

FINAL DEVELOPMENT PLANS

FOR

THE LEARNING EXPERIENCE

ARBOR WALK WEST

LEE'S SUMMIT, MO

UTILITIES
Electric Service
Evergy
Ron DeJarnette
816-347-4316
ron.dejarnette@evergy.com

Gas Service
Spire
Bobbe Saulsberry
816-591-6909
bobbie.saulsberry@sprienergy.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

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.



DESCRIPTION
LOT 3 PROPOSED ARBORWALK WEST ADDITION

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.

NOTE:
THERE ARE NO GAS/OIL WELLS ON SITE
PER MDNR DATA BASE OF OIL AND GAS
PERMITS.

INDEX OF SHEETS

C-1	COVER SHEET
C-2	EXISTING CONDITIONS
C-3	EXISTING CONDITIONS
C-4	OVERALL SITE PLAN
C-5	UTILITY PLAN
C-6	GRADING PLAN
C-7	STORM LINE C PLAN AND PROFILE
C-7.1	STORM LINE A PLAN AND PROFILE
C-8	DRAINAGE PLAN
C-9	EROSION CONTROL
C-10	EROSION DETAILS
C-11	DETAILS
C-12	DETAILS
C-13	DETAILS
C-14	LANDSCAPE PLAN
C-15	FIRE TRUCK MOVEMENTS
C-16	PHOTOMETRIC PLAN

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
1310 WESTLOOP PL SUITE #315
MANHATTAN KANSAS, 66502
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

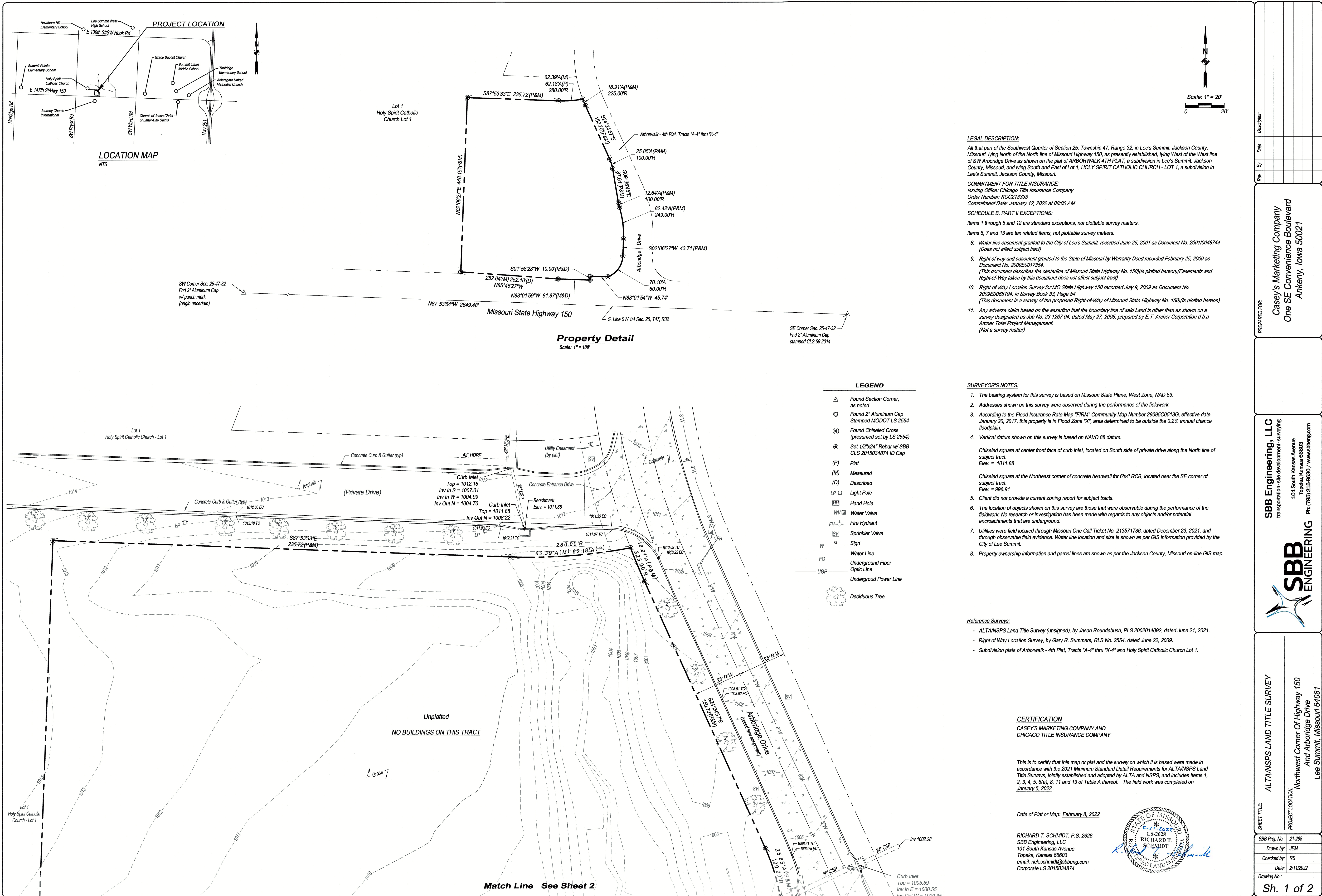
SM Engineering
1310 WESTLOOP
PL SUITE #315
MANHATTAN KS, 66502
smcivilengr@gmail.com
785.341.9747

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

ARBOR WALK WEST
LOT 3
LEE'S SUMMIT, MO.

