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

LOTS: 134-159 (26 TOTAL)

VICINITY MAP

SECTION 10, TOWNSHIP 47, RANGE 32
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
NOT TO SCALE

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:

NO ABANDONED OIL OR GAS WELLS HAVE BEEN IDENTIFIED WITHIN THE PROPERTY LIMITS OF THE PROPOSED CONSTRUCTION ACTIVITIES, PER THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) PERMITTED OIL AND GAS DATABASE, DATED JUNE 2, 2020.

811 Know what's below. Call before you dig.

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP CALL BEFORE YOU DIG!

UTILITY CONTACTS:

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

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

STREETS:
CITY OF LEE'S SUMMIT
MICHAEL PARK
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
PHONE (816) 969-1900

AT&T:
RONALD GIPFERT
500 E 8TH STREET
KANSAS CITY, MO 64106
PHONE (816) 275-1550

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

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

WATERSHED: LITTLE BLUE RIVER

DISTURBED AREA: 15.3 AC

SURVEY CONTROL:

COORDINATES ARE BASED ON THE MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE, USING JACKSON COUNTY, MISSOURI, GEOGRAPHIC REFERENCE SYSTEM MONUMENT JA-148 (2003 ADJUSTMENT) AND ARE MODIFIED FROM GRIS COORDINATES TO GROUND COORDINATES BY UTILIZING A GRID SCALE FACTOR OF 0.9999020 AT REFERENCE MONUMENT JA-148.

PROJECT ELEVATIONS ARE BASED ON JACKSON COUNTY, MISSOURI, GEOGRAPHIC REFERENCE SYSTEM MONUMENT JA-148 (2003 ADJUSTMENT).

"JA-148" - STANDARD KC METRO ALUMINUM 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.

GENERAL NOTES:

1. 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.

DEVELOPER:

BRAD KEMPF
SUMMIT HOMES KC
120 SE 30TH STREET
LEE'S SUMMIT, MO 64082
BRADLEY@SUMMITHOMESKC.COM
(816) 927-9711

CIVIL ENGINEER:

ZACH MYERS
ANDERSON ENGINEERING, INC.
941 W 141ST TERR
KANSAS CITY, MO 64145
ZMYERS@ANDERSONENGINEERINGINC.COM
(816) 380-4821

AS-BUILT

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information {provided by others / obtained by my firm}. "~~100.00~~ 100.10", "~~1.00%~~ 1.15% slope", or "8-inch ~~HDPE~~ PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.
Date: 04/27/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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C607	SEDIMENT BASIN
C608	SEDIMENT BASIN DETAILS
C609	OUTLET PROTECTION DETAILS
C610	TEMPORARY DIVERSION BERM

PROJECT SPECIFICATIONS:

THE SPECIFICATIONS FOR THIS PROJECT SHALL BE THE FOLLOWING:

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

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

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

ZACH A. MYERS
NUMBER PE-2012009232
3/15/21

ANDERSON ENGINEERING
EMPLOYEE OWNED
ENGINEERS • SURVEYORS • LABORATORIES • DRILLING
941 W. 141ST TER.• KANSAS CITY, MISSOURI 64145 • PHONE (816) 777-0400
A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - LC 62

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
3.	REVISED PER CITY COMMENTS	GC	3/10/21
4.	REVISED PER CITY COMMENTS	GC	3/15/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

DRAWING INFO.	
DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

COVER SHEET

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
CVR
1 OF 40

Mar 15, 2021 - 12:22pm Plotted By: gcate G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHT - COVER.dwg Layout: COVER SHEET

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 581.3. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, 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 SUBSIDIARY 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 SUBSIDIARY 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 SUBSIDIARY 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 SUBSIDIARY 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.

AS-BUILT

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Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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

04/16/2021

ANDERSON ENGINEERING
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A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - LC 62

REVISIONS			DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE	DRAWN BY: GC
1.	REVISED PER CITY COMMENTS	GC	1/15/21	CHECK BY: ZM
2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO. PE-2012009232
				DATE: 12/2/2020
				ISSUED FOR: FOR REVIEW
6.	AS-BUILT DRAWINGS	GC	4/27/22	JOB NUMBER: 20KC10057
				MO COA NO. 000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

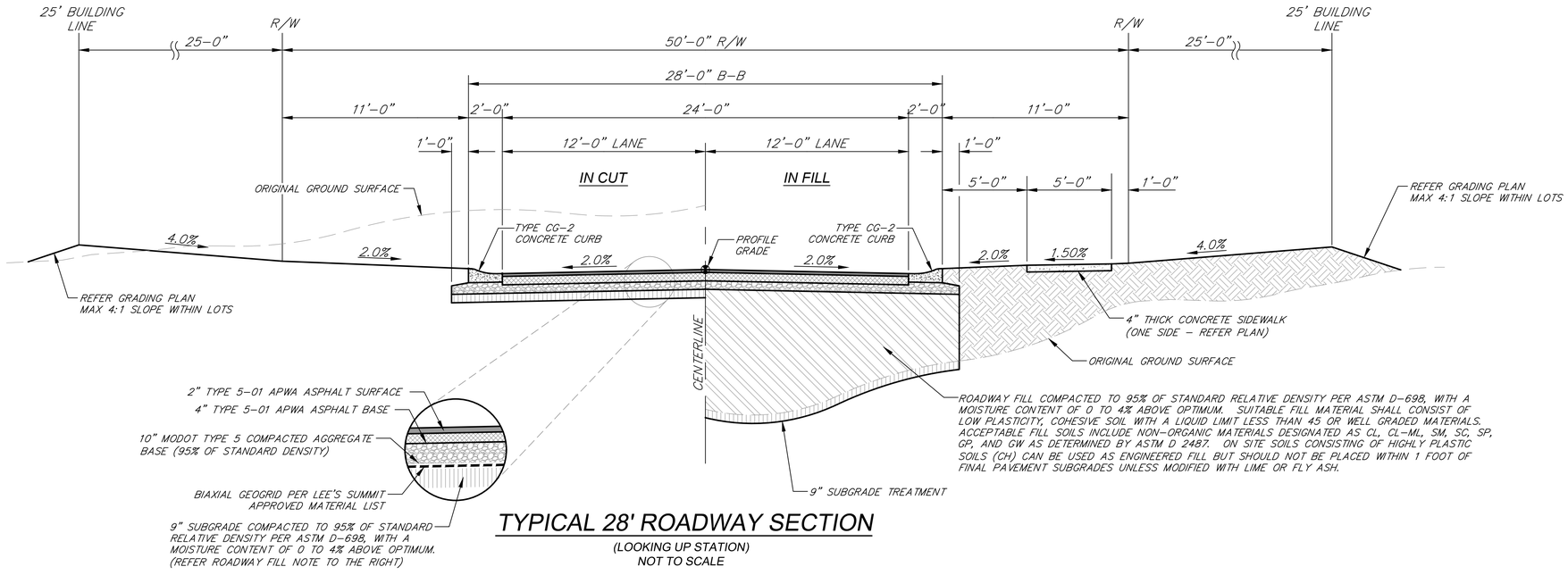
GENERAL NOTES

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C050
2 OF 40

Mar 11, 2021 - 1:57pm Plotted By: gcote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHT - GENERAL NOTES.dwg Layout: GENERAL NOTES



TYPICAL 28' ROADWAY SECTION

(LOOKING UP STATION)
NOT TO SCALE

SW 12TH STREET:
STA:1+23.21 - 6+89.12
STA:7+57.33 - 7+69.34
STA:11+34.96 - 12+74.09

SW 12TH TERRACE:
STA:3+68.01 - 5+41.89

AS-BUILT

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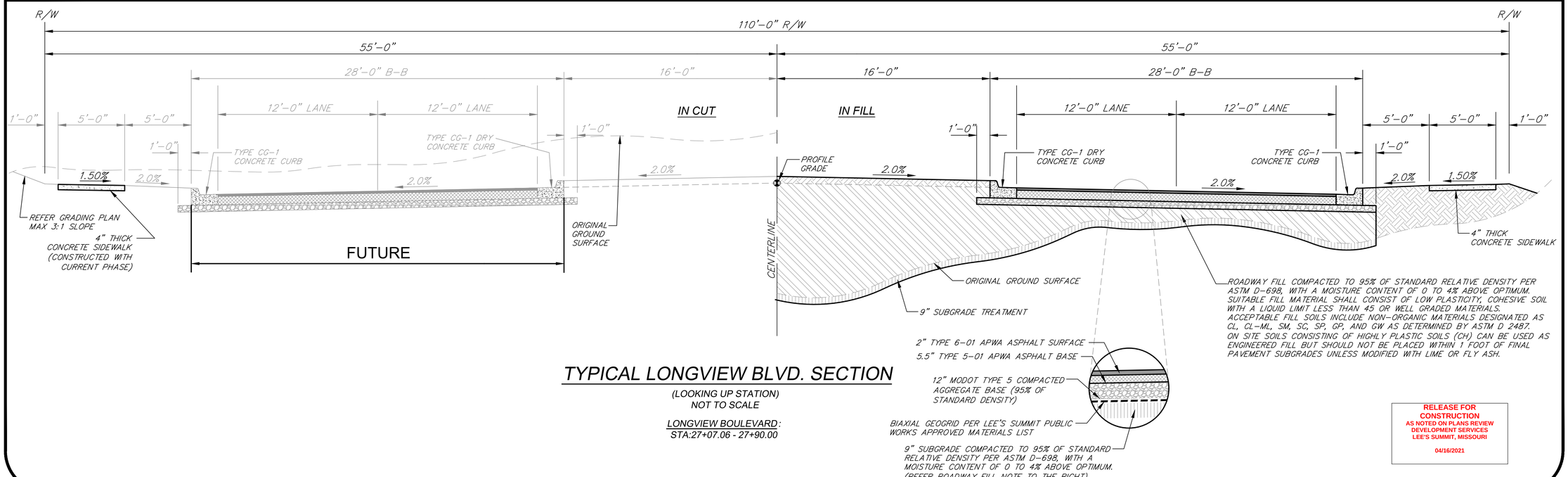

TYPICAL LONGVIEW BLVD. SECTION

(LOOKING UP STATION)
NOT TO SCALE

LONGVIEW BOULEVARD:
STA:27+07.06 - 27+90.00

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LEE'S SUMMIT, MISSOURI

04/16/2021

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DRAWN BY:	GC
CHECK BY:	ZM
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6.	AS-BUILT DRAWINGS	GC	4/27/22

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

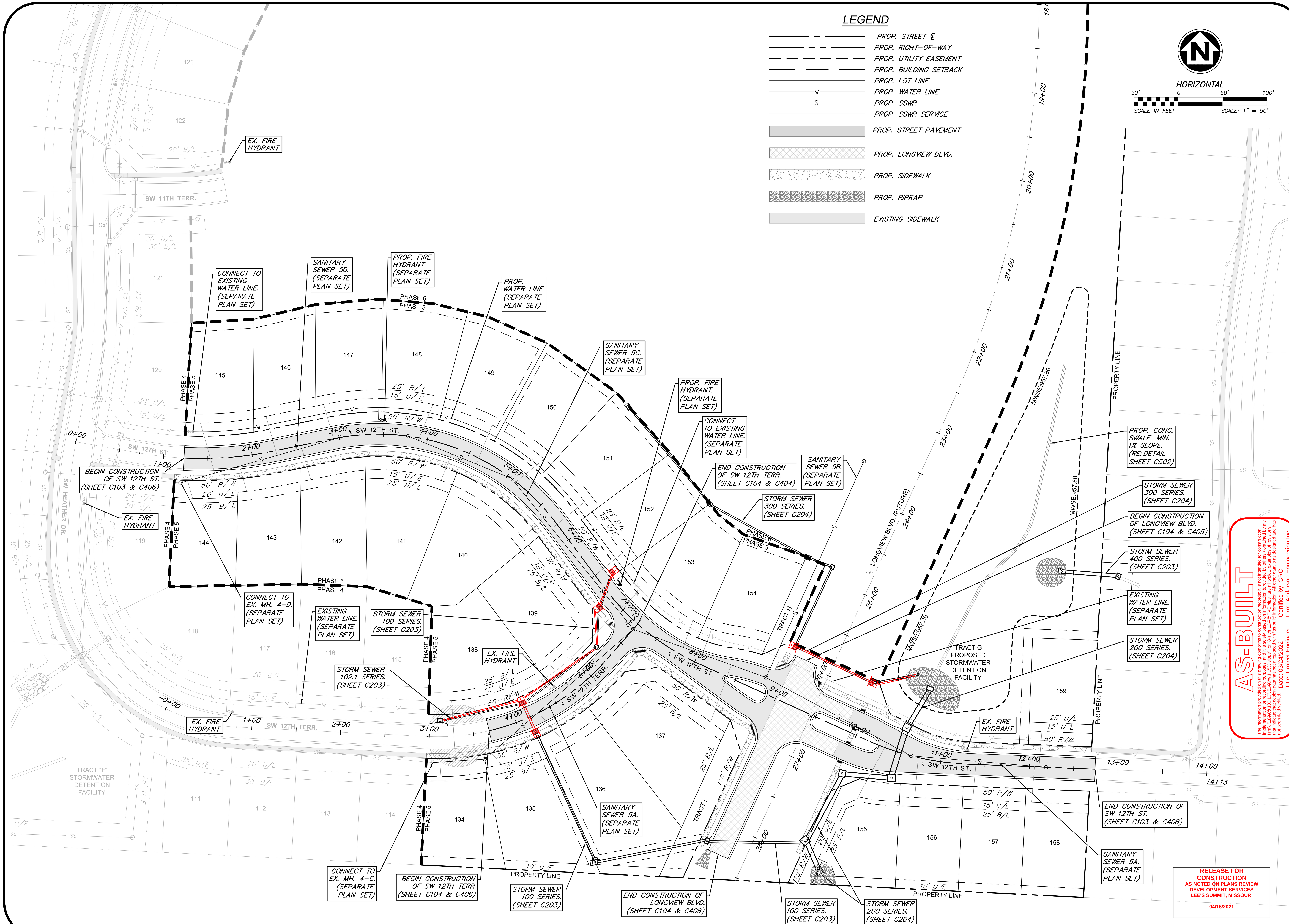
TYPICAL SECTIONS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C101
3 OF 40

Mar 11, 2021 - 1:57pm Plotted By: gcote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHT - TYPICAL SECTION.dwg Layout: TYPICAL SECTIONS


LEGEND
PROP. STREET ℄
PROP. RIGHT-OF-WAY
PROP. UTILITY EASEMENT
PROP. BUILDING SETBACK
PROP. LOT LINE
PROP. WATER LINE
PROP. SSWR
PROP. SSWR SERVICE
PROP. STREET PAVEMENT
PROP. LONGVIEW BLVD.
PROP. SIDEWALK
PROP. RIPRAP
EXISTING SIDEWALK
HORIZONTAL
SCALE IN FEET
SCALE: 1" = 50'
EX. FIRE HYDRANT
CONNECT TO EXISTING WATER LINE. (SEPARATE PLAN SET)
SANITARY SEWER 5D. (SEPARATE PLAN SET)
PROP. FIRE HYDRANT (SEPARATE PLAN SET)
PROP. WATER LINE (SEPARATE PLAN SET)
SANITARY SEWER 5C. (SEPARATE PLAN SET)
CONNECT TO EXISTING WATER LINE. (SEPARATE PLAN SET)
END CONSTRUCTION OF SW 12TH TERR. (SHEET C104 & C404)
SANITARY SEWER 5B. (SEPARATE PLAN SET)
STORM SEWER 300 SERIES. (SHEET C204)
BEGIN CONSTRUCTION OF SW 12TH ST. (SHEET C103 & C406)
CONNECT TO EX. MH. 4-D. (SEPARATE PLAN SET)
EXISTING WATER LINE. (SEPARATE PLAN SET)
STORM SEWER 100 SERIES. (SHEET C203)
STORM SEWER 102.1 SERIES. (SHEET C203)
PROP. CONC. SWALE. MIN. 1% SLOPE. (RE: DETAIL SHEET C502)
BEGIN CONSTRUCTION OF LONGVIEW BLVD. (SHEET C104 & C405)
STORM SEWER 400 SERIES. (SHEET C203)
STORM SEWER 200 SERIES. (SHEET C204)
TRACT G PROPOSED STORMWATER DETENTION FACILITY
TRACT "F" STORMWATER DETENTION FACILITY
END CONSTRUCTION OF SW 12TH ST. (SHEET C103 & C406)
SANITARY SEWER 5A. (SEPARATE PLAN SET)
CONNECT TO EX. MH. 4-C. (SEPARATE PLAN SET)
BEGIN CONSTRUCTION OF SW 12TH TERR. (SHEET C104 & C406)
END CONSTRUCTION OF LONGVIEW BLVD. (SHEET C104 & C406)
SW 11TH TERR.
SW 12TH ST.
SW 12TH TERR.
SW HEATHER DR.
LONGVIEW BLVD. (FUTURE)
PROPERTY LINE
TRACT H
TRACT I
PHASE 4
PHASE 5
PHASE 6
AS-BUILT
The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information {provided by others / obtained by my firm}. "100.00 100.10", "1.00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.
Date: 03/24/2022
Certified by: GRC
Title: Project Engineer
Firm: Anderson Engineering Inc.
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/16/2021

G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHT - GENERAL LAYOUT.dwg Layout: GENERAL LAYOUT

Mar 11, 2021 - 1:57pm Plotted By: gcote

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REVISIONS			
NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

DRAWING INFO.	
DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

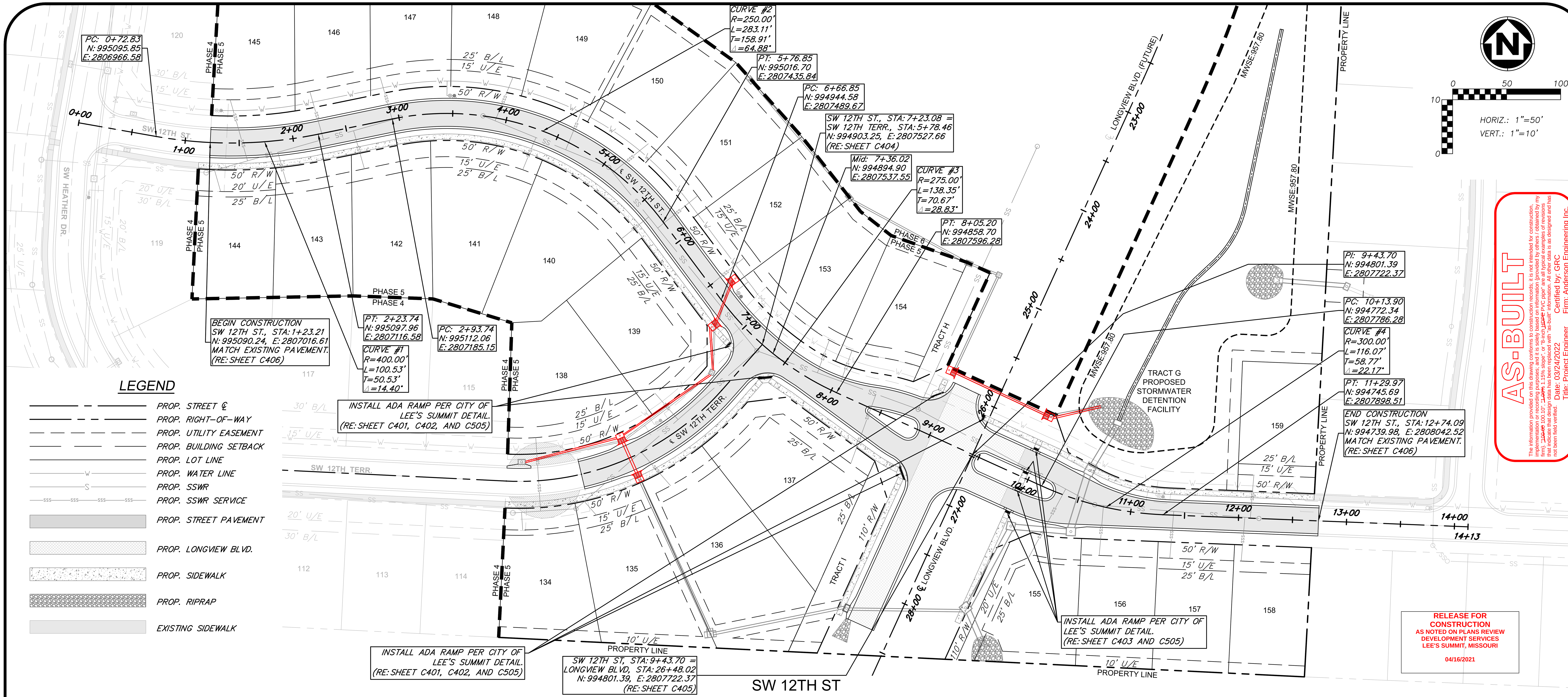
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

GENERAL LAYOUT

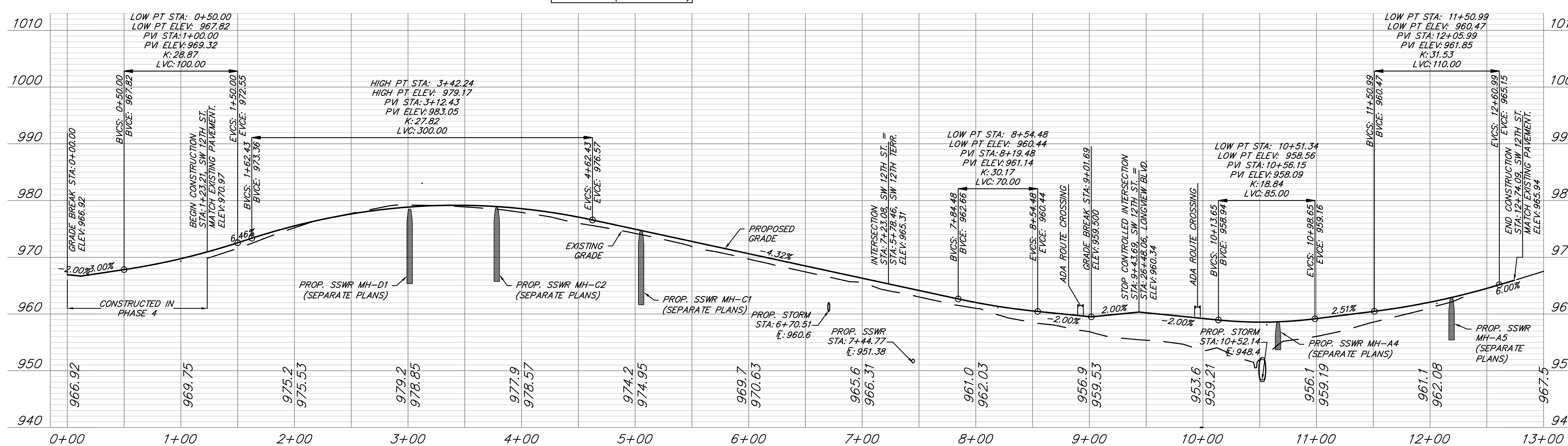
S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
PROFESSIONAL ENGINEER
3/10/21

SHEET NUMBER
C102



SW 12TH ST



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DRAWING INFO.

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LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

REVISIONS

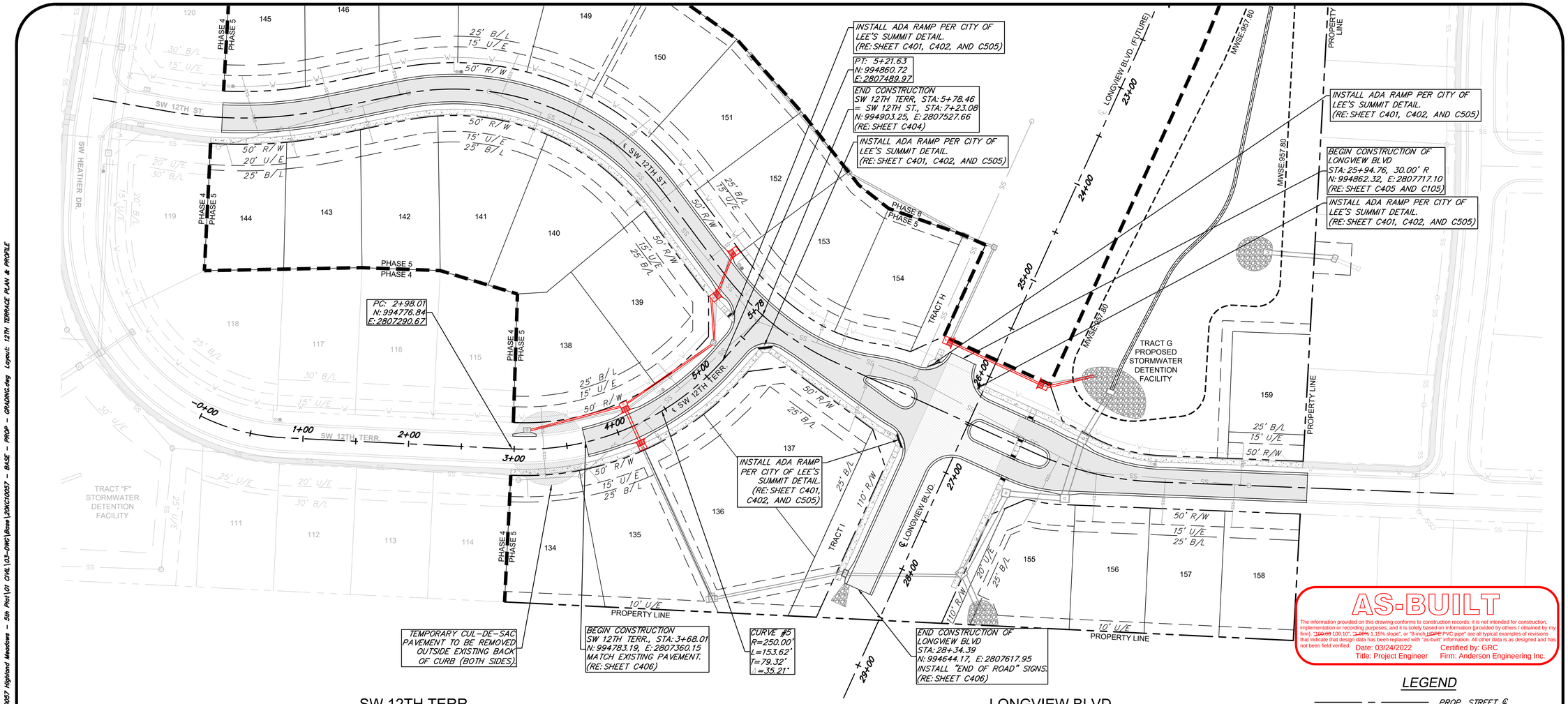
NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

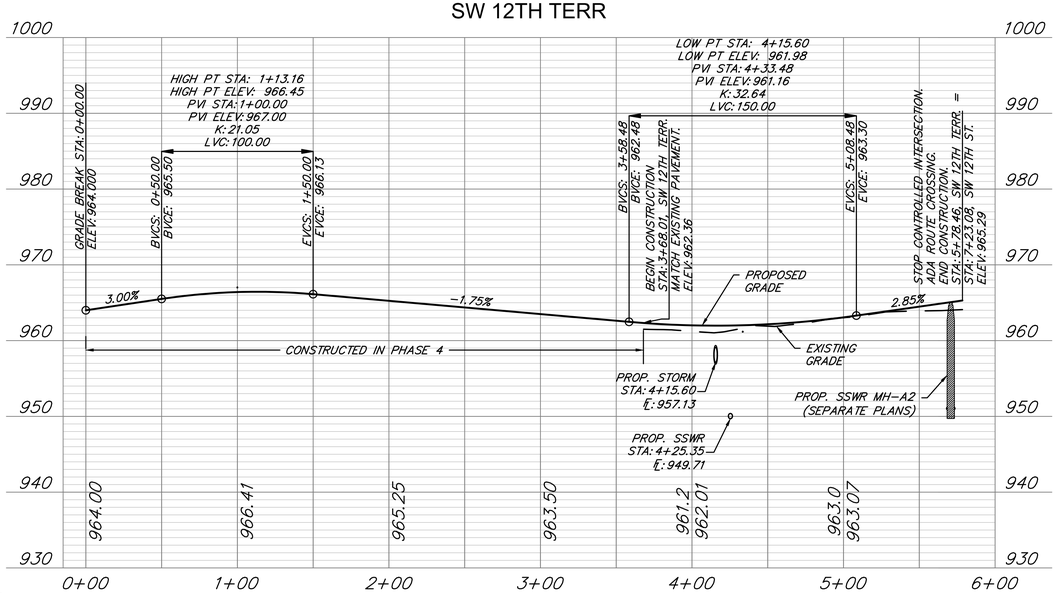
12TH STREET PLAN & PROFILE

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

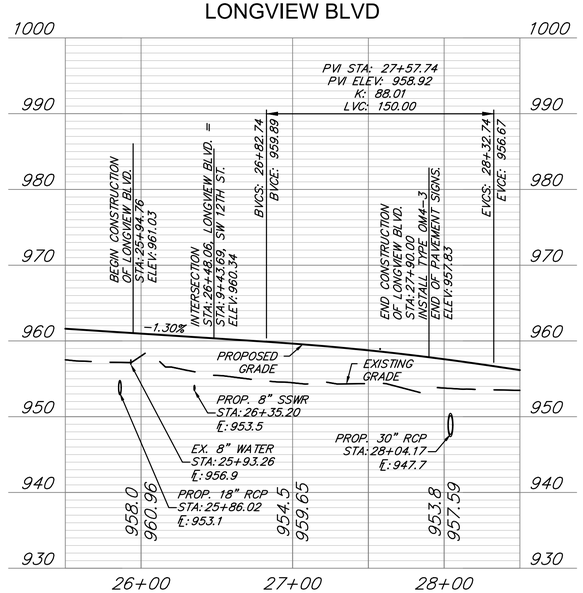
SHEET NUMBER
C103



SW 12TH TERR



LONGVIEW BLVD



LEGEND

- PROP. STREET ℄
- PROP. RIGHT-OF-WAY
- PROP. UTILITY EASEMENT
- PROP. BUILDING SETBACK
- PROP. LOT LINE
- PROP. WATER LINE
- PROP. SSWR
- PROP. SSWR SERVICE
- PROP. STREET PAVEMENT
- PROP. LONGVIEW BLVD.
- PROP. SIDEWALK
- PROP. RIPRAP
- EXISTING SIDEWALK

AS-BUILT

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Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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

HORIZ.: 1"=50'
VERT.: 1"=10'

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REVISIONS			DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE	DRAWN BY: GC
1.	REVISED PER CITY COMMENTS	GC	1/15/21	CHECK BY: ZM
2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO. PE-2012009232
				DATE: 12/2/2020
				ISSUED FOR: FOR REVIEW
6.	AS-BUILT DRAWINGS	GC	4/27/22	JOB NUMBER: 20KC10057
				MO COA NO. 000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

12TH TERR. & LONGVIEW BLVD. PLAN & PROFILE

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/25/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C104
6 OF 40

Mar 11, 2021 - 1:58pm Plotted By: gcote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Base\20KC10057 - BASE - PROP - GRADING.dwg Layout: 12TH TERRACE PLAN & PROFILE

LEGEND

- TYPICAL 28' ROADWAY PAVEMENT SECTION
- LONGVIEW BLVD. PAVEMENT SECTION
- 5' CONCRETE SIDEWALK
- RIPRAP OUTLET STABILIZATION
- RIGHT-OF-WAY
- ROAD CENTERLINE

AS-BUILT

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm). ~~100.00~~ 100.10", ~~21.00%~~ 1.15% slope", or "8-inch ~~HDPE~~ PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 04/26/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

ALL SIGNAGE SHALL COMPLY WITH THE CITY OF LEE'S SUMMIT STANDARD DETAILS AND SPECIFICATIONS PER SECTION 3000 OF THE DESIGN AND CONSTRUCTION MANUAL. REFER TO DETAILS SHEET C407 AND C408.

PERMANENT SIGNING GENERAL NOTES:

1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. THE CONTRACTOR IS RESPONSIBLE FOR AVOIDING ANY AND ALL UTILITIES WHEN INSTALLING SIGN POSTS, WHETHER THE UTILITY IS INDICATED ON THE PLANS OR NOT.
3. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF LEE'S SUMMIT.
4. THE CONTRACTOR SHALL STAKE THE LOCATION OF ALL SIGN POSTS TO BE INSTALLED. THE CITY INSPECTOR SHALL INSPECT THE STAKING PRIOR TO INSTALLATION. MINOR RELOCATION TO AVOID CONFLICTS MAY BE ALLOWED WITH THE APPROVAL OF THE CITY TRAFFIC ENGINEER OR DESIGNEE.
5. SIGNS SHOWN TO BE INSTALLED ON THE SIDE OF METAL POLES SHALL BE MOUNTED WITH STAINLESS STEEL STRAPS OR WING BRACKETS AS DETAILED. NO SIGNS ARE TO BE INSTALLED ON WOOD POLES. SEE TRAFFIC SIGNAL STANDARD DRAWINGS FOR THE INSTALLATION OF SIGNS ON MAST ARMS.
6. ALL POST MOUNTED SIGNS SHALL BE INSTALLED WITH BREAKAWAY ANCHORS ACCORDING TO STANDARD DRAWINGS.
7. ALL EXISTING SIGNS WILL BE USED IN PLACE DURING CONSTRUCTION AND PROTECT3ED FROM DAMAGE UNLESS OTHERWISE INDICATED ON PLANS. IF THE CONTRACTOR DAMAGES ANY EXISTING SIGN OR POSTS DURING CONSTRUCTION, THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING AND STORING ANY SIGNS THAT ARE TO BE REINSTALLED ON THE PROJECT. ALL EQUIPMENT SHALL BE REINSTALLED IN GOOD CONDITION.
8. EXISTING PERMANENT SIGNS AND POSTS REMOVED BY THE CONTRACTOR FOR CONSTRUCTION PURPOSES WHICH ARE NOT TO BE REINSTALLED SHALL BE DELIVERED TO THE CITY'S PUBLIC WORKS MAINTENANCE FACILITY (1971 SE HAMBLEN ROAD). THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND STORING EQUIPMENT IN GOOD CONDITION AND IS FULLY RESPONSIBLE FOR THE EQUIPMENT UNTIL IT IS DELIVERED.
9. ALL STOP, YIELD, OR STREET NAME SIGNS SHALL BE MAINTAINED IN A CONSPICUOUS LOCATION FOR THE DRIVING PUBLIC. ALL STOP AND YIELD SIGNS REMOVED FOR CONSTRUCTION PURPOSES CAN BE TEMPORARILY ERECTED IN REFLECTORIZED DRUMS (NO LESS THAN 7 FEET ABOVE THE PAVEMENT SURFACE) UNTIL THEY CAN BE REINSTALLED. ANY TEMPORARY STOP OR YIELD SIGN INSTALLED TO BE LEFT IN PLACE OVERNIGHT WILL REQUIRE PRIOR APPROVAL FROM THE CITY INSPECTOR.

HORIZONTAL
40' 0 40' 80'
SCALE IN FEET SCALE: 1" = 40'

SW 12TH TERR STA: 5+42.46 17.50', RT N: 994864.70 E: 2807516.88 INSTALL STOP SIGN (R1-1). INSTALL STREET SIGNS (D3-1). "SW 12TH ST." & "SW 12TH TERR."

END CONSTRUCTION OF LONGVIEW BLVD 30.00', RT STA: 28+34.39 N: 994644.17 E: 2807617.95 INSTALL (4) END OF ROAD SIGNS (OM4-3)

BEGIN CONSTRUCTION OF LONGVIEW BLVD 30.00', RT STA: 25+94.76 N: 994862.32 E: 2807717.10 INSTALL (4) END OF ROAD SIGNS (OM4-3)

SW 12TH ST STA: 8+79.69 36.00', RT N: 994795.10, E: 2807649.21 INSTALL "STOP" SIGN (R1-1). INSTALL STREET SIGNS (D3-1). "LONGVIEW BLVD." & "SW 12TH ST."

SW 12TH ST STA: 9+47.69 31.00', LT N: 994827.96, E: 2807738.83 INSTALL "STOP" SIGN (R1-1). INSTALL STREET SIGNS (D3-1). "LONGVIEW BLVD." & "SW 12TH ST.)

TRACT G PROPOSED STORMWATER DETENTION FACILITY

TRACT H

TRACT I

MWSE 957.80

PROPERTY LINE

PHASE 4 PHASE 5

PHASE 5 PHASE 4

PHASE 6 PHASE 5

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REVISIONS			
NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

DRAWING INFO.

DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

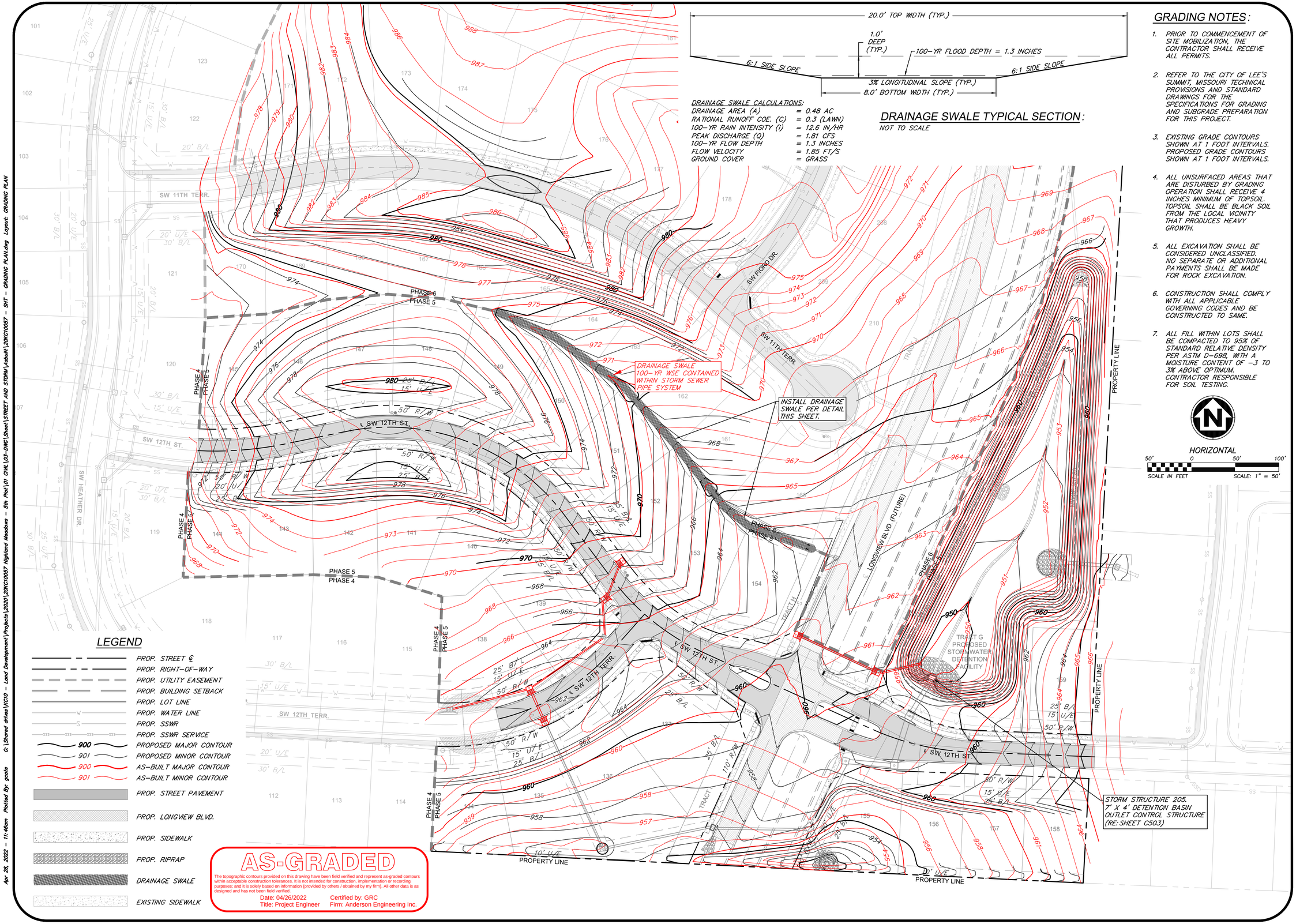
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

STREET SIGNAGE PLAN

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C105
7 OF 41

Apr 26, 2022 - 6:07pm Plotted By: gcote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHT - INTERSECTION DETAILS.dwg Layout: STREET SIGNAGE PLAN



DRAINAGE SWALE TYPICAL SECTION:

NOT TO SCALE

DRAINAGE SWALE CALCULATIONS:

DRAINAGE AREA (A)	= 0.48 AC
RATIONAL RUNOFF COE. (C)	= 0.3 (LAWN)
100-YR RAIN INTENSITY (I)	= 12.6 IN/HR
PEAK DISCHARGE (Q)	= 1.81 CFS
100-YR FLOW DEPTH	= 1.3 INCHES
FLOW VELOCITY	= 1.85 FT/S
GROUND COVER	= GRASS

GRADING NOTES:

1. PRIOR TO COMMENCEMENT OF SITE MOBILIZATION, THE CONTRACTOR SHALL RECEIVE ALL PERMITS.
2. REFER TO THE CITY OF LEE'S SUMMIT, MISSOURI TECHNICAL PROVISIONS AND STANDARD DRAWINGS FOR THE SPECIFICATIONS FOR GRADING AND SUBGRADE PREPARATION FOR THIS PROJECT.
3. EXISTING GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS. PROPOSED GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS.
4. ALL UNSURFACED AREAS THAT ARE DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES MINIMUM OF TOPSOIL. TOPSOIL SHALL BE BLACK SOIL FROM THE LOCAL VICINITY THAT PRODUCES HEAVY GROWTH.
5. ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED. NO SEPARATE OR ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION.
6. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
7. ALL FILL WITHIN LOTS SHALL BE COMPACTED TO 95% OF STANDARD RELATIVE DENSITY PER ASTM D-698, WITH A MOISTURE CONTENT OF -3 TO 3% ABOVE OPTIMUM. CONTRACTOR RESPONSIBLE FOR SOIL TESTING.

