

# HOOK FARMS FIRST PLAT STREET AND STORM SEWER PLANS

SECTION 23, TOWNSHIP 47 N, RANGE 32 W  
IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

**AS BUILT**

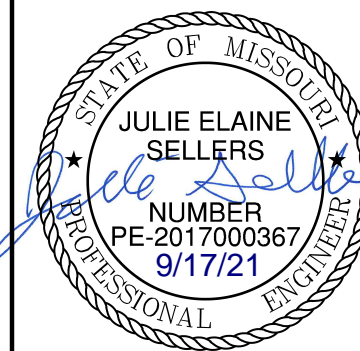
Date Surveyed: 2021-08-04

I hereby certify that the conditions shown are correct and the sewer are acceptably located within existing easements or right of ways.

*Julie E. Sellers*  
Julie E. Sellers, P.E.

**olsson**

Olsson - Civil Engineering  
Missouri Certificate of Authority #001592  
1301 Burlington Street  
North Kansas City, MO 64116  
www.olsson.com  
TEL 816.361.1177  
FAX 816.361.1888

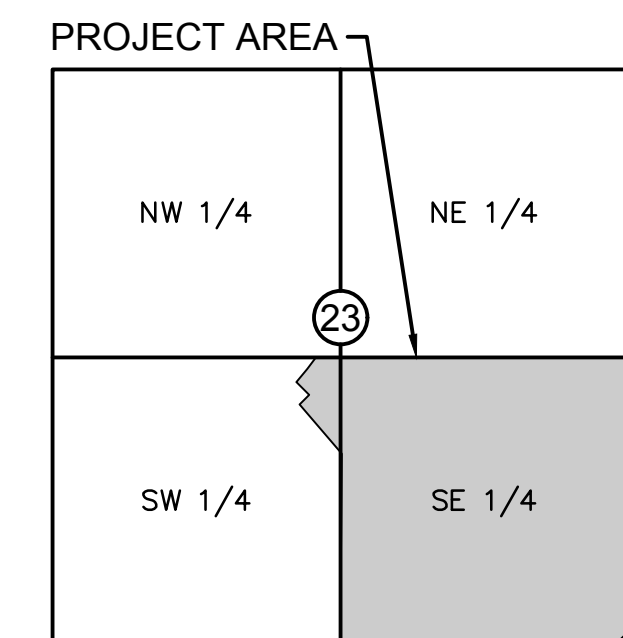


REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

TITLE SHEET	2020
STREET AND STORM SEWER PLANS	
HOOK FARMS FIRST PLAT	
LEE'S SUMMIT, MO	

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020

SHEET  
C101



**VICINITY MAP**  
S23, T47N, R32W  
SCALE 1"=2000'

PROJECT TEAM & UTILITY CONTACT LIST	
<b>OWNER / DEVELOPER</b>	HUNT MIDWEST REAL ESTATE DEVELOPMENT, INC. 8300 NE UNDERGROUND DRIVE KANSAS CITY, MO 64161 CONTACT: AARON SCHMIDT PHONE: 816.459.4285 EMAIL: ASCHMIDT@HUNTMIDWEST.COM
<b>ENGINEER</b>	OLSSON 1301 BURLINGTON STREET, SUITE 100 NORTH KANSAS CITY, MISSOURI 64116 CONTACT: JULIE E. SELLERS, P.E. PHONE: 816.361.1177
<b>SURVEYOR</b>	OLSSON 1301 BURLINGTON STREET, SUITE 100 NORTH KANSAS CITY, MISSOURI 64116 CONTACT: JASON ROUDEBUSH, P.L.S. PHONE: 816.361.1177

<input type="checkbox"/>	NOT FOR CONSTRUCTION
<input checked="" type="checkbox"/>	REVIEWED FOR CONSTRUCTION

**Accepted Record Drawings**  
These plans have been reviewed for accuracy and are accepted for basic conformance to the approved construction drawings.



**PROPERTY DESCRIPTION:**

A tract of land in the Southeast Quarter of Section 23, Township 47 North, Range 32 West of the 5th Principal Meridian in Lee's Summit, Jackson County, Missouri being bounded and described by or under the direct supervision of Jason S Roubesh, P.L.S. 2002014092 as follows: Commencing at the Southeast corner of said Southeast Quarter; thence North 02°45'34" East, on the East line of said Southeast Quarter, 2,635.08 feet to the Northeast corner of said Southeast Quarter; thence North 87°45'24" West, on the North line of said Southeast Quarter, 50.00 feet to the Southeast corner of Lot 3, EAGLE CREEK—FIRST PLAT, a subdivision in said Lee's Summit recorded as Instrument Number 110409 in Book 165 at Page 01 in Jackson County Recorder of Deeds Office, also being the Northwest corner of SW Pryor Road as described in the Right of Way Deed recorded as Instrument Number 20050087407 in said Jackson County Recorder of Deeds Office, also being Point of Beginning of the tract of land to be herein described; thence South 02°45'34" West, on the existing Westerly right-of-way line of said SW Pryor Road of said Right of Way Deed, 1,220.74 feet; thence leaving said existing Westerly right-of-way line, North 87°00'50" West, 245.56 feet; thence North 02°59'10" East, 25.00 feet; thence North 87°00'50" West, 438.50 feet; thence North 60°49'13" West, 252.48 feet; thence North 67°11'53" West, 74.21 feet; thence North 27°18'12" East, 138.17 feet; thence Westerly, on a curve to the left, having an initial tangent bearing of North 62°41'48" West with a radius of 275.00 feet, a central angle of 11°57'16" and an arc distance of 57.38 feet; thence North 15°20'56" East, 50.00 feet; thence North 29°10'47" East, 375.17 feet; thence North 07°19'52" East, 64.17 feet; thence South 87°00'50" East, 126.12 feet; thence North 02°59'10" East, 116.00 feet; thence North 42°00'50" West, 19.80 feet; thence North 02°59'10" East, 50.00 feet; thence South 87°00'50" East, 36.00 feet; thence North 02°59'10" East, 277.38 feet to a point on the South line of said EAGLE CREEK—FIRST PLAT and said North line of said Southeast Quarter; thence South 87°45'24" East, on said South and said North line, 643.83 feet to the Point of Beginning. Containing 953,270 square feet or 21.88 acres, more or less.

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNVC\Street and Storm Plans\C\_TTL01\_0194061.dwg  
 DATE: Sep 16, 2021 8:34am  
 USER: mossion  
 XREFS: C\_P\BLK\_0194061\_34x22  
 C\_P\BLK\_0194061

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\_V\_TTL01\_0194061.dwg  
 DATE: Sep 16, 2021 8:34am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061

USER: mossion

**GENERAL NOTES**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION ARE THE MOST CURRENT VERSION ISSUED, ARE FULLY COORDINATED WITH ALL SUBCONTRACTORS, AND PRESENT ON SITE AT ALL TIMES. CURRENT PLANS PREPARED BY OLSSON MAY BE OBTAINED AT THE DIRECTION OF OLSSON'S CLIENT. DIRECT REQUESTS TO OLSSON MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR INFORMATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
7. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY THROUGHOUT THE PROJECT AND NOT BE LIMITED BY WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
9. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
12. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

**REFERENCES**

1. ARCHITECTURAL AND STRUCTURAL ELEMENTS SHOWN IN THESE PLANS ARE FOR REFERENCE ONLY. CONTRACTORS AND SURVEYORS SHALL REFERENCE THEIR RESPECTIVE PLANS FOR DESIGN INFORMATION.
2. THE CONTRACTOR SHALL ADHERE TO THE SITE PREPARATION AND STRUCTURAL FILL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AS PROVIDED BY THE GEOTECHNICAL ENGINEER INCLUDING ALL CURRENT ADDENDUMS, THE STANDARDS AND SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI SHALL ALSO APPLY AND TAKE PRECEDENCE WHEN STRICTER THAN THE GEOTECHNICAL REPORT OR WHEN NO GEOTECHNICAL REPORT IS GIVEN.
3. UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY:
  - A. ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.
  - B. ALL CONSTRUCTION IN MISSOURI DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MISSOURI DEPARTMENT OF TRANSPORTATION.
  - C. ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
  - D. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES..
  - E. ALL EXTERIOR PAVEMENT (PCC, ASPHALT, ETC.) SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DELIVERY MANAGER AND COORDINATING ANY MAILBOXES THAT MAY BE DISTURBED. FAILURE TO DO SO MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.

**EXISTING CONDITIONS**

1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN INVESTIGATIONS AND MAKING THEIR OWN ASSUMPTIONS REGARDING SITE SURFACE AND SUBSURFACE CONDITIONS. THIS INCLUDES THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. CONTACT THE ENGINEER REGARDING ANY DISCREPANCIES THAT MAY AFFECT THE ABILITY TO CONSTRUCT FROM THESE PLANS AS DESIGNED.
3. EXISTING CONDITIONS WERE DETERMINED THROUGH A VARIETY OF METHODS THAT MAY INCLUDE SURVEY, AERIAL IMAGERY, AVAILABLE RECORDS, GIS DATA, ETC. SUBSURFACE CONDITIONS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES AND OTHER SITE IMPROVEMENTS PRESENT ON SITE. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS WHEN CONFLICTS AND DISCREPANCIES ARE FOUND.

**CONSTRUCTION**

1. THE CONTRACTOR SHALL INSTALL TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY AS SHOWN IN THESE PLANS. IF PLANS ARE NOT PROVIDED, CONTRACTOR SHALL COORDINATE AND PROVIDE CONTROLS TO THE SATISFACTION OF THE RIGHT-OF-WAY OWNER.
2. THE CONTRACTOR SHALL PROTECT ALL TREES OVER 3" CALIPER FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
3. IN ADDITION TO THE CONDITIONS OF THE GEOTECHNICAL REPORT AND AS A MINIMUM THE CONTRACTOR SHALL PERFORM THE GRADING AS FOLLOWS:
  - A. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY BUILDING AND PAVING. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON SITE IN AREAS DESIGNATED BY THE OWNER. CONTRACTOR SHALL REMOVE EXCESS STRIPPINGS AND EXCESS EXCAVATION WITHIN 30 DAYS OF COMPLETION OF GRADING OPERATIONS.
  - B. AREAS TO RECEIVE FILL AND AREAS CUT TO SUBGRADE LEVEL SHALL BE SCARIFIED AND THE TOP 8-INCH DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. THE SUBGRADE SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS. ANY UNSUITABLE AREAS SHALL BE UNDERCUT AND REPLACED WITH SUITABLE MATERIAL BEFORE ANY FILL MATERIAL CAN BE APPLIED.
  - C. FILL SHALL BE PLACED IN MAXIMUM OF 8 INCH LIFTS.
  - D. TOPSOIL SHALL BE PLACED TO A MINIMUM DEPTH OF 6 INCHES OVER ALL AREAS DISTURBED BY THE WORK. LARGE STONES, STICKS AND LUMPS SHALL BE REMOVED OR BROKEN UP, AND THE TOPSOIL SHALL BE LEVELED AND RAKED. ALL DISTURBED AREAS SHALL BE LANDSCAPED PER LANDSCAPE PLANS OR SHALL BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED.
  - E. CONTRACTOR SHALL PROVIDE COMPACTION TEST RESULTS AS REQUIRED.
4. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.
5. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED. NOT ALL ADJUSTMENTS ARE INDICATED IN THE PLANS.
6. THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

**SHOP DRAWINGS**

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

**STORM SEWER PLAN NOTES**

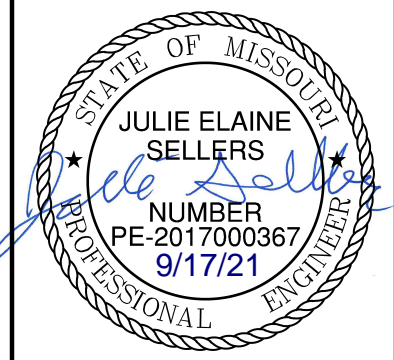
1. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH LEE'S SUMMIT, MISSOURI.
2. ALL PIPE LENGTHS AND ELEVATIONS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES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

ESTIMATE OF QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
STREET				
1	EXCAVATION	C.Y.	<del>5,710</del>	5,710
2	EMBANKMENT	C.Y.	<del>15,087</del>	15,087
3	SUBGRADE STABILIZATION (6" FLYASH TREATMENT)	S.Y.	<del>11,866</del>	11,866
4	6" ASPHALT PAVEMENT	S.Y.	<del>9,612</del>	9,612
5	CONCRETE CURB & GUTTER (CG-2)	L.F.	<del>6,335</del>	6,335
6	CONCRETE CURB & GUTTER (CG-1 DRY)	L.F.	<del>245</del>	245
7	5' CONCRETE SIDEWALK	L.F.	<del>143</del>	143
8	ADA RAMP	EA.	<del>11</del>	11
9	STOP SIGNS	EA.	<del>5</del>	5
10	STREET NAME SIGNS	EA.	<del>10</del>	10
11	TYPE IV OBJECT MARKERS	EA.	<del>2</del>	2
STORM				
12	STD. CURB INLET (5'x3' INSIDE)	EA.	<del>19</del>	19
13	STD. CURB INLET (6'x3' INSIDE)	EA.	<del>3</del>	3
14	STD. FIELD INLET (4'x4' INSIDE)	EA.	<del>6</del>	6
15	STD. MANHOLE (5' DIA. INSIDE)	EA.	<del>1</del>	1
16	WATER QUALITY BASIN OUTLET STRUCTURE	EA.	<del>1</del>	1
17	6" PVC	L.F.	<del>175.99</del>	175.99
18	15" HDPE	L.F.	<del>419.42</del>	420.17
19	18" HDPE	L.F.	<del>1552.87</del>	1551.18
20	24" HDPE	L.F.	<del>436.49</del>	432.8400
21	30" HDPE	L.F.	<del>284.64</del>	280.70
22	36" HDPE	L.F.	<del>94.79</del>	94.22
23	18" FLARED END SECTION	L.F.	<del>2</del>	2
24	24" FLARED END SECTION	L.F.	<del>1</del>	1
25	30" FLARED END SECTION	EA.	<del>1</del>	1
26	36" FLARED END SECTION	EA.	<del>1</del>	1
27	15" HDPE PLUG	EA.	<del>1</del>	1
28	RIPRAP	S.Y.	<del>55.1</del>	55.1

**AS-BUILT**

DATE: 21-08-04

Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



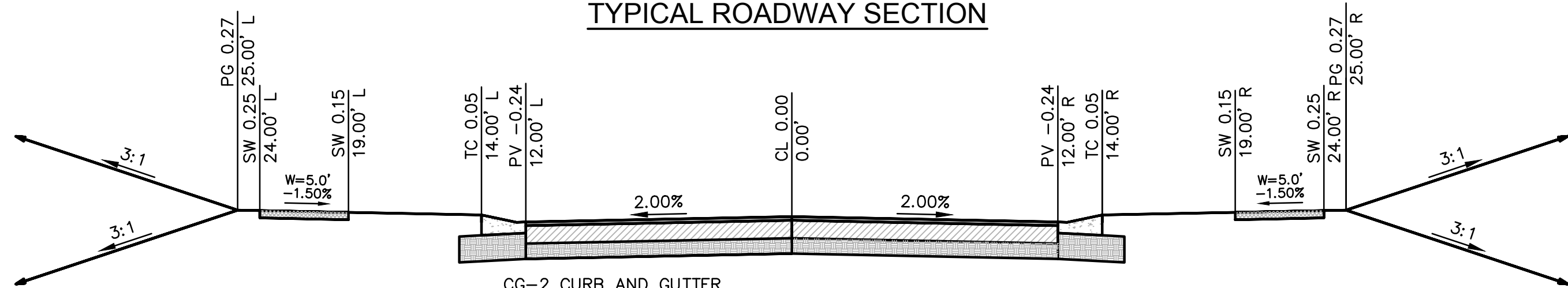
REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

GENERAL NOTES  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST PLAT  
 2020  
 LEE'S SUMMIT, MO

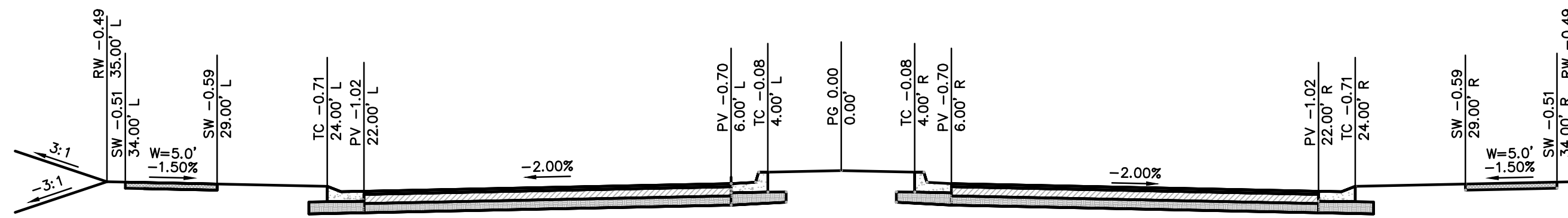
drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_GEN01\_0194061.dwg  
 DATE: Sep 16, 2021 8:34am XREFS: C\_PTBK\_0194061\_34x22 C\_PBND\_0194061 C\_XBASE\_0194061 C\_PBASE\_0194061 C\_PUTIL\_0194061 C\_FBASE\_0194061 USER: mession

**TYPICAL ROADWAY SECTION**



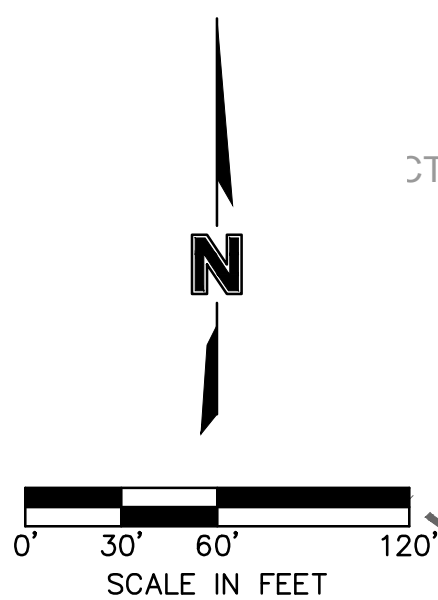
CG-2 CURB AND GUTTER  
 2" TYPE 5 OR 6 ASPHALTIC CONCRETE SURFACE  
 4" TYPE 5 ASPHALTIC CONCRETE BASE COURSE  
 6" MIN. MODOT TYPE 5 STONE BASE  
 6" MIN. FLYASH STABILIZED SUBGRADE



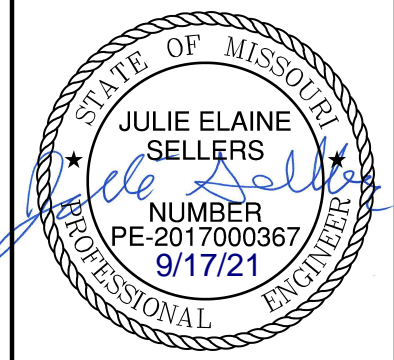
RESIDENTIAL LOCAL STREET - ENTRANCE (48' BK-BK)  
 SW 26TH TERRACE

CG-2 CURB & GUTTER  
 CG-1 DRY CURB & GUTTER AT MEDIAN  
 2" TYPE 6 ASPHALTIC CONCRETE SURFACE  
 4" TYPE 5 ASPHALTIC CONCRETE BASE COURSE  
 6" MIN. MODOT TYPE 5 STONE BASE  
 6" FLYASH STABILIZED SUBGRADE

**NOT AS-BUILT**



**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED PER CITY COMMENTS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

**GENERAL LAYOUT  
 STREET AND STORM SEWER PLANS**

**HOOK FARMS  
 FIRST PLAT**

LEE'S SUMMIT, MO 2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

**GENERAL NOTES:**

- CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEE'S SUMMIT (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED RIGHT-OF-WAY.
- AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND OR TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE GEOTECHNICAL ENGINEER AND OR TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AT HIS EXPENSE.
- ALL EMBANKMENT OUTSIDE OF RIGHT-OF-WAY SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 8". EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF -0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

LEGEND	
-100-	EXISTING INDEX CONTOURS
-100-	EXISTING INTERMEDIATE CONTOURS
-100-	PROPOSED INDEX CONTOURS
-100-	PROPOSED INTERMEDIATE CONTOURS

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	5,710	15,087
SITE	37,854	60,411
TOTAL	43,564	75,498

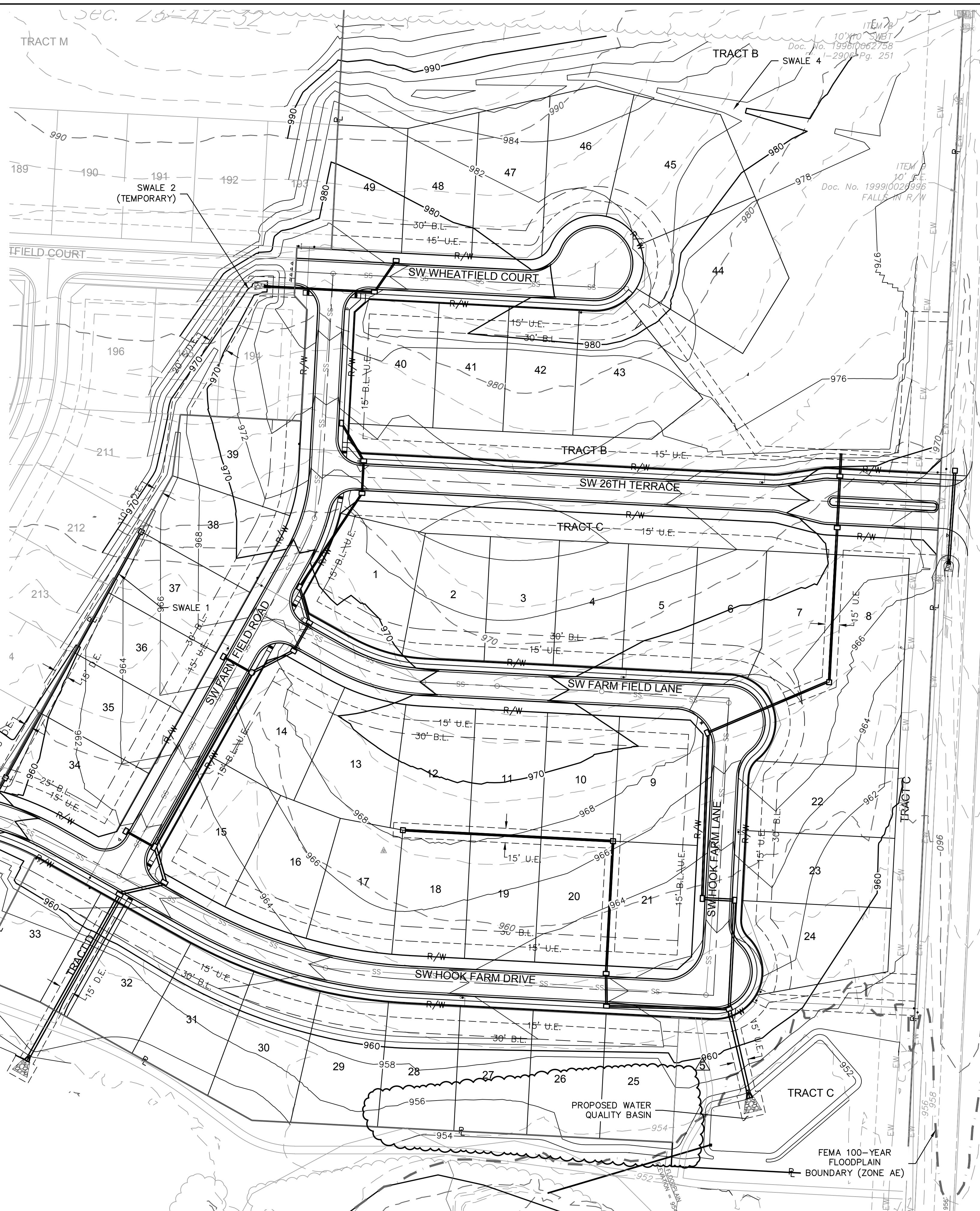
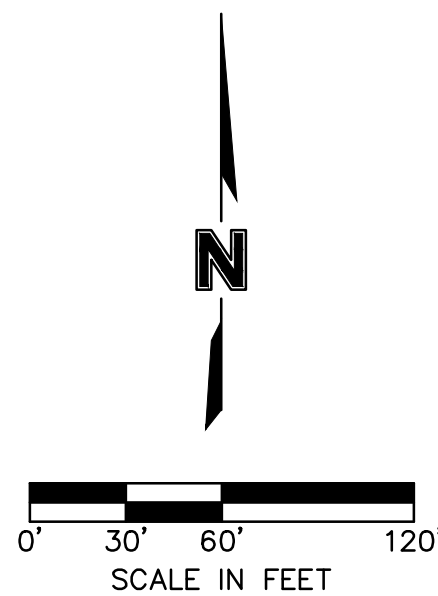
**EARTHWORK QUANTITIES NOTES:**

- EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
- EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.
- EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION THE IMPORTED STOCKPILE (APPROX. 20,000 CY) FROM KESSLER RIDGE 2ND PLAT.

Hook Farms 1st Plat As-Built				
Minimum Building Opening Elevation				
Lot	Rear Left MBOE	Rear Right MBOE	Front Left MBOE	Front Right MBOE
24	958.72	955.98	963.60	961.77
25	955.98	956.45	962.21	962.87
26	956.45	954.97	962.87	964.04
27	954.97	954.92	964.04	964.99
28	954.92	955.67	964.99	965.62
29	955.67	954.78	965.62	965.08
30	954.78	953.60	965.08	964.28
31	953.60	953.77	964.28	963.52
32	953.77	955.02	963.52	962.34
33	955.02	954.82	962.34	961.28
34	960.45	960.21	961.41	964.14
35	960.21	961.72	964.14	965.96
36	961.72	964.03	965.96	967.67
37	964.03	966.22	967.67	969.40
38	966.22	966.69	969.40	971.68
39	966.69	968.42	971.68	974.34

MBOE elevations have been provided per lot lines, facing the lot from the street. Interpolation will be allowed between the right and left side MBOE's provided, depending on the location of the lowest opening on the proposed structure.

**AS-BUILT MBOE TABLE**  
**NOT AS-BUILT SURFACE REFER TO MASTER DRAINAGE PLAN**



DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\As-Built\Sheets\GNCV\Street and Storm Plans\C\_GRD01\_0194061.dwg  
 DATE: Sep 16, 2021 8:34am  
 XREFS: C:\PTBLK\_0194061\_34x22 C:\PBASE\_0194061 C:\XBASE\_0194061 C:\PBASE\_0194061 C:\PBASE\_0194061  
 USER: mcession C:\PBASE\_0194061

**olsson**

Julie Elaine Sellers  
Professional Engineer  
No. PE-2017000367  
9/17/21

Missouri Certificate of Authority #001592  
1301 Burlington Street  
North Kansas City, MO 64116  
TEL 816.361.1177  
FAX 816.361.1888  
www.olsson.com

REV. NO.	DATE	DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED PER CITY COMMENTS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

**REVISIONS**

2020

GRADING PLAN  
STREET AND STORM SEWER PLANS

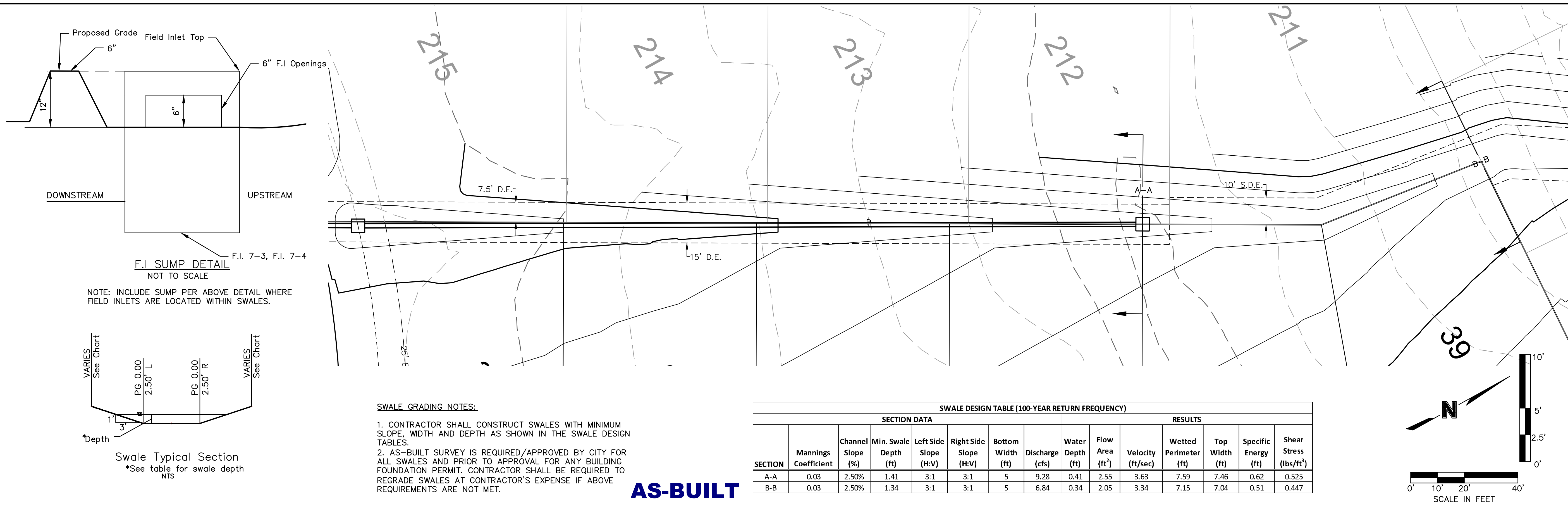
HOOK FARMS  
FIRST PLAT

LEE'S SUMMIT, MO

drawn by: CGW	checked by: JES
approved by: NDH	QA/QC by: JES
project no.: 019-4061	drawing no.:
date: 04/20/2020	

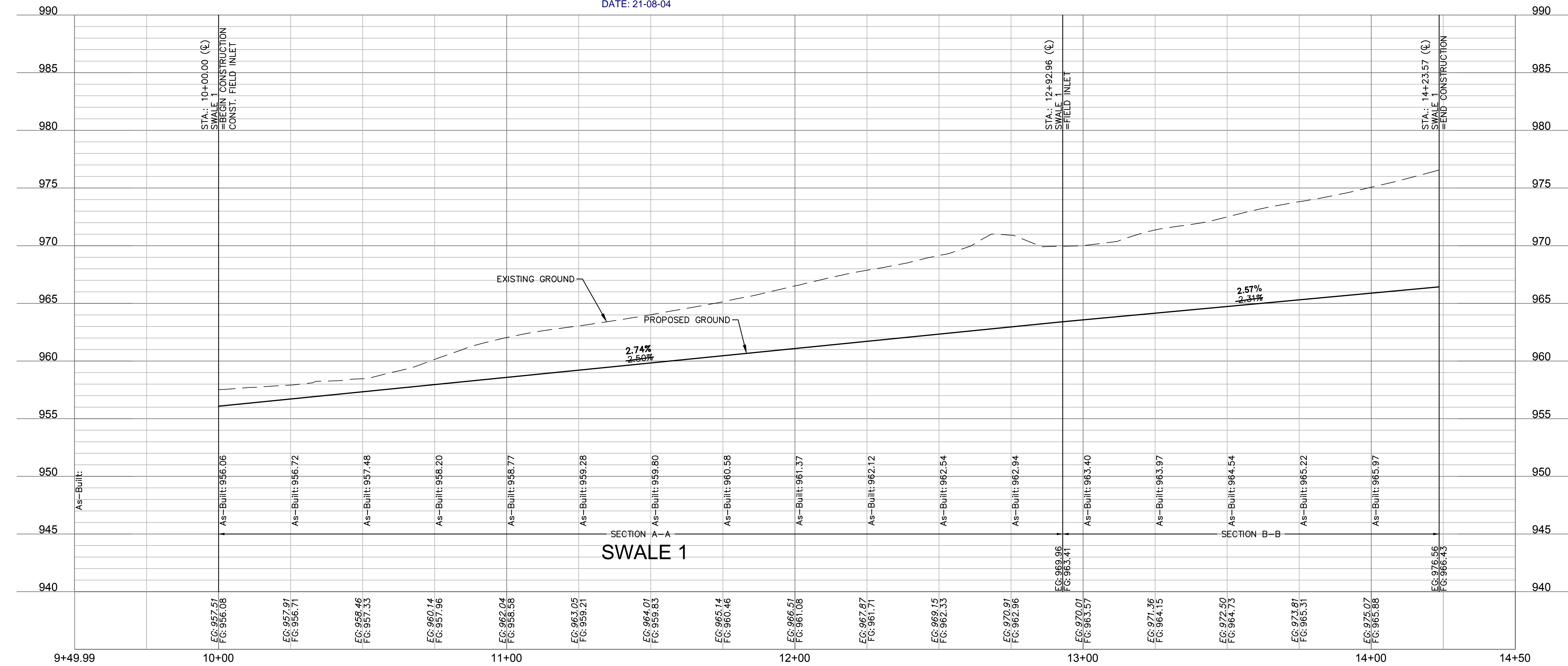
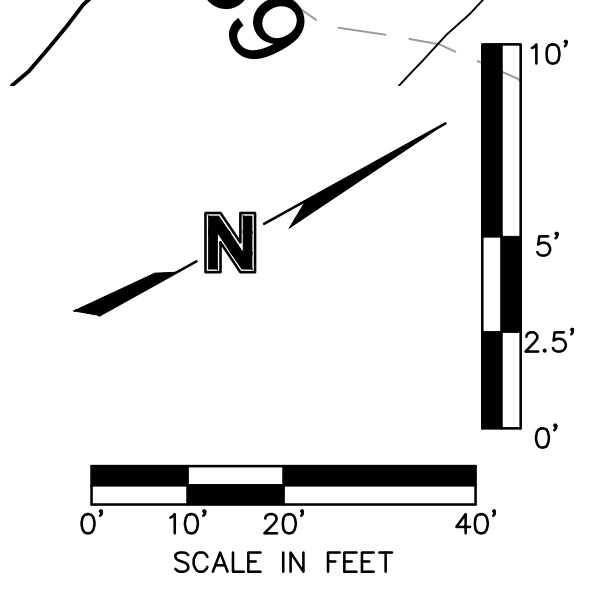
**SHEET C104**

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\As-Built\Sheets\GNCV\Street and Storm Plans\C\_SWL01\_0194061.dwg  
 DATE: Sep 16, 2021 8:35am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBASE\_0194061 C:\PBASE\_0194061 C:\PUTIL\_0194061 C:\PSURF\_0194061\_ASUBILT



**AS-BUILT**  
DATE: 21-08-04

SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION DATA								RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft <sup>2</sup> )	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft <sup>2</sup> )
A-A	0.03	2.50%	1.41	3:1	3:1	5	9.28	0.41	2.55	3.63	7.59	7.46	0.62	0.525
B-B	0.03	2.50%	1.34	3:1	3:1	5	6.84	0.34	2.05	3.34	7.15	7.04	0.51	0.447



Olsson - Civil Engineering  
Missouri Certificate of Authority #001592  
1301 Burlington Street  
North Kansas City, MO 64116  
TEL 816.361.1177  
FAX 816.361.1888  
www.olsson.com

REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADINGS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