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

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

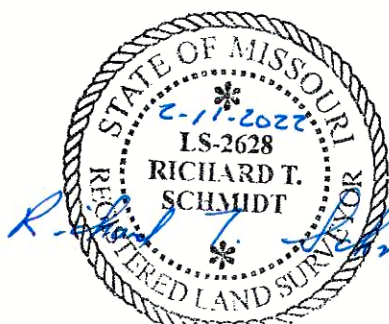
CERTIFICATION

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



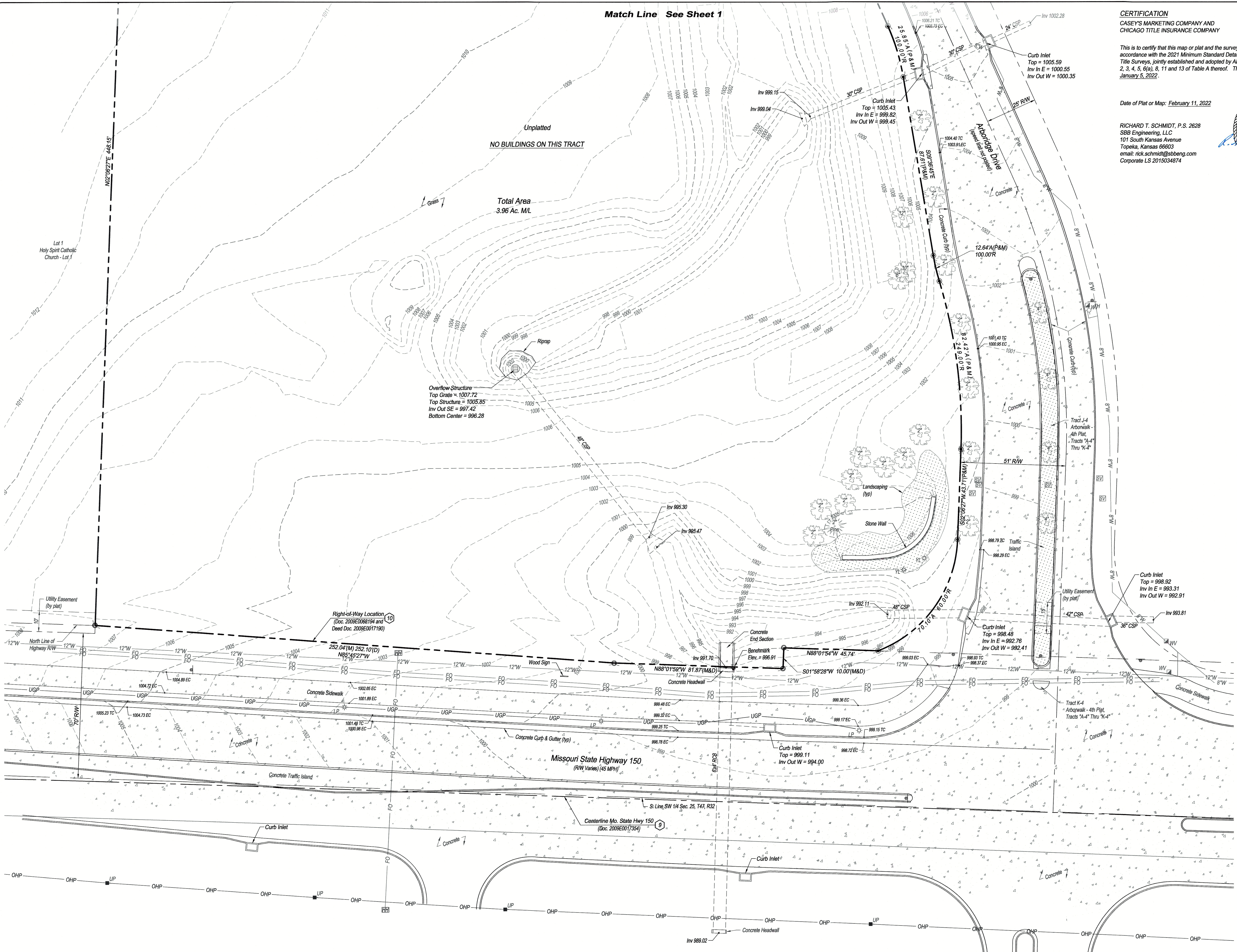
Casey's Marketing Company
One SE Convenience Boulevard
Ankeny, Iowa 50021

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



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.:

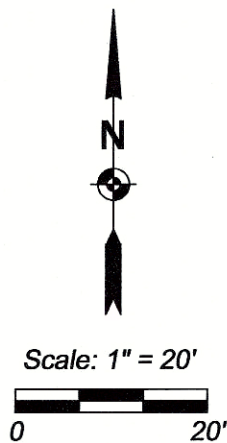
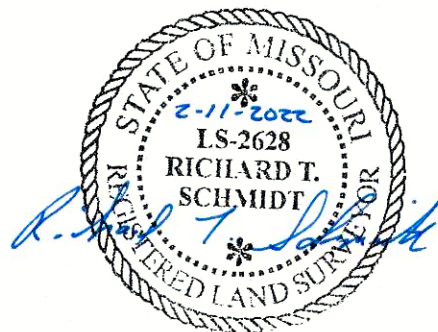


CERTIFICATION
CASEY'S MARKETING COMPANY AND
CHICAGO TITLE INSURANCE COMPANY

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



Rev.	By	Date	Description

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

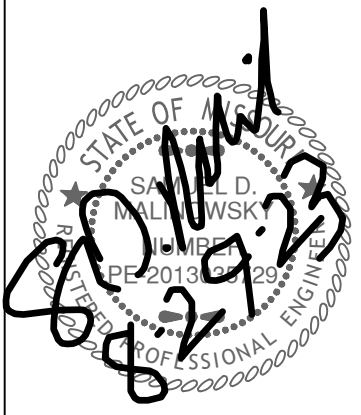
SBB Engineering, LLC
transportation - site development - surveying
301 South Kansas Avenue
Topeka, Kansas 66603
Ph: (785) 215-9630 / www.sbbeng.com