LEGEND

- PROP. STREET ℄
- PROP. RIGHT-OF-WAY
- PROP. UTILITY EASEMENT
- PROP. BUILDING SETBACK
- PROP. LOT LINE
- PROP. WATER LINE
- PROP. SSWR
- PROP. SSWR SERVICE
- 900 PROPOSED MAJOR CONTOUR
- 901 PROPOSED MINOR CONTOUR
- 900 AS-BUILT MAJOR CONTOUR
- 901 AS-BUILT MINOR CONTOUR
- PROP. STREET PAVEMENT
- PROP. LONGVIEW BLVD.
- PROP. SIDEWALK
- PROP. RIPRAP
- DRAINAGE SWALE
- EXISTING SIDEWALK

AS-GRADED

The topographic contours provided on this drawing have been field verified and represent as-graded contours within acceptable construction tolerances. It is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm). All other data is as designed and has not been field verified.

Date: 04/26/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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REVISIONS

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2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

DRAWING INFO.

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DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

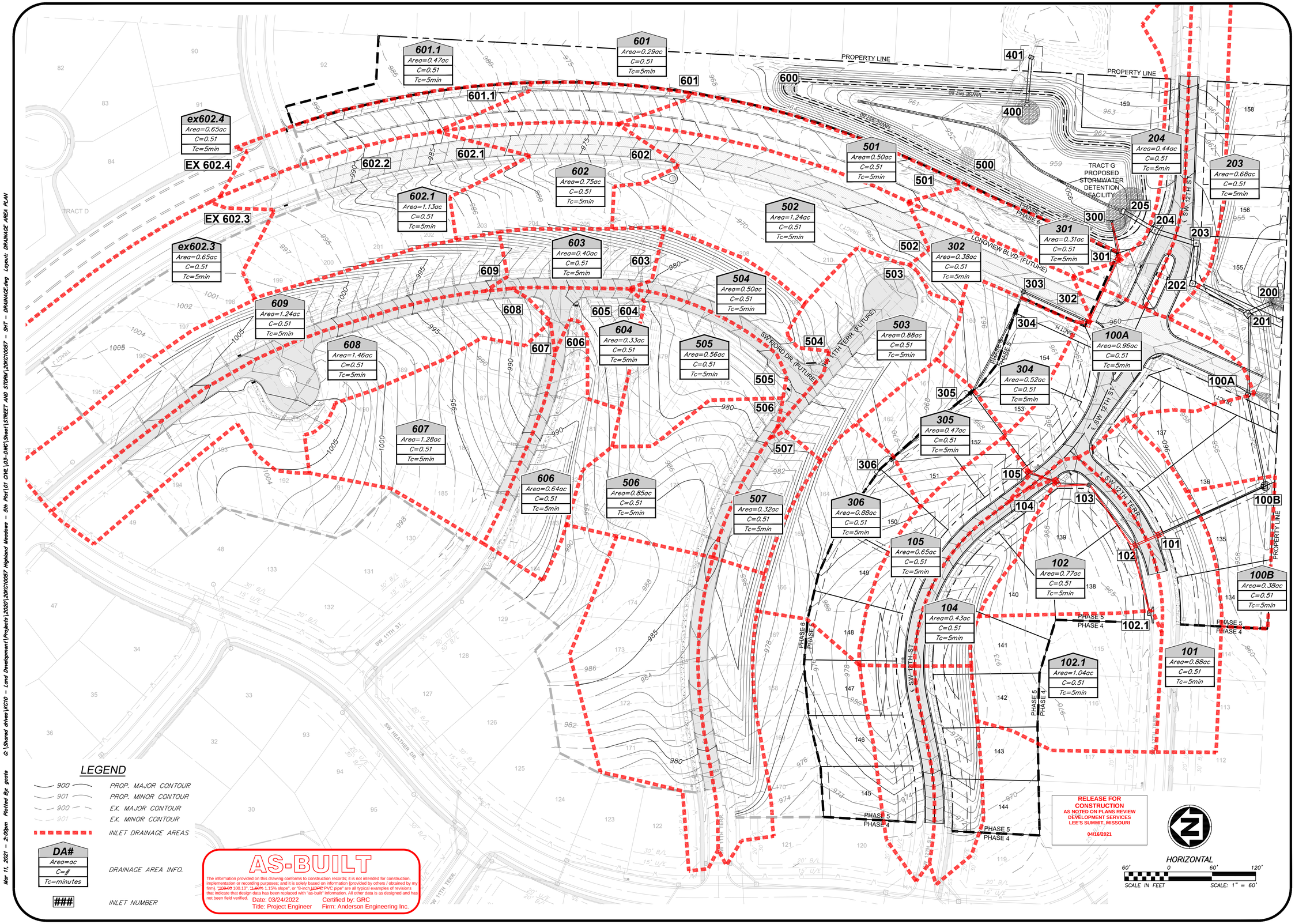
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

GRADING PLAN

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C106
8 OF 41

Apr 26, 2022 - 11:46am Plotted By: gcote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-SWKS\Sheet\STREET AND STORM\Asbuilt\20KC10057 - SHT - GRADING PLAN.dwg Layout: GRADING PLAN



LEGEND

- 900 — PROP. MAJOR CONTOUR
- 901 — PROP. MINOR CONTOUR
- 900 — EX. MAJOR CONTOUR
- 901 — EX. MINOR CONTOUR
- INLET DRAINAGE AREAS

DA#
Area=ac
C=#
Tc=minutes

DRAINAGE AREA INFO.

INLET NUMBER

AS-BUILT

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

DRAINAGE AREA PLAN

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/21
PROFESSIONAL ENGINEER

SHEET NUMBER
C201
9 OF 40

STORM SEWER DRAINAGE CALCULATIONS:

10-YEAR

HYDROLOGY												HYDRAULICS													GUTTER/INLET DESIGN					
Line No.	Inlet ID	Downstream Line No.	DrainageArea	Runoff Coefficient	Local CxA	System CxA	Tc	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 Slope	Gutter Spread	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	967.53	958.48	953.12	59.49	9.01	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	958.00	949.90	946.81	31.01	0.29	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	956.45	944.95	947.05	110.34	1.90	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	954.94	950.39	944.90	128.30	4.28	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	962.28	954.33	950.84	162.07	2.15	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	962.06	954.84	954.43	45.00	0.91	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	963.85	956.30	956.06	103.55	0.81	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	967.37	958.87	956.45	39.95	6.06	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	968.39	961.84	959.62	52.10	4.26	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	963.51	958.71	956.06	94.95	2.79	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	958.94	947.49	947.05	86.54	0.51	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	958.66	947.91	947.69	55.83	0.39	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	958.62	948.51	948.16	57.23	0.59	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	958.25	948.70	948.66	51.16	0.08	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	960.76	952.16	950.29	40.96	4.57	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	960.68	953.38	952.51	105.01	0.83	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	962.12	955.51	953.93	98.87	1.60	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	960.11	956.11	956.08	28.60	0.10	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	964.68	959.23	956.21	126.66	2.38	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	969.76	964.81	958.73	141.99	4.28	15	0.012	13.99	3.75	6.42	8.20	965.93	959.97	LINE 306	3.75	....	Sag	....	....

100-YEAR

HYDROLOGY												HYDRAULICS													GUTTER/INLET DESIGN					
Line No.	Inlet ID	Downstream Line No.	DrainageArea	Runoff Coefficient	Local CxA	System CxA	Tc	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 Slope	Gutter Spread	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	967.53	958.48	953.12	59.49	9.01	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	958.00	949.90	946.81	31.01	0.29	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	956.45	944.95	947.05	110.34	1.90	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	954.94	950.39	944.90	128.30	4.28	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	962.28	954.33	950.84	162.07	2.15	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	962.06	954.84	954.43	45.00	0.91	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	963.85	956.30	956.06	103.55	0.81	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	967.37	958.87	956.45	39.95	6.06	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	968.39	961.84	959.62	52.10	4.26	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	963.51	958.71	956.06	94.95	2.79	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	958.94	947.49	947.05	86.54	0.51	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	958.66	947.91	947.69	55.83	0.39	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	958.62	948.51	948.16	57.23	0.59	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	958.25	948.70	948.66	51.16	0.08	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	960.76	952.16	950.29	40.96	4.57	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	960.68	953.38	952.51	105.01	0.83	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	962.12	955.51	953.93	98.87	1.60	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	960.11	956.11	956.08	28.60	0.10	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	964.68	959.23	956.21	126.66	2.38	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	969.76	964.81	958.73	141.99	4.28	15	0.012	13.99	5.65	6.66	7.74	966.11	960.19	LINE 306	5.65	....	Sag	....	....

AS-BUILT

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm): "150 HP 100.10"; "1.67% 1.15% slope"; or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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

04/16/2021

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941 W. 141ST TER • KANSAS CITY, MISSOURI 64145 • PHONE (816) 777-0400
A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - LC 62

DRAWING INFO.

DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

REVISIONS

NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
3.	REVISED PER CITY COMMENTS	GC	3/10/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

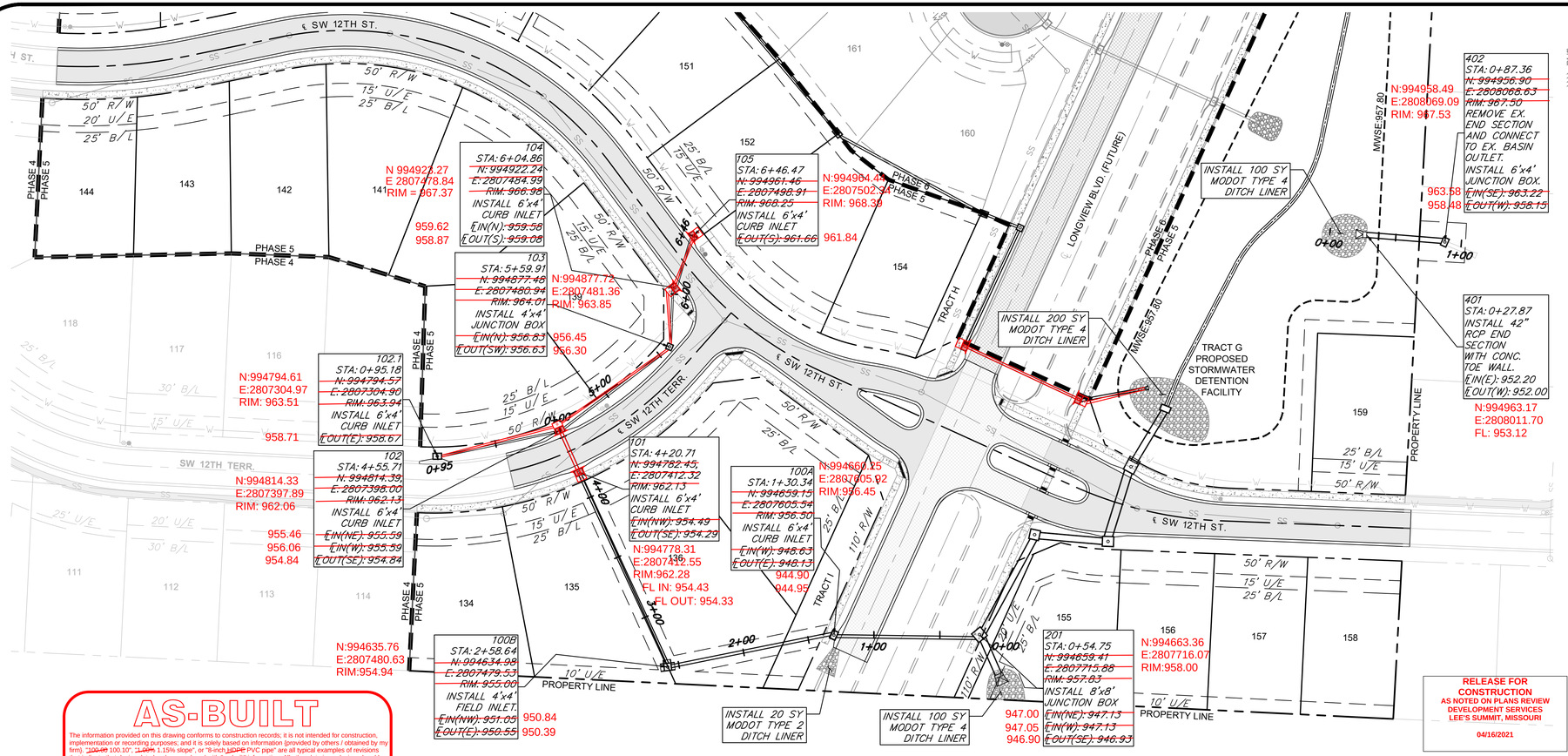
DRAINAGE CALCULATIONS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C202
10 OF 40

Mar 11, 2021 - 2:00pm Plotted By: geste G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Base\20KC10057 - BASE - PROP - STORM.dwg Layout: DRAINAGE CALCULATIONS



LEGEND

RIP RAP

FILL PRIOR TO PIPE INSTALLATION

STORM PIPE AND STRUCTURES:

1. HDPE PIPE SHALL CONFORM TO ASTM F2306. JOINTS SHALL BE INTEGRAL BELL AND SPIGOT WITH RUBBER GASKETS. JOINTS SHALL BE WATER TIGHT AS DEFINED BY ASTM F2306.
2. CONCRETE PIPE SHALL CONFORM TO ASTM C76, CLASS III, WALL TYPE B. JOINTS SHALL BE TONGUE–IN–GROVE WITH PREFORMED, FLEXIBLE SEALANTS AND SHALL CONFORM TO ASTM C990.
3. PROPOSED CURB INLETS AND JUNCTION BOXES SHALL CONFORM TO THE CITY OF LEE'S SUMMIT STANDARD DETAILS.
4. DOUBLE WALL POLYPROPYLENE PIPE IS AN APPROVED EQUAL AND SHALL CONFORM TO THE CITY OF LEE'S SUMMIT SPECIFICATIONS PER SECTION 2602.2.G. OF THE DESIGN AND CONSTRUCTION MANUAL.

GENERAL NOTES:

1. COORDINATES AT TOP ELEVATIONS SHOWN ARE LOCATED AT CENTER OR STRUCTURES. ROAD OFFSETS AREA AT INSIDE FACE OF CURB INLETS, AND AT CENTER OF MANHOLES AND JUNCTIONS BOXES.
2. PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. INSIDE FRONT FACE OF CURB INLETS SHALL BE LOCATED 1.5 FEET BEHIND BACK OF CURB. STRUCTURE SHALL BE PARALLEL WITH CURB ALIGNMENT.
4. TOP ELEVATION OF CURB INLETS SHALL BE SLOPED TO CONFORM TO GRADE OF STREET.
5. WATER MAINS AND STORM SEWERS SHALL HAVE AT LEAST 3' OF CLEAR HORIZONTAL SEPARATION.
6. CONTROLLED FILL: PRIOR TO INSTALLATION OF STORM SEWER PIPING IN FILL AREAS, FILL SHALL BE PLACED AND COMPACTED TO A MINIMUM 95% OF STANDARD PROCTOR DENSITY PER ASTM D 698 TO A MINIMUM DEPTH OF 2 FEET ABOVE THE TOP OF PIPE.

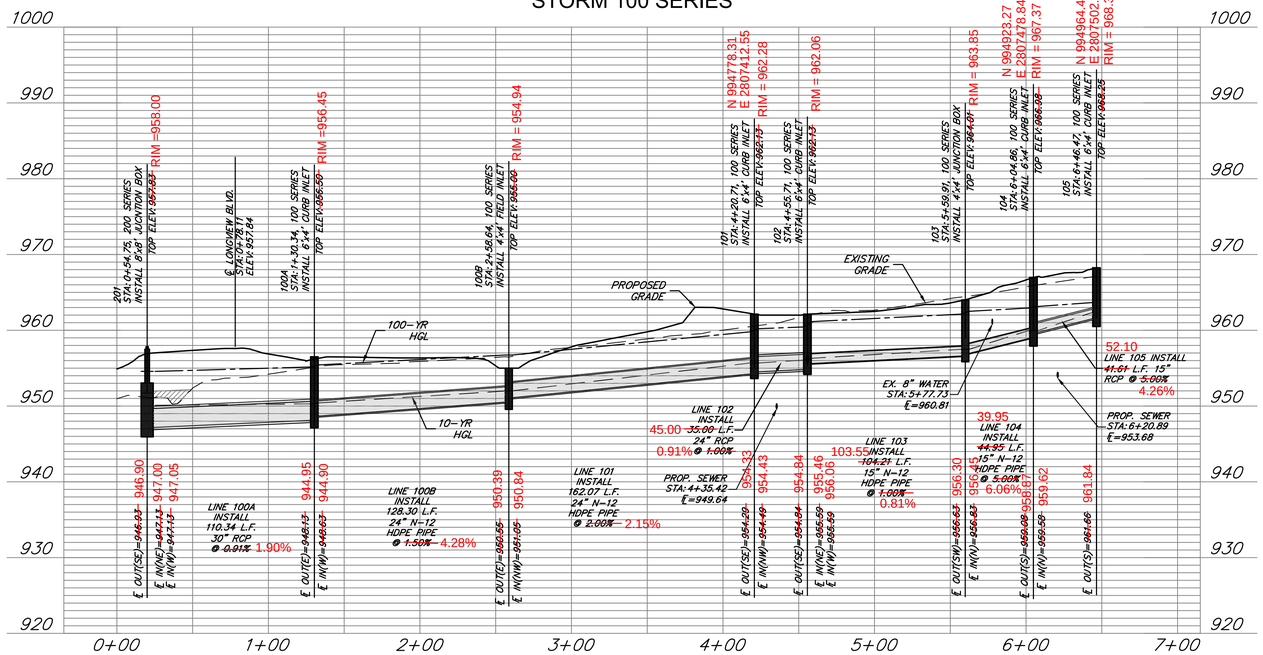
0 50 100

10 0

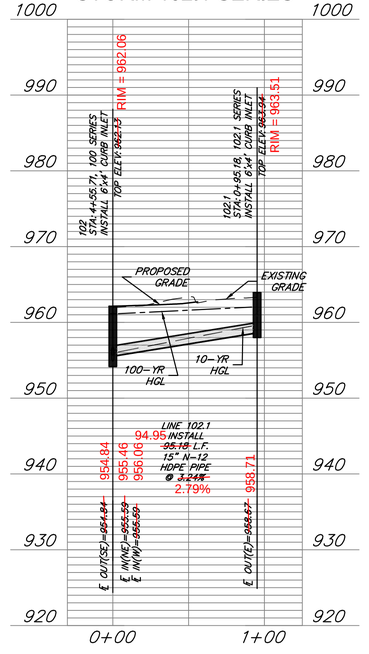
HORIZ.: 1"=50'

VERT.: 1"=10'

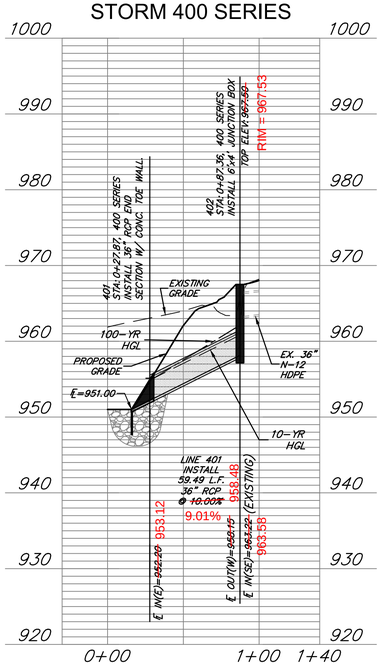
STORM 100 SERIES



STORM 102.1 SERIES



STORM 400 SERIES



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DRAWING INFO.

DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

REVISIONS

NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
3.	REVISED PER CITY COMMENTS	GC	3/10/21
4.	REVISED PER CITY COMMENTS	GC	3/15/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

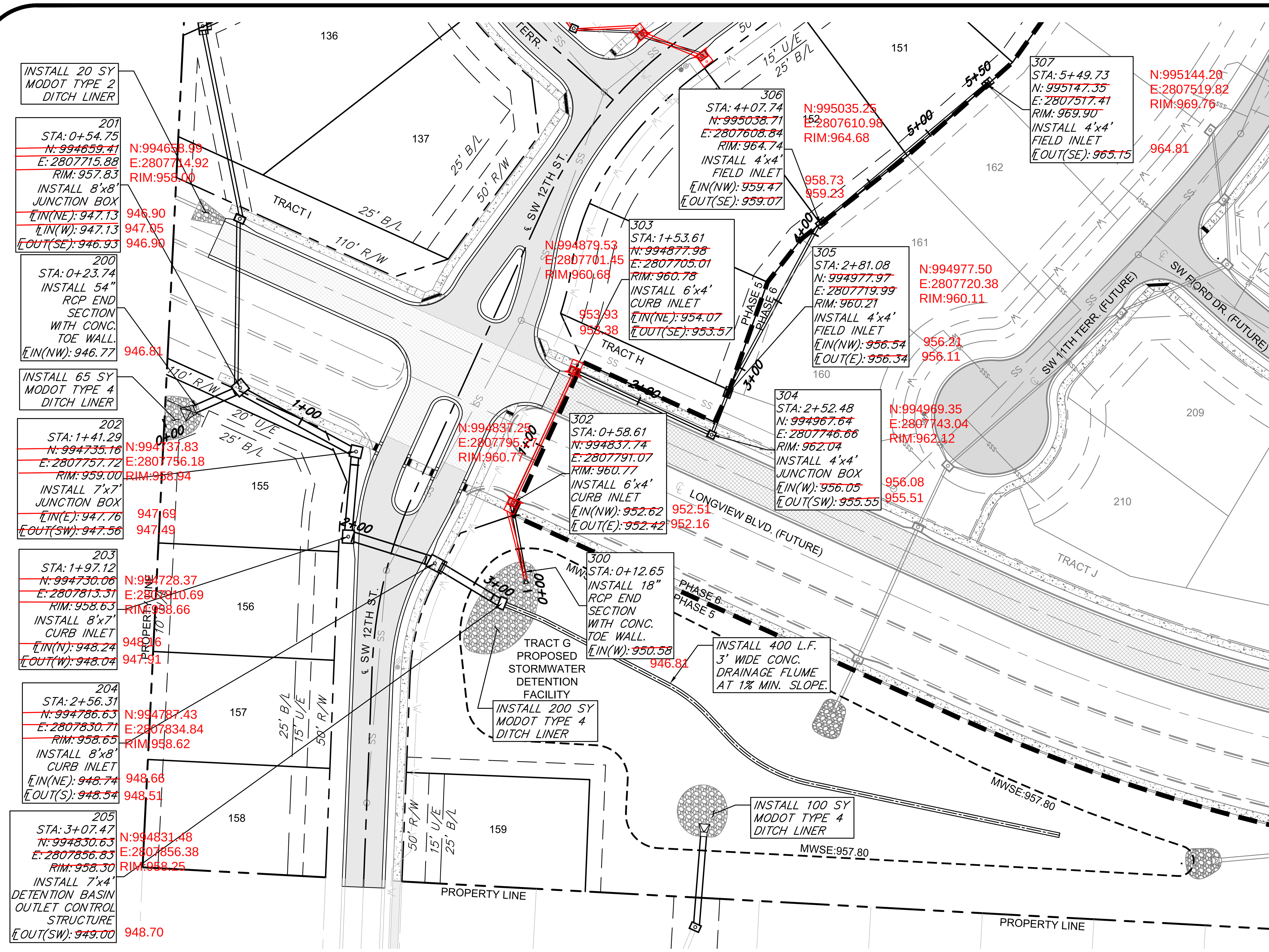
STORM SEWER PLAN & PROFILE

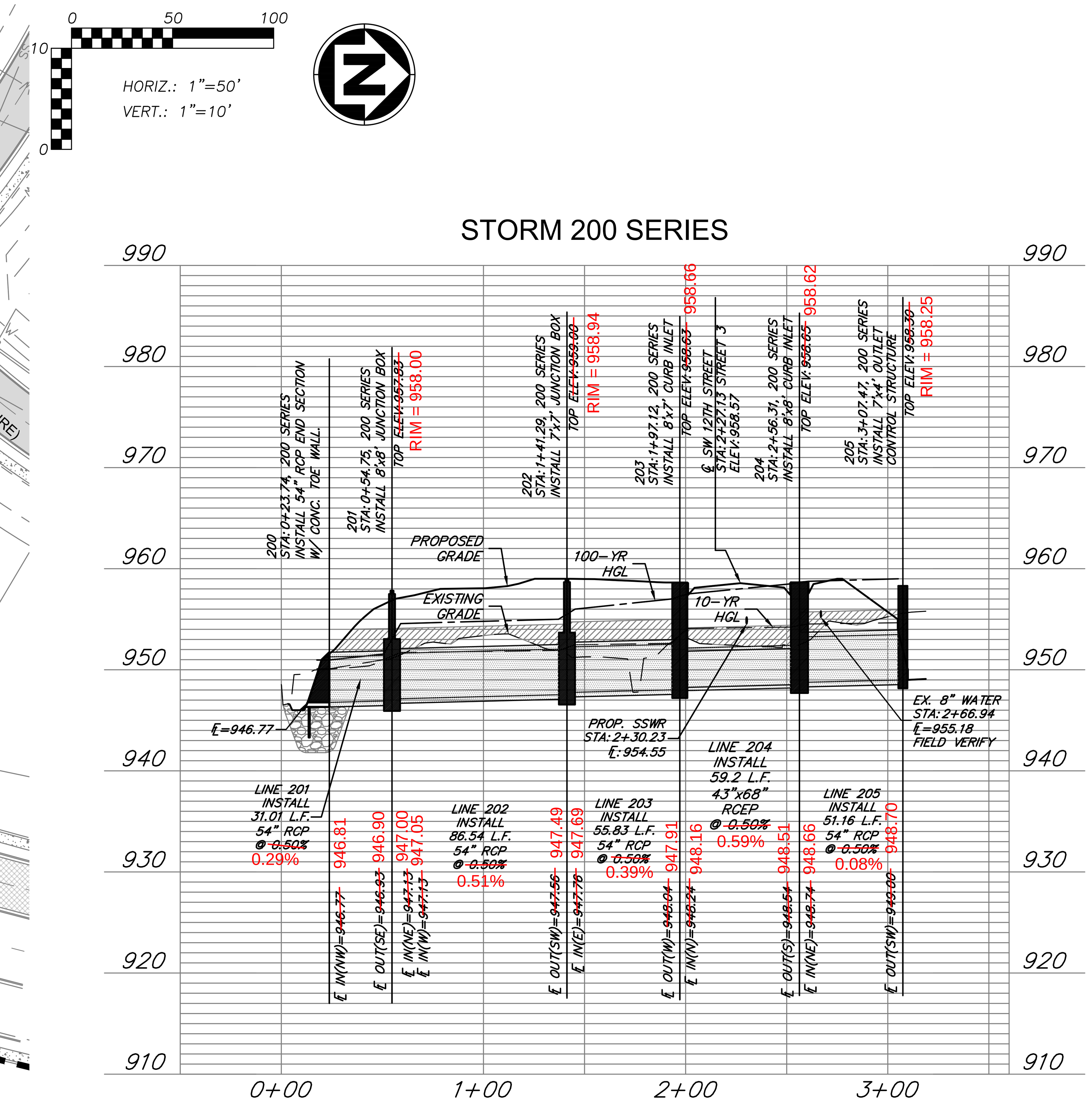
S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

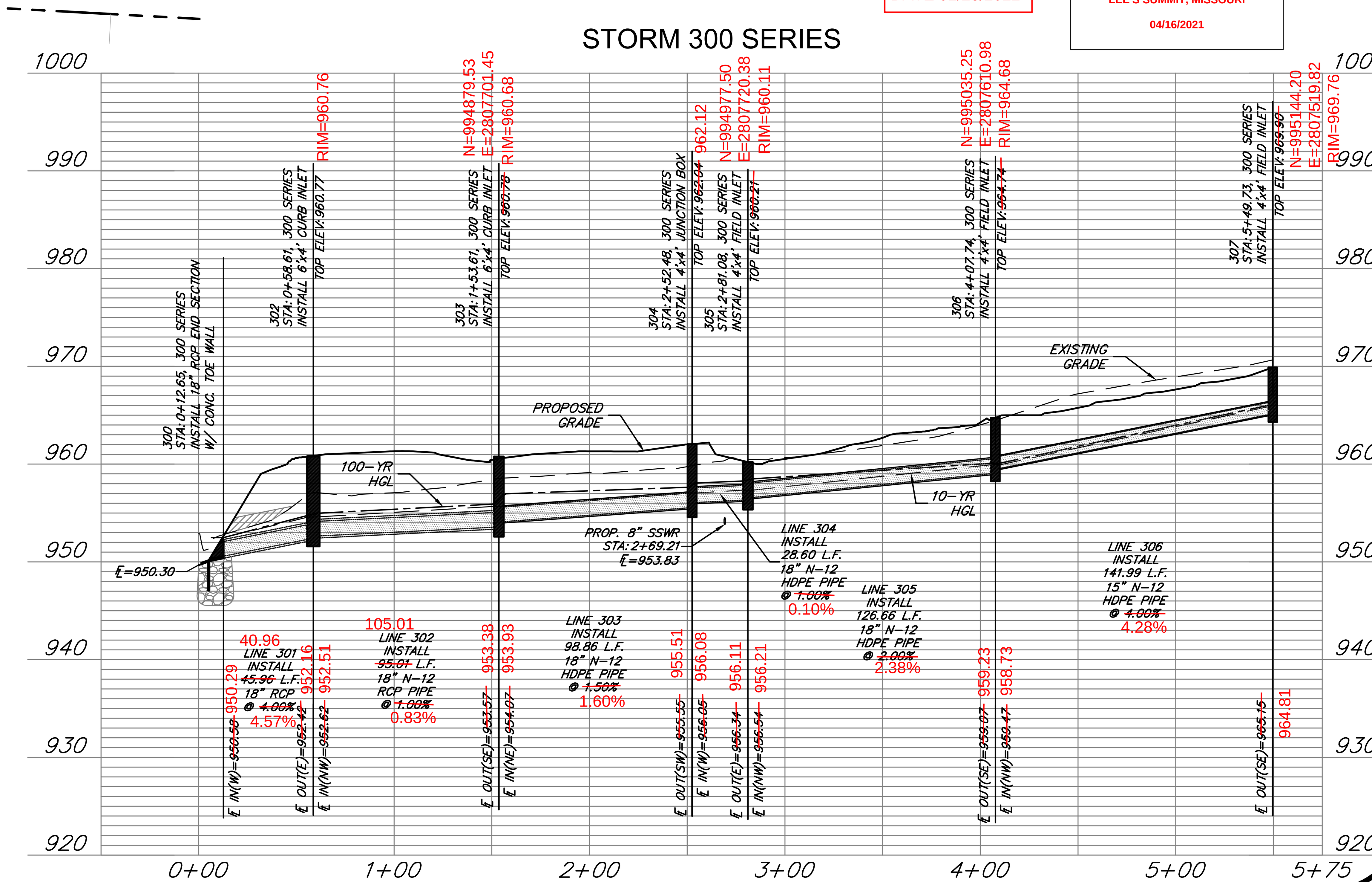
STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/15/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C203
11 OF 40

Mar 15, 2021 – 12:16pm Plotted By: gcote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\01 CIVIL\03-DWG\Base\20KC10057 – BASE – PROP – STORM.dwg Layout: STORM SEWER PLAN & PROFILE







AS-BUILT
DATE 01/28/2022

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

AS-BUILT

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2. PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. INSIDE FRONT FACE OF CURB INLETS SHALL BE LOCATED 1.5 FEET BEHIND BACK OF CURB. STRUCTURE SHALL BE PARALLEL WITH CURB ALIGNMENT.
4. TOP ELEVATION OF CURB INLETS SHALL BE SLOPED TO CONFORM TO GRADE OF STREET.
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6. CONTROLLED FILL: PRIOR TO INSTALLATION OF STORM SEWER PIPING IN FILL AREAS, FILL SHALL BE PLACED AND COMPACTED TO A MINIMUM 95% OF STANDARD PROCTOR DENSITY PER ASTM D 698 TO A MINIMUM DEPTH OF 2 FEET ABOVE THE TOP OF PIPE.

LEGEND

RIP RAP
FILL PRIOR TO PIPE INSTALLATION

STORM PIPE AND STRUCTURES:

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Mar 15, 2021 - 12:17pm Plotted By: gcate G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Base\20KC10057 - BASE - PROP - STORM.dwg Layout: STORM SEWER PLAN & PROFILE (2)

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DRAWING INFO.

DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

REVISIONS

NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
3.	REVISED PER CITY COMMENTS	GC	3/10/21
4.	REVISED PER CITY COMMENTS	GC	3/15/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

STORM SEWER PLAN & PROFILE (2)

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
PROFESSIONAL ENGINEER

SHEET NUMBER
C204

AS-BUILT LEGEND

- 900 — AS-GRADED MAJOR CONTOUR
- 901 — AS-GRADED MINOR CONTOUR

STORAGE VOLUME:

REQUIRED: 223,114 FT^3

DESIGN: 280,352 FT^3

AS-BUILT: 268,315 FT^3

WATER SURFACE ELEVATIONS:

W_QV	952.06
2-YR	953.49
10-YR	955.57
100-YR	957.80

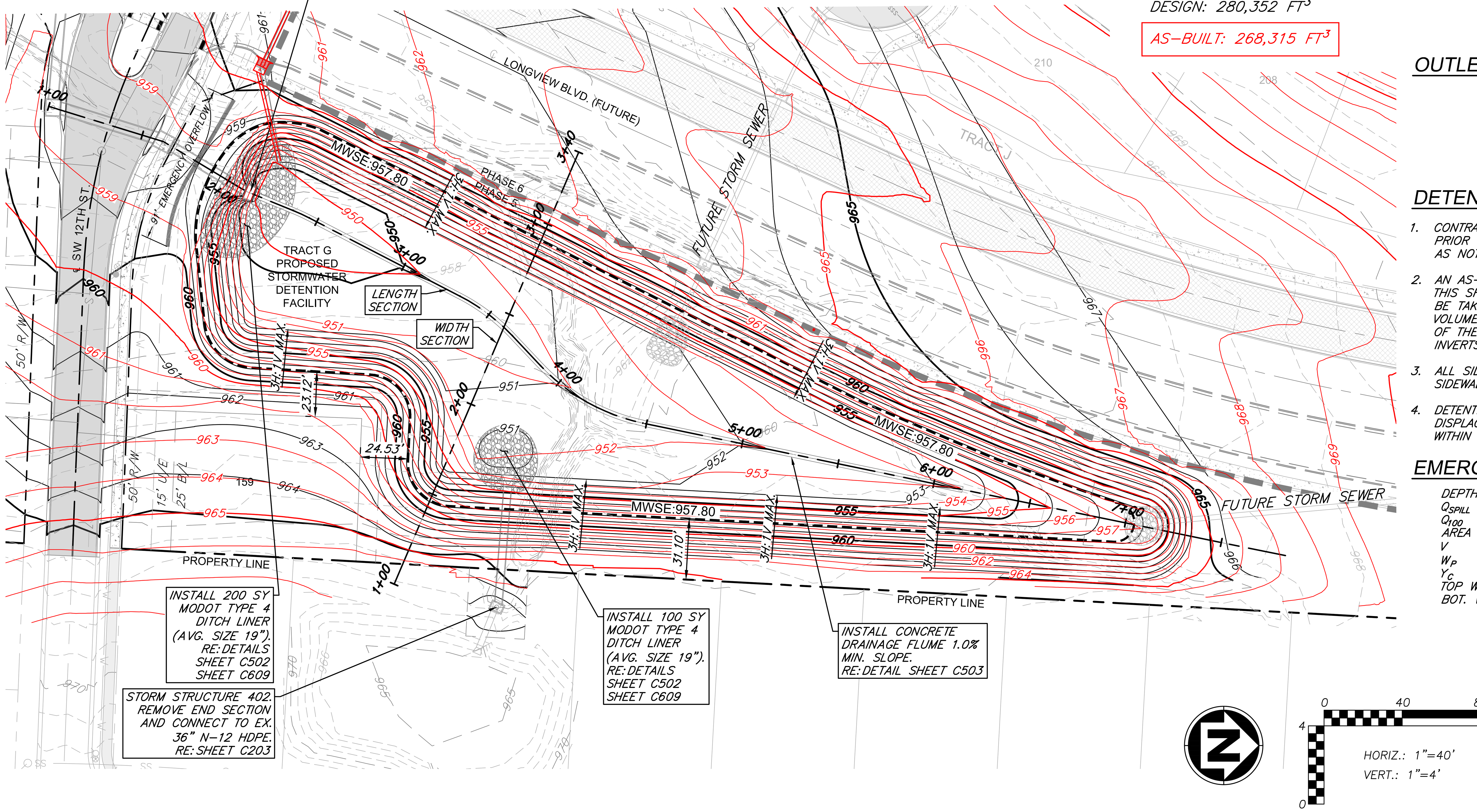
OUTLET DISCHARGE RATES:

W_QV	0.08 CFS
2-YR	23.41 CFS
10-YR	94.04 CFS
100-YR	194.07 CFS

LEGEND

- 900 — PROPOSED MAJOR CONTOUR
- 901 — PROPOSED MINOR CONTOUR
- 900 — EXISTING MAJOR CONTOUR
- 901 — EXISTING MINOR CONTOUR
- TYPICAL 28' ROADWAY PAVEMENT SECTION
- 5' CONCRETE SIDEWALK
- RIPRAP STABILIZATION
- RIGHT-OF-WAY
- ROAD CENTERLINE

MAXIMUM WATER SURFACE ELEVATION – MWSE

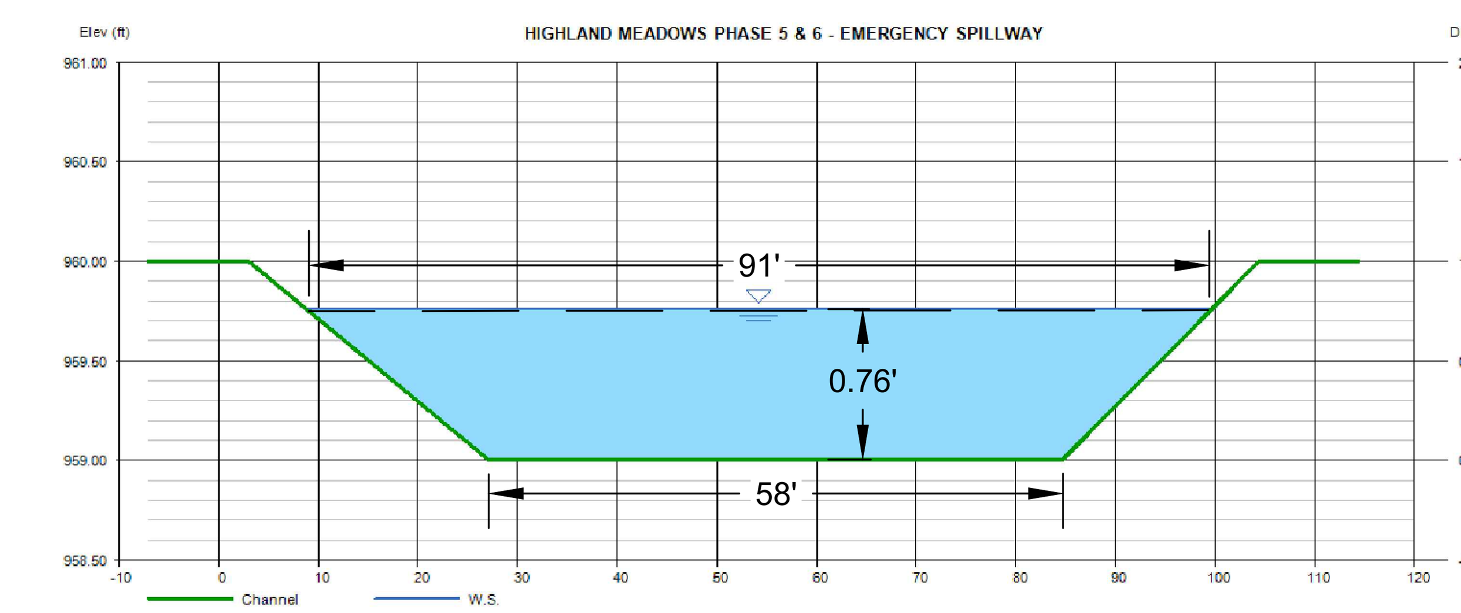


DETENTION BASIN GENERAL NOTES:

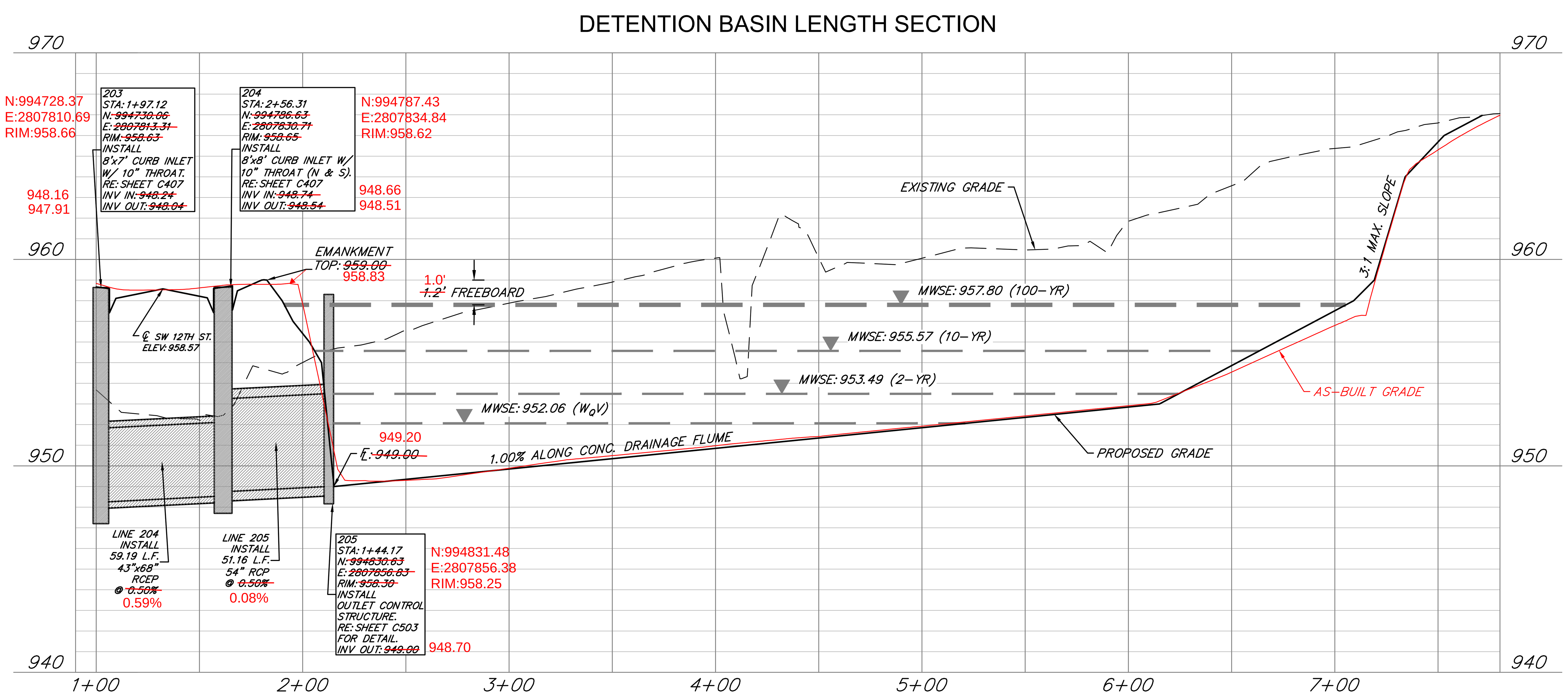
1. CONTRACTOR TO CONSTRUCT STORMWATER MANAGEMENT FACILITIES, SPECIFICALLY THOSE FEATURES RELATED TO DETENTION, PRIOR TO ANY LAND DISTURBANCE OF THE SITE AND PRIOR TO THE CONSTRUCTION OF ANY OTHER SITE DEVELOPMENT WORK AS NOT TO EFFECT DOWNSTREAM NEIGHBORS WITH UNDETAINED STORMWATER DISCHARGE.
2. AN AS-GRADED AND AS-BUILT DRAWING SHALL BE SUBMITTED TO AND REVIEWED BY THE CITY FOR 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 BASIN, OUTLET STRUCTURE INCLUDING ALL WEIR ELEVATIONS AND STORM SYSTEM INCLUDING ALL THE INVERTS, STAMPED BY A MISSOURI LICENSED ENGINEER.
3. ALL SIDEWALK ADJACENT TO TRACTS SHALL BE CONSTRUCTED WITH PUBLIC IMPROVEMENTS, ALONG WITH ALL ADA ACCESSIBLE SIDEWALK RAMPS.
4. DETENTION BASIN SHALL FUNCTION AS A SEDIMENT BASIN UNTIL ALL DISTURBED AREAS ARE ADEQUATELY STABILIZED AND DISPLACED SEDIMENTS ARE NO LONGER BEING COLLECTED IN THE BASIN. REFER TO EROSION CONTROL PLANS AND DETAILS WITHIN THIS PLAN SET, AS WELL AS, SWPPP DOCUMENTS AND MDNR LAND DISTURBANCE PERMIT FOR STATE REQUIREMENTS.

