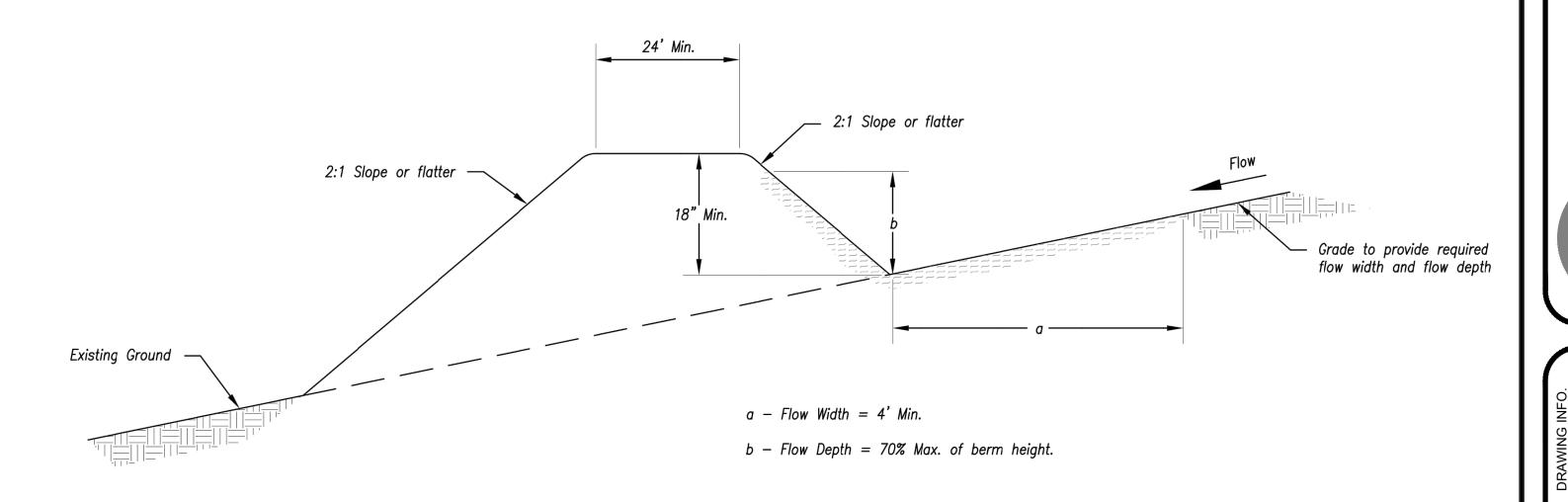
Notes for Slope Drain:

- 1. Slope Drain and Diversion Berm may be used on either project foreslopes or project backslopes.
- 2. Discharge of Slope Drains shall be into stabilized ditch or area, or into Sediment Basin.
- 3. Pipe shall be secured in place as approved by Engineer.

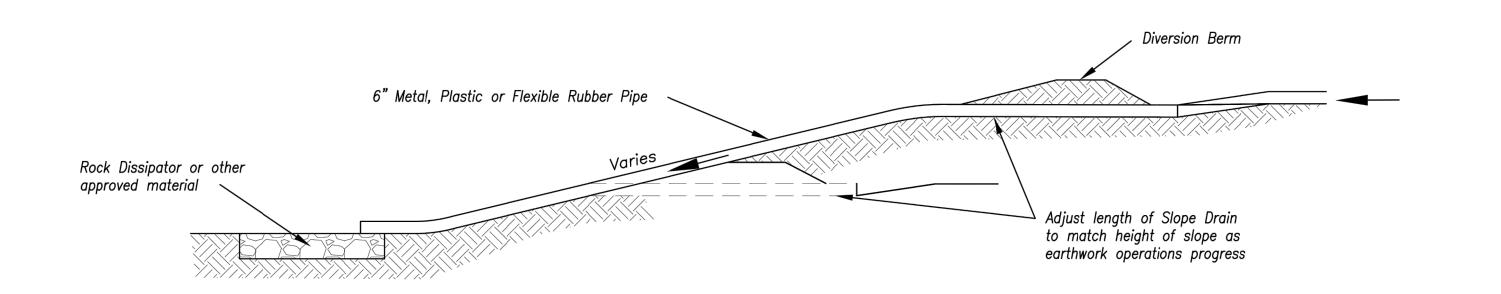
<u>Maintenance:</u>

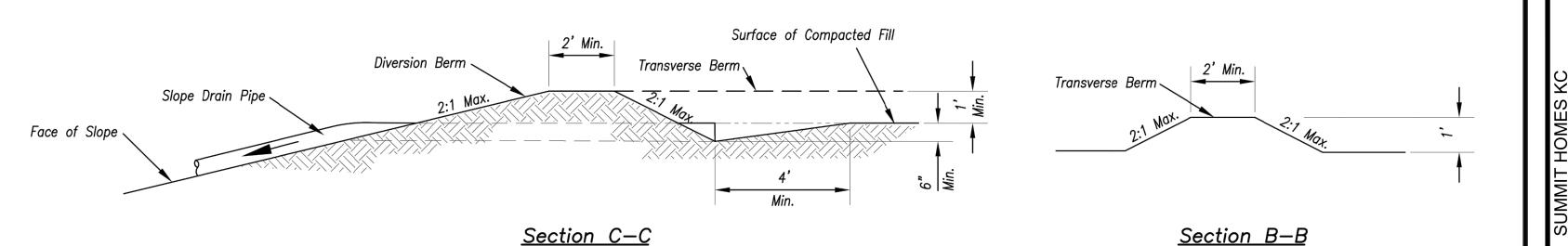
- 1. Accumulation of any visible sediment at the inlet and outlet shall be removed promptly.
- 2. Outlet conditions shall be repaired if scour is observed. Leaking or damaged section of pipe shall be repaired immediately.
- 3. Barriers directing water to the inlet shall be monitored for continuity and effectiveness.

TYPICAL PROFILE OF DIVERSION BEAM Not to Scale



TYPICAL PROFILE OF DIVERSION BERM





TYPICAL PROFILE OF DIVERSION BERM WITH SLOPE DRAIN



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

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY METRO CHAPTER

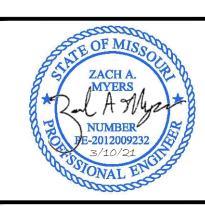
SLOPE DRAINS

STANDARD DRAWING NUMBER ESC-05 ADOPTED: 10/24/2016

| | | | | | 0) | · |
|-----------|----------------------|------------------------|-----------|-------------|-------------|---------------|
| GC | ZM | PE-2012009232 | 12/2/2020 | FOR REVIEW | 20KC10057 | 000062 |
| DRAWN BY: | GC 1/15/21 CHECK BY: | GC 2/26/21 LICENSE NO. | DATE: | ISSUED FOR: | JOB NUMBER: | MO COA NO. |
| DATE | 1/15/21 | 2/26/21 | | | | |
| ВУ | CC | CC | | | | 2020 |
| | S | S | | | | NG, INC. 2020 |

四 DIVERSION

S10, T47N, F JACKSON



SHEET NUMBER C610 40 of 40