SWALE 1 PLAN & PROFILE  
STREET AND STORM SEWER PLANS

HOOK FARMS  
FIRST PLAT

LEE'S SUMMIT, MO

2020

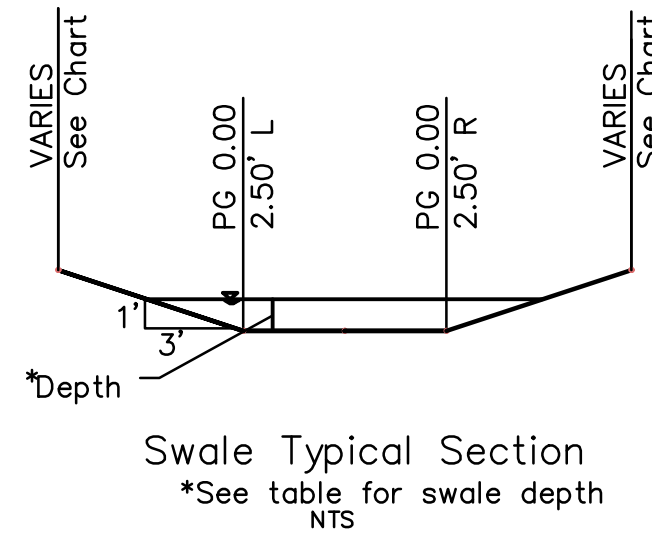
REVISIONS

drawn by: CGW  
checked by: JES  
approved by: NDH  
QA/QC by: JES  
project no.: 019-4061  
drawing no.:  
date: 04/20/2020

SHEET  
C105

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_SWL01\_0194061.dwg  
 DATE: Sep 16, 2021 8:35am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\XBASE\_0194061 C:\PUTIL\_0194061 C:\PSURF\_0194061\_AS\_BUILT

USER: mession  
 C:\FBASE\_0194061



Swale Typical Section  
 \*See table for swale depth  
 NTS

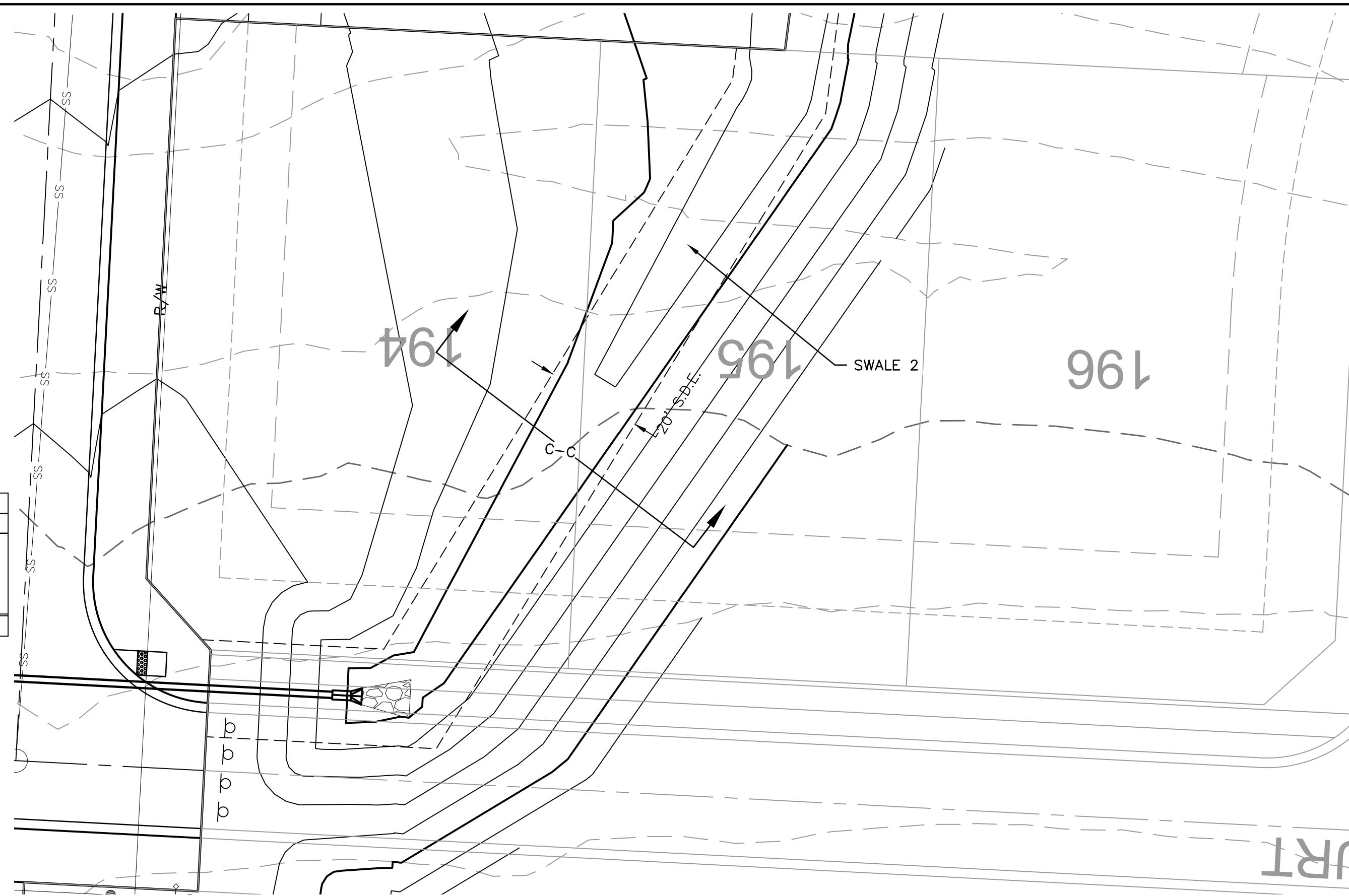
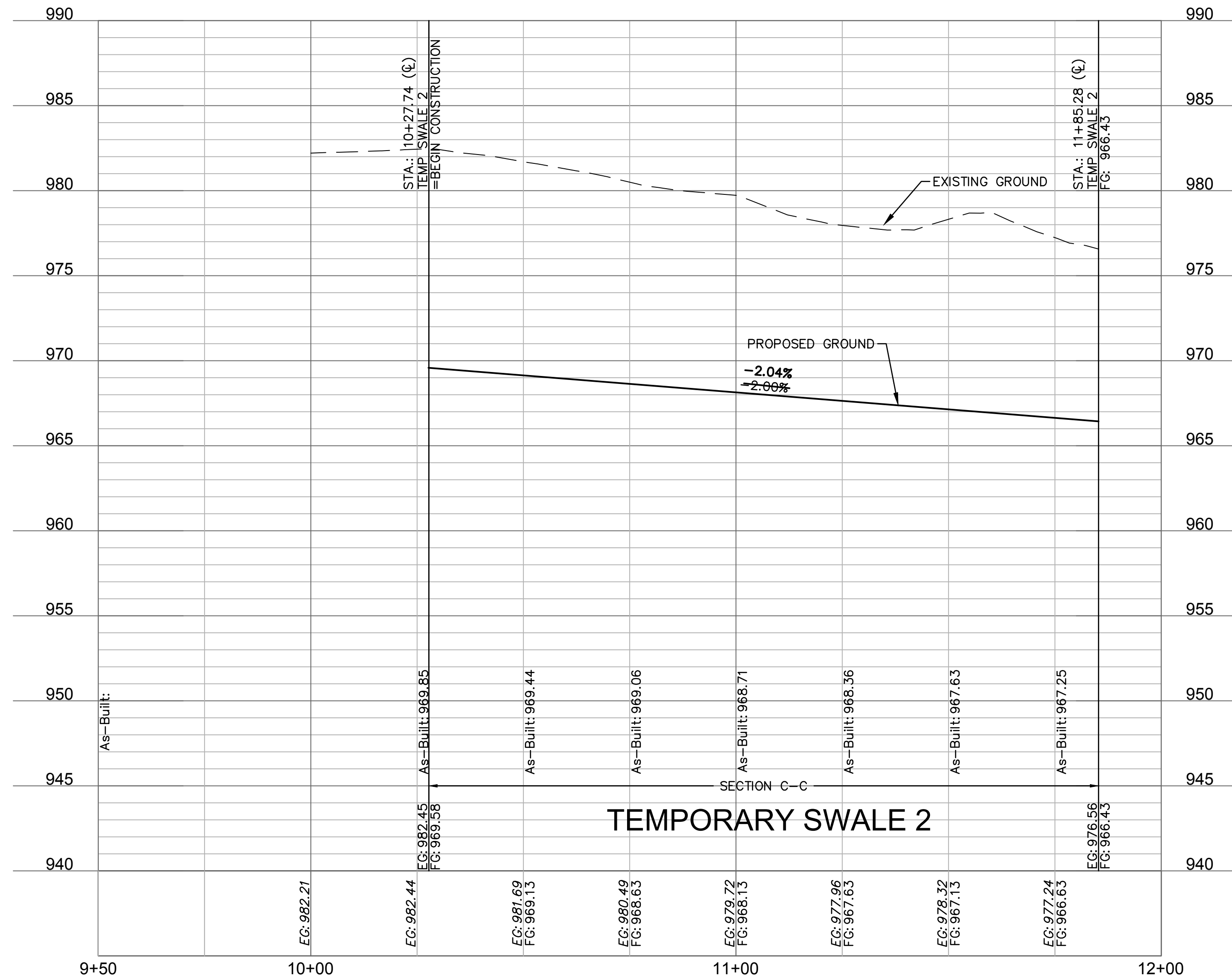
SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)

SECTION DATA								RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft <sup>2</sup> )	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft <sup>2</sup> )
C-C	0.03	2.00%	1.23	3:1	3:1	5	19.60	0.23	1.31	2.28	6.45	6.38	0.31	0.253

**AS-BUILT**  
 DATE: 21-08-04

SWALE GRADING NOTES:

- CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
- AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.



**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

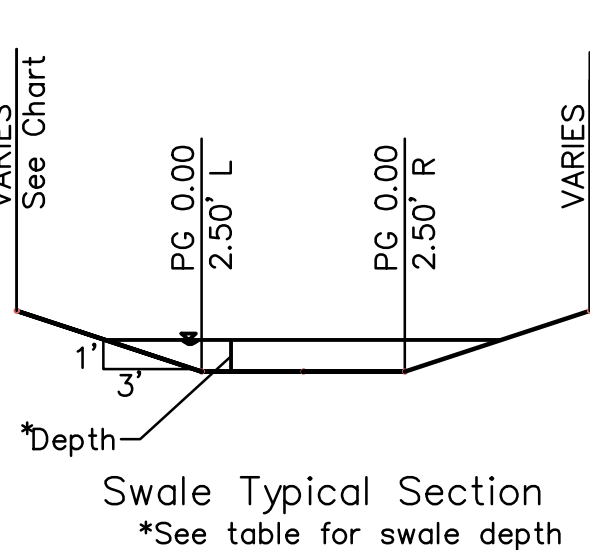
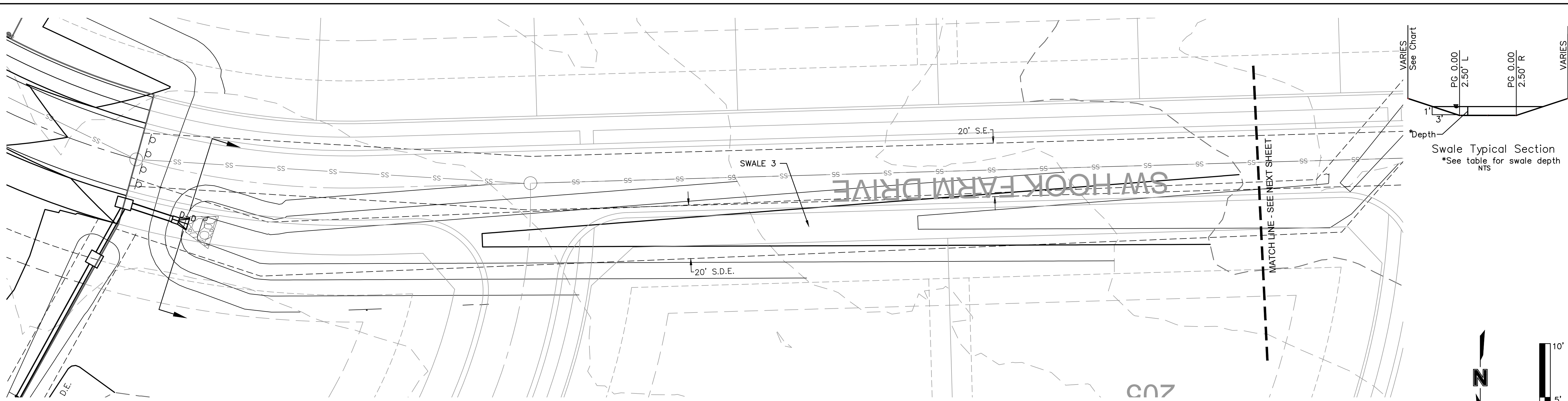
STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 PROFESSIONAL ENGINEER  
 NUMBER PE-2017000367  
 9/17/21

REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

SWALE 2 PLAN & PROFILE  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST PLAT  
 2020  
 LEE'S SUMMIT, MO

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\As-Built\Sheets\GNCV\Street and Storm Plans\C\_SWL01\_0194061.dwg  
 DATE: Sep 16, 2021 8:35am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PUTIL\_0194061 C:\PSURF\_0194061\_ASUBUILT USER: mession



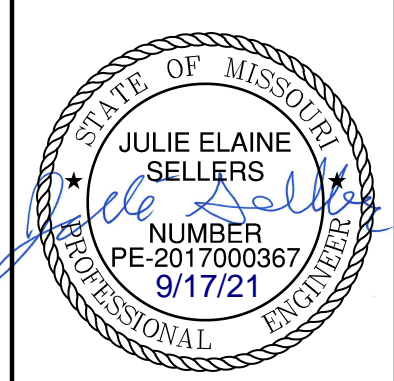
SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION	SECTION DATA							RESULTS						
	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft <sup>2</sup> )	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft <sup>2</sup> )
D-D	0.03	1.23%	2.03	3:1	3:1	5	36.35	1.03	8.33	4.36	11.51	11.18	1.33	0.556

**AS-BUILT**  
 DATE: 21-08-04

- SWALE GRADING NOTES:**
- CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
  - AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.



**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



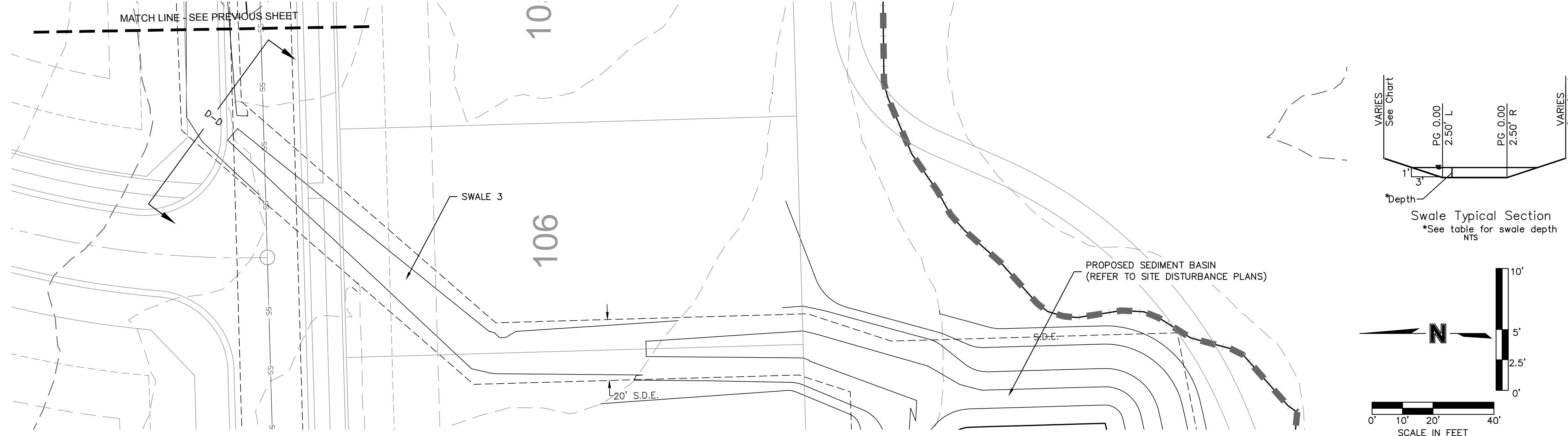
REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REMOVED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADINGS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

SWALE 3 PLAN & PROFILE  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST PLAT  
 LEES SUMMIT, MO  
 2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

**SHEET C107**

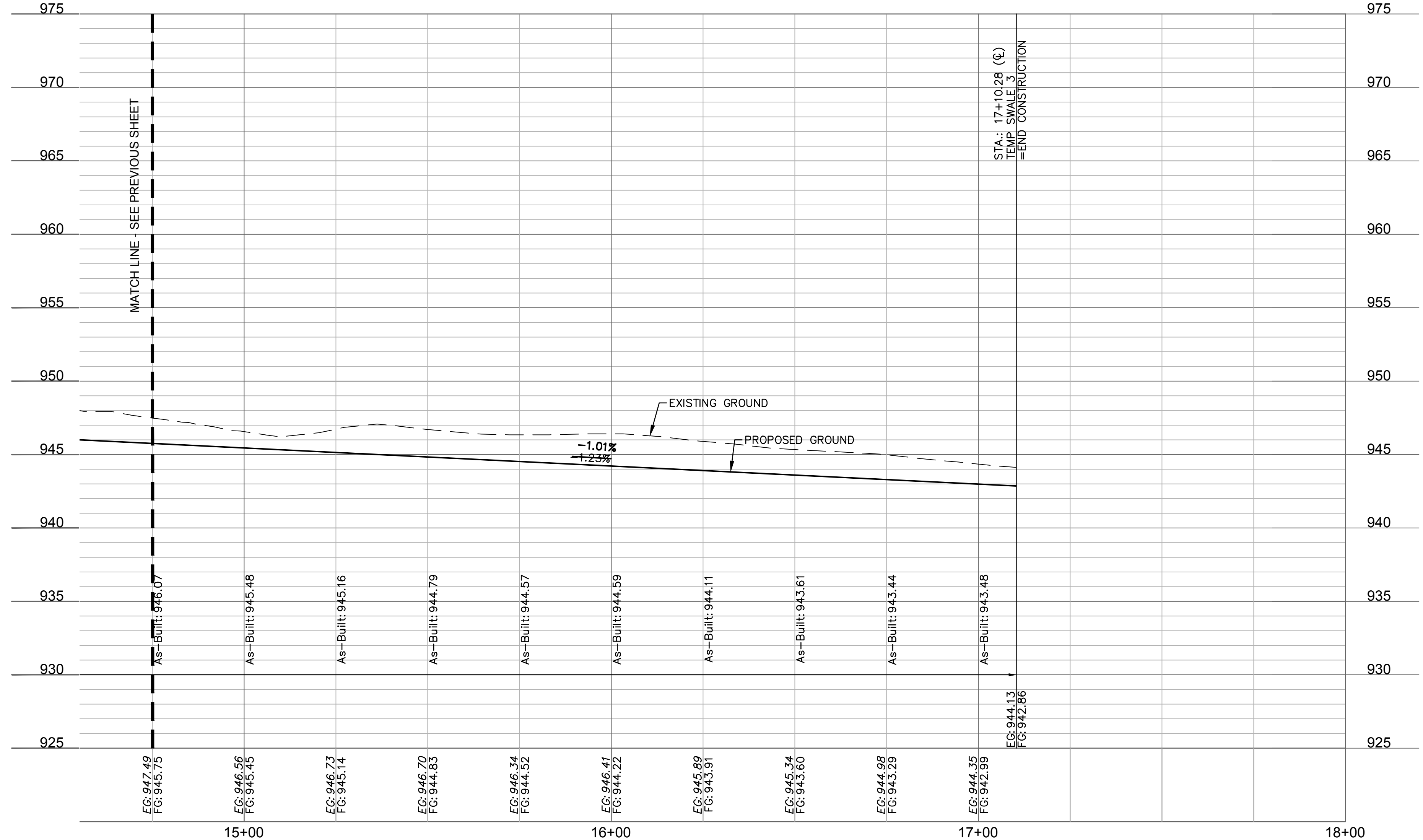
DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\As-Built\Sheets\GNCV\Street and Storm Plans\C\_SWL01\_0194061.dwg  
 DATE: Sep 16, 2021 8:35am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PUTL\_0194061 C:\PSURF\_0194061\_ASUBUILT USER: mession C:\FBASE\_0194061

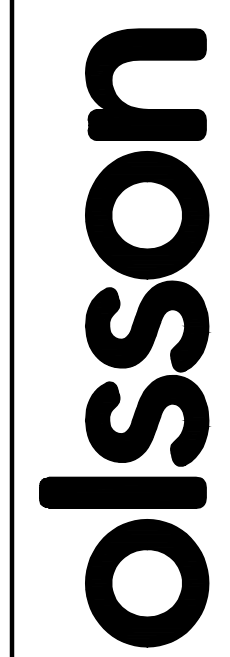


**AS-BUILT**  
 DATE: 21-08-04

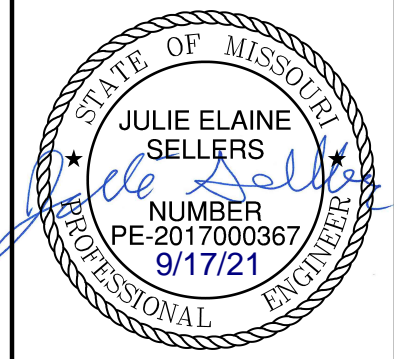
SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION DATA							RESULTS							
SECTION	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft <sup>2</sup> )	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft <sup>2</sup> )
D-D	0.03	1.23%	2.03	3:1	3:1	5	36.35	1.03	8.33	4.36	11.51	11.18	1.33	0.556

- SWALE GRADING NOTES:**
- CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
  - AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.





Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REMOVED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADINGS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

**REVISIONS**

<b>SWALE 3 PLAN &amp; PROFILE CONT'D STREET AND STORM SEWER PLANS</b>	<b>2020</b>
<b>HOOK FARMS FIRST FLAT</b>	
<b>LEE'S SUMMIT, MO</b>	

drawn by: \_\_\_\_\_ CGW  
 checked by: \_\_\_\_\_ JES  
 approved by: \_\_\_\_\_ NDH  
 QA/QC by: \_\_\_\_\_ JES  
 project no.: 019-4061  
 drawing no.: \_\_\_\_\_  
 date: 04/20/2020

**SHEET  
C108**

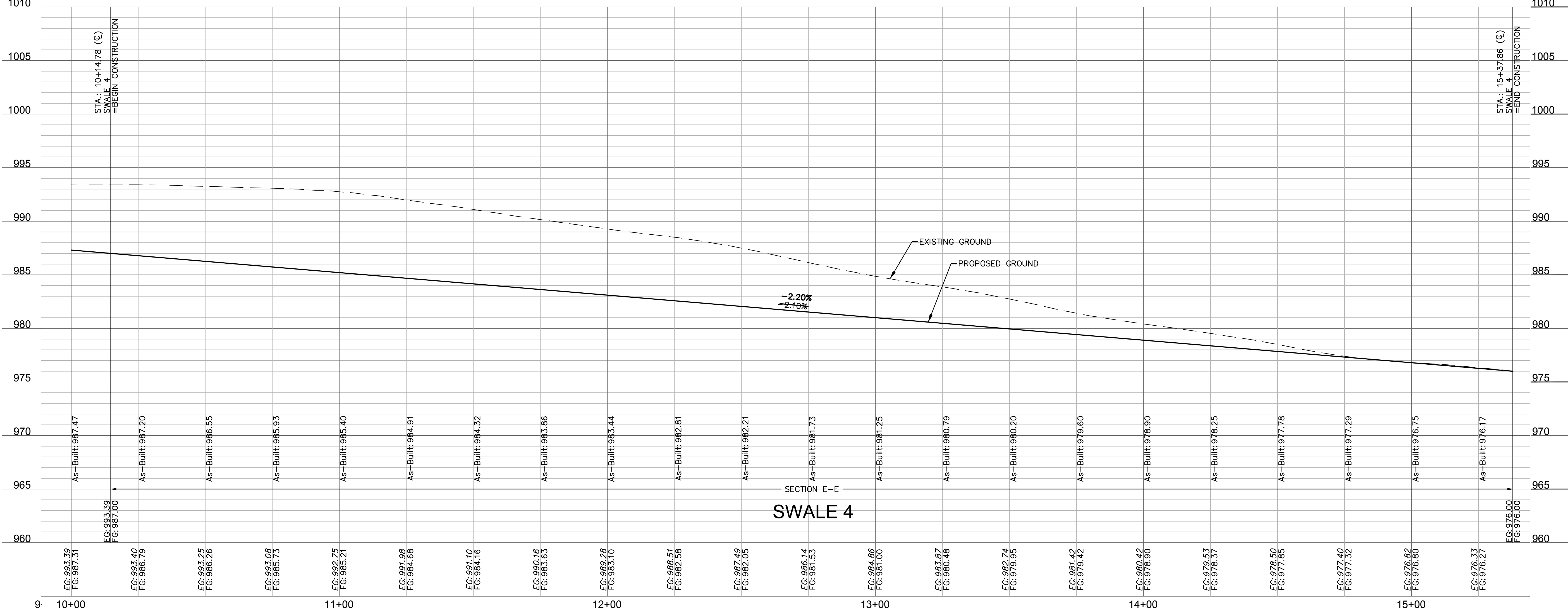
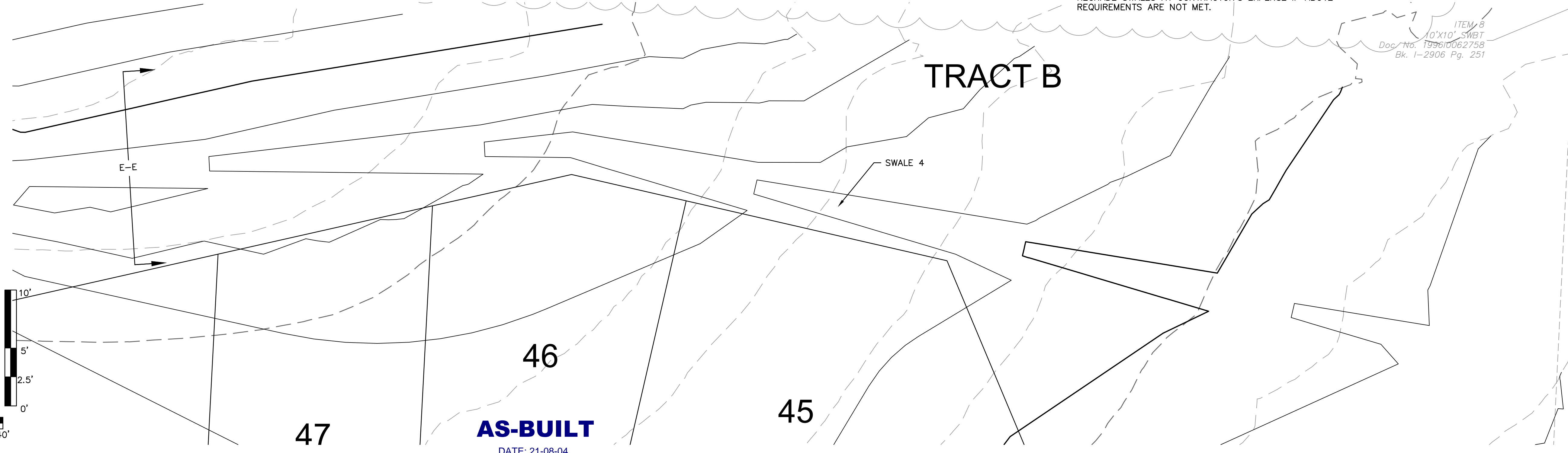
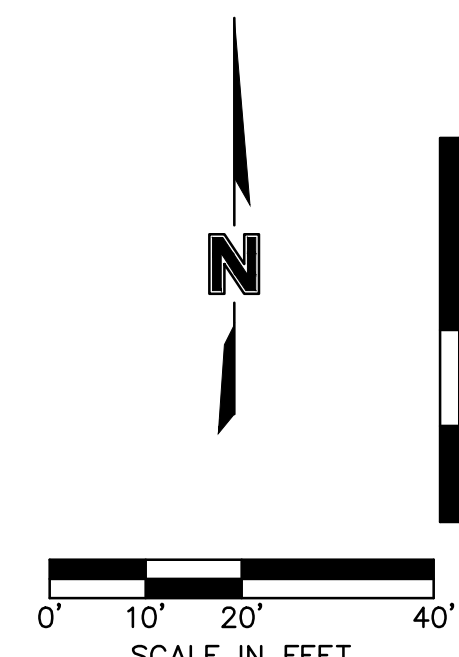


SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION DATA								RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft <sup>2</sup> )	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft <sup>2</sup> )
E-E	0.03	2.10%	1.39	3:1	3:1	5	7.99	0.39	2.41	3.32	7.47	7.34	0.56	0.422

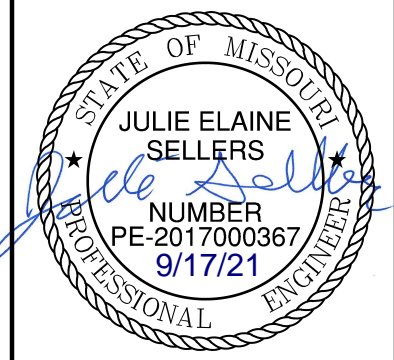
**SWALE GRADING NOTES:**

1. CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
2. AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.

ITEM 8  
 10'X10' SWBT  
 Doc No. 199610062758  
 Bk. 1-2906 Pg. 251



**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REMOVED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADINGS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

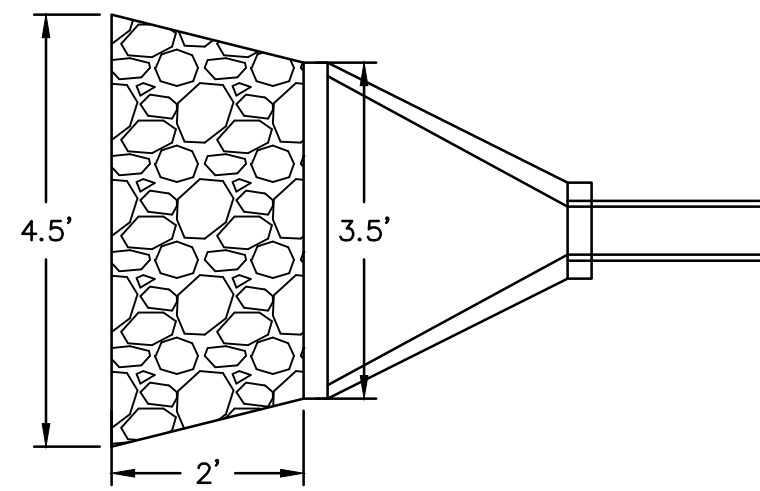
**SWALE 4 PLAN & PROFILE**  
**STREET AND STORM SEWER PLANS**  
 HOOK FARMS  
 FIRST FLAT  
 LEE'S SUMMIT, MO  
 2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

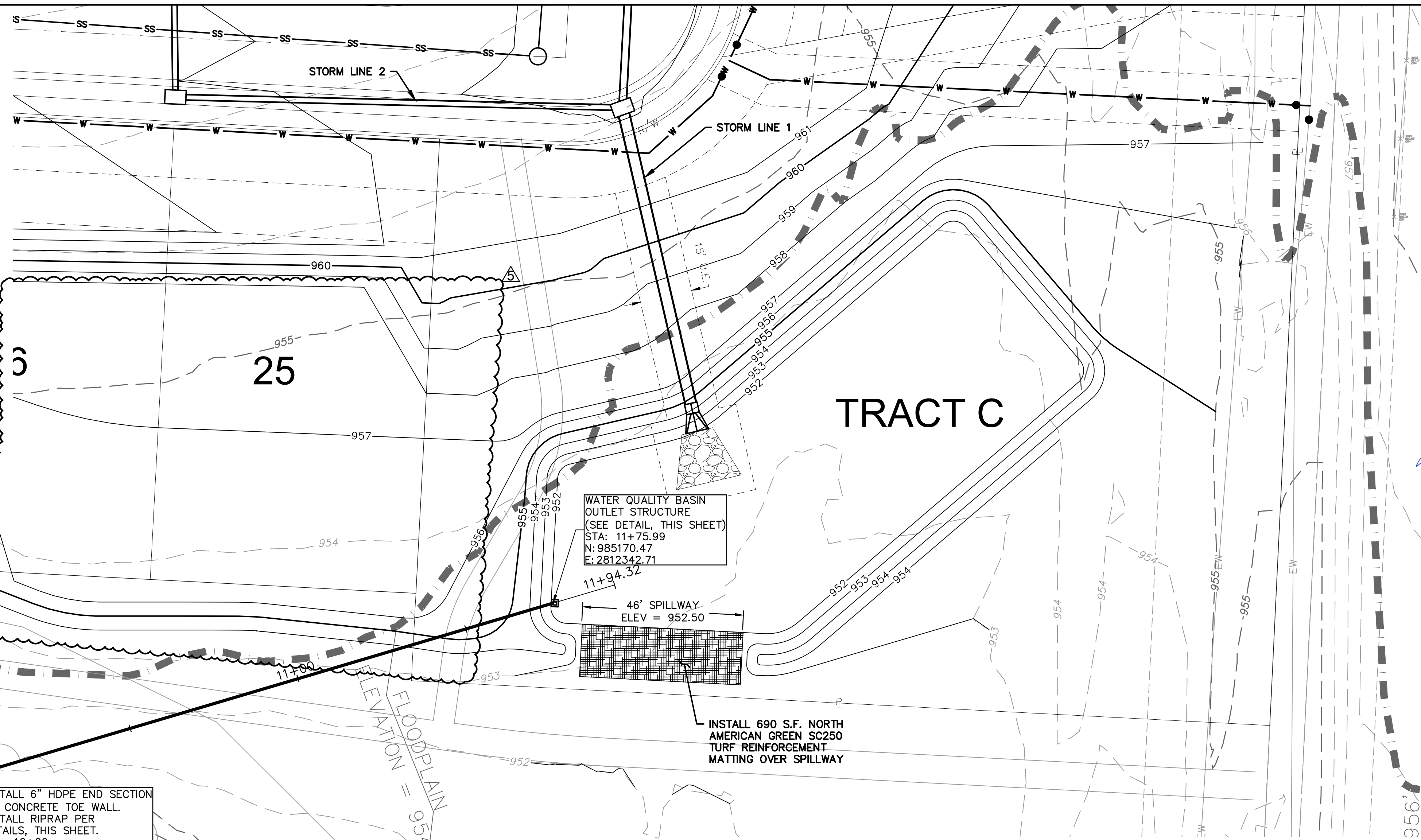
DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans-As-Built\Sheets\GNCV\Street and Storm Plans\C\_DBP01\_0194061.dwg  
 DATE: Sep 16, 2021 8:36am XREFS: C:\PTBLK\_0194061\_34x22 C:\XBASE\_0194061 C:\PBASE\_0194061 C:\PBNDY\_0194061 C:\PUTIL\_0194061  
 USER: mcession

Riprap Calculations							
End Section	Q <sub>100</sub> (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
WQv Outlet	0.93	0.5	1	5	2	1.46	0.5

