

UTILITIES
Electric Service
Evergy
Nathan Michael
913-347-4310
Nathan.michael@evergy.com

Gas Service
Spire
Bobbie Saulsberry
816-969-2266
bobbie.saulsberry@spireenergy.com

Water/Sanitary Sewer
Water Utilities Department
1200 SE Hamblen Road
Lee's Summit, Mo 64081
Jeff Thorn
816-969-1900
jeff.thorn@cityofls.net

Street and Storm
City of Lee's Summit Public Works Dept
220 SE Green
Lee's Summit, MO 64063
816-969-1800

Communication Service
AT&T Carrie Cilke
816-703-4386
cc3527@att.com

Time Warner Cable
Steve Baxter
913-643-1928
steve.baxter@charter.com

Comcast
Ryan Alkire
816-795-2218
ryan.alkire@cable.comcast.com

Google Fiber
Becky Davis
913-725-8745
rebeccadavis@google.com

UTILITY STATEMENT:
THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.
SAFETY NOTICE TO CONTRACTOR
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICE, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY/DISCLAIMER
THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENEDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER SM ENGINEERING NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE SM ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION- NOTICE TO CONTRACTOR
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.



ARBORIDGE DRIVE PUBLIC STREET AND STORM PLANS FOR ARBOR WALK WEST LEE'S SUMMIT



FLOODPLAIN NOTE:
SUBJECT PROPERTY IS SHOWN TO BE LOCATED IN "OTHER AREAS ZONE X" ON THE FLOOD INSURANCE RATE MAP FOR JACKSON COUNTY, MISSOURI AND INCORPORATED AREAS. COMMUNITY PANEL NO. 29095C0531G, REVISED JANUARY 20, 2017. "OTHER AREAS ZONE X" IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUL CHANCE FLOODPLAIN". LOCATION DETERMINED BY A SCALED GRAPHICAL PLOT OF THE FLOOD INSURANCE RATE MAP.

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
11/27/2023

INDEX OF SHEETS

- C-1 COVER SHEET
- C-2 EXISTING CONDITIONS
- C-3 EXISTING CONDITIONS
- C-4 DEMOLITION PLAN
- C-5 LAYOUT PLAN
- C-6 GRADING PLAN
- C-7 STORM LINE A PLAN AND PROFILE
- C-8 STORM LINE B PLAN AND PROFILE
- C-9 EROSION CONTROL PLAN
- C-10 EROSION CONTROL DETAILS
- C-11 DETAILS
- C-12 DETAILS
- C-13 DETAILS
- C-14 TRAFFIC CONTROL
- C-15 TRAFFIC CONTROL DETAILS

DEVELOPER

CHRISTIE DEVELOPMENT ASSOCIATES LLC 7217 W
110TH STREET
OVERLAND PARK, KS 66210
CONTACT: GARRETT FUGATE
PHONE: 913.649.4500
EMAIL: GARRET@CHRISTIEDEV.COM

ENGINEER

SM ENGINEERING
SAM MALINOWSKY
5507 HIGH MEADOW CIRCLE
MANHATTAN KANSAS, 66503
SMCIVILENGR@GMAIL.COM
785.341.9747

SURVEYOR

SCHMIDT, BECK & BOYD
ENGINEERING, LLC
1415 SW TOPEKA BOULEVARD
TOPEKA, KANSAS 66612
PH: (785) 215-8630 / WWW.SBBENG.COM



SAMUEL D. MALINOWSKY
PROFESSIONAL ENGINEER

SM Engineering
5507 High Meadow Circle
Manhattan Kansas, 66503
smcivilengr@gmail.com
785.341.9747

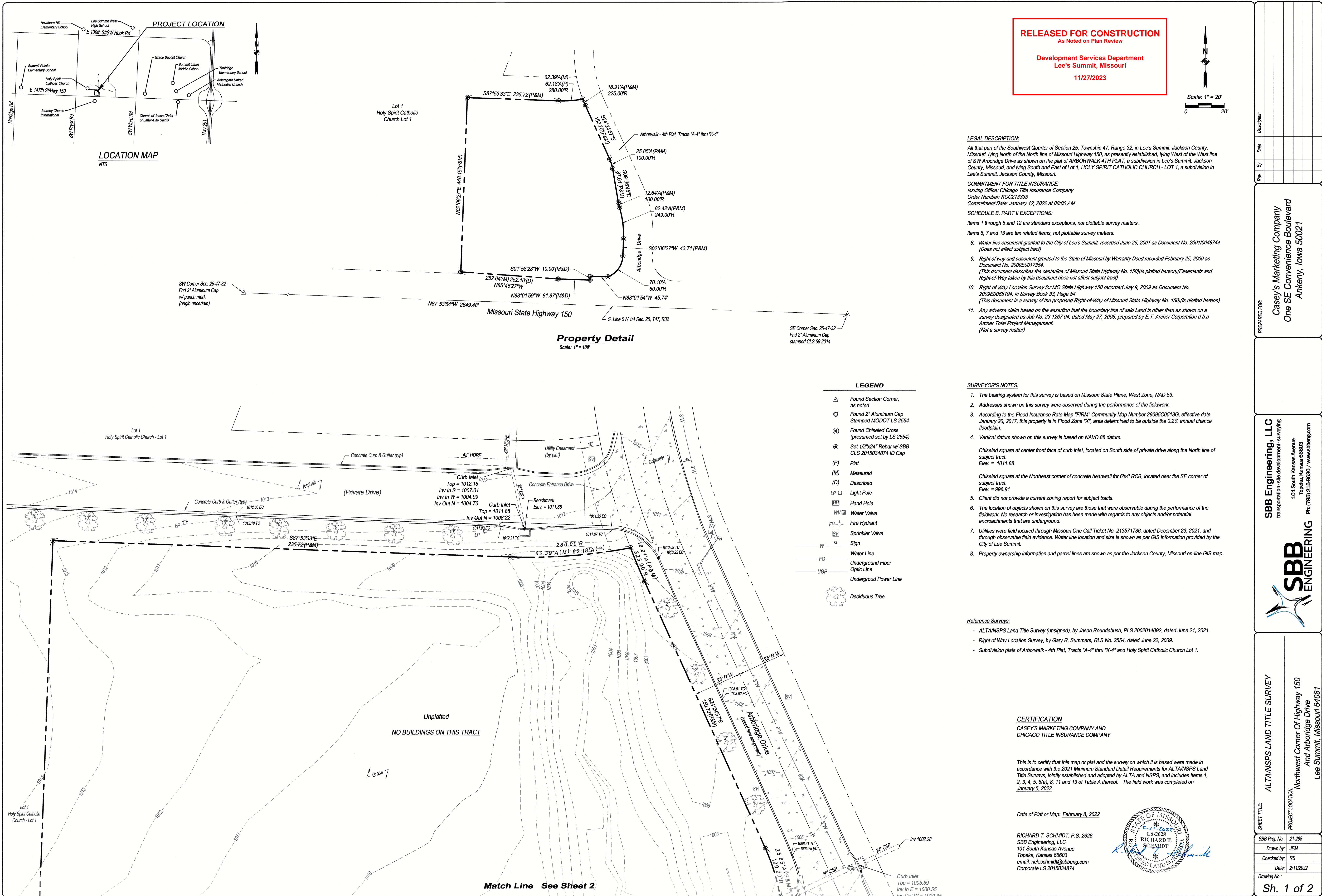
Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.

Revisions
8-29-23 CITY COMMENTS
10-3-23 CITY COMMENTS
10-25-23 CITY COMMENTS
11-3-23 CITY COMMENTS

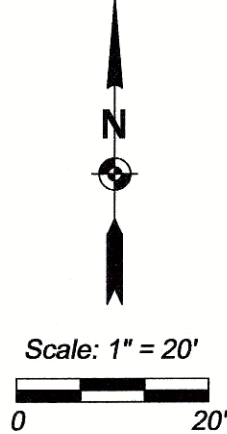
ARBORIDGE DRIVE
IMPROVEMENTS
LEES SUMMIT, MO.

s h e e t
C1.0
Civil
COVER SHEET
permit
18 JULY 2023

PRSUBD20234377
PRCOM20233582



RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
11/27/2023



LEGAL DESCRIPTION:
All that part of the Southwest Quarter of Section 25, Township 47, Range 32, in Lee's Summit, Jackson County, Missouri, lying North of the North line of Missouri Highway 150, as presently established, lying West of the West line of SW Arboridge Drive as shown on the plat of ARBORWALK 4TH PLAT, a subdivision in Lee's Summit, Jackson County, Missouri, and lying South and East of Lot 1, HOLY SPIRIT CATHOLIC CHURCH - LOT 1, a subdivision in Lee's Summit, Jackson County, Missouri.

COMMITMENT FOR TITLE INSURANCE:
Issuing Office: Chicago Title Insurance Company
Order Number: KCC213333
Commitment Date: January 12, 2022 at 08:00 AM

SCHEDULE B, PART II EXCEPTIONS:
Items 1 through 5 and 12 are standard exceptions, not plottable survey matters.
Items 6, 7 and 13 are tax related items, not plottable survey matters.

8. Water line easement granted to the City of Lee's Summit, recorded June 25, 2001 as Document No. 200110048744. (Does not affect subject tract)

9. Right of way and easement granted to the State of Missouri by Warranty Deed recorded February 25, 2009 as Document No. 2009E0017354. (This document describes the centerline of Missouri State Highway No. 150)(Is plotted hereon)(Easements and Right-of-Way taken by this document does not affect subject tract)

10. Right-of-Way Location Survey for MO State Highway 150 recorded July 9, 2009 as Document No. 2009E0068194, in Survey Book 33, Page 54 (This document is a survey of the proposed Right-of-Way of Missouri State Highway No. 150)(Is plotted hereon)

11. Any adverse claim based on the assertion that the boundary line of said Land is other than as shown on a survey designated as Job No. 23 1267 04, dated May 27, 2005, prepared by E.T. Archer Corporation d.b.a Archer Total Project Management. (Not a survey matter)

SURVEYOR'S NOTES:

- The bearing system for this survey is based on Missouri State Plane, West Zone, NAD 83.
- Addresses shown on this survey were observed during the performance of the fieldwork.
- According to the Flood Insurance Rate Map "FIRM" Community Map Number 2908SC0513G, effective date January 20, 2017, this property is in Flood Zone "X", area determined to be outside the 0.2% annual chance floodplain.
- Vertical datum shown on this survey is based on NAVD 88 datum.

Chiseled square at center front face of curb inlet, located on South side of private drive along the North line of subject tract.
Elev. = 1011.88

Chiseled square at the Northeast corner of concrete headwall for 6'x4' RCB, located near the SE corner of subject tract.
Elev. = 996.91

Client did not provide a current zoning report for subject tracts.

The location of objects shown on this survey are those that were observable during the performance of the fieldwork. No research or investigation has been made with regards to any objects and/or potential encroachments that are underground.

Utilities were field located through Missouri One Call Ticket No. 213571736, dated December 23, 2021, and through observable field evidence. Water line location and size is shown as per GIS information provided by the City of Lee Summit.

Property ownership information and parcel lines are shown as per the Jackson County, Missouri on-line GIS map.

Reference Surveys:

- ALTA/NSPS Land Title Survey (unsigned), by Jason Roundebush, PLS 2002014092, dated June 21, 2021.
- Right of Way Location Survey, by Gary R. Summers, RLS No. 2554, dated June 22, 2009.
- Subdivision plats of Arborwalk - 4th Plat, Tracts "A-4" thru "K-4" and Holy Spirit Catholic Church Lot 1.

CERTIFICATION
CASEY'S MARKETING COMPANY AND
CHICAGO TITLE INSURANCE COMPANY

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(a), 8, 11 and 13 of Table A thereof. The field work was completed on January 5, 2022.

Date of Plat or Map: February 8, 2022

RICHARD T. SCHMIDT, P.S. 2628
SBB Engineering, LLC
101 South Kansas Avenue
Topeka, Kansas 66603
email: rick.schmidt@sbbeng.com
Corporate LS 2015034874



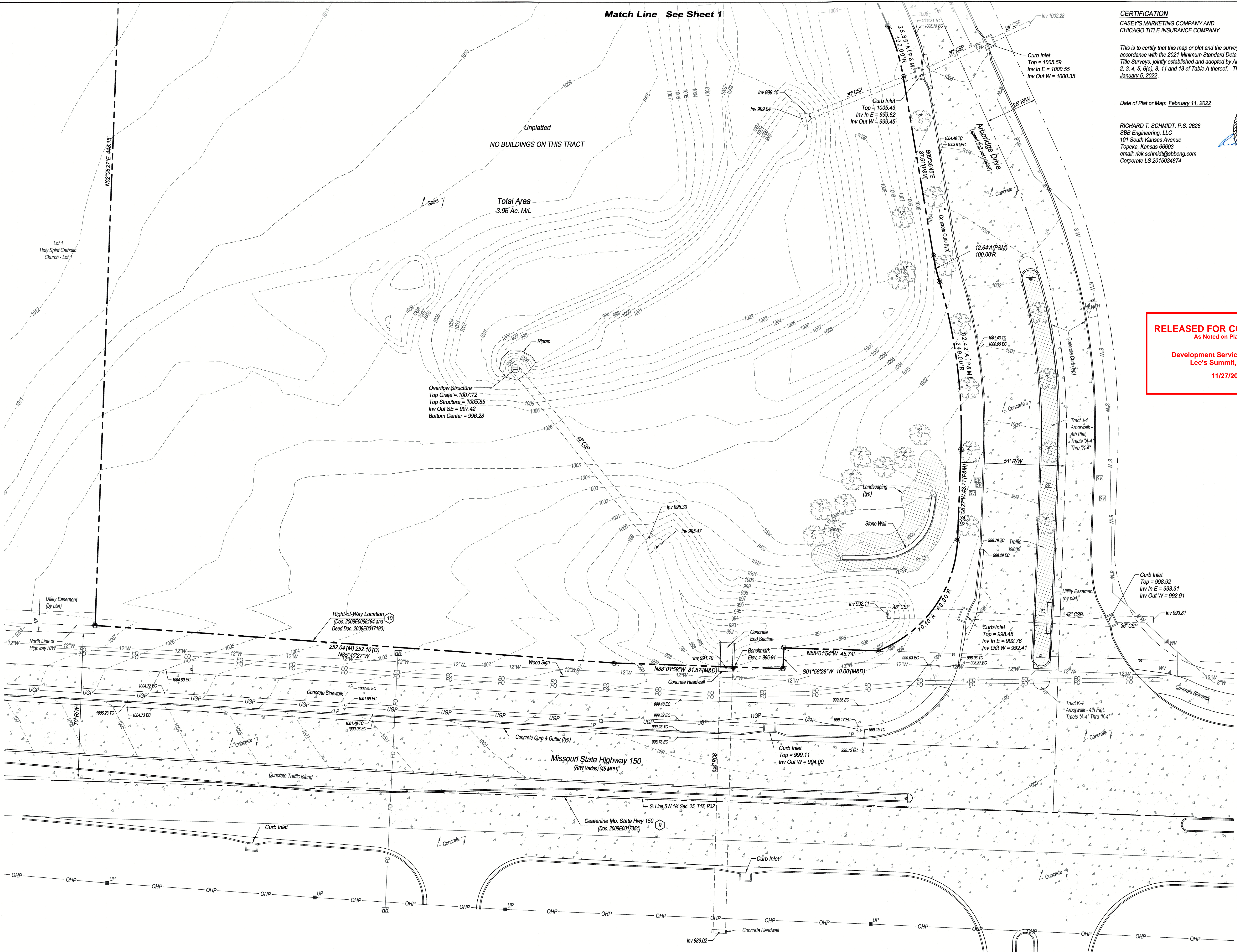
PREPARED FOR:
Casey's Marketing Company
One SE Convenience Boulevard
Ankeny, Iowa 50021

SBB Engineering, LLC
transportation - site development - surveying
101 South Kansas Avenue
Topeka, Kansas 66603
PH: (785) 215-8630 / www.sbbeng.com

SHEET TITLE:
ALTA/NSPS LAND TITLE SURVEY

PROJECT LOCATION:
Northwest Corner Of Highway 150
And Arboridge Drive
Lee Summit, Missouri 64081

SBB Proj. No.: 21-288
Drawn by: JEM
Checked by: RS
Date: 2/11/2022
Drawing No.:
Sh. 1 of 2

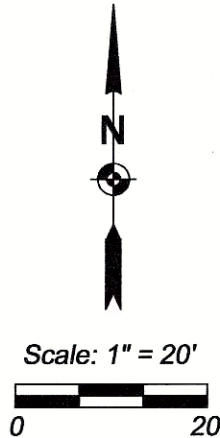


CERTIFICATION
CASEY'S MARKETING COMPANY AND
CHICAGO TITLE INSURANCE COMPANY

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(a), 8, 11 and 13 of Table A thereof. The field work was completed on January 5, 2022.

Date of Plat or Map: February 11, 2022

RICHARD T. SCHMIDT, P.S. 2628
SBB Engineering, LLC
101 South Kansas Avenue
Topeka, Kansas 66603
email: rick.schmidt@sbbeng.com
Corporate LS 2015034874



RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
11/27/2023

Rev.	By	Date	Description

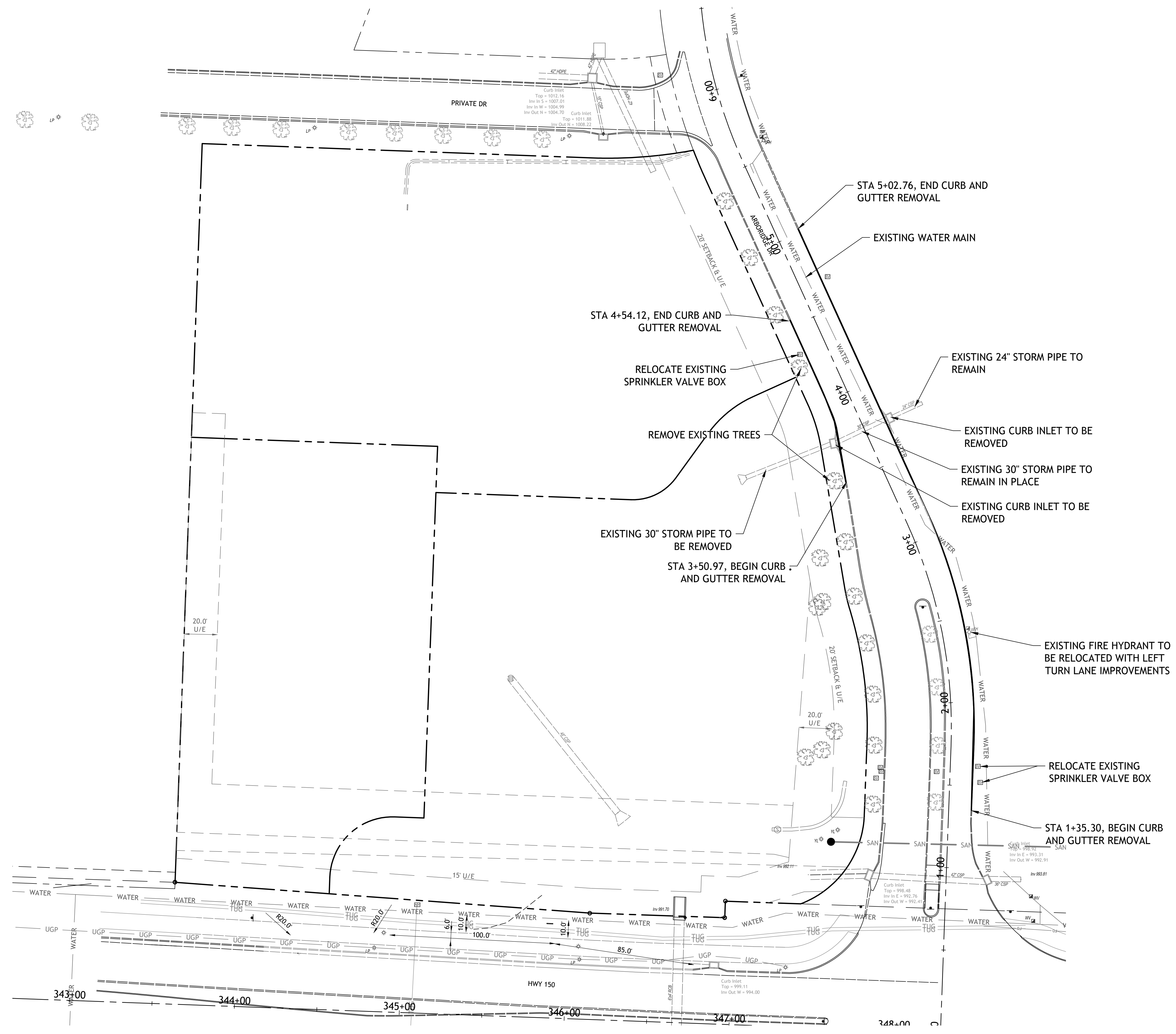
PREPARED FOR: Casey's Marketing Company
One SE Convenience Boulevard
Ankeny, Iowa 50021

SBB Engineering, LLC
transportation - site development - surveying
101 South Kansas Avenue
Topeka, Kansas 66603
Ph: (785) 215-9630 / www.sbbeng.com

SBB ENGINEERING

ALTA/NSPS LAND TITLE SURVEY
PROJECT LOCATION: Northwest Corner Of Highway 150
And Arboridge Drive
Lee Summit, Missouri 64081

SBB Proj. No.:	21-288
Drawn by:	JEM
Checked by:	RS
Date:	2/11/2022
Drawing No.:	Sh. 2 of 2



RELEASED FOR CONSTRUCTION
 As Noted on Plan Review

Development Services Department
 Lee's Summit, Missouri

11/27/2023

SM Engineering

 5507 High Meadow Circle
 Manhattan Kansas, 66503
 smcivilengr@gmail.com
 785.341.9747

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.