EMERGENCY SPILLWAY CALCULATIONS:

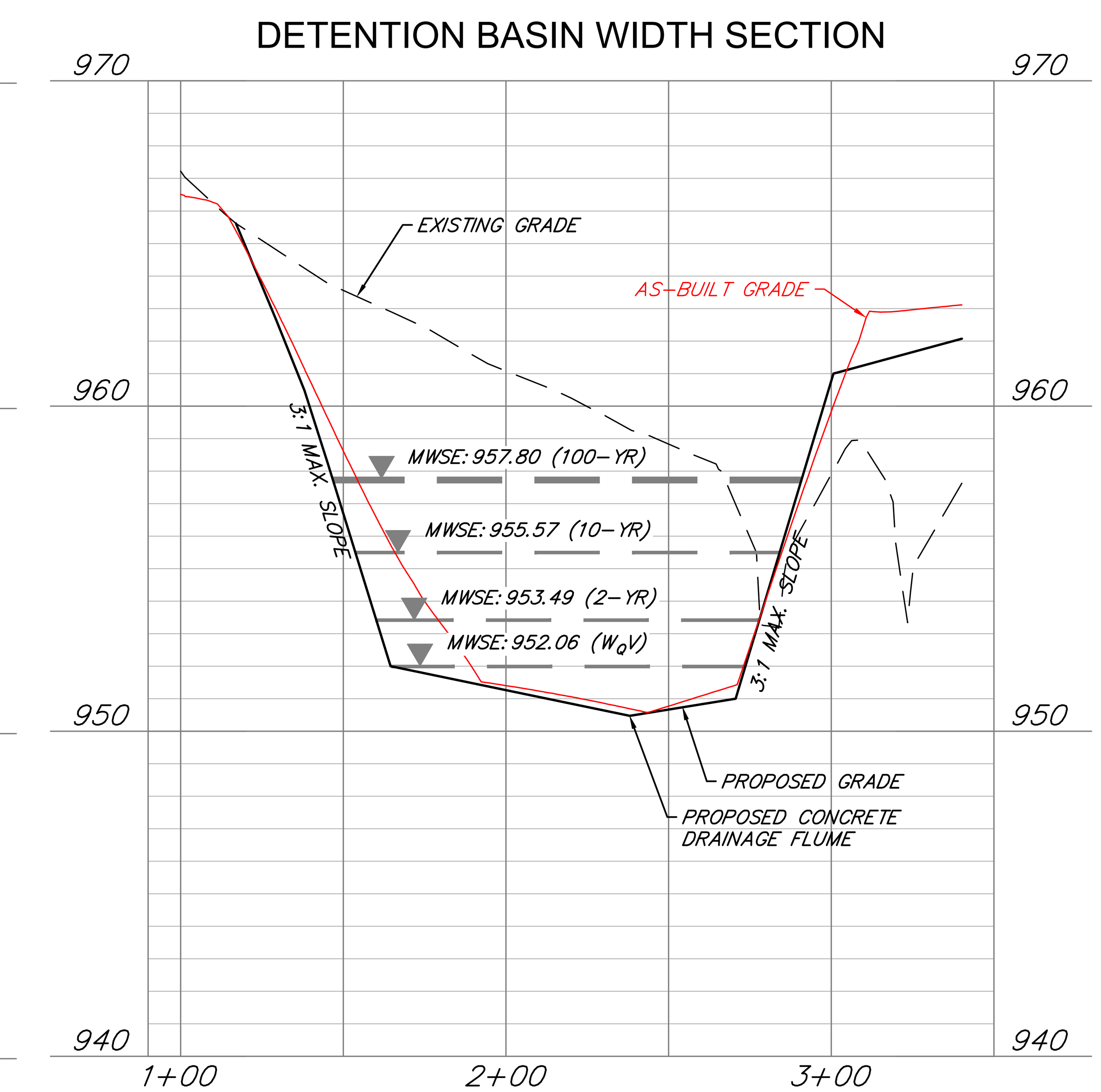
DEPTH	0.76 FT
Q_{SPILL}	203.4 CFS
Q_{100}	194.2 CFS
AREA	56.4 SQ.FT.
V	3.61 FT/S
W_P	90.9 FT
Y_C	0.67
TOP W	91 FT
BOT. W	58 FT



DETENTION BASIN LENGTH SECTION



DETENTION BASIN WIDTH SECTION



AS-BUILT

The information provided on this drawing conforms to construction records. Date: 04/27/2022 Certified by: GRC Title: Project Engineer Firm: Anderson Engineering Inc.

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NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
2.	REVISED PER CITY COMMENTS	GC	3/10/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

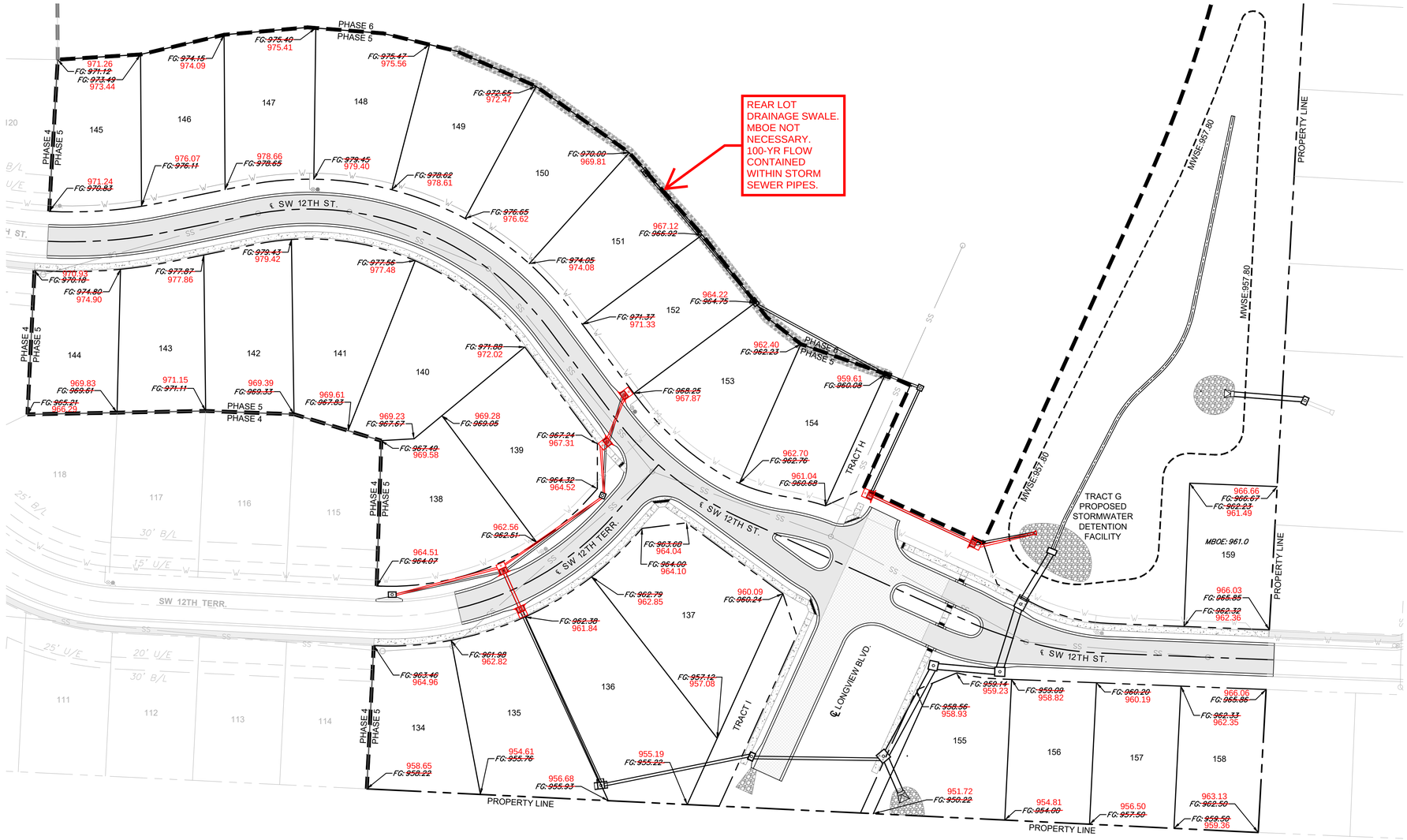
DRAWING INFO.	
DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

DETENTION BASIN PLAN & PROFILE

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C205
13 OF 41



LEGEND

FG FINISH GRADE

MBOE 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 HOME.
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.

AS-BUILT

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm). ~~"100.00"~~ 100.10", ~~"1.00%"~~ 1.15% slope", or "8-inch ~~HDPE~~ PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 04/26/2022 Certified by: GRC

Title: Project Engineer Firm: Anderson Engineering Inc.

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REVISIONS			DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE	
1.	REVISED PER CITY COMMENTS	GC	1/15/21	DRAWN BY: GC
2.	REVISED PER CITY COMMENTS	GC	2/26/21	CHECK BY: ZM
				LICENSE NO. PE-2012009232
				DATE: 12/2/2020
5.	AS-BUILT DRAWINGS	GC	3/24/22	ISSUED FOR: FOR REVIEW
6.	AS-BUILT DRAWINGS	GC	4/27/22	JOB NUMBER: 20KC10057
				MO COA NO. 000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

MINIMUM BUILDING OPENING PLAN

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C206
14 OF 41

Apr 21, 2022 – 3:28pm Plotted By: gcote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\01 CIVIL\03–DWG\Base\ASBUILT\20KC10057 – BASE – PROP – STORM.dwg Layout: MINIMUM BUILDING OPENING PLAN

GENERAL EROSION CONTROL NOTES:

1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOD, ROCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE COVER.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

EROSION CONTROL MAINTENANCE:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.

KCAPWA REFERENCE DETAILS:

ESC-01	CONSTRUCTION ENTRANCE & CONCRETE WASHOUT
ESC-02	EROSION CONTROL BLANKET & TURF REINFORCEMENT MATS
ESC-03	SILT FENCE
ESC-05	TEMPORARY ROCK DIVERSION BERM
ESC-06	CURB INLET PROTECTION
ESC-07	AREA INLET PROTECTION
ESC-10	ROCK DITCH CHECK DAM
ESC-11	SEDIMENT BASIN
ESC-12	SEDIMENT BASIN DETAILS
ESC-14	OUTLET PROTECTION

FEMA FLOOD NOTE:

THE SUBJECT PROPERTY IS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO MAP ITEM NUMBER: 29095C0418G EFFECTIVE DATE: 1/20/2017

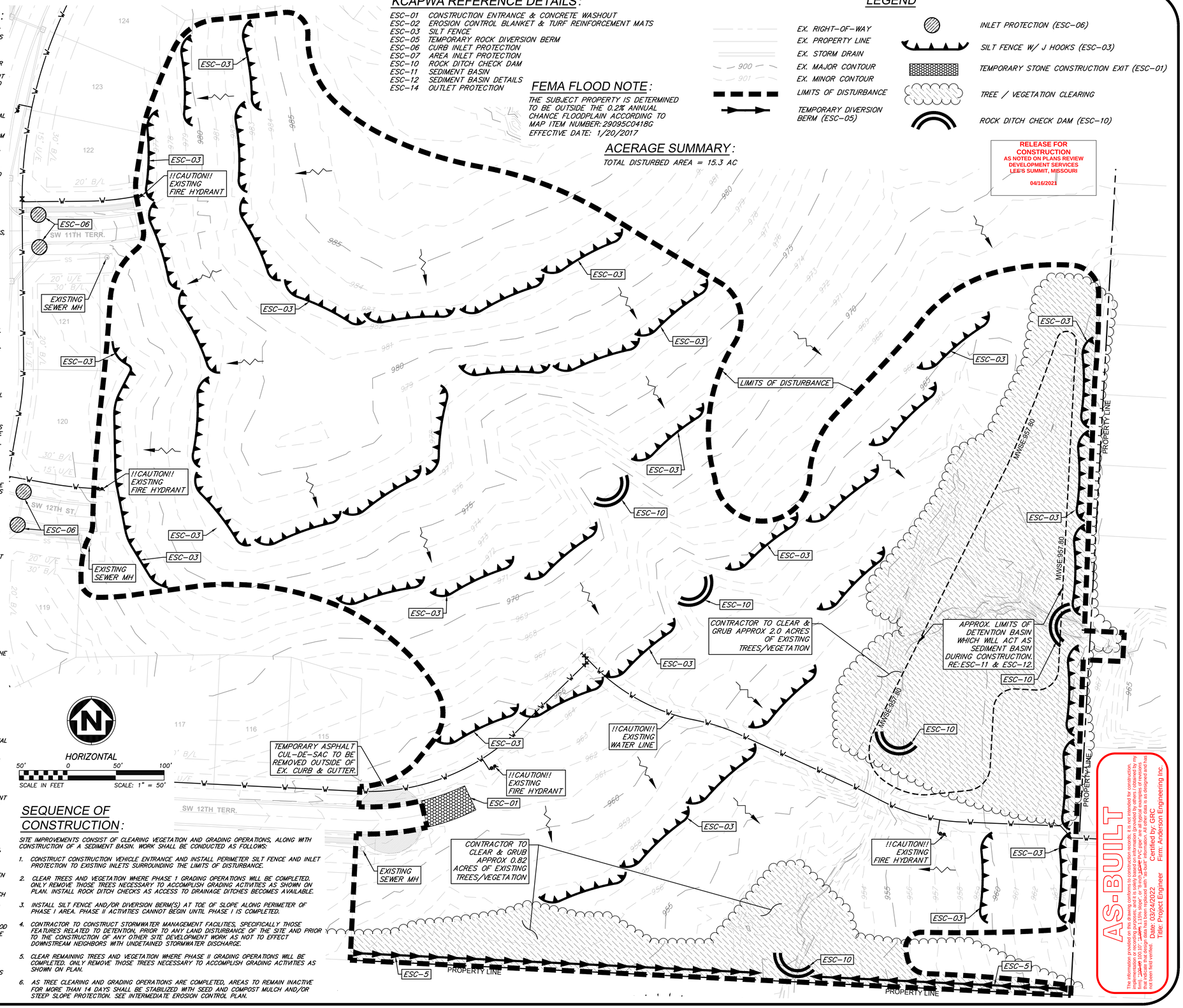
ACREAGE SUMMARY:

TOTAL DISTURBED AREA = 15.3 AC

LEGEND

- EX. RIGHT-OF-WAY
- EX. PROPERTY LINE
- EX. STORM DRAIN
- EX. MAJOR CONTOUR
- EX. MINOR CONTOUR
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION BERM (ESC-05)
- INLET PROTECTION (ESC-06)
- SILT FENCE W/ J HOOKS (ESC-03)
- TEMPORARY STONE CONSTRUCTION EXIT (ESC-01)
- TREE / VEGETATION CLEARING
- ROCK DITCH CHECK DAM (ESC-10)

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



HORIZONTAL
50' 0 50' 100'
SCALE IN FEET
SCALE: 1" = 50'

SEQUENCE OF CONSTRUCTION:

SITE IMPROVEMENTS CONSIST OF CLEARING VEGETATION AND GRADING OPERATIONS, ALONG WITH CONSTRUCTION OF A SEDIMENT BASIN. WORK SHALL BE CONDUCTED AS FOLLOWS:

1. CONSTRUCT CONSTRUCTION VEHICLE ENTRANCE AND INSTALL PERIMETER SILT FENCE AND INLET PROTECTION TO EXISTING INLETS SURROUNDING THE LIMITS OF DISTURBANCE.
2. CLEAR TREES AND VEGETATION WHERE PHASE 1 GRADING OPERATIONS WILL BE COMPLETED. ONLY REMOVE THOSE TREES NECESSARY TO ACCOMPLISH GRADING ACTIVITIES AS SHOWN ON PLAN. INSTALL ROCK DITCH CHECKS AS ACCESS TO DRAINAGE DITCHES BECOMES AVAILABLE.
3. INSTALL SILT FENCE AND/OR DIVERSION BERM(S) AT TOE OF SLOPE ALONG PERIMETER OF PHASE I AREA. PHASE II ACTIVITIES CANNOT BEGIN UNTIL PHASE I IS COMPLETED.
4. 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.
5. CLEAR REMAINING TREES AND VEGETATION WHERE PHASE II GRADING OPERATIONS WILL BE COMPLETED. ONLY REMOVE THOSE TREES NECESSARY TO ACCOMPLISH GRADING ACTIVITIES AS SHOWN ON PLAN.
6. AS TREE CLEARING AND GRADING OPERATIONS ARE COMPLETED, AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED WITH SEED AND COMPOST MULCH AND/OR STEEP SLOPE PROTECTION. SEE INTERMEDIATE EROSION CONTROL PLAN.

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DRAWING INFO.

DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

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2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

PRE-CLEARING EROSION CONTROL PLAN

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C301
15 OF 40

G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHTS - EROSION.dwg Layout: PRE-CLEARING EROSION CONTROL PLAN
Mar 11, 2021 - 2:43pm Plotted By: grote

GENERAL EROSION CONTROL NOTES:

1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READLY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOD, ROCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE COVER.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

EROSION CONTROL MAINTENANCE:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.

Mar 11, 2021 - 2:03pm Plotted By: gcate G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHTS - EROSION.dwg Layout: INTERMEDIATE EROSION CONTROL PLAN

KCAPWA REFERENCE DETAILS:

ESC-01 CONSTRUCTION ENTRANCE & CONCRETE WASHOUT
ESC-02 EROSION CONTROL BLANKET & TURF REINFORCEMENT MATS
ESC-03 SILT FENCE
ESC-05 TEMPORARY ROCK DIVERSION BERM
ESC-06 CURB INLET PROTECTION
ESC-07 AREA INLET PROTECTION
ESC-10 ROCK DITCH CHECK DAM
ESC-11 SEDIMENT BASIN
ESC-12 SEDIMENT BASIN DETAILS
ESC-14 OUTLET PROTECTION

FEMA FLOOD NOTE:

THE SUBJECT PROPERTY IS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO MAP ITEM NUMBER: 29095C0418G
EFFECTIVE DATE: 1/20/2017

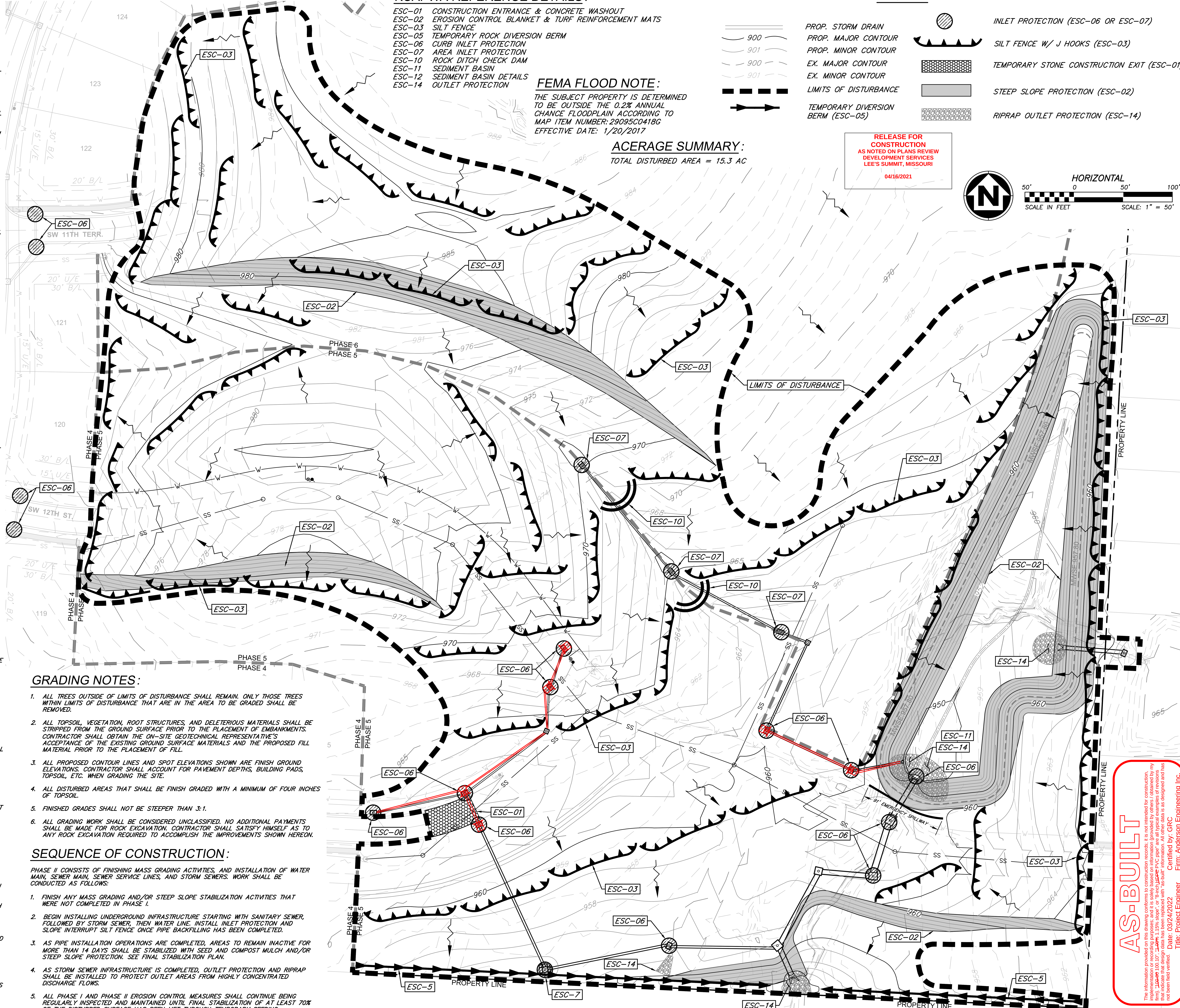
ACERAGE SUMMARY:

TOTAL DISTURBED AREA = 15.3 AC

LEGEND

PROP. STORM DRAIN
PROP. MAJOR CONTOUR
PROP. MINOR CONTOUR
EX. MAJOR CONTOUR
EX. MINOR CONTOUR
LIMITS OF DISTURBANCE
TEMPORARY DIVERSION BERM (ESC-05)
INLET PROTECTION (ESC-06 OR ESC-07)
SILT FENCE W/ J HOOKS (ESC-03)
TEMPORARY STONE CONSTRUCTION EXIT (ESC-01)
STEEP SLOPE PROTECTION (ESC-02)
RIPRAP OUTLET PROTECTION (ESC-14)

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



GRADING NOTES:

1. ALL TREES OUTSIDE OF LIMITS OF DISTURBANCE SHALL REMAIN. ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT ARE IN THE AREA TO BE GRADED SHALL BE REMOVED.
2. ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS. CONTRACTOR SHALL OBTAIN THE ON-SITE GEOTECHNICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL.
3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.
4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A MINIMUM OF FOUR INCHES OF TOPSOIL.
5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.
6. ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREON.

SEQUENCE OF CONSTRUCTION:

PHASE II CONSISTS OF FINISHING MASS GRADING ACTIVITIES, AND INSTALLATION OF WATER MAIN, SEWER MAIN, SEWER SERVICE LINES, AND STORM SEWERS. WORK SHALL BE CONDUCTED AS FOLLOWS:

1. FINISH ANY MASS GRADING AND/OR STEEP SLOPE STABILIZATION ACTIVITIES THAT WERE NOT COMPLETED IN PHASE I.
2. BEGIN INSTALLING UNDERGROUND INFRASTRUCTURE STARTING WITH SANITARY SEWER, FOLLOWED BY STORM SEWER, THEN WATER LINE. INSTALL INLET PROTECTION AND SLOPE INTERRUPT SILT FENCE ONCE PIPE BACKFILLING HAS BEEN COMPLETED.
3. AS PIPE INSTALLATION OPERATIONS ARE COMPLETED, AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED WITH SEED AND COMPOST MULCH AND/OR STEEP SLOPE PROTECTION. SEE FINAL STABILIZATION PLAN.
4. AS STORM SEWER INFRASTRUCTURE IS COMPLETED, OUTLET PROTECTION AND RIPRAP SHALL BE INSTALLED TO PROTECT OUTLET AREAS FROM HIGHLY CONCENTRATED DISCHARGE FLOWS.
5. ALL PHASE I AND PHASE II EROSION CONTROL MEASURES SHALL CONTINUE BEING REGULARLY INSPECTED AND MAINTAINED UNTIL FINAL STABILIZATION OF AT LEAST 70% OF THE DISTURBED SURFACE HAS BEEN MET THROUGH TEMPORARY SEEDING.

AS-BUILT

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information {provided by others / obtained by my firm}. "~~100.00~~ 100.10", "~~1.00%~~ 1.15% slope", or "8-inch ~~HDPE~~ PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.
Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - LC 62

NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
3.	REVISED PER CITY COMMENTS	GC	3/10/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

DRAWING INFO.	
DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

INTERMEDIATE EROSION CONTROL PLAN

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/21
PROFESSIONAL ENGINEER

SHEET NUMBER
C302

GENERAL EROSION CONTROL NOTES:

1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READLY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOD, ROCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE COVER.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

EROSION CONTROL MAINTENANCE:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.

KCAPWA REFERENCE DETAILS:

ESC-01	CONSTRUCTION ENTRANCE & CONCRETE WASHOUT
ESC-02	EROSION CONTROL BLANKET & TURF REINFORCEMENT MATS
ESC-03	SILT FENCE
ESC-05	TEMPORARY ROCK DIVERSION BERM
ESC-06	CURB INLET PROTECTION
ESC-07	AREA INLET PROTECTION
ESC-10	ROCK DITCH CHECK DAM
ESC-11	SEDIMENT BASIN
ESC-12	SEDIMENT BASIN DETAILS
ESC-14	OUTLET PROTECTION

FEMA FLOOD NOTE:

THE SUBJECT PROPERTY IS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO MAP ITEM NUMBER: 29095C0418G EFFECTIVE DATE: 1/20/2017

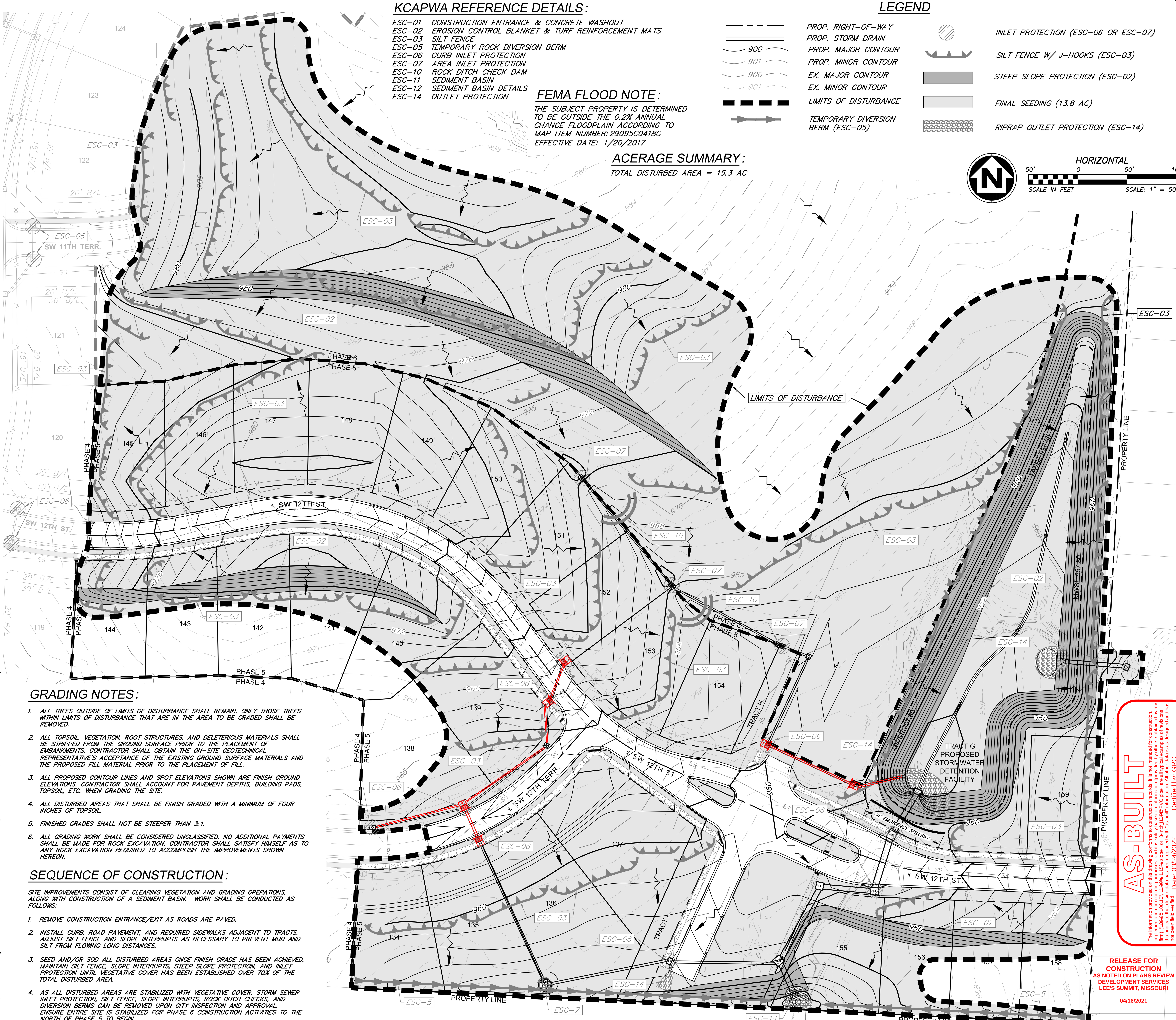
ACERAGE SUMMARY:

TOTAL DISTURBED AREA = 15.3 AC

LEGEND

- PROP. RIGHT-OF-WAY
- PROP. STORM DRAIN
- 900 PROP. MAJOR CONTOUR
- 901 PROP. MINOR CONTOUR
- 900 EX. MAJOR CONTOUR
- 901 EX. MINOR CONTOUR
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION BERM (ESC-05)
- INLET PROTECTION (ESC-06 OR ESC-07)
- SILT FENCE W/ J-HOOKS (ESC-03)
- STEEP SLOPE PROTECTION (ESC-02)
- FINAL SEEDING (13.8 AC)
- RIPRAP OUTLET PROTECTION (ESC-14)

HORIZONTAL 50' 0 50' 100'
SCALE IN FEET SCALE: 1" = 50'



GRADING NOTES:

1. ALL TREES OUTSIDE OF LIMITS OF DISTURBANCE SHALL REMAIN. ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT ARE IN THE AREA TO BE GRADED SHALL BE REMOVED.
2. ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS. CONTRACTOR SHALL OBTAIN THE ON-SITE GEOTECHNICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL.
3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.
4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A MINIMUM OF FOUR INCHES OF TOPSOIL.
5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.
6. ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREON.

SEQUENCE OF CONSTRUCTION:

SITE IMPROVEMENTS CONSIST OF CLEARING VEGETATION AND GRADING OPERATIONS, ALONG WITH CONSTRUCTION OF A SEDIMENT BASIN. WORK SHALL BE CONDUCTED AS FOLLOWS:

1. REMOVE CONSTRUCTION ENTRANCE/EXIT AS ROADS ARE PAVED.
2. INSTALL CURB, ROAD PAVEMENT, AND REQUIRED SIDEWALKS ADJACENT TO TRACTS. ADJUST SILT FENCE AND SLOPE INTERRUPTS AS NECESSARY TO PREVENT MUD AND SILT FROM FLOWING LONG DISTANCES.
3. SEED AND/OR SOD ALL DISTURBED AREAS ONCE FINISH GRADE HAS BEEN ACHIEVED. MAINTAIN SILT FENCE, SLOPE INTERRUPTS, STEEP SLOPE PROTECTION, AND INLET PROTECTION UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER 70% OF THE TOTAL DISTURBED AREA.
4. AS ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATIVE COVER, STORM SEWER INLET PROTECTION, SILT FENCE, SLOPE INTERRUPTS, ROCK DITCH CHECKS, AND DIVERSION BERMS CAN BE REMOVED UPON CITY INSPECTION AND APPROVAL. ENSURE ENTIRE SITE IS STABILIZED FOR PHASE 6 CONSTRUCTION ACTIVITIES TO THE NORTH OF PHASE 5 TO BEGIN.

ANDERSON ENGINEERING
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A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - LC 62

REVISIONS

NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
3.	REVISED PER CITY COMMENTS	GC	3/10/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

DRAWING INFO.

DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

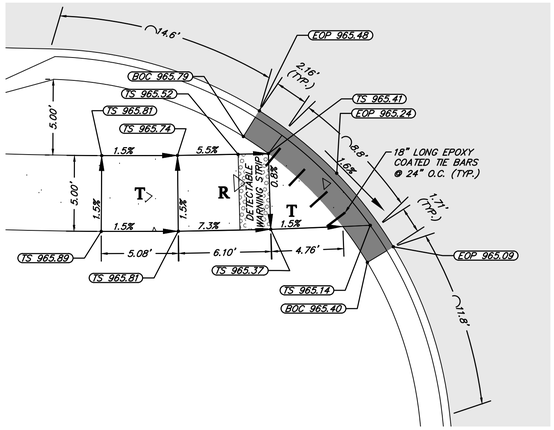
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

FINAL STABILIZATION EROSION CONTROL PLAN

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/21
PROFESSIONAL ENGINEER

SHEET NUMBER
C303



ADA RAMP #1

HORIZONTAL
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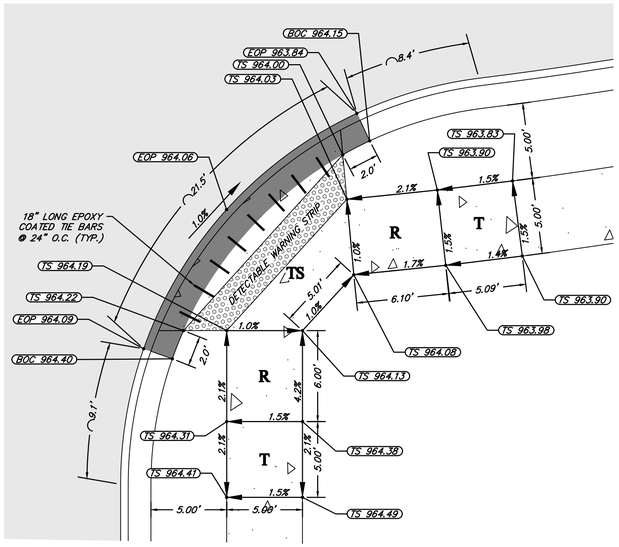
SCALE IN FEET SCALE: 1" = 5'



ADA RAMP #2

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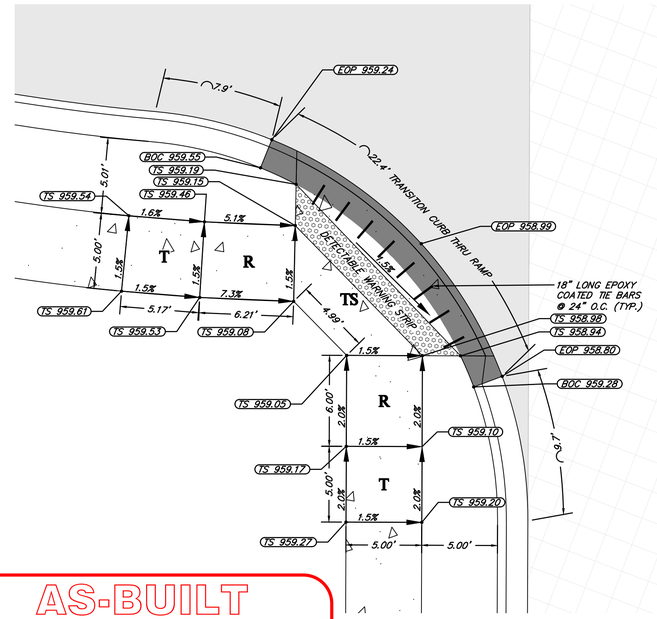
SCALE IN FEET SCALE: 1" = 5'



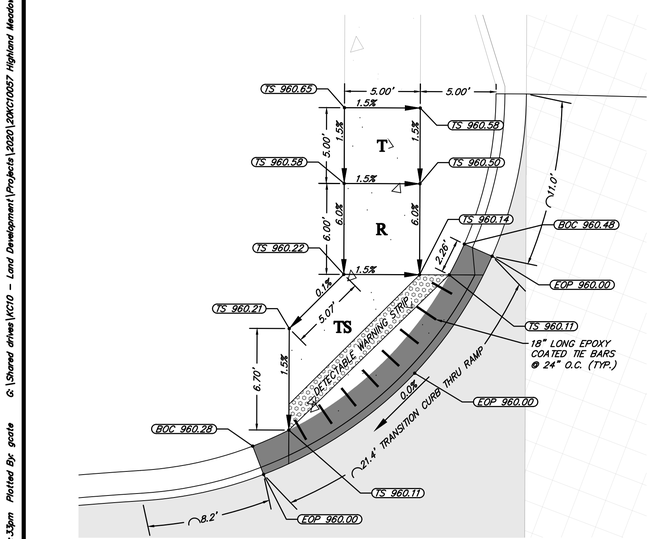
ADA RAMP #3

HORIZONTAL
5' 0 5' 10'
SCALE IN FEET SCALE: 1" = 5'

AS-BUILT

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm) ~~100.00~~ 100.10', ~~1.00%~~ 1.15% slope", or "9-inch ~~HDPE~~ PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 04/27/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.