\*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18



Scale: 1"=2'  
 02 RIPRAP OUTLET PROTECTION



WATER QUALITY BASIN  
 OUTLET STRUCTURE  
 (SEE DETAIL, THIS SHEET)  
 STA: 11+75.99  
 N: 985170.47  
 E: 2812342.71

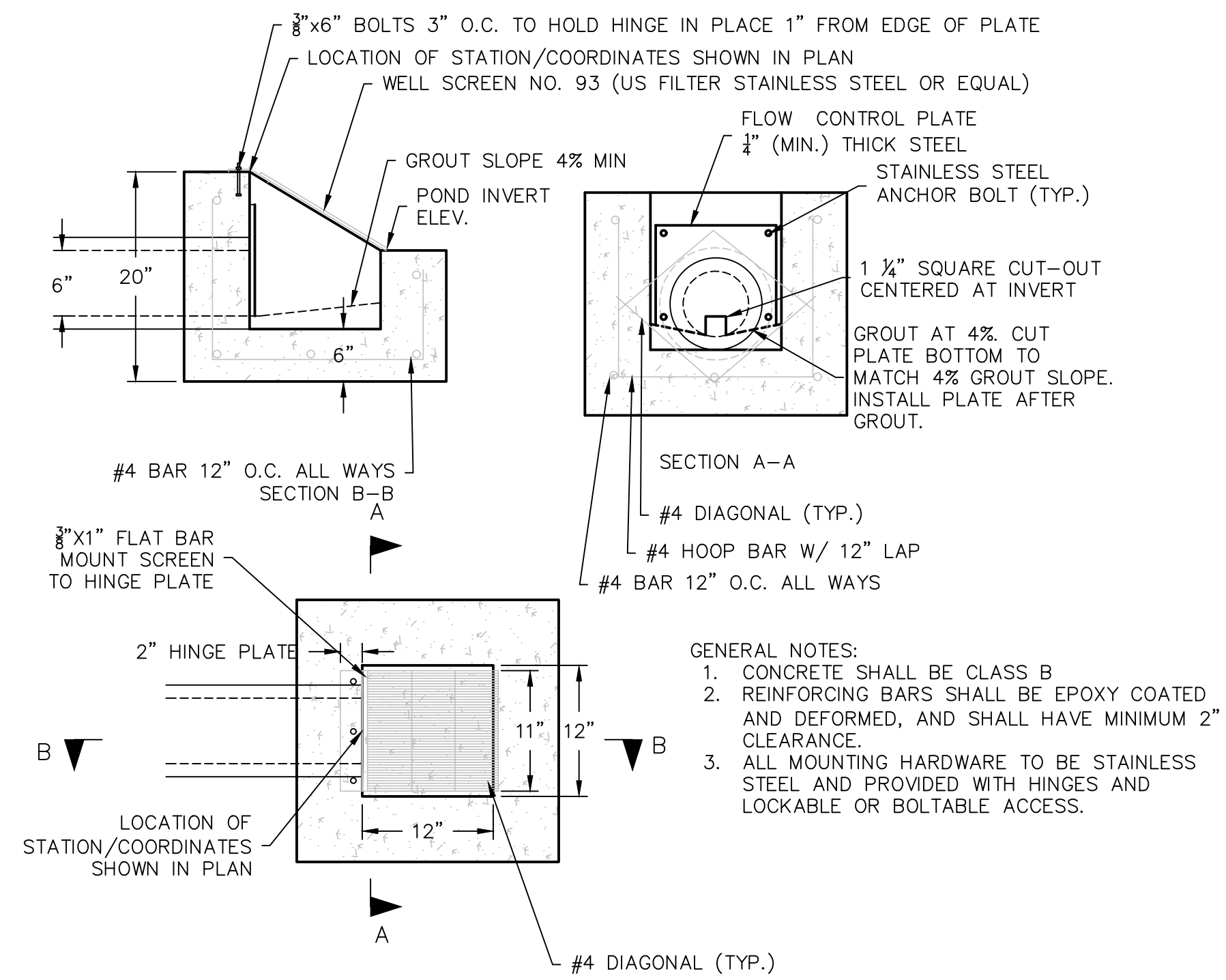
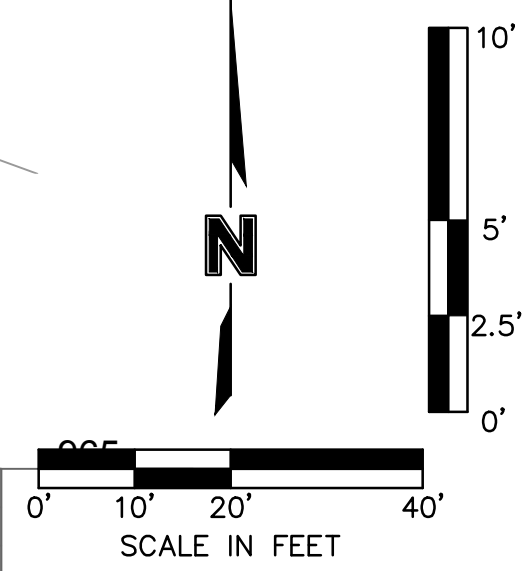
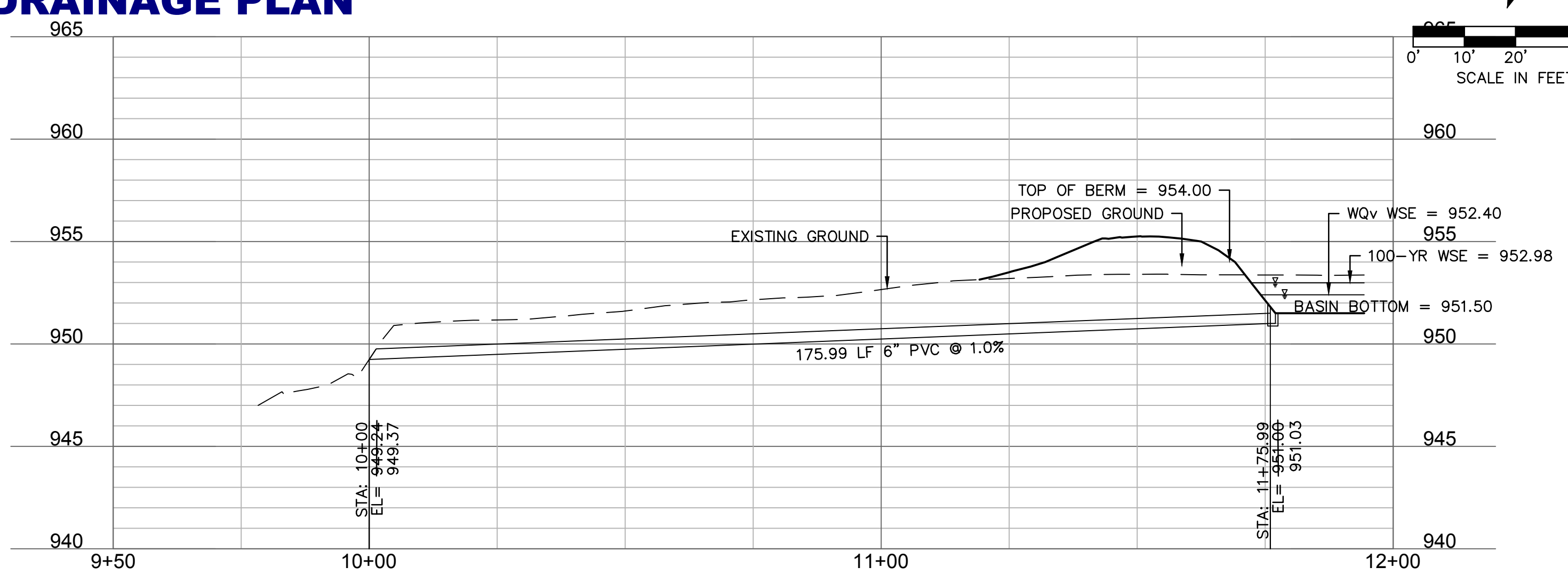
46' SPILLWAY  
 ELEV = 952.50

INSTALL 690 S.F. NORTH  
 AMERICAN GREEN SC250  
 TURF REINFORCEMENT  
 MATTING OVER SPILLWAY

INSTALL 6" HDPE END SECTION  
 W/ CONCRETE TOE WALL.  
 INSTALL RIPRAP PER  
 DETAILS, THIS SHEET.  
 STA: 10+00  
 N: 985120.47  
 E: 2812173.97

**AS-BUILT PIPE**  
**NOT AS-BUILT**  
**SURFACE**  
**REFER TO MASTER**  
**DRAINAGE PLAN**

WATER QUALITY OUTLET (9+50 - 12+00)



Scale: 1"=1'  
 01 WATER QUALITY BASIN OUTLET STRUCTURE

**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

STATE OF MISSOURI  
 JULIE ELAINE  
 SELLERS  
 PROFESSIONAL ENGINEER  
 NUMBER  
 PE-2017000367  
 9/17/21

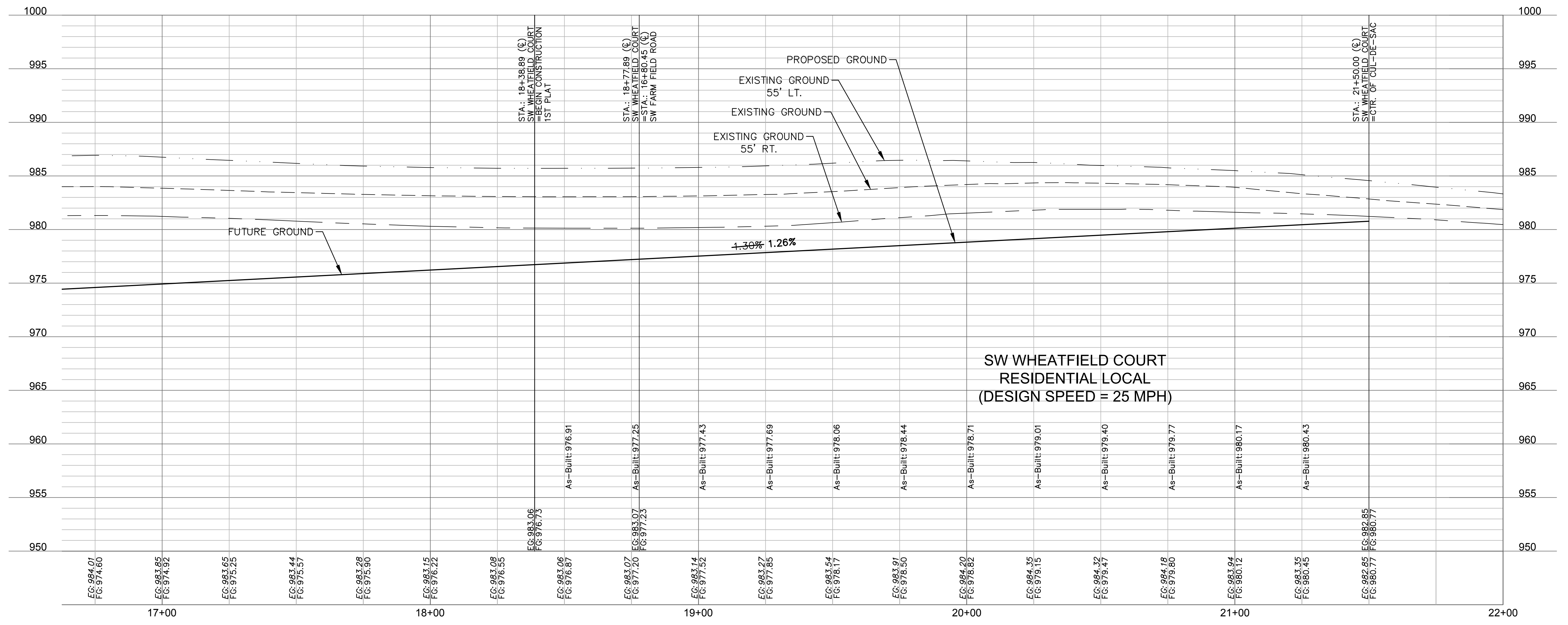
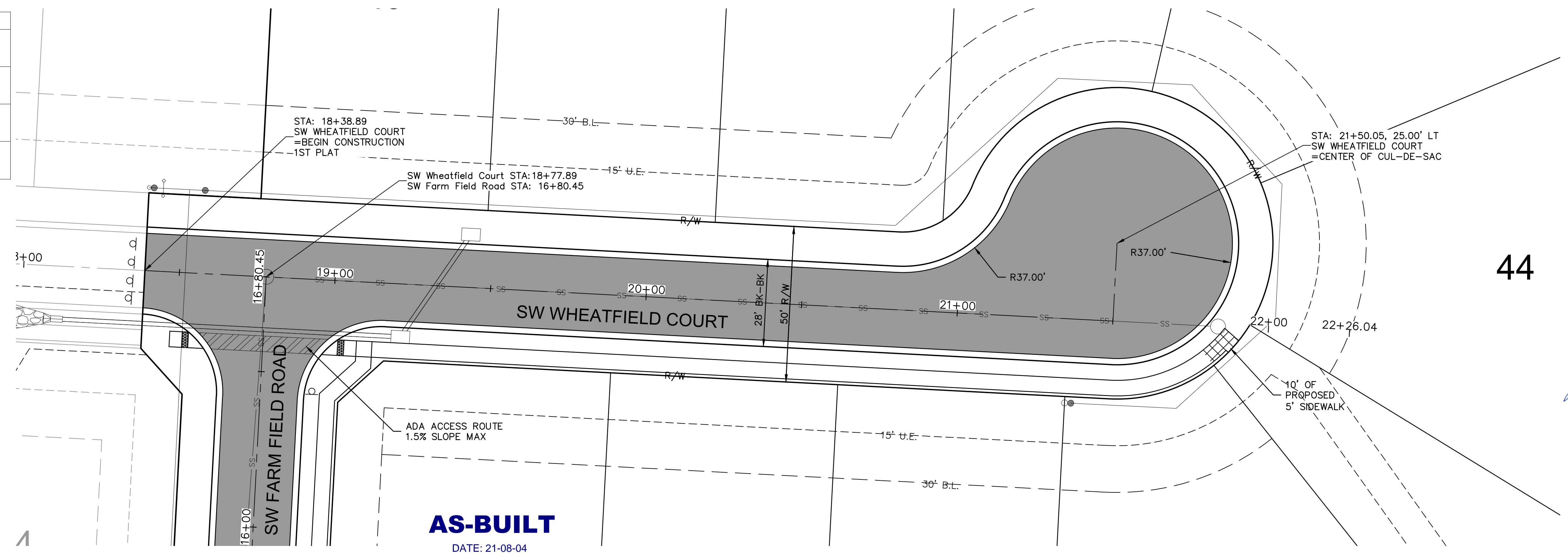
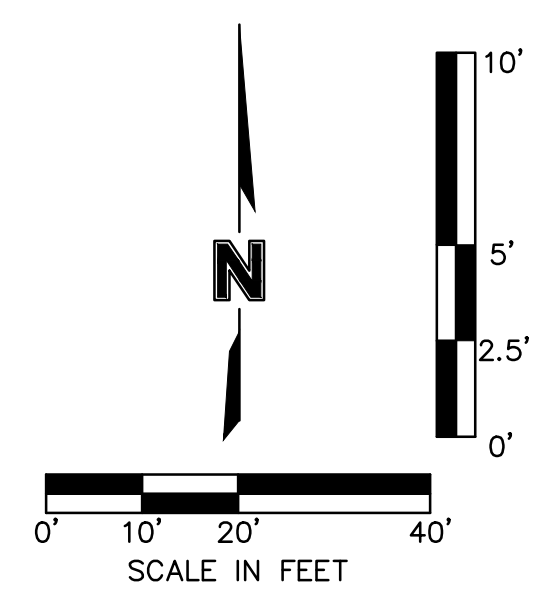
REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED PER CITY COMMENTS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

WATER QUALITY BASIN PLAN  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST FLAT  
 2020  
 LEE'S SUMMIT, MO

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\As-Built\Sheets\GNCV\Street and Storm Plans\C\_RPP01\_0194061.dwg  
 DATE: Sep 16, 2021 8:37am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PPATT\_0194061 C:\PSTRM\_0194061 C:\PSURF\_0194061\_ASUBUILD

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 NUMBER PE-2017000367  
 9/17/21  
 PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REVISED PER CITY COMMENTS	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADING	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

ROADWAY PLAN & PROFILE (SW WHEATFIELD COURT)  
 STREET AND STORM SEWER PLANS

HOOK FARMS  
 FIRST PLAT

LEE'S SUMMIT, MO

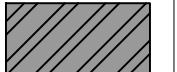


2020

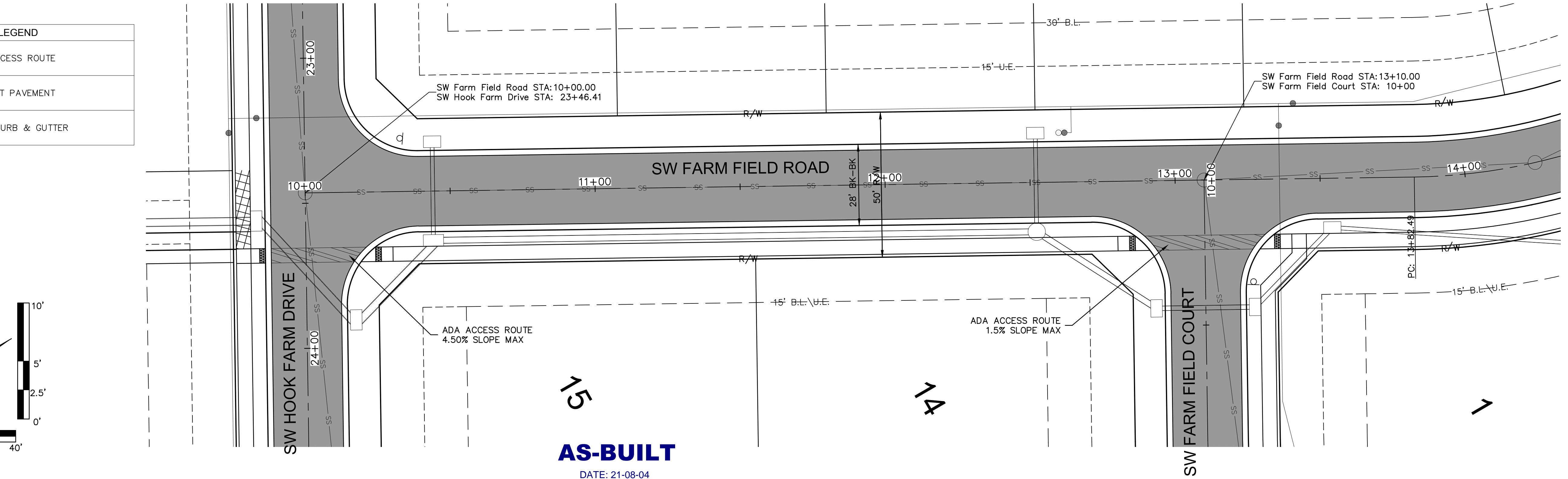
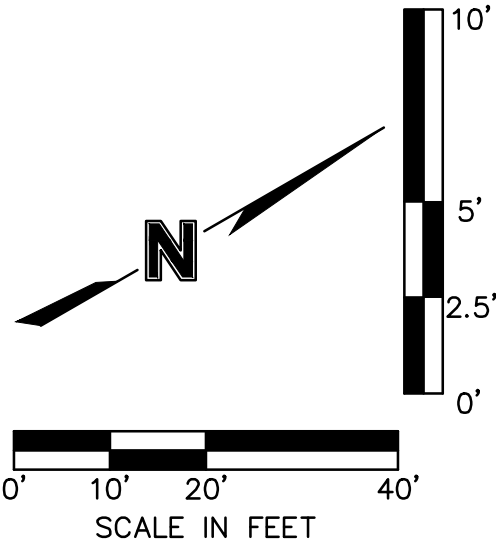
REVISIONS

drawn by: CGW	checked by: JES
approved by: NDH	QA/QC by: JES
project no.: 019-4061	drawing no.: 04/20/2020

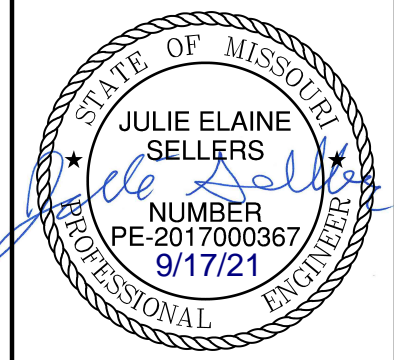
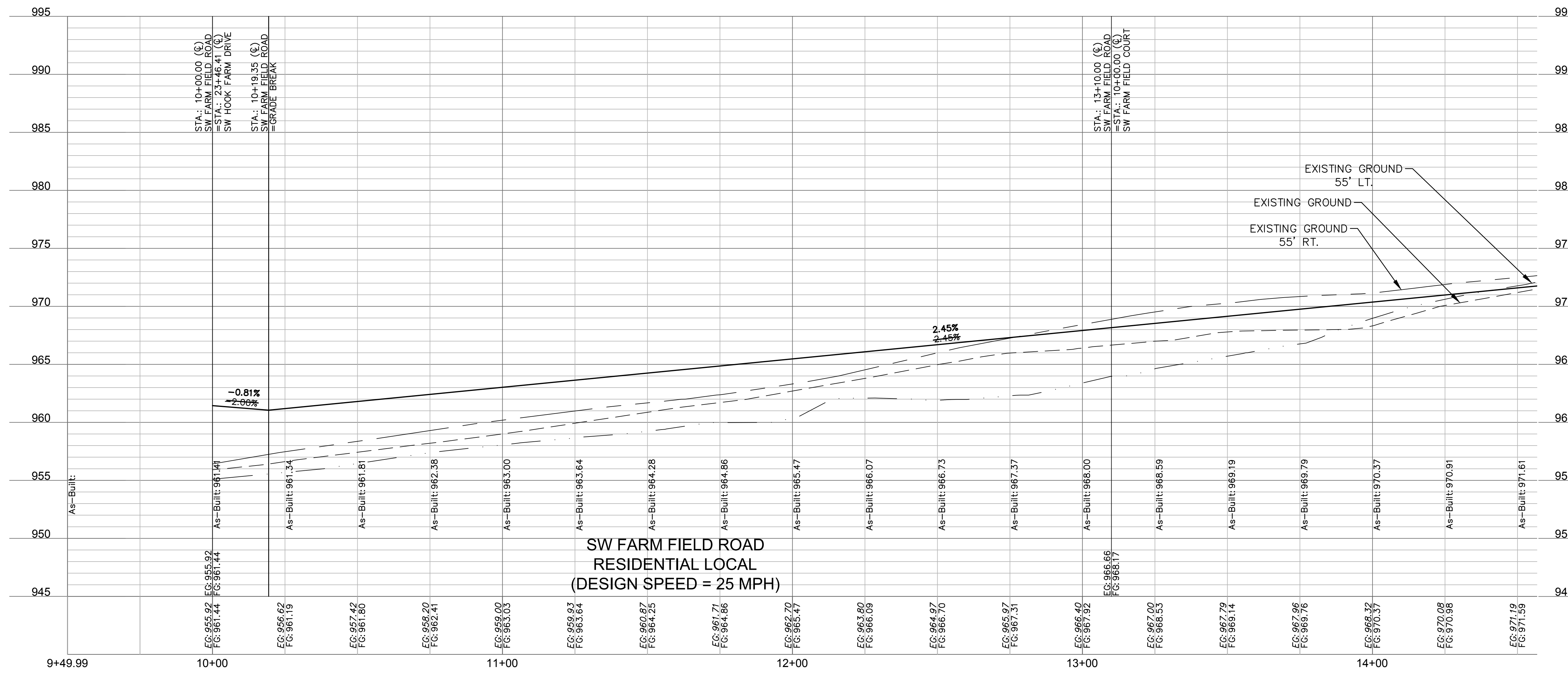
SHEET C111

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\As-Built\Sheets\GNCV\Street and Storm Plans\C\_RPP01\_0194061.dwg  
 DATE: Sep 16, 2021 8:37am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBNDY\_0194061 C:\PBASE\_0194061 C:\PSTRM\_0194061 C:\PPATT\_0194061 C:\PUTIL\_0194061 C:\PSURF\_0194061\_AS\BUILT

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER



**AS-BUILT**  
 DATE: 21-08-04



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

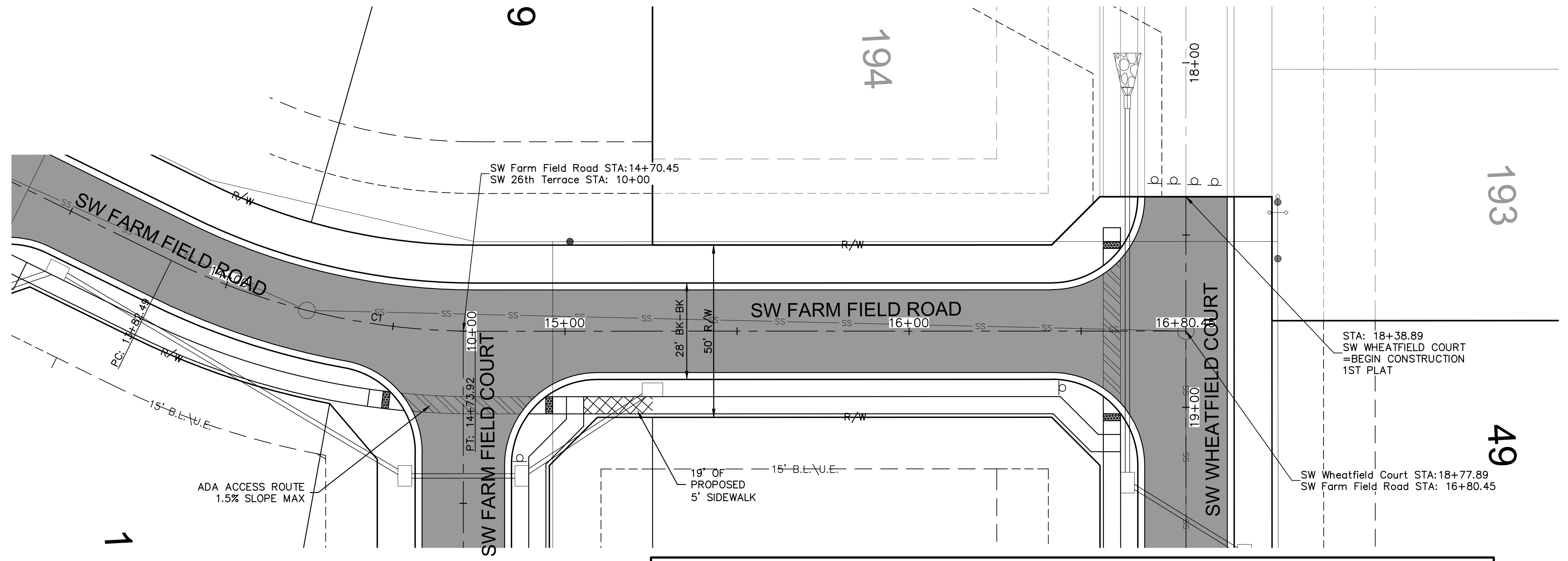
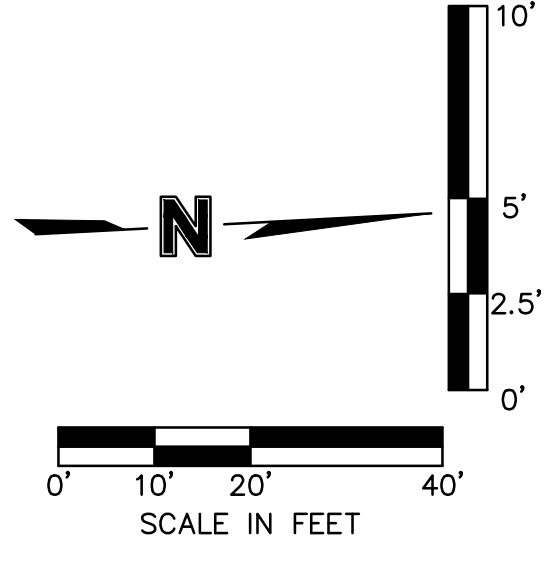
ROADWAY PLAN & PROFILE (SW FARM FIELD ROAD) STREET AND STORM SEWER PLANS	BY
HOOK FARMS FIRST FLAT	
LEE'S SUMMIT, MO	2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

**SHEET C112**

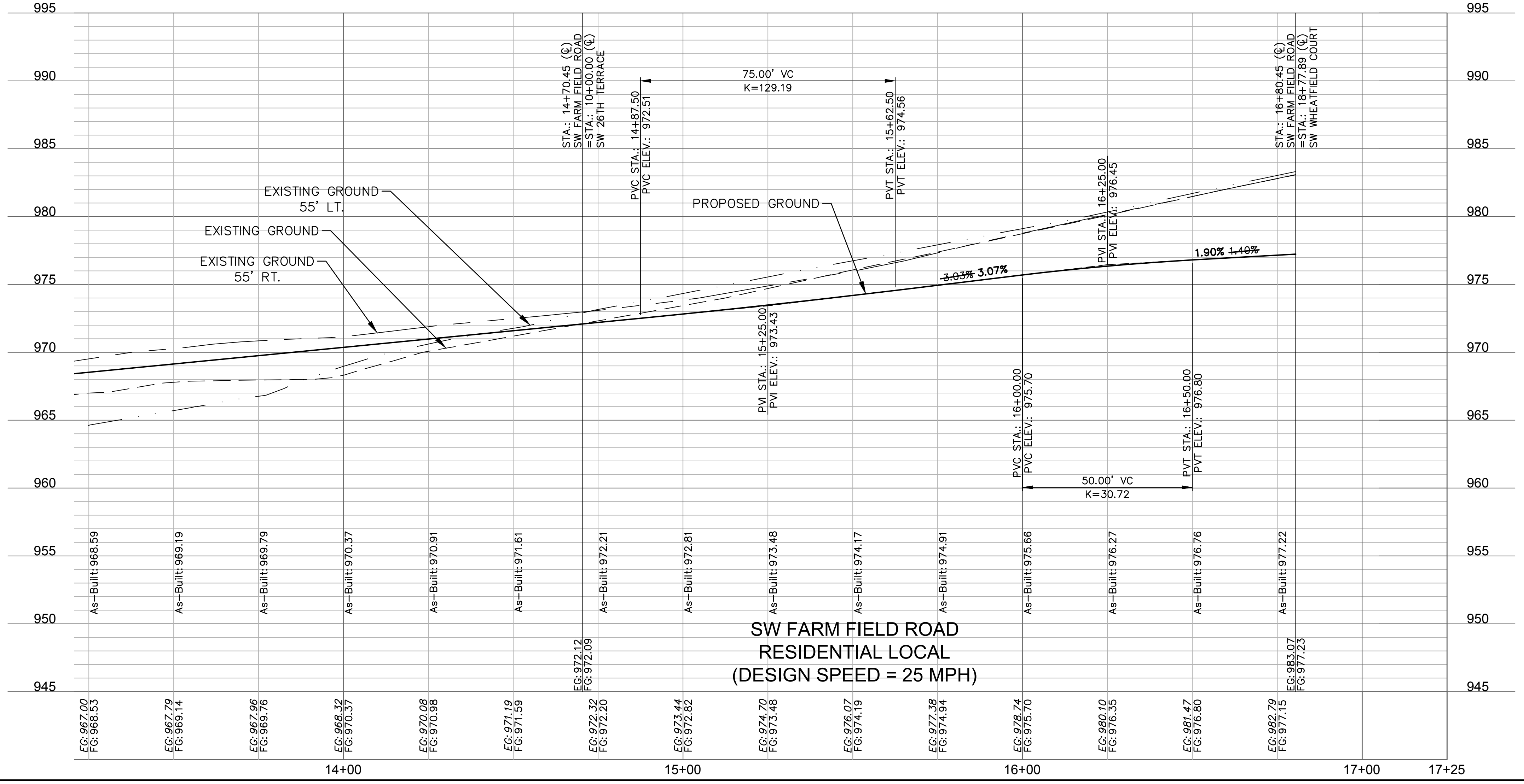
**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER



**AS-BUILT**  
DATE: 21-08-04

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	TANGENT	P.I. STATION (BACK)
C1	13+82.49 14+73.92	N: 985784.58 E: 2811914.27	N: 985871.67 E: 2811939.38	200.00	91.43	026°11'37"	46.53	14+27.39



SW FARM FIELD ROAD  
RESIDENTIAL LOCAL  
(DESIGN SPEED = 25 MPH)

Olsson - Civil Engineering  
Missouri Certificate of Authority #001592  
1301 Burlington Street  
North Kansas City, MO 64116  
TEL 816.361.1177  
FAX 816.361.1888  
www.olsson.com