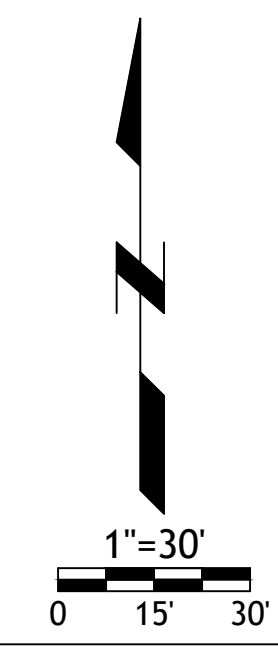
Revisions

8-29-23 CITY COMMENTS
 10-3-23 CITY COMMENTS
 10-18-23 CITY COMMENTS

**ARBORIDGE DRIVE
 IMPROVEMENTS**

LEES SUMMITT, MO.

sheet
C4.0
 Civil
 DEMOLITION PLAN
 permit
 18 JULY 2023



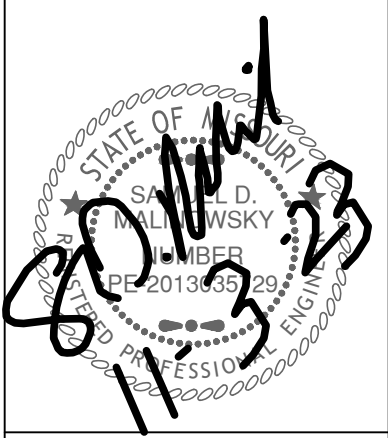
RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

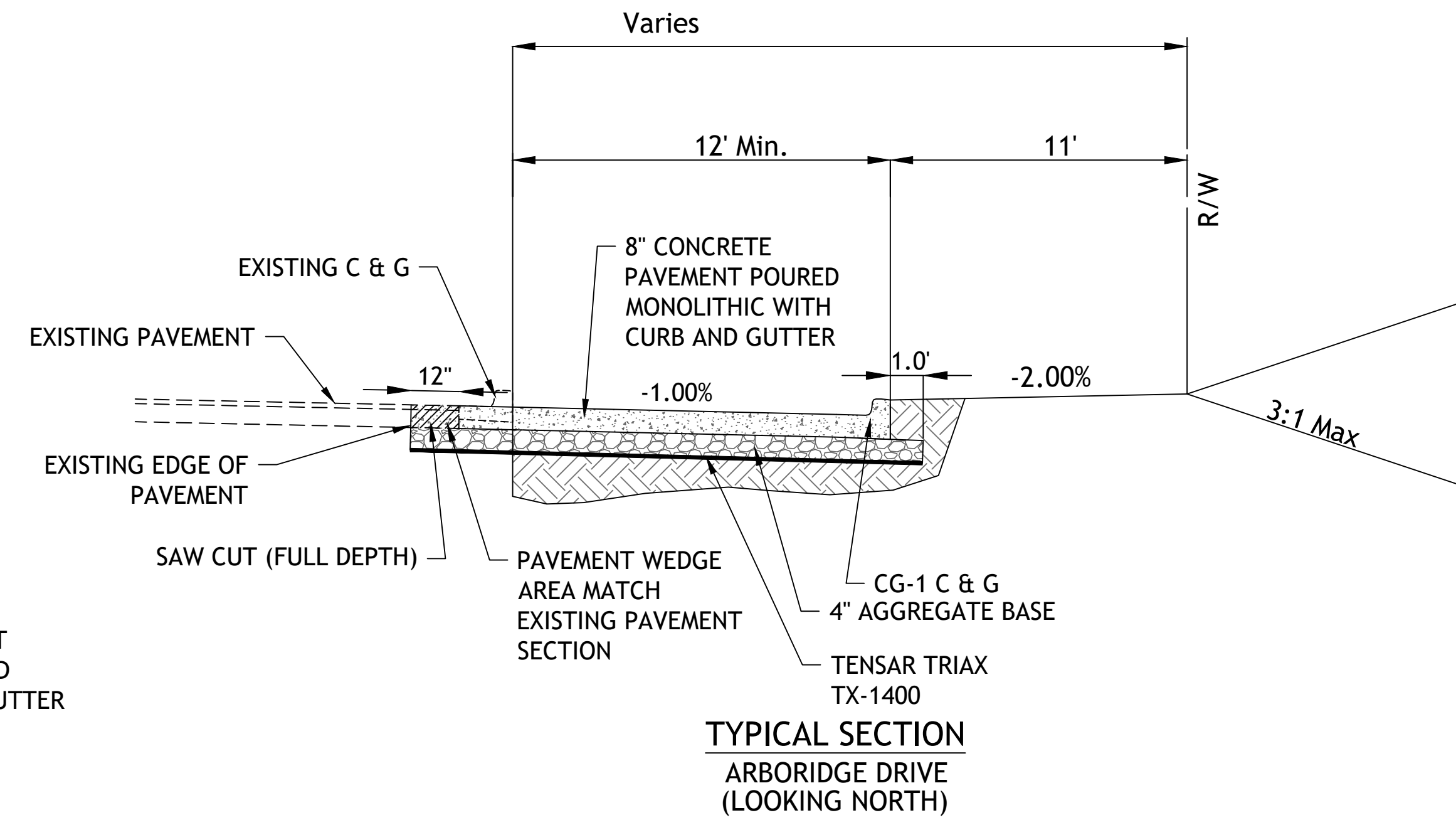
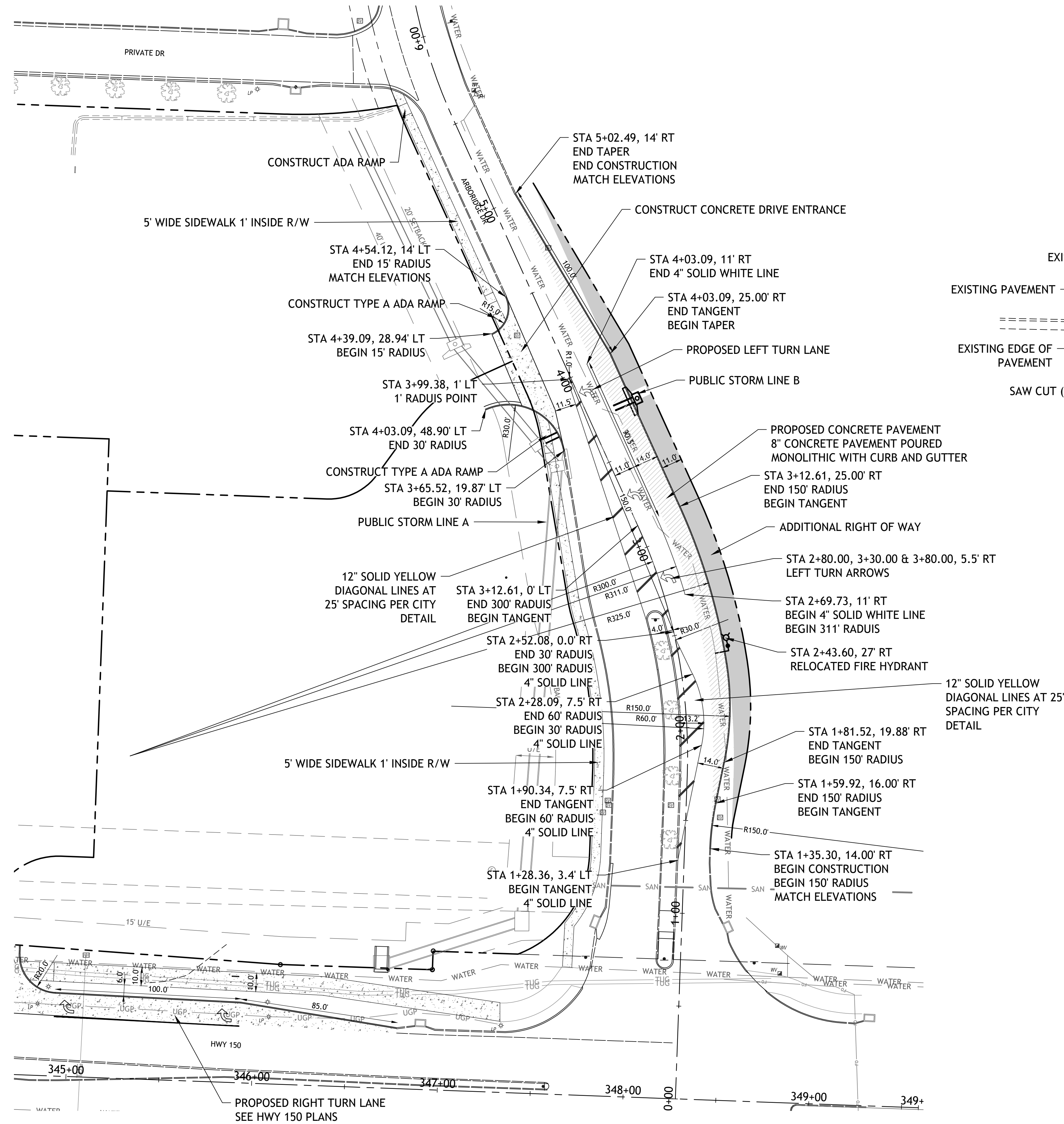
11/27/2023

SM Engineering
5507 High Meadow Circle
Manhattan Kansas, 66503
smcivilengr@gmail.com
785.341.9747

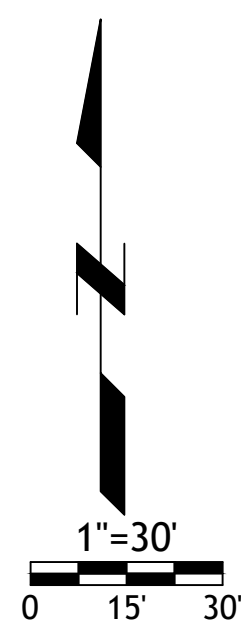
Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



Revisions
8-29-23 CITY COMMENTS
10-3-23 CITY COMMENTS
10-25-23 CITY COMMENTS
11-3-23 CITY COMMENTS

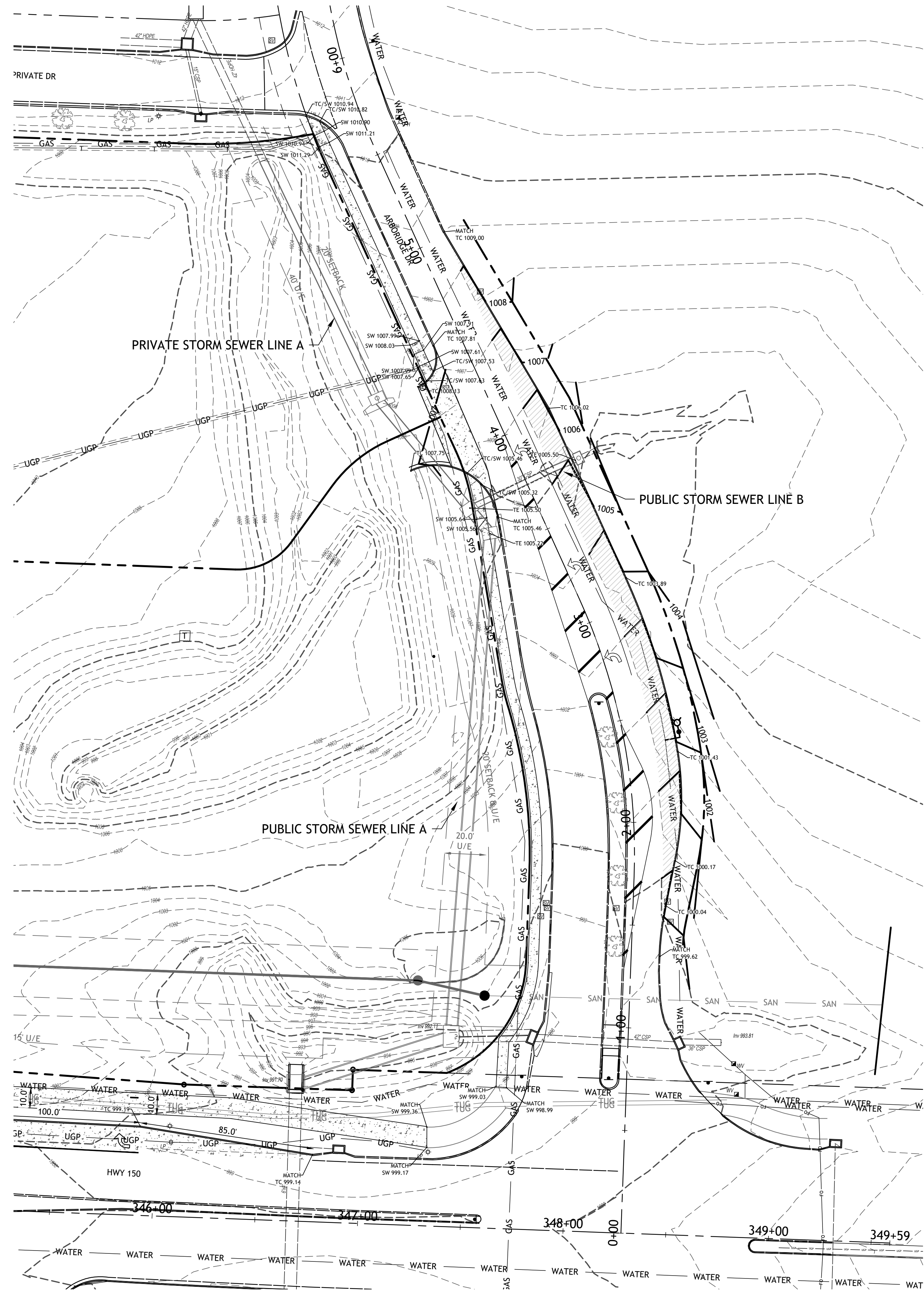


- NOTE
- TURN ARROWS SHALL BE PRE-FORMED THERMOPLASTIC PER CITY SPECIFICATIONS
 - LONGITUDINAL STRIPING MATERIAL SHALL BE HIGH BUILD PAINT PER CITY OF LEE'S SUMMIT SPECIFICATIONS



ARBORIDGE DRIVE IMPROVEMENTS

LEES SUMMIT, MO.



RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

11/27/2023

SM Engineering
SME

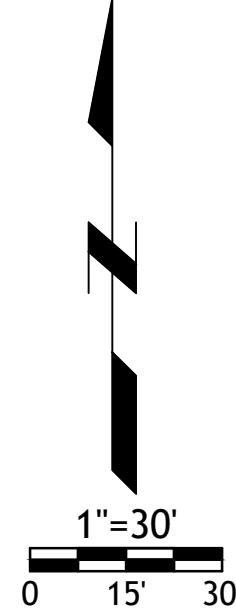
5507 High Meadow Circle
Manhattan Kansas, 66503
smcivilengr@gmail.com
785.341.9747

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.

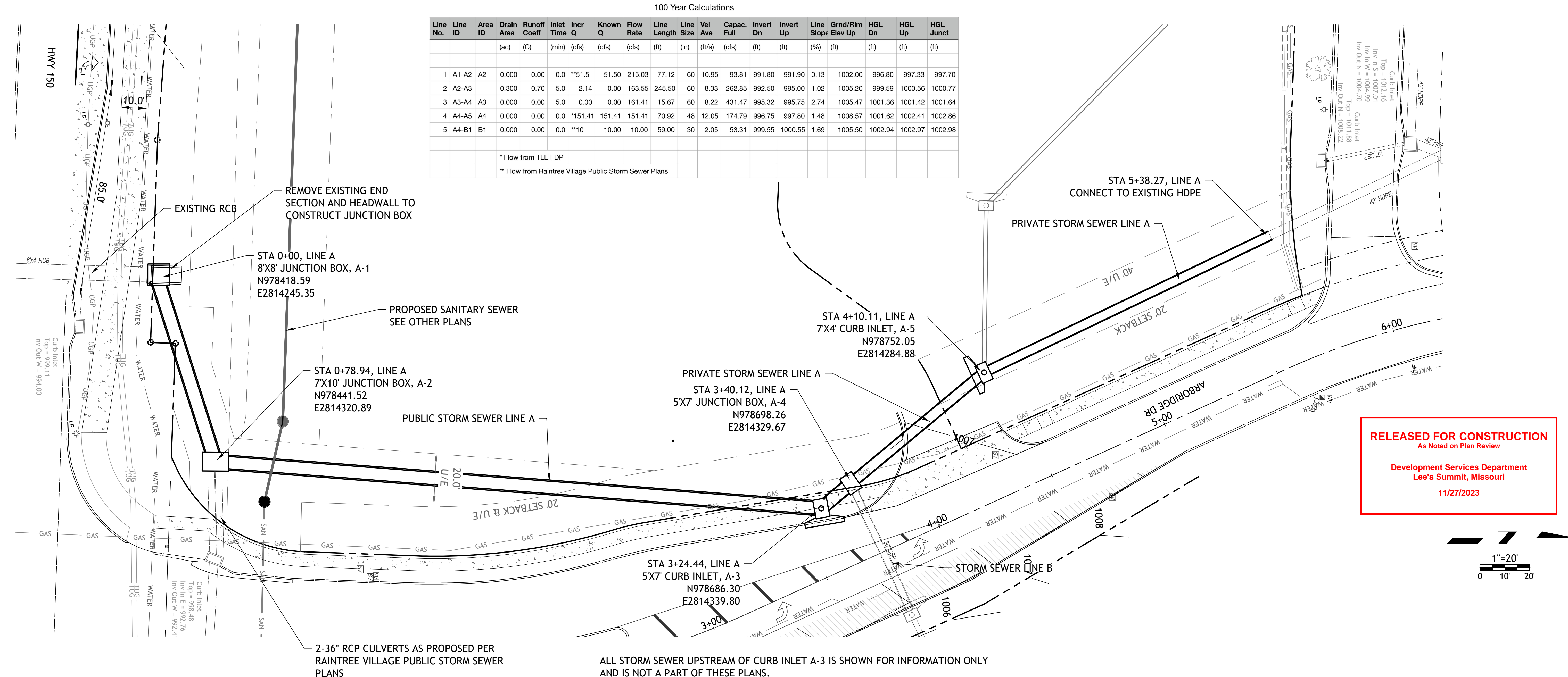


Revisions
8-29-23 CITY COMMENTS
10-3-23 CITY COMMENTS
10-25-23 CITY COMMENTS
11-3-23 CITY COMMENTS

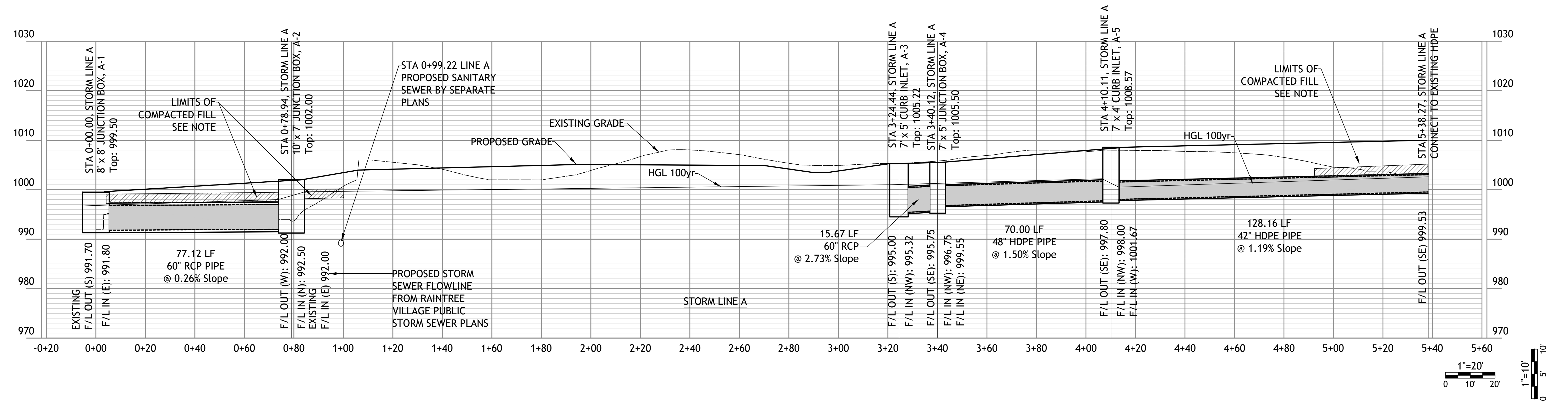
ARBORDRIDGE DRIVE
IMPROVEMENTS
LEES SUMMITT, MO.



sheet
C6.0
Civil
GRADING
permit
18 JULY 2023



100 Year Calculations																			
Line No.	Line ID	Area ID	Drain Area	Runoff Coeff	Inlet Time	Incr Q	Known Q	Flow Rate	Line Length	Line Size	Vel Ave	Capac. Full	Invert Dn	Invert Up	Line Slope	Grnd/Rim Elev	HGL Dn	HGL Up	HGL Junct
			(ac)	(C)	(min)	(cfs)	(cfs)	(cfs)	(ft)	(in)	(ft/s)	(cfs)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)
1	A1-A2	A2	0.000	0.00	0.0	**51.5	51.50	215.03	77.12	60	10.95	93.81	991.80	991.90	0.13	1002.00	996.80	997.33	997.70
2	A2-A3		0.300	0.70	5.0	2.14	0.00	163.55	245.50	60	8.33	262.85	992.50	995.00	1.02	1005.20	999.59	1000.56	1000.77
3	A3-A4	A3	0.000	0.00	5.0	0.00	0.00	161.41	15.67	60	8.22	431.47	995.32	995.75	2.74	1005.47	1001.36	1001.42	1001.64
4	A4-A5	A4	0.000	0.00	0.0	*151.41	151.41	151.41	70.92	48	12.05	174.79	996.75	997.80	1.48	1008.57	1001.62	1002.41	1002.86
5	A4-B1	B1	0.000	0.00	0.0	**10	10.00	10.00	59.00	30	2.05	53.31	999.55	1000.55	1.69	1005.50	1002.94	1002.97	1002.98
			* Flow from TLE FDP																
			** Flow from Raintree Village Public Storm Sewer Plans																



SM Engineering

5507 High Meadow Circle
Manhattan Kansas, 66503
smcivilengr@gmail.com
785.341.9747

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.