ADA RAMP #4

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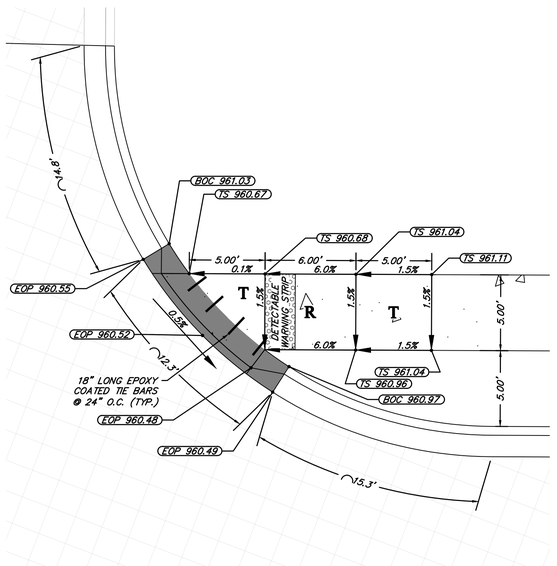
SCALE IN FEET SCALE: 1" = 5'



ADA RAMP #5

HORIZONTAL
5' 0 5' 10'
SCALE IN FEET SCALE: 1" = 5'

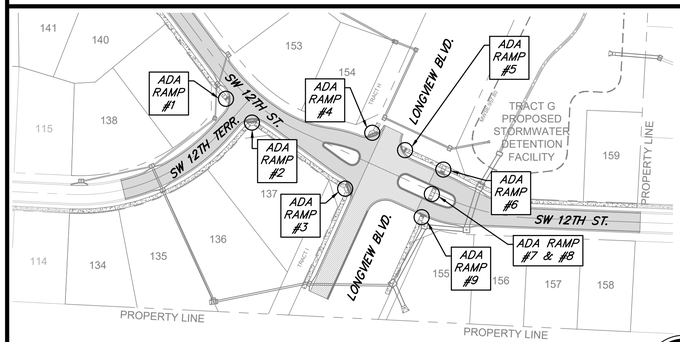
LEGEND

EOP = EDGE OF PAVEMENT
TS = TOP OF SIDEWALK
TYP = TYPICAL
T = TRANSITION
TS = TURNING SPACE
R = RAMP

DRY CURB & GUTTER
DETECTIBLE WARNING STRIP
TYPICAL 28' ROADWAY PAVEMENT SECTION
KCMMB4K CONCRETE SIDEWALK

GENERAL NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WITH AN OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED THE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%, ADA MAXIMUM CROSS SLOPE = 2.0%. *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%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
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 PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



LOCATION MAP

HORIZONTAL
100' 0 100' 200'
SCALE IN FEET SCALE: 1" = 100'

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NO.	DESCRIPTION	BY	DATE	DRAWN BY: GC
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2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO. PE-2012009232
				DATE: 12/2/2020
				ISSUED FOR: FOR REVIEW
6.	AS-BUILT DRAWINGS	GC	4/27/22	JOB NUMBER: 20KC10057

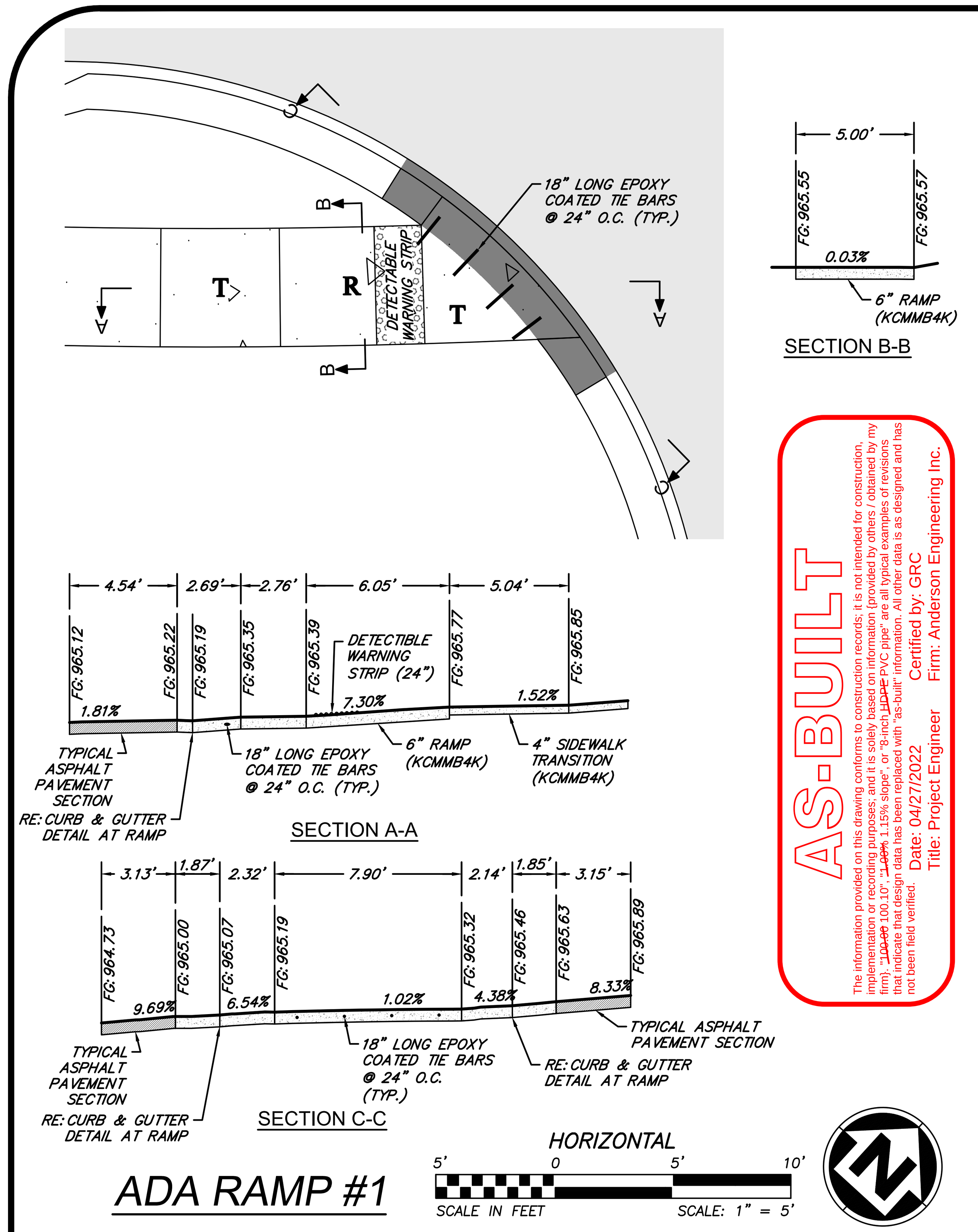
MO COA NO. 000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

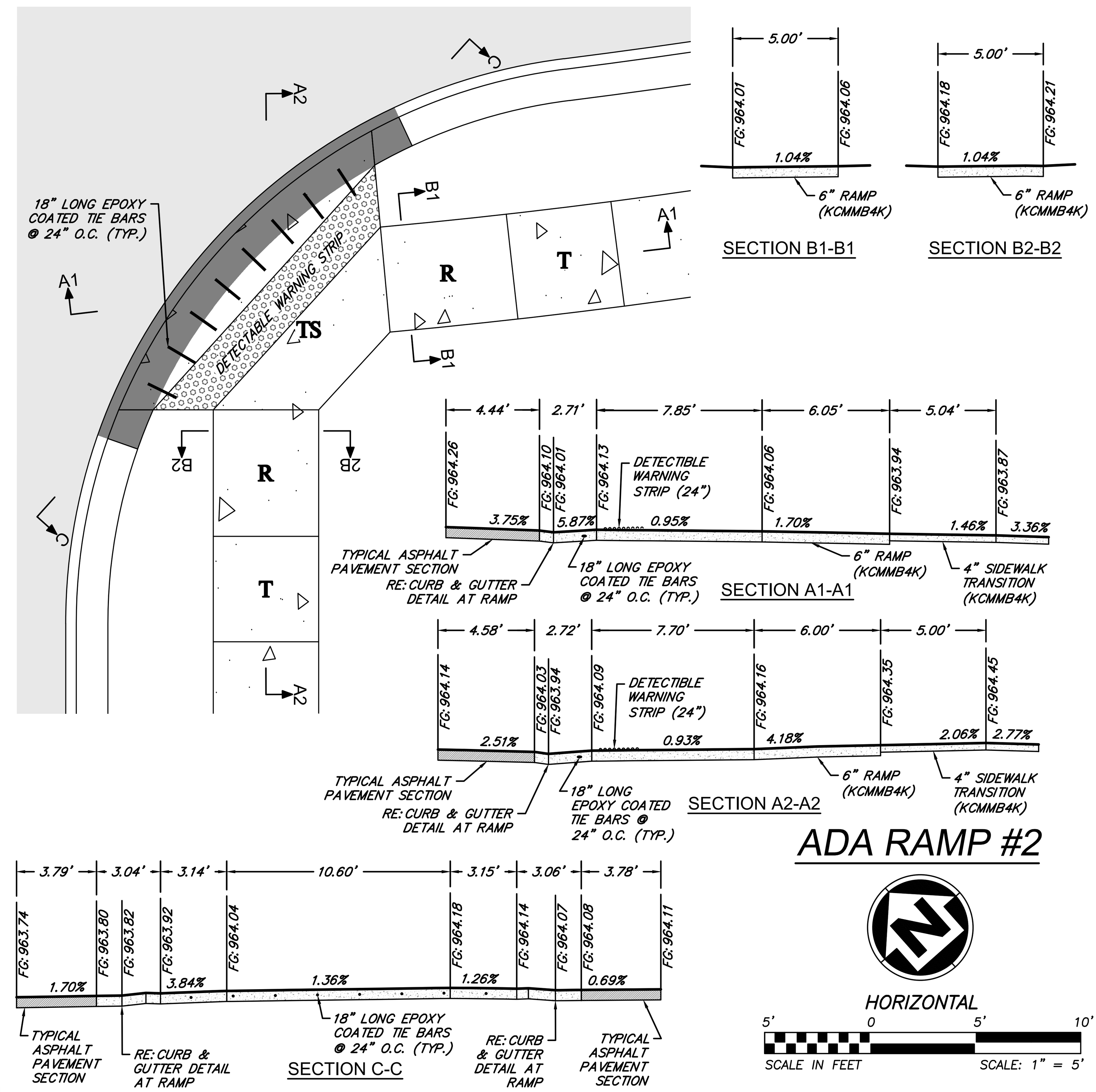
ADA RAMP PLAN

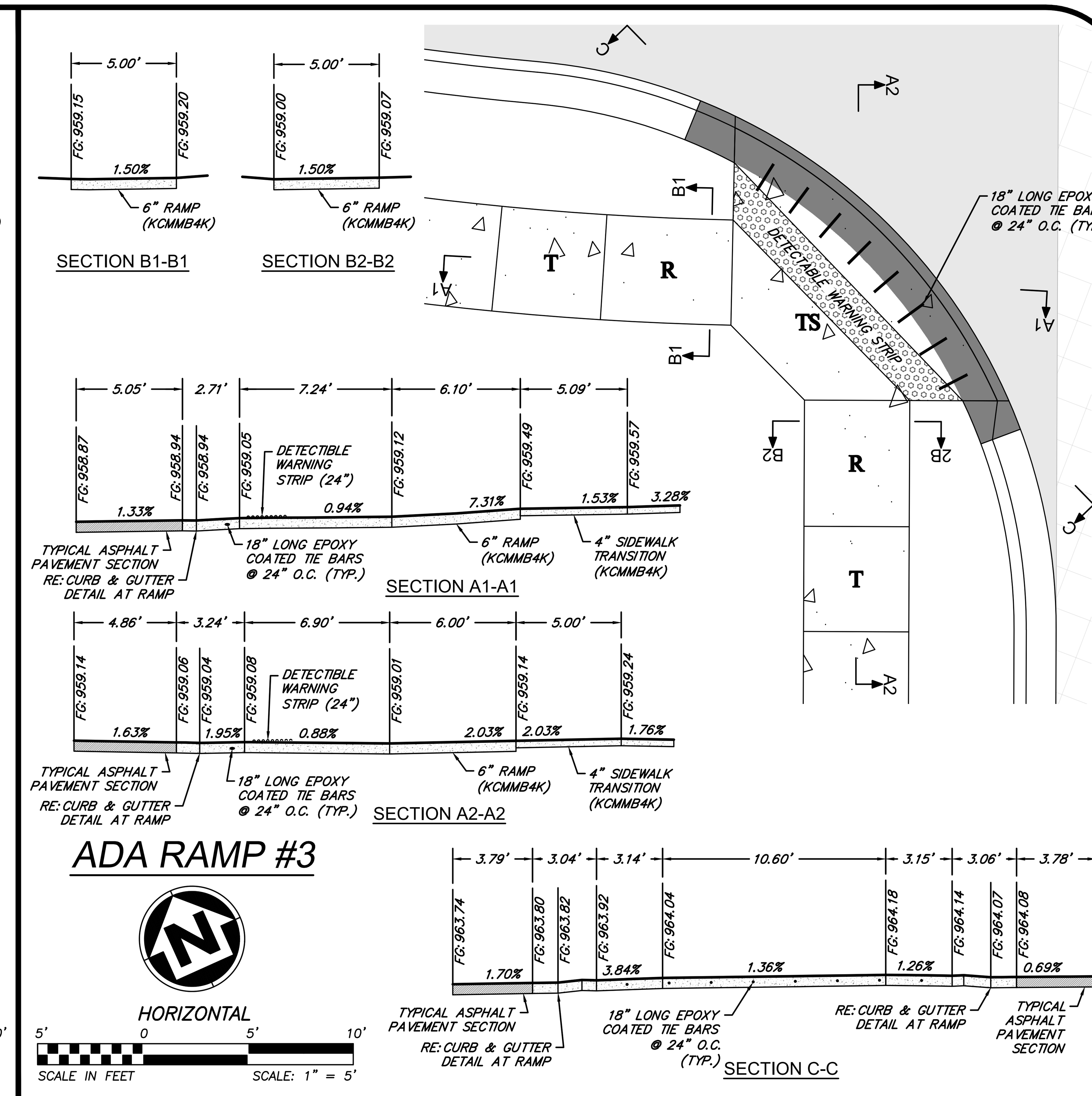
S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

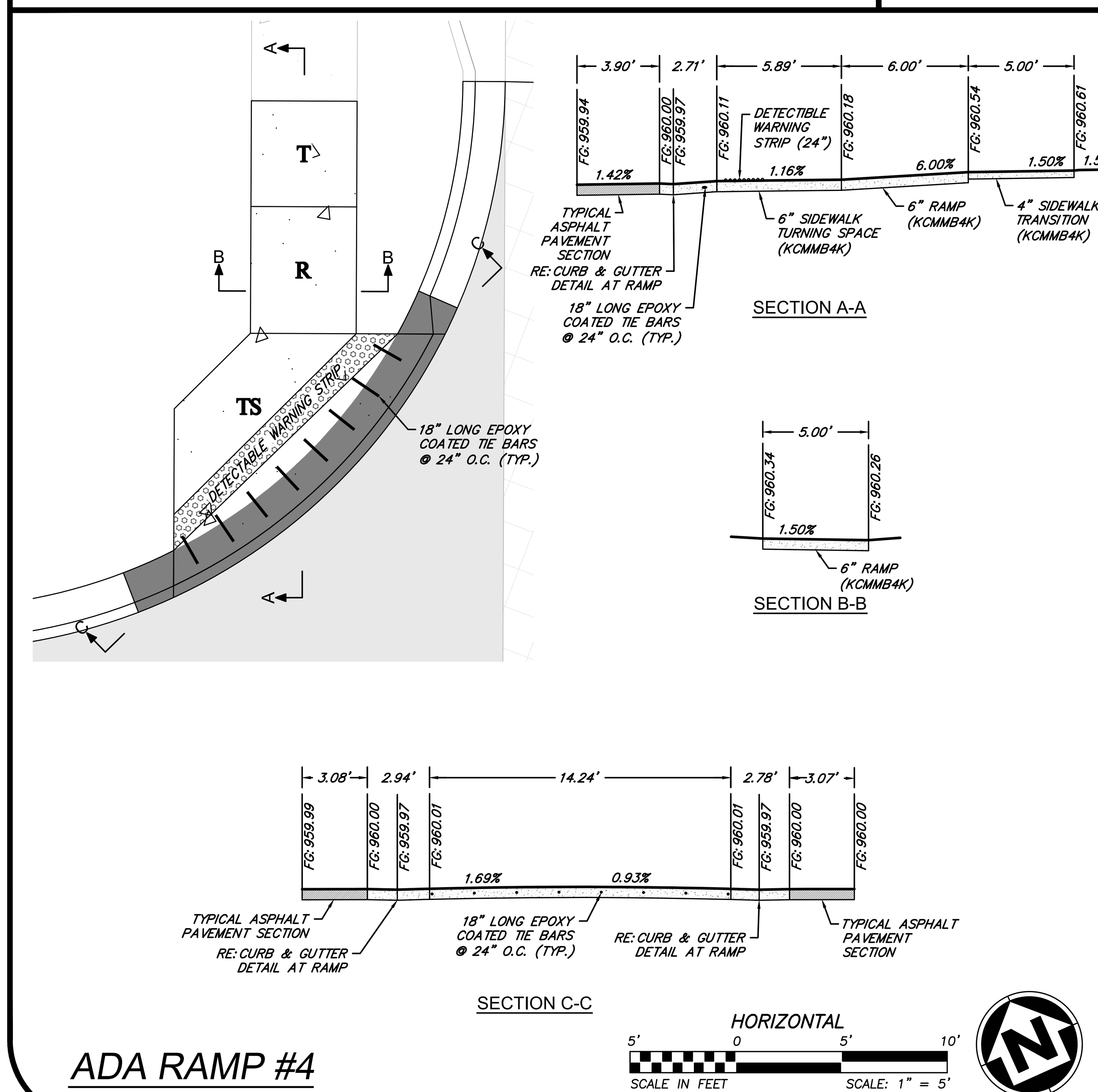
SHEET NUMBER
C401
18 OF 41

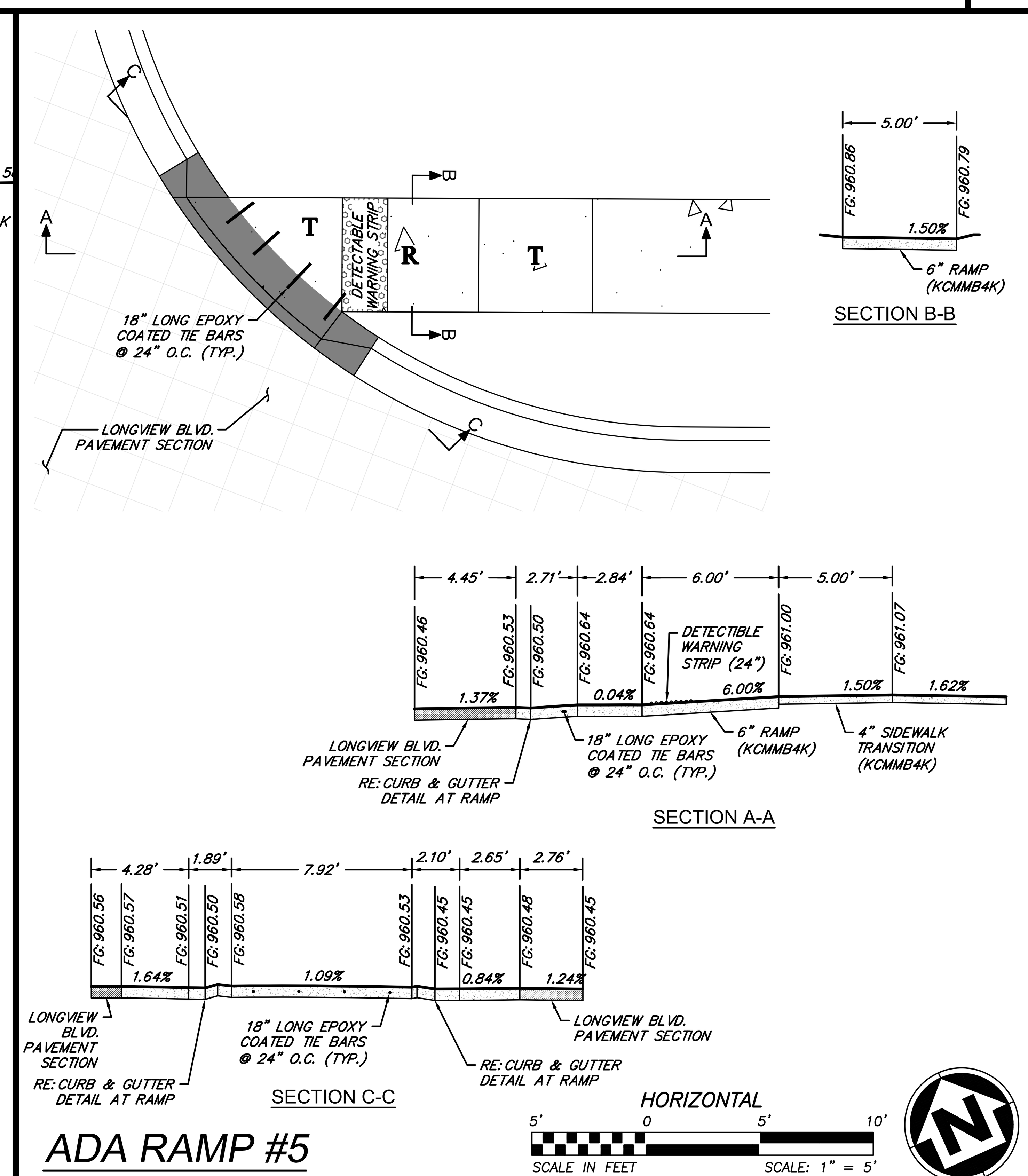


AS-BUILT
Certified by: GRC
Firm: Anderson Engineering Inc.
Date: 04/27/2022
Title: Project Engineer









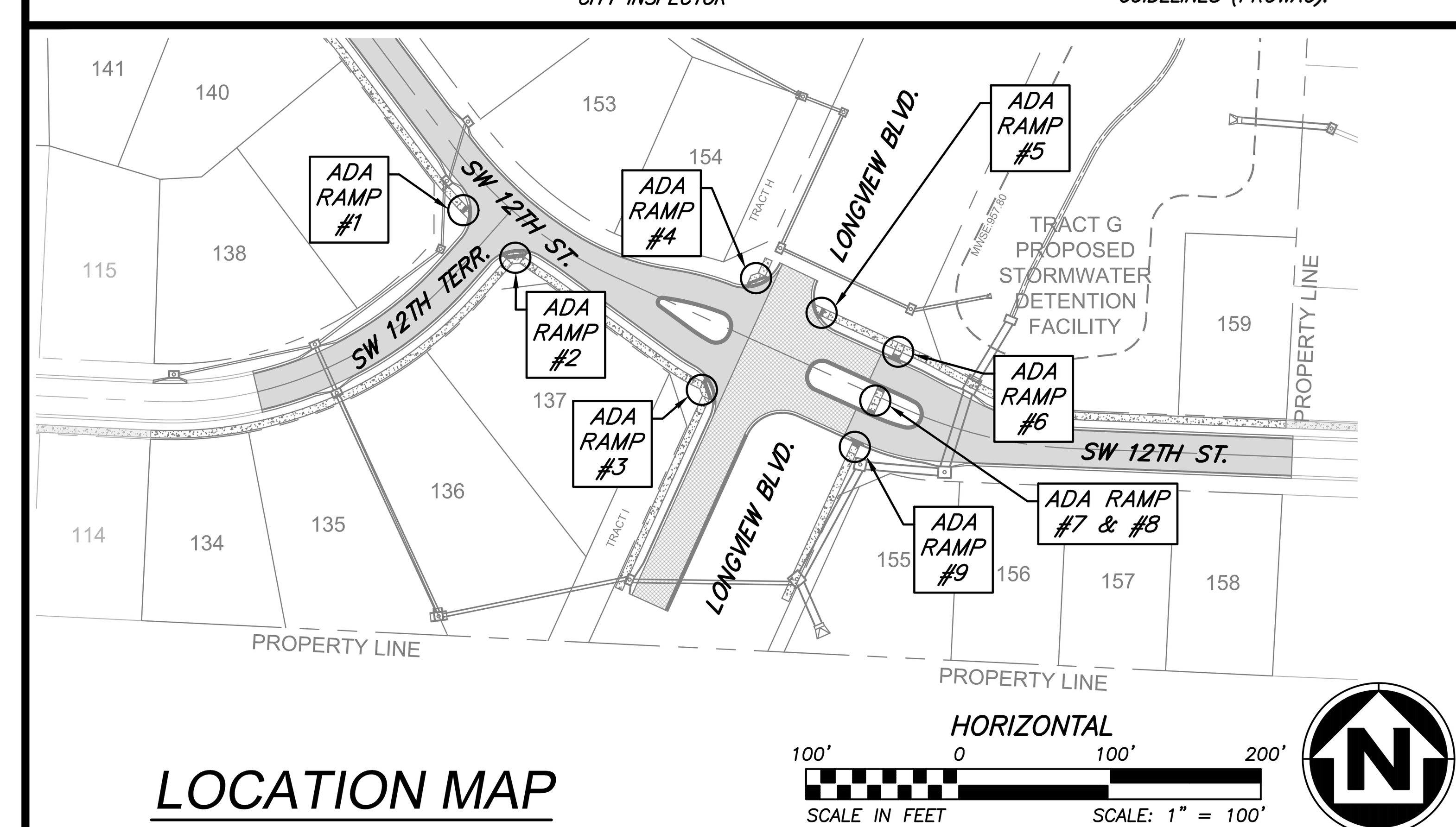
LEGEND

EOP = EDGE OF PAVEMENT
TS = TOP OF SIDEWALK
TYP = TYPICAL
T = TRANSITION
TS = TURNING SPACE
R = RAMP

DRY CURB & GUTTER
DETECTABLE WARNING STRIP
TYPICAL 28' ROADWAY PAVEMENT SECTION
KCMMB4K CONCRETE SIDEWALK

GENERAL NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WITH AN OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED THE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%, ADA MAXIMUM CROSS SLOPE = 2.0%. *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%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
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 PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



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2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

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CHECK BY:	ZM
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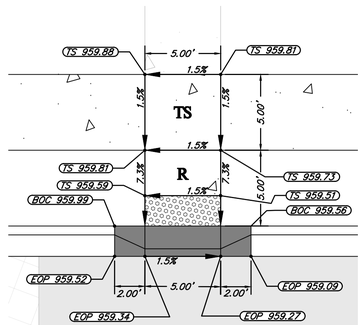
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

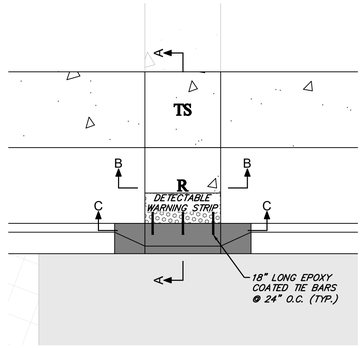
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

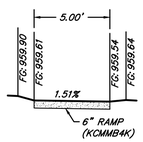
ADA RAMP CROSS SECTIONS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

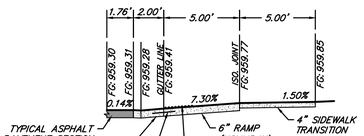
SHEET NUMBER
C402



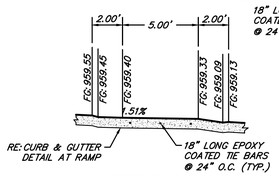




SECTION B-B



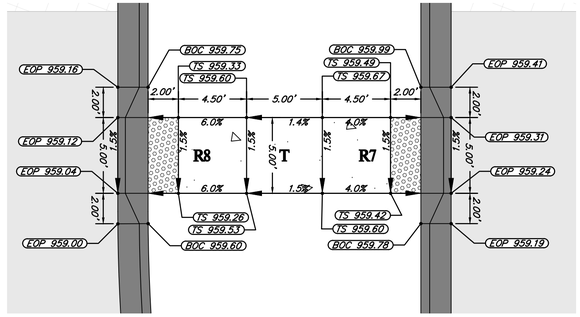
SECTION A-A

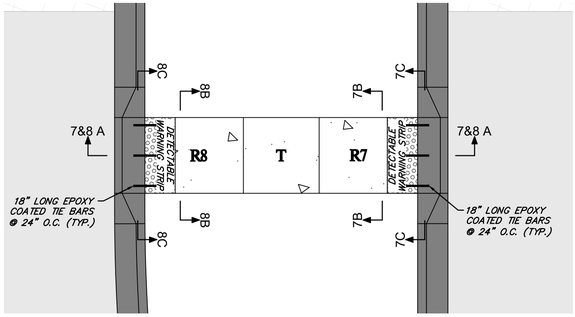


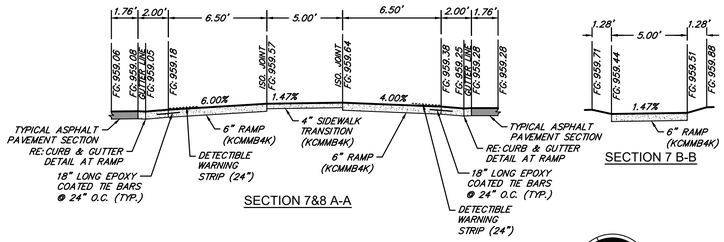
SECTION C-C

ADA RAMP #6

HORIZONTAL
5' 0 5' 10'
SCALE IN FEET
SCALE: 1" = 5'

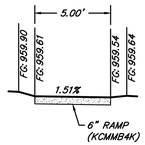




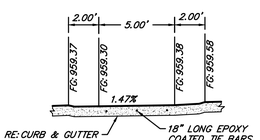


SECTION 7&8 A-A

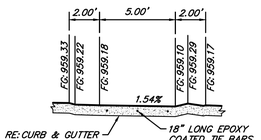
SECTION 7 B-B



SECTION 8 B-B



SECTION 7 C-C



SECTION 8 C-C

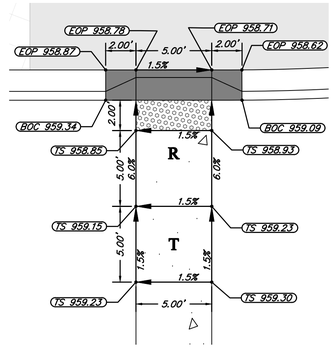
AS-BUILT

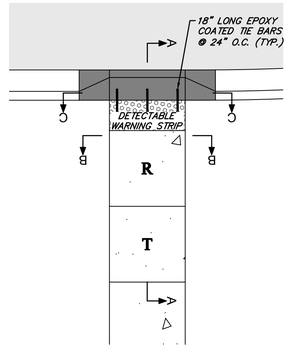
The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm); ~~3 inch~~ 100.10", ~~3 inch~~ 1.15% slope", or "8-inch ~~HDPE~~ PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

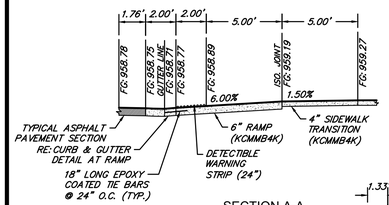
Date: 04/27/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

ADA RAMP #7 & #8

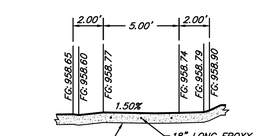
HORIZONTAL
5' 0 5' 10'
SCALE IN FEET
SCALE: 1" = 5'



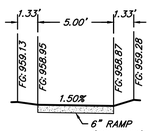




SECTION A-A



SECTION C-C



SECTION B-B

ADA RAMP #9

HORIZONTAL
5' 0 5' 10'
SCALE IN FEET
SCALE: 1" = 5'

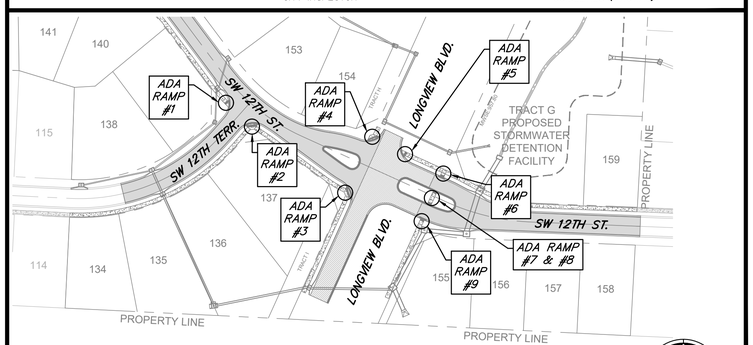
LEGEND

EOP = EDGE OF PAVEMENT
TS = TOP OF SIDEWALK
TYP = TYPICAL
T = TRANSITION
TS = TURNING SPACE
R = RAMP

DRY CURB & GUTTER
DETECTIBLE WARNING STRIP
TYPICAL 28' ROADWAY PAVEMENT SECTION
KCMMB4K CONCRETE SIDEWALK

GENERAL NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WITH AN OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED THE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED–USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33% ADA MAXIMUM CROSS SLOPE = 2.0% *ROADWAY EXCEPTION: WHERE EXISTING 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%.
7. TURNING SPACES SHALL BE 1.5% ±0.5% SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5" TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
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 PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



LOCATION MAP

HORIZONTAL
100' 0 100' 200'
SCALE IN FEET
SCALE: 1" = 100'

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CHECK BY: ZM
LICENSE NO. PE-2012009232
DATE: 12/2/2020
ISSUED FOR: FOR REVIEW
JOB NUMBER: 20KC10057
MO COA NO. 000062

REVISIONS

NO.	DESCRIPTION	BY	DATE
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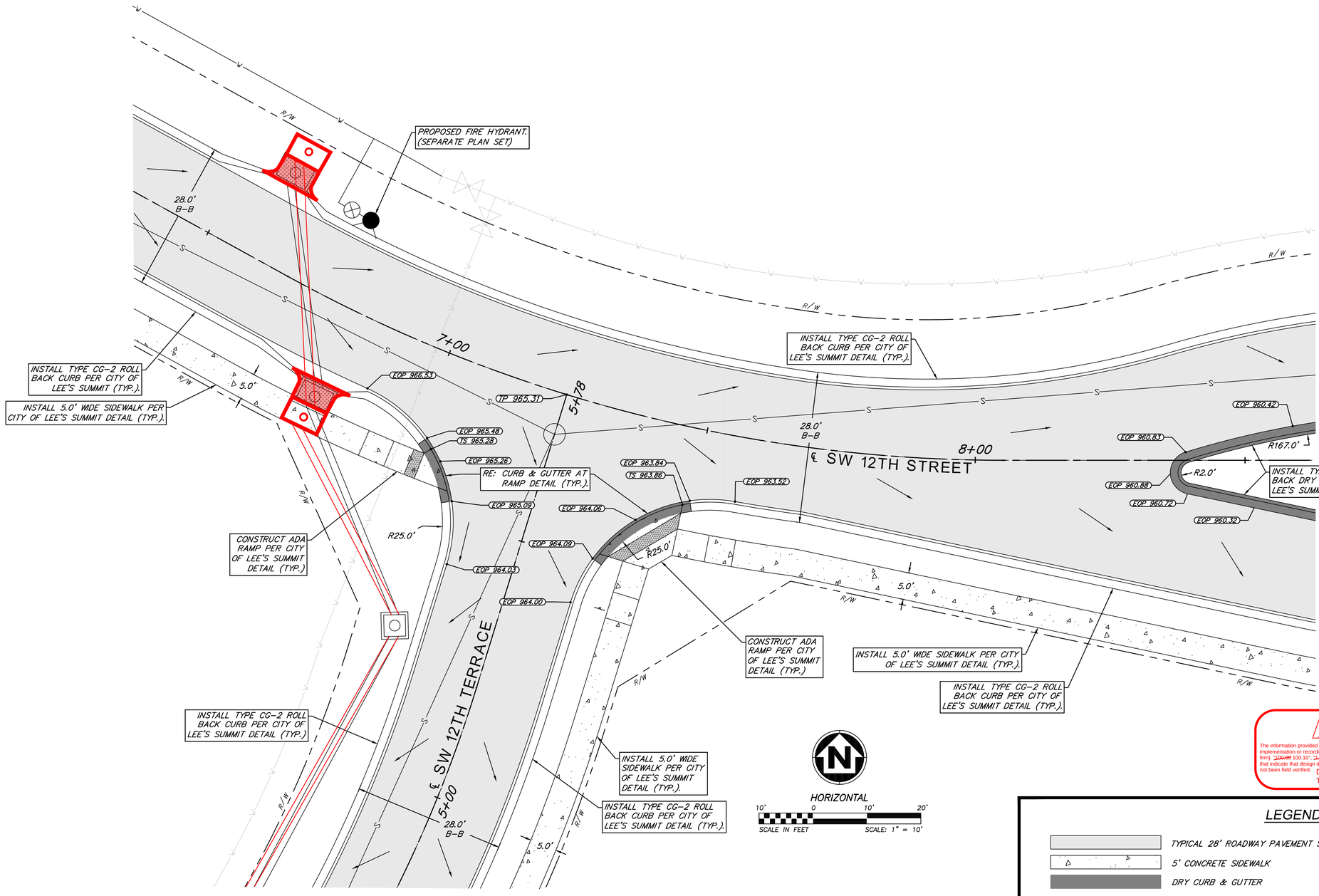
2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

ADA RAMPS #6 - #9

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C403
20 OF 41



INTERSECTION OF SW 12TH STREET & SW 12TH TERRACE

AS-BUILT

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm). "~~Slope~~ 100.10", "~~Slope~~ 1.15% slope", or "8-inch ~~PIPE~~ PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 04/27/2022 Certified by: GRC

Title: Project Engineer Firm: Anderson Engineering Inc.