**JULIE ELAINE SELLERS**  
Professional Engineer  
No. PE-2017000367  
Exp. 9/17/21

---

ROADWAY PLAN & PROFILE (SW FARM FIELD ROAD)  
STREET AND STORM SEWER PLANS

HOOK FARMS  
FIRST PLAT

LEE'S SUMMIT, MO

2020

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

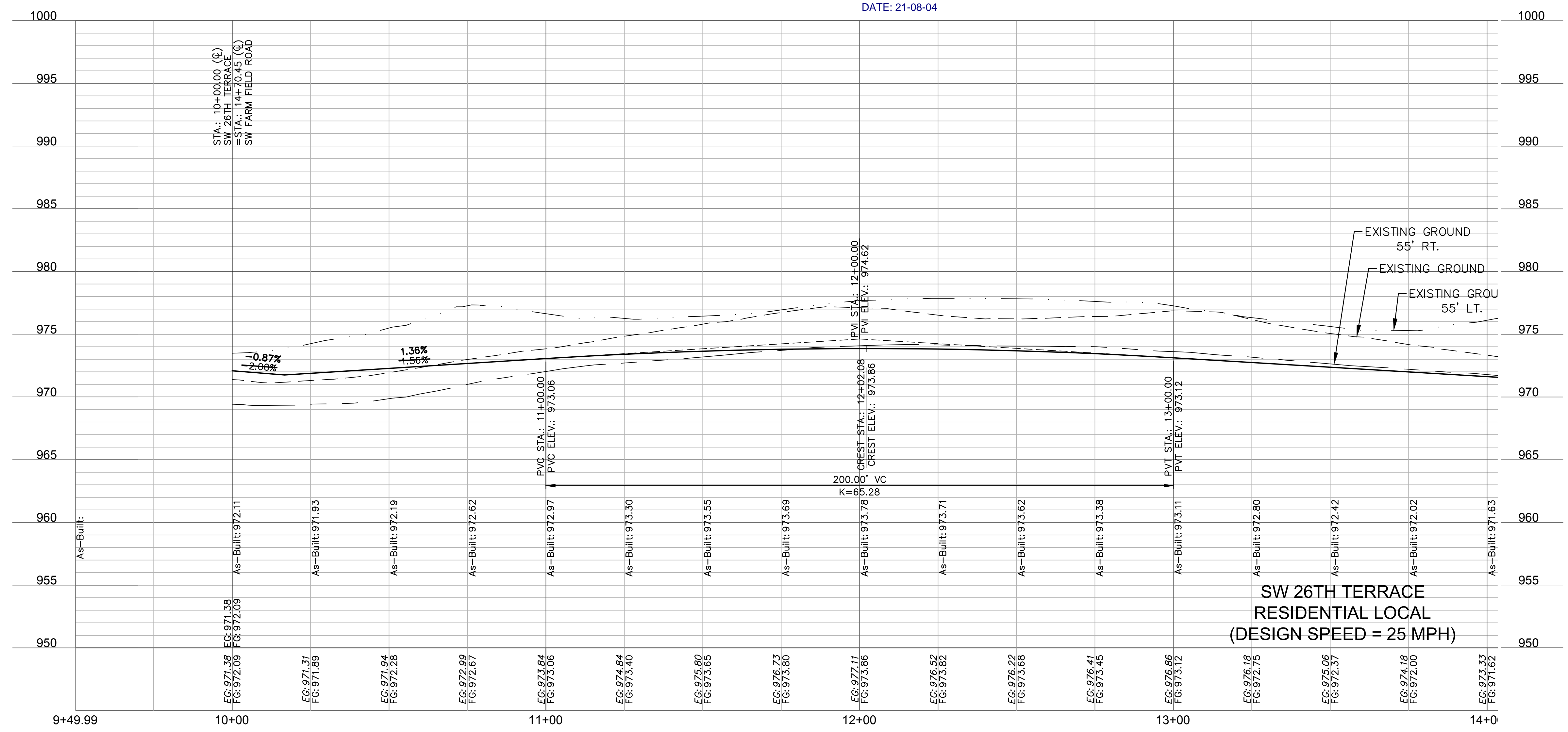
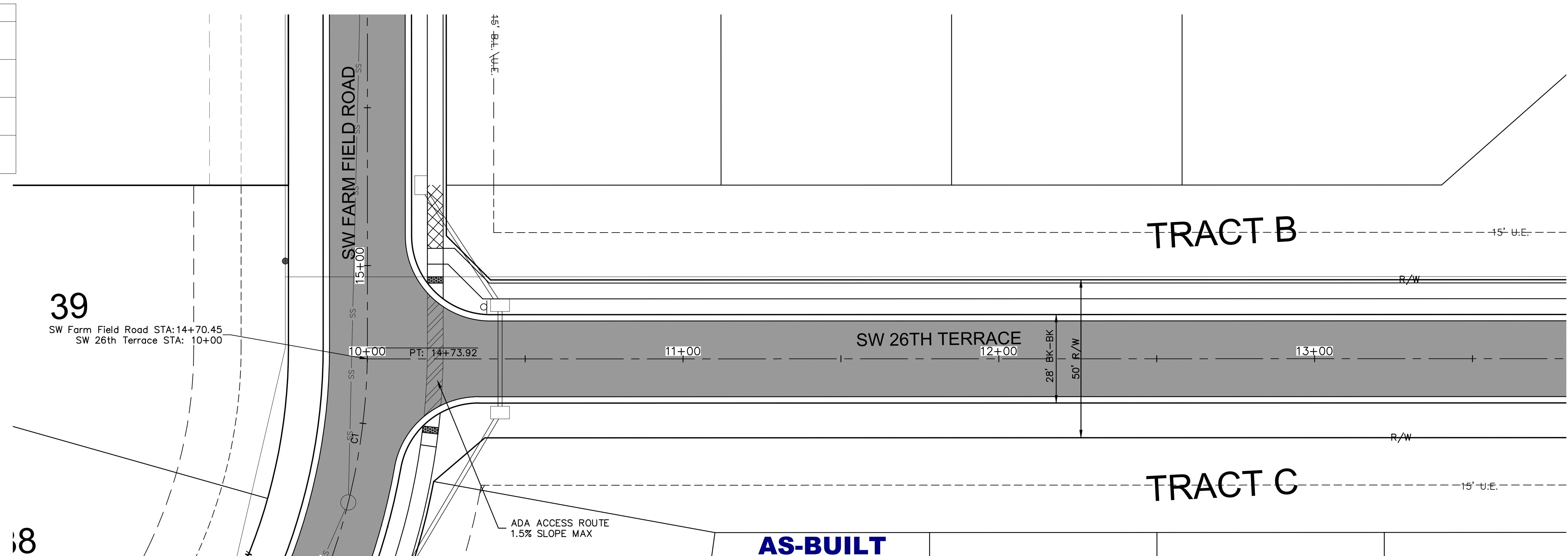
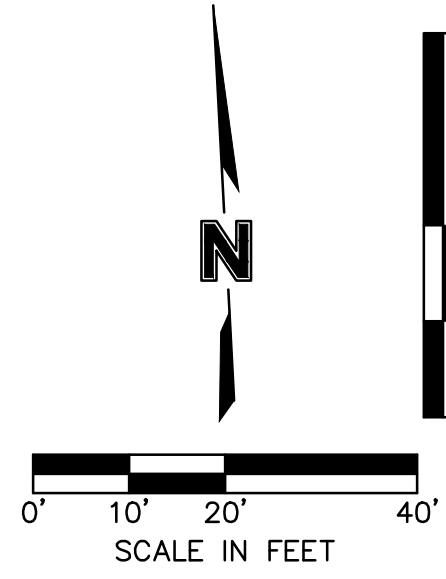
---

drawn by: CGW  
checked by: JES  
approved by: NDH  
QA/QC by: JES  
project no.: 019-4061  
drawing no.:  
date: 04/20/2020

SHEET  
C113

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans-As-Built\Sheets\GNCV\Street and Storm Plans\C\_RP01\_0194061.dwg  
 DATE: Sep 16, 2021 8:37am  
 XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\XBASE\_0194061 C:\FBASE\_0194061 C:\PUTIL\_0194061 C:\PPATT\_0194061 C:\PSTRM\_0194061 C:\PSURF\_0194061\_ASUBUILD

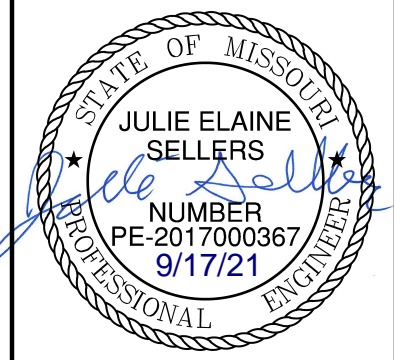
LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



**AS-BUILT**  
DATE: 21-08-04

SW 26TH TERRACE  
RESIDENTIAL LOCAL  
(DESIGN SPEED = 25 MPH)

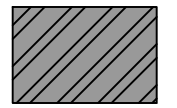

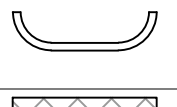

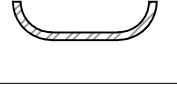
**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com

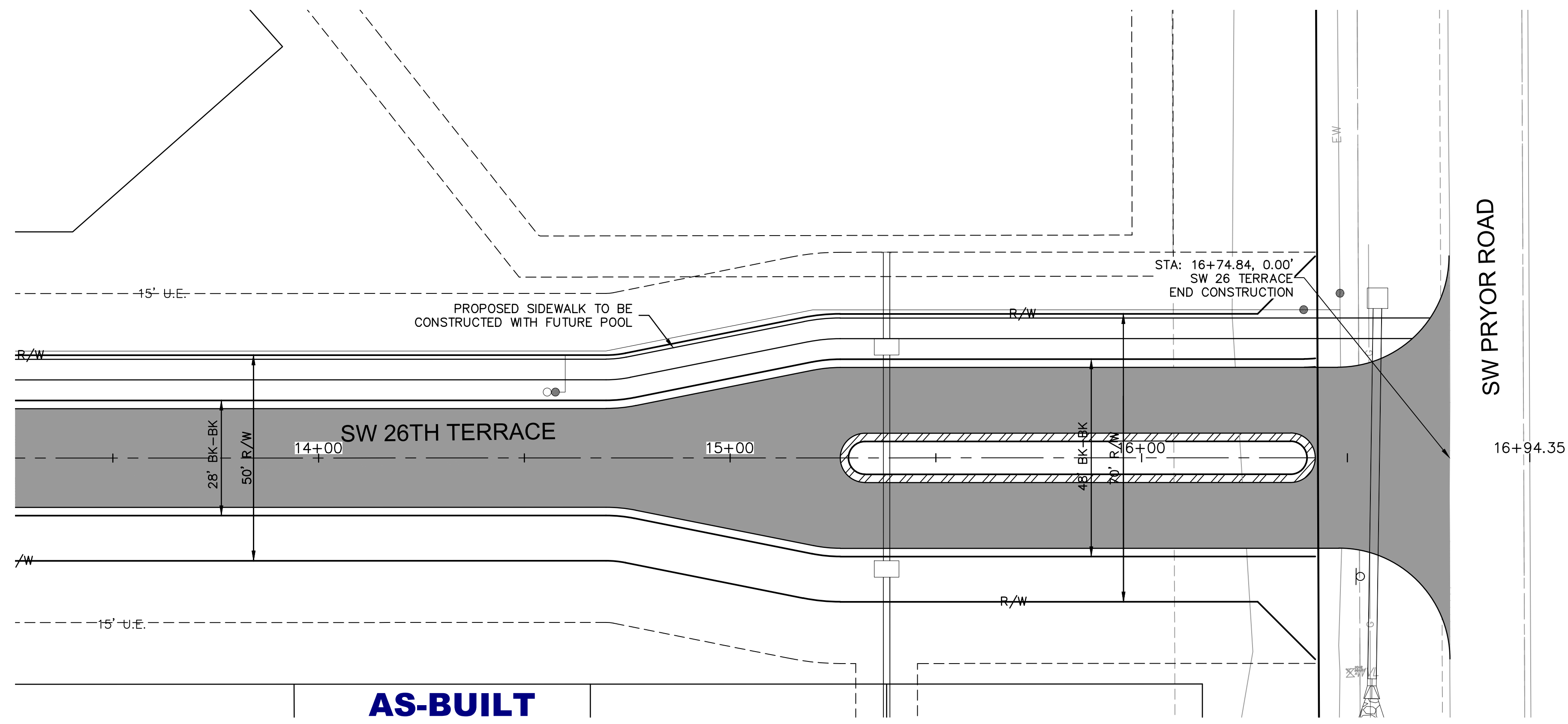
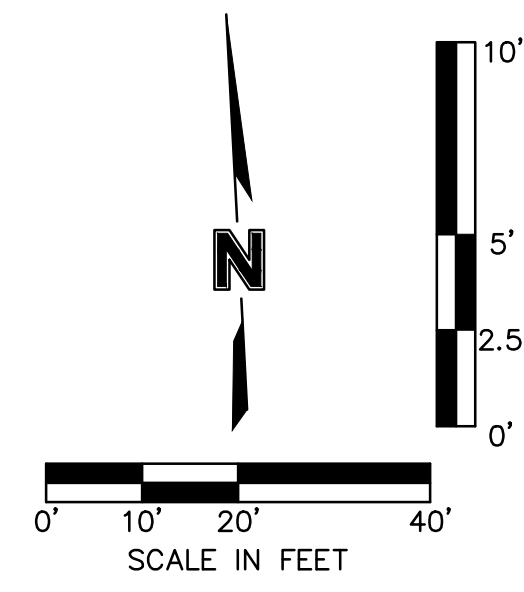


REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADINGS	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

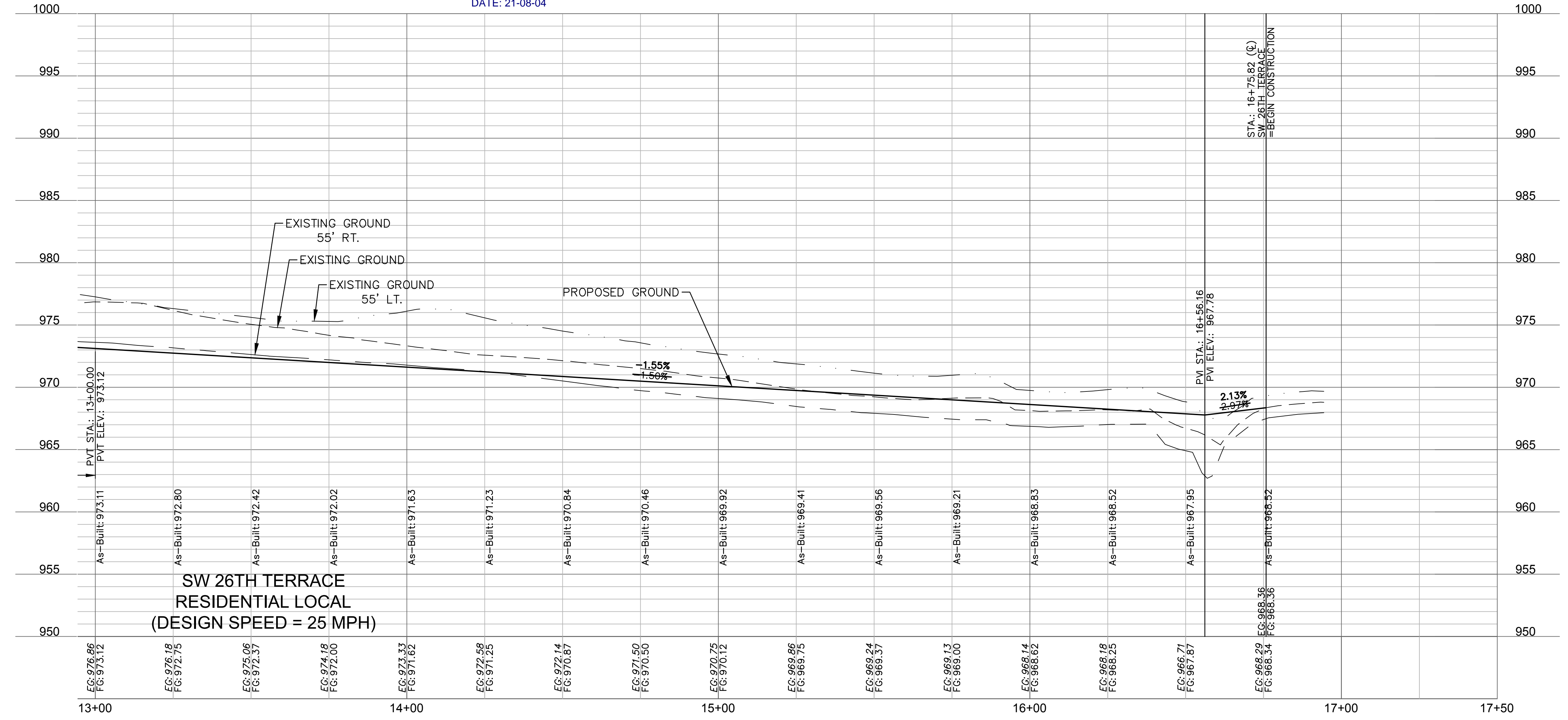
ROADWAY PLAN & PROFILE (SW 26TH TERRACE)  
STREET AND STORM SEWER PLANS  
 HOOK FARMS  
FIRST PLAT  
 2020  
 LEE'S SUMMIT, MO

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK
	CG-1 CURB & GUTTER



**AS-BUILT**  
DATE: 21-08-04



drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com

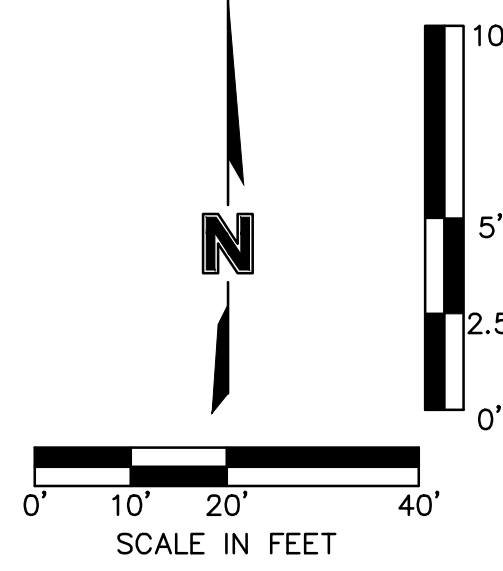
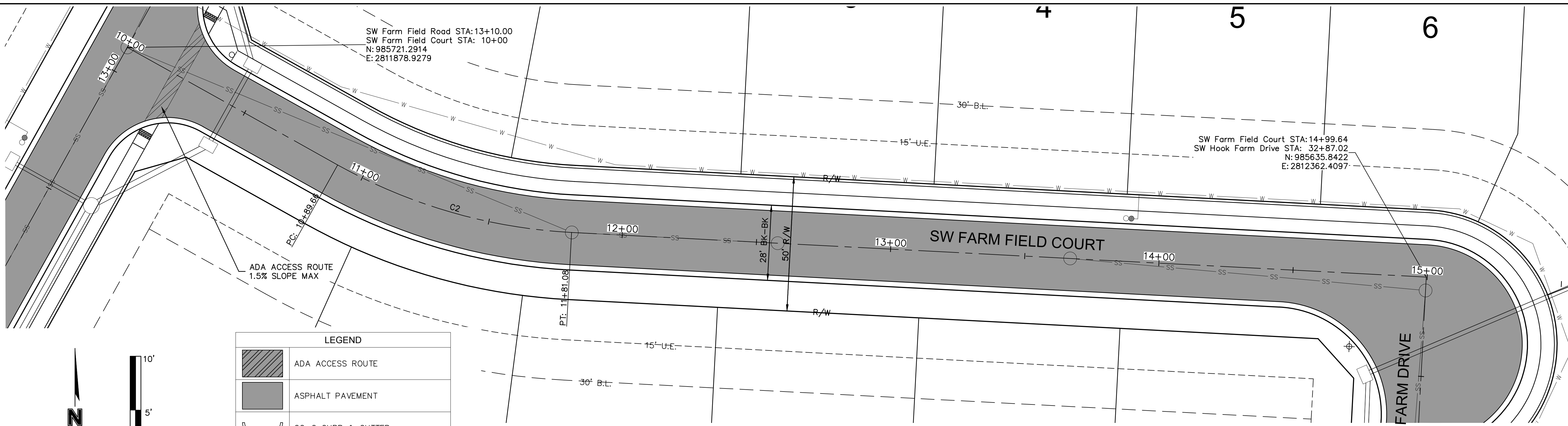
STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 PROFESSIONAL ENGINEER  
 NUMBER PE-2017000367  
 9/17/21

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REVISED PER CITY COMMENTS	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADINGS	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED ADA RAMPS	

ROADWAY PLAN & PROFILE (SW 26TH TERRACE)  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST PLAT  
 LEE'S SUMMIT, MO

2020  
 REVISIONS

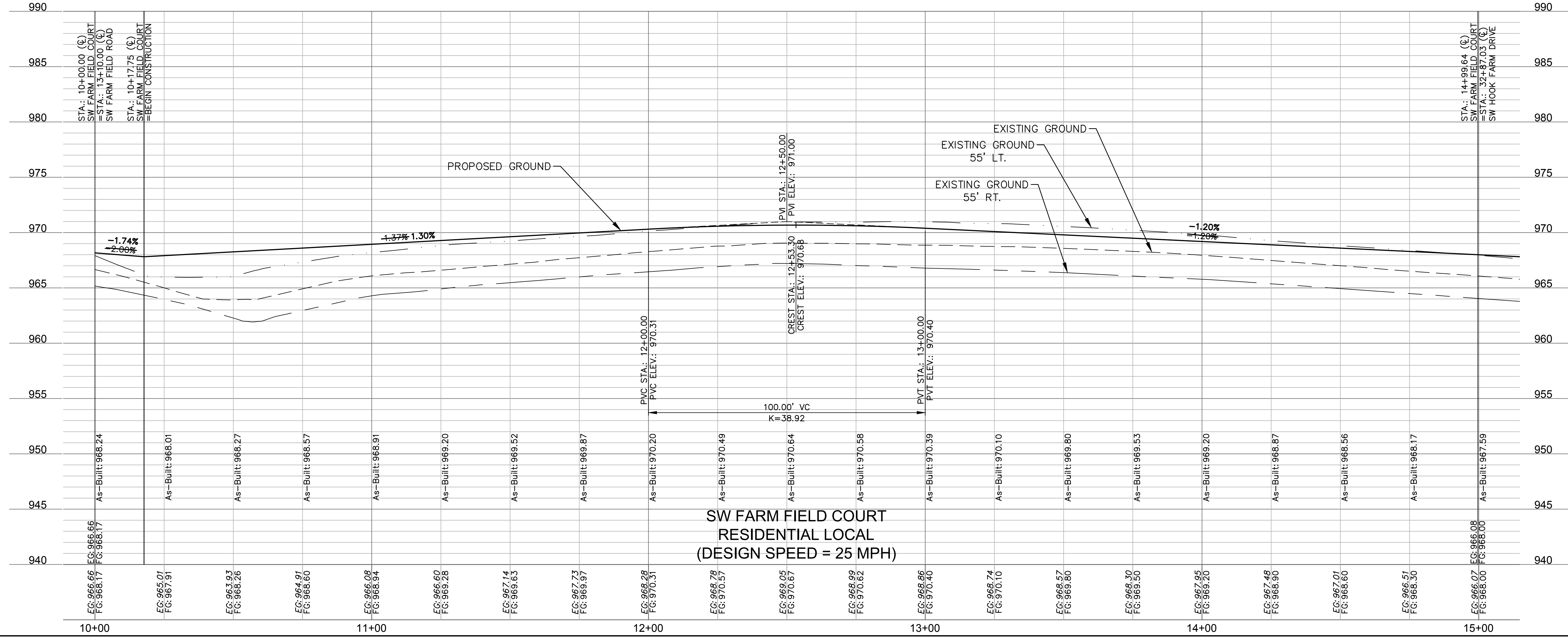
DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans-As-Built\Sheets\GNCV\Street and Storm Plans\C\_RP02\_0194061.dwg  
 DATE: Sep 16, 2021 8:35am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PPATT\_0194061 C:\PSTRM\_0194061 C:\PSURF\_0194061\_ASUBUILD



LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK
	CG-1 CURB & GUTTER

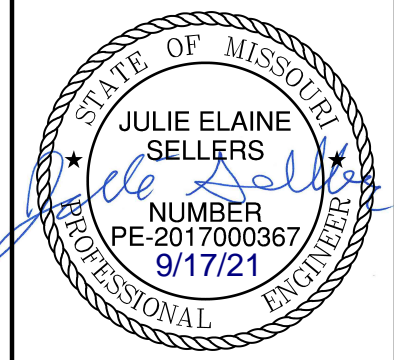
**AS-BUILT**  
DATE: 21-08-04

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	TANGENT	P.I. STATION (BACK)
C2	10+89.66 11+81.08	N: 985677.58 E: 2811957.21	N: 985652.47 E: 2812044.29	200.00	91.42	026°11'22"	46.52	11+34.56



SW FARM FIELD COURT  
RESIDENTIAL LOCAL  
(DESIGN SPEED = 25 MPH)

**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REMOVED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADINGS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

ROADWAY PLAN & PROFILE (SW WHEATFIELD COURT)  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST PLAT  
 LEE'S SUMMIT, MO  
 2020

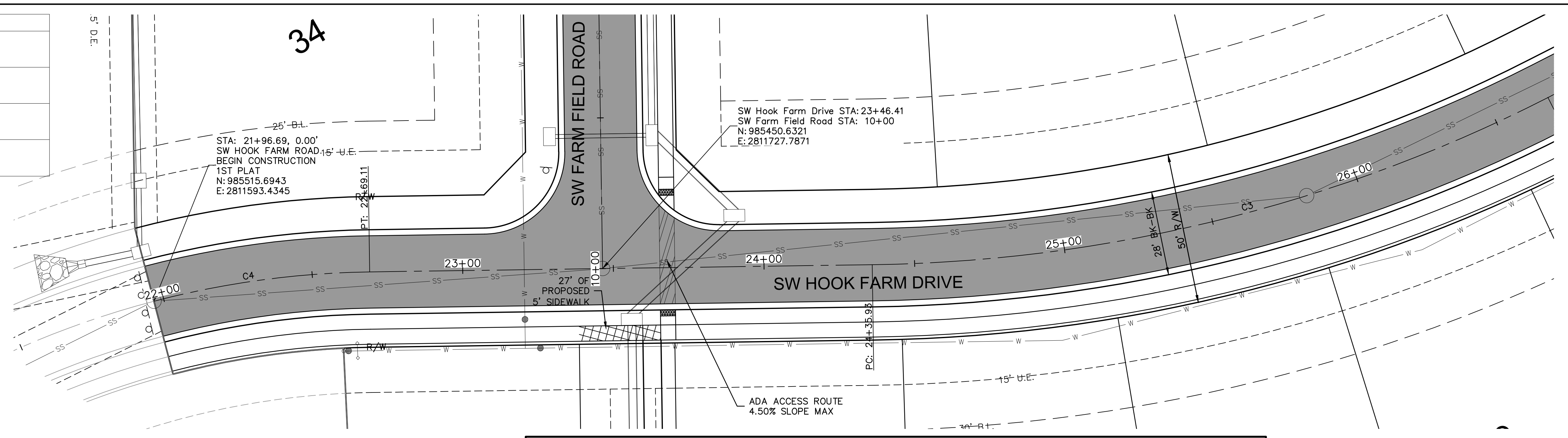
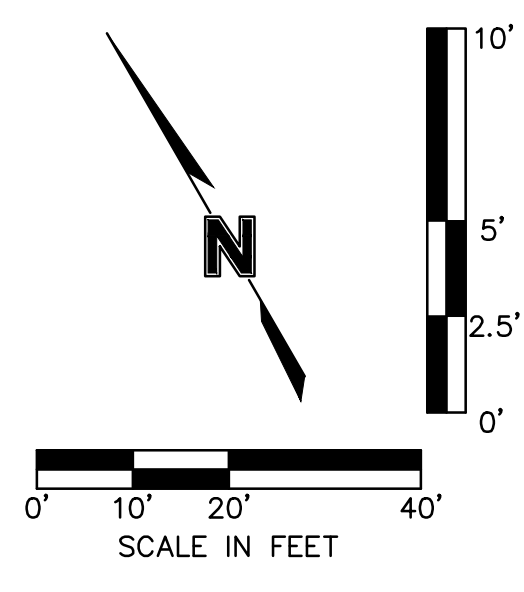
drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020



DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\As-Built\Sheets\GNCV\Street and Storm Plans\C\_RPP02\_0194061.dwg  
 DATE: Sep 16, 2021 8:39am XREFS: C:\PTBLK\_0194061\_34x22 C:\XBASE\_0194061 C:\PBDY\_0194061 C:\PPATT\_0194061 C:\PSTRM\_0194061 C:\PSURF\_0194061\_ASUBUILD

**LEGEND**

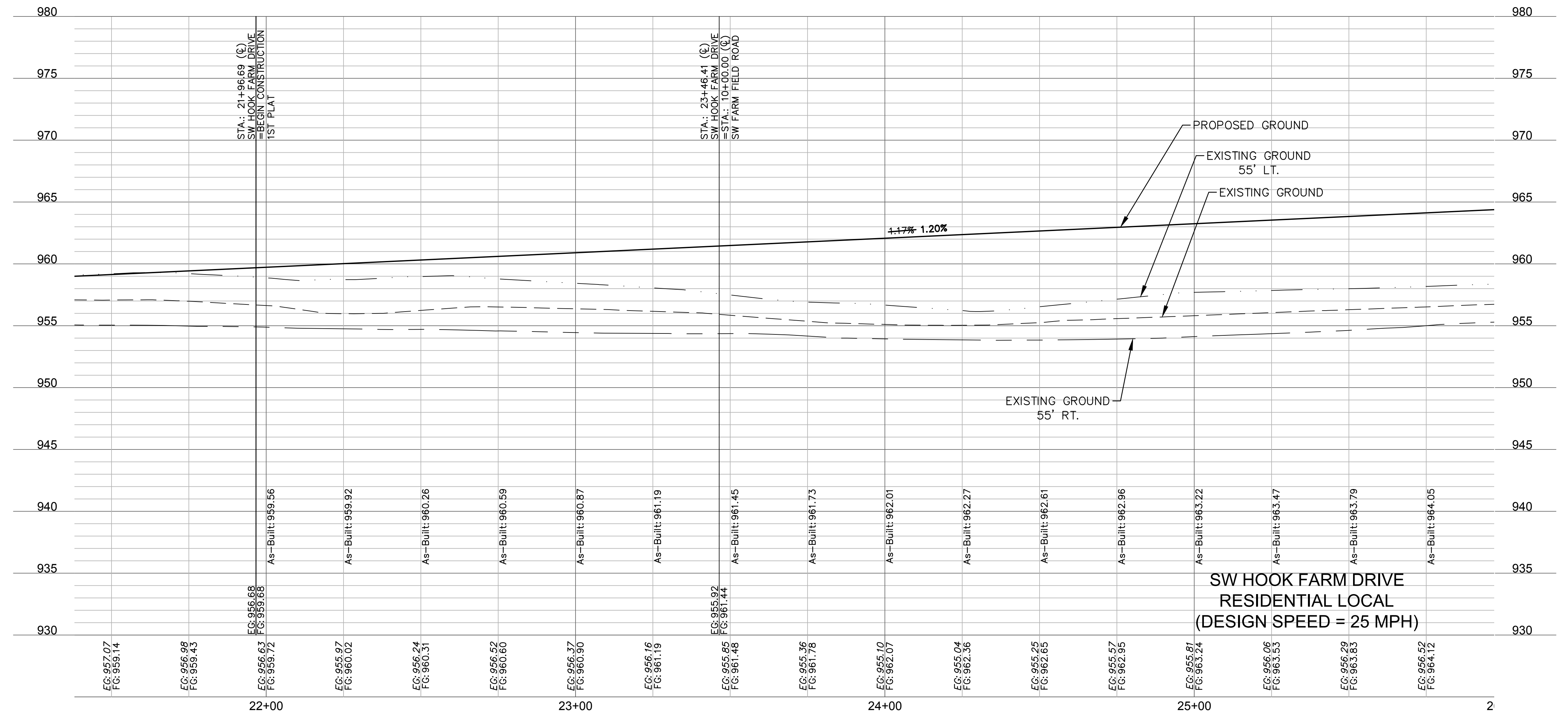
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



**ALIGNMENT CURVES**

CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	TANGENT	P.I. STATION (BACK)
C3	24+35.93 26+68.94	N: 985406.99 E: 2811805.95	N: 985342.96 E: 2812027.88	510.00	233.00	026°10'37"	118.57	25+50.37
C4	21+07.71 22+69.11	N: 985526.27 E: 2811505.41	N: 985488.32 E: 2811660.29	300.00	161.40	030°49'31"	82.71	21+86.40

**AS-BUILT**  
 DATE: 21-08-04



**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com

STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 NUMBER PE-2017000367  
 9/17/21  
 PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADINGS	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)  
 STREET AND STORM SEWER PLANS

HOOK FARMS  
 FIRST PLAT

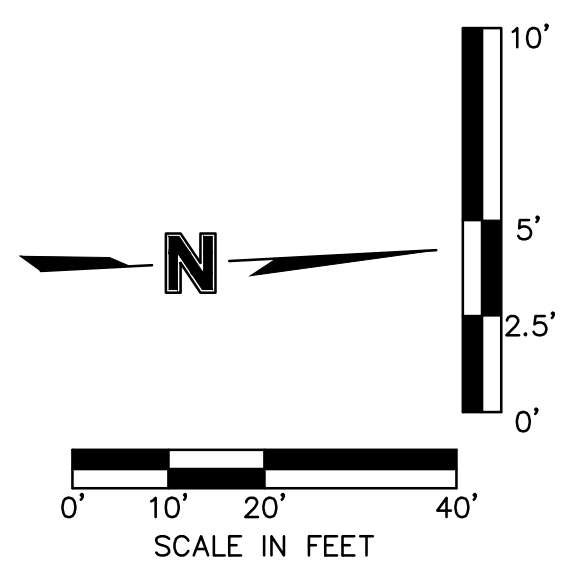
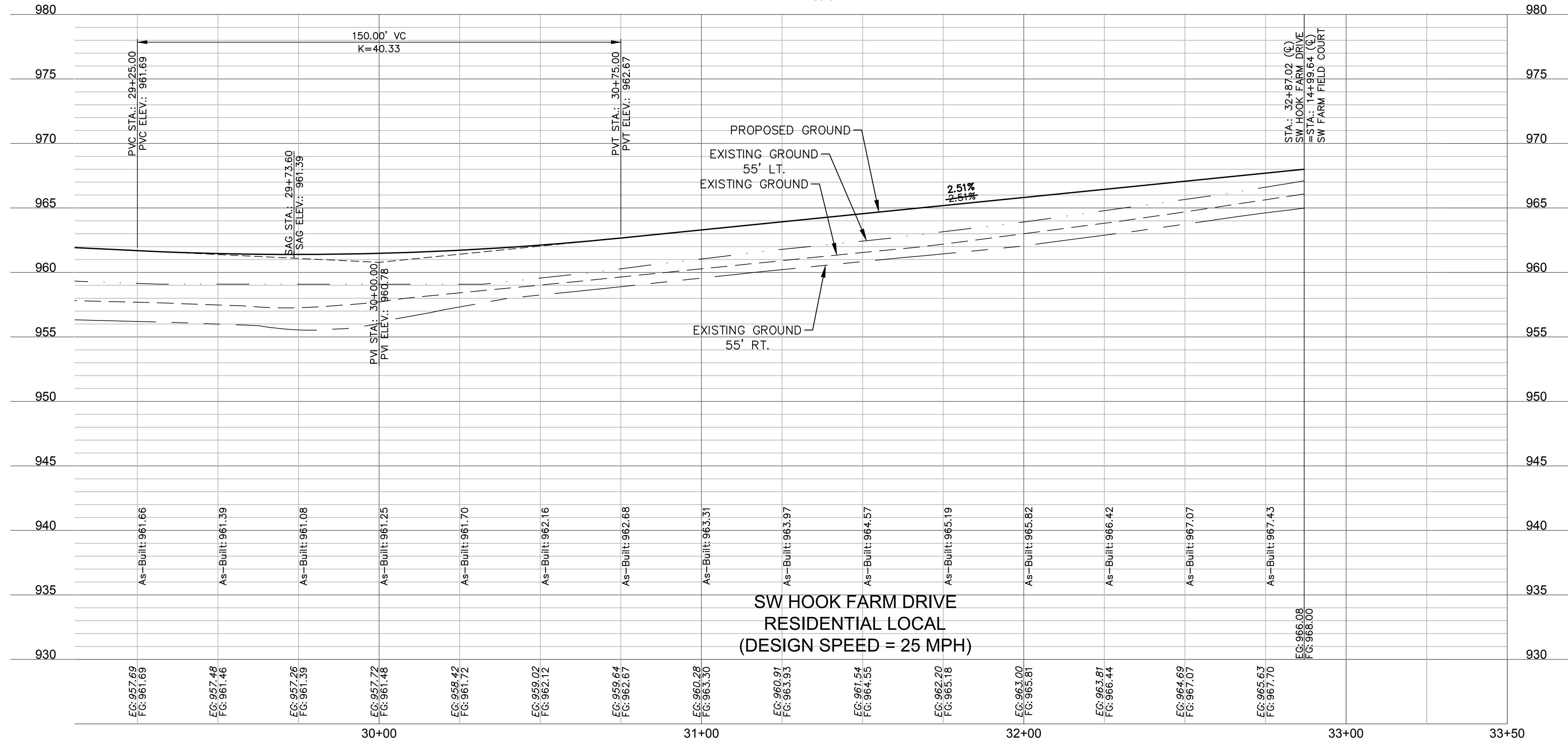
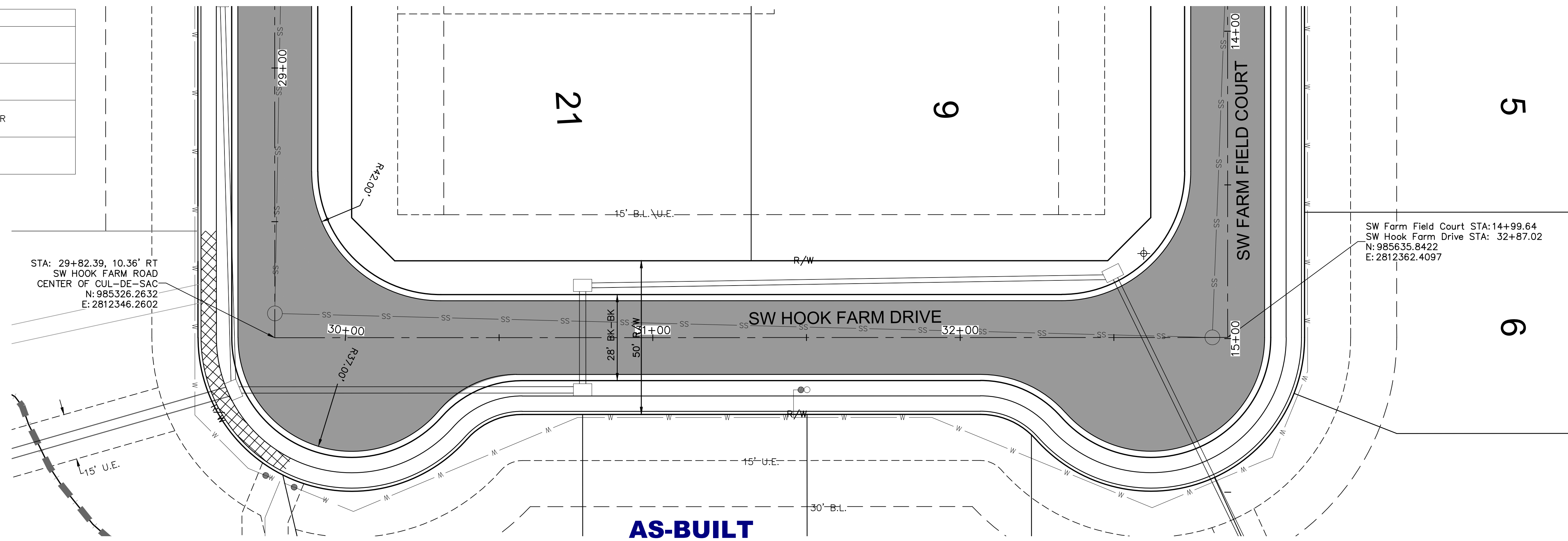
LEE'S SUMMIT, MO 2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