Revisions
8-29-23 CITY COMMENTS
10-3-23 CITY COMMENTS
10-25-23 CITY COMMENTS
11-3-23 CITY COMMENTS

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
11/27/2023

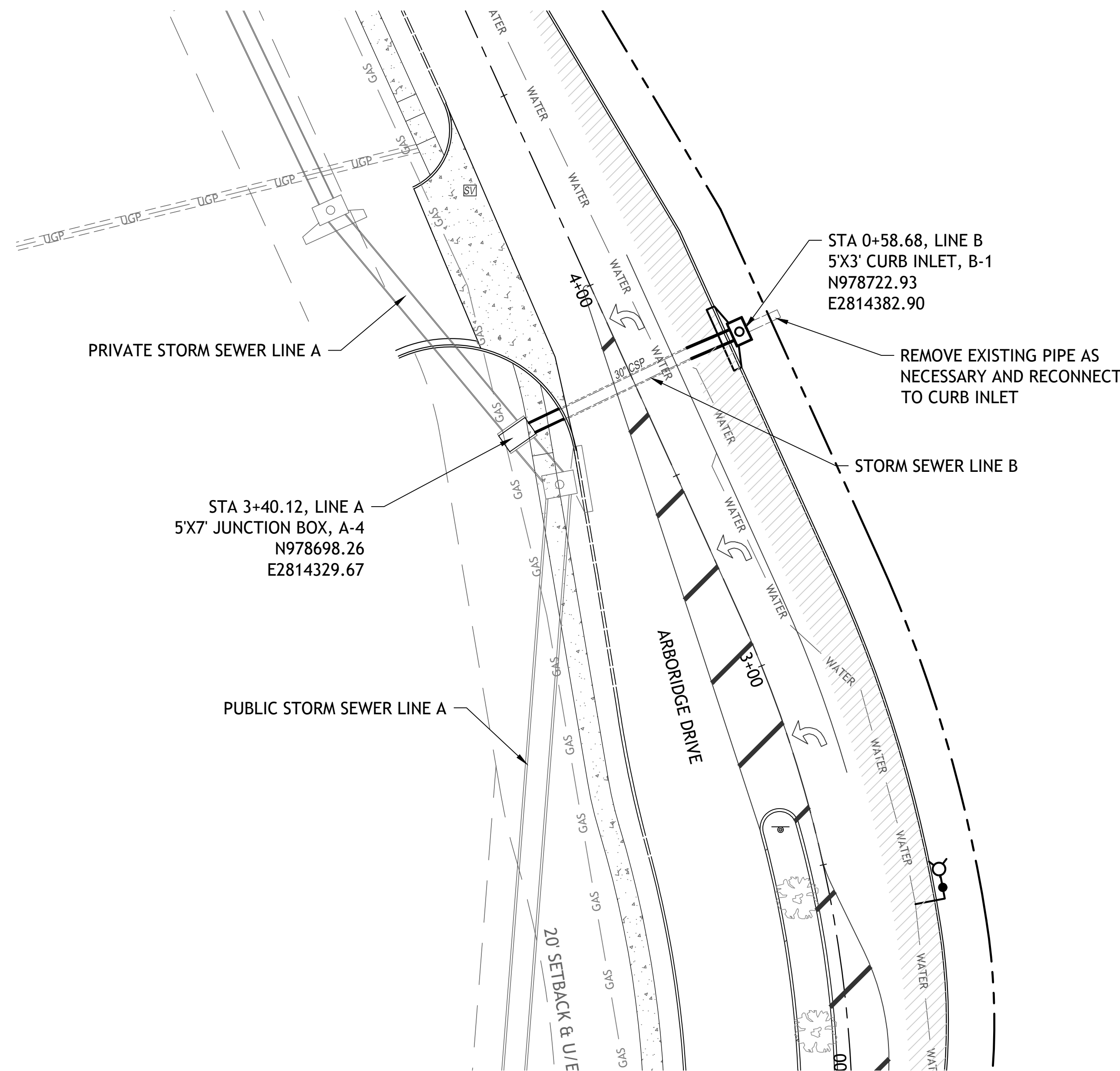
1"=20'
0 10' 20'

ARBORIDGE DRIVE
IMPROVEMENTS
LEES SUMMIT, MO.

sheet

C7.0

Civil
STORM LINE A
PLAN AND PROFILE
18 JULY 2023



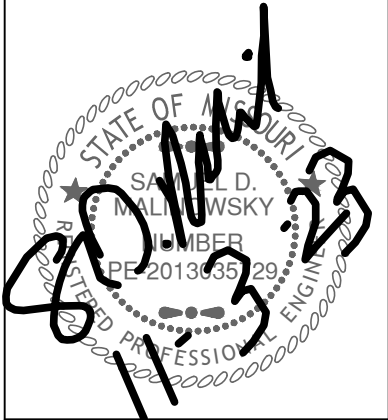
RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

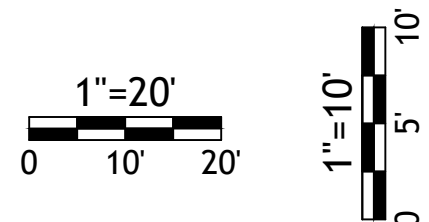
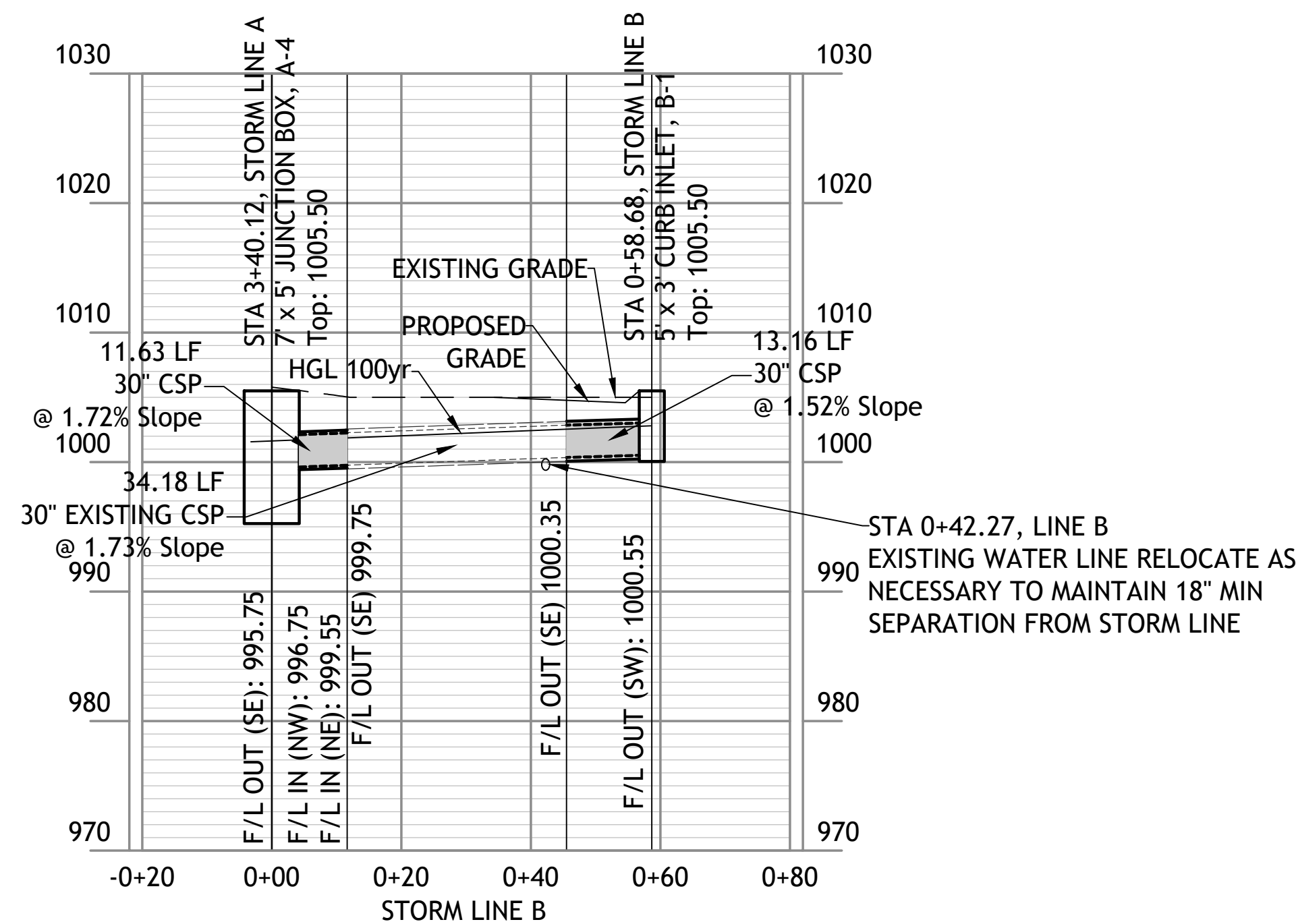
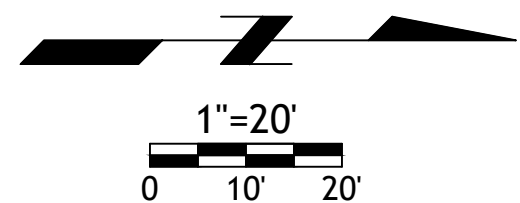
11/27/2023

SM Engineering
SME
5507 High Meadow Circle
Manhattan Kansas, 66503
smcivilengr@gmail.com
785.341.9747

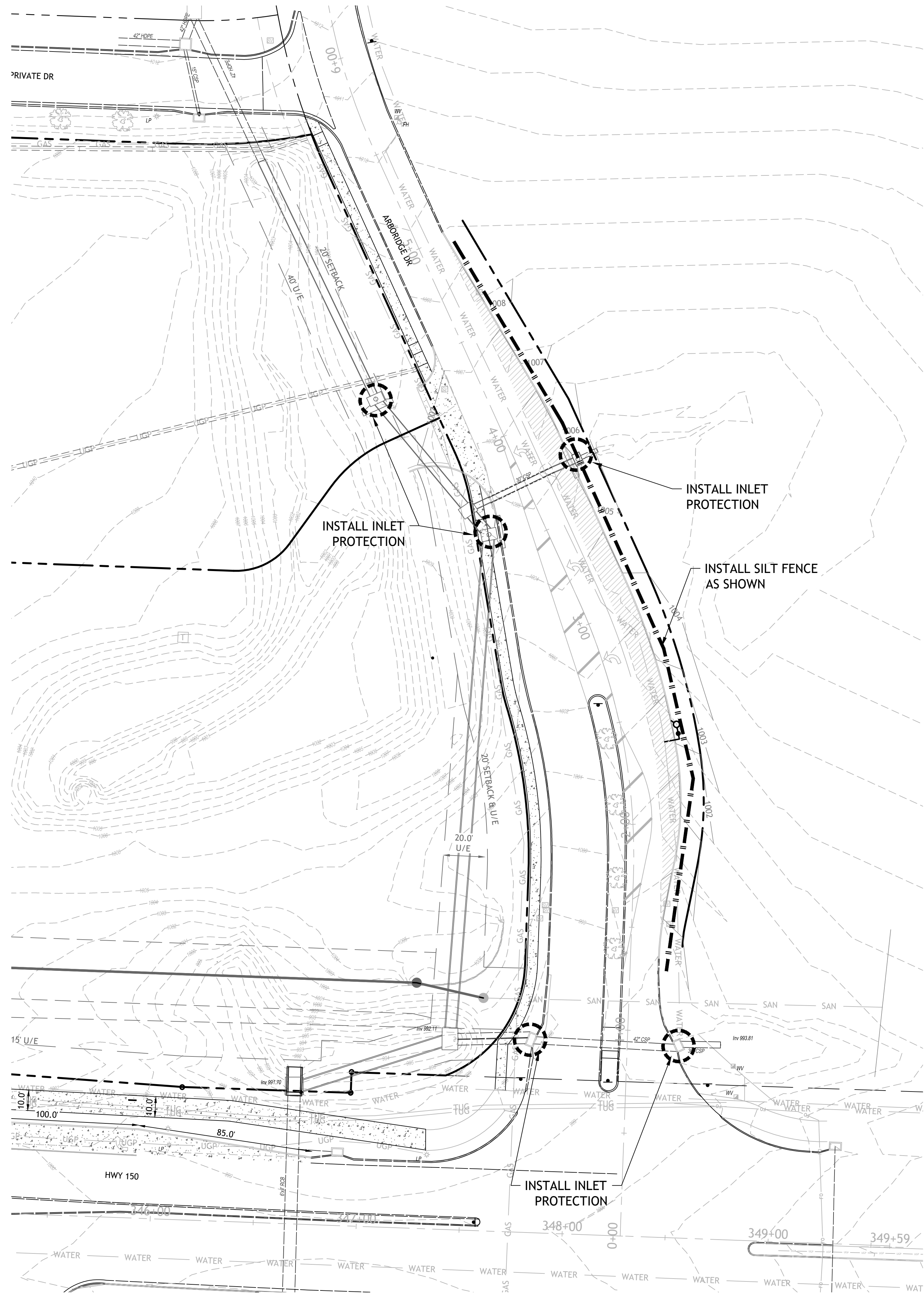
Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



Revisions
8-29-23 CITY COMMENTS
10-3-23 CITY COMMENTS
10-25-23 CITY COMMENTS
11-3-23 CITY COMMENTS



ARBORIDGE DRIVE
IMPROVEMENTS
LEES SUMMITT, MO.



NOTES:
1. Prior to Land Disturbance activities, the following shall occur:
a) Identify the limits of construction on the ground with easily recognizable indications such as construction staking, construction fencing and placement of physical barriers or other means acceptable to the City Inspector and in conformance with the erosion and pollution control plan;
b) Construct a stabilized entrance/parking/staging area;
c) Install perimeter controls and protect any existing stormwater inlets;
d) Request an initial inspection of the installed Phase I pollution control measures designated on the approved erosion and pollution control plan. Land disturbance work shall not proceed until there is a passed inspection

2. The site shall comply with all requirements of the MoDNR general requirements
a) Immediate initiation of temporary stabilization BMPs on disturbed areas where construction activities have temporarily ceased on that portion of the project site if construction activities will not resume for a period exceeding 14 calendar days. Temporary stabilization may include establishment of vegetation, geotextiles, mulches or other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb the area. This stabilization must be completed within 14 calendar days;
b) Inspection of erosion and sediment control measures shall be performed to meet or exceed the minimum inspection frequency in the MoDNR General Permit. At a minimum, inspections shall be performed during all phases of construction at least once every 14 days and within 24 hours of each precipitation event.
c) An inspection log shall be maintained and shall be available for review by the regulatory authority;
d) The erosion and pollution control plan shall be routinely updated to show all modifications and amendments to the original plan. A copy of the erosion and pollution control plan shall be kept on site and made available for review by the regulatory authority.

3. Temporary seeding shall only be used for periods not to exceed 12 months. For final stabilization, temporary seeding shall only be used to establish vegetation outside the permanent seeding or sodding dates as specified in the Standard Specifications. Final stabilization requires a uniform perennial vegetative cover with a density of 70% over 100% of disturbed area.

4. Erosion and pollution control shall be provided for the duration of a project. All installed erosion and pollution control BMPs shall be maintained in a manner that preserves their effectiveness. If the City determines that the BMPs in place do not provide adequate erosion and pollution control at any time during the project, additional or alternate measures that provide effective control shall be required.

5. Concrete wash or rinse water from concrete mixing equipment. Tools and/or ready-mix trucks, etc. may not be discharged into or be allowed to run to any existing water body or portion of the storm water system. One or more locations for concrete washout will be designated on site, such that discharges during concrete washout will be contained in a small area where waste concrete can solidify in place. Proper signage will be installed to direct users to the concrete washout. Concrete washouts must be handled prior to pouring any concrete.

6. Silt fences and sediment control BMPs which are shown along the back of curb must be installed within two weeks of curb backfill and prior to placement of base asphalt. Exact locations of these erosion control methods may be field adjusted to minimize conflicts with utility construction. However, anticipated disturbance by utility construction shall not delay installation.

7. Required sediment basins and traps shall be installed as early as possible during mass grading. Sediment basins and traps shall be cleaned out when the sediment capacity has been reduced by 20% of its original design volume.

8. All manufactured BMPs such as erosion control blankets, TRMs, biodegradable logs, filter socks, synthetic sediment barriers and hydraulic erosion control shall be installed as directed by the manufacturer.

9. The above requirements are the responsibility of the permittee for the site. Responsibility may be transferred to another party by the permittee, but the permittee shall remain liable by the City of Lee's Summit if any of the above conditions are not met.

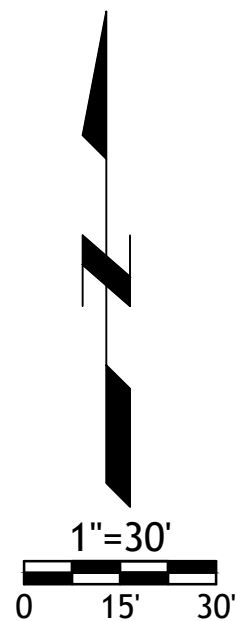
RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
11/27/2023

- EROSION CONTROL NOTES
1. PROTECT ALL STORM INLETS AND DRAINAGE CONVEYANCE FROM CONSTRUCTION DEBRIS AND SEDIMENT
 2. DO NOT WASH CONCRETE TRUCKS INTO THE STORM SYSTEM.
 3. DO NOT ALLOW SEDIMENT TO LEAVE CONSTRUCTION SITE.
 4. KEEP ALL ROADS FREE FROM CONSTRUCTION DEBRIS AND SEDIMENT.