LEGEND

- TYPICAL 28' ROADWAY PAVEMENT SECTION
- 5' CONCRETE SIDEWALK
- DRY CURB & GUTTER
- RIGHT-OF-WAY
- ROAD CENTERLINE
- DRAINAGE PATH

EOP = EDGE OF PAVEMENT
TP = TOP OF PAVEMENT
TS = TOP OF SIDEWALK
B-B = BACK OF CURB TO BACK OF CURB
TYP = TYPICAL

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

INTERSECTION DETAILS

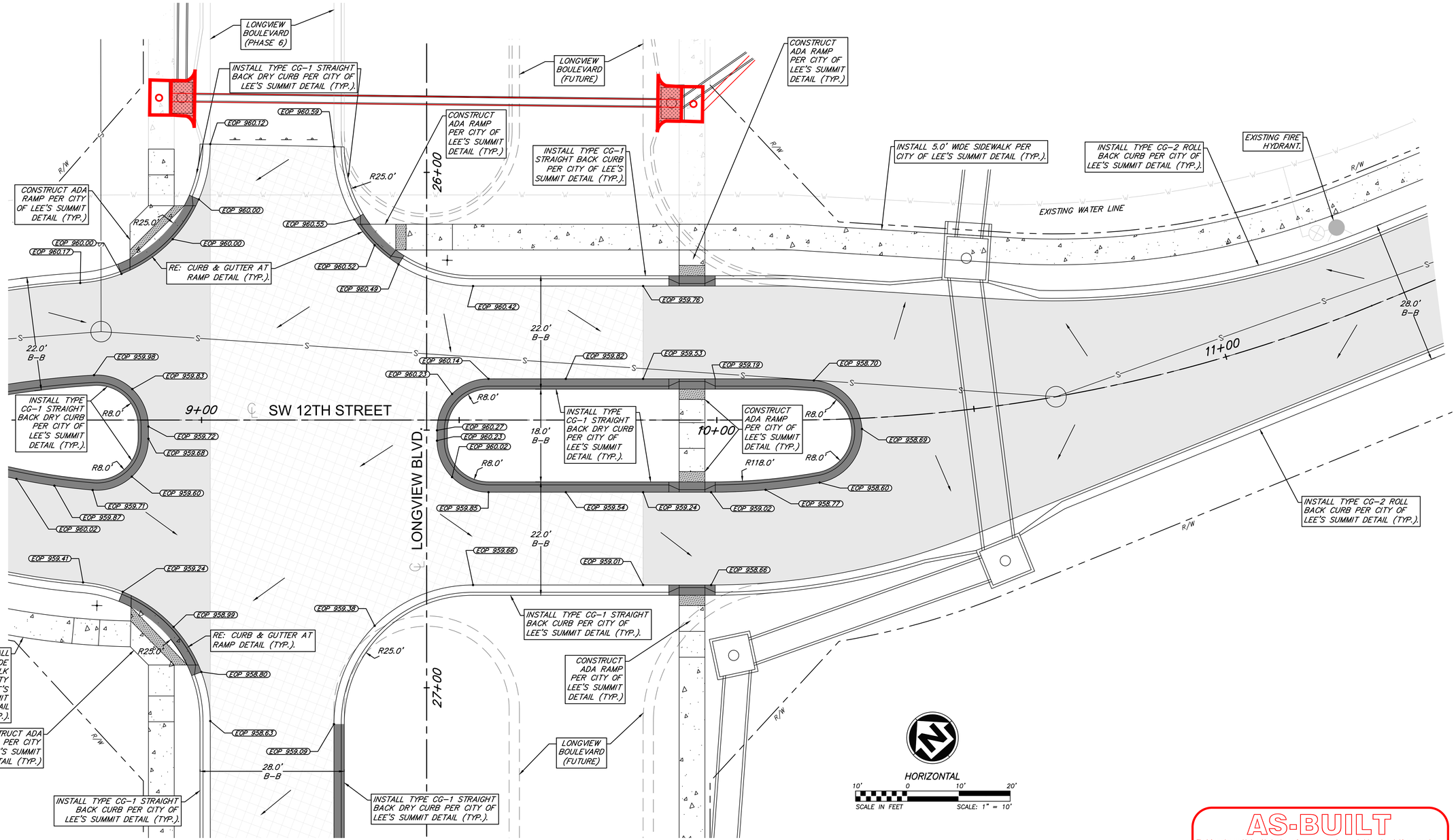
S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C404
21 OF 41

LEGEND

- TYPICAL 28' ROADWAY PAVEMENT SECTION
- TYPICAL LONGVIEW BLVD. PAVEMENT SECTION
- 5' CONCRETE SIDEWALK
- DRY CURB & GUTTER
- RIGHT-OF-WAY
- ROAD CENTERLINE
- DRAINAGE PATH

EOP = EDGE OF PAVEMENT
TP = TOP OF PAVEMENT
TS = TOP OF SIDEWALK
B-B = BACK OF CURB TO BACK OF CURB
TYP = TYPICAL



INTERSECTION OF SW 12TH STREET & LONGVIEW BOULEVARD

AS-BUILT

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Date: 04/27/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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6.	AS-BUILT DRAWINGS	GC	4/27/22

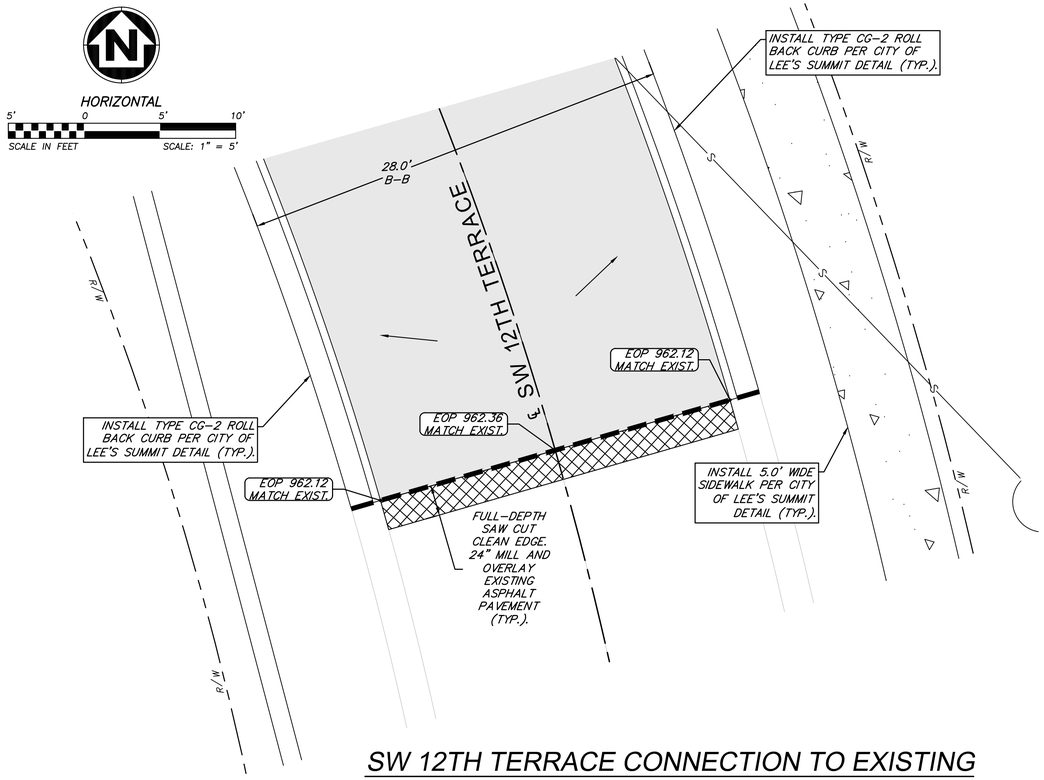
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

INTERSECTION DETAILS (2)

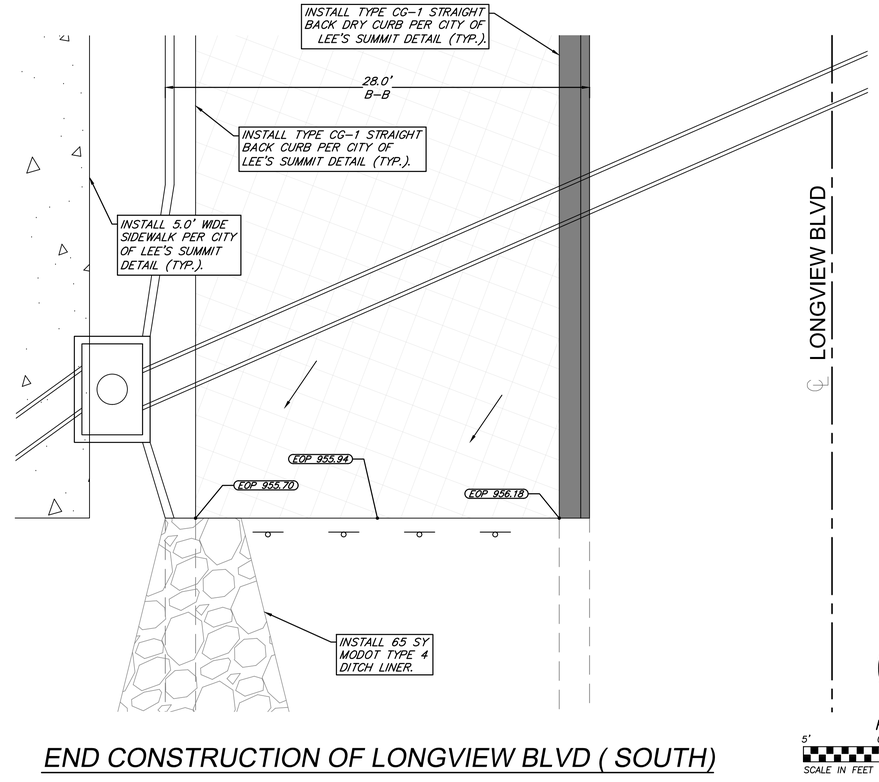
S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C405
22 OF 41

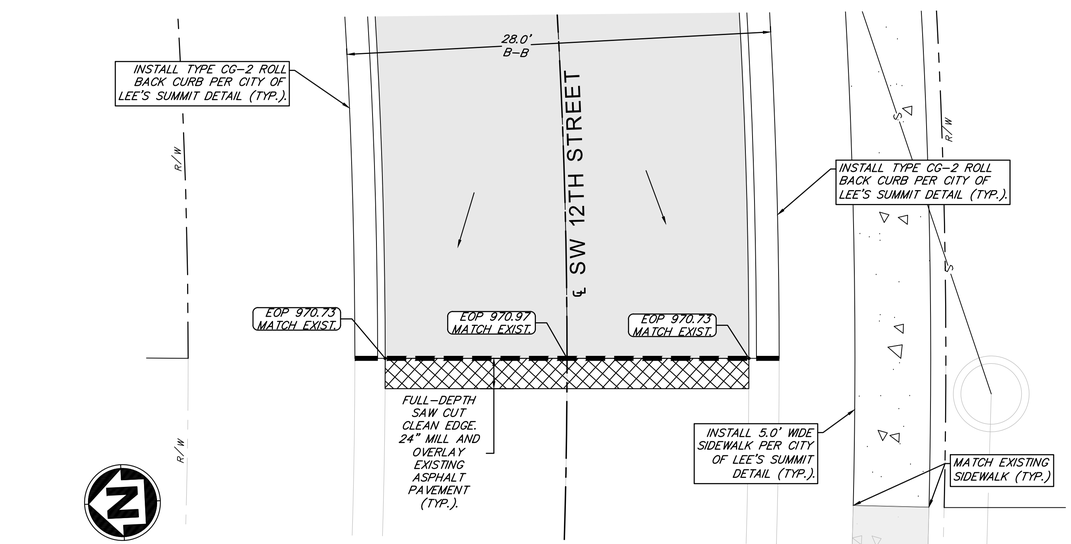
Apr 26, 2022 - 5:34pm Plotted By: gcote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHT - INTERSECTION DETAILS.dwg Layout: INTERSECTION DETAILS (2)



SW 12TH TERRACE CONNECTION TO EXISTING



END CONSTRUCTION OF LONGVIEW BLVD (SOUTH)

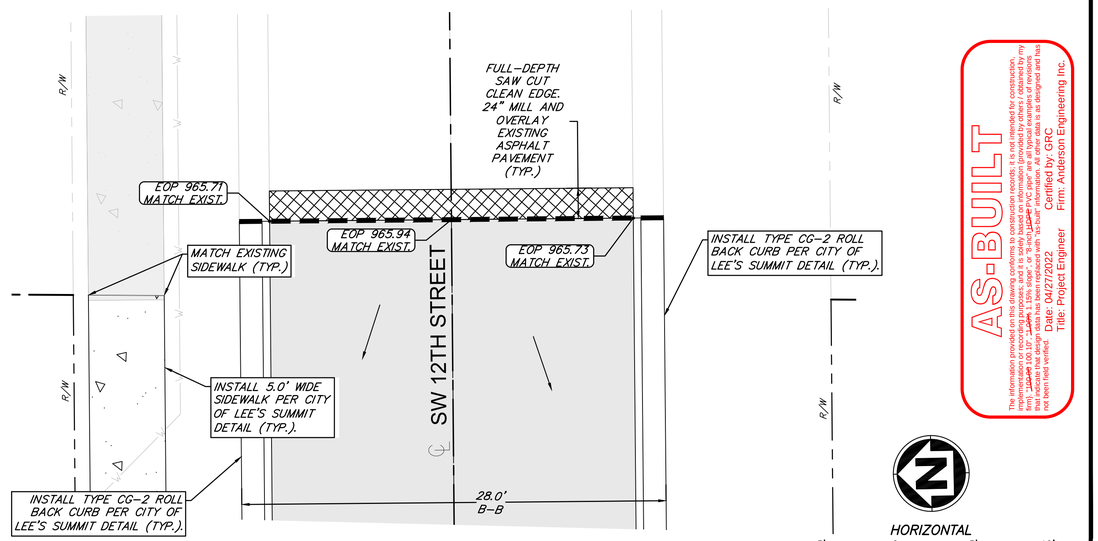


SW 12TH STREET CONNECTION TO EXISTING (WEST)

LEGEND

- TYPICAL 28' ROADWAY PAVEMENT SECTION
- TYPICAL LONGVIEW BLVD. PAVEMENT SECTION
- 5' CONCRETE SIDEWALK
- 24" MILL AND OVERLAY EXISTING ASPHALT
- DRY CURB & GUTTER
- FULL DEPTH SAWCUT
- RIGHT-OF-WAY
- ROAD CENTERLINE
- DRAINAGE PATH

EOP = EDGE OF PAVEMENT
TP = TOP OF PAVEMENT
B-B = BACK OF CURB TO BACK OF CURB
TYP = TYPICAL



SW 12TH STREET CONNECTION TO EXISTING (EAST)

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DRAWING INFO.

DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

REVISIONS

NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

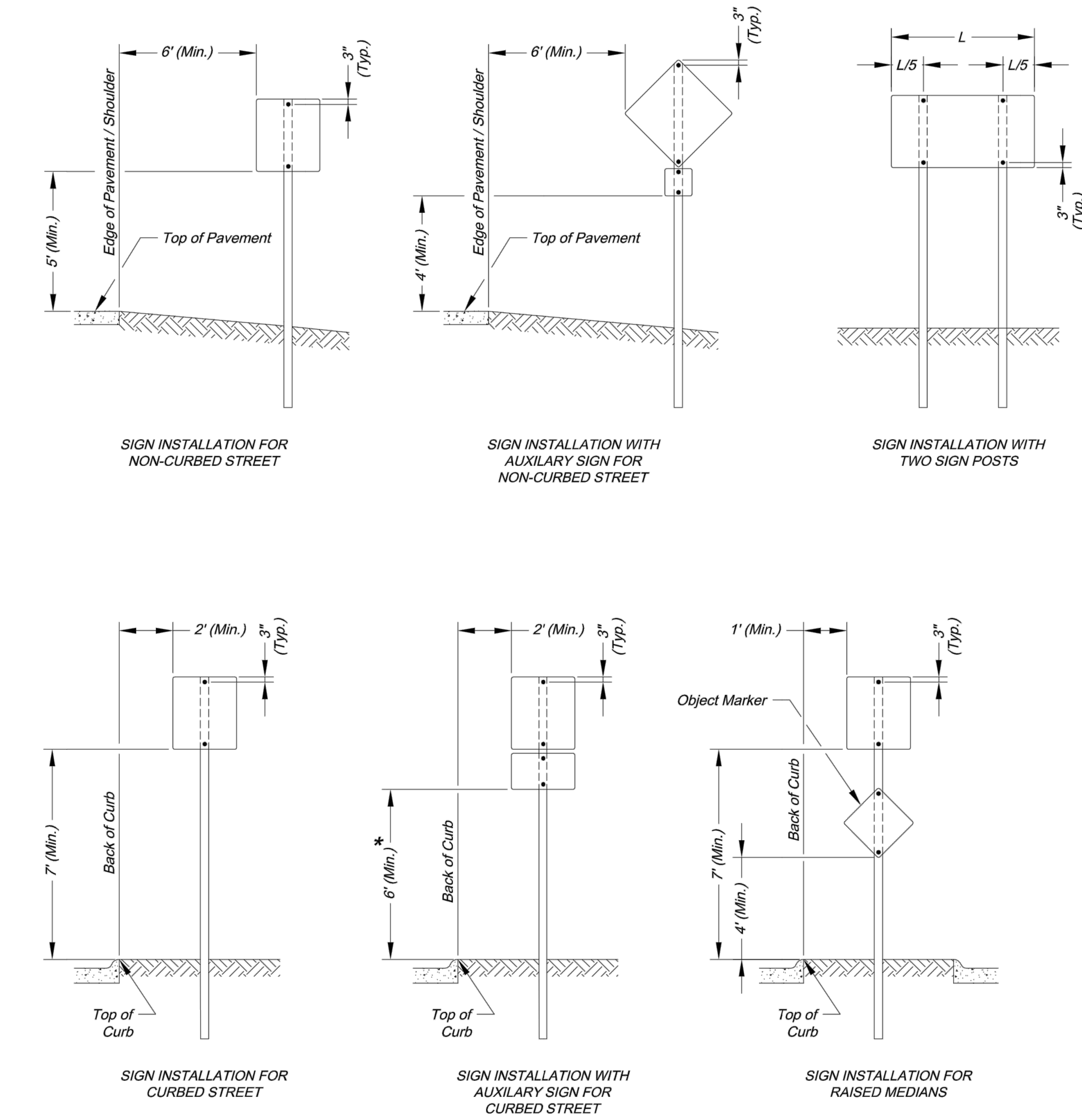
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

MATCH EXISTING PAVEMENT DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C406
23 OF 41

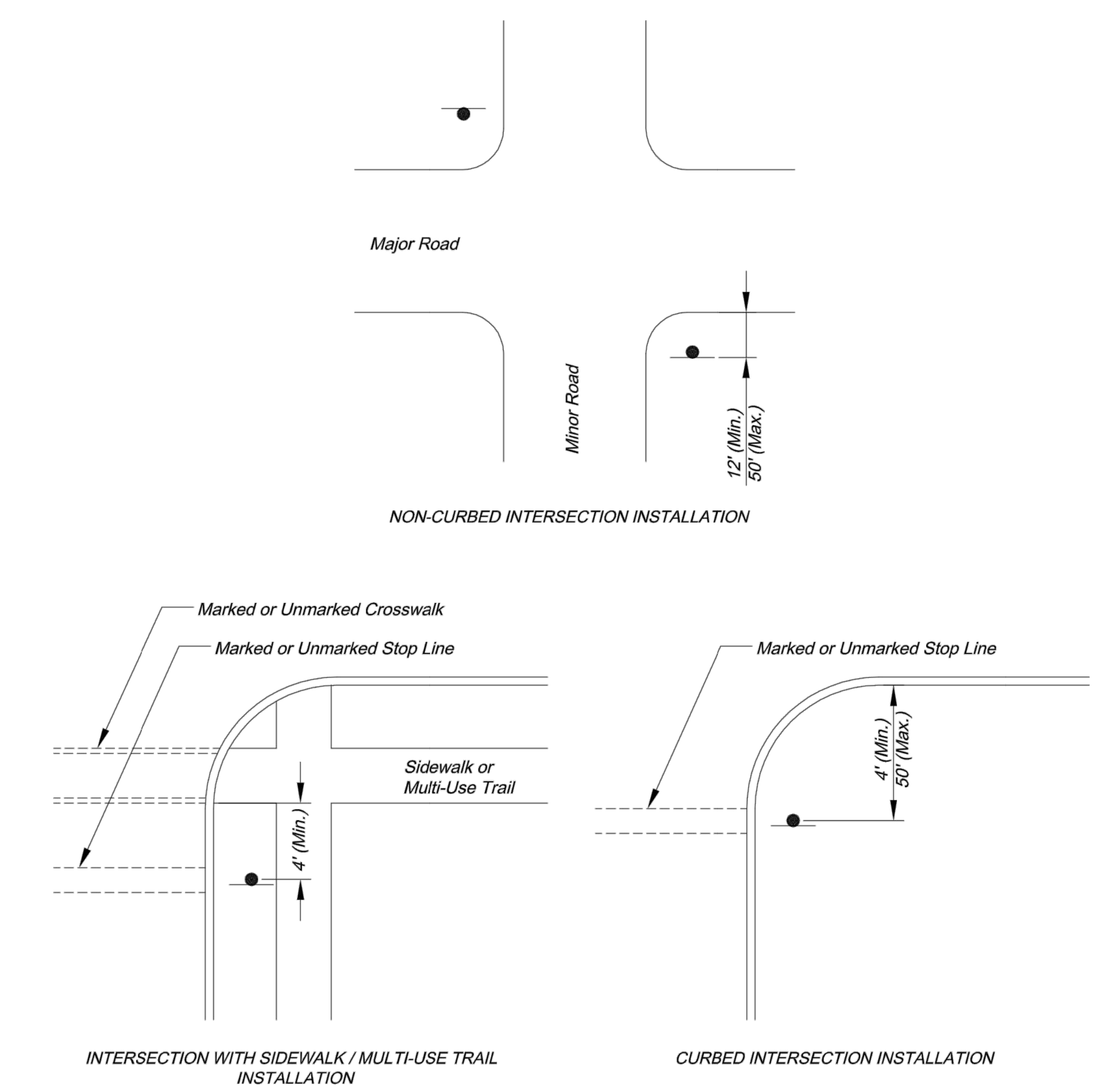
Apr 28, 2022 - 5:34pm Plotted By: gcote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SH7 - INTERSECTION DETAILS.dwg Layout: MATCH EXISTING PAVEMENT DETAILS



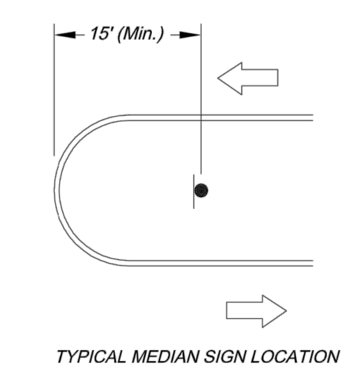
SIGN MOUNTING DETAILS

* The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.

NOTE:
1. Generally, the sign mounting height should not be more than 1' greater than the minimum mounting height.

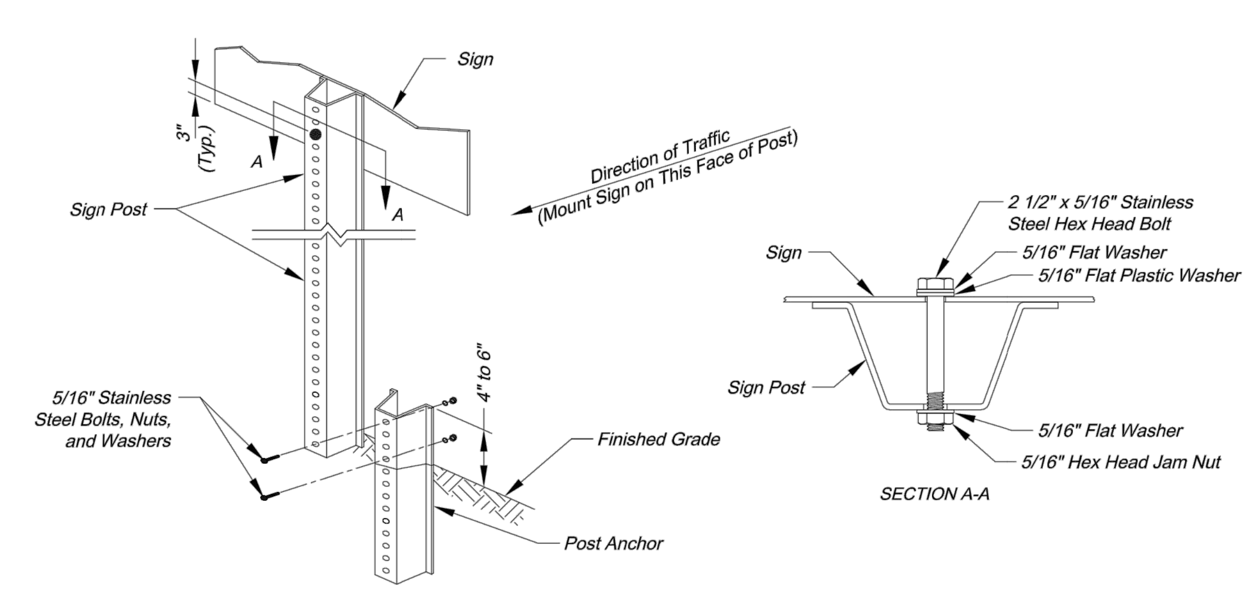


CONTROL SIGN LOCATION



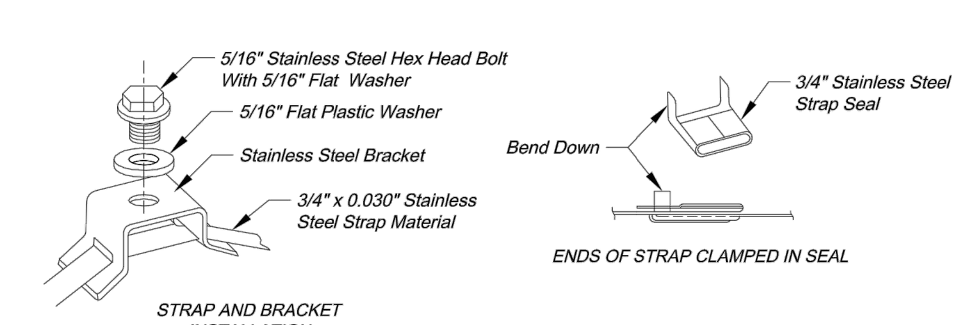
MEDIAN SIGN LOCATION

NOTES:
1. A 4" P.V.C. sleeve shall be installed in new concrete medians at each location where a sign is to be installed.
2. For existing concrete medians, a 4" hole shall be cored into the concrete.



U-STEEL POST DETAILS

U-STEEL POST NOTES:
1. Splice shall be positioned entirely between finished grade line and 18" above finished grade line. Only one splice will be allowed per post.
2. U-Steel post shall be 3 lb./ft., galvanized according to ASTM A123.
3. U-Steel post can be used for installation of signs with an area of less than 2.5 square feet.
4. All posts shall be embedded a minimum of 3 feet.

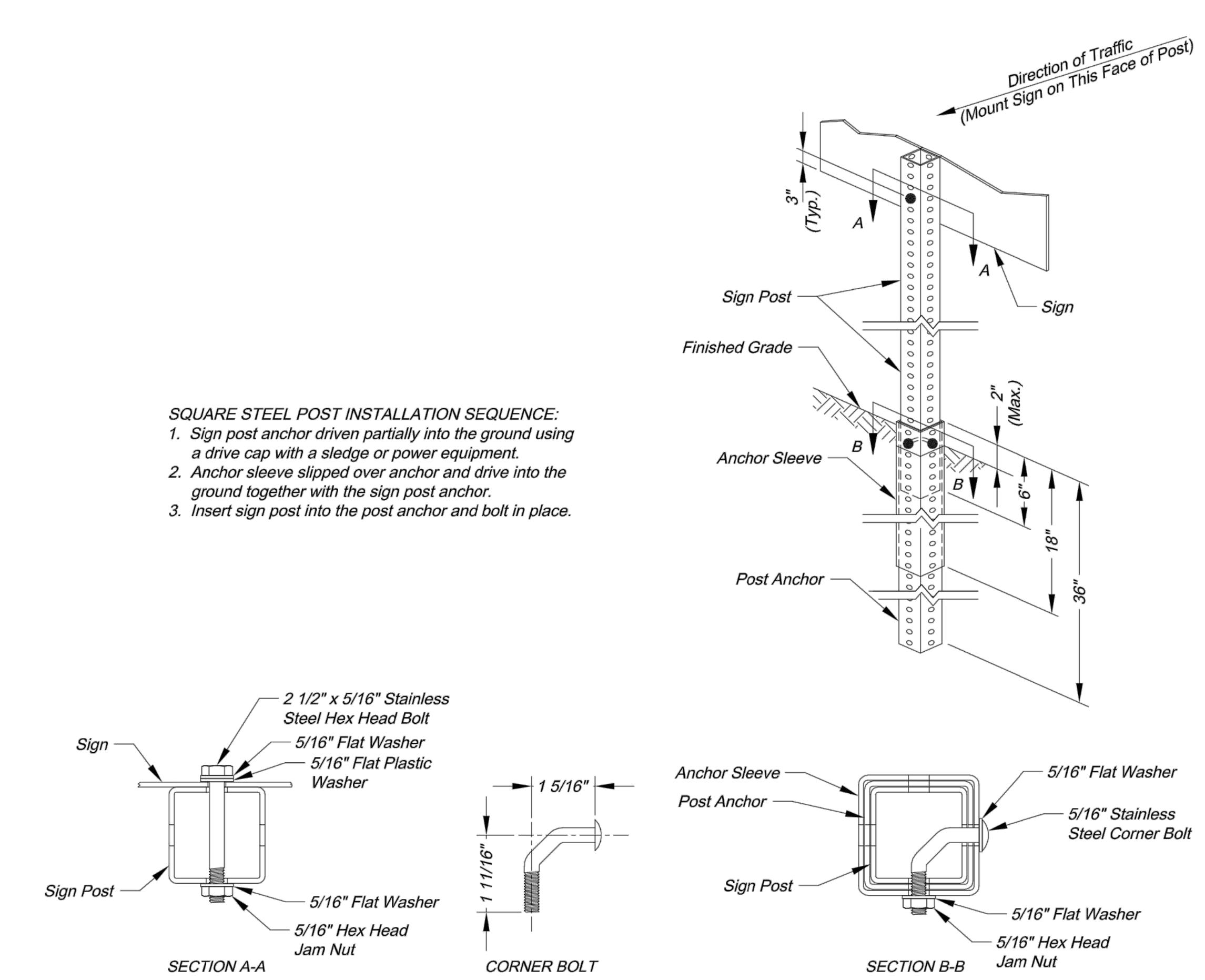


STRAP TYPE SIGN SUPPORT DETAILS

METAL POLE SIGN MOUNTING NOTES:
1. Signs on metal poles shall be attached with two brackets and stainless steel bands.
2. Holes in sign for attachment to the mounting brackets shall be offset a minimum of 2 inches from the edge of the sign.
3. Holes in sign shall be located such that the sign is level.
4. All strap, bracket, and seal materials should be Type 201 stainless steel.

PERMANENT SIGNING GENERAL NOTES:
1. All signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
2. The Contractor is responsible for avoiding any and all utilities when installing sign posts, whether the utility is indicated on the plans or not.
3. All workmanship and materials shall be subject to the inspection and approval of the Public Works Department of the City of Lee's Summit.
4. The Contractor shall stake the location of all sign posts to be installed. The City Inspector shall inspect the staking prior to installation. Minor relocation to avoid conflicts may be allowed with the approval of the City Traffic Engineer or designee.
5. Signs shown to be installed on the side of metal poles shall be mounted with stainless steel straps or wing brackets as detailed. No signs are to be installed on wood poles. See Traffic Signal Standard Drawings for the installation of signs on mast arms.
6. All post mounted signs shall be installed with breakaway anchors according to the Standard Drawings.
7. All existing signs will be used in place during construction and protected from damage unless otherwise indicated in the plans. If the Contractor damages any existing sign or posts during construction, the Contractor will be required to replace the damaged materials with new signs or posts of the same type and size at the Contractor's expense. The Contractor shall be responsible for removing and storing any signs that are to be reinstalled on the project. All equipment shall be reinstalled in good condition.
8. Existing permanent signs and posts removed by the Contractor for construction purposes which are not to be reinstalled shall be delivered to the City's Public Works Maintenance Facility (1971 SE Hamblen Road). The Contractor shall be responsible for removing and storing equipment in good condition and is fully responsible for the equipment until it is delivered.
9. All Stop, Yield, or street name signs shall be maintained in a conspicuous location for the driving public. All Stop and Yield signs removed for construction purposes can be temporarily erected in reflectorized drums (no less than 7 feet above the pavement surface) until they can be reinstalled. Any temporary Stop or Yield sign installation to be left in place overnight will require prior approval from the City Inspector.

SQUARE STEEL POST INSTALLATION SEQUENCE:
1. Sign post anchor driven partially into the ground using a drive cap with a sledge or power equipment.
2. Anchor sleeve slipped over anchor and drive into the ground together with the sign post anchor.
3. Insert sign post into the post anchor and bolt in place.



SQUARE STEEL POST DETAILS

SQUARE STEEL POST NOTES:
1. Square steel sign posts and break-away anchor shall consist of the following materials:
   - Sign Post - 14 Ga. 2" x 2" Square Steel Post
   - Post Anchor - 12 Ga. 2 1/4" x 2 1/4" x 36" Square Steel Post
   - Anchor Sleeve - 12 Ga. 2 1/2" x 2 1/2" x 18" Square Steel Post
2. 14 Gauge posts must meet a certified minimum yield strength of 60,000 psi.
3. In all installations the first hole above the finished grade line on the sign post, anchor, and anchor sleeve must be in line for the insertion of the corner bolt.
4. The maximum area for one sign post is 9.0 square feet. A sign or combination of signs with an area greater than 9.0 square feet will require two posts. Also, signs with a width greater than 36" (not including 36" x 36" diamond shaped signs) will require two posts.

CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

SIGN MOUNTING DETAILS — STANDARD DRAWING SN-1
Drawn By: AS | Checked By: JW | Date: 08/26/2009
1 OF 3 — 1

SIGN POST DETAILS — STANDARD DRAWING SN-2
Drawn By: AS | Checked By: JW | Date: 08/26/2009
2 OF 3 — 2

AS-BUILT
The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm). "100.00 100.10", "1.00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.
Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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

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DRAWING INFO.

DRAWN BY:	GC
CHECK BY:	ZM
LICENSE NO.	PE-2012009232
DATE:	12/2/2020
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JOB NUMBER:	20KC10057
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REVISIONS

NO.	DESCRIPTION	BY	DATE
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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

SIGN POST & MOUNTING DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI — ZACH A. MYERS — NUMBER PE-2012009232 — PROFESSIONAL ENGINEER — 3/10/21

SHEET NUMBER
C407

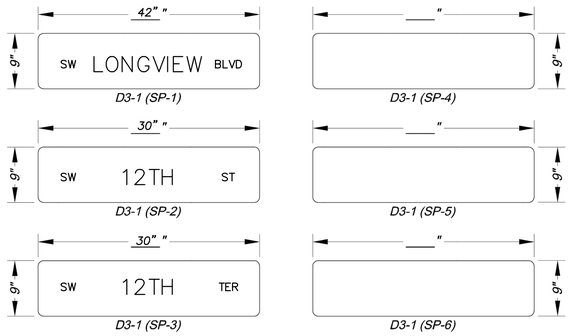
STANDARD ABBREVIATION LISTS

Named Streets	
Avenue	AVE
Boulevard	BLVD
Circle	CIR
Creek	CR
Court	CT
Crossing	XING
Drive	DR
Highway	HWY
Lane	LN
Parkway	PKWY
Place	PL
Road	RD
Street	ST
Terrace	TER
Trail	TRL
Way	WAY

Numbered Streets	
First	ST
Second	ND
Third	RD
Fourth to Tenth	TH

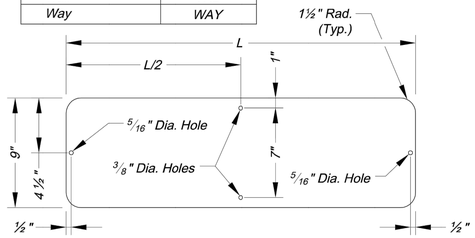
STREET NAME SIGN QUANTITIES

Sign Designation	Sign Size	Sign Area (Sq. Ft.)	Number	Quantity (Sq. Ft.)
D3-1 (SP-1)	9" x 42"	2.625	2	5.25
D3-1 (SP-2)	9" x 30"	1.875	3	5.625
D3-1 (SP-3)	9" x 30"	1.875	1	1.875
D3-1 (SP-4)	9" x			
D3-1 (SP-5)	9" x			
D3-1 (SP-6)	9" x			

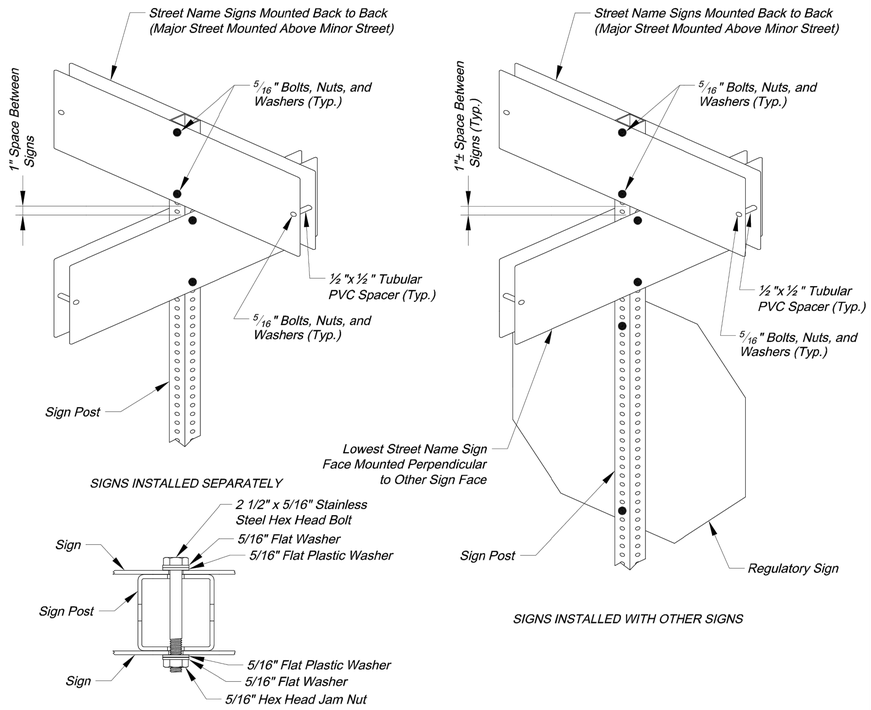


STREET NAME SIGN BLANK DETAILS

For Mounting on Square Steel Posts



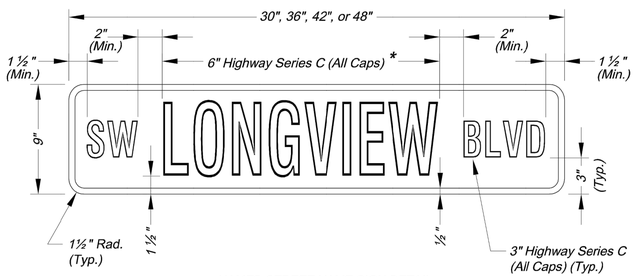
PROJECT SIGN DETAILS



PLAN VIEW

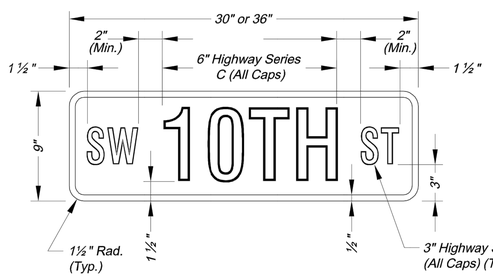
SQUARE STEEL POST MOUNTING DETAILS

STREET NAME SIGN FACE DETAILS

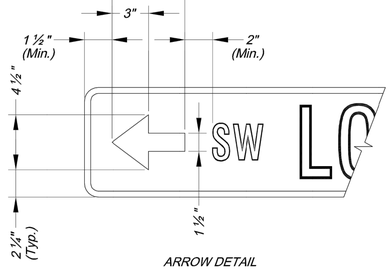


NAMED STREET NAME SIGN DETAIL

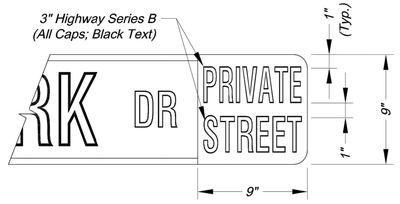
* Use Highway Series B (All Caps) in lieu of series C if necesary to fit text on a 36" sign blank.



NUMBERED STREET NAME SIGN DETAIL

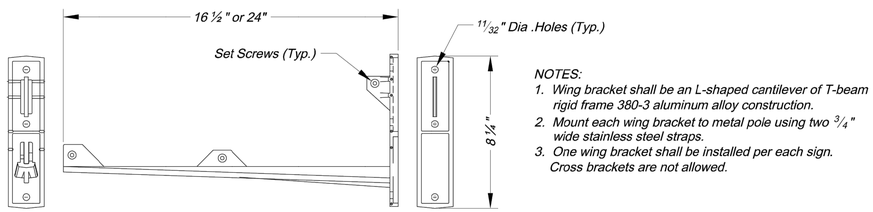


ARROW DETAIL

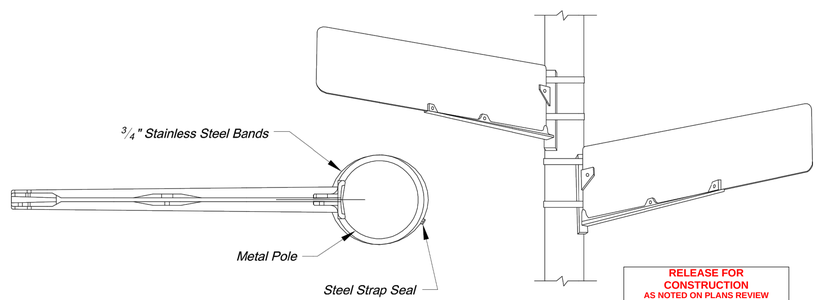


PRIVATE STREET TAG DETAIL

NOTES:
1. For all street name signs, the legend shall be white and the background shall be green.
2. Arrows shall be added to street name signs where the name of a street changes at an intersection. Street name signs with arrows are to be installed on each side of the intersection to indicate the change in names. Arrows shall be white.
3. The "PRIVATE STREET" tag should be added to the end of street name signs to indicate where a street that is outside the right-of-way intersects a public street. The background for the "PRIVATE STREET" tag shall be yellow.