SHEET C117



LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

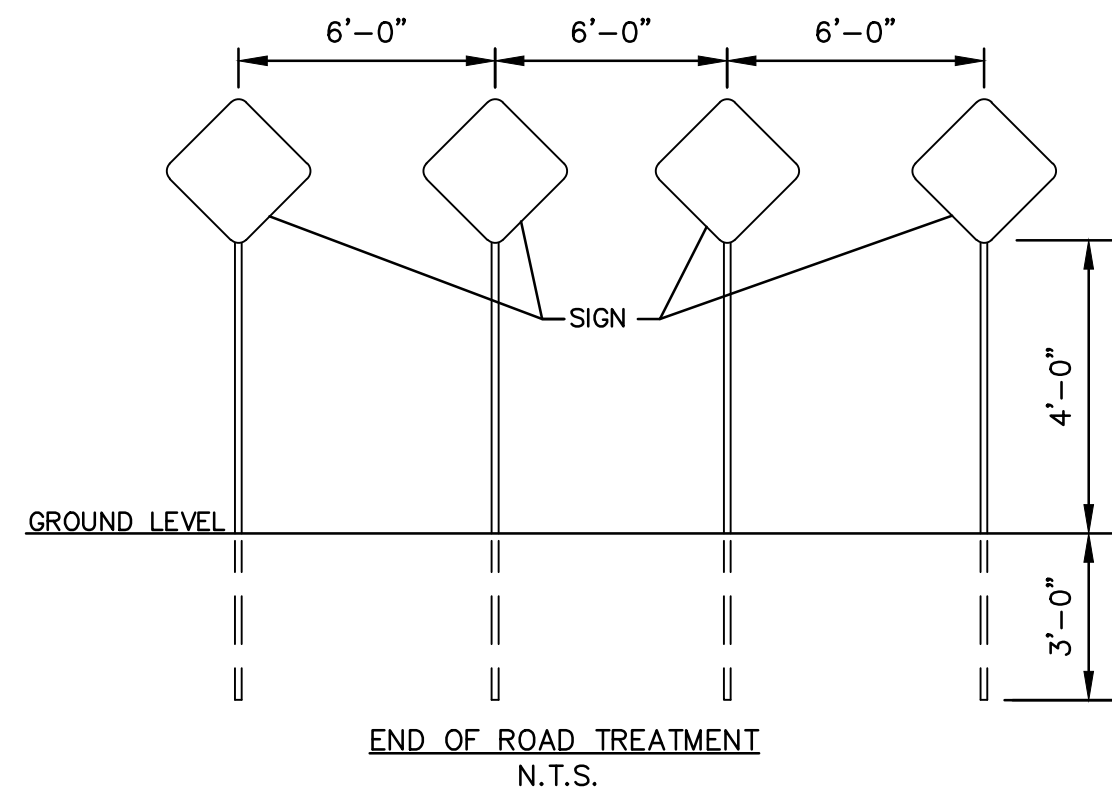
STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 PE-2017000367  
 9/17/21

REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REMOVED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

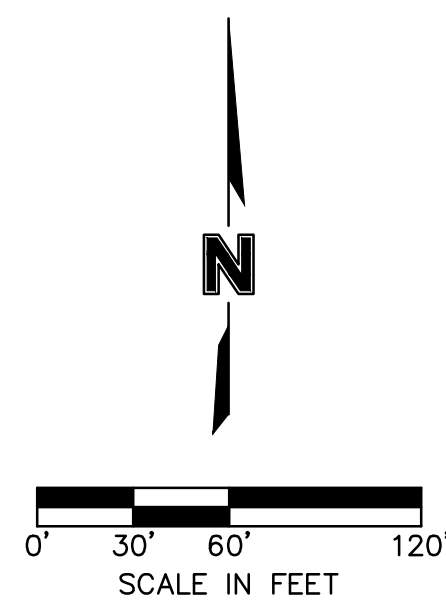
ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST PLAT  
 2020  
 LEE'S SUMMIT, MO

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\_As-Builts\Sheets\GNCV\Street and Storm Plans\C\_TCP01\_0194061.dwg  
 DATE: Sep 16, 2021 8:39am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\XBASE\_0194061 C:\XBASE\_0194061 USER: mession

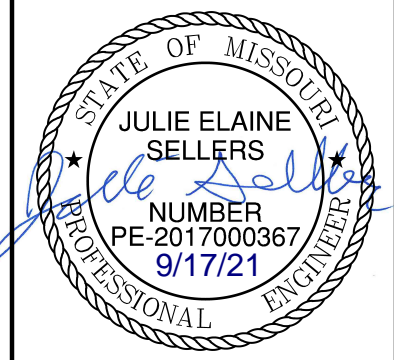


OBJECT MARKERS (TYPE OM4-3, 18"X18") ARE TO BE INSTALLED 2' FROM END OF PROPOSED PAVEMENT.



ITEM 8  
 10'X10' SWBT  
 Doc. No. 199910026996  
 Bk. 1-2906 Pg. 251

ITEM 9  
 10' G.E.  
 Doc. No. 199910026996  
 FALLS IN R/W



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REMOVED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

TRAFFIC CONTROL PLAN  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST PLAT  
 LEE'S SUMMIT, MO  
 2020

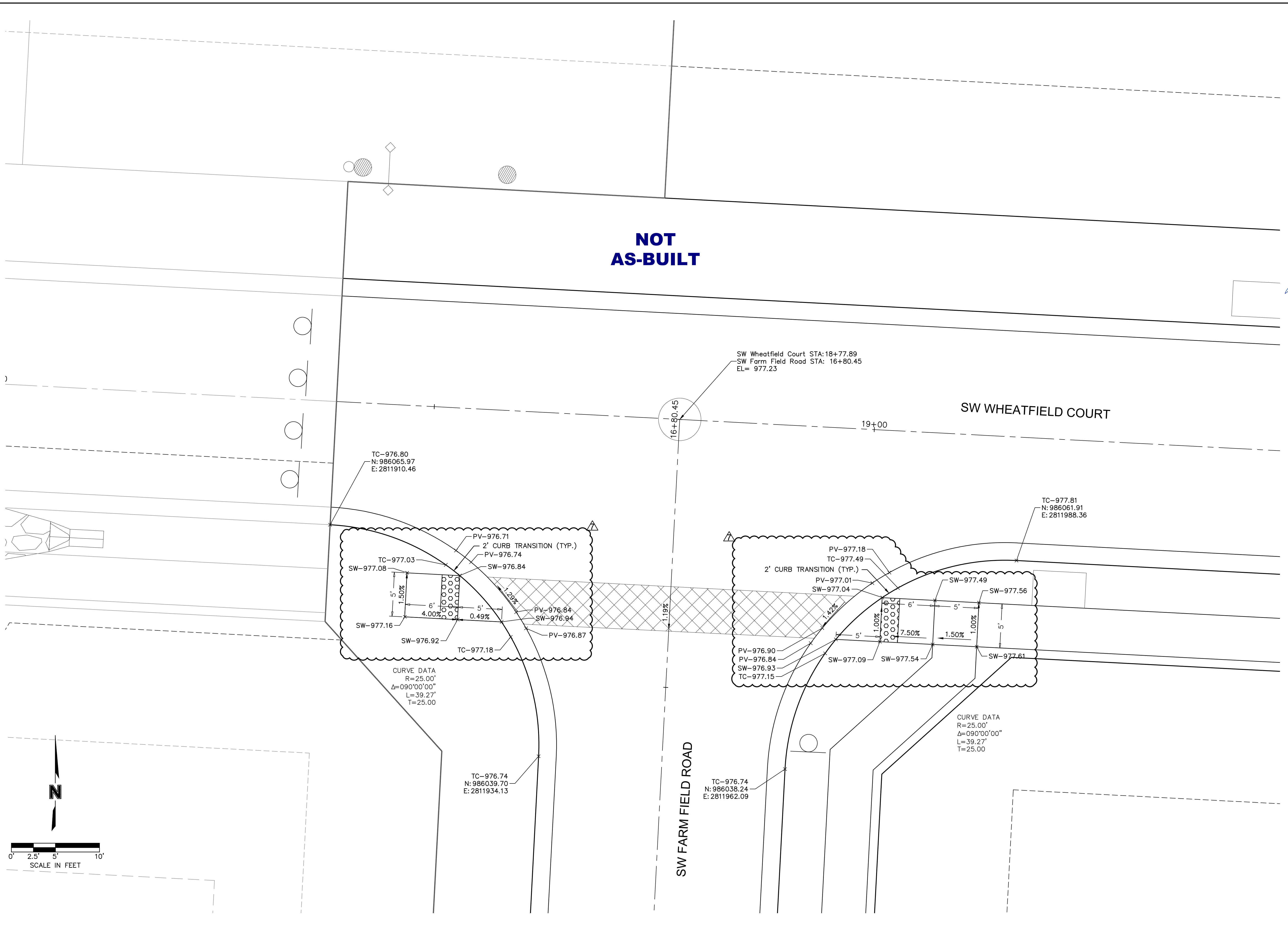
drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

SHEET  
 C120

**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com

REVISIONS

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans-As-Built\Sheets\GNCV\Street and Storm Plans\C\_INT01\_0194061.dwg  
 DATE: Sep 16, 2021 8:40am XREFS: C\_P\BLK\_0194061\_34x22 C\_P\BASE\_0194061 C\_P\BASE\_0194061 C\_P\BASE\_0194061 C\_P\UTIL\_0194061  
 USER: mossion

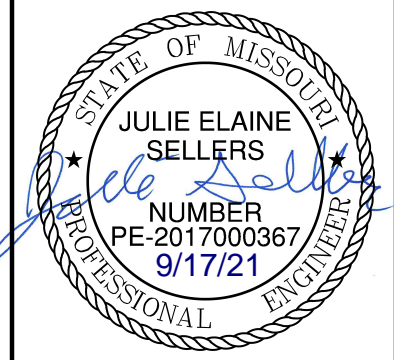


**NOT AS-BUILT**

SW WHEATFIELD COURT

SW FARM FIELD ROAD

**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

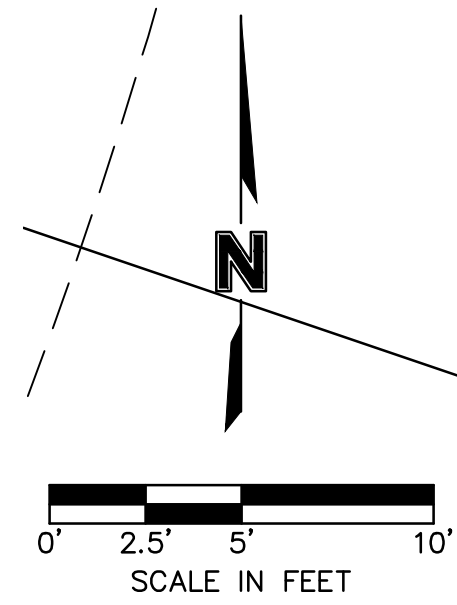


REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REVISED PER CITY COMMENTS	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED PER CITY COMMENTS	
6	02/17/2021	REVISED ADA RAMP	
7	03/12/2021	REVISED ADA RAMP	
8	05/18/2021	REVISED STREET NAMES	

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REVISED PER CITY COMMENTS	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED PER CITY COMMENTS	
6	02/17/2021	REVISED ADA RAMP	
7	03/12/2021	REVISED ADA RAMP	
8	05/18/2021	REVISED STREET NAMES	

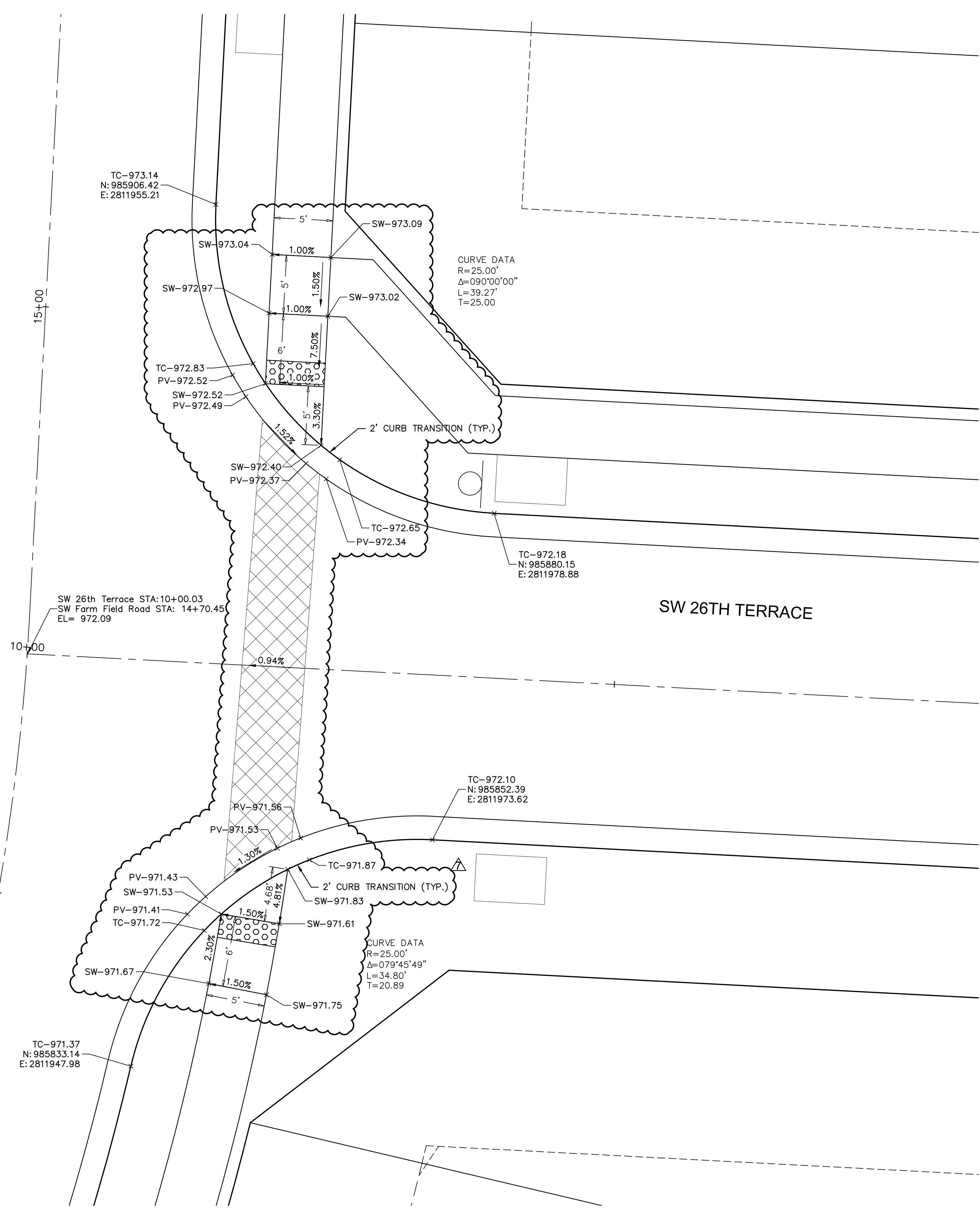
SHEET C121

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans-As-Built\Sheets\GNCV\Street and Storm Plans\C\_INT01\_0194061.dwg  
 DATE: Sep 16, 2021 8:40am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PBASE\_0194061 C:\PUTIL\_0194061

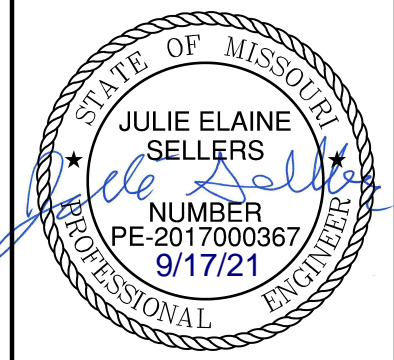


**NOT  
AS-BUILT**

SW FARM FIELD ROAD



**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADING	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

SW FARM FIELD ROAD & SW 26TH TERRACE  
 STREET AND STORM SEWER PLANS

HOOK FARMS  
 FIRST PLAT

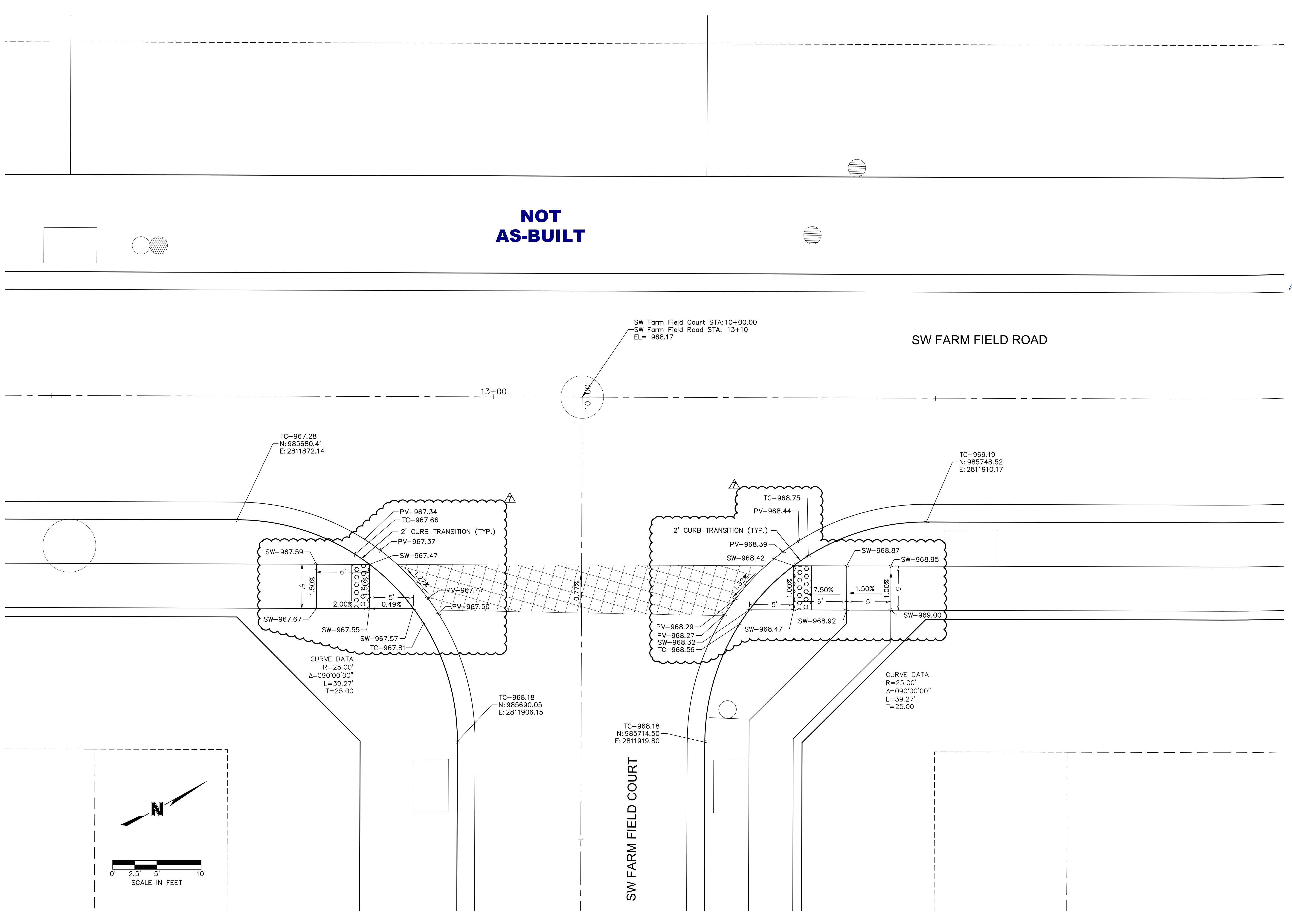
LEE'S SUMMIT, MO

2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020



DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans-As-Built\Sheets\GNCV\Street and Storm Plans\C\_INT01\_0194061.dwg  
 DATE: Sep 16, 2021 8:40am XREFS: C\_PTBK\_0194061\_34x22 C\_PBND\_0194061 C\_XBASE\_0194061 C\_PUTIL\_0194061 C\_FBASE\_0194061 C\_PUTIL\_0194061 USER: msson



**NOT  
AS-BUILT**

SW FARM FIELD ROAD

SW FARM FIELD COURT

**olsson**

Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com

STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 PE-2017000367  
 9/17/21  
 PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REVISED PER CITY COMMENTS	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED PER CITY COMMENTS	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

**REVISIONS**

SW FARM FIELD ROAD & SW FARM FIELD COURT  
 STREET AND STORM SEWER PLANS

HOOK FARMS  
 FIRST PLAT

LEE'S SUMMIT, MO

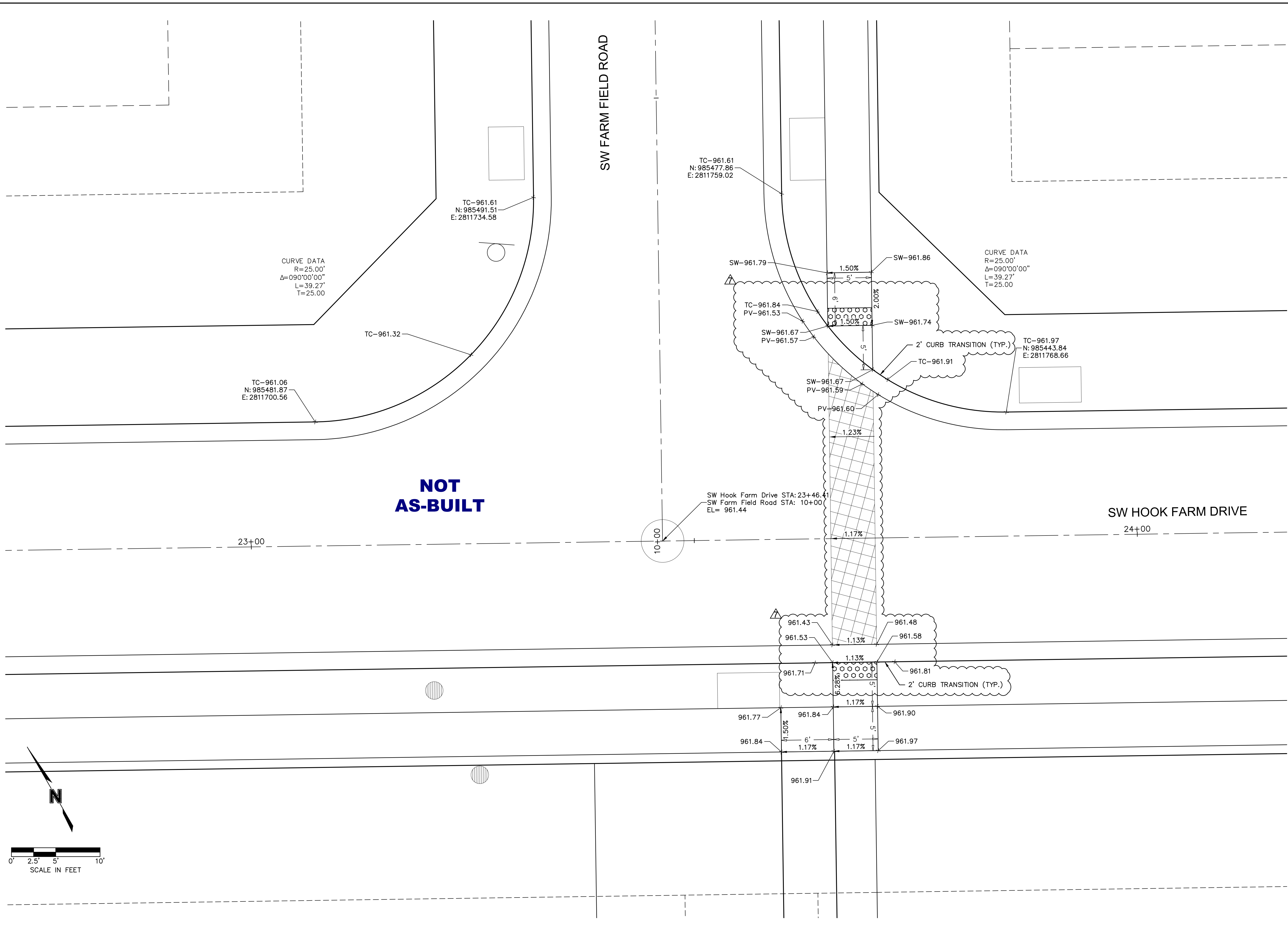
2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

**SHEET  
C124**



DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\_As-Builts\Sheets\GNCV\Street and Storm Plans\C\_INT02\_0194061.dwg  
 DATE: Sep 16, 2021 8:41am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\XBASE\_0194061 C:\PBASE\_0194061 C:\PUTIL\_0194061 USER: mossion C:\FBASE\_0194061



**olsson**

Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 LICENSE NUMBER PE-2017000367  
 EXPIRES 9/17/21  
 PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REVISED PER CITY COMMENTS	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED PER CITY COMMENTS	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

SW FARM FIELD ROAD & SW HOOK FARM DRIVE  
 STREET AND STORM SEWER PLANS

HOOK FARMS  
 FIRST PLAT

LEE'S SUMMIT, MO

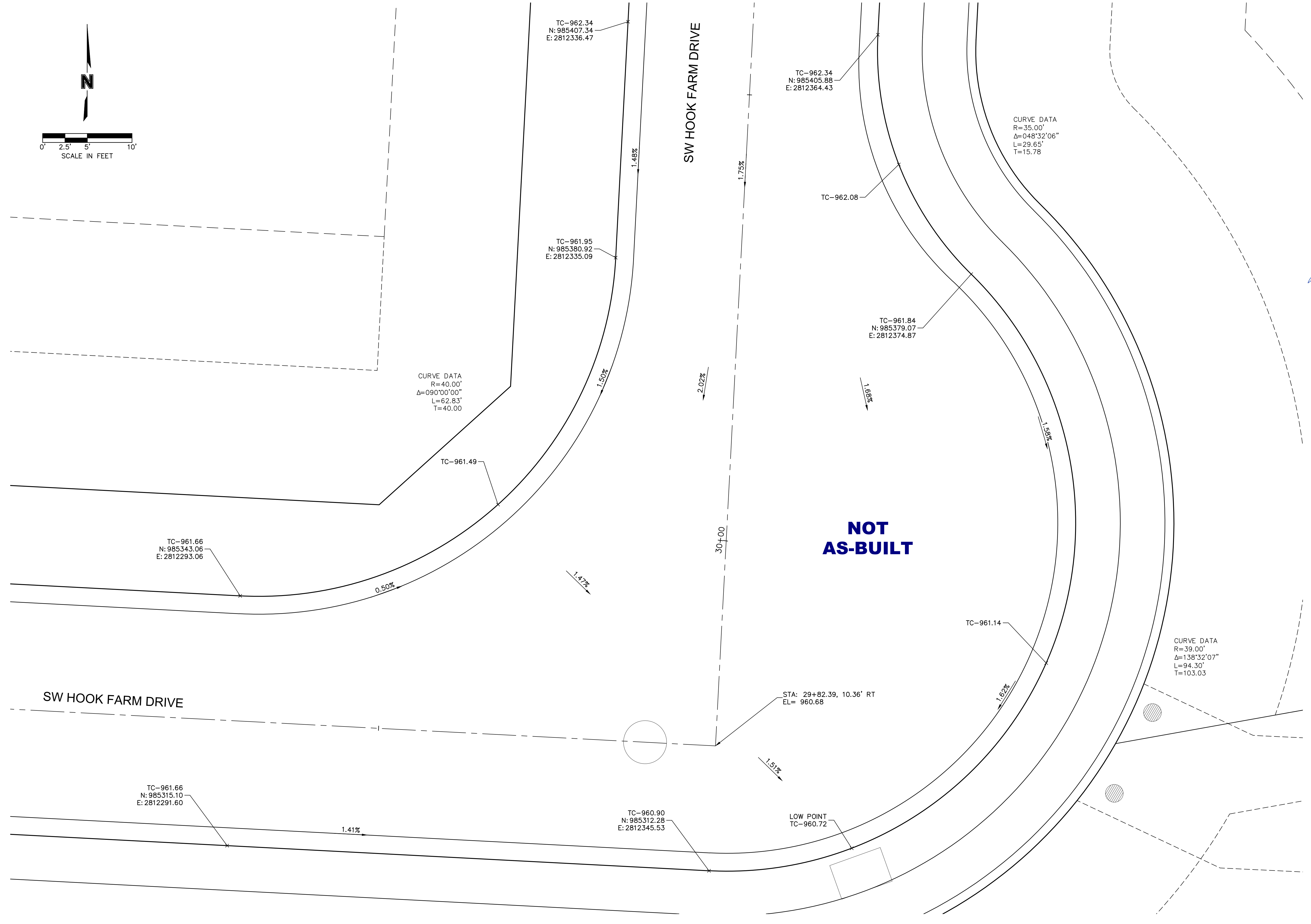
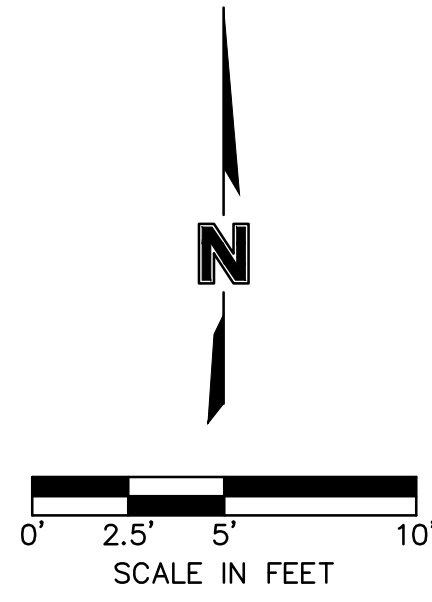
2020

REVISIONS

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

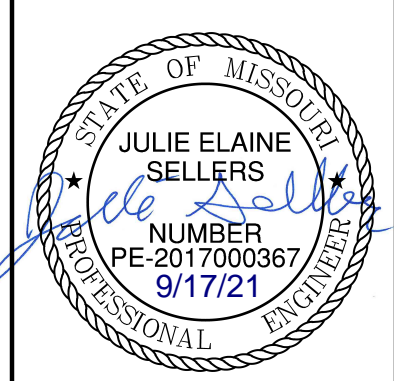
SHEET  
C125

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_INT02\_0194061.dwg  
 DATE: Sep 16, 2021 8:41am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PBASE\_0194061 C:\PUTIL\_0194061 USER: mossion



**olsson**

Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADING	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

SW HOOK FARM DRIVE & SW HOOK FARM DRIVE STREET AND STORM SEWER PLANS

HOOK FARMS FIRST PLAT

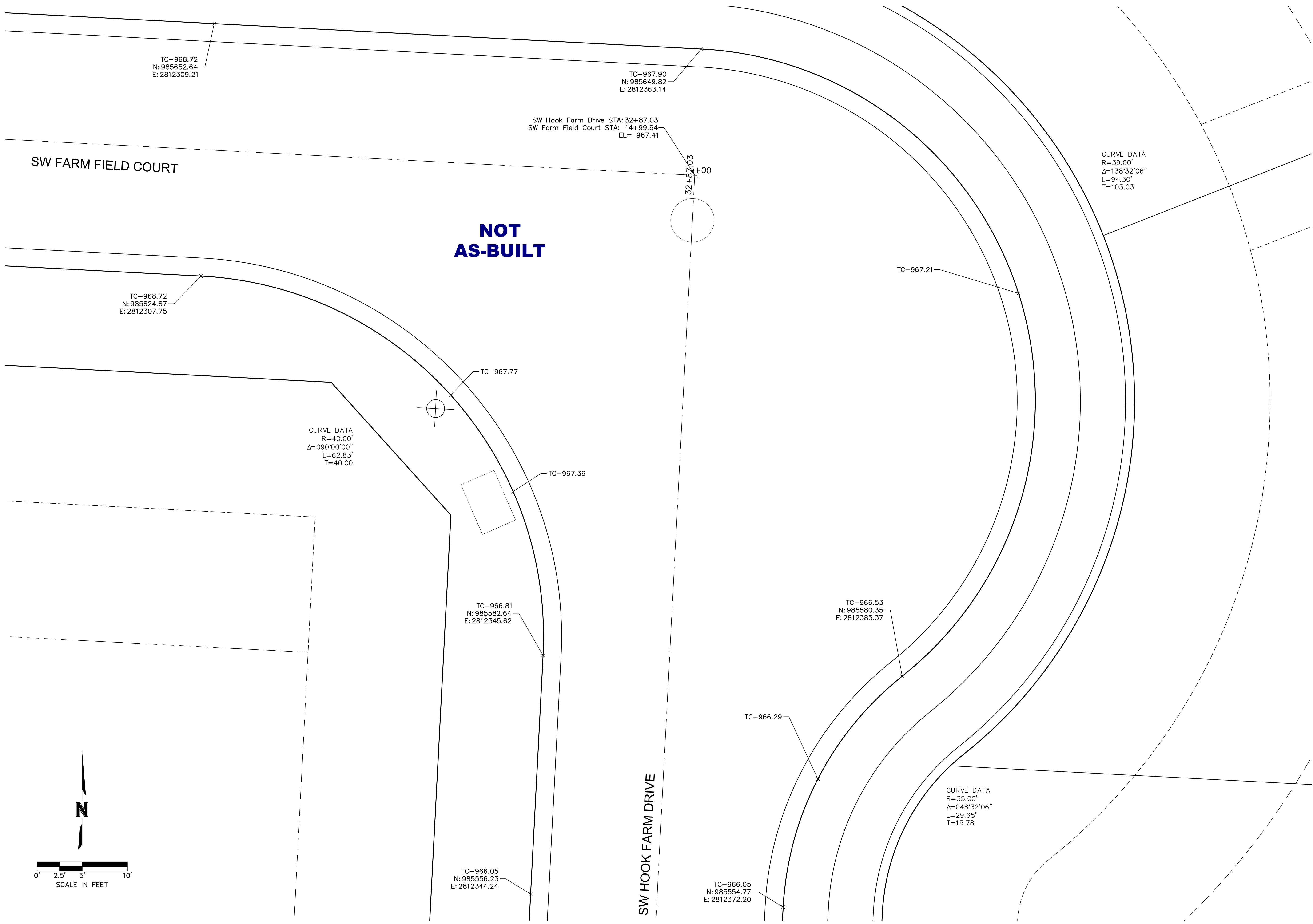
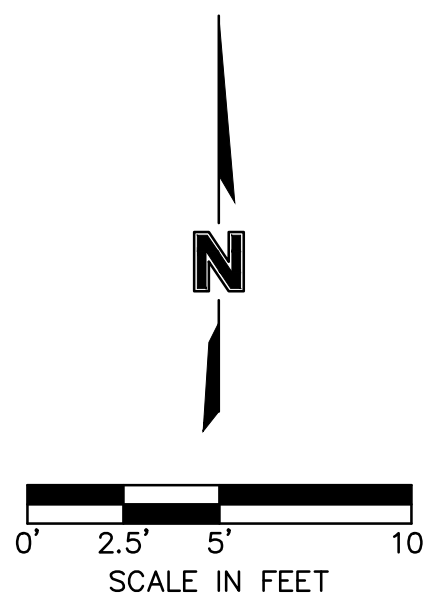
LEE'S SUMMIT, MO