SBB ENGINEERING

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

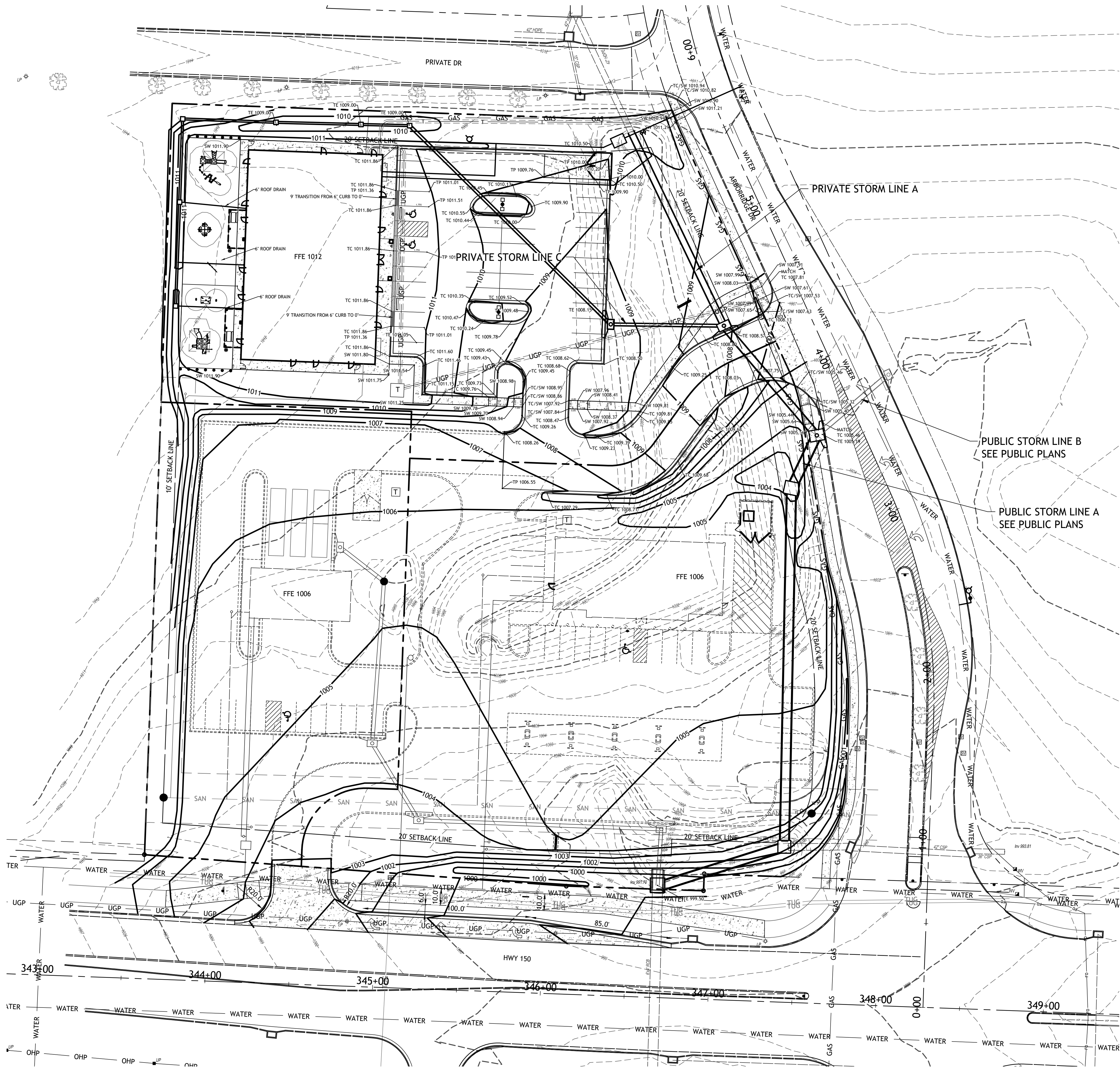
SBB Proj. No.:	21-288
Drawn by:	JEM
Checked by:	RS
Date:	2/11/2022
Drawing No.:	Sh. 2 of 2

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.

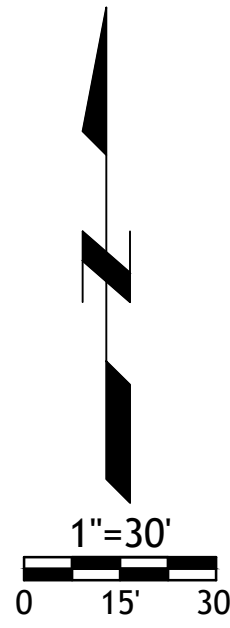


Revisions
8-29-23 CITY COMMENTS

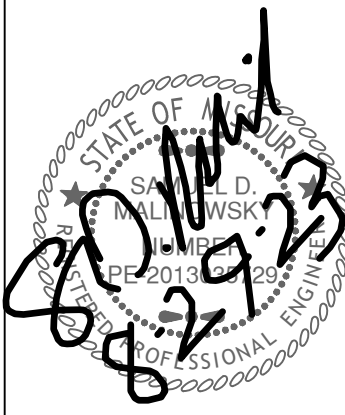
ARBOR WALK WEST
LOT 3
LEES SUMMITT, MO.



- GRADING NOTES:**
1. EARTHWORK UNDER THE BUILDING SHALL COMPLY WITH THE PROJECT ARCHITECTURAL PLANS. OTHER FILL MATERIAL SHALL BE MADE IN LIFTS NOT TO EXCEED EIGHT INCHES DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. FILL MATERIAL MAY INCLUDE ROCK FROM ON-SITE EXCAVATION IF CAREFULLY PLACED SO THAT LARGE STONES ARE WELL DISTRIBUTED AND VOIDS ARE COMPLETELY FILLED WITH SMALLER STONES, EARTH, SAND OR GRAVEL TO FURNISH A SOLID EMBANKMENT. NO ROCK LARGER THAN THREE INCHES IN ANY DIMENSION NOR ANY SHALE SHALL BE PLACED IN THE TOP 12 INCHES OF EMBANKMENT.
 2. AREAS THAT ARE TO BE CUT TO SUBGRADE LEVELS SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS.
 3. IN ALL AREAS OF EXCAVATION, IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED. A QUALIFIED GEOTECHNICAL ENGINEER SHALL RECOMMEND TO THE OWNER THE METHODS OF UNDERCUTTING AND REPLACEMENT OF PROPERLY COMPACTED, APPROVED FILL MATERIAL. ALL PROOF ROLLING AND UNDERCUTTING SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER.
 4. CONTRACTOR SHALL USE SILT FENCE OR OTHER MEANS OF CONTROLLING EROSION ALONG THE EDGE OF THE PROPERTY OR OTHER BOTTOM OF SLOPE LOCATIONS.
 5. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS.
 6. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
 7. IT IS NOT THE DUTY OF THE ENGINEER OR THE OWNER TO REVIEW THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE AT ANY TIME DURING CONSTRUCTION.
 8. PIPE LENGTHS ARE CENTER TO CENTER OF STRUCTURE OR TO END OF END SECTIONS.
 9. HANDICAP STALLS SHALL MEET ADA REQUIREMENTS AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION AT THE BUILDING ENTRY AND ACCESSIBLE PARKING STALLS. SLOPES EXCEEDING 2.0% WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 10. CONTRACTOR TO ADJUST DEPTHS OF EXISTING SERVICE LINES AS NECESSARY
 11. ALL CONSTRUCTION TRAFFIC, TEMPORARY TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS SHALL CONFORM TO REQUIREMENTS OF THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 12. SITE BEING ROUGH GRADED TO 12.5" BELOW FINISHED GRADE
 13. CONTRACTOR TO PLACE 8" LOW PERMEABILITY LVC FOR BUILDING PAD