LEGEND

- ||— SILT FENCE
- INLET PROTECTION



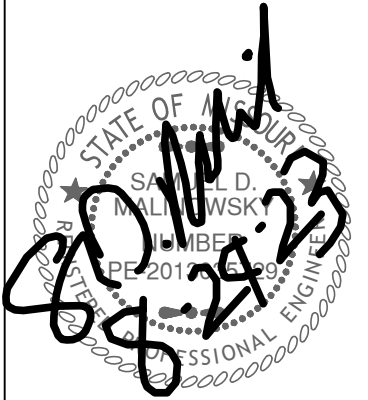
Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



Revisions
8-29-23 CITY COMMENTS
10-3-23 CITY COMMENTS
10-25-23 CITY COMMENTS
11-3-23 CITY COMMENTS

ARBORIDGE DRIVE
IMPROVEMENTS
LEES SUMMITT, MO.

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



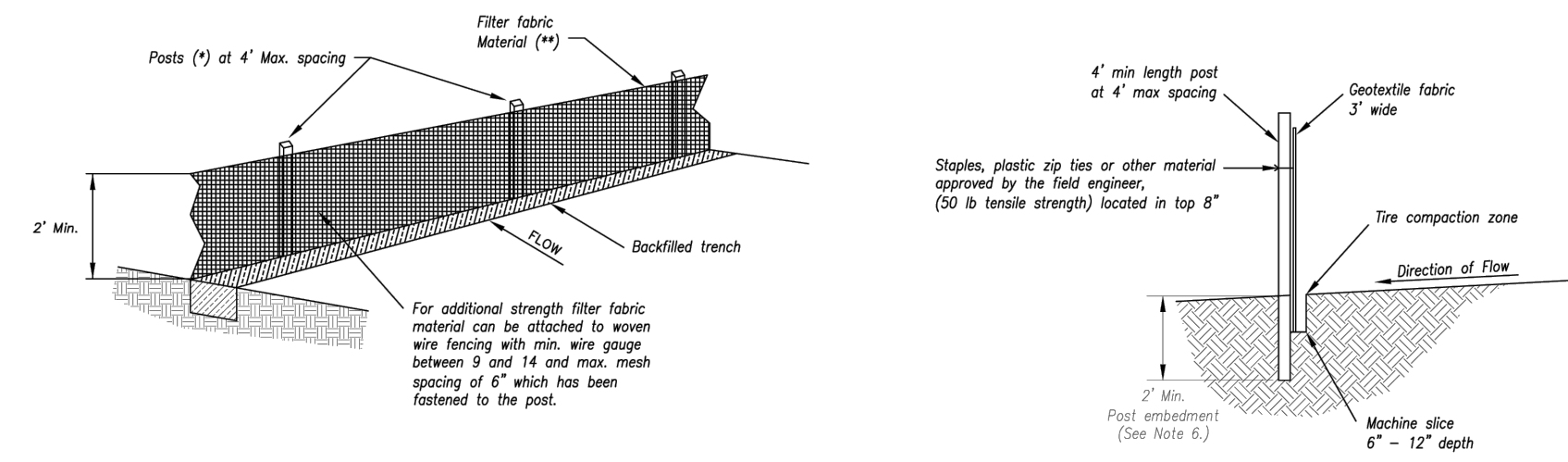
Revisions
8-29-23 CITY COMMENTS

ARBORIDGE DRIVE
IMPROVEMENTS
LEES SUMMITT, MO.

sheet
C10.0
Civil
EROSION DETAILS
permit
18 JULY 2023

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
11/27/2023



- (*) POSTS
- MIN. LENGTH 4'
 - HARDWOOD 1 3/4" x 1 3/4"
 - NO.2 SOUTHERN PINE 2 3/4" x 2 3/4"
 - STEEL 1.33 LB/FT

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

SILT FENCE DETAILS
Not to Scale

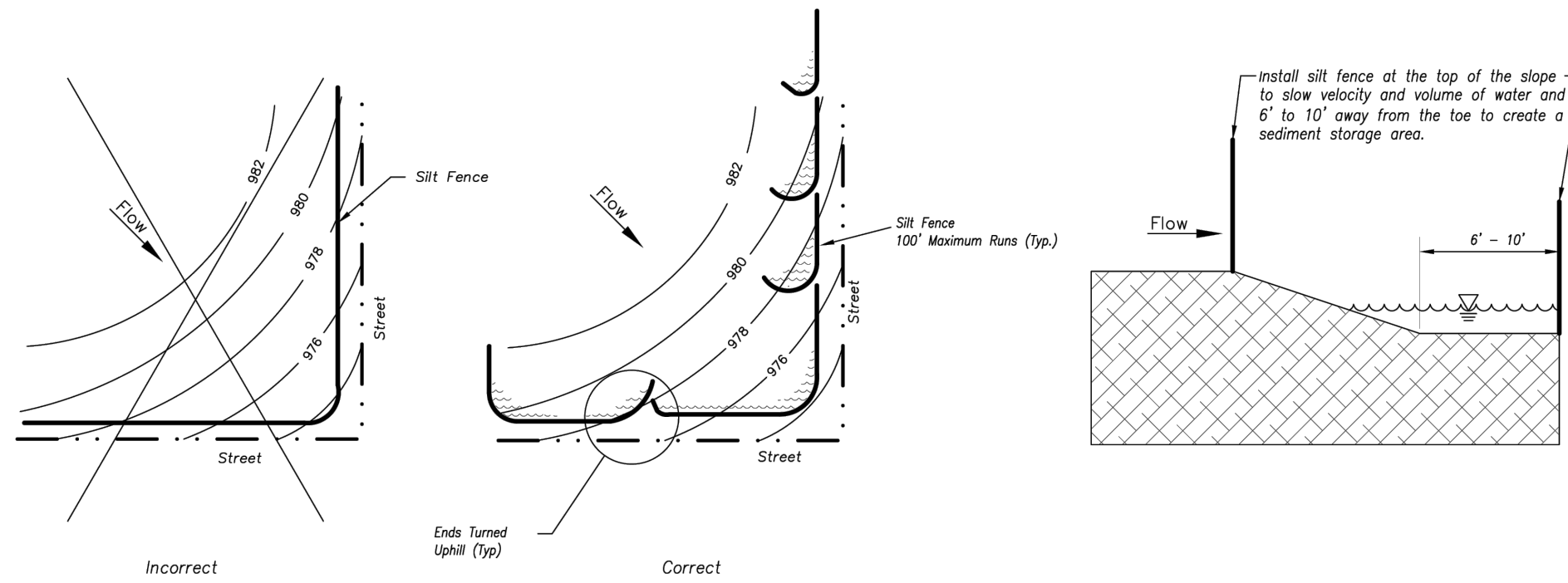
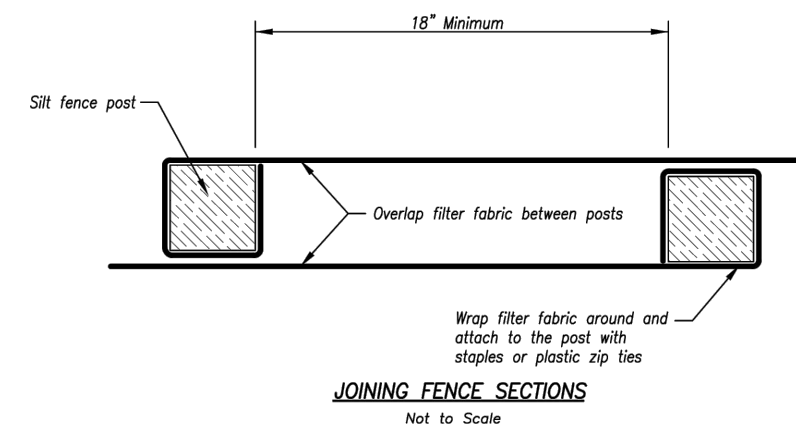


Figure A


SILT FENCE LAYOUT
Not to Scale

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

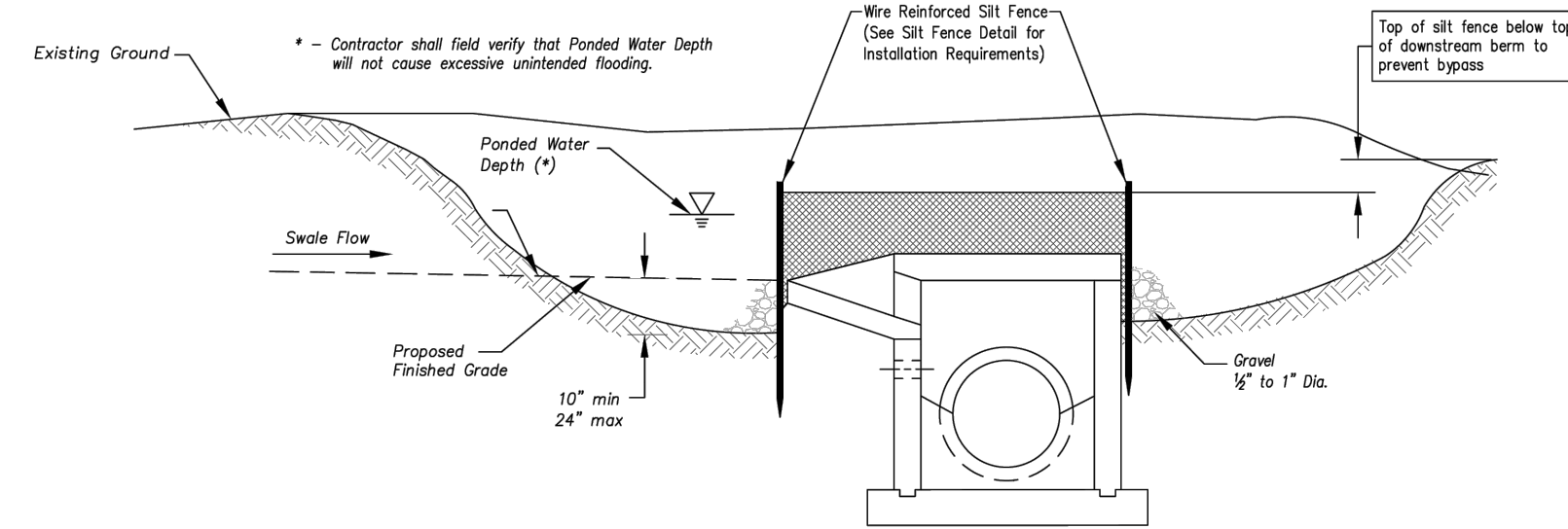
- Maintenance:
- Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of silt fence.
 - Repair as necessary to maintain function and structure.



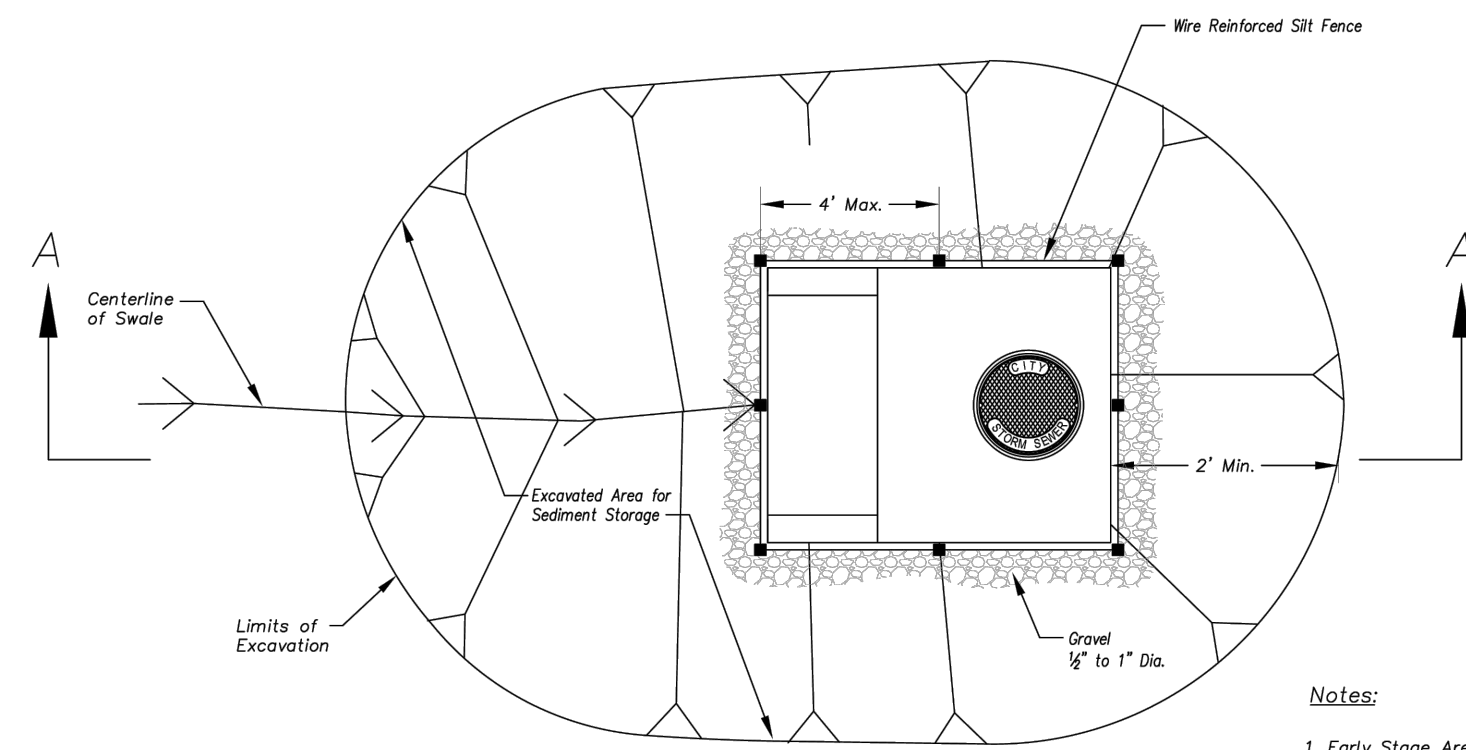
JOINING FENCE SECTIONS
Not to Scale

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
SILT FENCE	STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

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



Section A-A
Not to Scale



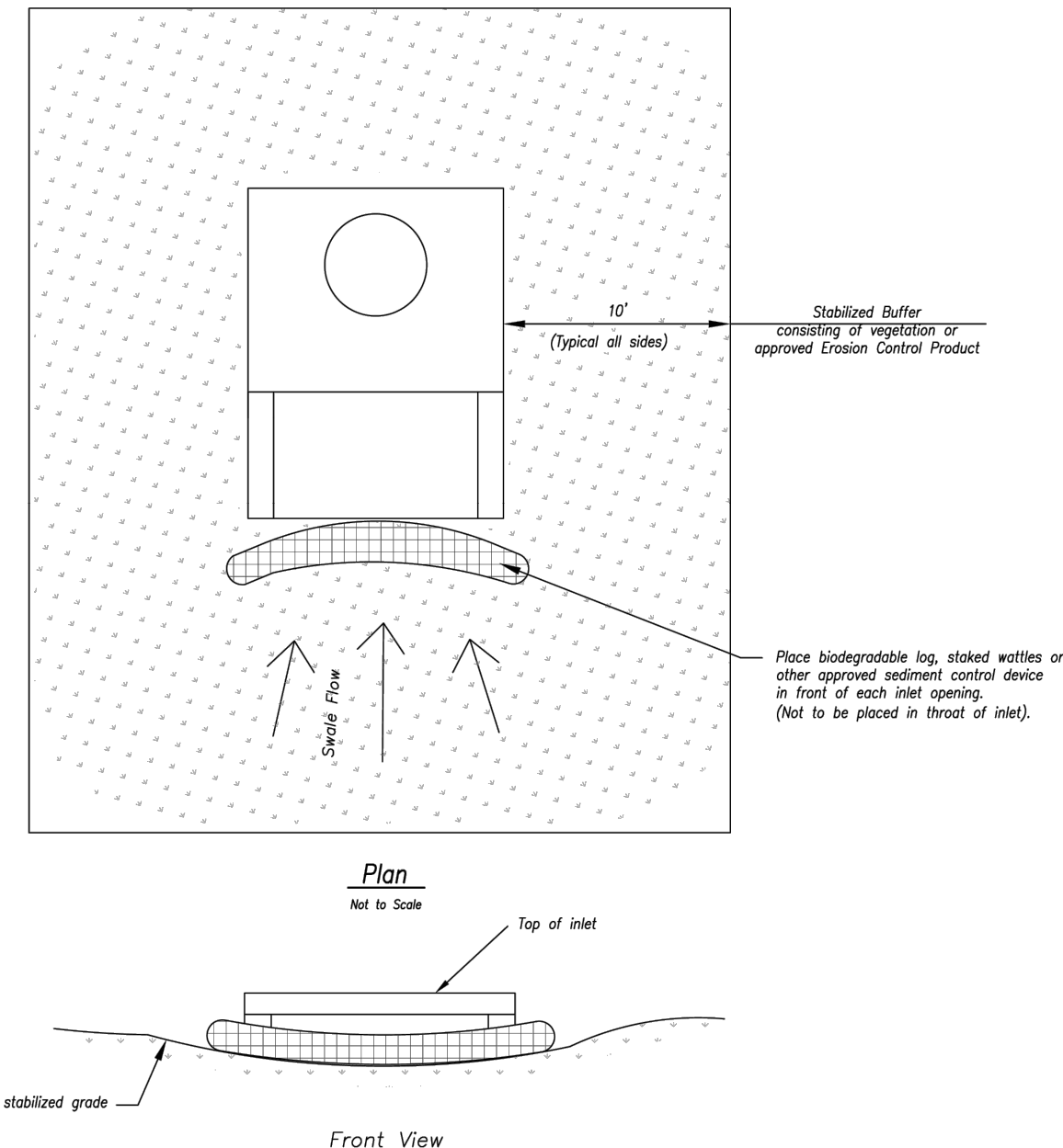
Plan

Not to Scale

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


- Notes:
- Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
 - Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
 - Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
 - Wire reinforced silt fence may be used in place of silt fence attached to wood frame.