NOTES:
1. Wing bracket shall be an L-shaped cantilever of T-beam rigid frame 380-3 aluminum alloy construction.
2. Mount each wing bracket to metal pole using two ¾" wide stainless steel straps.
3. One wing bracket shall be installed per each sign. Cross brackets are not allowed.



WING BRACKET MOUNTING DETAILS

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

Drawn By: AS
Checked By: JW
Date: 08/26/2009
Project#
3 OF 3
3

Project: STREET NAME SIGN DETAILS
Sheet Name: STANDARD DRAWING SN-3

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CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

REVISIONS			DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE	
1.	REVISED PER CITY COMMENTS	GC	1/15/21	DRAWN BY: GC
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				DATE: 12/2/2020
				ISSUED FOR: FOR REVIEW
6.	AS-BUILT DRAWINGS	GC	4/27/22	JOB NUMBER: 20KC10057
				MO COA NO. 000062

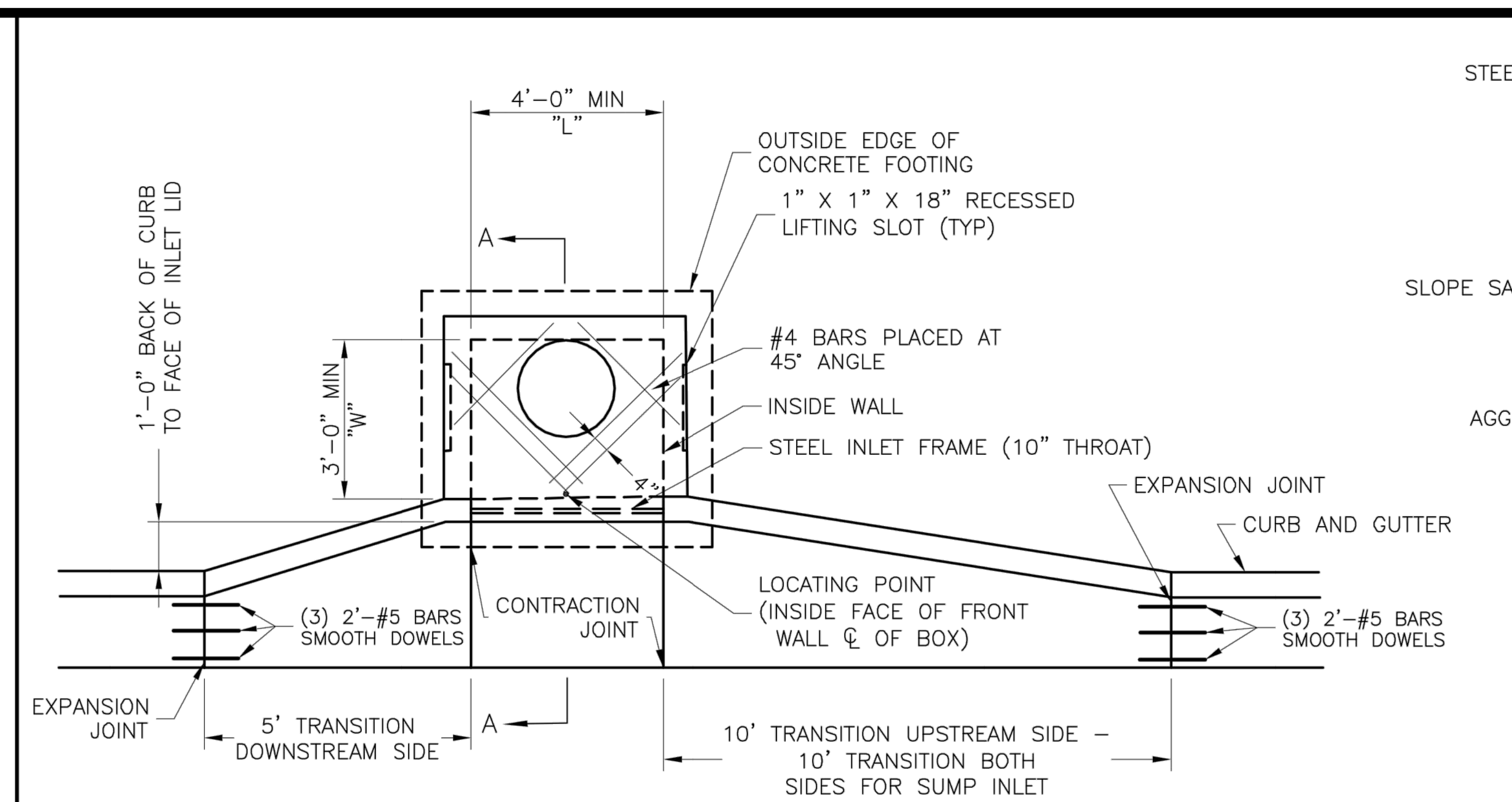
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

STREET NAME SIGN DETAILS

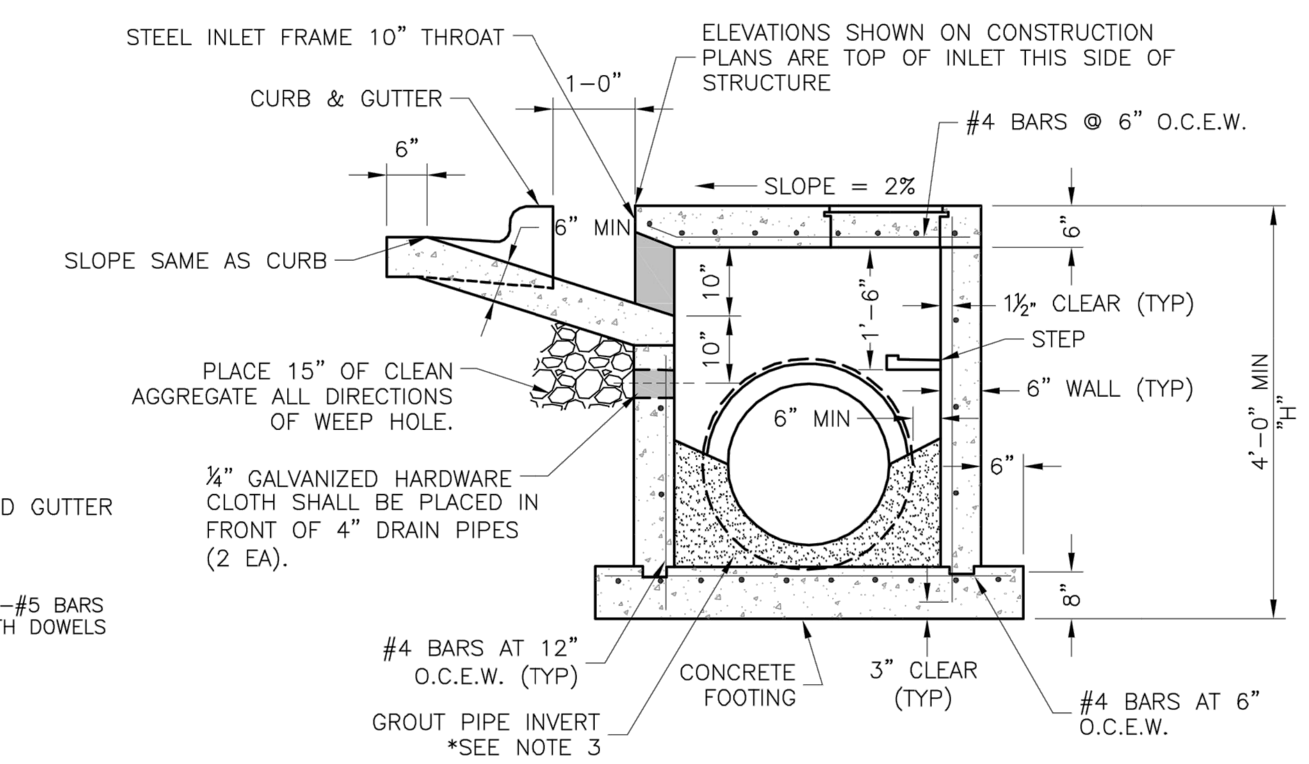
S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

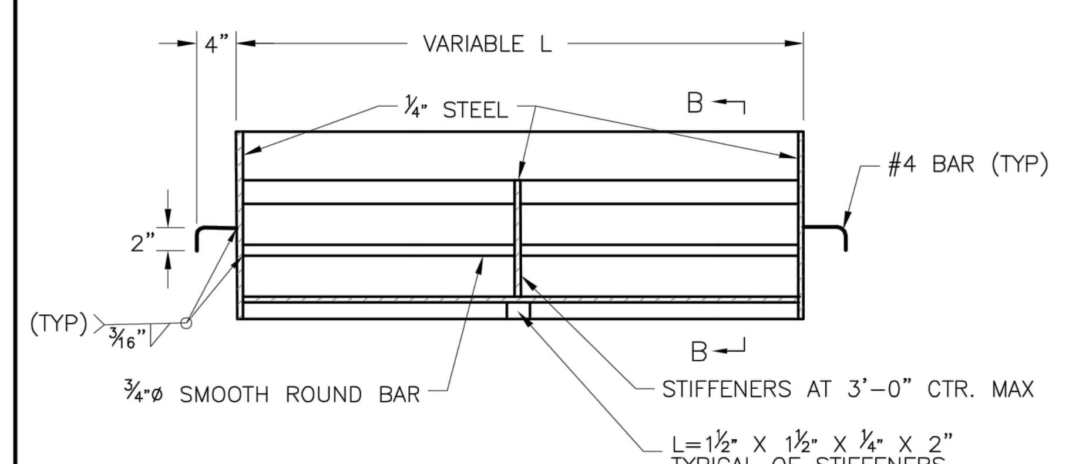
SHEET NUMBER
C408
25 OF 40



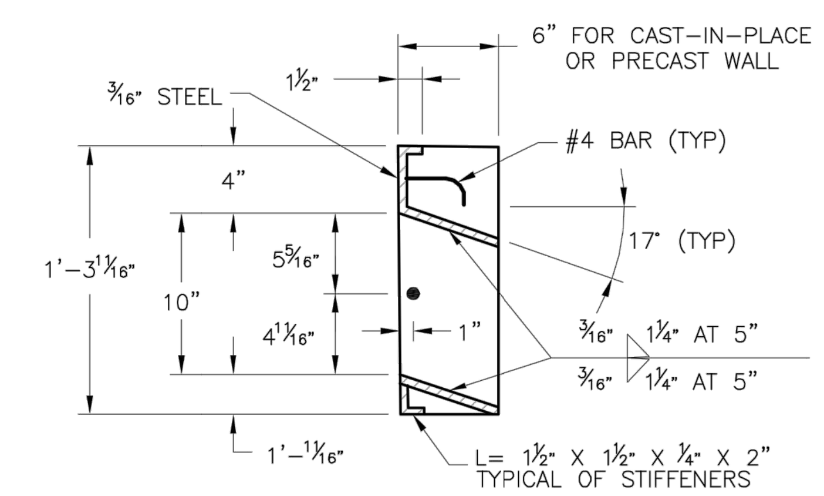
PLAN VIEW



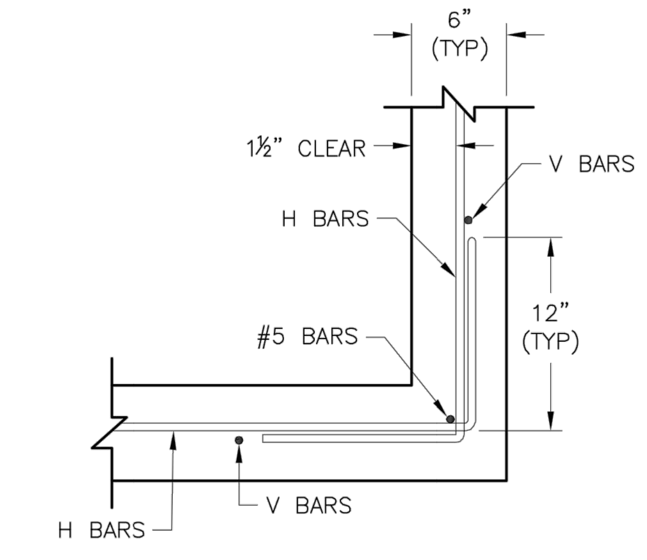
SECTION A–A



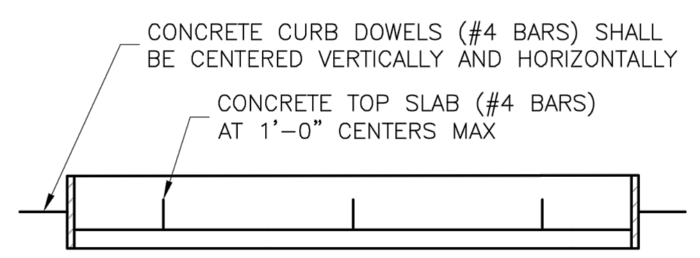
FRONT ELEVATION



SECTION B–B



WALL CORNER DETAIL



PLAN VIEW

STEEL FRAME NOTES:
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM-PRIME #37H-78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON-SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

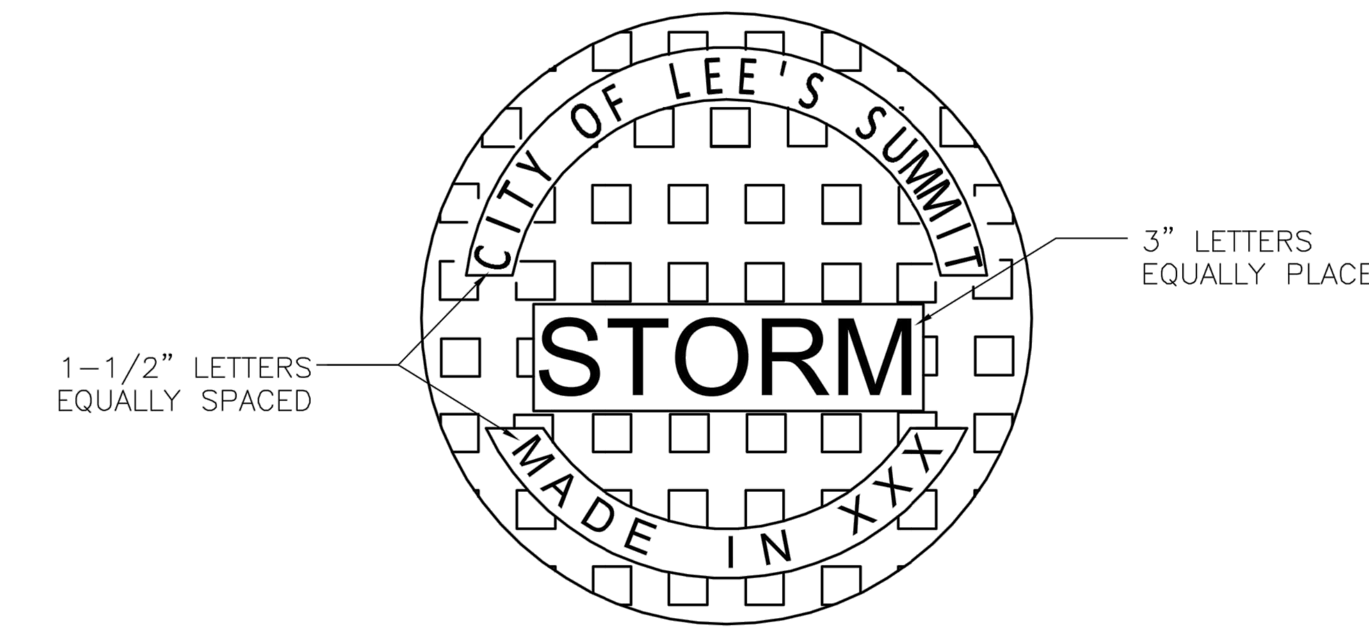
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

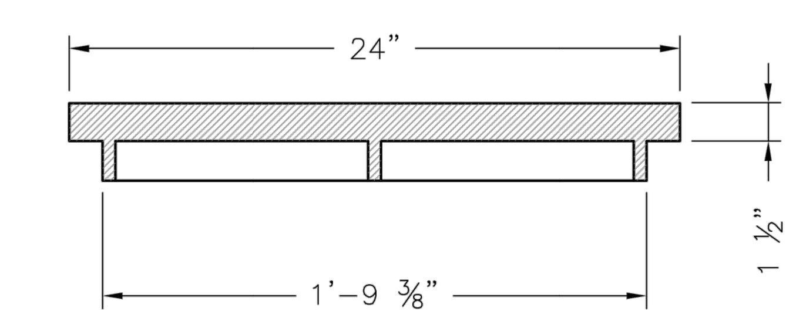
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Project:
Sheet Name: CURB INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-1





STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB
NOTE: PICK HOLES NOT SHOWN

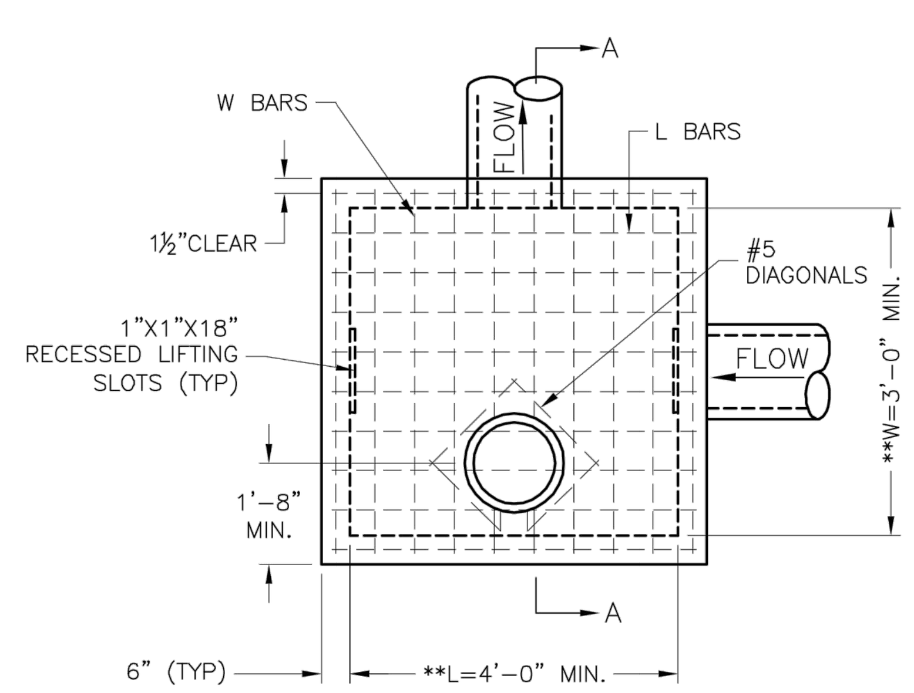
*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

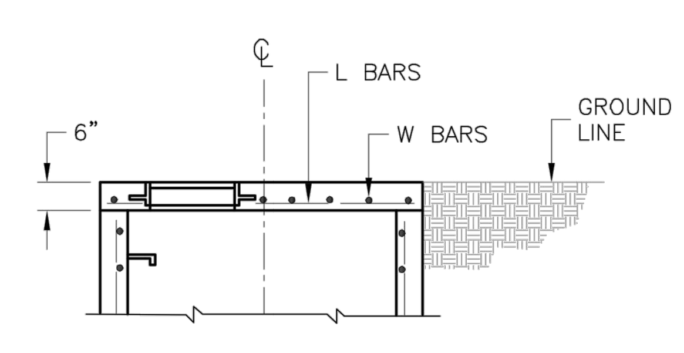
STORM MANHOLE COVER DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-6



PLAN

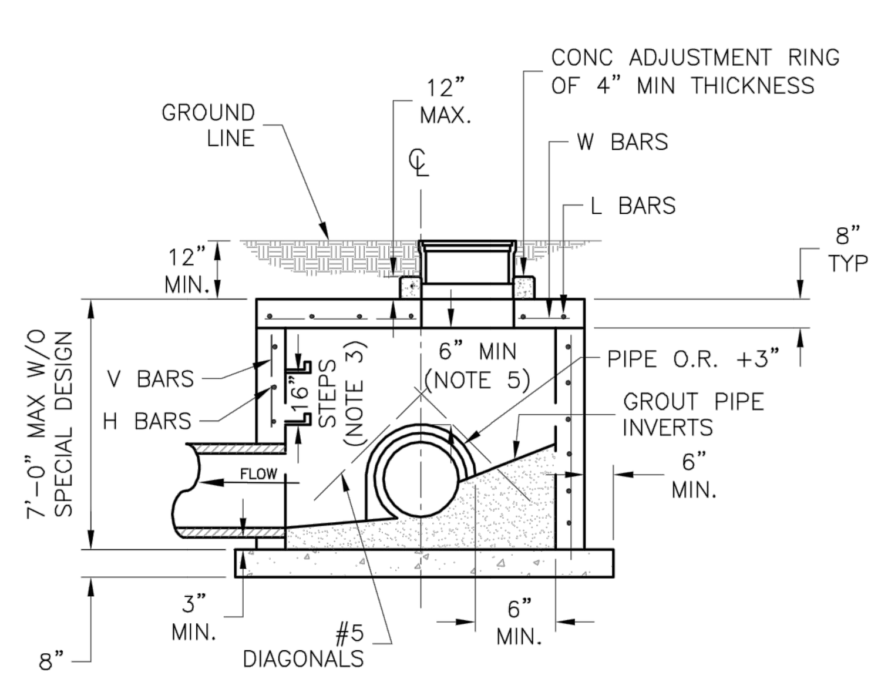


SLAB TOP ALTERNATE FOR JUNCTION BOX (SHALLOW)

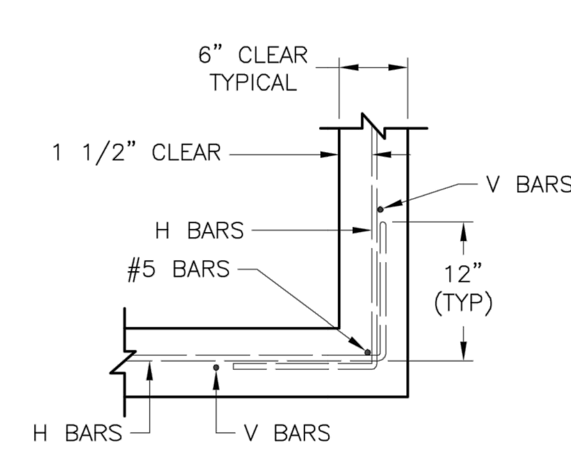
** INCREASE IN MULTIPLES OF 6" (7'-0") MAX WITHOUT SPECIAL DESIGN. (SEE PROJECT PLANS FOR DETAILS)

REINFORCING

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6



SECTION A–A



WALL CORNER DETAIL

GENERAL NOTES:
1. LOCATE RING AND COVER ON BLANK WALL.
2. USE ¾" CHAMFER STRIP OR ½" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

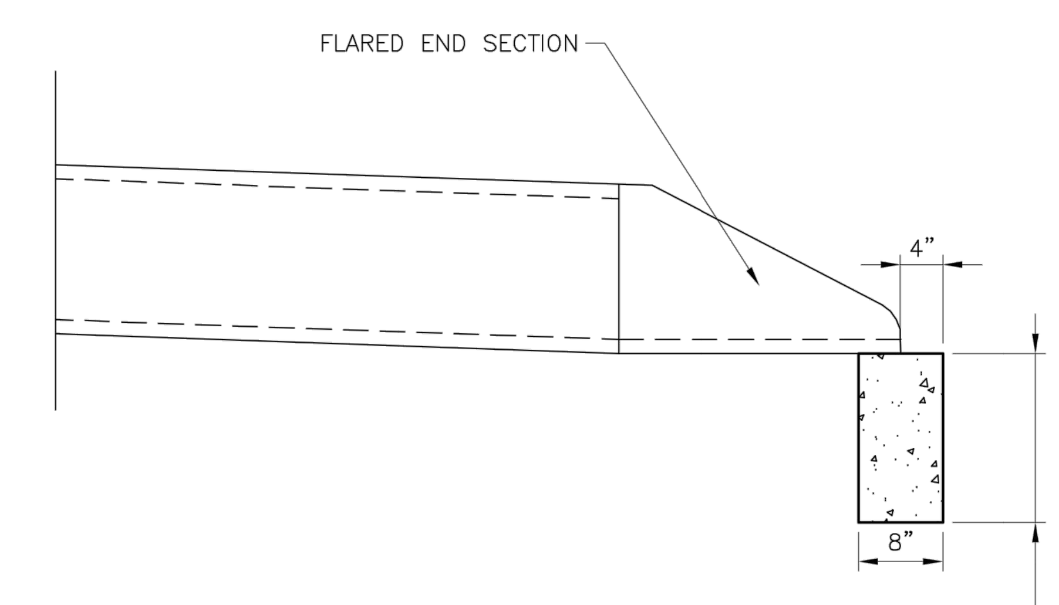
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Project:
Sheet Name: JUNCTION BOX DETAIL

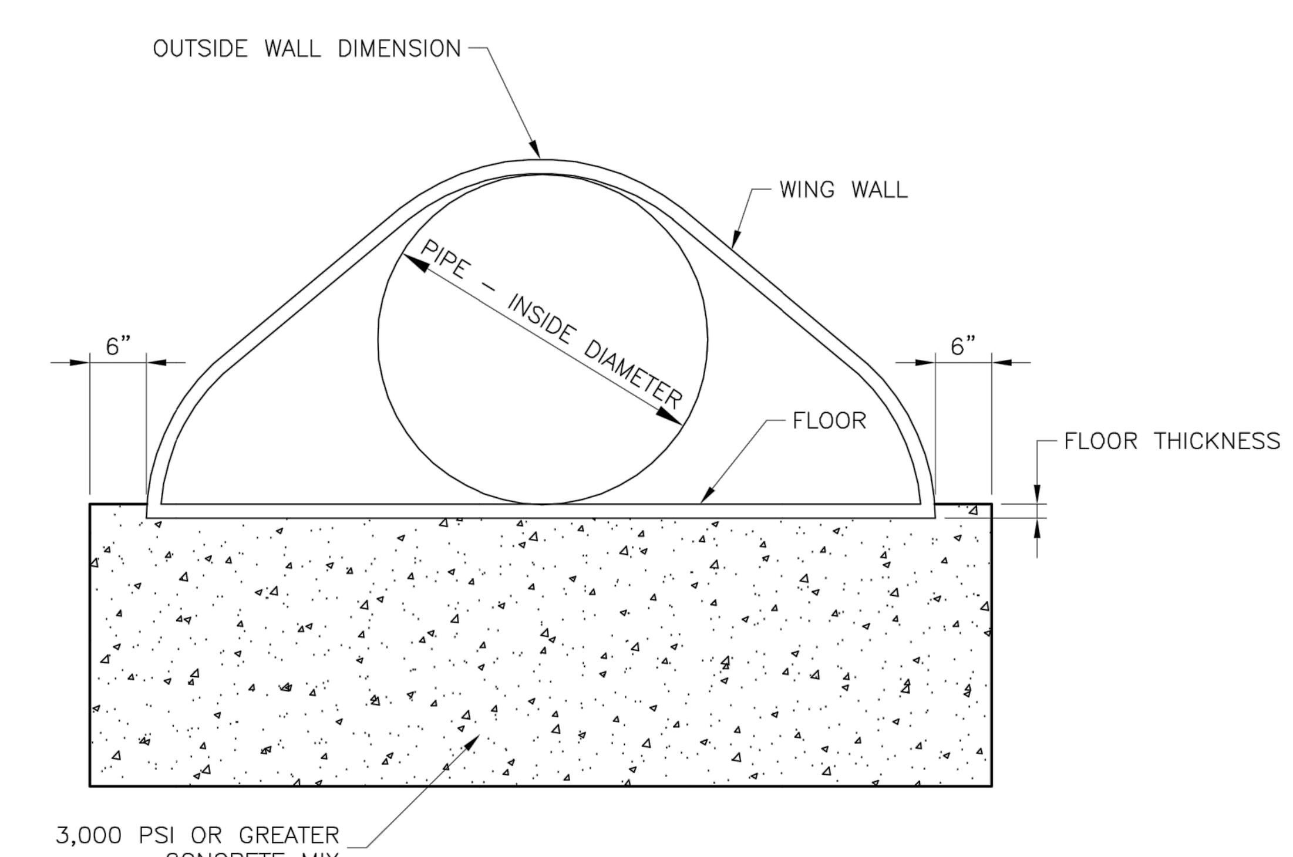
Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-3



PLAN VIEW
NOT TO SCALE

2' MIN. OR TO BEDROCK WHICHEVER IS SHALLOWER



END VIEW
NOT TO SCALE

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

FLARED END SECTION SUPPORT DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-5

AS-BUILT
The information provided on this drawing conforms to construction records, it is not intended for construction, implementation or recording purposes, and it is solely based on information (provided by others / obtained by my firm). Date: 03/24/2022 Certified by: GRC Title: Project Engineer Firm: Anderson Engineering Inc.

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

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REVISIONS				DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE	DRAWN BY:	GC
1.	REVISED PER CITY COMMENTS	GC	1/15/21	CHECK BY:	ZM
2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO.	PE-2012009232
				DATE:	12/2/2020
				ISSUED FOR:	FOR REVIEW
6.	AS-BUILT DRAWINGS	GC	4/27/22	JOB NUMBER:	20KC10057
				MO COA NO.	000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

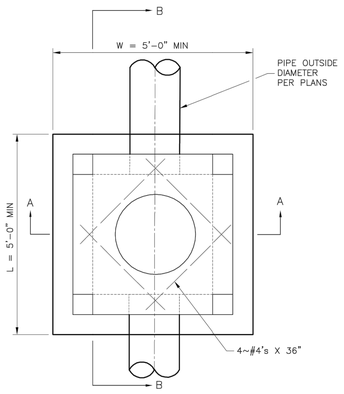
STORM SEWER DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

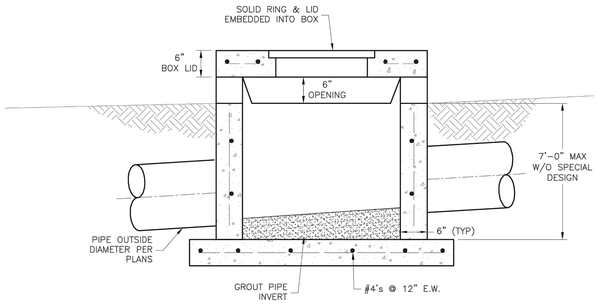
STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
PROFESSIONAL ENGINEER
3/10/21

SHEET NUMBER
C501

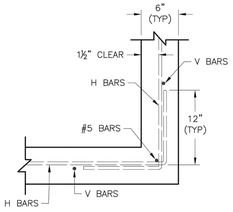
Mar 11, 2021 – 2:07pm Plotted By: gcole G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\01 CIVIL\03–DWG\Sheet\STREET AND STORM\20KC10057 – SHTS – DETAILS.dwg Layout: STORM SEWER DETAILS



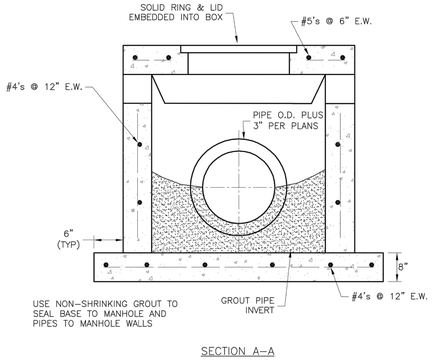
PLAN VIEW



SECTION B–B



WALL CORNER DETAIL



SECTION A–A

GENERAL NOTES:

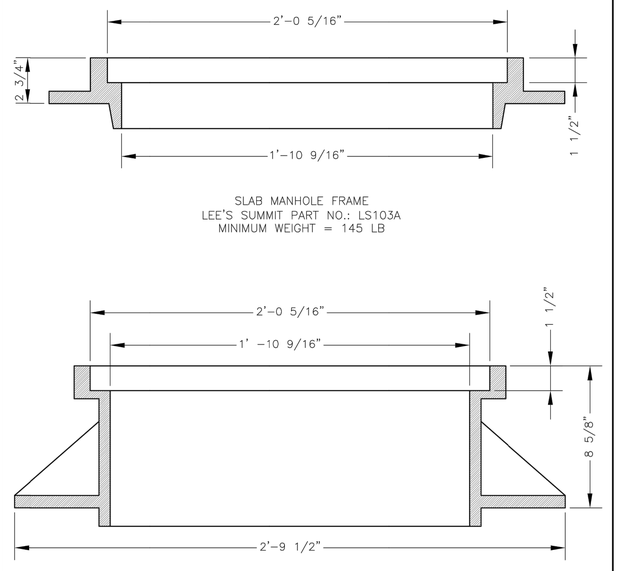
1. LOCATE RING AND COVER OVER OUTLET ON BLANK WALL.
2. USE ¾" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 3' ON BLANK WALL IF POSSIBLE.
5. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE.
6. THE MINIMUM REINFORCING SHALL BE 1 H–BAR OVER A CAST–IN–PLACE PIPE AND 2 H–BARS OVER A PRECAST BOXOUT.
7. SHOW FIELD INLET ORIENTATION ON PLANS PLUS NUMBER AND SIDE OF OPENINGS.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: FIELD INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj.#:

STM-2



*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCTS LIST.

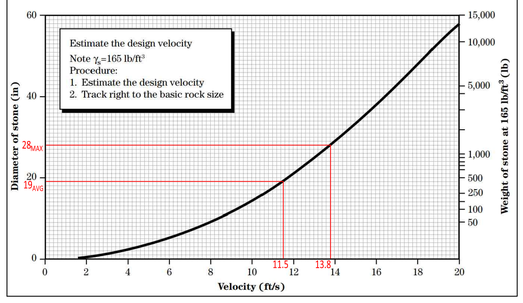
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STORM MANHOLE FRAME DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-7

Figure TS14C–5 Rock size based on Isbash curve



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

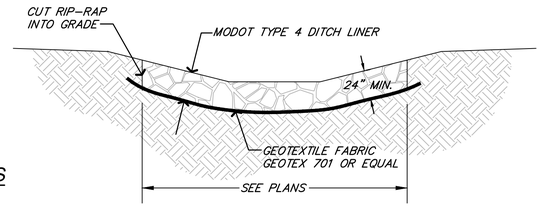
"TYPE 4 ROCK DITCH LINER SHALL CONSIST OF MATERIAL WITH A PREDOMINAT ROCK SIZE OF 19 INCHES, A MAXIMUM ROCK SIZE OF 28 INCHES AND A GRADATION SUCH THAT NO MORE THAN 15% WILL BE LESS THAN 6 INCHES" PER SECTION 609.60.2.4 OF THE 2018 MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

RIP–RAP NOTES:

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 FROST ACTION. REFER APWA SECTION 2600.
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.
100	700
85–95	525
30–50	175
0–15	30

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.



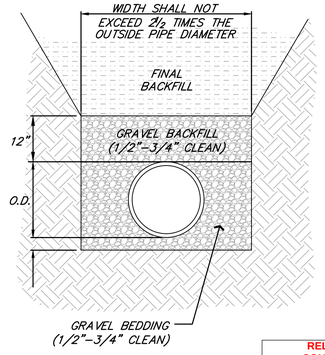
RIPRAP DETAILS
NOT TO SCALE

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

INITIAL BACKFILL
–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 PIPE		
PIPE DIAMETER	IN SOIL	IN ROCK
24" AND LESS	4"	6"
27" THRU 60"	4"	9"



PIPE BEDDING DETAIL
NOT TO SCALE

AS-BUILT

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Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
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LEE'S SUMMIT, MISSOURI
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1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

DRAWING INFO.
DRAWN BY: GC
CHECK BY: ZM
LICENSE NO. PE-2012009232
DATE: 12/2/2020
ISSUED FOR: FOR REVIEW
JOB NUMBER: 20KC10057
MO COA NO. 000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

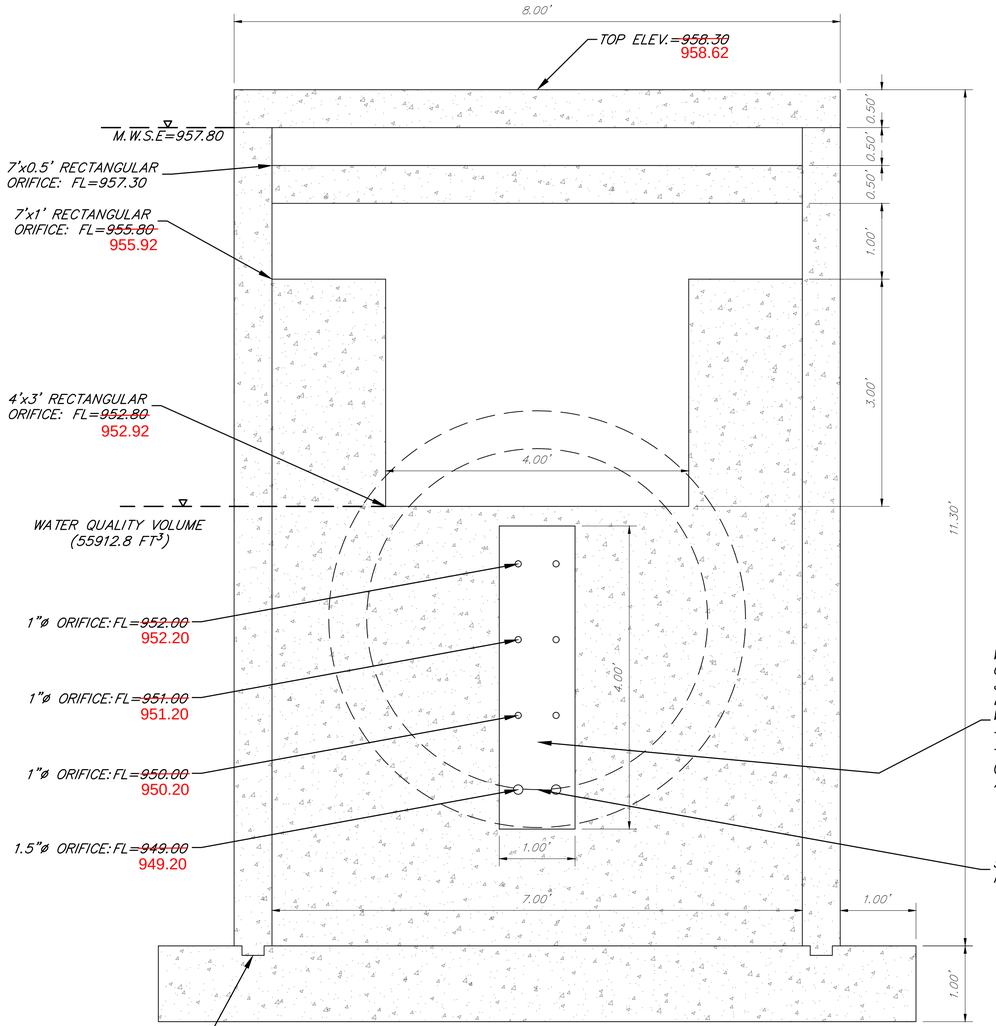
STORM SEWER DETAILS (2)

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

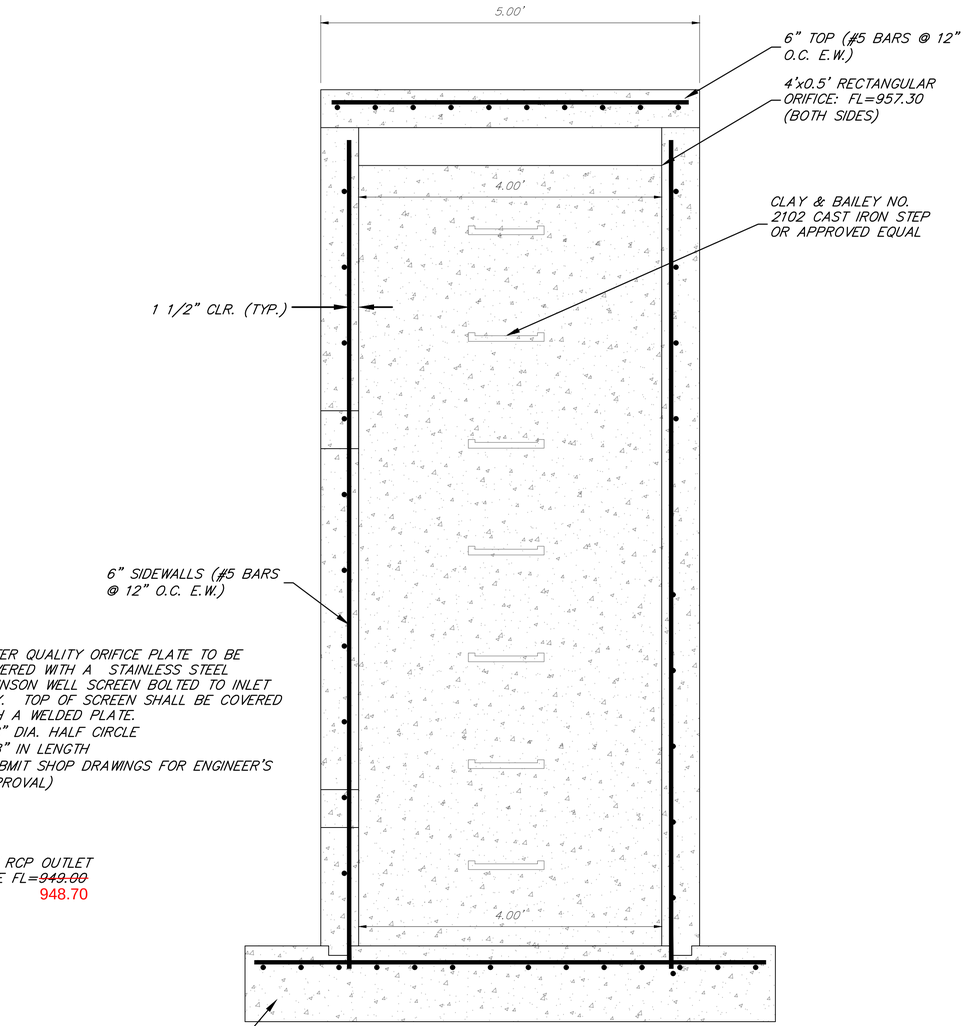
STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
4/25/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C502
27 OF 40

Mar 11, 2021 – 2:07pm Plotted By: gcote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 – Highland Meadows – 5th Plat\01 CIVIL\03–DWG\Sheet\STORM\20KC10057 – STS – DETAILS.dwg Layout: STORM SEWER DETAILS (2)



FRONT ELEVATION



SIDE ELEVATION

WATER QUALITY ORIFICE PLATE TO BE COVERED WITH A STAINLESS STEEL JOHNSON WELL SCREEN BOLTED TO INLET BOX. TOP OF SCREEN SHALL BE COVERED WITH A WELDED PLATE.
–18" DIA. HALF CIRCLE
–48" IN LENGTH
(SUBMIT SHOP DRAWINGS FOR ENGINEER'S APPROVAL)

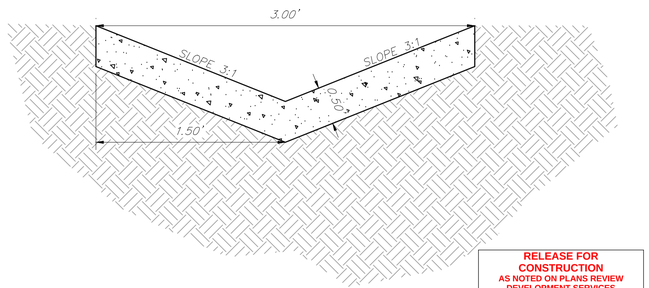
54" RCP OUTLET PIPE FL=~~949.00~~ 948.70

DETENTION OUTLET CONTROL STRUCTURE

SCALE: 1"=1'

NOTES

1. ALL CONCRETE SHALL BE KCMMB 4K.
2. ALL REINFORCING STEEL SHALL BE 60 KSI.
3. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
4. FLOOR OF INLET SHALL BE SHAPED WITH NON–REINFORCED CONCRETE INVERT TO PROVIDE SMOOTH FLOW.
5. EXPANSION JOINTS SHALL BE EITHER HOT OR COLD POURED JOINT SEALING COMPOUND, OR PREMOLDED EXPANSION JOINT FILLER.
6. BEVEL ALL EXPOSED EDGES WITH TRIANGULAR MOLDING.
7. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF ±1/8" SHALL BE PERMITTED.
8. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
9. ALL DOWELS SHALL BE ACCURATELY PLACED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF BOTTOM SLAB CONCRETE. STICKING OF DOWELS INTO FRESH OR PARTIALLY HARDENED CONCRETE WILL NOT BE ACCEPTABLE.
10. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'–0" MAXIMUM SPACING.
11. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.
12. THE BOTTOM SLAB SHALL BE AT LEAST 24 HOURS OLD BEFORE PLACING SIDEWALL CONCRETE. ALL SIDEWALL FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS AFTER SIDEWALLS ARE POURED BEFORE REMOVAL, AND AFTER REMOVAL SHALL BE IMMEDIATELY TREATED WITH MEMBRANE CURING COMPOUND.
13. RCP CONNECTIONS TO PRECAST STRUCTURES SHALL HAVE A MINIMUM OF 6" OF CONCRETE AROUND THE ENTIRE PIPE WITHIN 2' OF THE STRUCTURE.