2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

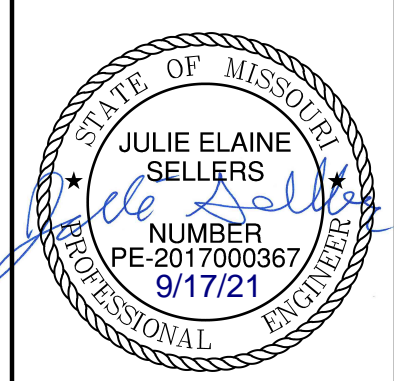
**SHEET C126**

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_INT02\_0194061.dwg  
 DATE: Sep 16, 2021 8:41am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\XBASE\_0194061 C:\FBASE\_0194061 C:\PUTIL\_0194061 USER: mossion



**olsson**

Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADING	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

SW FARM FIELD COURT & SW HOOK FARM DRIVE  
 STREET AND STORM SEWER PLANS

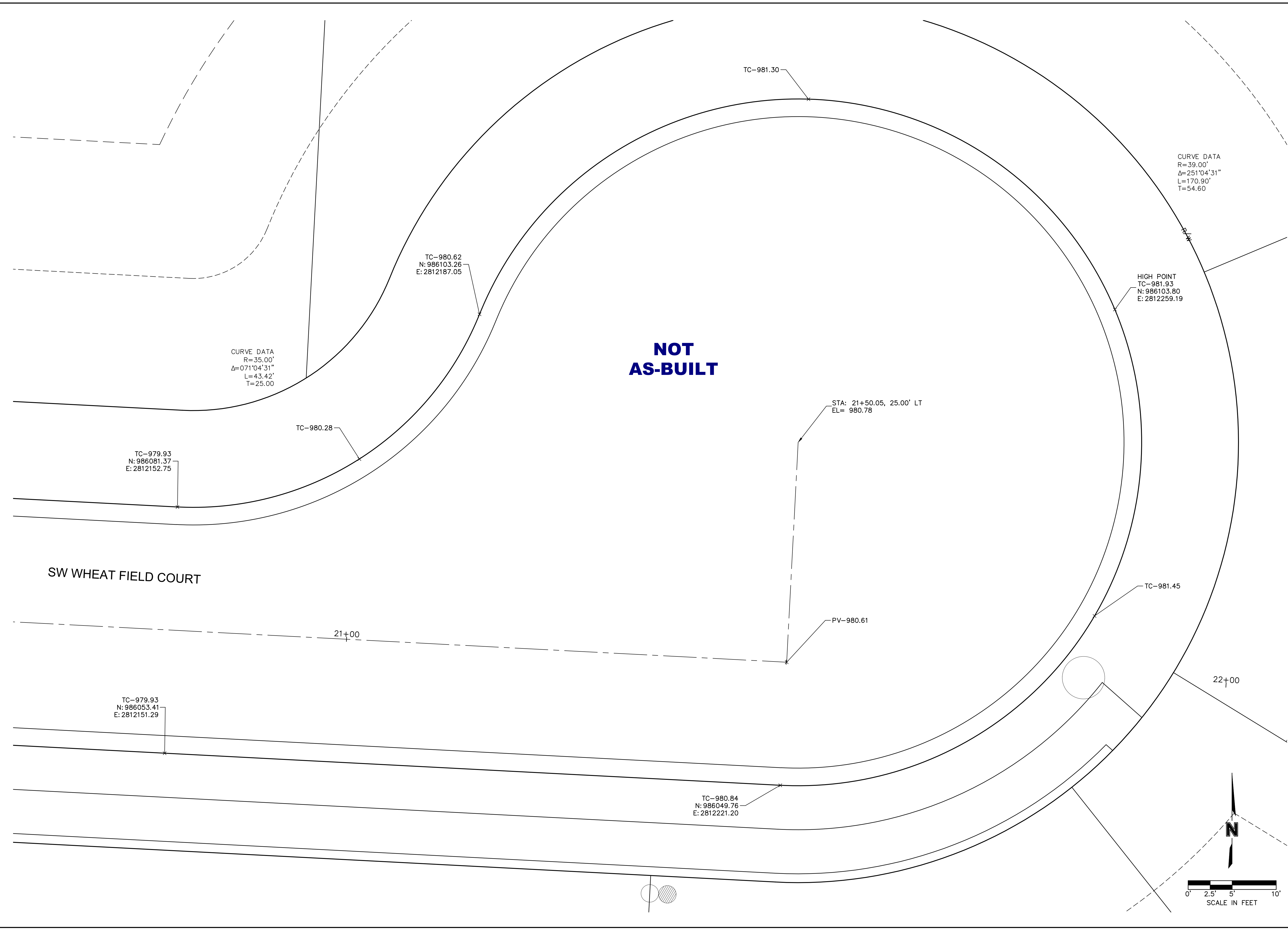
HOOK FARMS  
 FIRST PLAT

LEE'S SUMMIT, MO

2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_INT02\_0194061.dwg  
 DATE: Sep 16, 2021 8:41am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PBASE\_0194061 C:\PUTIL\_0194061 USER: mossion



**olsson**

Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 PROFESSIONAL ENGINEER  
 NUMBER PE-2017000367  
 9/17/21

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADING	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

SW WHEAT FIELD COURT CUL-DE-SAC  
 STREET AND STORM SEWER PLANS

HOOK FARMS  
 FIRST PLAT

LEE'S SUMMIT, MO

2020

REVISIONS

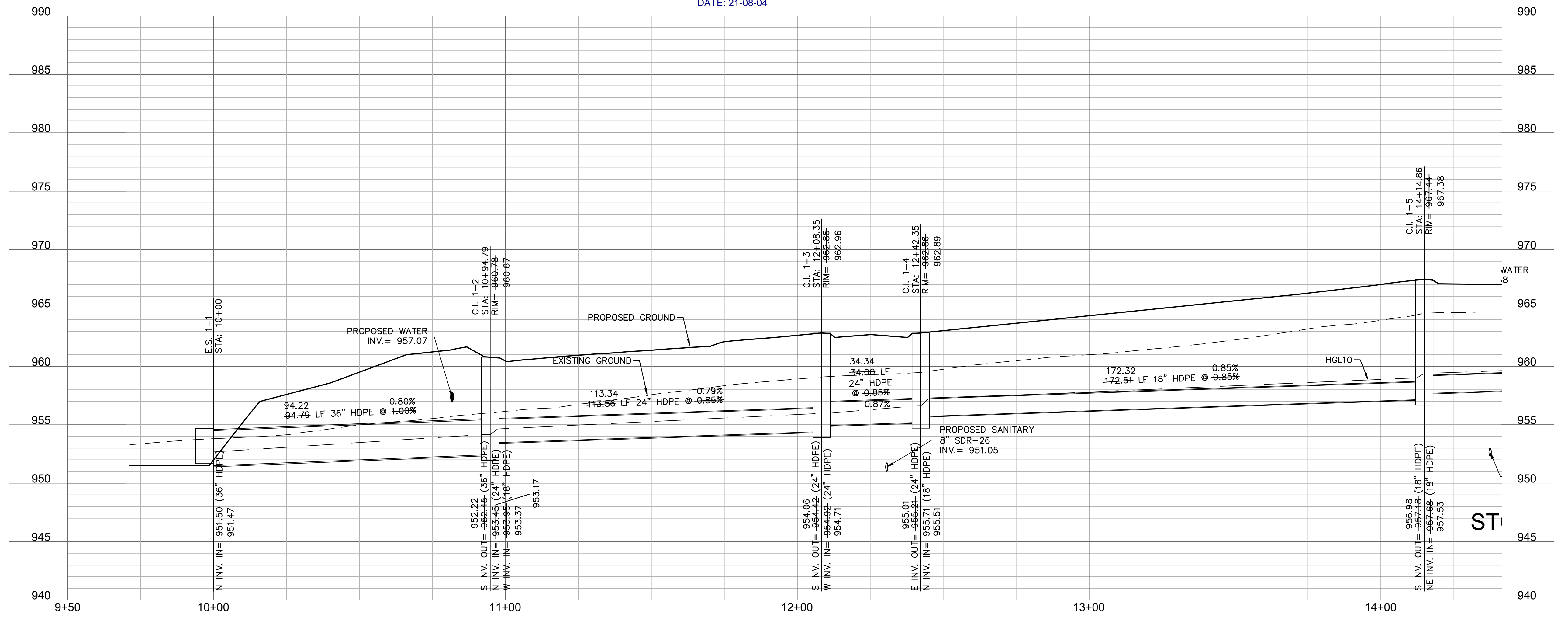
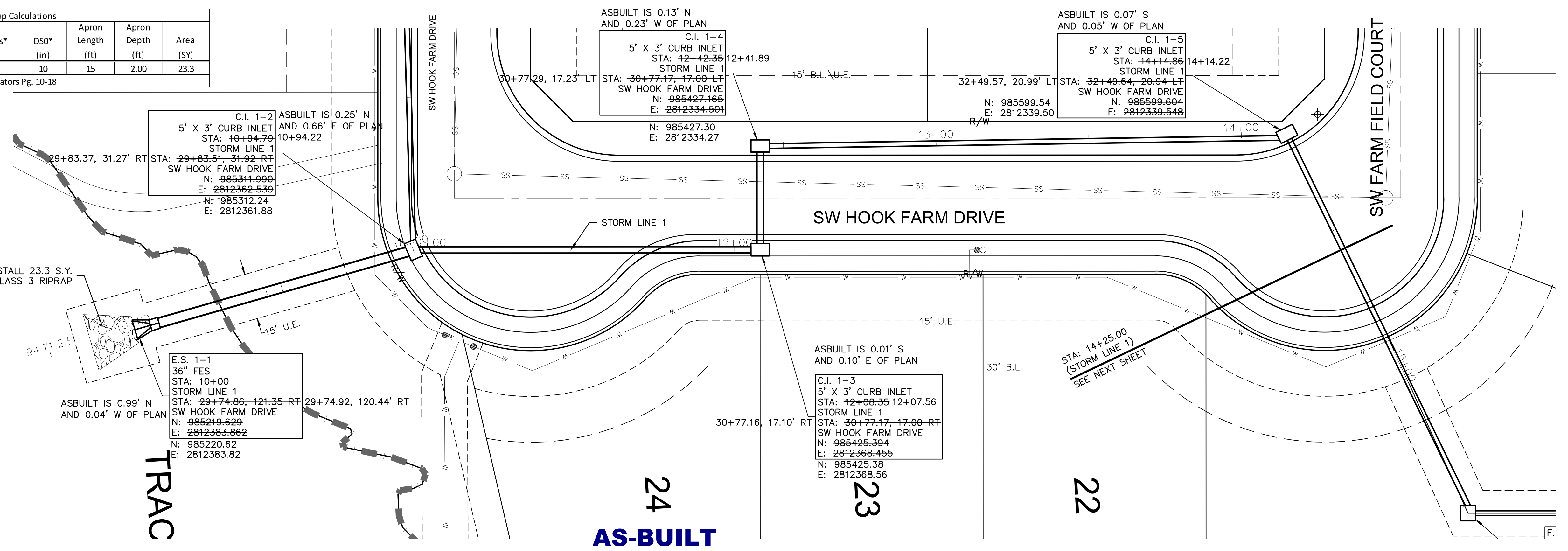
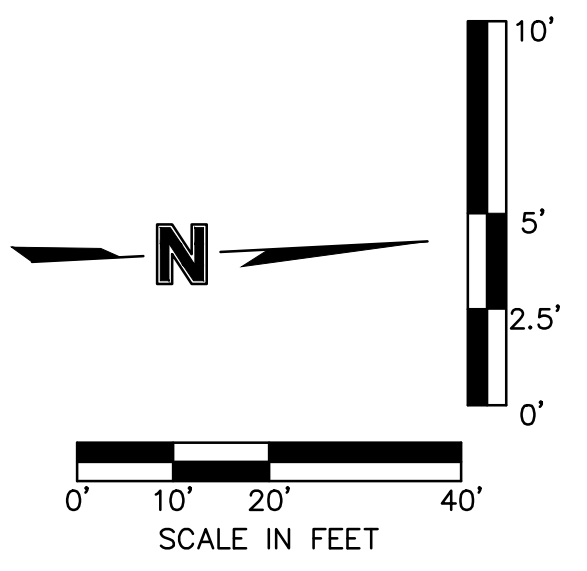
drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

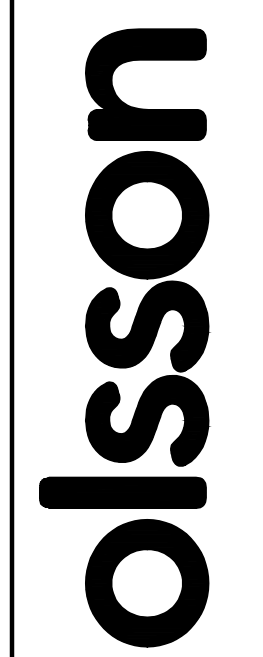
**SHEET**  
C128

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans-As-Built\Sheets\GNCV\Street and Storm Plans\C\_STM01\_0194061.dwg  
 DATE: Sep 16, 2021 8:42am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\XBASE\_0194061 C:\PSURF\_0194061 C:\PUTIL\_0194061 C:\PSTRM\_0194061 C:\PBASE\_0194061 C:\FBASE\_0194061 C:\PSURF\_0194061 C:\PUTIL\_0194061 C:\PSTRM\_0194061 C:\FBASE\_0194061

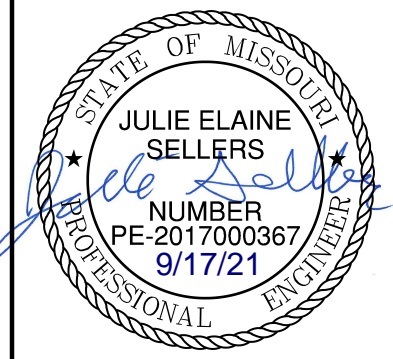
Riprap Calculations							
End Section	Q <sub>100</sub> (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SV)
E.S. 1-1	48.24	3	3	10	15	2.00	23.3

\*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18





Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REMOVED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADINGS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

STORM SEWER PLAN & PROFILE (LINE 1)  
 STREET AND STORM SEWER PLANS

HOOK FARMS  
 FIRST FLAT

LEE'S SUMMIT, MO

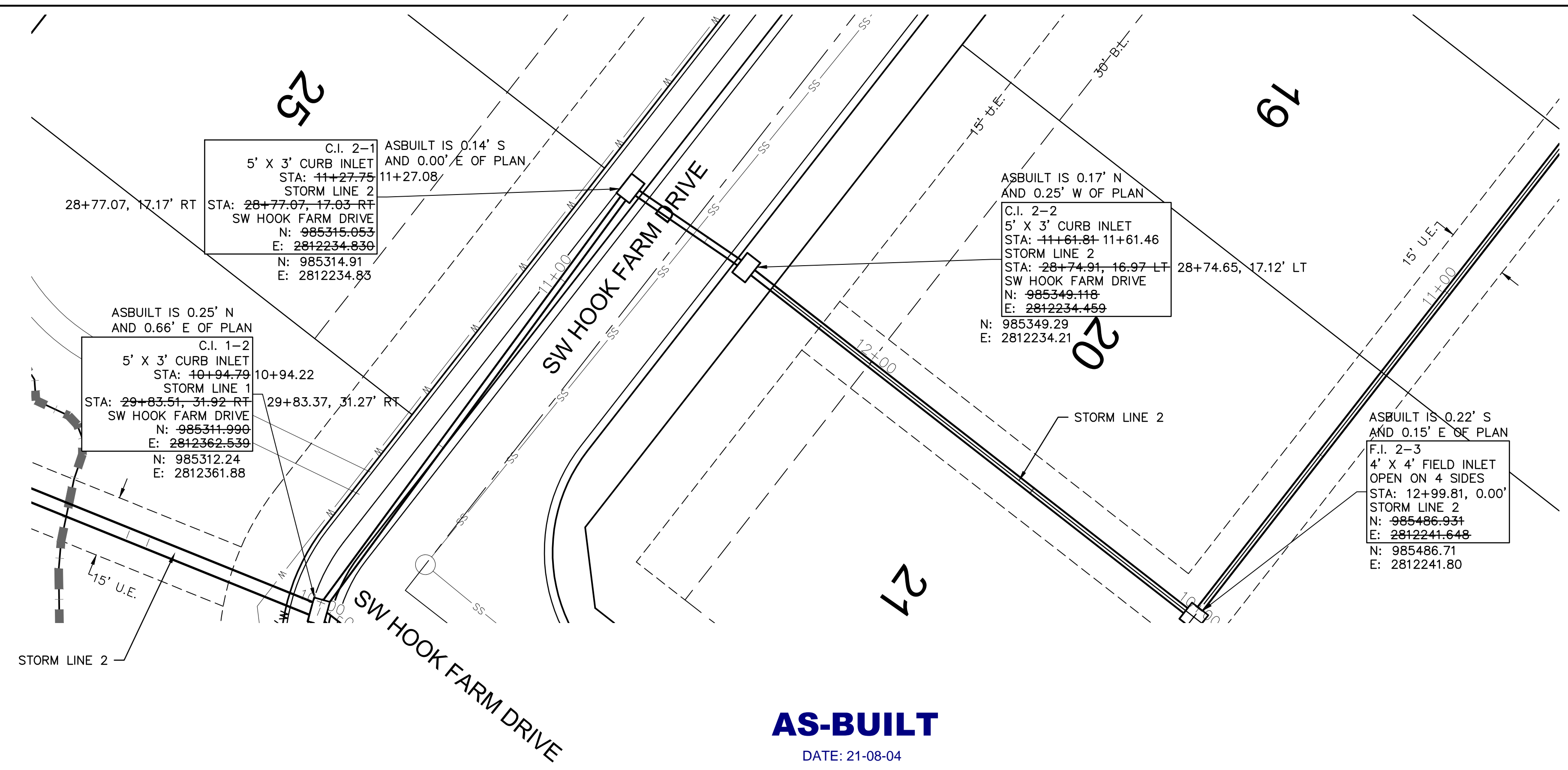
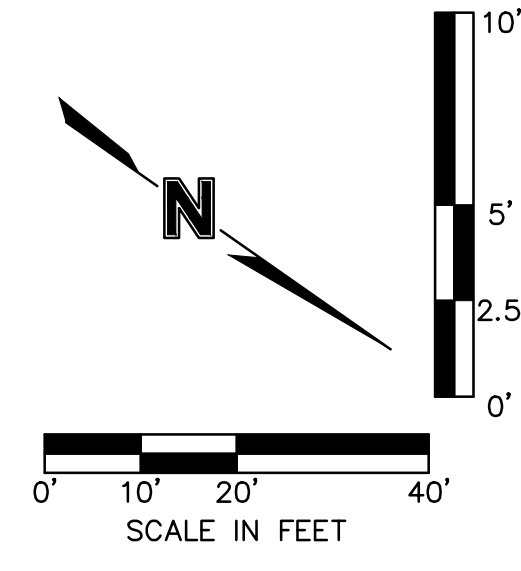
2020

REVISIONS

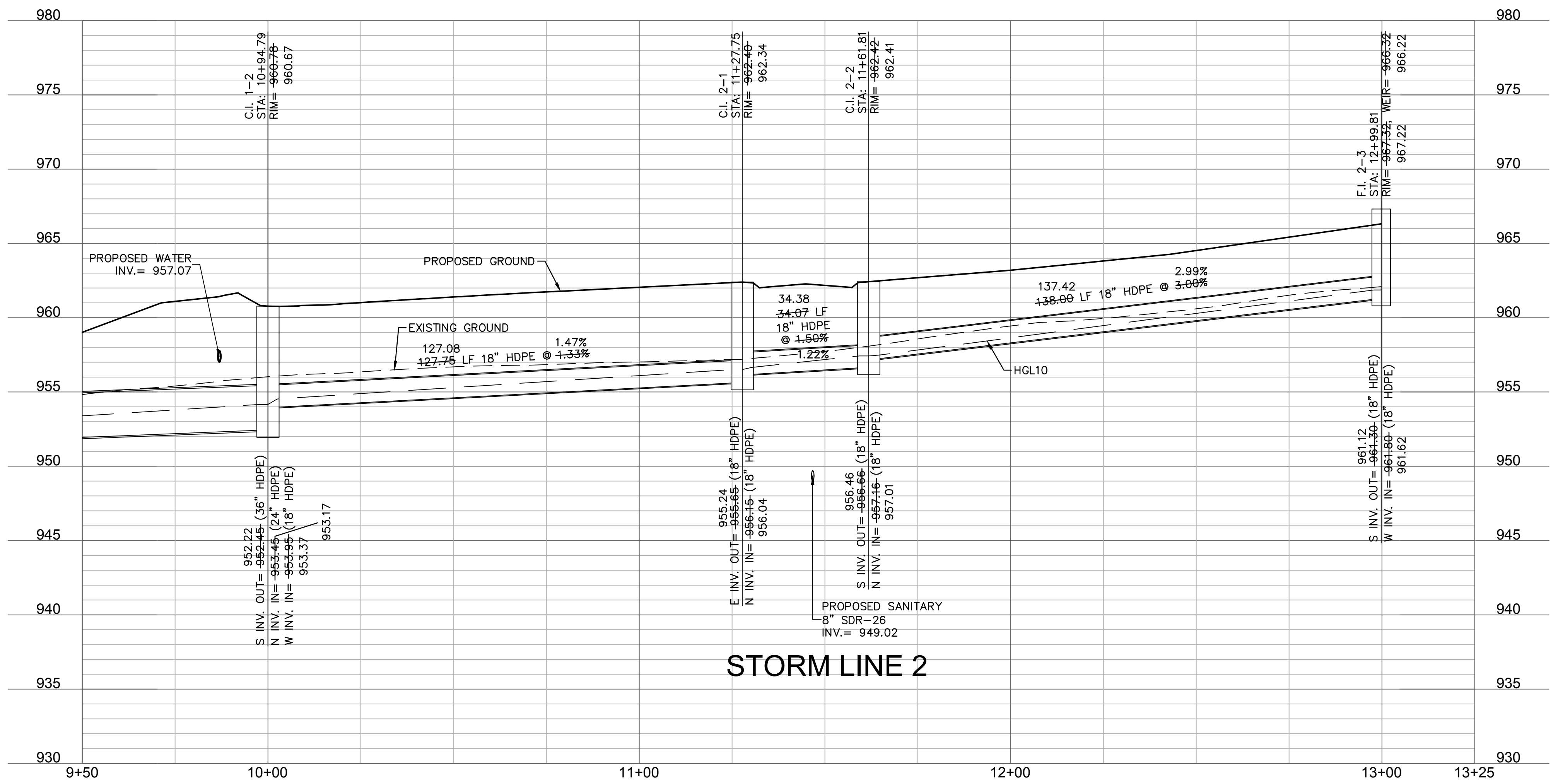
drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020



DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_STM01\_0194061.dwg  
 DATE: Sep 16, 2021 8:42am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PBASE\_0194061 C:\PSTRM\_0194061 C:\PSURF\_0194061 C:\PUTIL\_0194061 C:\PSTRM\_0194061



**AS-BUILT**  
 DATE: 21-08-04



**STORM LINE 2**

**olsson**

Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADINGS	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

**STORM SEWER PLAN & PROFILE (LINE 2)  
 STREET AND STORM SEWER PLANS**

**HOOK FARMS  
 FIRST FLAT**

2020

**REVISIONS**

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

**SHEET  
 C131**

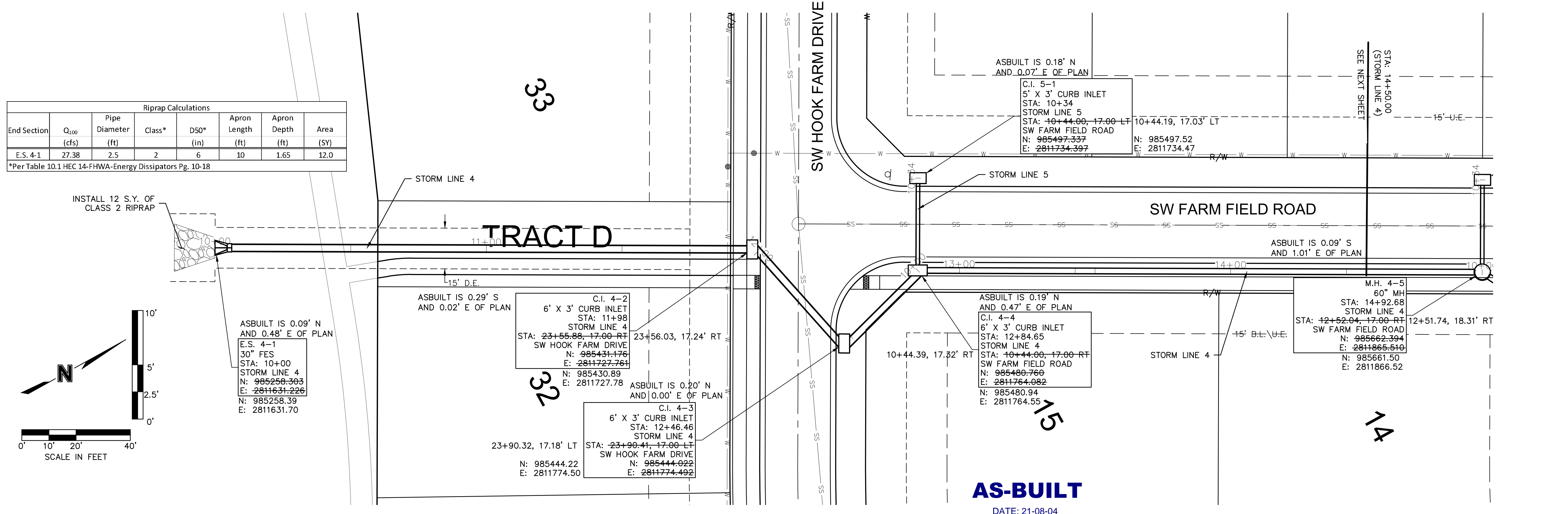
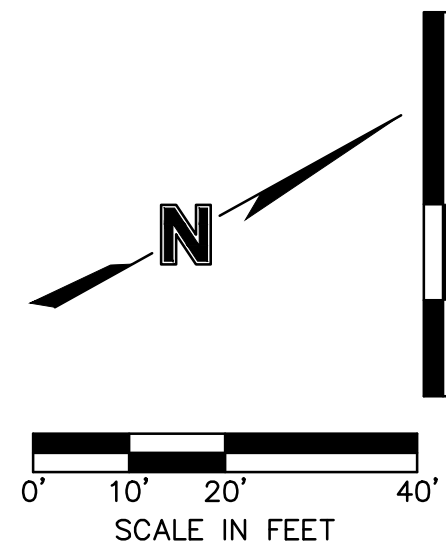




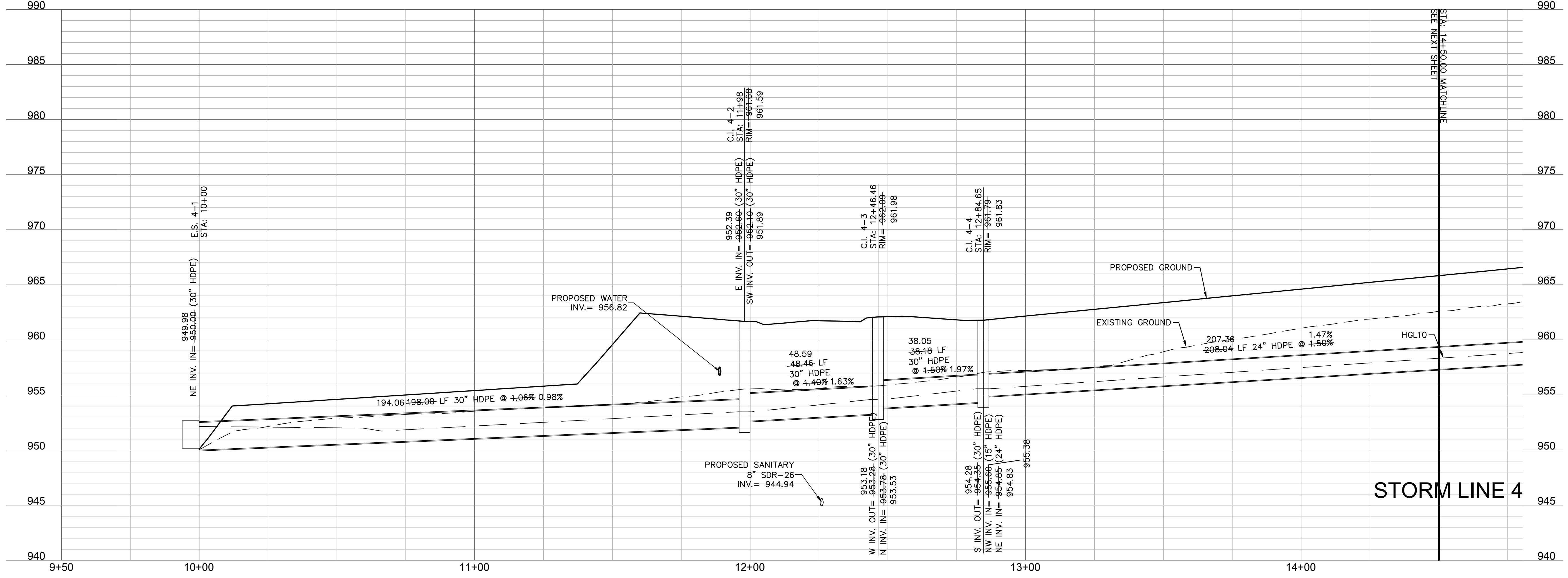
DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_STM02\_0194061.dwg  
 DATE: Sep 16, 2021 8:44am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBDY\_0194061 C:\PBASE\_0194061 C:\PSURF\_0194061 C:\PSTRM\_0194061 C:\PUTIL\_0194061 C:\PSTRM\_0194061\_ASUBUILD

Riprap Calculations							
End Section	Q <sub>100</sub> (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 4-1	27.38	2.5	2	6	10	1.65	12.0

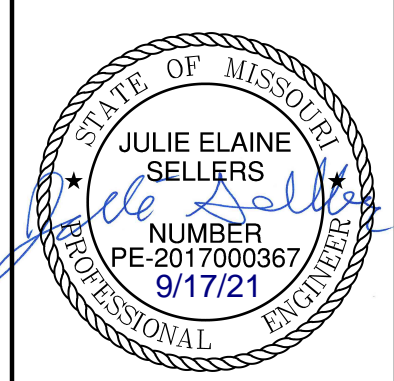
\*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18



**AS-BUILT**  
DATE: 21-08-04



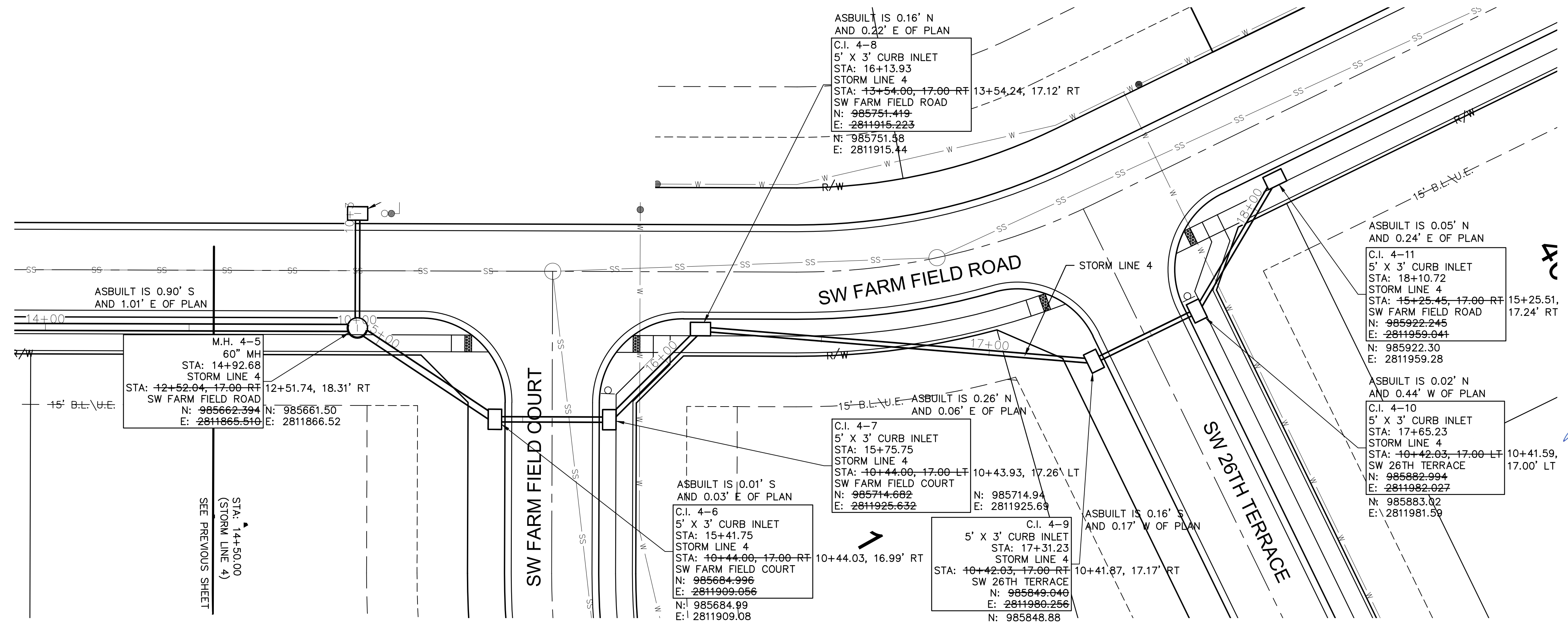
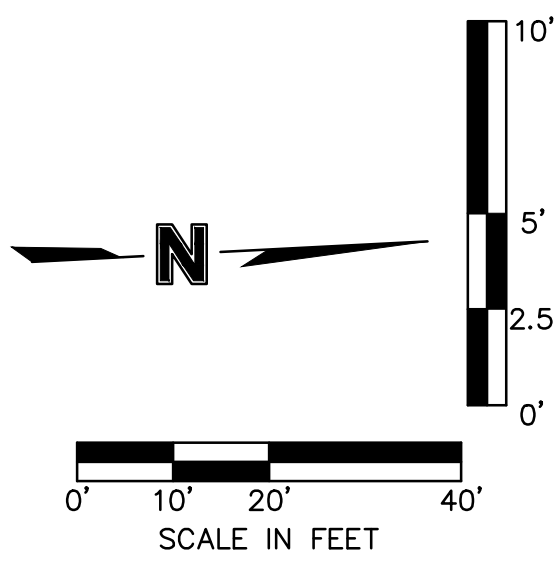
**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olson.com