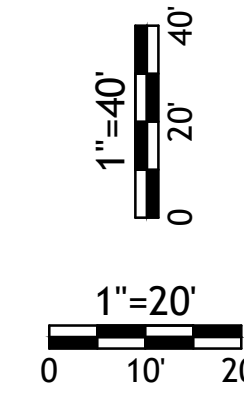
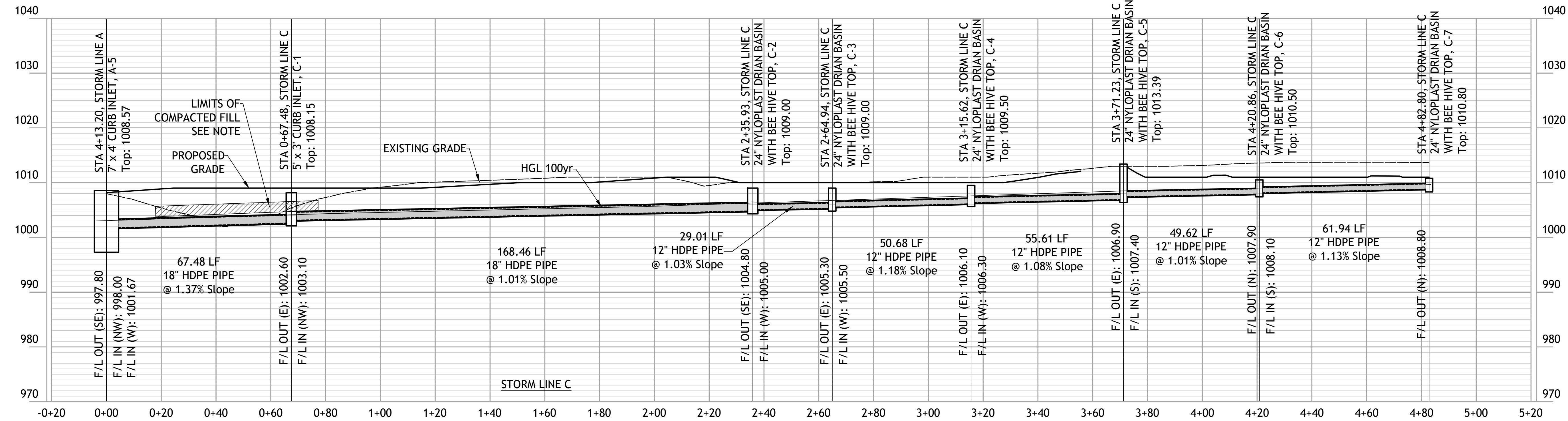
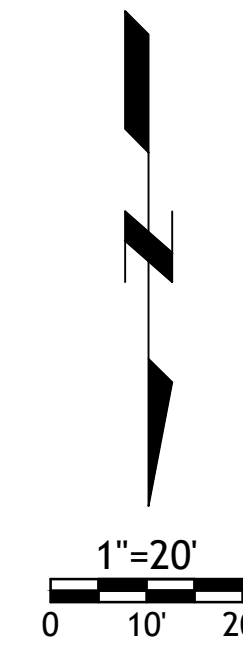
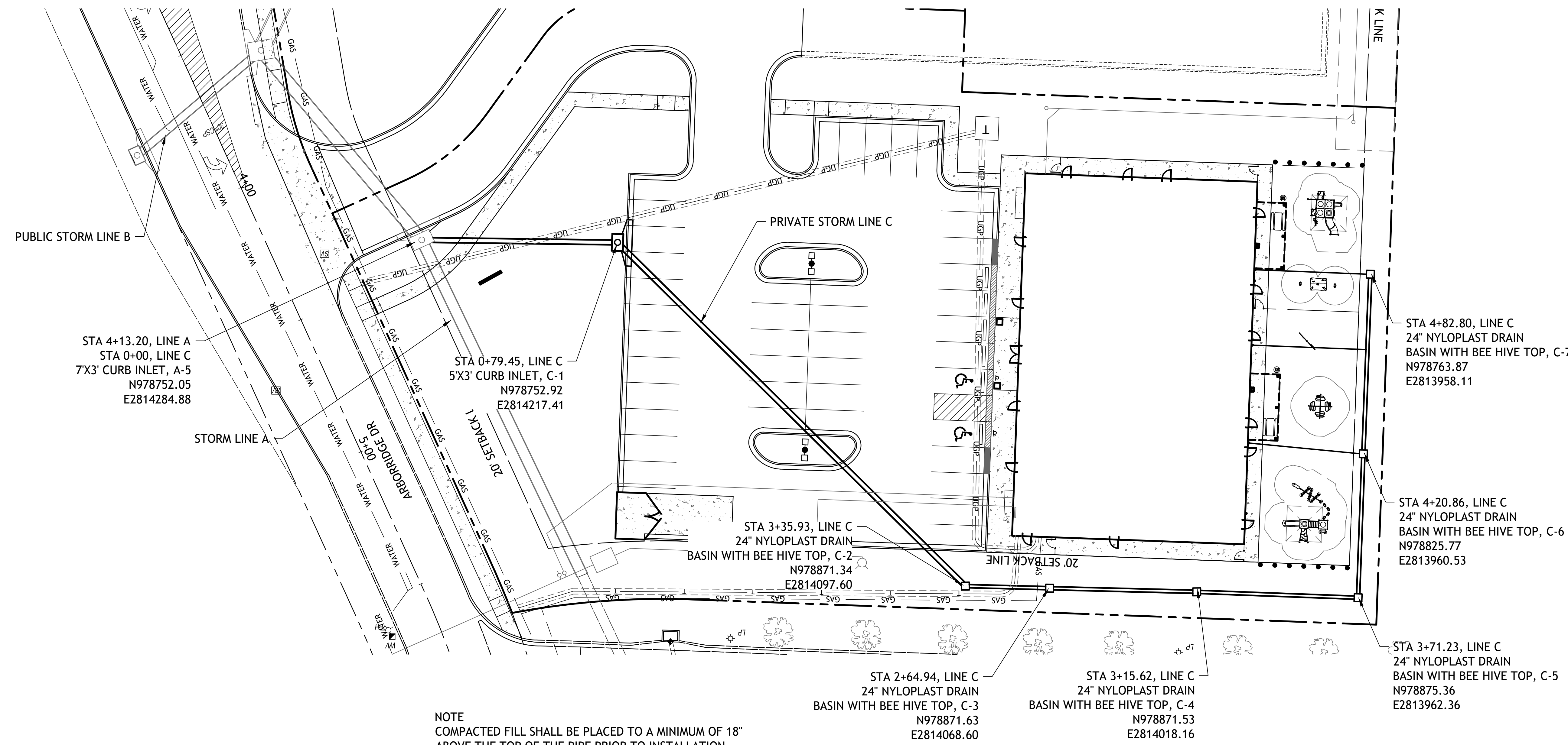


Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineer is prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual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



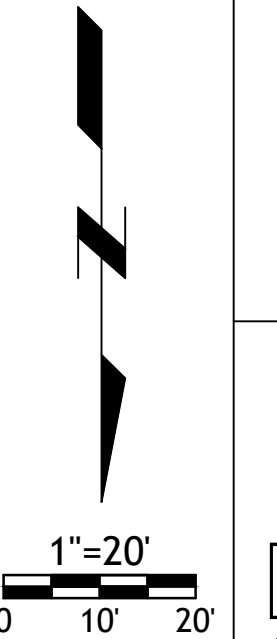
Revisions
8-29-23 CITY COMMENTS

ARBOR WALK WEST LOT 3 LEES SUMMITT, MO.



ARBOR WALK WEST
LOT 3
LEE'S SUMMITT, MO.

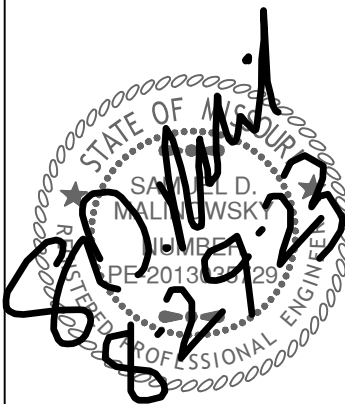
sheet
C7.1
Civil
STORM LINE A
PLAN AND PROFILE
permit
19 JULY 2023



Profile view of Storm Line A. The vertical axis shows elevation in feet (970 to 1030). The horizontal axis shows stationing from -0+20 to 5+60. The profile includes existing and proposed grades, a 100-year high water level (HGL 100yr), and various pipe segments with their lengths and slopes. Key features include manholes at stations 0+00, 0+80, 2+88, 3+27, 4+13, and 5+41. The profile also shows compacted fill areas and limits of construction.

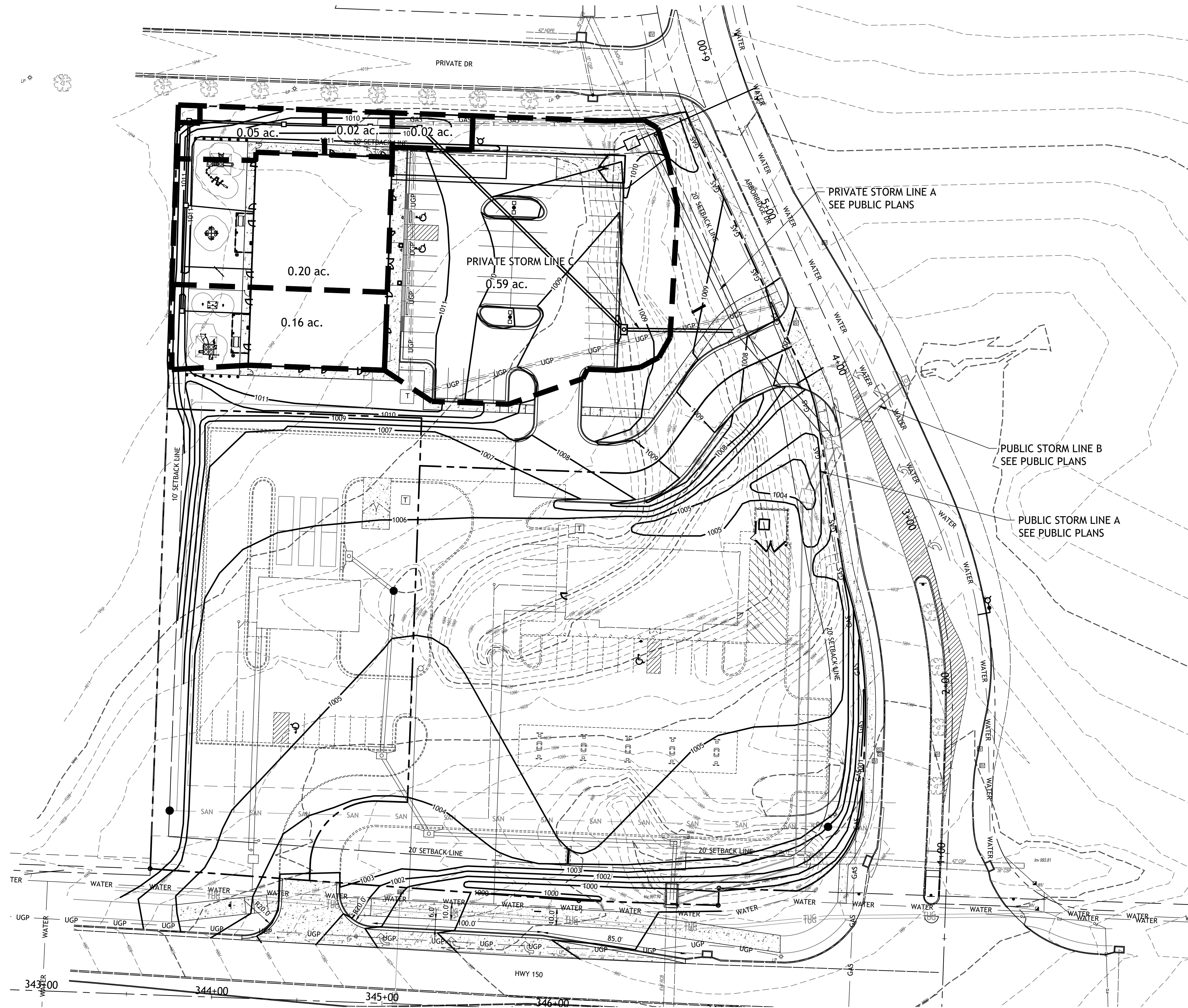
Station <th>Feature / Pipe Segment <th>Length (LF)</th> <th>Slope</th> <th>Notes</th> </th>	Feature / Pipe Segment <th>Length (LF)</th> <th>Slope</th> <th>Notes</th>	Length (LF)	Slope	Notes
0+00 to 0+80	60" RCP PIPE	77.12	@ 1.00% Slope	Existing
0+80 to 2+88	60" RCP PIPE	213.78	@ 1.00% Slope	Proposed
2+88 to 3+27	60" RCP PIPE	34.88	@ 1.00% Slope	Proposed
3+27 to 4+13	48" HDPE PIPE	85.59	@ 2.11% Slope	Proposed
4+13 to 5+41	42" HDPE PIPE	128.16	@ 1.19% Slope	Proposed

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.