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

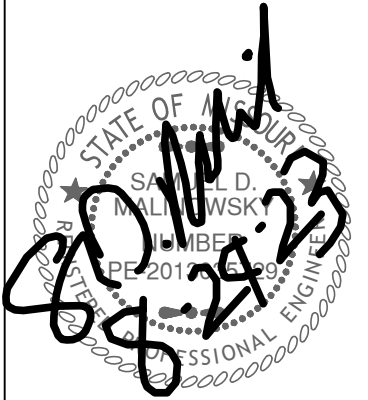


LATE STAGE AREA INLET
(Area inlets at final grade and existing inlets)

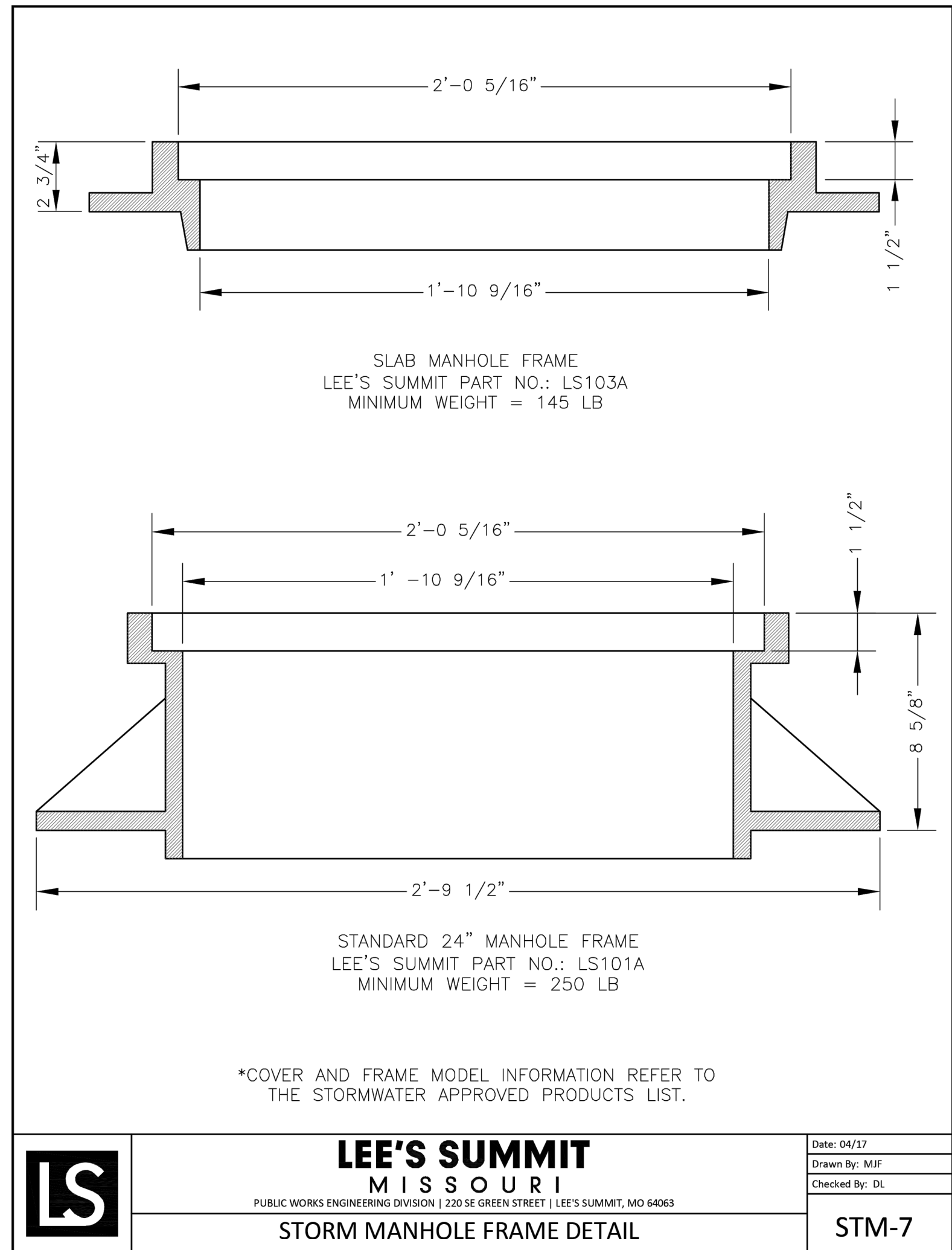
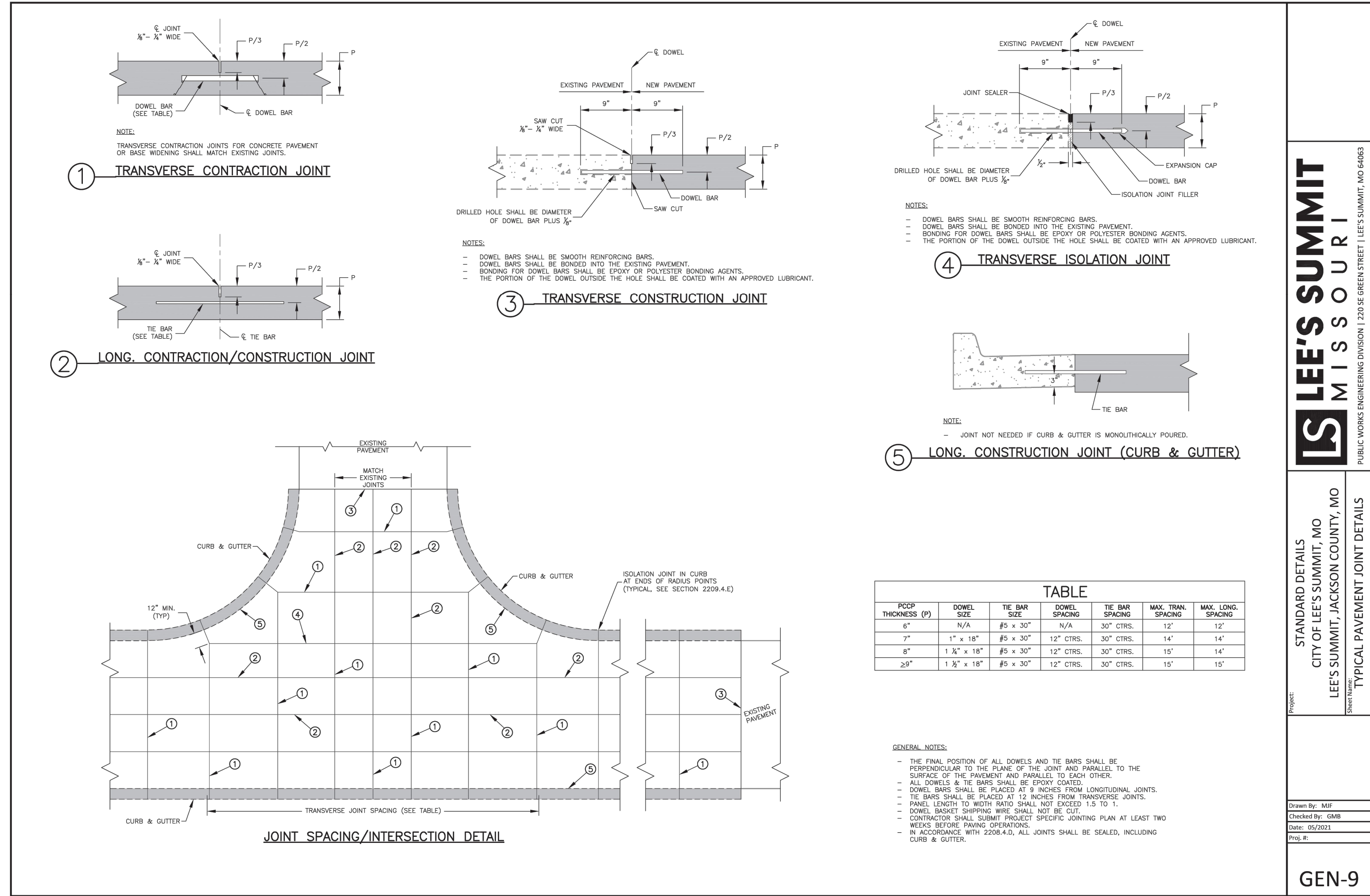
- Maintenance:
- Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
 - Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
 - Repair or replace as necessary to maintain function and integrity of installation.

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

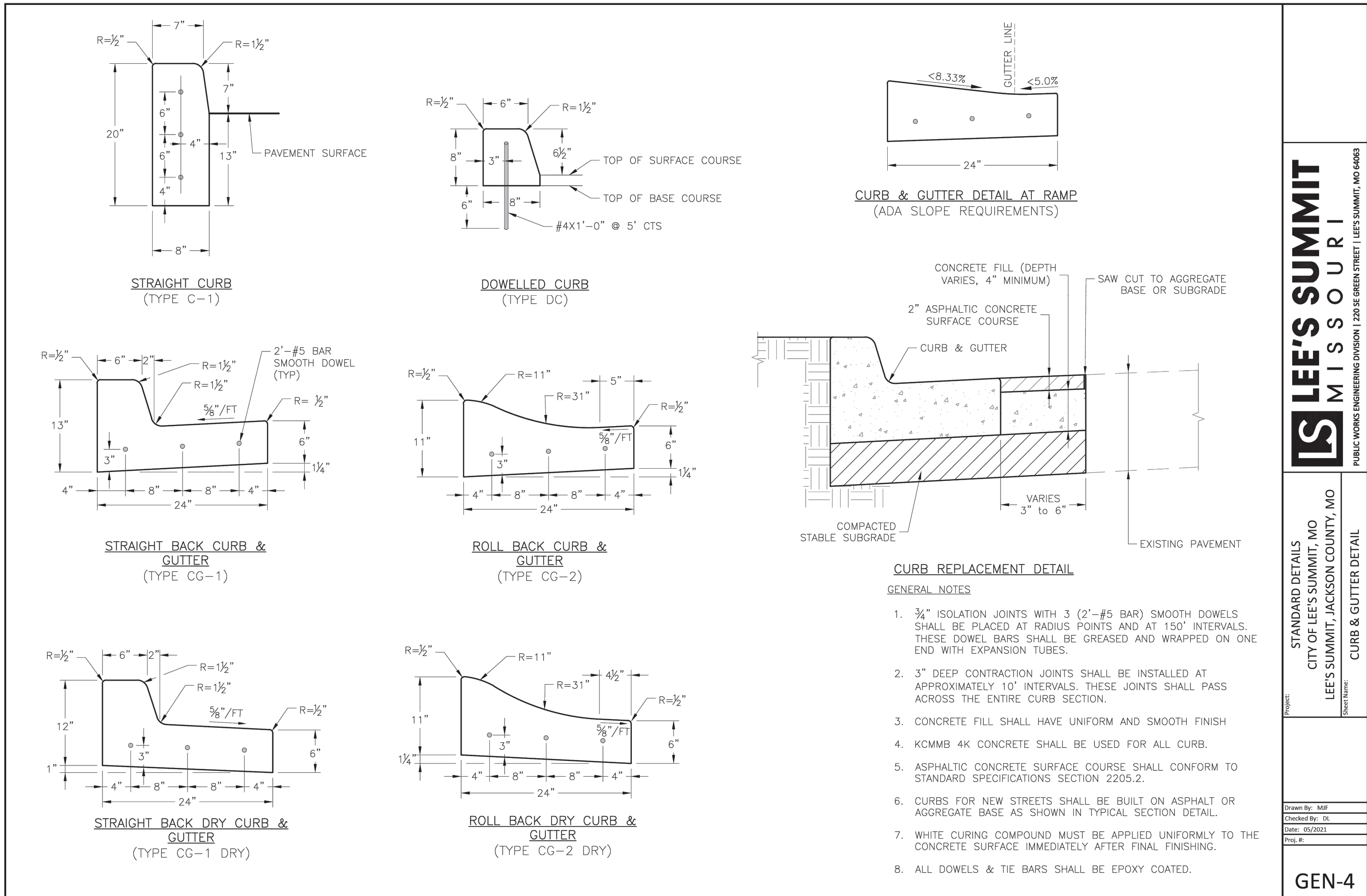
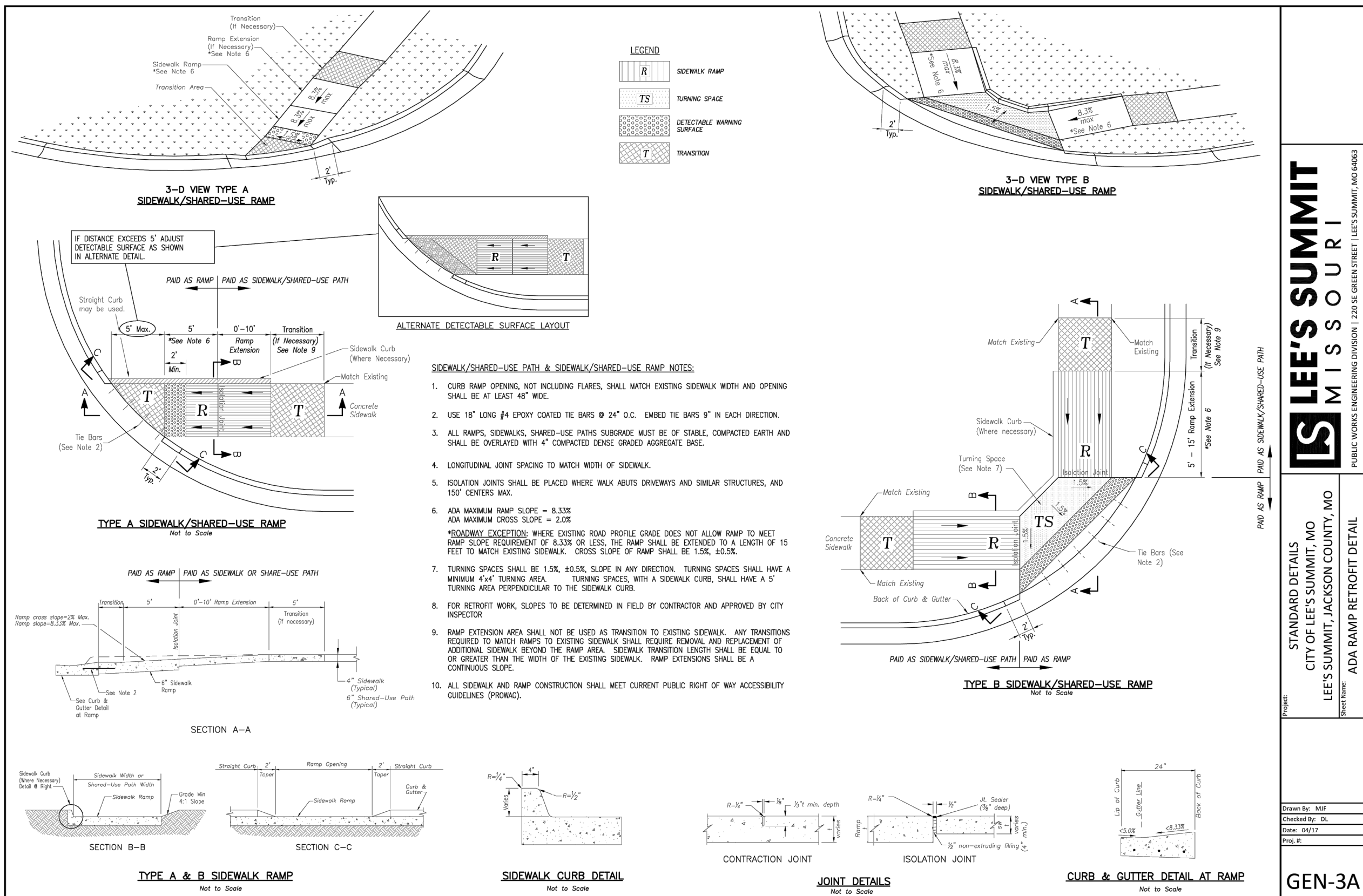
Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer's prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



Revisions
8-29-23 CITY COMMENTS

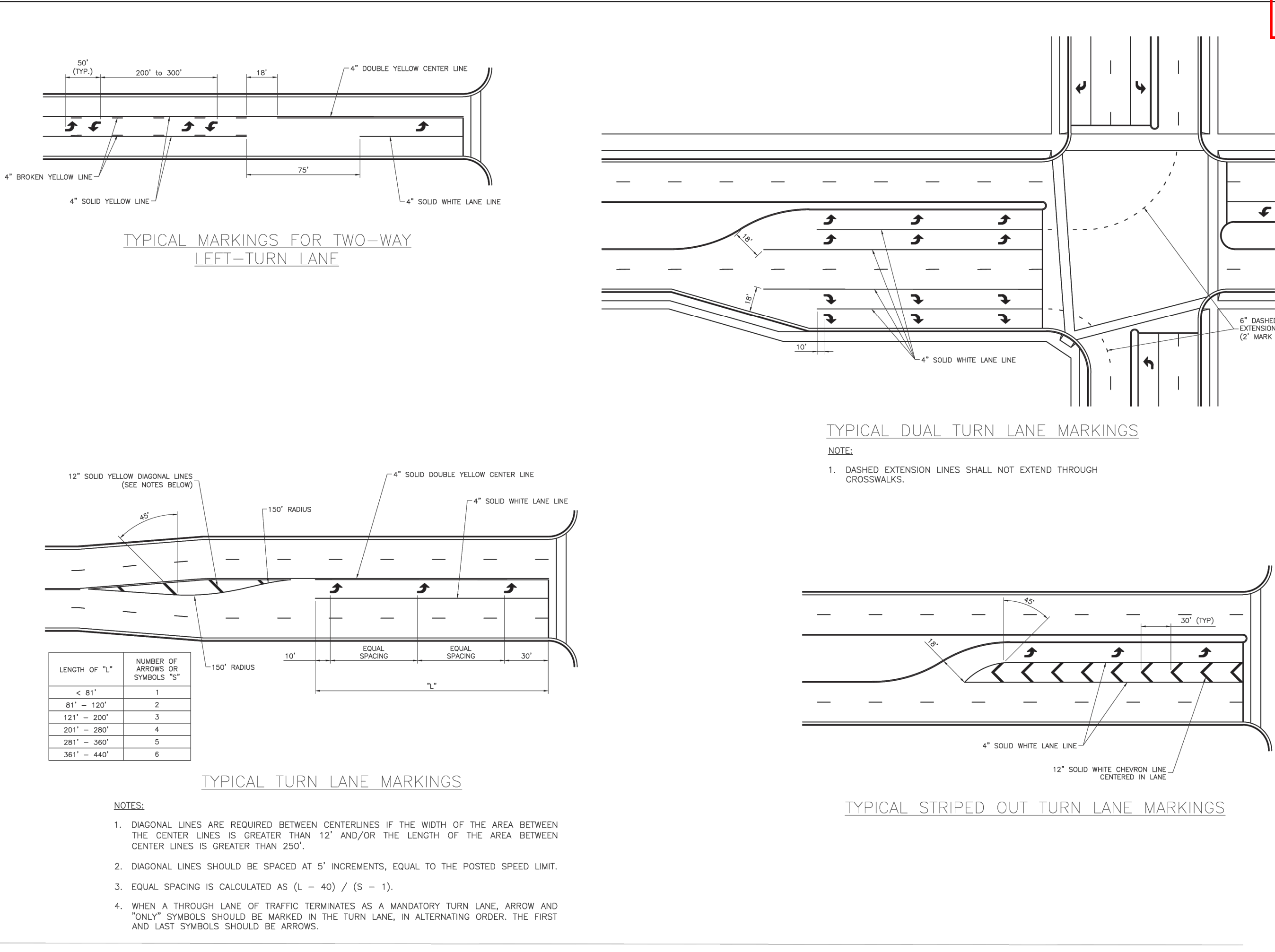
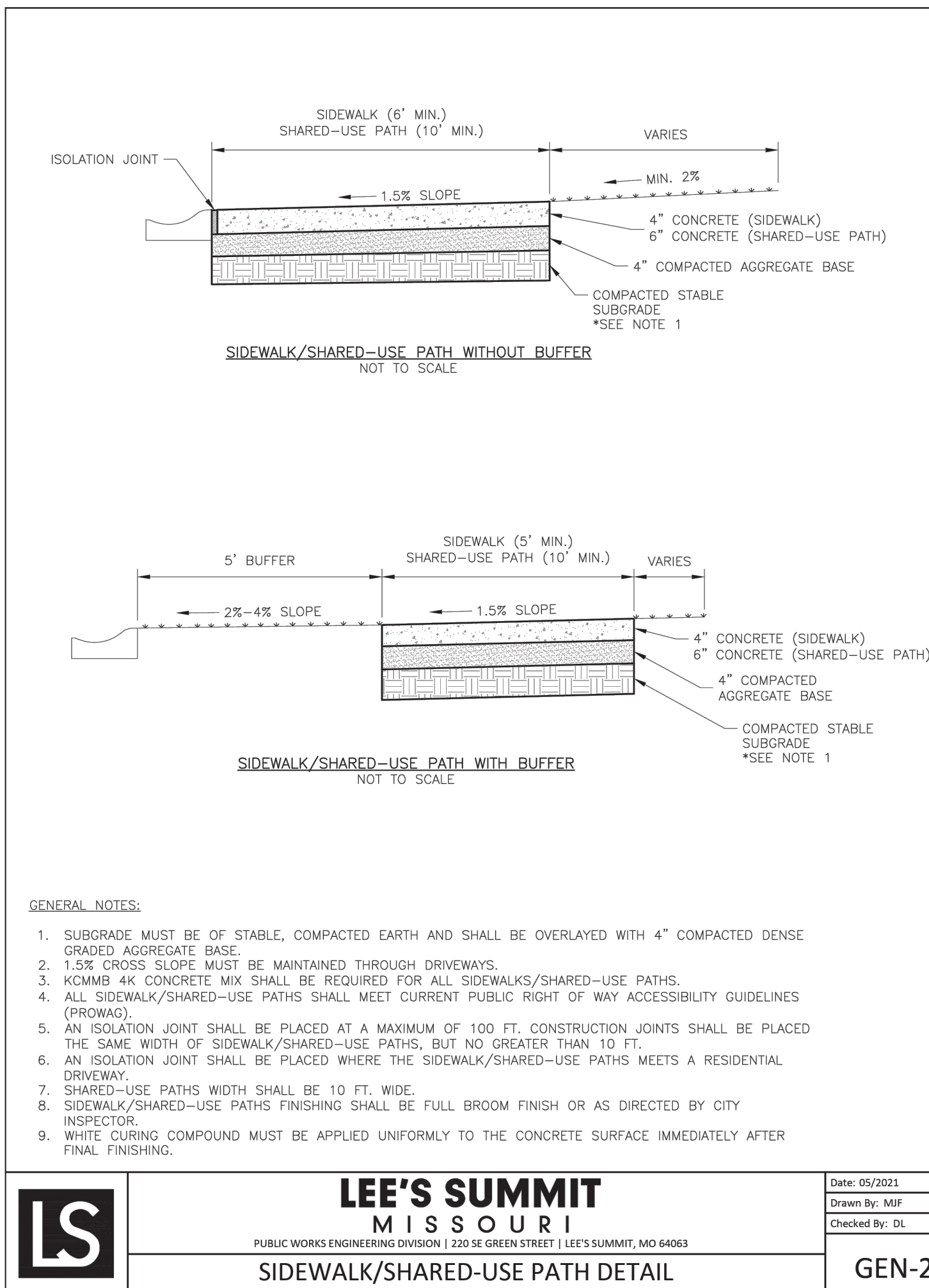
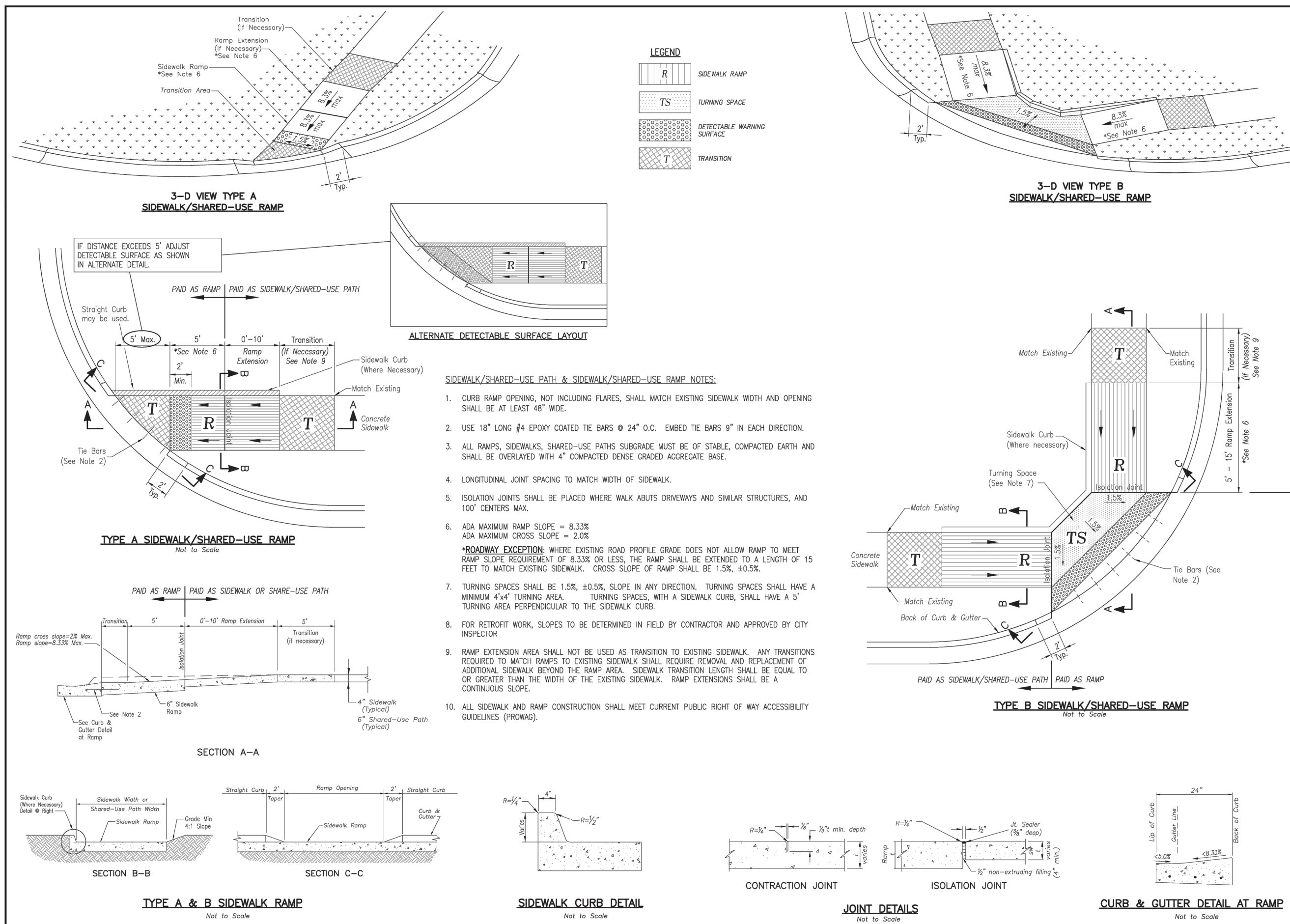


RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
11/27/2023

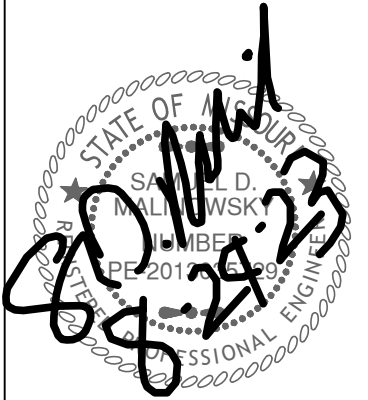


ARBORIDGE DRIVE
IMPROVEMENTS
LEE'S SUMMIT, MO.

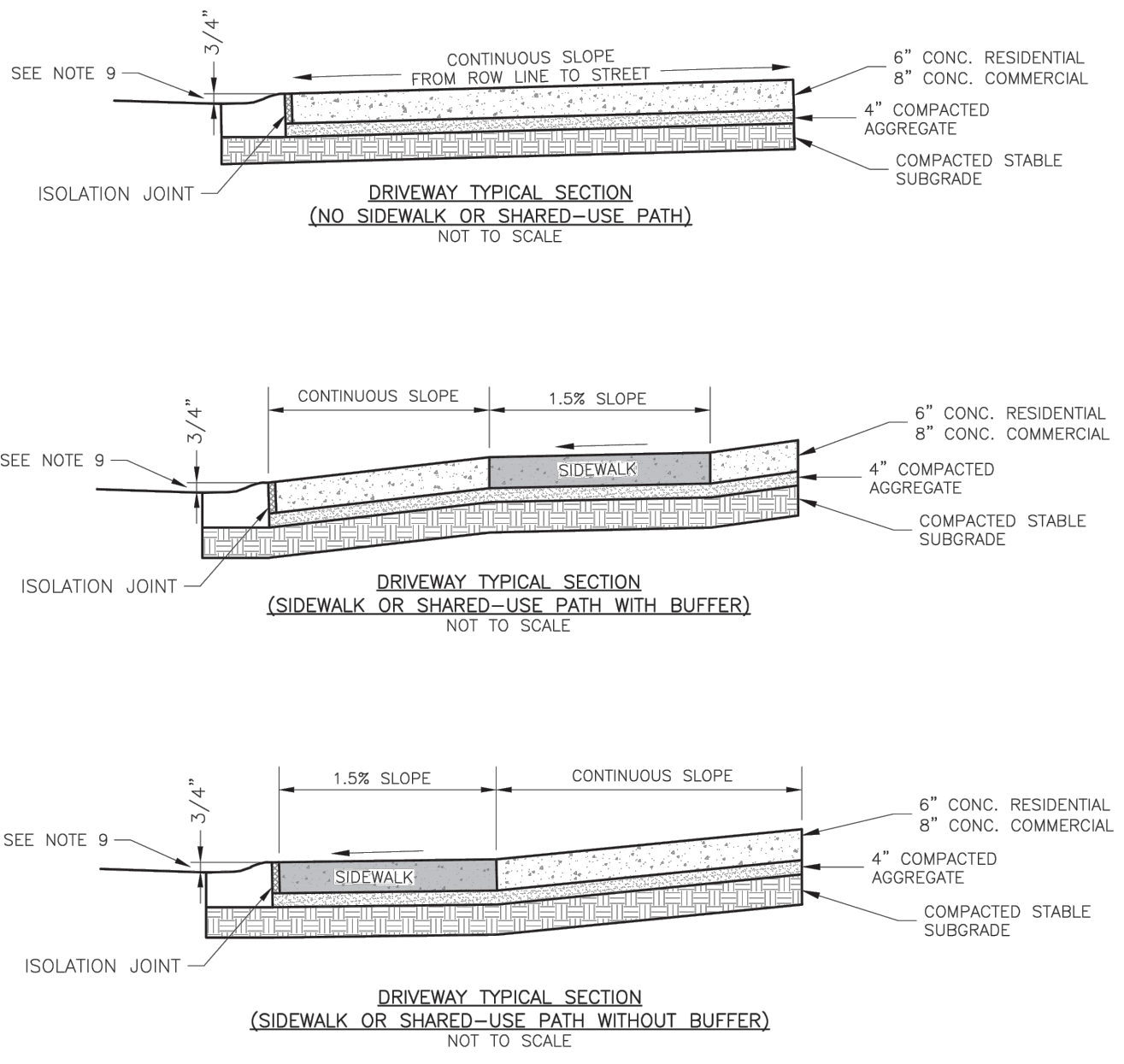
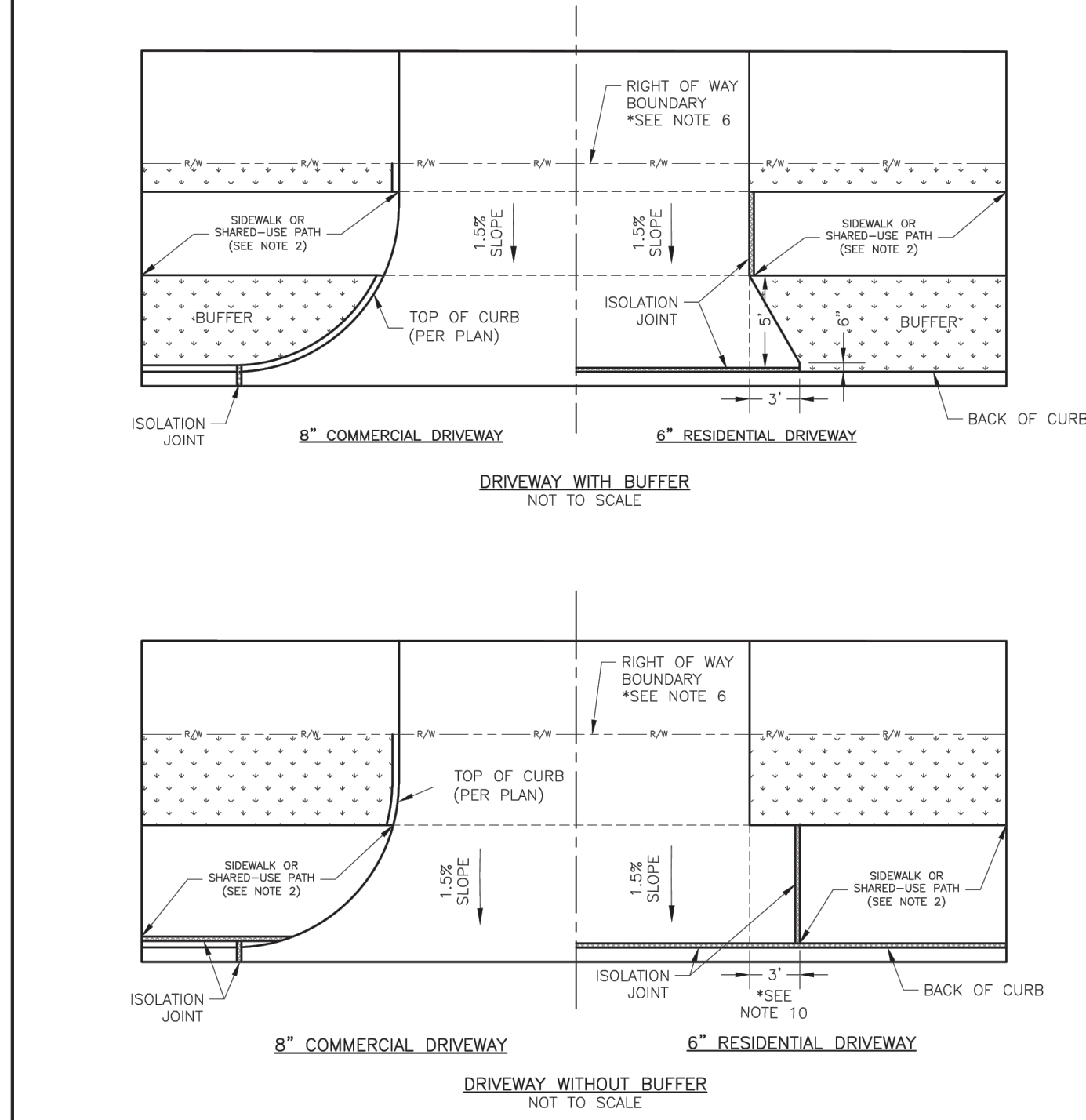
sheet
C11.0
Civil
DETAILS
permit
18 JULY 2023



Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



Revisions
8-29-23 CITY COMMENTS

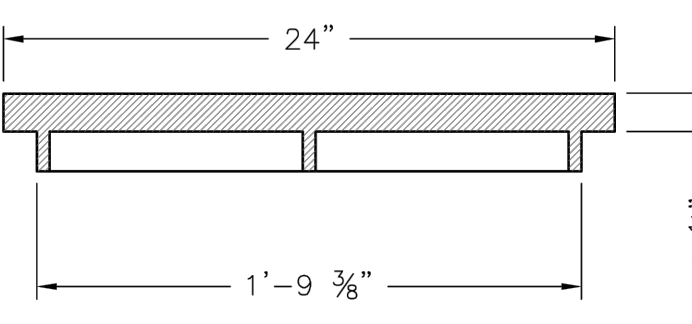


- GENERAL NOTES**
- SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
 - ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAD) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT DETAIL GEN-38, SIDEWALK/SHARED USE PATH RAMP AT DRIVEWAY DETAIL).
 - JOINT AT BACK OF CURB LINE SHALL BE AN ISOLATION JOINT FOR RESIDENTIAL DRIVEWAYS.
 - KCMMB 4K CONCRETE MIX IS REQUIRED FOR ALL CURBS.
 - COMMERCIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMMB 4K CONCRETE MIX.
 - RESIDENTIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, KCMMB 4K CONCRETE MIX IS RECOMMENDED. OTHER CONCRETE MIXES NEED TO BE APPROVED BY CITY INSPECTOR.
 - A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
 - WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
 - 3/4" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CG-1 CURB ONLY). MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
 - SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3' FROM THE DRIVEWAY.
 - THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT OF WAY.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Drawn By: MJF
Checked By: DL
Date: 06/2021
Proj. #:

GEN-1



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

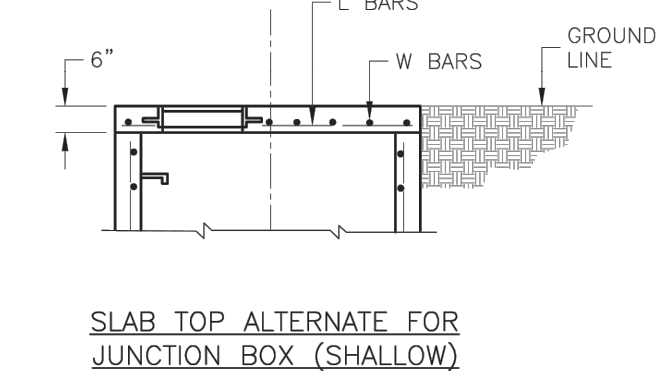
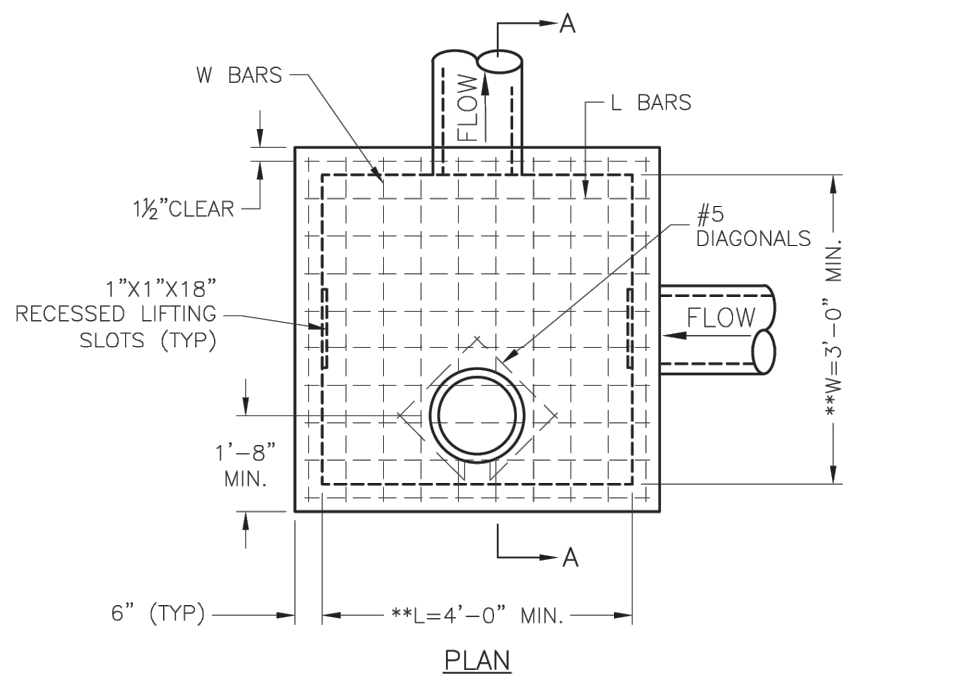
*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
11/27/2023



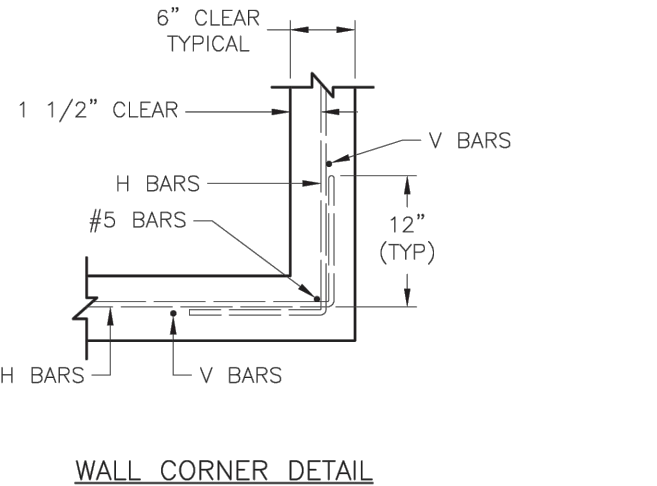
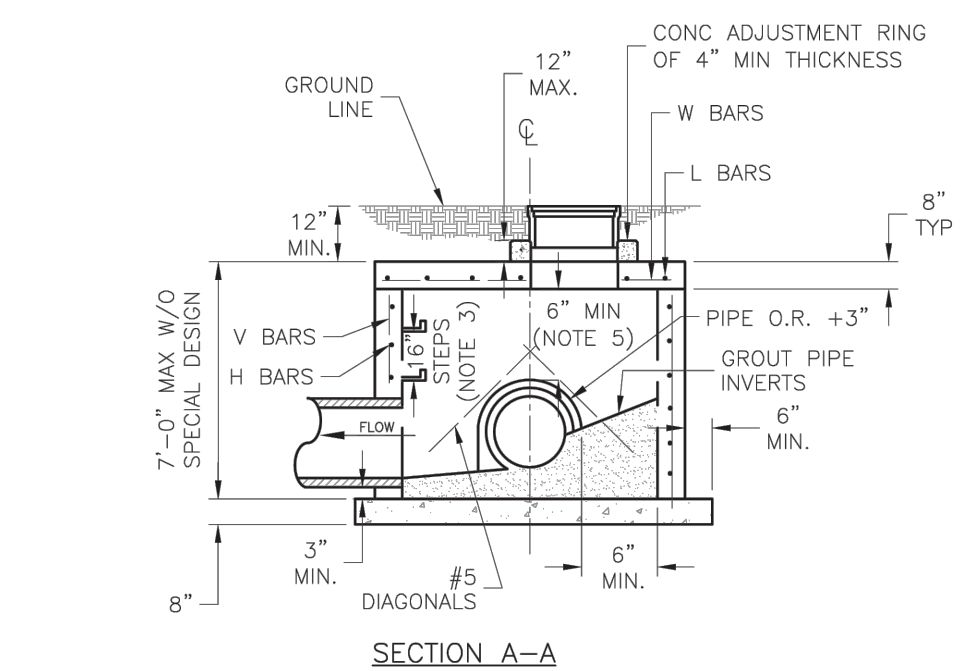
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083
STORM MANHOLE COVER DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL
STM-6