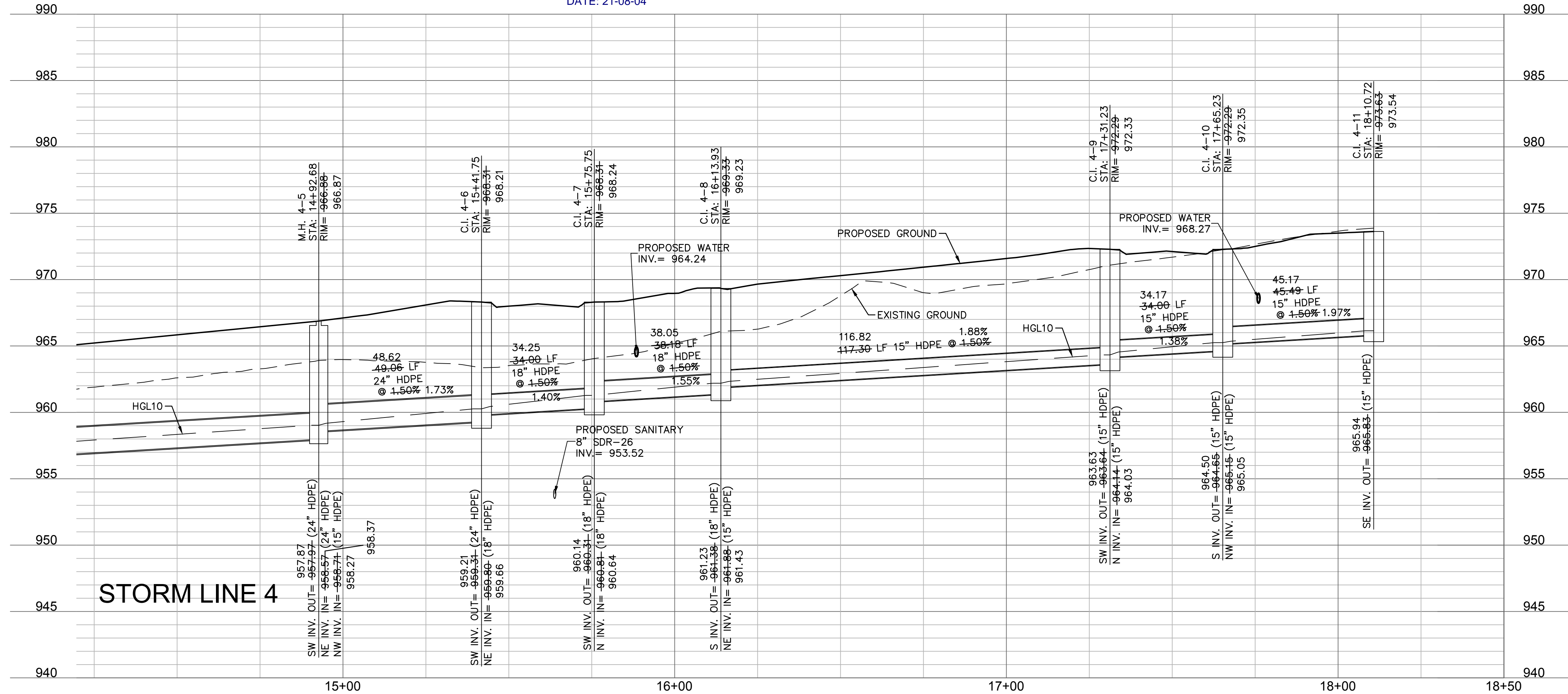
REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REMOVED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

STORM SEWER PLAN & PROFILE (LINE 4)  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST FLAT  
 LEE'S SUMMIT, MO  
 2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020



**AS-BUILT**  
DATE: 21-08-04



**olsson**

Olsson - Civil Engineering  
Missouri Certificate of Authority #001592  
1301 Burlington Street  
North Kansas City, MO 64116  
TEL 816.361.1177  
FAX 816.361.1888  
www.olsson.com

STATE OF MISSOURI  
JULIE ELAINE SELLERS  
Professional Engineer  
PE-2017000367  
9/17/21

REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADINGS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

STORM SEWER PLAN & PROFILE (LINE 4 CONT'D)  
STREET AND STORM SEWER PLANS

HOOK FARMS  
FIRST FLAT

2020

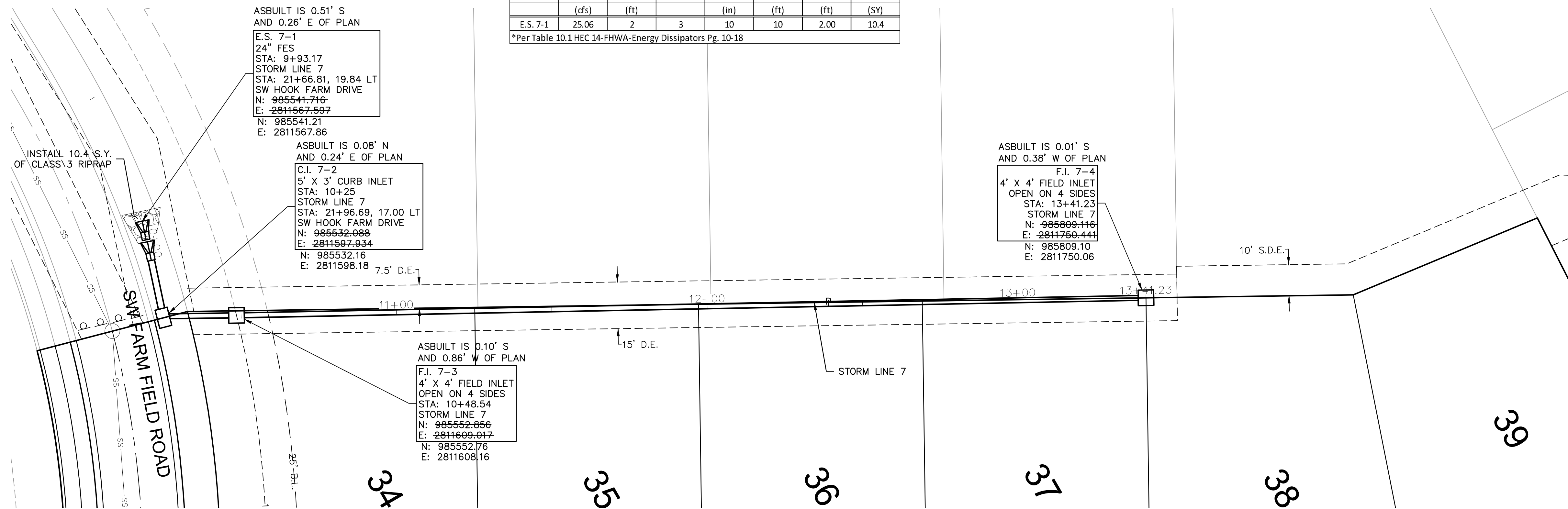
REVISIONS

drawn by: CGW  
checked by: JES  
approved by: NDH  
QA/QC by: JES  
project no.: 019-4061  
drawing no.:  
date: 04/20/2020

**SHEET**  
C134



DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\As-Built\Sheets\GNCV\Street and Storm Plans\C\_STM02\_0194061.dwg  
 DATE: Sep 16, 2021 8:45am XREFS: C:\PTBLK\_0194061\_34x22 C:\PBASE\_0194061 C:\PBASE\_0194061 C:\PSTRM\_0194061 C:\PSURF\_0194061 C:\PUTIL\_0194061 C:\PSTRM\_0194061

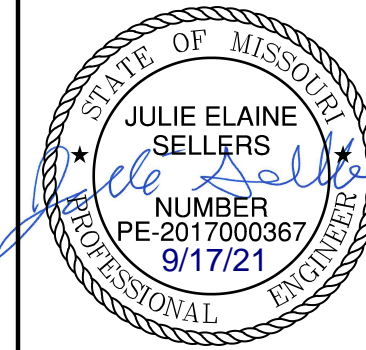
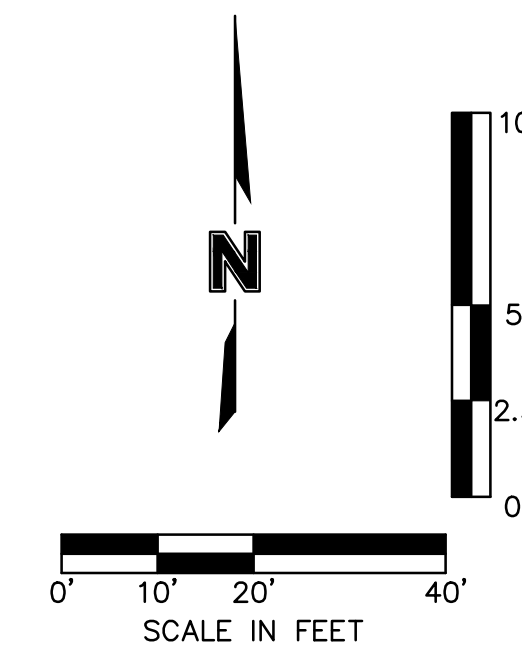
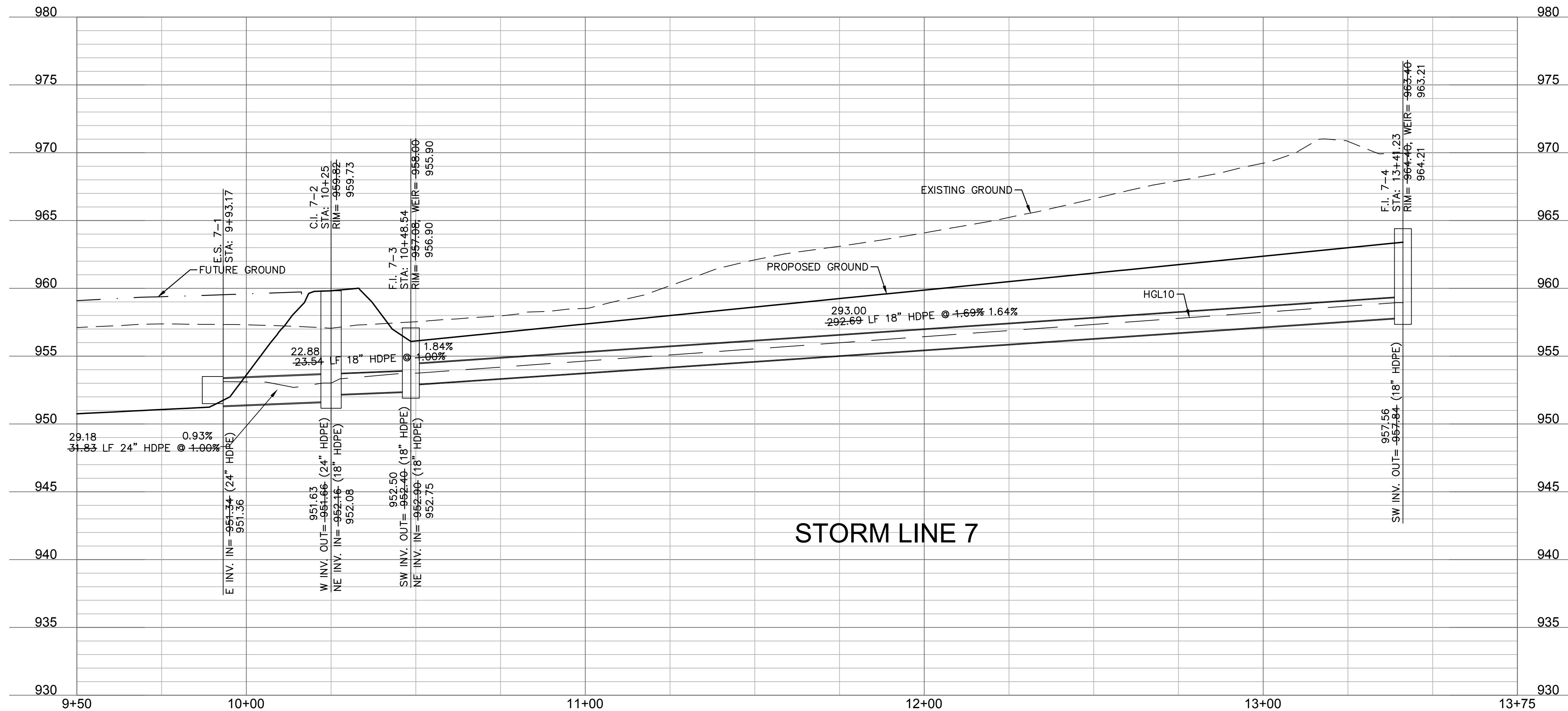


Riprap Calculations							
End Section	Q <sub>100</sub> (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 7-1	25.06	2	3	10	10	2.00	10.4

\*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18

**AS-BUILT**

DATE: 21-08-04



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED PER CITY COMMENTS
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

STORM SEWER PLAN & PROFILE (LINE 7)  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST FLAT  
 LEE'S SUMMIT, MO  
 2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

SHEET  
 C136

**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_STM03\_0194061.dwg  
 DATE: Sep 16, 2021 8:46am  
 XREFS: C:\PTBLK\_0194061\_34x22 C:\PBASE\_0194061 C:\PBASE\_0194061 C:\PUTIL\_0194061 C:\PSTRM\_0194061

LEGEND	
—100	FINISHED INDEX CONTOURS
-100	FINISHED INTERMEDIATE CONTOURS
—	RIDGE LINE
A	DRAINAGE AREA
C	RUNOFF COEFFICIENT
(C.I. 0-D)	STORM STRUCTURE NUMBER

**NOTES:**

MBOE - MINIMUM BUILDING OPENING ELEVATION

**NOTES:**

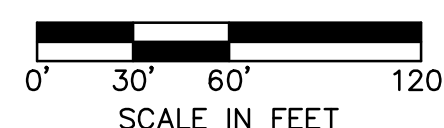
- INDIVIDUAL LOT OWNERS SHALL NOT CHANGE OR OBSTRUCT THE DRAINAGE FLOW LINES OR PATHS ON THE LOTS, AS SHOWN ON THE MASTER DRAINAGE PLAN, UNLESS SPECIFIC APPLICATION IS MADE AND APPROVED BY THE CITY ENGINEER.
- PLAT IS LOCATION IN ZONE X, "AREAS OUTSIDE THE 1-PERCENT ANNUAL CHANCE FLOODPLAINS, AREAS OF 1-PERCENT ANNUAL CHANCE SHEET FLOW FLOODING WHERE THE AVERAGE DEPTHS ARE LESS THAN 1 FOOT, AREAS OF 1-PERCENT ANNUAL CHANCE STREAM FLOODING WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 1 SQUARE MILE, OR AREAS PROTECTED FROM THE 1-PERCENT ANNUAL CHANCE FLOOD BY LEVEES. NO BASE FLOOD ELEVATIONS OR DEPTHS ARE SHOWN WITHIN THIS ZONE"
- PLAT IS LOCATED OUTSIDE OF ANY REQUIRED BUFFER ZONES FOR NATURAL STREAMS.
- MBOE ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN THE RIGHT AND LEFT SIDE MBOE'S SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.
- REFER TO SHEET C105-C109 FOR SWALE GRADING DETAILS.
- DRAINAGE PATHS TO BE CONSTRUCTED BETWEEN EACH OF THE LOTS LABELED AS STANDARD LOTS TO DRAIN WEST.
- NO BUILDING PERMITS WILL BE ISSUED UNTIL AN AS-GRADED MASTER DRAINAGE PLAN HAS BEEN SUBMITTED TO THE CITY AND APPROVED BY THE CITY.

Hook Farms 1st Plat As-Built				
Minimum Building Opening Elevation				
Lot	Rear Left MBOE	Rear Right MBOE	Front Left MBOE	Front Right MBOE
24	958.72	955.98	963.60	961.77
25	955.98	956.45	962.21	962.87
26	956.45	954.97	962.87	964.04
27	954.97	954.92	964.04	964.99
28	954.92	955.67	964.99	965.62
29	955.67	954.78	965.62	965.08
30	954.78	953.60	965.08	964.28
31	953.60	953.77	964.28	963.52
32	953.77	955.02	963.52	962.34
33	955.02	954.82	962.34	961.28
34	960.45	960.21	961.41	964.14
35	960.21	961.72	964.14	965.96
36	961.72	964.03	965.96	967.67
37	964.03	966.22	967.67	969.40
38	966.22	966.69	969.40	971.68
39	966.69	968.42	971.68	974.34

MBOE elevations have been provided per lot lines, facing the lot from the street. Interpolation will be allowed between the right and left side MBOE's provided, depending on the location of the lowest opening on the proposed structure.

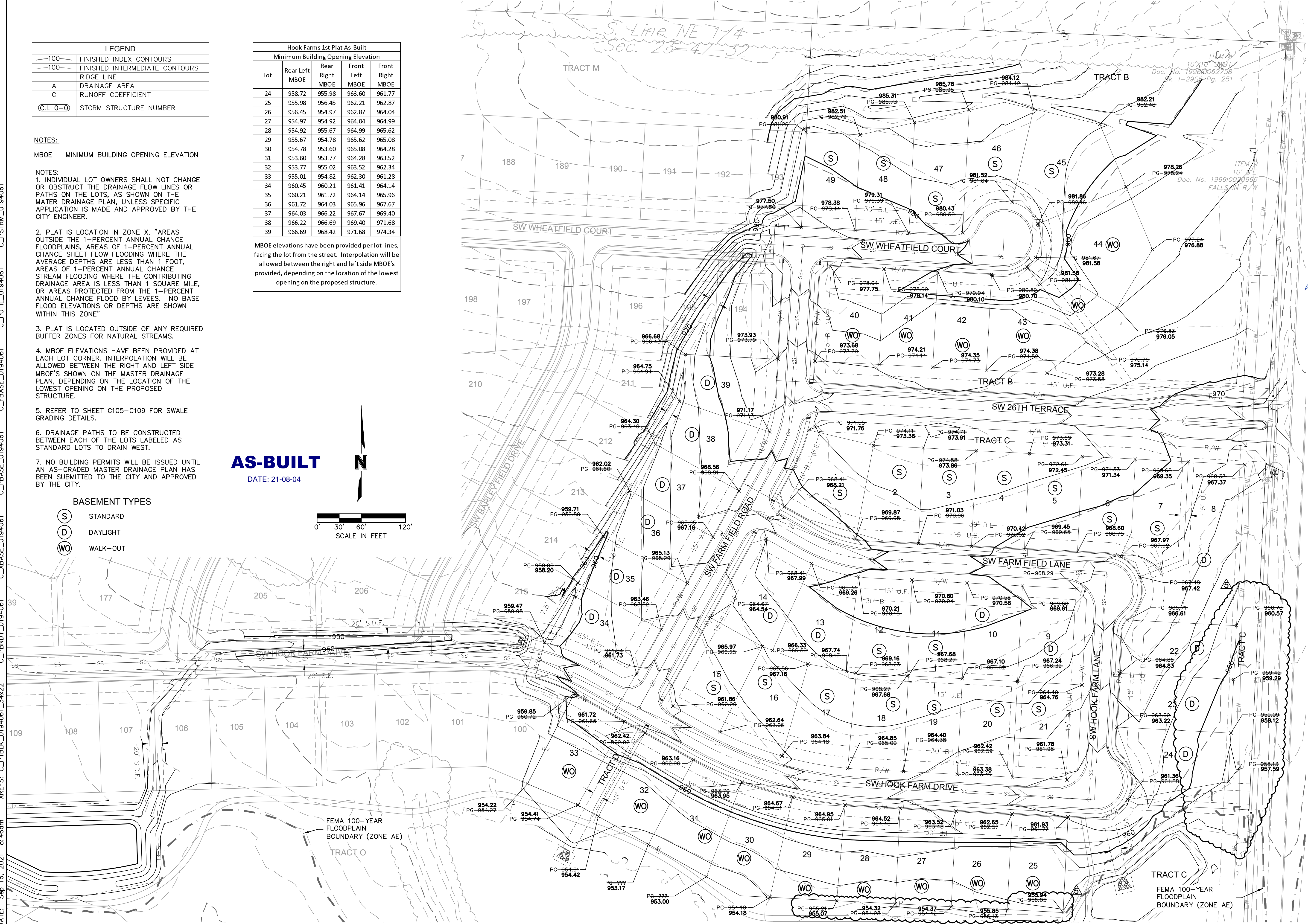
**AS-BUILT**

DATE: 21-08-04



**BASEMENT TYPES**

- (S) STANDARD
- (D) DAYLIGHT
- (WO) WALK-OUT



Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 PE 2017000367  
 9/17/21  
 PROFESSIONAL ENGINEER

BY \_\_\_\_\_

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PIPE INSULATION
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED STREET NAMES
8	05/18/2021	REVISED STREET NAMES

MASTER DRAINAGE PLAN  
 STREET AND STORM SEWER PLANS

HOOK FARMS  
 FIRST PLAT

drawn by: \_\_\_\_\_ CGW  
 checked by: \_\_\_\_\_ JES  
 approved by: \_\_\_\_\_ NDH  
 QA/QC by: \_\_\_\_\_ JES  
 project no.: 019-4061  
 drawing no.: \_\_\_\_\_  
 date: 04/20/2020

2020

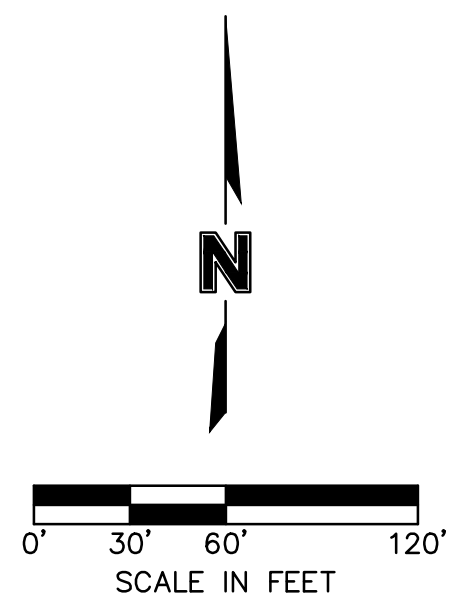
LEE'S SUMMIT, MO

SHEET  
C137

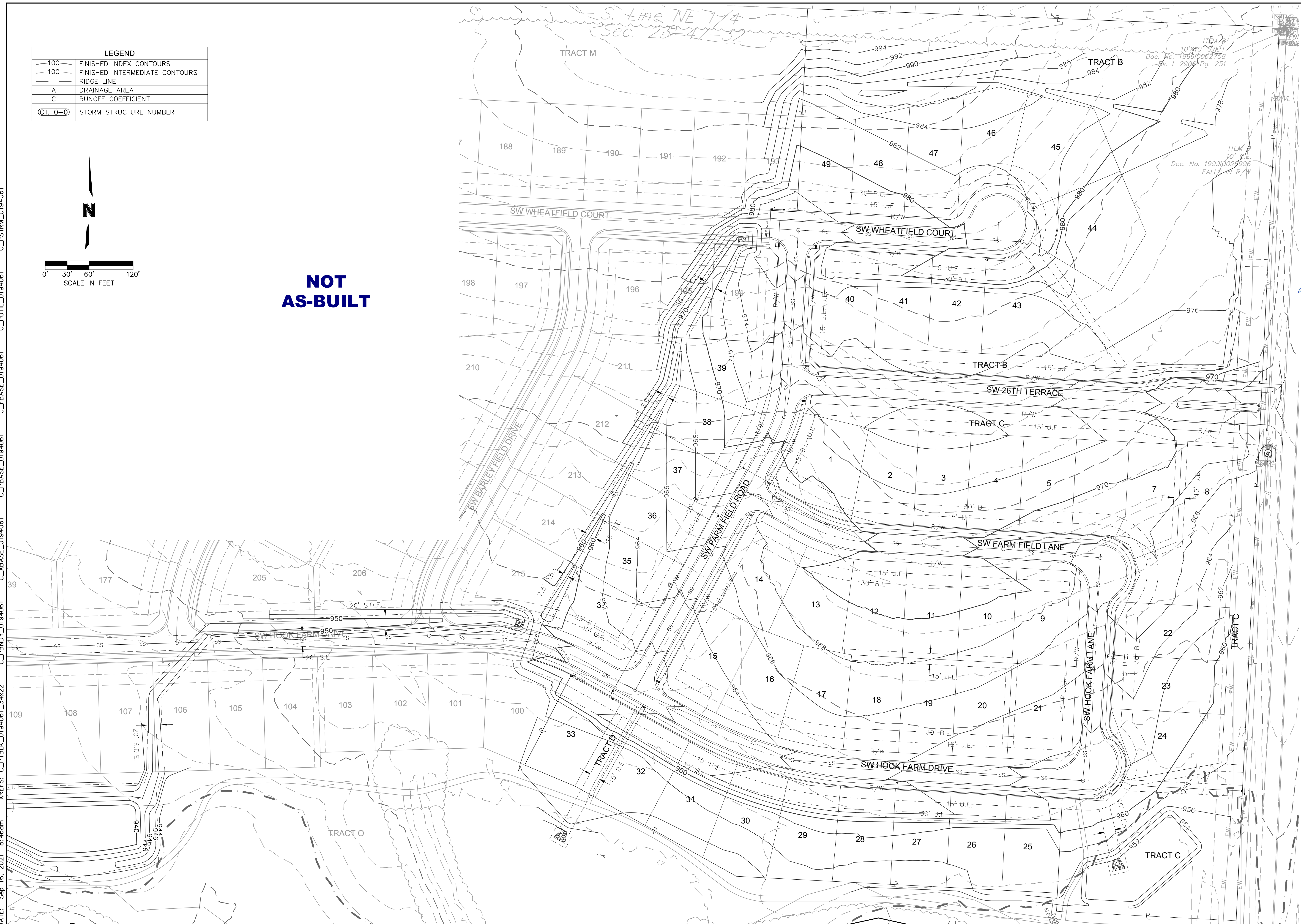
2020

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans-As-Built\Sheets\GNCV\Street and Storm Plans\C\_STM04\_0194061.dwg  
 DATE: Sep 16, 2021 8:45am XREFS: C:\PTBLK\_0194061\_34x22 C:\PNDY\_0194061 C:\PBASE\_0194061 C:\PBASE\_0194061 C:\PSTRM\_0194061 C:\PUTIL\_0194061 USER: mession

LEGEND	
— 100	FINISHED INDEX CONTOURS
- - - 100	FINISHED INTERMEDIATE CONTOURS
—	RIDGE LINE
A	DRAINAGE AREA
C	RUNOFF COEFFICIENT
(C.I. 0-D)	STORM STRUCTURE NUMBER

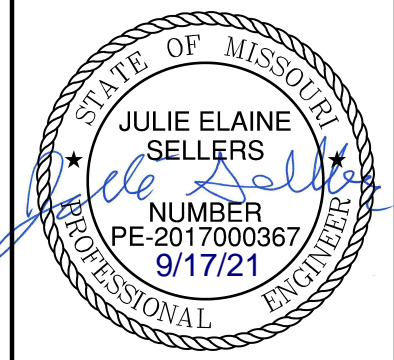


**NOT  
AS-BUILT**



**olsson**

Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADING	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	
3	09/10/2020	REMOVED PIPE INSULATION	
4	10/01/2020	REVISED PER CITY COMMENTS	
5	11/18/2020	REVISED LOTS 25-29 GRADING	
6	02/17/2021	REVISED ADA RAMPS	
7	03/12/2021	REVISED ADA RAMPS	
8	05/18/2021	REVISED STREET NAMES	

**SHEET  
C138**

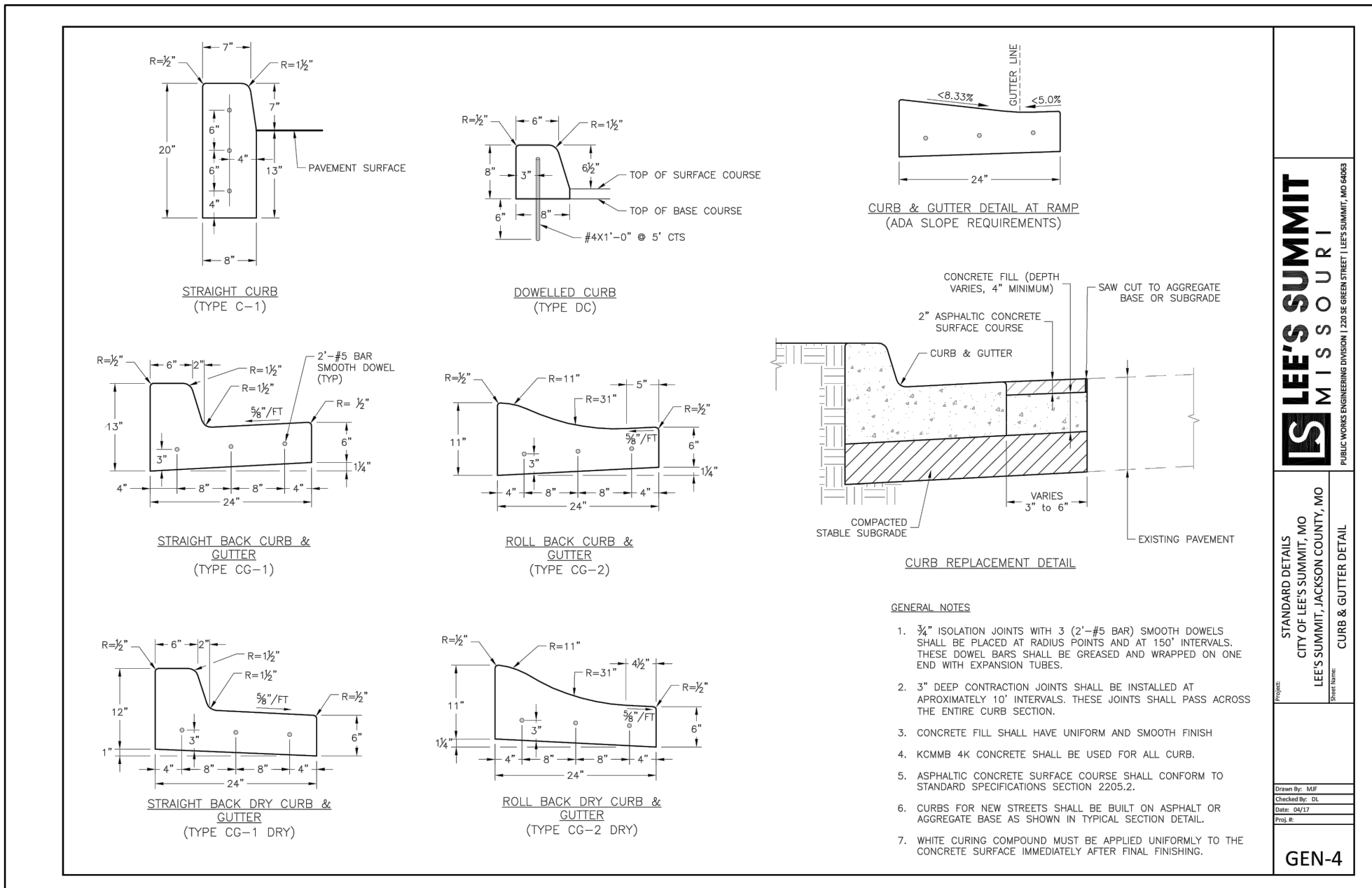
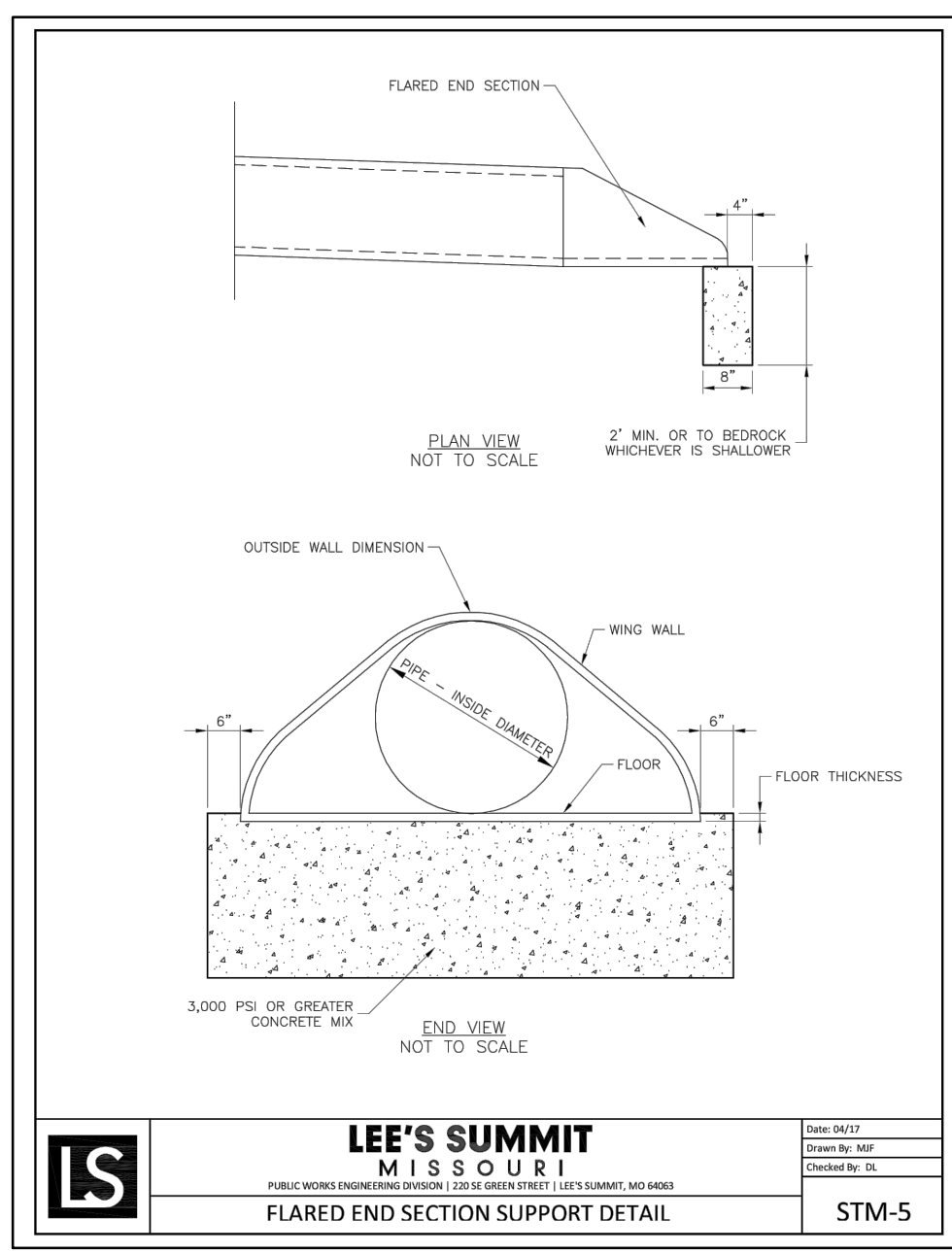
Inlet Design Table													
10 Year Return Frequency													
Inlet ID	Inlet Location	Peak Flow	Upstream Bypass	Total Flow	Clogging Factor	Inlet Capacity	Sag Inlet Capacity (Note 1)	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
		(cfs)	(cfs)	(cfs)		(cfs)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 1-2(L)	SAG	0.60	...	...	...	...	...	...	...	...	0.16	8.12	...
C.I. 1-2(R)	SAG	1.43	...	...	...	...	...	...	...	...	0.14	6.86	...
C.I. 1-2	SAG	3.08	...	...	...	...	...	...	...	...	...	...	...
C.I. 1-3	GRADE	4.80	0.00	4.80	1.00	3.01	15.52	4.97	0.00	100.00%	...	...	...
C.I. 1-4	GRADE	1.09	0.11	1.19	1.00	1.06	1.06	1.06	0.13	89.12%	0.13	6.26	...
C.I. 1-5	GRADE	1.09	0.00	1.09	1.00	0.98	0.98	0.98	0.11	90.13%	0.12	6.04	...
F.I. 1-6	SAG	0.90	0.00	0.90	0.80	18.67	14.93	0.90	0.00	100.00%	...	...	0.07
C.I. 1-7	GRADE	1.54	0.00	1.54	1.00	1.49	1.49	1.49	0.04	97.14%	0.14	6.54	...
C.I. 1-8	GRADE	1.16	0.00	1.16	1.00	1.15	1.15	1.15	0.01	98.84%	0.13	5.89	...
PLUG 1-9	SAG	9.46	...	...	...	...	...	...	...	...	...	...	...
C.I. 2-1	GRADE	1.05	0.00	1.05	1.00	0.95	0.95	0.10	90.49%	0.12	5.96	...	...
C.I. 2-2	GRADE	2.25	0.00	2.25	1.00	1.80	1.80	1.80	0.45	79.97%	0.16	7.94	...
F.I. 2-3	SAG	1.58	0.00	1.58	0.80	18.67	14.93	1.58	0.00	100.00%	...	...	0.10
F.I. 3-1	SAG	0.68	0.00	0.68	0.80	18.67	14.93	0.68	0.00	100.00%	...	...	0.05
C.I. 4-2	GRADE	1.39	0.00	1.39	1.00	1.24	1.24	1.24	0.15	89.36%	0.13	6.62	...
C.I. 4-3	GRADE	2.81	0.00	2.81	1.00	2.20	2.20	2.20	0.61	78.28%	0.17	8.63	...
C.I. 4-4(L)	SAG	2.51	...	...	...	...	...	...	...	...	0.17	8.27	...
C.I. 4-4(R)	SAG	0.00	...	...	...	...	...	...	...	...	0.00	0.00	...
C.I. 4-4	SAG	3.08	0.09	3.17	0.80	23.28	18.63	3.17	0.00	100.00%	...	...	...
C.I. 4-6	GRADE	1.01	0.00	1.01	1.00	0.92	0.92	0.92	0.09	90.84%	0.12	5.88	...
C.I. 4-7	GRADE	2.25	0.00	2.25	1.00	1.80	1.80	1.80	0.45	79.97%	0.16	7.94	...
C.I. 4-8(L)	SAG	0.64	...	...	...	...	...	...	...	...	0.12	6.05	...
C.I. 4-8(R)	SAG	0.00	...	...	...	...	...	...	...	...	0.00	0.00	...
C.I. 4-8	SAG	1.09	0.45	1.54	0.80	19.40	15.52	1.54	0.00	100.00%	...	...	...
C.I. 4-9	GRADE	0.71	0.00	0.71	1.00	0.67	0.67	0.67	0.04	93.77%	0.10	5.16	...
C.I. 4-10	GRADE	2.03	0.00	2.03	1.00	1.66	1.66	1.66	0.37	81.81%	0.15	7.63	...
C.I. 4-11	GRADE	0.68	0.00	0.68	1.00	0.64	0.64	0.64	0.04	94.15%	0.10	5.05	...
C.I. 5-1	GRADE	1.01	0.34	1.35	1.00	1.18	1.18	1.18	0.17	87.71%	0.13	6.55	...
C.I. 6-1	GRADE	1.76	0.17	1.93	1.00	1.59	1.59	1.59	0.34	82.61%	0.15	7.49	...
C.I. 7-2	GRADE	0.64	0.61	1.25	1.00	1.11	1.11	1.11	0.14	88.63%	0.13	6.36	...
F.I. 7-3	SAG	5.29	0.00	5.29	0.80	18.67	14.93	5.29	0.00	100.00%	...	...	0.22
F.I. 7-4	SAG	7.72	0.00	7.72	0.80	18.67	14.93	7.72	0.00	100.00%	...	...	0.28
C.I. 8-2	GRADE	1.35	0.00	1.35	1.00	1.18	1.18	1.18	0.17	87.69%	0.13	6.55	...
C.I. 8-3	GRADE	4.16	0.00	4.16	1.00	2.77	2.77	2.77	1.40	66.43%	0.20	9.99	...
F.I. 9-1	SAG	8.70	0.00	8.70	0.80	18.67	14.93	8.70	0.00	100.00%	...	...	0.30