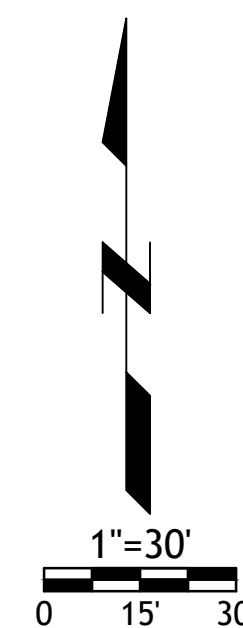
Revisions
8-29-23 CITY COMMENTS

ARBOR WALK WEST
LOT 3
LEES SUMMITT, MO.

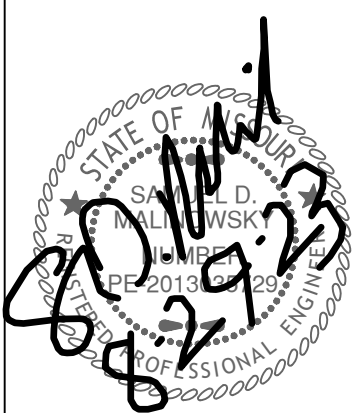


100 Year Storm Calculations

Station	Station	Length	Drainage Area	Drainage Area	Runoff C x Area	C x Area	Tc	Intensity	Intensity	Runoff	Runoff	Add'l F	Total F	Cap Full Ave	Ve Line	Line	Invert Elev	Invert Elev	HGL Elev	HGL Elev	Surface Elev	Surface Elev	Line Id
Line	To Line		(ft)	(ac)	(C)	(ac)	(min)	(min)	(in/hr)	(in/hr)	(cfs)	(cfs)	(cfs)	(cfs)	(ft/s)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	Outfall	31.5	0	1.04	0	0	0.9	0	6.4	0	12.26	0	11.04	0	118.2	151.4	9.5	48	1.11	997.8	997.45	1001.6	A5-A4
2	1	67.48	0.59	1.04	0.95	0.56	0.9	5	6.3	12.9	12.32	7.23	11.09	0	11.09	13.36	6.28	18	1.38	1002.6	1001.67	1004.21	A5-C1
3	2	168.46	0.02	0.45	0.3	0.01	0.34	5	5.8	12.9	12.53	0.08	4.26	0	4.26	11.43	3.47	18	1.01	1004.8	1003.1	1005.59	C1-C2
4	3	29	0.02	0.43	0.3	0.01	0.33	5	5.7	12.9	12.56	0.08	4.2	0	4.2	3.92	5.6	12	1.03	1005.3	1005	1006.21	C2-C3
5	4	50.68	0.05	0.41	0.8	0.04	0.33	5	5.6	12.9	12.63	0.52	4.14	0	4.14	4.2	5.27	12	1.18	1006.1	1005.5	1007.17	C3-C4
6	5	55.61	0	0.36	0.9	0	0.29	5	5.4	0	12.71	0	3.66	0	3.66	3.7	4.66	12	1.08	1006.9	1006.3	1008.09	RD-C4
7	6	49.62	0.16	0.36	0.8	0.13	0.29	5	5.2	12.9	12.78	1.65	3.68	0	3.68	3.87	4.69	12	1.01	1007.9	1007.4	1008.98	C5-C6
8	7	61.94	0.2	0.2	0.8	0.16	0.16	5	5	12.9	12.9	2.06	2.06	0	2.06	3.08	2.63	12	0.84	1008.5	1008.1	1009.49	C6-C7
9	1	128.16	0	0	0	0	0	0	0	0	0	0	107.2	107.2	117.9	11.1	42	1.17	999.5	998	1004.02	1002.78	A5-A6



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

ARBOR WALK WEST
LOT 3
LEES SUMMIT, 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.