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

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

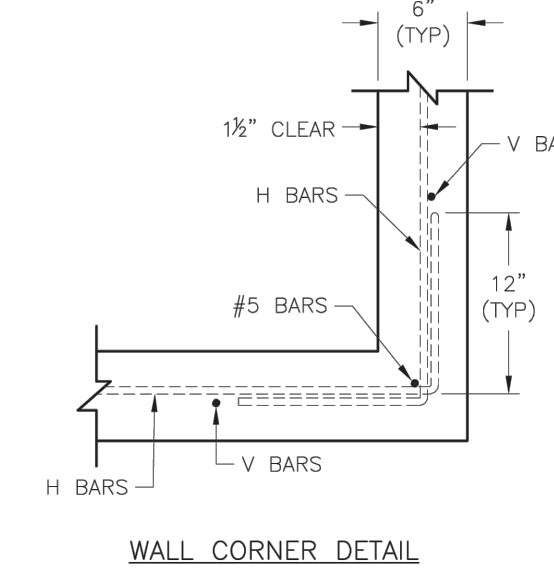
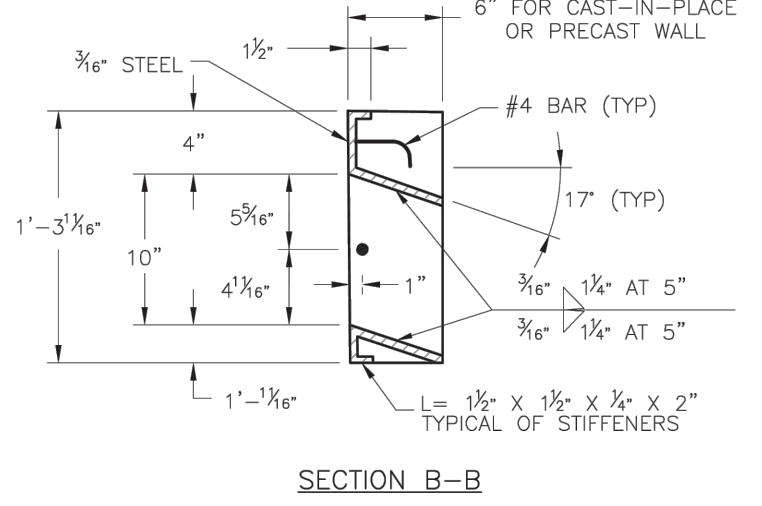
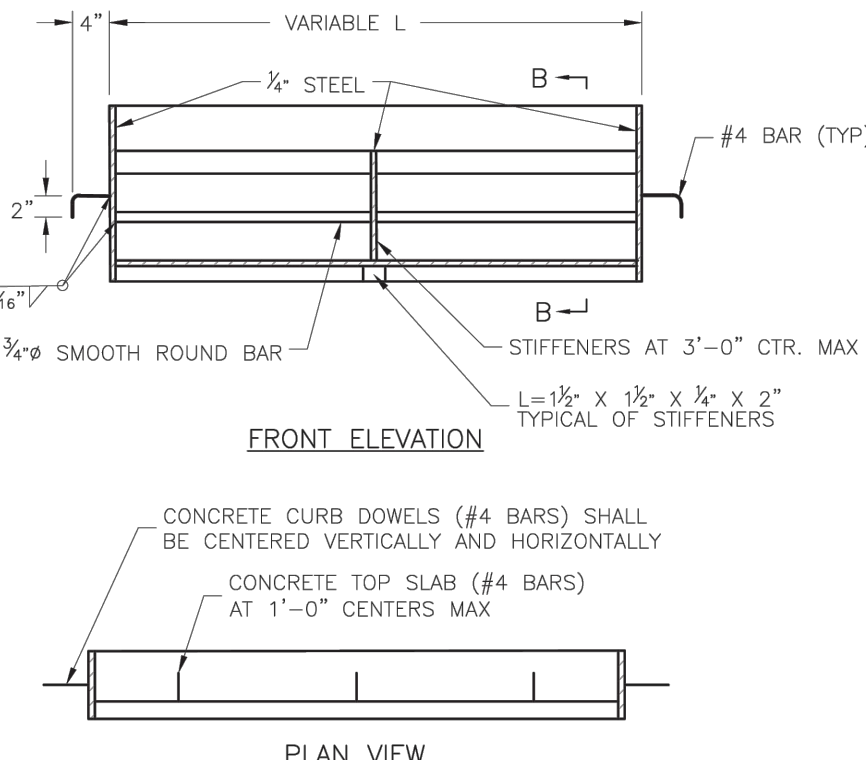
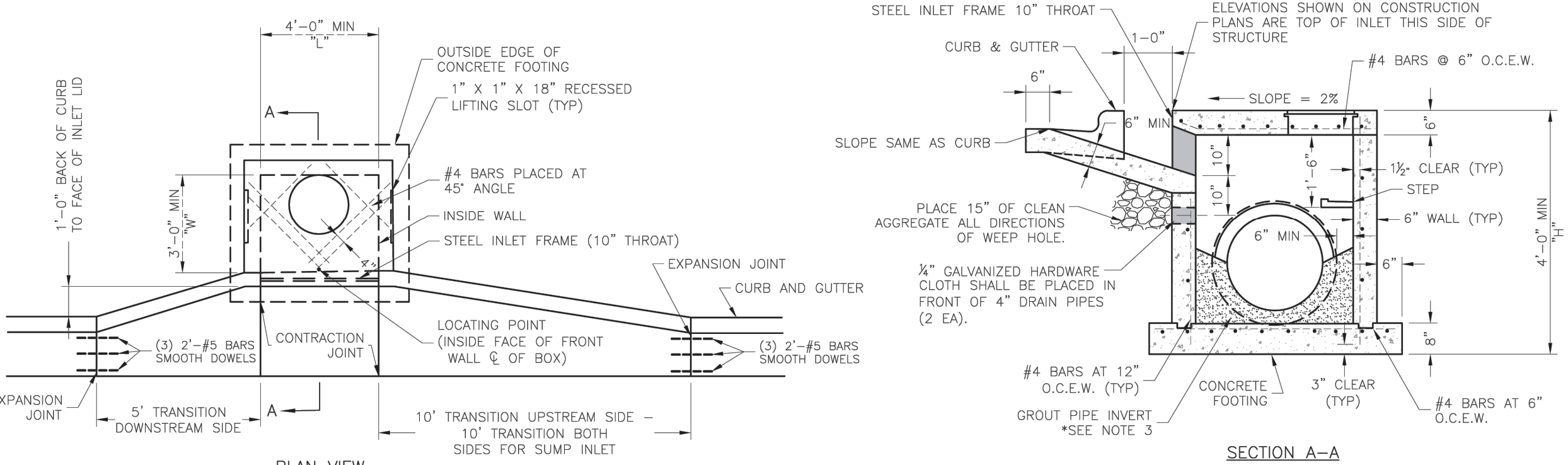


- GENERAL NOTES:**
- LOCATE RING AND COVER ON BLANK WALL.
 - USE 3/4" CHAMFER STRIP OR 1/2" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
 - STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
 - BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE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

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Drawn By: MJF
Checked By: DL
Date: 06/2021
Proj. #:

STM-3



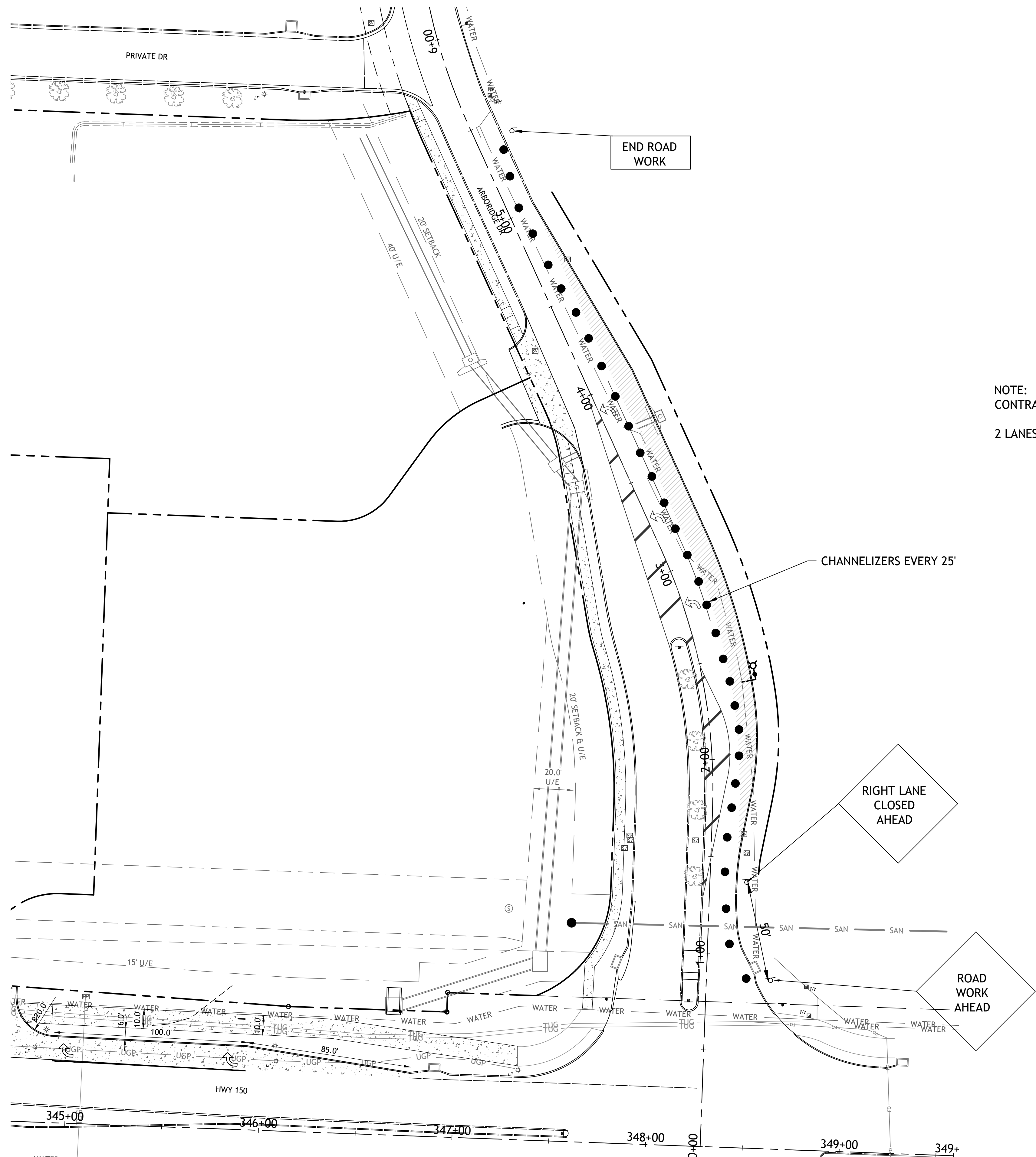
- GENERAL NOTES:**
- THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
 - FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
 - FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.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

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Drawn By: MJF
Checked By: DL
Date: 06/2021
Proj. #:

STM-1

ARBORIDGE DRIVE
IMPROVEMENTS
LEE'S SUMMIT, MO.



NOTE:
 CONTRACTOR TO SHIFT TRAFFIC CONTROL TO WEST SIDE AS NECESSARY
 2 LANES OF TRAFFIC TO BE MAINTAINED AT ALL TIMES.

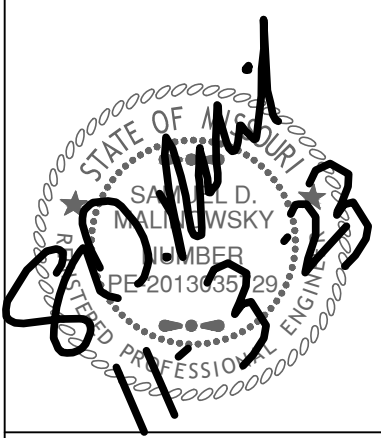
RELEASED FOR CONSTRUCTION
 As Noted on Plan Review

Development Services Department
 Lee's Summit, Missouri

11/27/2023

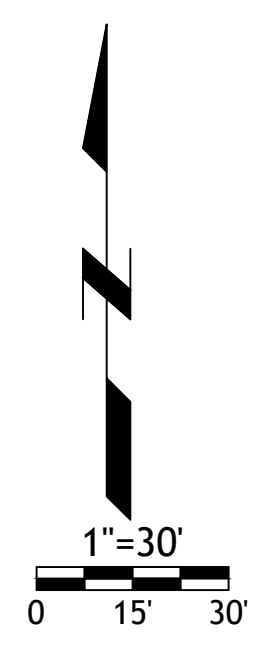
SM Engineering
SM E
 5507 High Meadow Circle
 Manhattan Kansas, 66503
 smcivilengr@gmail.com
 785.341.9747

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



Revisions
 8-29-23 CITY COMMENTS
 10-3-23 CITY COMMENTS
 10-25-23 CITY COMMENTS
 11-3-23 CITY COMMENTS

ARBORIDGE DRIVE
 IMPROVEMENTS
 LEES SUMMIT, MO.



sheet
C14.0
 Civil
 TRAFFIC CONTROL
 permit
 18 JULY 2023

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

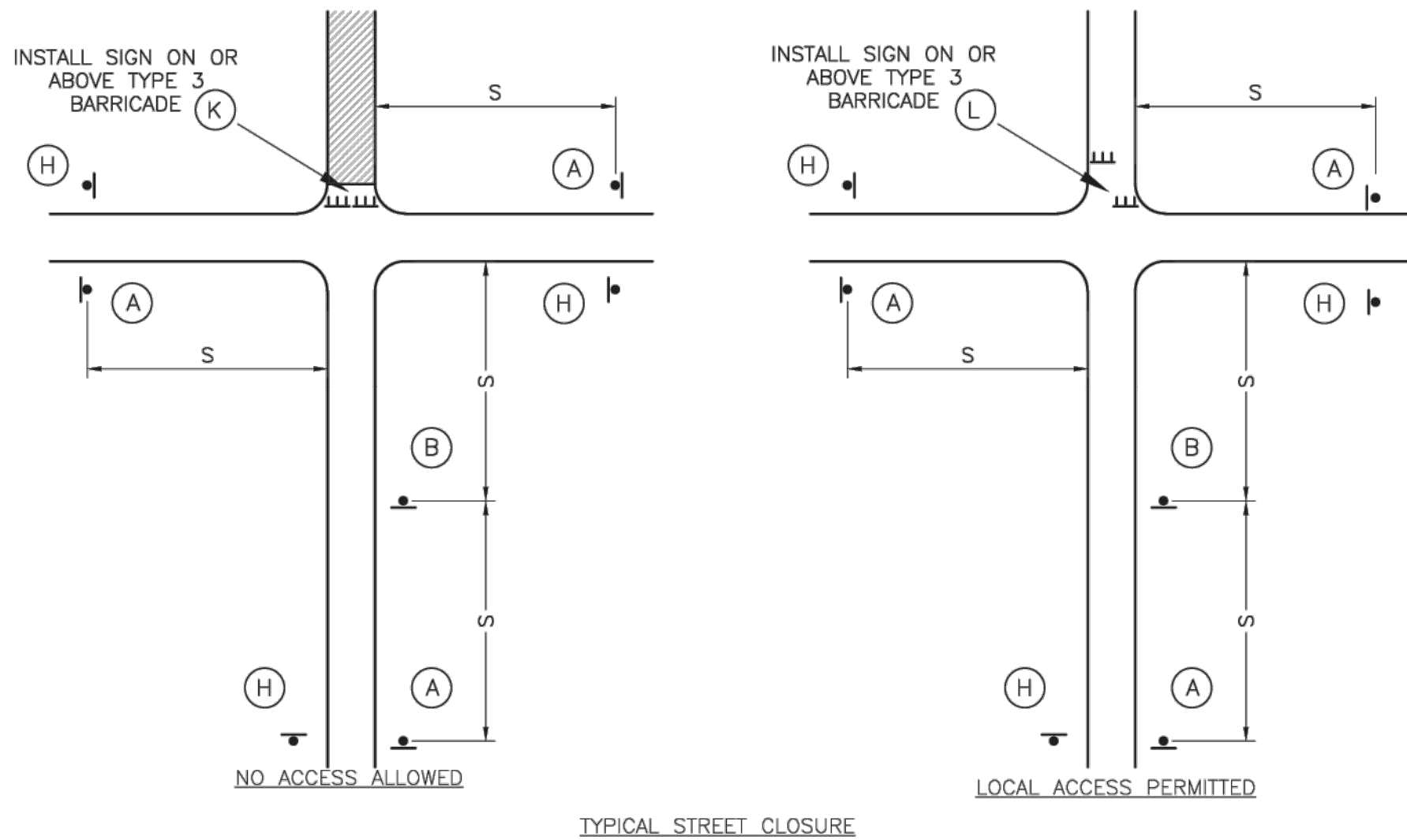
Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: TRAFFIC CONTROL DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TC-1

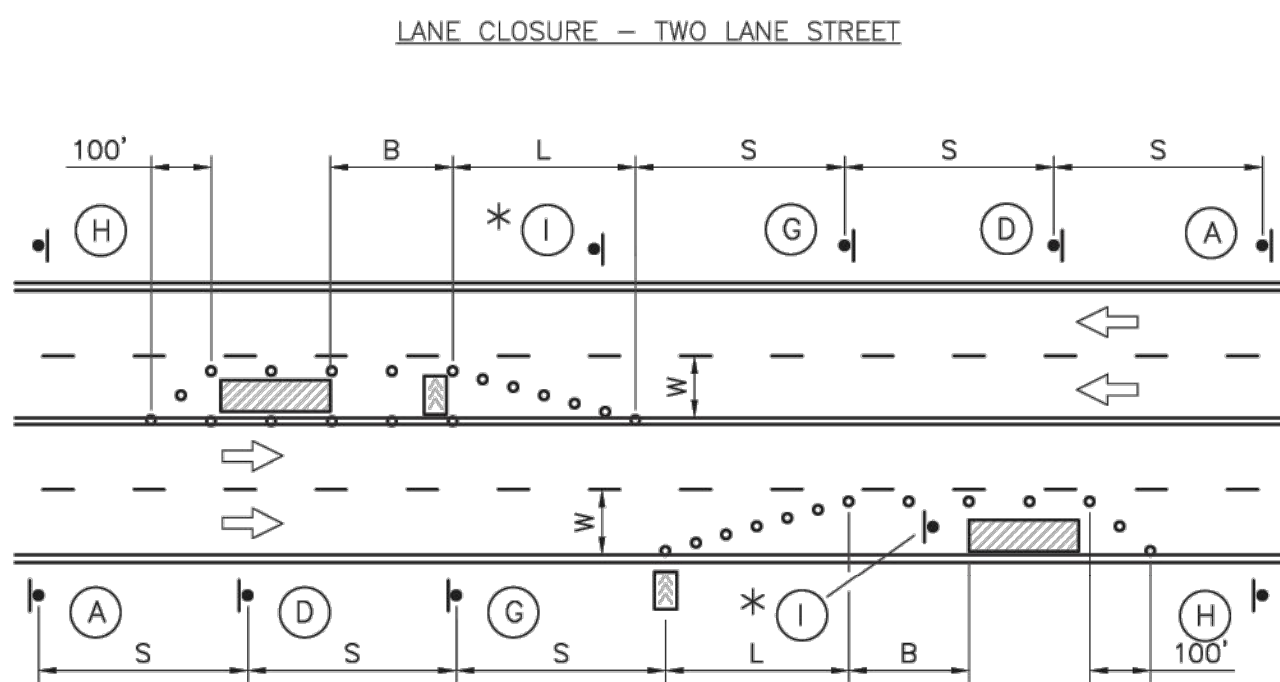
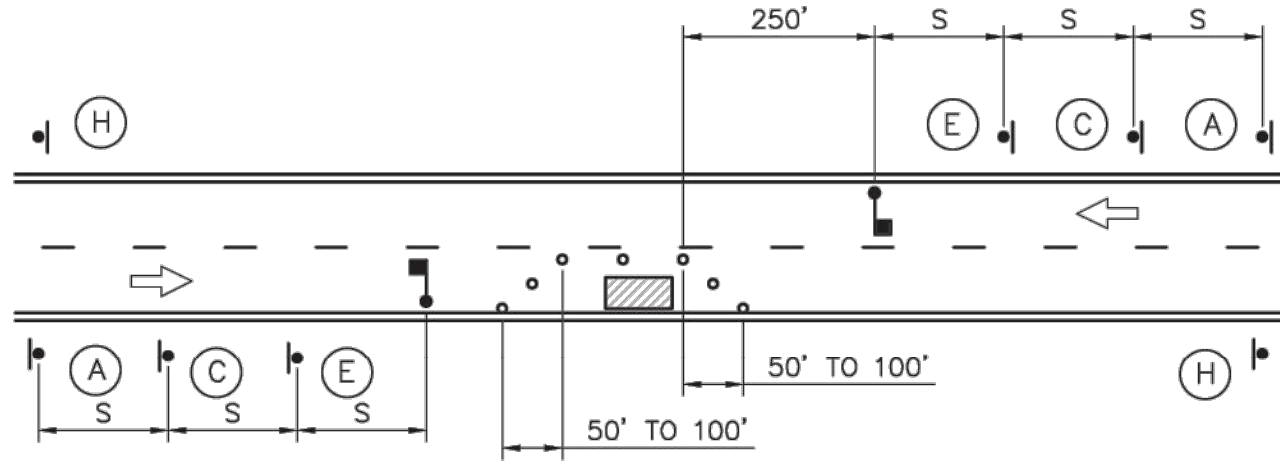
GENERAL NOTES:

- ALL SIGNS, BARRICADES, CHANNELIZERS, MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- ALL TRAFFIC CONTROL DEVICES SHALL BE STANDARD IN SIZE, SHAPE, COLOR, AND MESSAGE, IN GOOD CONDITION, AND RETRO-REFLECTORIZED. ALL SIGNS SHALL BE SECURELY MOUNTED WITH HEIGHT AND LATERAL LOCATION AS DESCRIBED IN THE MUTCD.
- WARNING LIGHTS SHALL BE USED ON BARRICADES IN PLACE AT NIGHT AND ON WARNING SIGNS WHICH ALERT DRIVERS ABOUT A CHANGE IN ALIGNMENT, TRAFFIC CONTROL, LANE CLOSURE, OR ROAD CLOSURE.
- FLAGGERS SHALL BE USED WHERE INDICATED ON THE PLANS, WHERE CONSTRUCTION VEHICLES INTERACT WITH NORMAL TRAFFIC, OR WHERE CONSTRUCTION ACTIVITIES IMPOSE A RESTRICTION ON TRAFFIC, AS DIRECTED BY THE CITY TRAFFIC ENGINEER. WHERE FLAGGERS ARE USED, ADVANCE SIGNING SHALL BE ERCTED AS SHOWN IN THE DETAILS OR AS SPECIFIED IN THE MUTCD. FLAGGERS SHALL MEET THE REQUIREMENTS IN THE MUTCD IN REGARD TO CHARACTER, TRAINING, ATTIRE, AND BEHAVIOR.
- TRIM-LINES ARE THE CITY'S PREFERRED CHANNELIZING DEVICE. CONES MAY NOT BE USED AT NIGHTTIME.
- TRAFFIC CONTROL DEVICES NOT IN USE OR NOT APPLICABLE SHALL BE EITHER COVERED OR REMOVED FROM THE WORK AREA.
- THE CONTRACTOR SHALL USE BARRICADES, STREET PLATES, OR FENCING AS NEEDED TO EFFECTIVELY SHIELD PEDESTRIAN AND VEHICULAR TRAFFIC FROM EXPOSED OBJECTS, EXCAVATIONS, AND CONSTRUCTION ACTIVITIES.
- ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS AND SIDE STREETS UNLESS NOTED OTHERWISE ON THE PLANS.
- NO STREET SHALL BE CLOSED WITHOUT THE APPROVAL OF THE CITY TRAFFIC ENGINEER. THE CONTRACTOR SHALL NOTIFY THE CITY TRAFFIC ENGINEER AT LEAST 7 DAYS IN ADVANCE OF ANY STREET CLOSURE. IF A DETOUR ROUTE AROUND THE CLOSURE IS TO BE PROVIDED, ALL DETOUR SIGNING SHALL BE AS SHOWN ON A PLAN APPROVED BY THE CITY TRAFFIC ENGINEER.
- CONSTRUCTION VEHICLES PARKED ALONG STREETS SHALL BE LOCATED WITHIN THE WORK AREA (TRAFFIC CONTROL) OR WHERE OTHERWISE NORMALLY PERMITTED. CONSTRUCTION MATERIALS, INCLUDING TRAFFIC CONTROL AND VEHICLES SHALL NOT RESTRICT SIGHT DISTANCE FOR VEHICLES EXITING AT STREETS OR DRIVES.
- CONSTRUCTION MATERIALS SHALL BE KEPT OFF OF SIDEWALKS, CONSOLIDATED IN ONE LOCATION WITHIN CITY RIGHT-OF-WAY, AND REMOVED DAILY UNLESS OTHERWISE APPROVED BY THE INSPECTOR. DIRT, MUD, AND OTHER CONSTRUCTION DEBRIS ON STREETS AND SIDEWALKS SHALL BE REMOVED IMMEDIATELY.
- THE CONTRACTOR SHALL NOT PERFORM ANY WORK THAT WILL RESTRICT VEHICULAR TRAFFIC IN ANY WAY BETWEEN THE HOURS OF 7:00 A.M. AND 9:00 A.M. OR 4:00 P.M. AND 6:00 P.M. MONDAY THROUGH FRIDAY UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS.
- ALL TRAVEL LANES SHOULD BE AT LEAST 11 FEET WIDE UNLESS OTHERWISE AUTHORIZED BY THE CITY TRAFFIC ENGINEER. A "NARROW LANES" SIGN SHALL BE INSTALLED IN ADVANCE OF A LANE WIDTH REDUCTION TO LESS THAN 11 FEET.
- ALL EDGE DROP-OFFS OF MORE THAN 2 INCHES AND LESS THAN 4 INCHES SHOULD BE PROTECTED BY A WEDGE OR BARRIER AND ALL EDGE DROP-OFFS GREATER THAN 4 INCHES SHALL HAVE EDGE PROTECTION (SEE TRAFFIC CONTROL SPECIFICATIONS FOR EDGE TREATMENT REQUIREMENTS).
- THE "WORKERS" SYMBOLIC SIGN (MUTCD NO. W21-1A) MAY BE USED INSTEAD OF THE "ROAD WORK AHEAD" SIGN FOR WORK WITH A DURATION OF 12 HOURS OR LESS. THE "END ROAD WORK" SIGN IS NOT REQUIRED TO BE INSTALLED AFTER THE "WORKERS" SIGN.
- NO TRAFFIC SIGNAL SHALL BE ALTERED OR MODIFIED IN ANY WAY WITHOUT A PLAN APPROVED BY THE CITY TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES ON AN AROUND-THE-CLOCK BASIS, WHETHER OR NOT WORK IS ACTIVELY BEING PURSUED AND ANY DEFICIENCIES NOTED SHALL BE CORRECTED IMMEDIATELY.
- THE TRAFFIC CONTROL REQUIREMENTS SHOWN ON THESE PLANS ARE MINIMUM REQUIREMENTS ONLY AND DO NOT ATTEMPT TO ADDRESS IN DEPTH THE VARIETY OF SITUATIONS THAT MAY OCCUR ONCE CONSTRUCTION HAS STARTED. IN NO WAY DO THE REQUIREMENTS SHOWN ON THESE PLANS RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR SELECTING THE PROPER TRAFFIC CONTROL DEVICES AND IMPLEMENTATION PROCEDURES THAT WILL ASSURE THE SAFETY OF DRIVERS, PEDESTRIANS, AND WORKERS AT ALL TIMES.
- SHOULD THE CONTRACTOR FAIL TO ENFORCE THE TRAFFIC CONTROL PLAN OR FAIL TO CLEAN, REPLACE OR OTHERWISE MAINTAIN THE TRAFFIC CONTROL DEVICES WHEN DIRECTED TO DO SO BY THE CITY TRAFFIC ENGINEER OR REPRESENTATIVE, THE CITY MAY TAKE ONE OR MORE OF THE FOLLOWING ACTIONS:
 - EMPLOY ANOTHER AGENCY TO CORRECT DEFICIENCIES IN TRAFFIC CONTROL DEVICES AND DEDUCT THE COST FROM THE CONTRACTOR'S PAY ESTIMATE.
 - STOP THE WORK UNTIL DEFICIENCIES ARE CORRECTED.
 - SUSPEND ALL PAY ESTIMATES UNTIL DEFICIENCIES ARE CORRECTED, OR
 - PLACE THE CONTRACTOR IN DEFAULT.

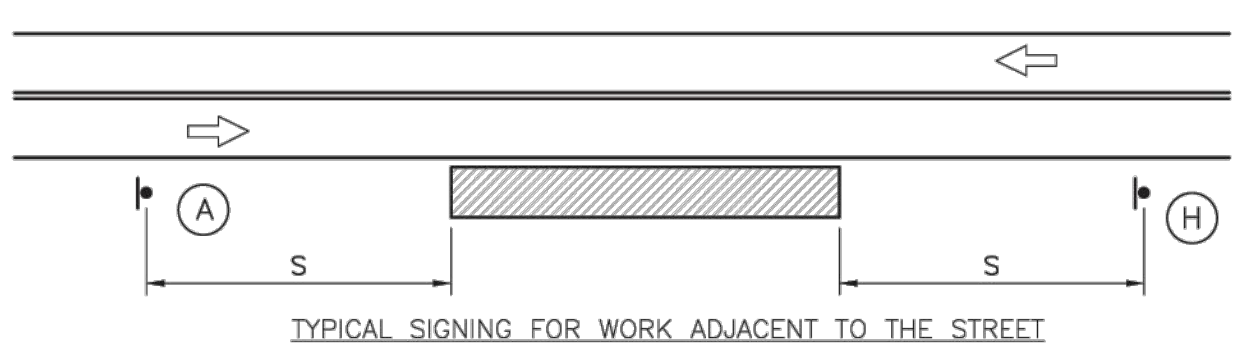
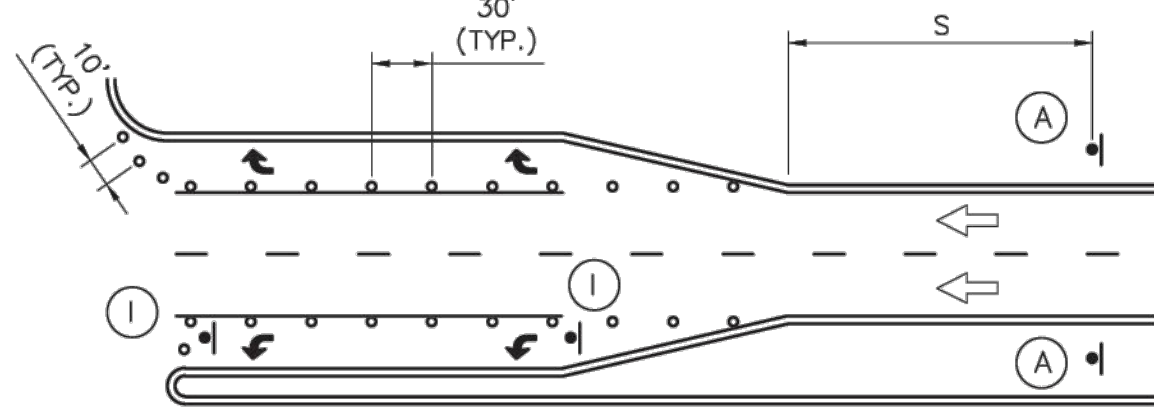


SYMBOL LEGEND

- WORK AREA
- SIGN
- BARRICADE
- DIRECTION OF TRAVEL
- CHANNELIZER
- ARROW PANEL
- FLAGGER



*INSTALL SIGNS EVERY 200 FEET THROUGHOUT THE CLOSED LANE OR AS NEEDED

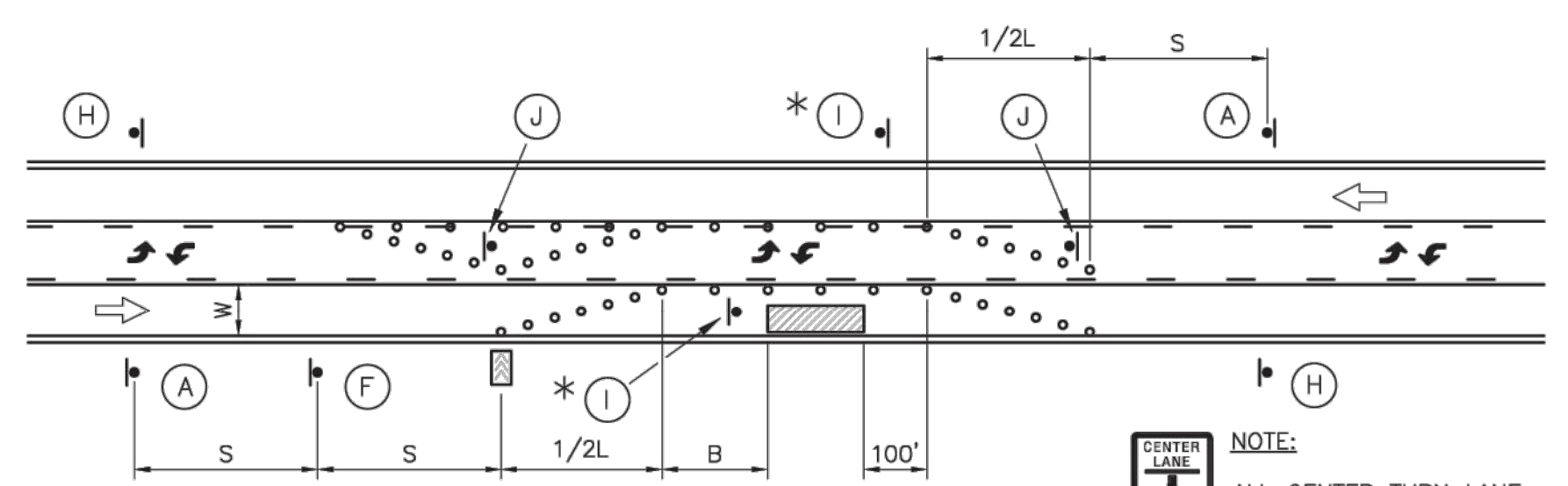
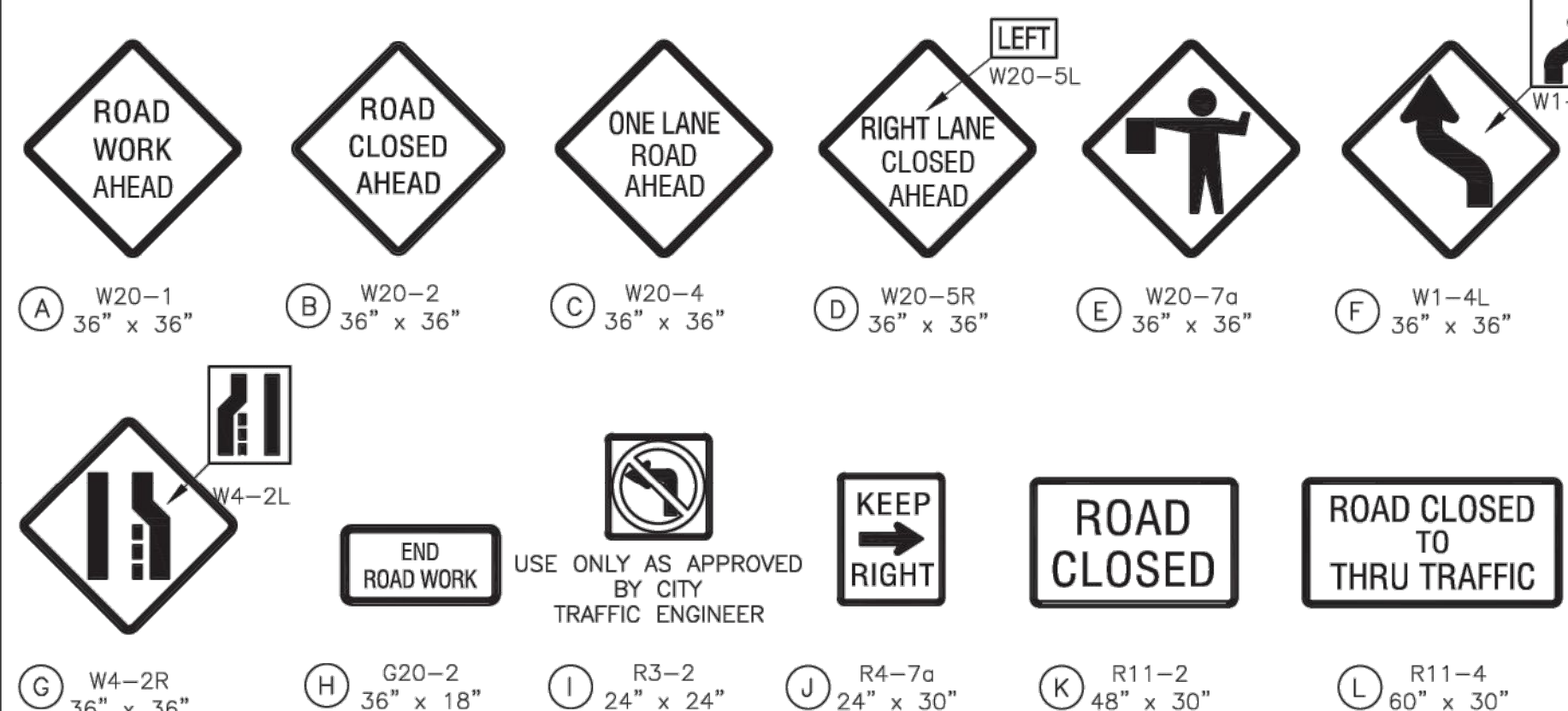


GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE "B"		MAXIMUM CHANNELIZER SPACING		
SPEED LIMIT (MPH)	LENGTH (FEET)	SPEED LIMIT (MPH)	WITHIN TAPER (FEET)	OUTSIDE TAPER (FEET)
25	35	25	25	50
30	55	30	30	60
35	85	35	35	70
40	120	40	40	80
45	170	45	45	90

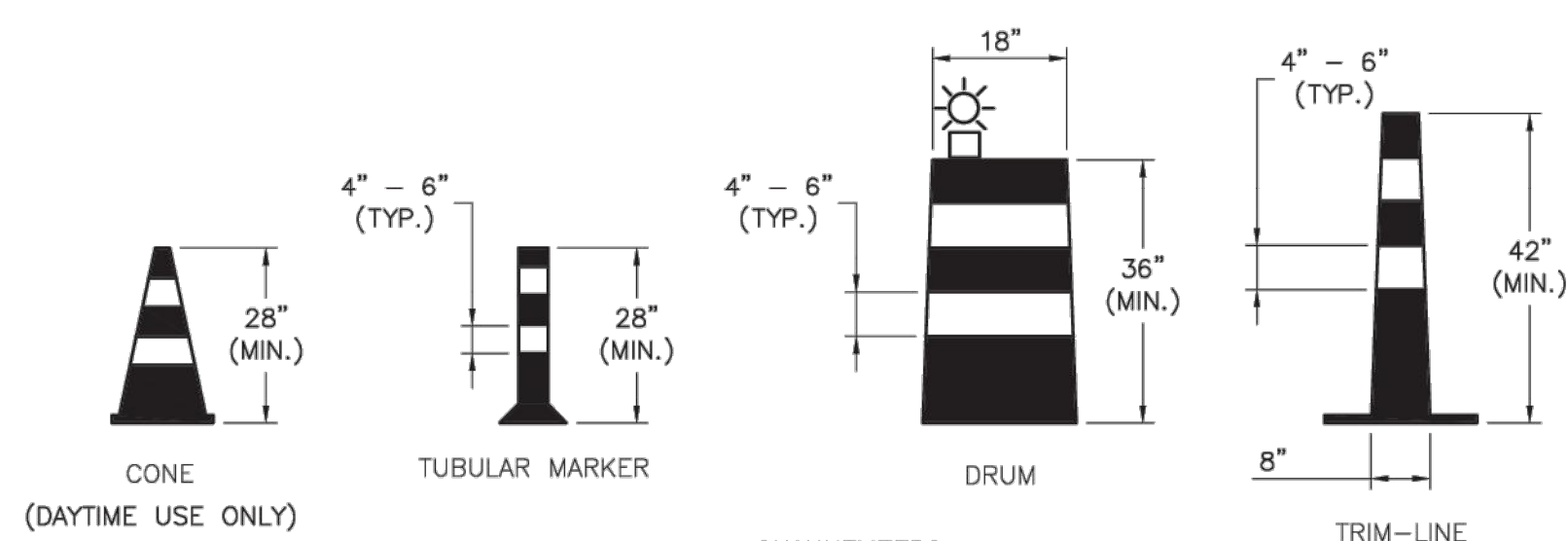
TAPER DIMENSIONS (FEET)				SIGN SPACING "S"	
SPEED LIMIT (MPH)	MINIMUM TAPER LENGTH "L", PER LANE WIDTH "W"			MINIMUM NUMBER OF CHANNELIZERS	
	10	11	12		
25	105	115	125	6	
30	150	165	180	7	
35	205	225	245	8	
40	270	295	320	9	
45	450	495	540	13	

SPEED LIMIT (MPH)	SPACING (FEET)
25	100
30-35	250
40	350

SIGN LEGEND



*INSTALL SIGNS EVERY 200 FEET THROUGHOUT THE CLOSED LANE OR AS NEEDED



CHANNELIZERS

NOTE:
WHITE BANDS ON BARRICADES AND CHANNELIZERS SHALL BE MADE FROM HIGH INTENSITY SHEETING MATERIAL.