CONCRETE FLUME DETAIL

NOT TO SCALE

AS-BUILT

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Date: 04/27/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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LEE'S SUMMIT, MISSOURI

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2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO. PE-2012009232
				DATE: 12/2/2020
				ISSUED FOR: FOR REVIEW
6.	AS-BUILT DRAWINGS	GC	4/27/22	JOB NUMBER: 20KC10057

MO COA NO. 000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

STORM SEWER DETAILS (3)

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

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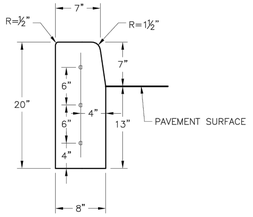
28 OF 40

Mar 11, 2021 – 2:07pm Plotted By: grote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\01 CIVIL\03–DWG\Sheet\STREET AND STORM\20KC10057 – SHTS – DETAILS.dwg Layout: STORM SEWER DETAILS (3)



STRAIGHT CURB
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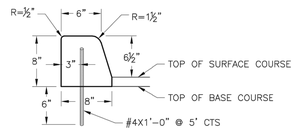

DOWELLED CURB
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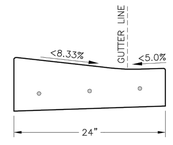
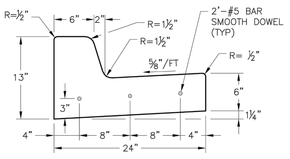
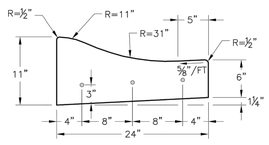


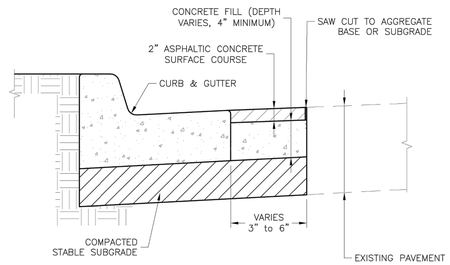
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



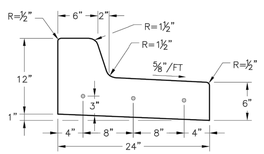
STRAIGHT BACK CURB & GUTTER
(TYPE CG-1)



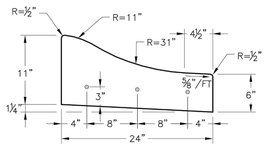
ROLL BACK CURB & GUTTER
(TYPE CG-2)



CURB REPLACEMENT DETAIL



STRAIGHT BACK DRY CURB & GUTTER
(TYPE CG-1 DRY)



ROLL BACK DRY CURB & GUTTER
(TYPE CG-2 DRY)

GENERAL NOTES

1. ¾" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

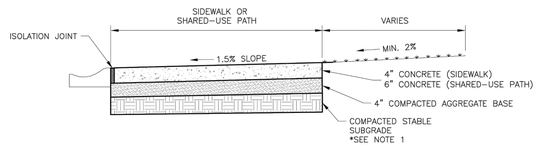
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

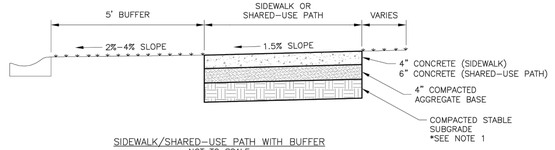
Sheet Name: CURB & GUTTER DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-4



SIDEWALK/SHARED-USE PATH WITHOUT BUFFER
NOT TO SCALE



SIDEWALK/SHARED-USE PATH WITH BUFFER
NOT TO SCALE

GENERAL NOTES:

1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS AND SHARED-USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
4. ALL SIDEWALKS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN EXPANSION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK, BUT NO GREATER THAN 10 FT.
6. SHARED-USE PATH WIDTH SHALL BE 10 FT. WIDE.
7. SIDEWALK FINISHING (NO PICTURE FRAMING) AS DIRECTED BY CITY INSPECTOR.
8. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

SIDEWALK/SHARED-USE PATH DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

GEN-2

AS-BUILT

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information (provided by others / obtained by my firm); "150'" 100.10'; "1.50%" 1.15% slope", or "6-inch PVC" PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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

04/16/2021

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NO.	DESCRIPTION	BY	DATE	DRAWN BY: GC
1.	REVISED PER CITY COMMENTS	GC	1/15/21	CHECK BY: ZM
2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO. PE-2012009232
				DATE: 12/2/2020
				ISSUED FOR: FOR REVIEW
6.	AS-BUILT DRAWINGS	GC	4/27/22	JOB NUMBER: 20KC10057
				MO COA NO. 000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

CURB & SIDEWALK DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C504
29 OF 40

Mar 11, 2021 - 2:07pm Plotted By: gcote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHTS - DETAILS.dwg Layout: CURB & SIDEWALK DETAILS

3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP

LEGEND

- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION

3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP

TYPE A SIDEWALK/SHARED-USE RAMP
Not to Scale

ALTERNATE DETECTABLE SURFACE LAYOUT

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%
   *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%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5% SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION 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 PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).

SECTION A-A

SECTION B-B

SECTION C-C

TYPE A & B SIDEWALK RAMP
Not to Scale

SIDEWALK CURB DETAIL
Not to Scale

CONTRACTION JOINT

ISOLATION JOINT

JOINT DETAILS
Not to Scale

CURB & GUTTER DETAIL AT RAMP
Not to Scale

TYPE B SIDEWALK/SHARED-USE RAMP
Not to Scale

3-D VIEW TYPE M
SIDEWALK/SHARED-USE RAMP

TYPE M SIDEWALK/SHARED-USE RAMP
Not to Scale

SECTION A-A

SECTION B-B

SECTION C-C

TYPE M SIDEWALK RAMP
Not to Scale

3-D VIEW TYPE M
SIDEWALK/SHARED-USE RAMP

3-D VIEW SIDEWALK/SHARED-USE RAMP
AT DRIVEWAY

SIDEWALK/SHARED USE RAMP
AT DRIVEWAY WITH ADJOINING CURB

CURB & GUTTER DETAIL AT RAMP
Not to Scale

SIDEWALK CURB DETAIL
Not to Scale

LEGEND

- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION

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LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-3A

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-3B

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

ADA RAMP DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

AS-BUILT

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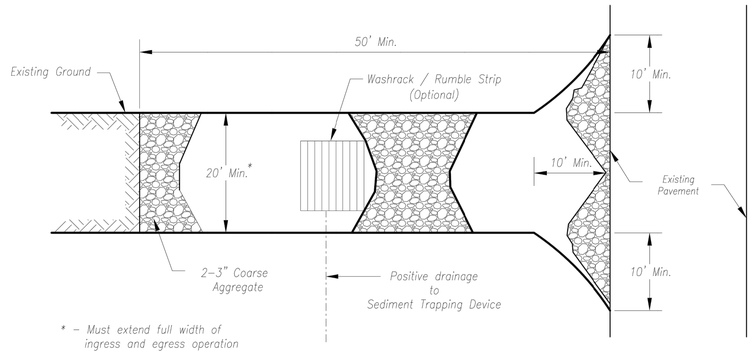
Title: Project Engineer Firm: Anderson Engineering Inc.

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

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

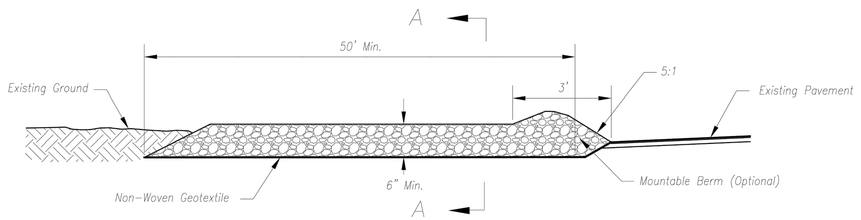
SHEET NUMBER
C505
30 OF 40

Mar 11, 2021 - 2:07pm Plotted By: geote G:\Shared drives\KC10 - Land Development\Projects\2020\20KC10057 - Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KC10057 - SHTS - DETAILS.dwg Layout: ADA RAMP DETAILS



Plan View

Not to Scale



Side Elevation

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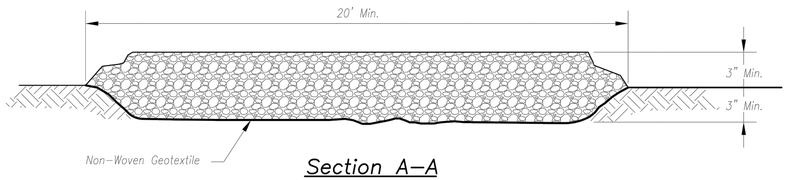

Section A–A

Not to Scale

Notes for Construction Entrance:

1. *Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.*
2. *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.*
4. *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:

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

CONSTRUCTION ENTRANCE

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.

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:

1. *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.*
3. *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.*
4. *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.*

AS-BUILT

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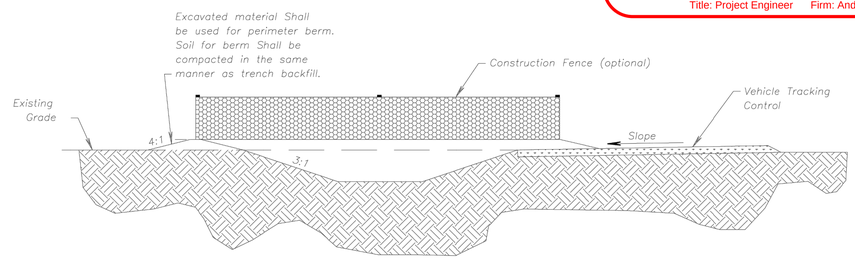
Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.



CONCRETE WASHOUT

RELEASE FOR CONSTRUCTION
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

04/16/2021

AMERICAN PUBLIC WORKS ASSOCIATION

Kansas City Metro Chapter APWA AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

STANDARD DRAWING NUMBER ESC-01
ADOPTED: 10/24/2016

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

CONSTRUCTION ENTRANCE DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
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NUMBER PE-2012009232
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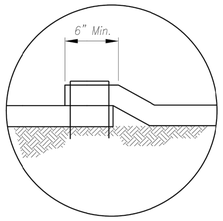
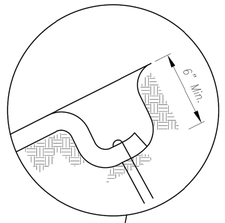
SHEET NUMBER
C601
31 OF 40

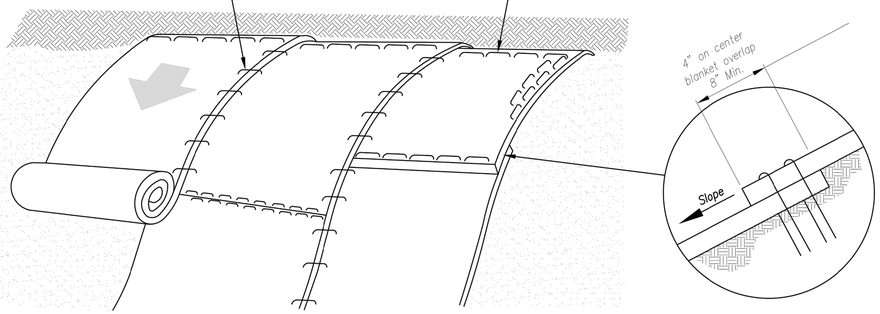
Mar 11, 2021 – 2:07pm Plotted By: gcote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\07 CIVIL\03–DWG\Sheet\STREET AND STORM\20KC10057 – SHTS – DETAILS.dwg Layout: CONSTRUCTION ENTRANCE DETAILS

Longitudinal Seam



Anchor Slot





Installation on Slopes

General Notes:

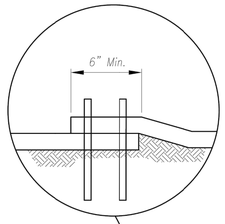
1. *APWA Specifications 2150 and Design Guidance 5100 shall be referenced to select type of blanket or mat to be used.*
2. *Typical anchors and pattern/spacing shall be installed according to the manufacturers instructions.*
3. *LONGITUDINAL SEAMS: The edges of the blanket or mat should overlap each other a minimum of 6 inches, with anchors catching the edges of both blankets.*

Maintenance:

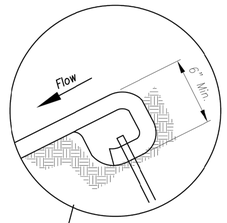
1. *Torn or degraded product shall be repaired or replaced, unless such degradation is within the functional longevity specified by the manufacturer.*
2. *Edges or seams that are loose or frayed shall be secured.*

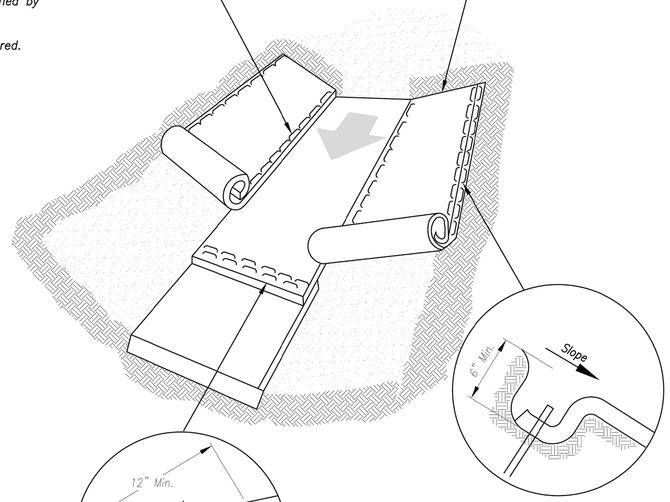
Splice Seam

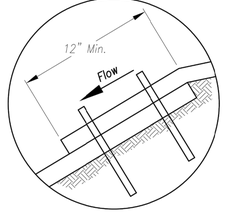
Longitudinal Seam



Anchor Fold





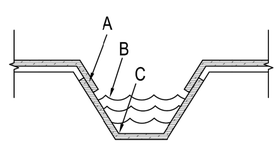


Edge Anchor

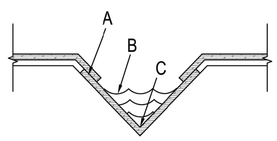
Splice Seam

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



V Channel

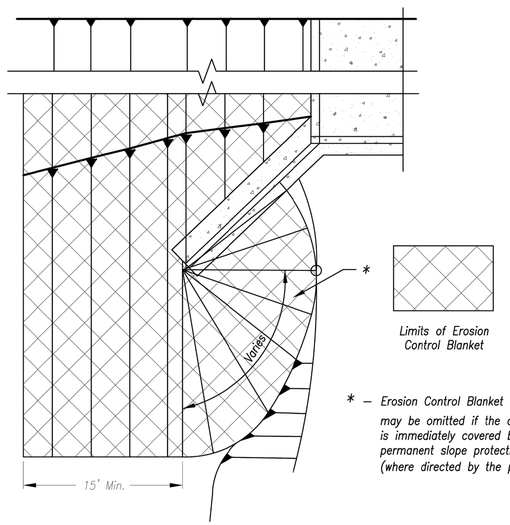
Installation in Channels

Critical Points:

A – *Overlaps and seams;*

B – *Projected water line;*

C – *Channel bottom / side slope vertices;*



* – *Erosion Control Blanket or TRM may be omitted if the area is immediately covered by permanent slope protection (where directed by the plans)*

Limits of Erosion Control Blanket

Partial Box Culvert Plan

Not to Scale

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 seams.*
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.*

Installation Around Culvert Slope

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

AS-BUILT

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AMERICAN PUBLIC WORKS ASSOCIATION
KANSAS CITY METRO CHAPTER

EROSION CONTROL BLANKETS AND TURF REINFORMENT MATS

STANDARD DRAWING NUMBER ESC-02
ADOPTED: 10/24/2016

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

STEEP SLOPE PROTECTION DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/21
PROFESSIONAL ENGINEER

SHEET NUMBER
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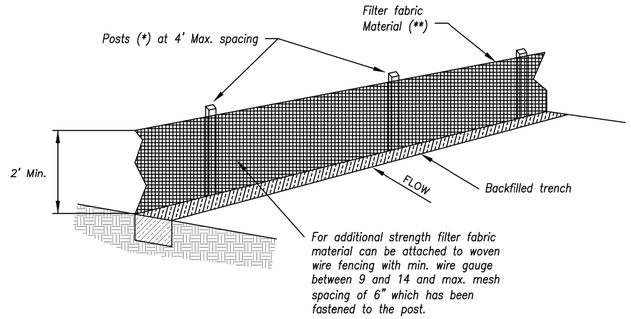
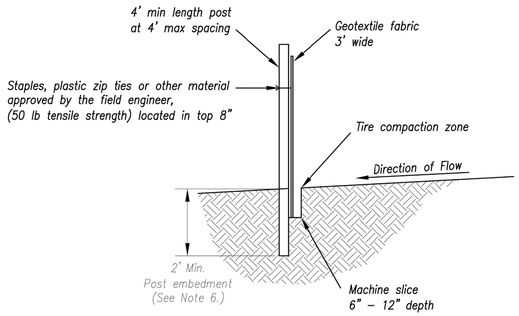




(*) POSTS
– MIN, LENGTH 4'
– HARDWOOD 1 3/16" x 1 3/16"
– NO.2 SOUTHERN PINE 2 5/8" x 2 5/8"
– STEEL 1.33 LB/FT

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

SILT FENCE DETAILS

Not to Scale

Notes:

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).
3. 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 used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches ⅓ the height of silt fence.
2. Repair as necessary to maintain function and structure.

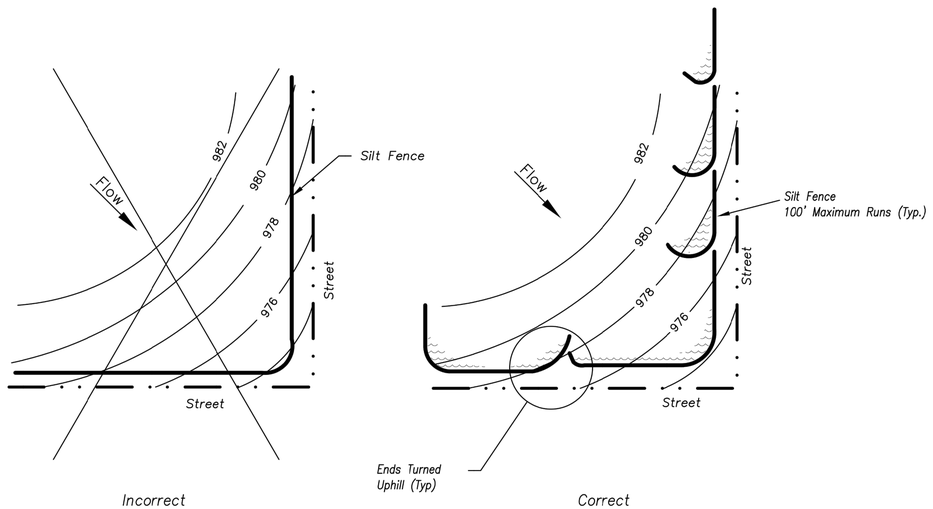
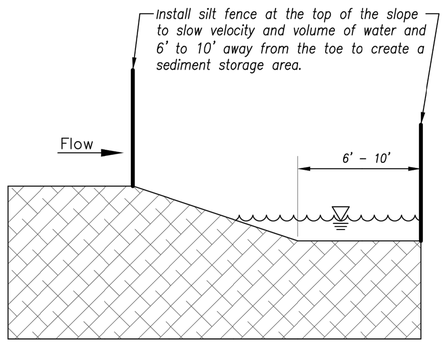
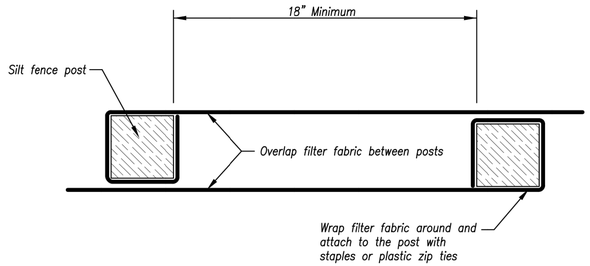


Figure A

SILT FENCE LAYOUT

Not to Scale





JOINING FENCE SECTIONS

Not to Scale

AS-BUILT

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Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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

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

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Kansas City Metro Chapter APWA American Public Works Association	KANSAS CITY METRO CHAPTER
SILT FENCE	STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

SILT FENCE DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
5/25/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C603
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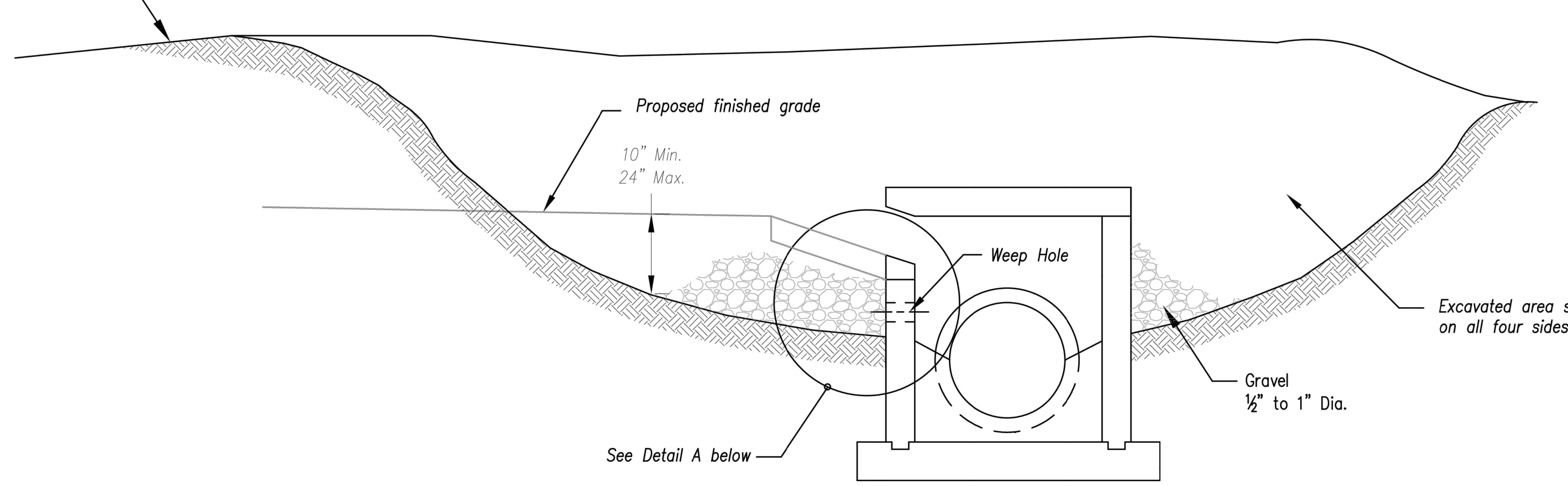
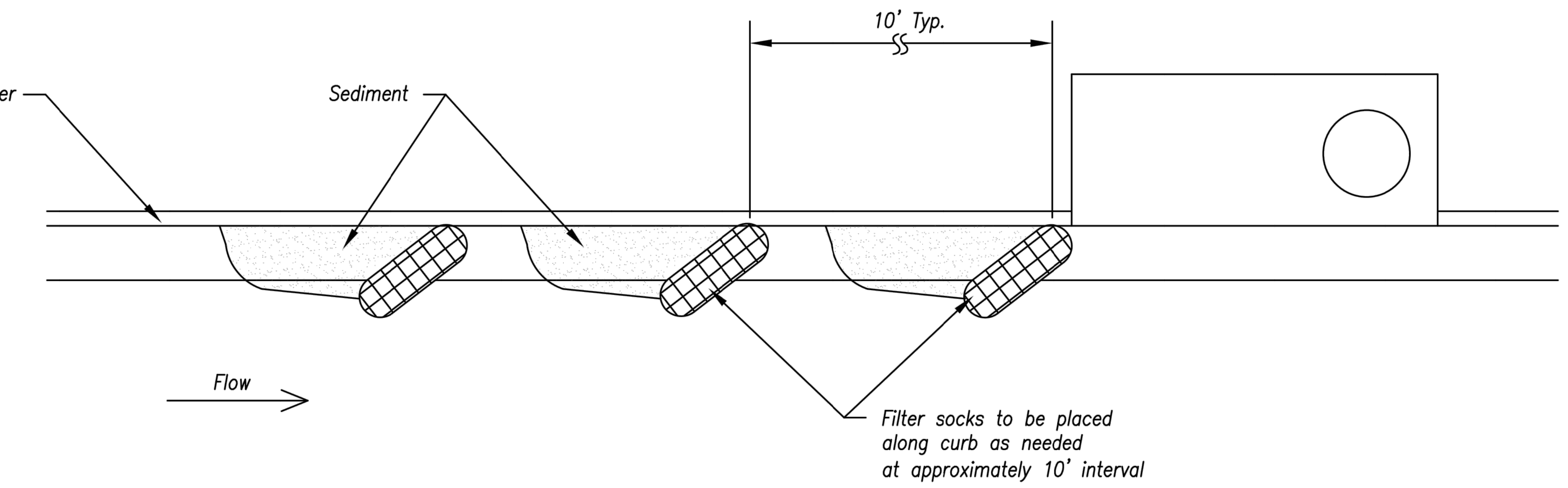
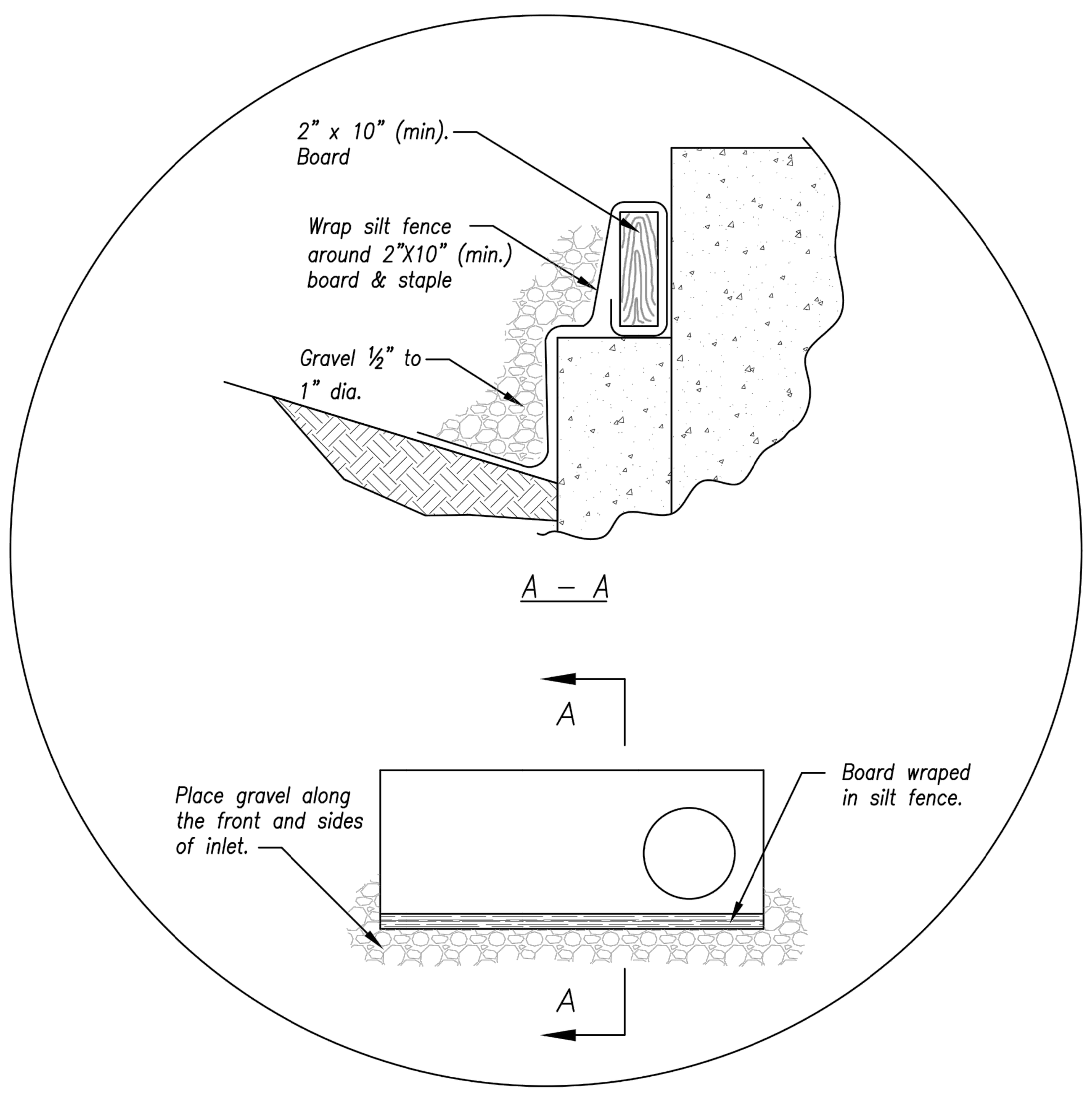
Mar 11, 2021 – 2:07pm Plotted By: gcote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\01 CIVIL\03–DWG\Sheet\STREET AND STORM\20KC10057 – SHTS – DETAILS.dwg Layout: SILT FENCE DETAILS





On Grade Curb Inlet Protection



Detail A

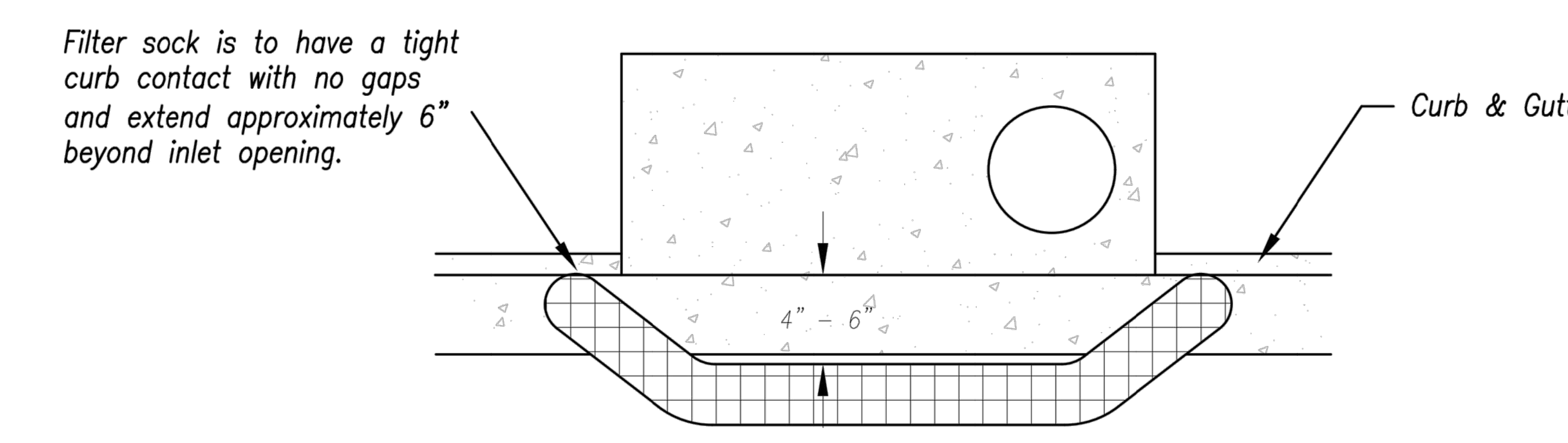
EARLY STAGE CURB INLET
(Open Box and Prior to Pouring Curb and Inlet Throat)

Notes:

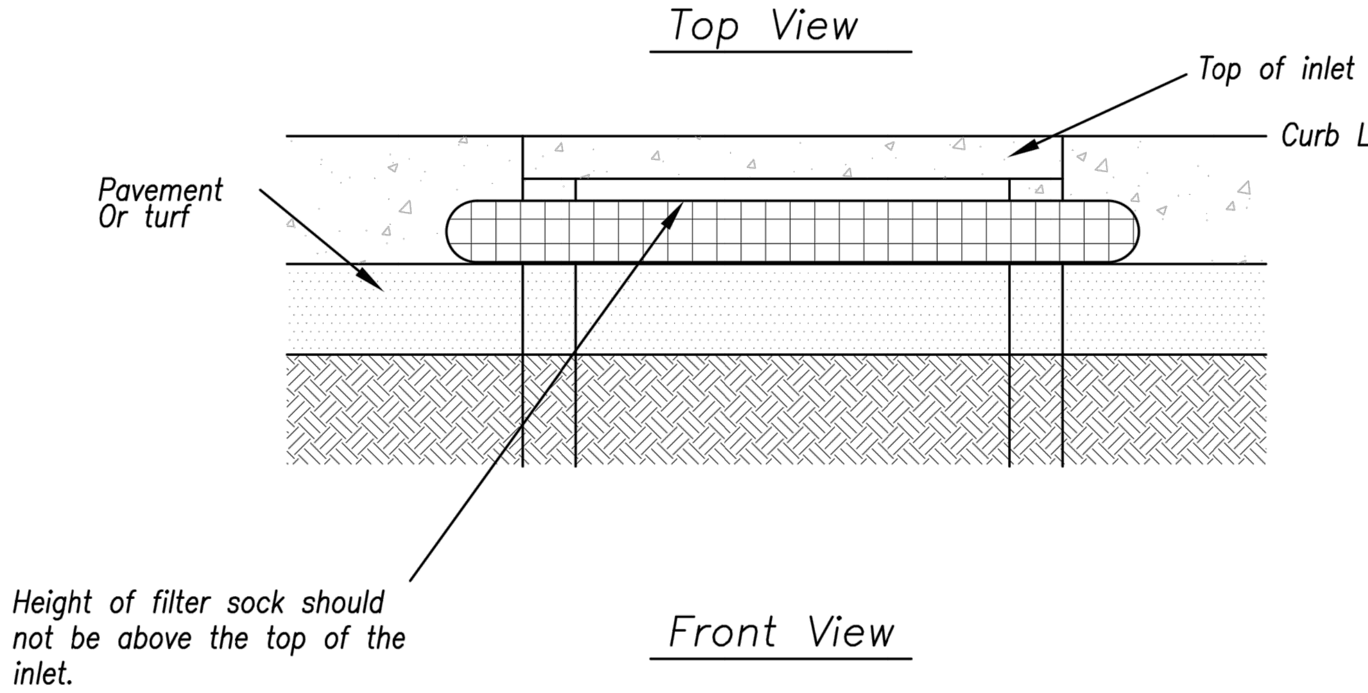
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" X 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
2. When 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.
3. Contractor to field verify ponding water shall not create a traffic hazard.

Maintenance:

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.