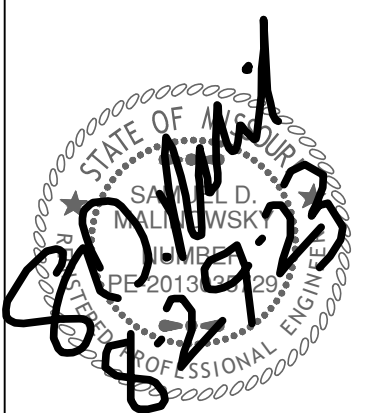
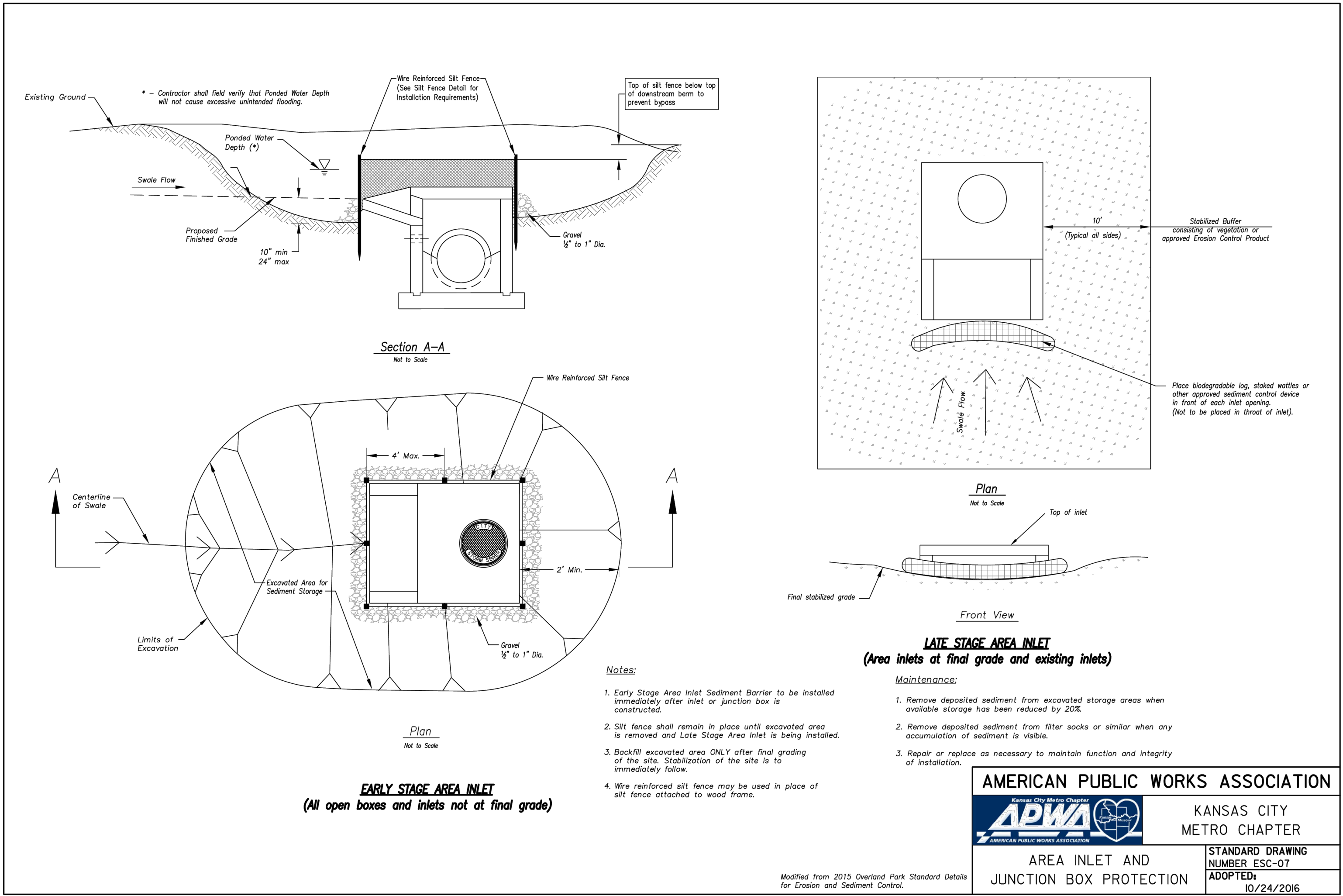
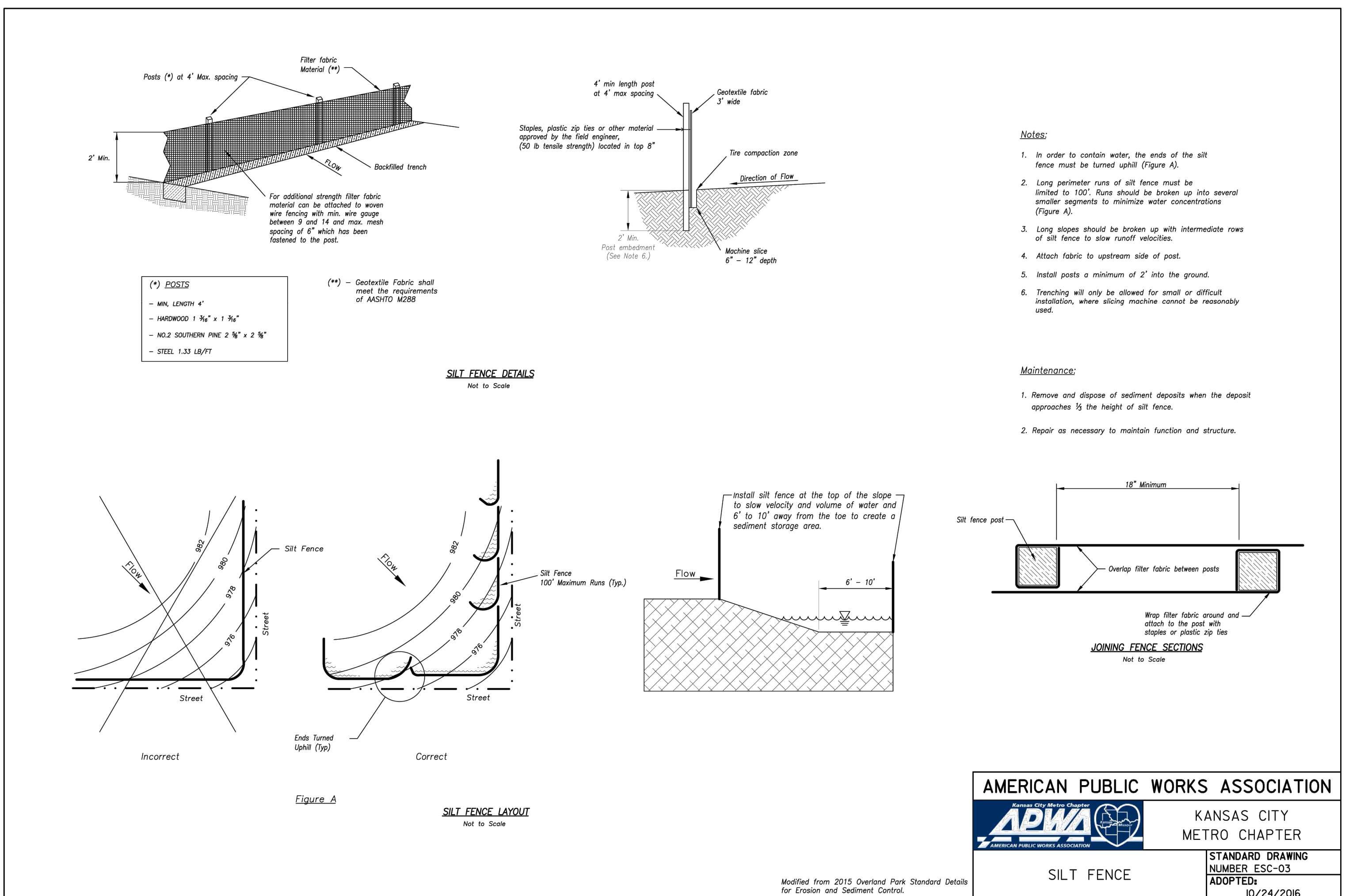
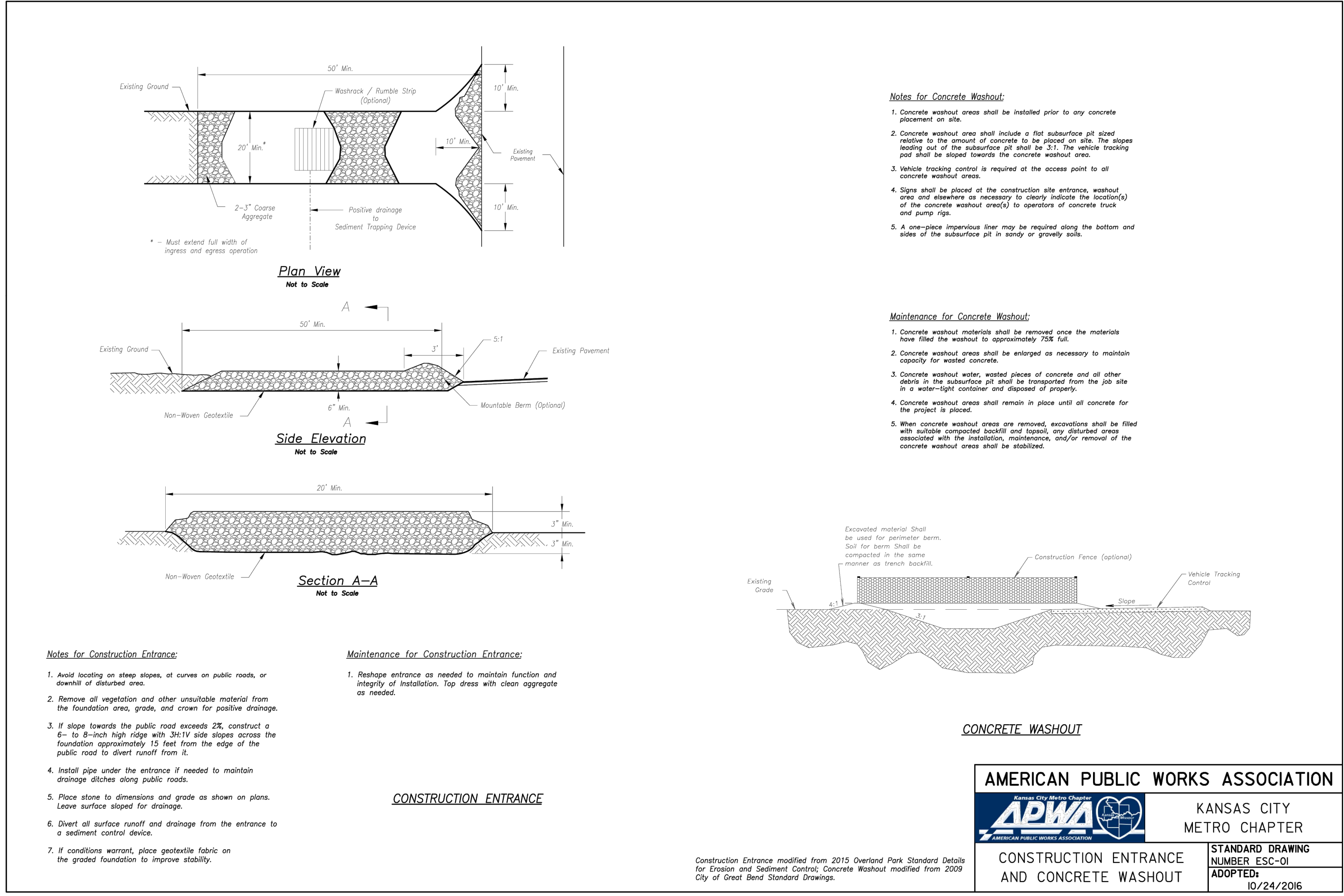
EROSION CONTROL NOTES