Notes:  
 1. Inlet capacity at sag location has been reduced by a clogging factor of 0.80, reducing theoretical capacity to 80% capacity, as required per APWA Section 5600. Both theoretical capacity and reduced capacity are shown.  
 2. Inlet efficiency shown in the tables is Captured Flow/Total Flow, denoting the actual percentage of flow captured after the capacity has been reduced to 80% of theoretical capacity.

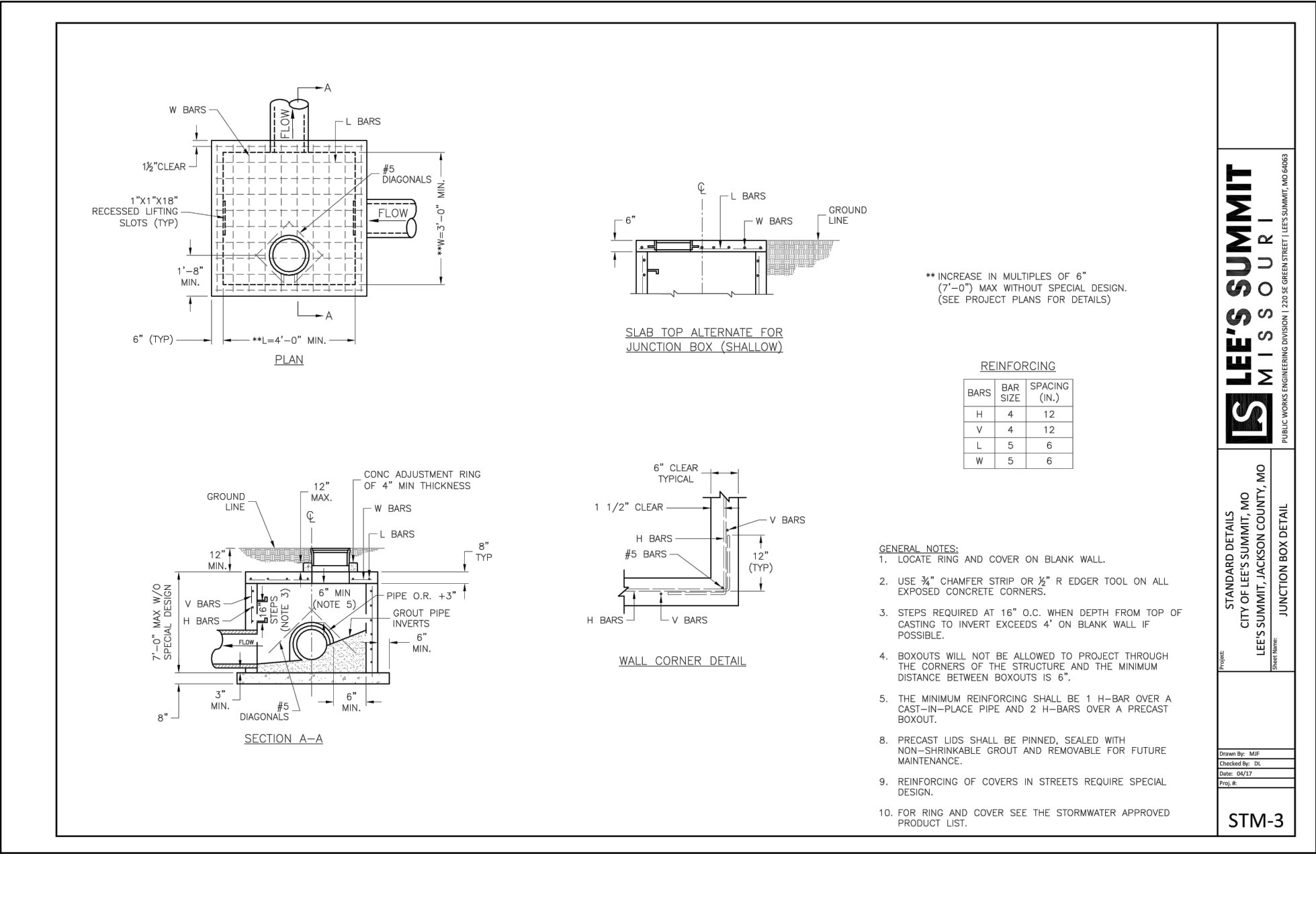
Drainage Area Design Table							
10 Year Return Frequency							
Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow	
	(ac)		(min)	(in/hr)		(cfs)	
C.I. 1-2(L)	0.16	0.51	5.00	7.35	1.00	0.60	
C.I. 1-2(R)	0.38	0.51	5.00	7.35	1.00	1.43	
C.I. 1-2(B)	0.28	0.51	5.00	7.35	1.00	1.05	
C.I. 1-2	0.82	0.51	5.00	7.35	1.00	3.08	
C.I. 1-3	1.28	0.51	5.00	7.35	1.00	4.80	
C.I. 1-4	0.29	0.51	5.00	7.35	1.00	1.09	
C.I. 1-5	0.29	0.51	5.00	7.35	1.00	1.09	
F.I. 1-6	0.24	0.51	5.00	7.35	1.00	0.90	
C.I. 1-7	0.41	0.51	5.00	7.35	1.00	1.54	
C.I. 1-8	0.31	0.51	5.00	7.35	1.00	1.16	
PLUG 1-9	2.34	0.55	5.00	7.35	1.00	9.46	
C.I. 2-1	0.28	0.51	5.00	7.35	1.00	1.05	
C.I. 2-2	0.60	0.51	5.00	7.35	1.00	2.25	
F.I. 2-3	0.42	0.51	5.00	7.35	1.00	1.58	
F.I. 3-1	0.18	0.51	5.00	7.35	1.00	0.68	
C.I. 4-2	0.37	0.51	5.00	7.35	1.00	1.39	
C.I. 4-3	0.75	0.51	5.00	7.35	1.00	2.81	
C.I. 4-4(L)	0.67	0.51	5.00	7.35	1.00	2.51	
C.I. 4-4(R)	0.00	0.51	5.00	7.35	1.00	0.00	
C.I. 4-4(B)	0.15	0.51	5.00	7.35	1.00	0.56	
C.I. 4-4	0.82	0.51	5.00	7.35	1.00	3.08	
C.I. 4-6	0.27	0.51	5.00	7.35	1.00	1.01	
C.I. 4-7	0.60	0.51	5.00	7.35	1.00	2.25	
C.I. 4-8(L)	0.17	0.51	5.00	7.35	1.00	0.64	
C.I. 4-8(R)	0.00	0.51	5.00	7.35	1.00	0.00	
C.I. 4-8(B)	0.12	0.51	5.00	7.35	1.00	0.45	
C.I. 4-8	0.29	0.51	5.00	7.35	1.00	1.09	
C.I. 4-9	0.19	0.51	5.00	7.35	1.00	0.71	
C.I. 4-10	0.54	0.51	5.00	7.35	1.00	2.03	
C.I. 4-11	0.18	0.51	5.00	7.35	1.00	0.68	
C.I. 5-1	0.27	0.51	5.00	7.35	1.00	1.01	
C.I. 6-1	0.47	0.51	5.00	7.35	1.00	1.76	
C.I. 7-2	0.17	0.51	5.00	7.35	1.00	0.64	
F.I. 7-3	1.41	0.51	5.00	7.35	1.00	5.29	
F.I. 7-4	3.00	0.35	5.00	7.35	1.00	7.72	
C.I. 8-2	0.36	0.51	5.00	7.35	1.00	1.35	
C.I. 8-3	1.11	0.51	5.00	7.35	1.00	4.16	
F.I. 9-1	3.38	0.35	5.00	7.35	1.00	8.70	

Storm Sewer Design Calculation Table													
10 Year Return Frequency													
Upstream Structure	Downstream Structure	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope (%)	Diameter (in)	Manning's n	Total Flow (cfs)	Velocity (ft/s)	Capacity (cfs)	Flow Depth (ft)	Upstream Struct. HGL (ft)	Upstream Top Elev. (ft)
C.I. 8-2	E.S. 8-1	114.701	969.58	970.73	1.00	15	0.01	3.95	5.74	8.41	0.60	971.53	977.94
C.I. 8-3	C.I. 8-2	39.926	971.33	972.13	2.00	15	0.01	2.77	6.02	11.88	0.41	972.80	978.21
C.I. 4-2	E.S. 4-1	198.000	952.10	950.00	1.06	30	0.01	16.51	4.84	54.91	2.14	953.47 j	961.69
C.I. 4-3	C.I. 4-2	48.464	953.28	952.60	1.40	30	0.01	15.30	7.93	63.16	0.87	954.60	962.09
C.I. 4-4	C.I. 4-3	38.184	954.35	953.78	1.49	30	0.01	13.17	7.48	65.14	0.82	955.57	961.79
M.H. 4-5	C.I. 4-4	208.035	957.97	954.79	1.53	24	0.01	8.82	6.51	36.35	0.78	959.03	966.88
C.I. 4-6	M.H. 4-5	49.062	959.31	958.57	1.51	24	0.01	7.23	6.93	36.11	0.61	960.26	966.31
C.I. 4-7	C.I. 4-6	34.000	960.31	959.80	1.50	18	0.01	6.31	7.01	16.72	0.64	961.28	968.31
C.I. 4-8	C.I. 4-7	38.184	961.38	960.81	1.49	18	0.01	4.51	6.31	16.68	0.53	962.19	969.18
C.I. 4-9	C.I. 4-8	117.300	963.64	961.88	1.50	15	0.01	2.97	5.75	10.28	0.46	964.33	972.29
C.I. 4-10	C.I. 4-9	34.000	964.65	964.14	1.50	15	0.01	2.30	5.32	10.28	0.40	965.26	972.29
C.I. 4-11	C.I. 4-10	45.486	965.83	965.15	1.49	15	0.01	0.64	3.66	10.26	0.21	966.14	973.57
C.I. 1-2	E.S. 1-1	94.790	952.45	951.50	1.00	36	0.01	28.03	8.84	86.80	1.17	954.16	960.78
C.I. 1-3	C.I. 1-2	113.558	954.42	953.45	0.85	24	0.01	18.05	8.13	27.17	1.19	955.95	962.86
C.I. 1-4	C.I. 1-3	34.000	955.21	954.92	0.85	24	0.01	15.04	7.64	27.16	1.06	956.61	962.86
C.I. 1-5	C.I. 1-4	172.513	957.18	955.71	0.85	18	0.01	13.98	7.91	12.60	1.50	959.02	967.44
F.I. 1-6	C.I. 1-5	137.631	958.85	957.68	0.85	18	0.01	13.00	7.36	12.59	1.50	960.66	968.80
C.I. 1-7	F.I. 1-6	161.082	960.72	959.35	0.85	18	0.01	12.10	6.90	12.59	1.50	962.16	968.91
C.I. 1-8	C.I. 1-7	54.000	961.68	961.22	0.85	18	0.01	10.61	6.78	12.60	1.24	962.93	968.91
PLUG 1-9	C.I. 1-8	23.000	962.41	962.18	1.00	18	0.01	9.46	7.32	13.65	0.92	963.60	967.43
C.I. 2-1	C.I. 1-3	127.746	955.65	953.95	1.33	18	0.01	5.01	6.34	15.75	0.58	956.51	962.40
C.I. 2-2	C.I. 2-1	34.068	956.66	956.15	1.50	18	0.01	4.06	6.11	16.70	0.50	957.43	962.42
F.I. 2-3	C.I. 2-2	138.000	961.30	957.16	3.00	18	0.01	2.26	6.06	23.65	0.31	961.87	967.32
F.I. 3-1	F.I. 2-3	219.038	964.43	961.80	1.20	18	0.01	0.68	3.46	14.96	0.22	964.74	969.23
C.I. 6-1	M.H. 4-5	34.000	959.61	958.71	2.65	15	0.01	1.59	4.96	13.66	0.32	960.11	966.88
C.I. 7-2	E.S. 7-1	31.830	951.66	951.34	1.01	24	0.01	14.17	5.53	29.48	1.78	953.01 j	959.82
F.I. 7-3	C.I. 7-2	23.540	952.40	952.16	1.02	18	0.01	13.01	8.32	13.79	1.16	953.75	956.08
F.I. 7-4	F.I. 7-3	292.690	957.84	952.90	1.69	15	0.01	7.72	7.71	10.91	0.85	958.94	963.40
C.I. 5-1	C.I. 4-4	34.000	956.27	955.62	1.91	15	0.01	1.18	4.62	11.61	0.27	956.70	961.79
F.I. 9-1	E.S. 9-1	97.38	963.07	962.58	0.50	18	0.010	8.7					

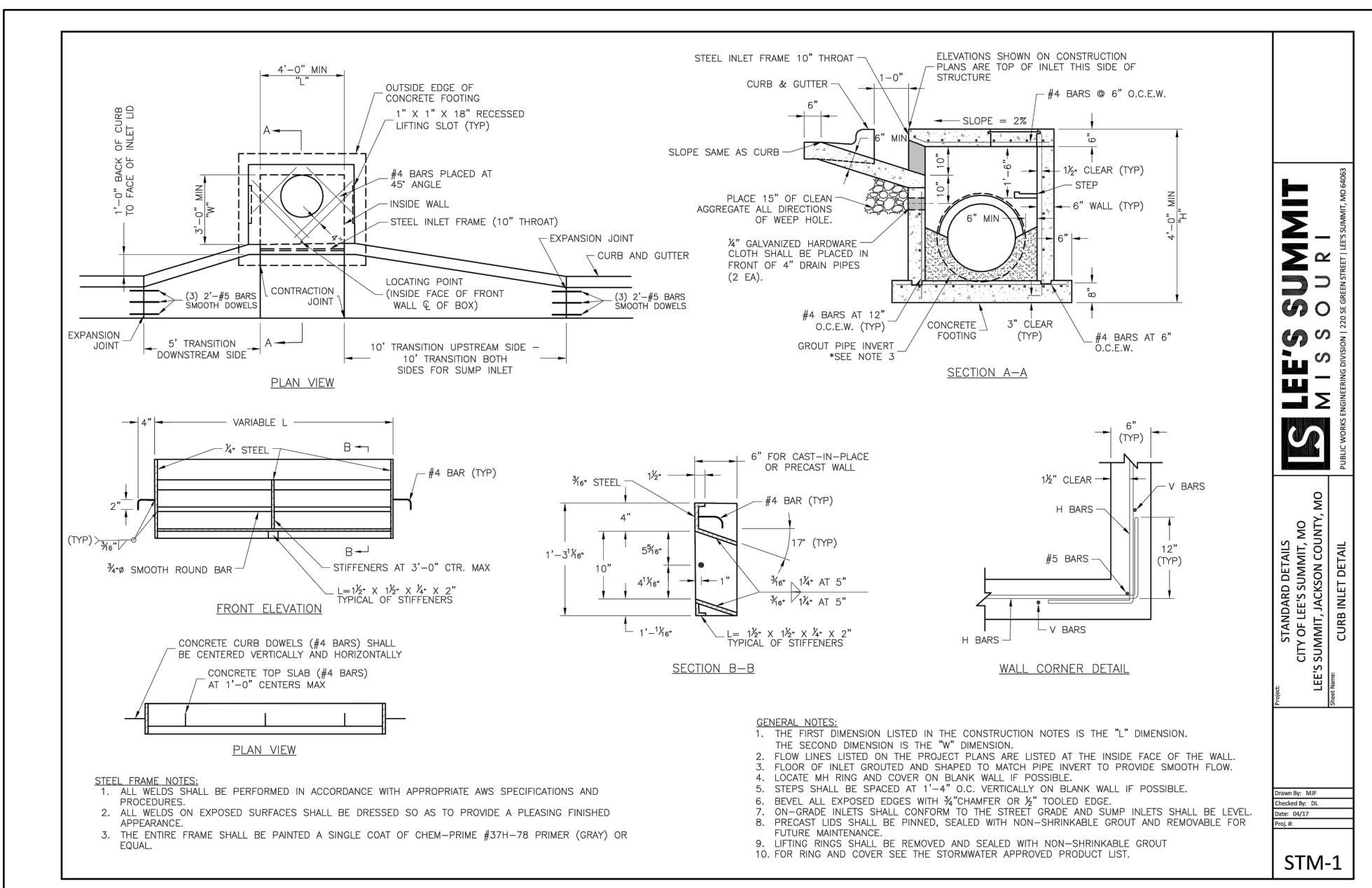
DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\_As-Built\Sheets\GNCV\Street and Storm Plans\C\_DTL01\_0194061.dwg  
 DATE: Sep 16, 2021 8:45am  
 USER: msson



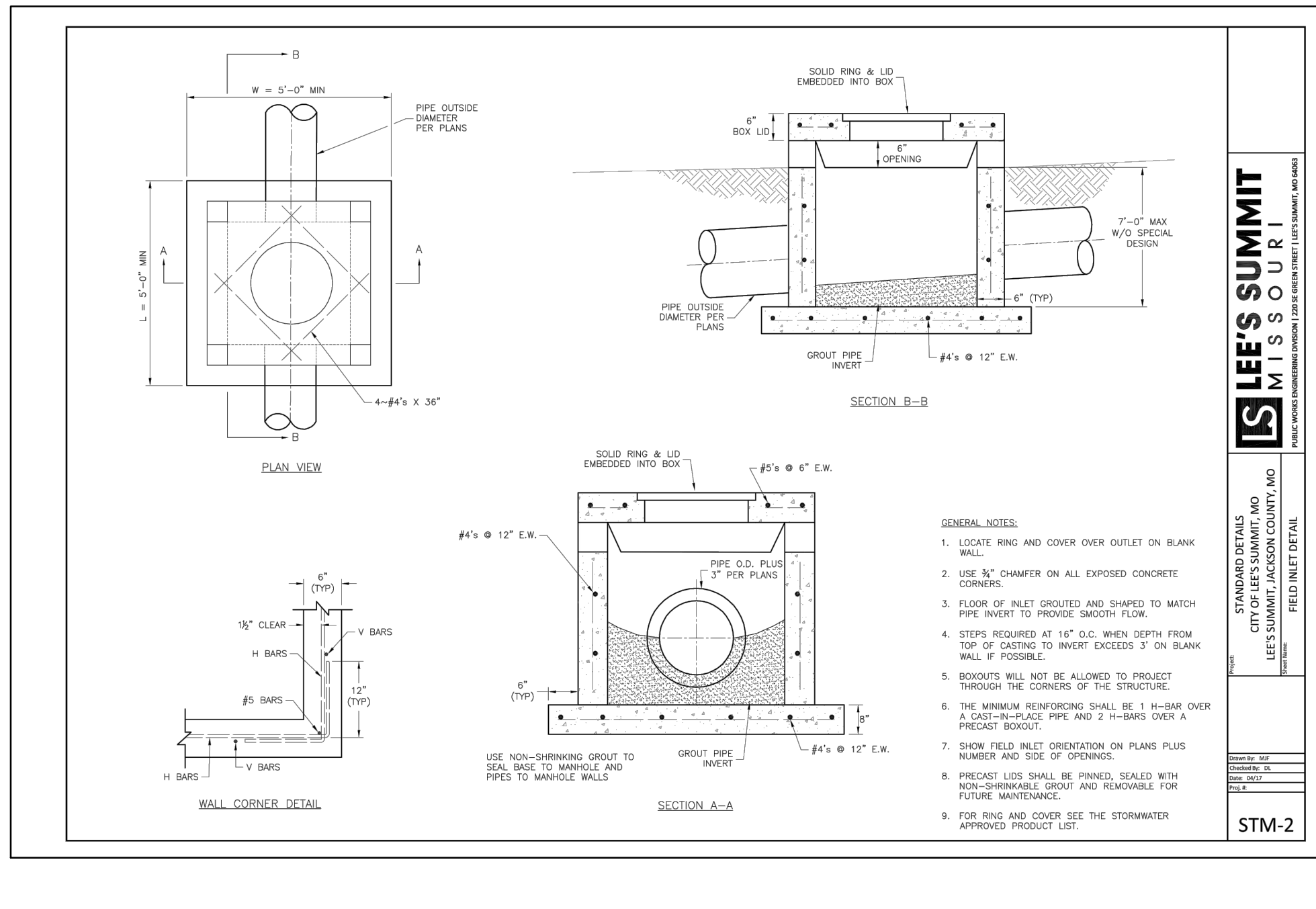
**LEE'S SUMMIT MISSOURI**  
 STANDARD DETAILS  
 CITY OF LEE'S SUMMIT, MO  
 LEE'S SUMMIT, JACKSON COUNTY, MO  
 CURB & GUTTER DETAIL  
 STM-4



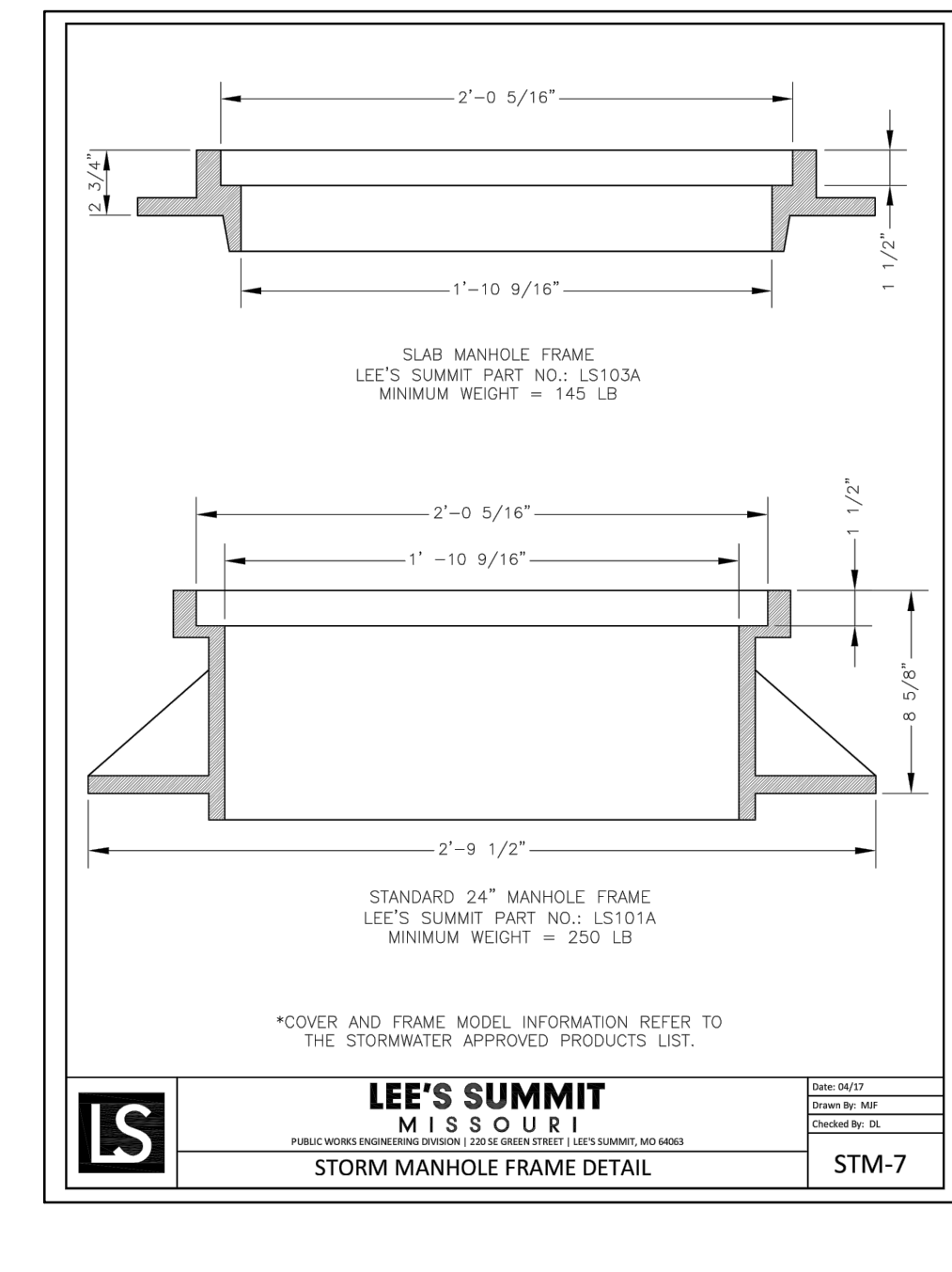
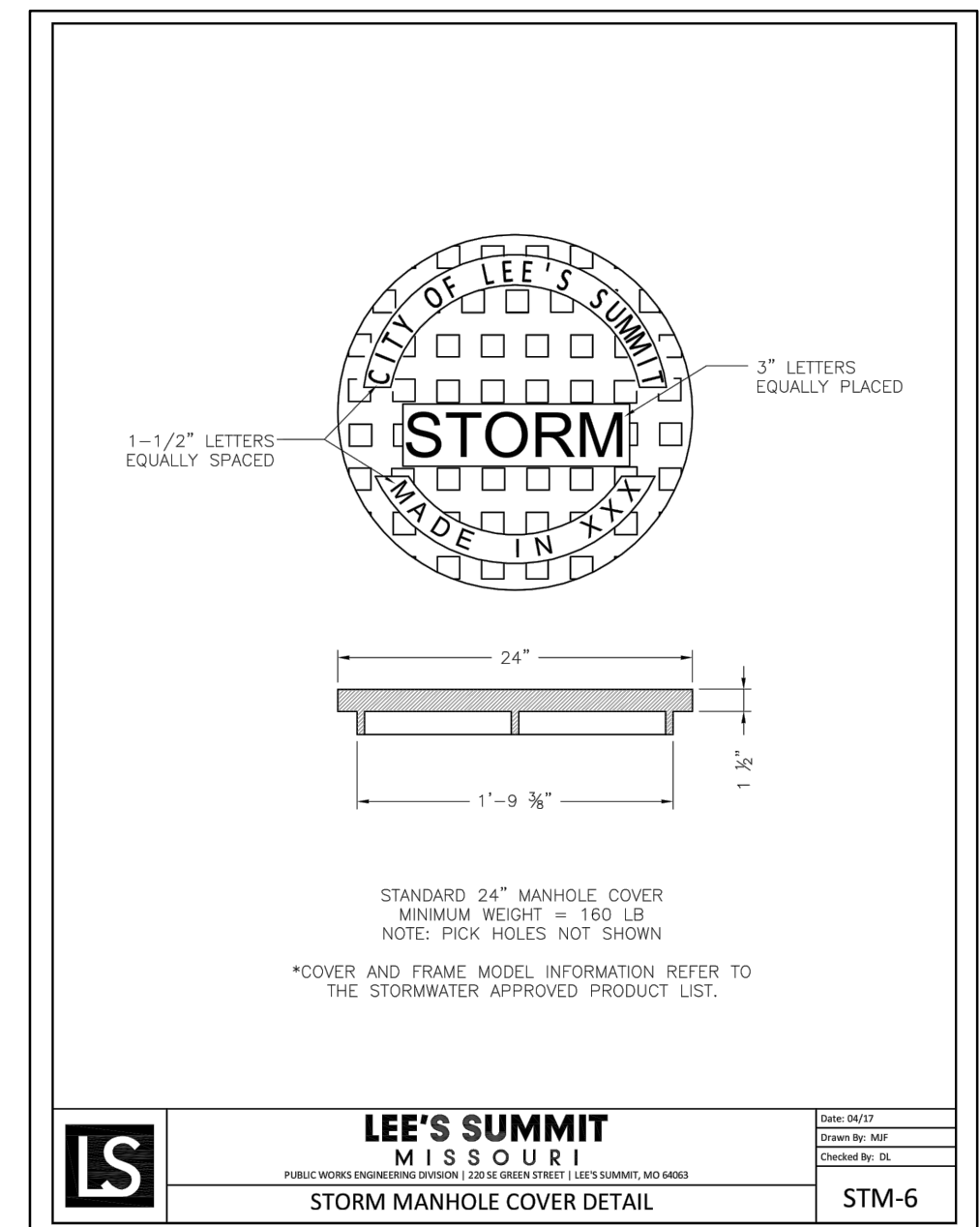
**LEE'S SUMMIT MISSOURI**  
 STANDARD DETAILS  
 CITY OF LEE'S SUMMIT, MO  
 LEE'S SUMMIT, JACKSON COUNTY, MO  
 JUNCTION BOX DETAIL  
 STM-3



**LEE'S SUMMIT MISSOURI**  
 STANDARD DETAILS  
 CITY OF LEE'S SUMMIT, MO  
 LEE'S SUMMIT, JACKSON COUNTY, MO  
 CURB INLET DETAIL  
 STM-1



**LEE'S SUMMIT MISSOURI**  
 STANDARD DETAILS  
 CITY OF LEE'S SUMMIT, MO  
 LEE'S SUMMIT, JACKSON COUNTY, MO  
 FIELD INLET DETAIL  
 STM-2



**LEE'S SUMMIT MISSOURI**  
 STANDARD DETAILS  
 CITY OF LEE'S SUMMIT, MO  
 LEE'S SUMMIT, JACKSON COUNTY, MO  
 STORM MANHOLE FRAME DETAIL  
 STM-7



**LEE'S SUMMIT MISSOURI**  
 STANDARD DETAILS  
 CITY OF LEE'S SUMMIT, MO  
 LEE'S SUMMIT, JACKSON COUNTY, MO  
 FLARED END SECTION SUPPORT DETAIL  
 STM-5

**NOT AS-BUILT**

**olsson**  
 Olsson - Civil Engineering  
 Missouri Certificate of Authority #001592  
 1301 Burlington Street  
 North Kansas City, MO 64116  
 TEL 816.361.1177  
 FAX 816.361.1888  
 www.olsson.com

STATE OF MISSOURI  
 JULIE ELAINE SELLERS  
 MISSOURI PROFESSIONAL ENGINEER  
 NUMBER PE-2017000367  
 9/17/21

REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS
3	09/10/2020	REVISED PER CITY COMMENTS
4	10/01/2020	REVISED PER CITY COMMENTS
5	11/18/2020	REVISED LOTS 25-29 GRADING
6	02/17/2021	REVISED ADA RAMPS
7	03/12/2021	REVISED ADA RAMPS
8	05/18/2021	REVISED STREET NAMES

STORM DETAILS  
 STREET AND STORM SEWER PLANS  
 HOOK FARMS  
 FIRST FLAT  
 LEE'S SUMMIT, MO  
 2020

drawn by: CGW  
 checked by: JES  
 approved by: NDH  
 QA/QC by: JES  
 project no.: 019-4061  
 drawing no.:  
 date: 04/20/2020

**SHEET C140**