Top View



Front View

Sump Inlet Sediment Filter

LATE STAGE CURB INLET
(After Pouring Curb and Inlet Throat)

AS-BUILT
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AS NOTED ON PLANS REVIEW
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LEE'S SUMMIT, MISSOURI
04/16/2021

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

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

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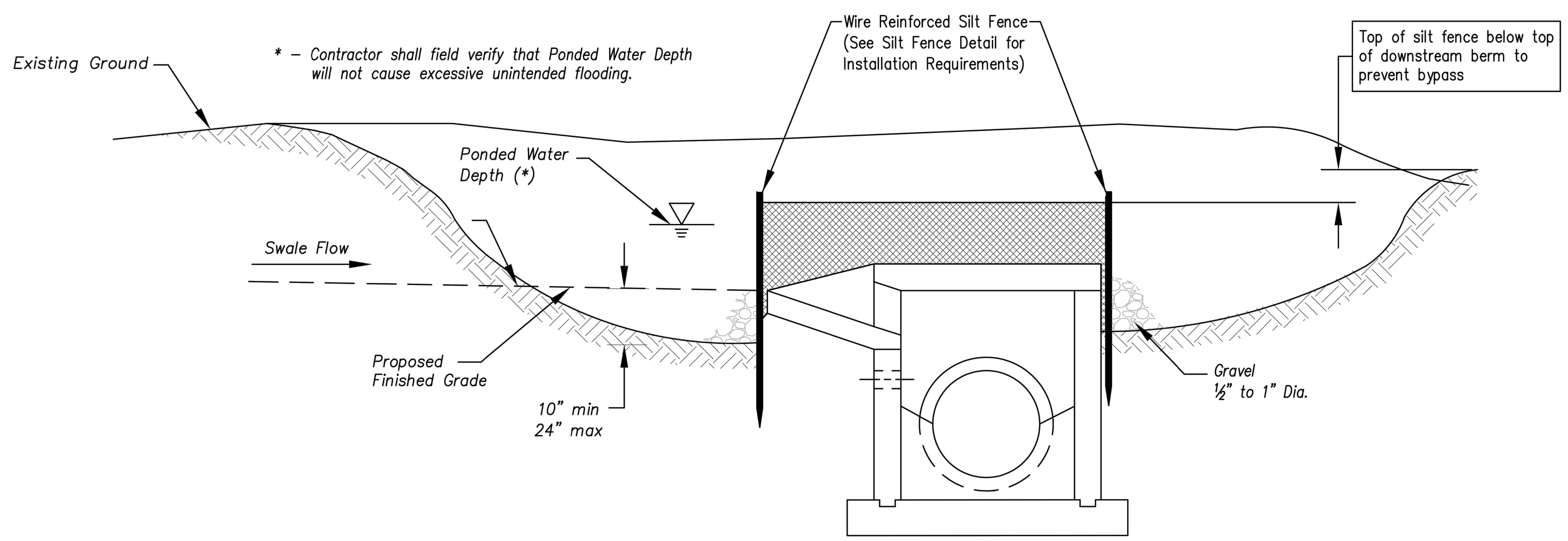
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

CURB INLET PROTECTION DETAILS

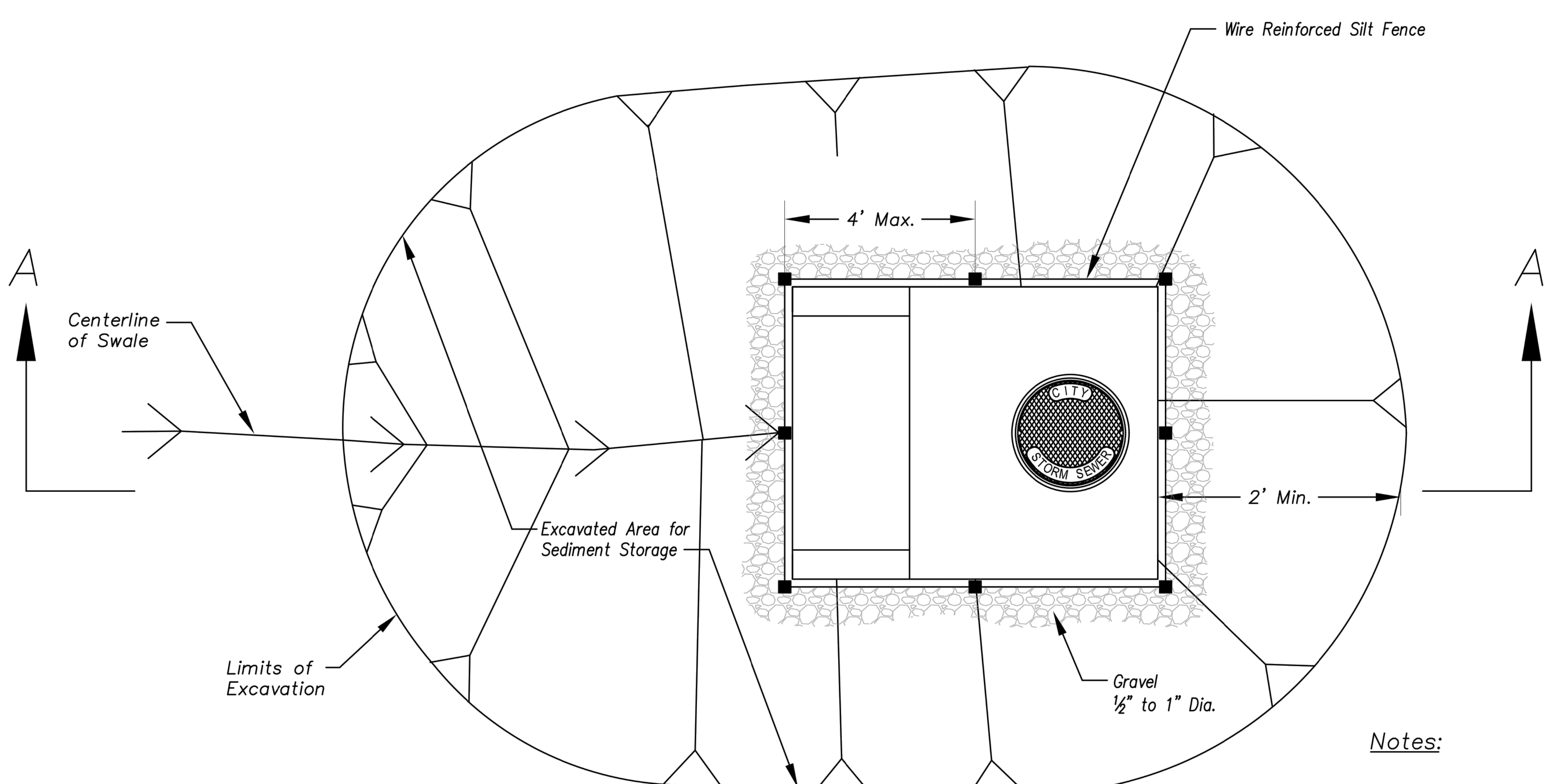
S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI ZACH A. MYERS NUMBER PE-2012009232 PROFESSIONAL ENGINEER 3/10/21

SHEET NUMBER
C604

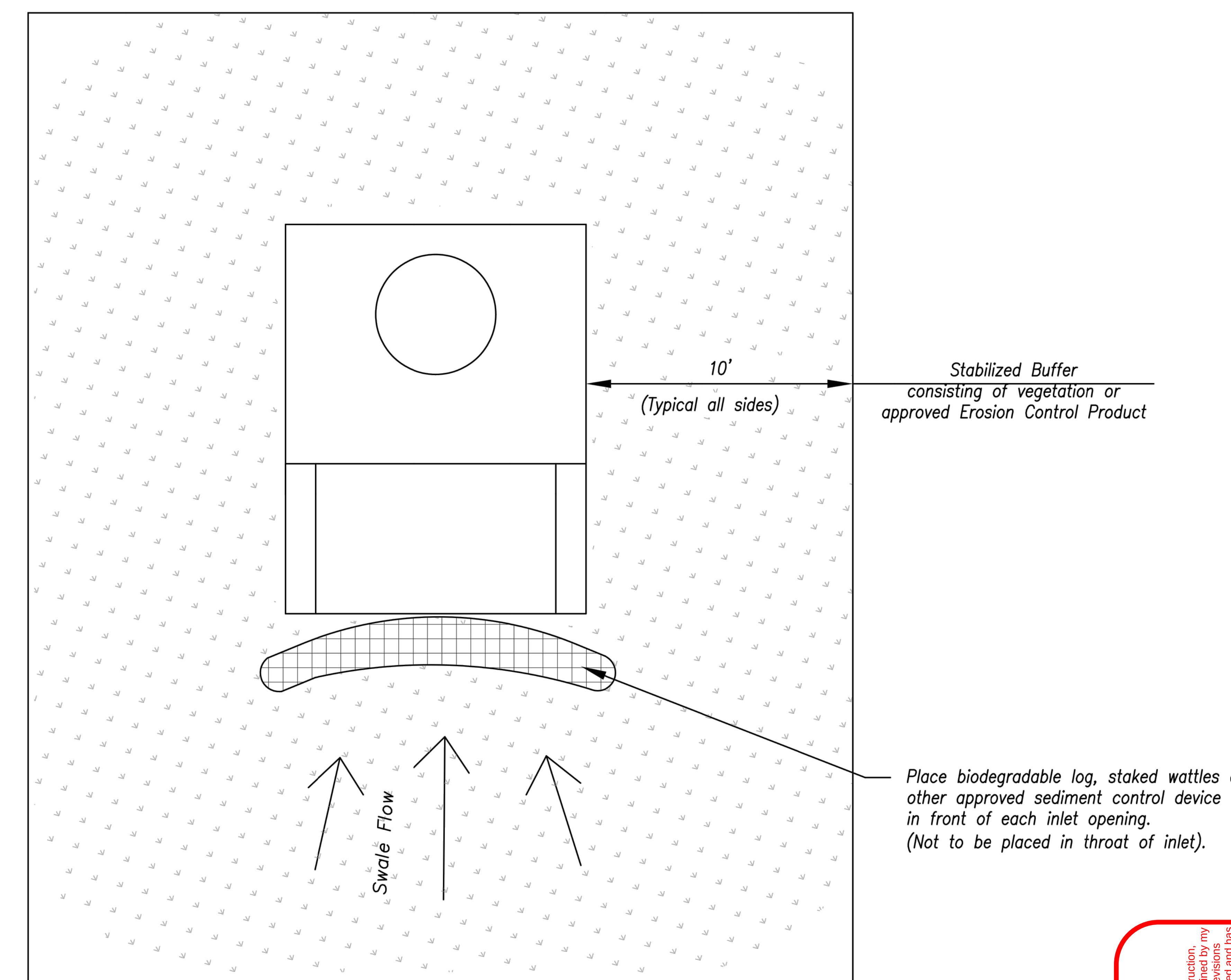


Section A–A
Not to Scale



Plan
Not to Scale

EARLY STAGE AREA INLET
(All open boxes and inlets not at final grade)



Plan
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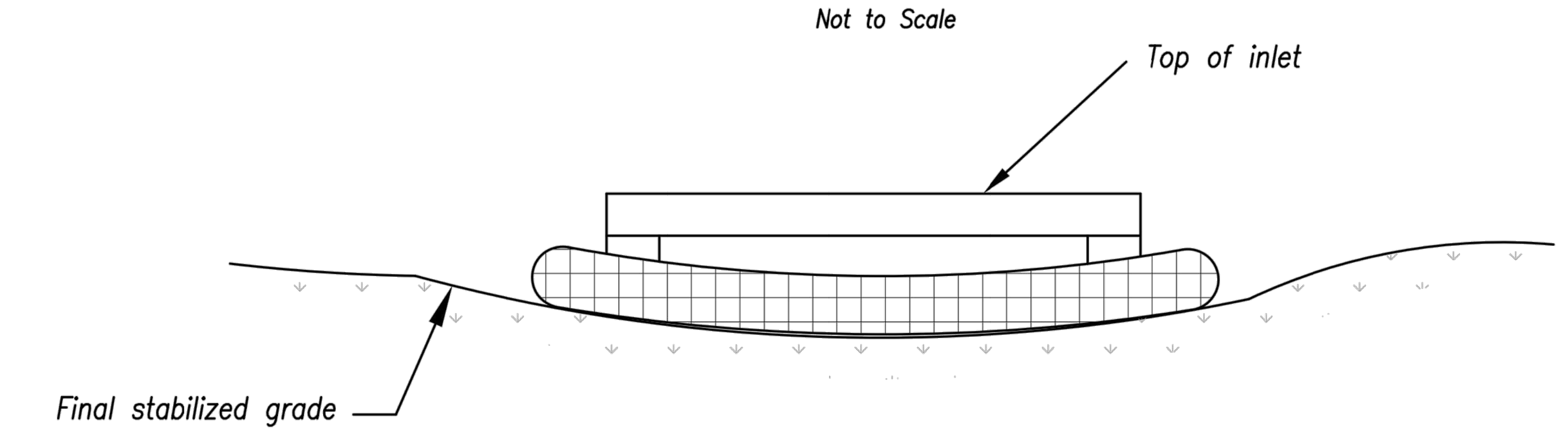

Front View

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

Notes:

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

Maintenance:

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.

AS-BUILT
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Title: Project Engineer Firm: Anderson Engineering Inc.

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

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

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KANSAS CITY METRO CHAPTER
AREA INLET AND JUNCTION BOX PROTECTION
STANDARD DRAWING NUMBER ESC-07
ADOPTED: 10/24/2016

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

AREA INLET PROTECTION DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
PROFESSIONAL ENGINEER

SHEET NUMBER
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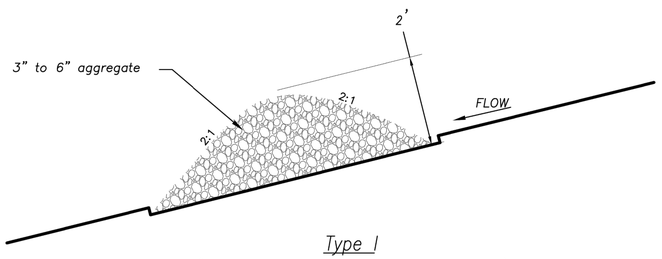
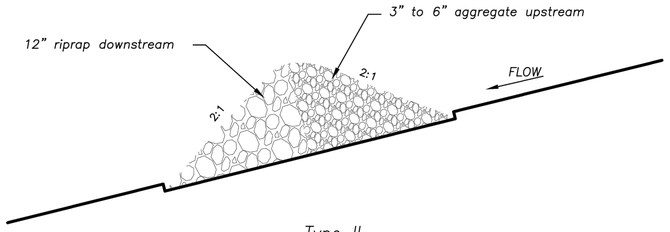


Type I

(2 Acres or less of Drainage Area)

Not to Scale



Type II

(2–10 Acres of Drainage Area)

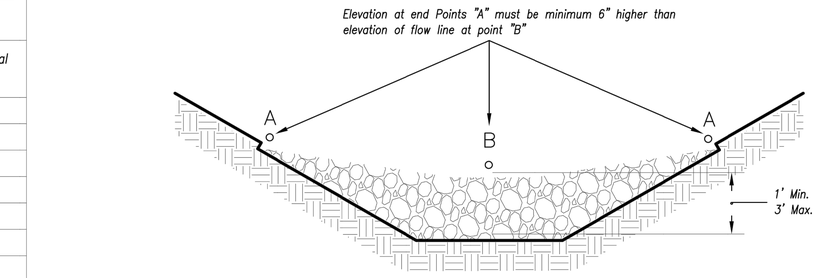
Not to Scale

Temporary Rock Ditch Check Spacing

Ditch Centerline Slope (%)	Spacing Interval (Feet)
5.0	60
6.0	50
7.0	43
8.0	36
9.0	33
10.0	29

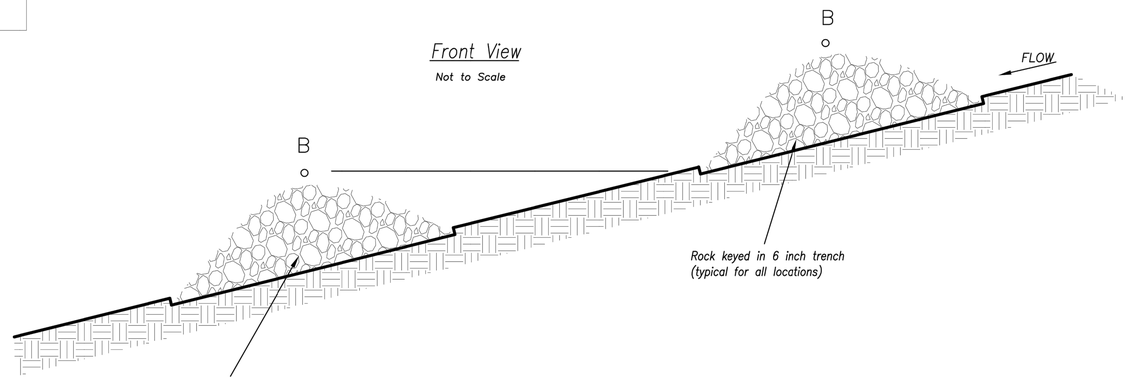
Note: Use this spacing only for Rock Ditch Checks.

ROCK DITCH CHECK



Front View

Not to Scale



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

Notes:

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%.

Maintenance:

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.

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Title: Project Engineer Firm: Anderson Engineering Inc.

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

04/16/2021

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KANSAS CITY METRO CHAPTER

ROCK DITCH CHECKS

STANDARD DRAWING NUMBER ESC-10

ADOPTED: 10/24/2016

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

ROCK DITCH CHECKS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
PROFESSIONAL ENGINEER

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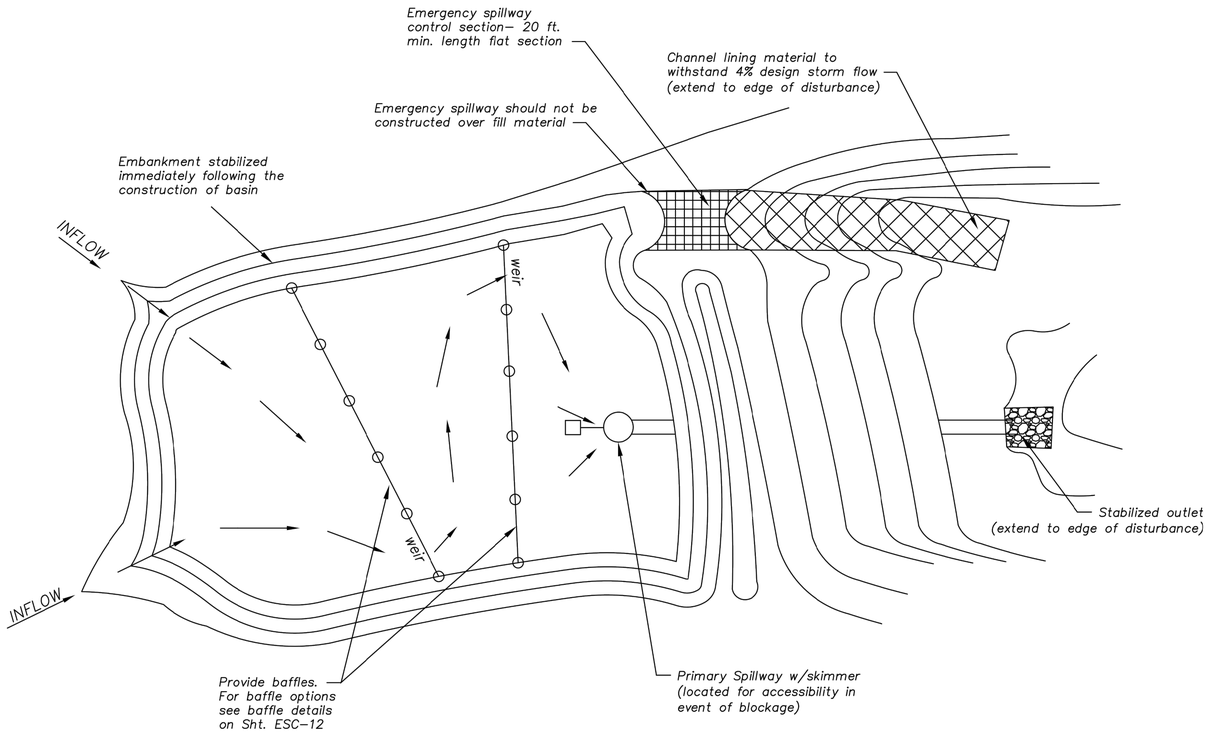
Mar 11, 2021 – 2:08pm Plotted By: gcote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\01 CIVIL\03–DWG\Sheet\STREET AND STORM\20KC10057 – SHTS – DETAILS.dwg Layout: ROCK DITCH CHECKS



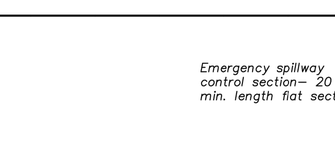
Sediment Basin Design Summary (**)

Design Item	Basin #1	Basin #2	Units	Notes
Site Data:				
Tributary Drainage Area to Pond	18.87		Acres	
50% (2 yr) Design Flow	52		cfs	
4% (25 yr) Design Flow	165		cfs	
Pond Data:				
Minimum Sediment Storage Volume	2,529		cu yd	134 cy/acre required minimum
Provided Sediment Storage Volume	3,550		cu yd	
Bottom Elevation	949.00		Ft	
Sediment Cleanout Elevation	951.40		Ft	Elevation equal to 20% of original design volume
Top of Riser Elevation	954.50		Ft	Top of dry storage volume
Emergency Spillway Elevation	959.00		Ft	at or above Q–2 elevation. 1.0 ft min above principal spillway
Top of Dam Elevation	959.00		Ft	1.0 ft min above Q–25 elevation
Basin Shape Data:				
A = Area at Normal Pool	33,261		SF	
L = Length of Flow Path	505		Ft	
We = Effective Width = A/L	88.4		Ft	
Length to Width Ratio = L/We	3.7			
Principal Spillway Data:				
Riser Pipe dia	60		in	15" min. Size for 2 year flow minimum
Barrel Pipe dia	54		in	15" min. Size for 2 year flow minimum
Concrete Base size for Riser Pipe	1.5		CY	Size to prevent flotation. 1.25 safety factor required
Skimmer Size	6"			Designer to provide specific details and calculations per application to dewater in 48 to 72 hours
Emergency Spillway Data:				
Design Depth in Spillway	0.76		ft	
Design Velocity in Spillway	3.61		ft/sec	
Lining Material	CH–CL			Designer to provide specific details and calculations per application

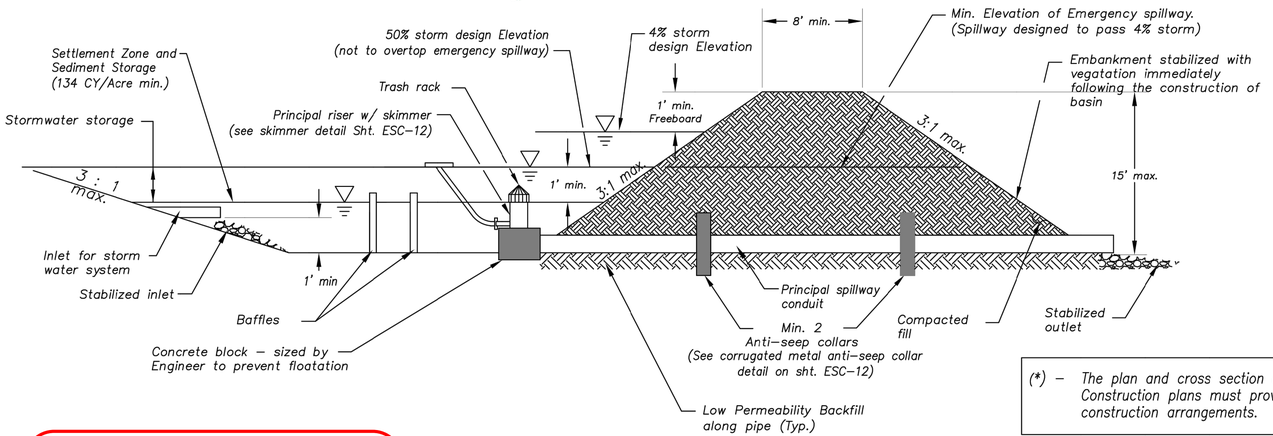
(**) – Required on all Sediment Basin Plan Sheets

EMERGENCY SPILLWAY CALCULATIONS:

DEPTH – 0.76 FT
Q_{SPILL} – 203.4 CFS
Q_{100} – 194.2 CFS
AREA – 56.4 SQ.FT.
V – 3.61 FT/S
W_P – 90.9 FT
Y_C – 0.67
TOP W – 91 FT
BOT. W – 58 FT



Plan View (*)
Not to Scale



Cross Section (*)
Not to Scale

(*) – The plan and cross section are schematic in nature. Construction plans must provide specific site construction arrangements.

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

Sediment Basin Notes:

1. Interior baffles shall be provided to reduce short–circuiting of the basin. See Sht. ESC–12 for approved baffle options.
2. Emergency spillways to be located in a non–fill location when feasible and shall be lined with a non–erodible material such as Riprap or Turf Reinforcement Mat.
3. When directed, sediment basins shall be fenced using construction fence or other material for safety reasons and include warning signs, reading: "Danger – KEEP OUT".

Maintenance:

1. Check temporary sediment basins after periods of significant runoff.
2. Remove sediment and restore the basin to its original dimensions when sediment accumulates to 20% of the storage capacity.
3. Immediately repair any erosion damage to the embankment and outlets.
4. Repair and/or replace baffles as necessary to maintain function and integrity of installation.
5. Keep outlet, skimmer and pool area free of all trash and other debris.

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

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Kansas City Metro Chapter APWA American Public Works Association
KANSAS CITY METRO CHAPTER
SEDIMENT BASIN
STANDARD DRAWING NUMBER ESC-11
ADOPTED: 10/24/2016

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

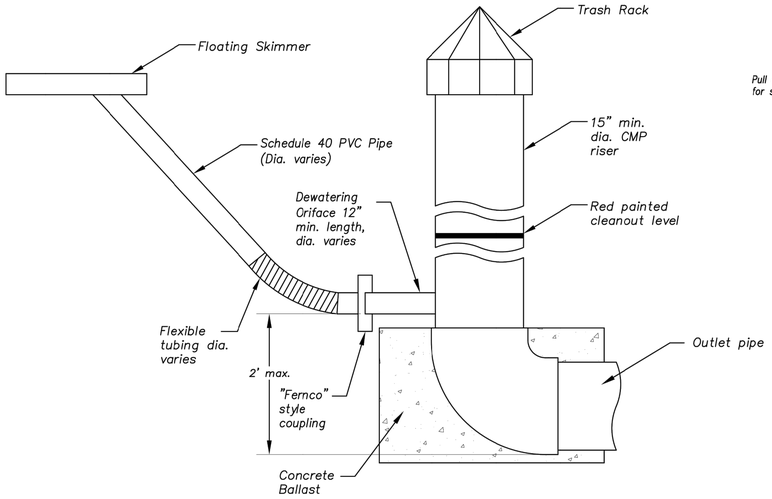
SEDIMENT BASIN

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

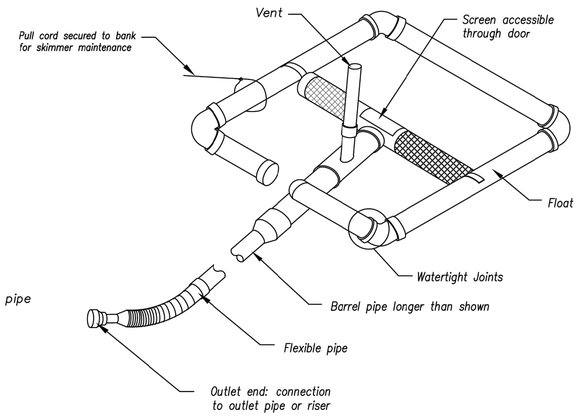
STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/21
PROFESSIONAL ENGINEER

SHEET NUMBER
C607
37 OF 40

Mar 11, 2021 – 2:08pm Plotted By: gcote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\01 CIVIL\03–DWG\Sheet\STREET AND STORM\20KC10057 – SHTS – DETAILS.dwg Layout: SEDIMENT BASIN

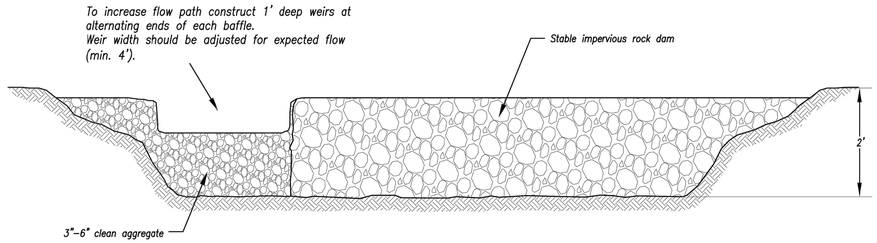


PRINCIPAL SPILLWAY DETAIL

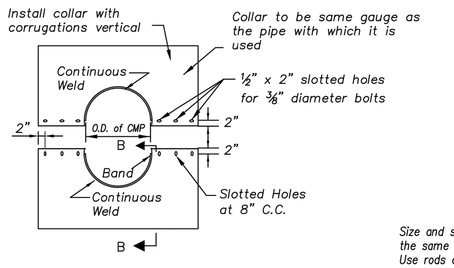


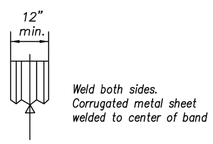
SKIMMER DETAIL (Typ.) *

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



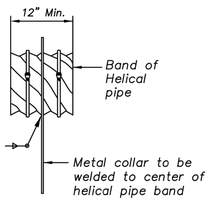
Option A – Rock with Weir



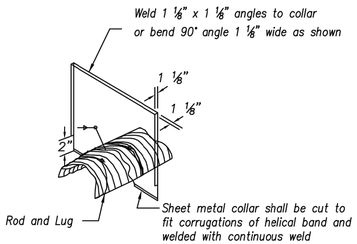


SECTION B–B

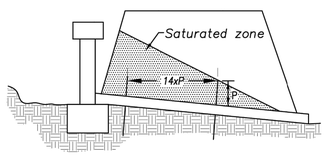
Size and spacing of slotted openings shall be the same as shown for CM collar. Use rods and lugs to clamp bands securely to pipe.



PARTIAL ELEVATION



ISOMETRIC VIEW



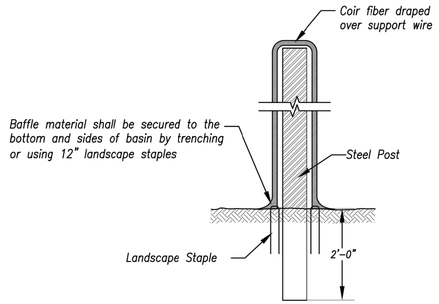
ANTI–SEEPAGE COLLAR LOCATIONS

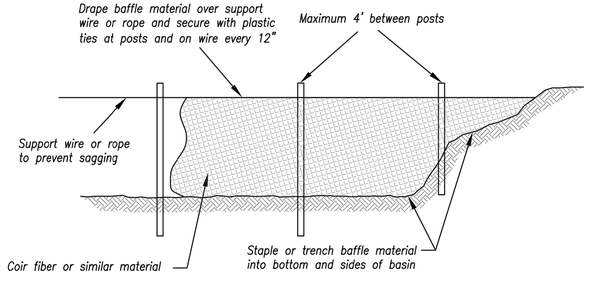
Anti–Seepage Collar Notes:

1. Connections between the anti–seepage collar and the barrel must be watertight.
2. P = projection distance. Sized as required to achieve at least a 10% increase in seepage length.
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.
6. When specified on the plans, coating of collars shall be in accordance with construction material specifications.
7. Unassembled collars shall be marked by painting or tagging to identify matching pairs.
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 installation.
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".

CORRUGATED METAL ANTI–SEEPAGE COLLAR DETAIL

Not to Scale





Option B – Coir Fiber Material

BAFFLE DETAILS

Not to Scale

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

AS-BUILT

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Date: 03/24/2022 Certified by: GRC
Title: Project Engineer Firm: Anderson Engineering Inc.

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 APWA American Public Works Association

KANSAS CITY METRO CHAPTER

SEDIMENT BASIN - DETAILS

STANDARD DRAWING NUMBER ESC-12

ADOPTED: 10/24/2016

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DRAWING INFO.

DRAWN BY:	GC
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LICENSE NO.	PE-2012009232
DATE:	12/2/2020
ISSUED FOR:	FOR REVIEW
JOB NUMBER:	20KC10057
MO COA NO.	000062

REVISIONS

NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

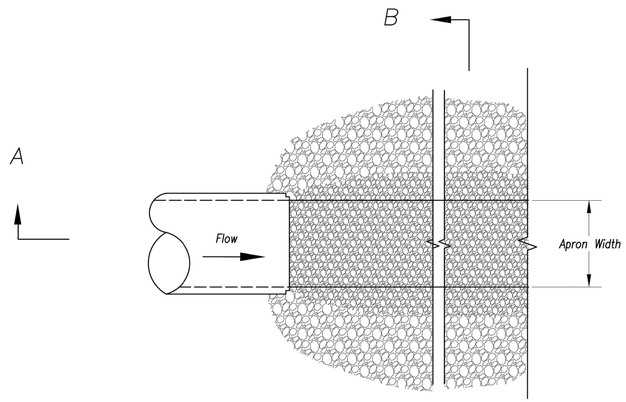
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

SEDIMENT BASIN DETAILS

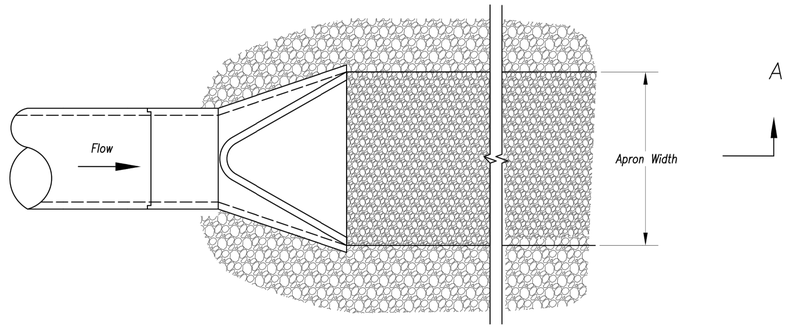
S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
3/10/22
PROFESSIONAL ENGINEER

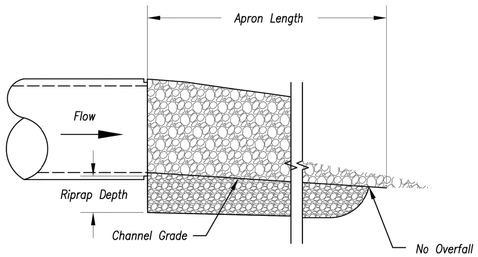
SHEET NUMBER
C608
38 OF 40



Plan View
Not to Scale



Plan View
Not to Scale



Section A–A
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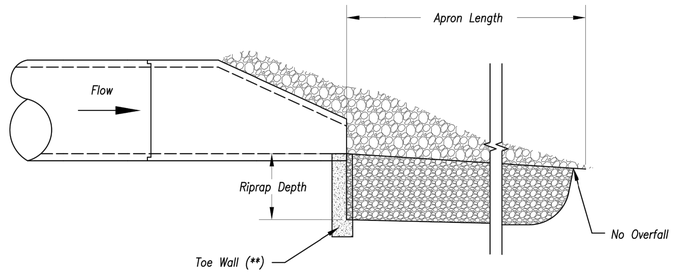
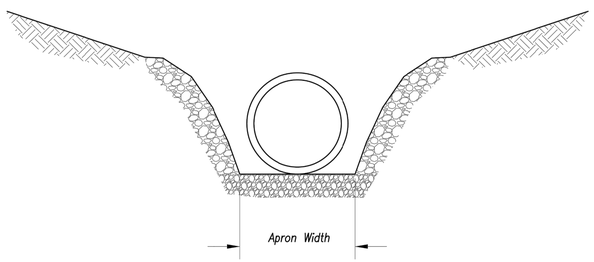


Section A–A
Not to Scale

OUTLET PROTECTION WITH END SECTION



Section B–B
Not to Scale

OUTLET PROTECTION W/O END SECTION

Notes:

1. Rock all sides steeper than 3:1.
2. Stabilize all disturbed areas downstream of outlet to the limits of disturbance.
3. 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.
5. Reference APWA Specification 2650 for rock type, size, and placement.

AS-BUILT

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Title: Project Engineer Firm: Anderson Engineering Inc.

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

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

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OUTLET PROTECTION

STANDARD DRAWING NUMBER ESC-14
ADOPTED: 10/24/2016

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2.	REVISED PER CITY COMMENTS	GC	2/26/21
6.	AS-BUILT DRAWINGS	GC	4/27/22

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

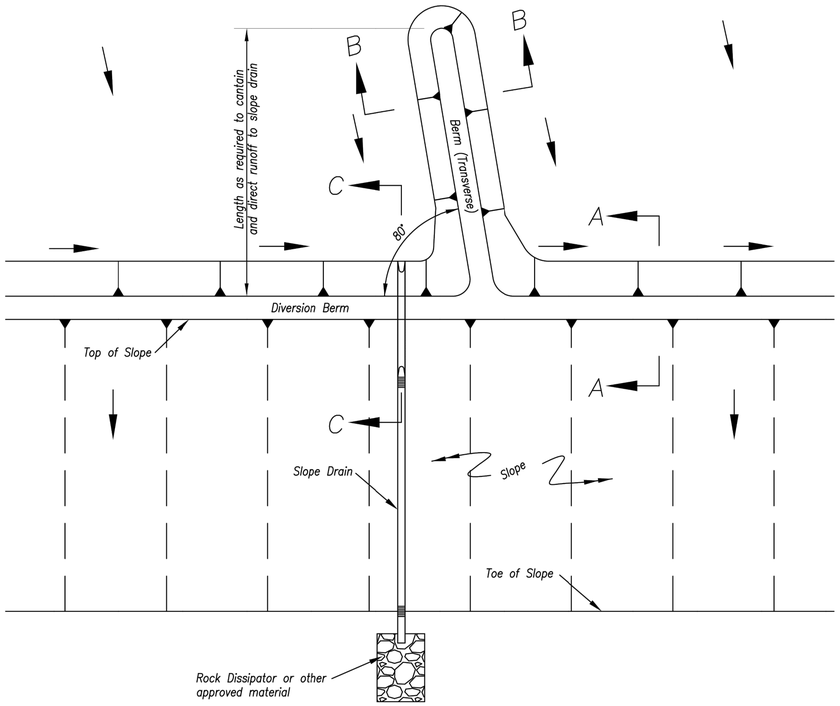
OUTLET PROTECTION DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER PE-2012009232
5/10/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C609
39 OF 40

Mar 11, 2021 – 2:08pm Plotted By: gcote G:\Shared drives\KC10 – Land Development\Projects\2020\20KC10057 Highland Meadows – 5th Plat\01 CIVIL\03–DWG\Sheet\STREET AND STORM\20KC10057 – SHTS – DETAILS.dwg Layout: OUTLET PROTECTION DETAILS



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.

Maintenance:

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:

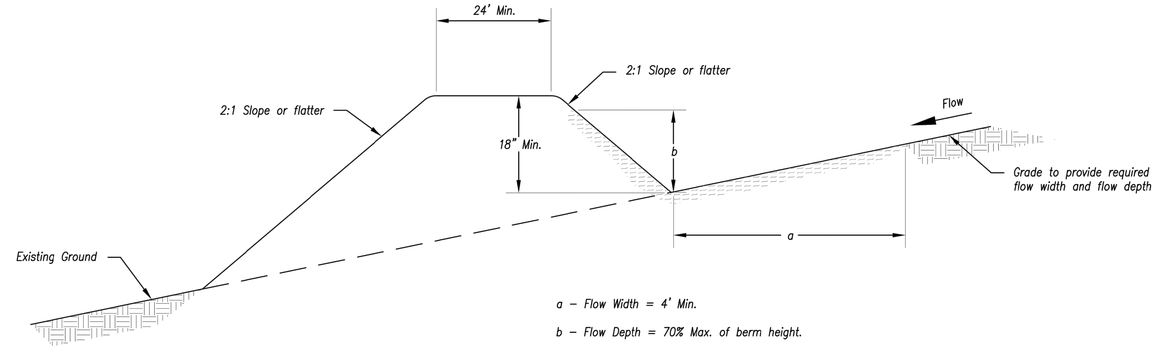
1. Slope Drain and Diversion Berm may be used on either project foreslopes or project backslopes.
2. Discharge of Slope Drains shall be into stabilized ditch or area, or into Sediment Basin.
3. Pipe shall be secured in place as approved by Engineer.

Maintenance:

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

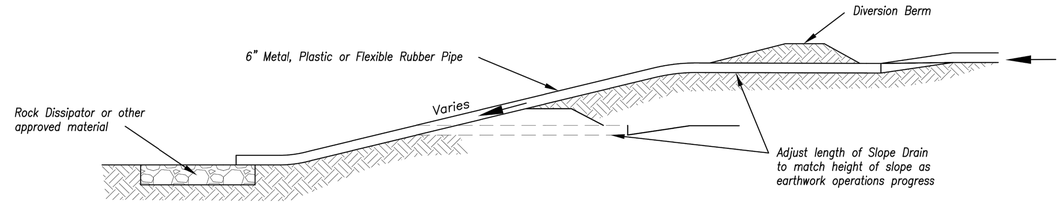
Not to Scale

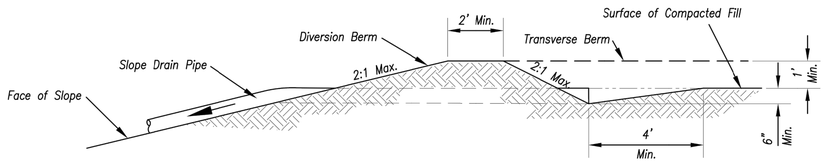


a – Flow Width = 4' Min.

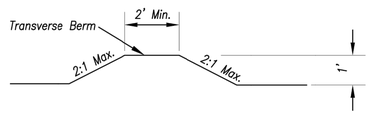
b – Flow Depth = 70% Max. of berm height.

TYPICAL PROFILE OF DIVERSION BERM





Section C–C



Section B–B

TYPICAL PROFILE OF DIVERSION BERM WITH SLOPE DRAIN

AS-BUILT

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DIVERSION BERMS AND SLOPE DRAINS

STANDARD DRAWING NUMBER ESC-05

ADOPTED: 10/24/2016

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

TEMPORARY DIVERSION BERM

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
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NUMBER PE-2012009232
5/25/22
PROFESSIONAL ENGINEER

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