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

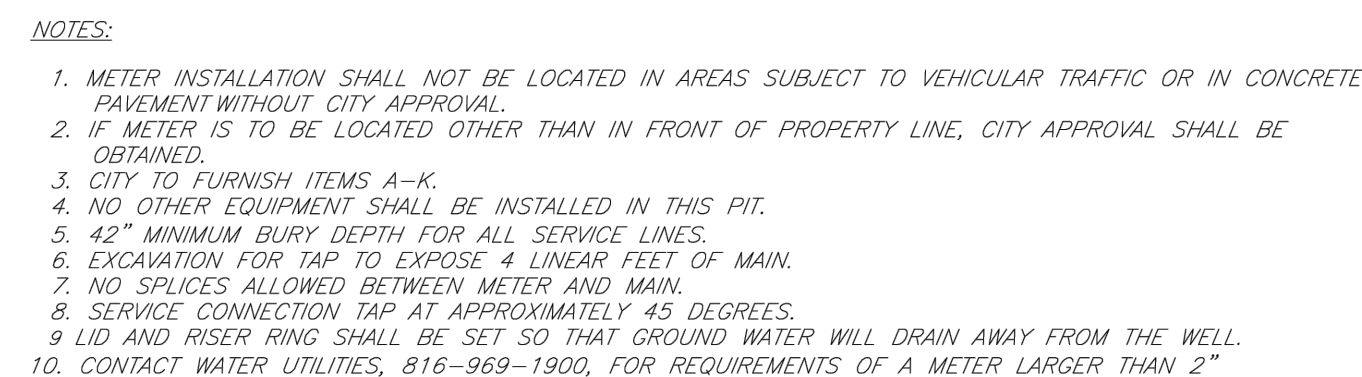
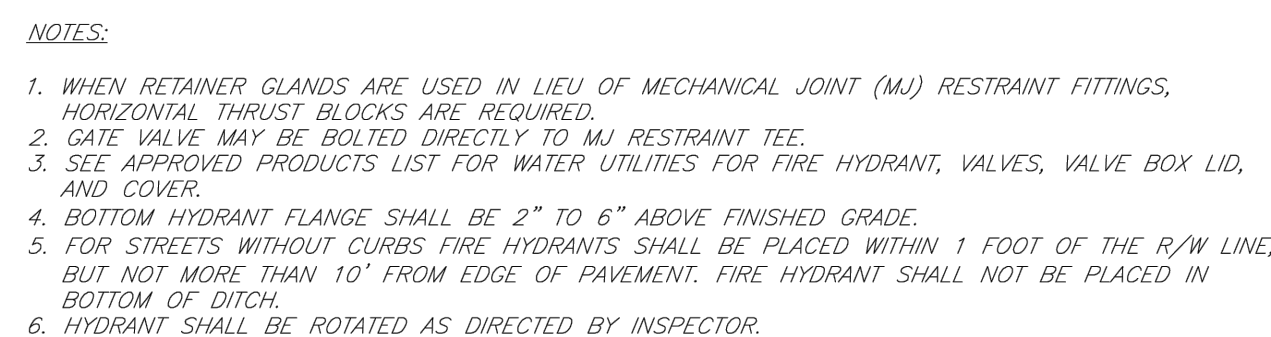
- SILT FENCE
○ INLET PROTECTION
■ TEMPORARY CONSTRUCTION ENTRANCE

1"=30'
0 15 30

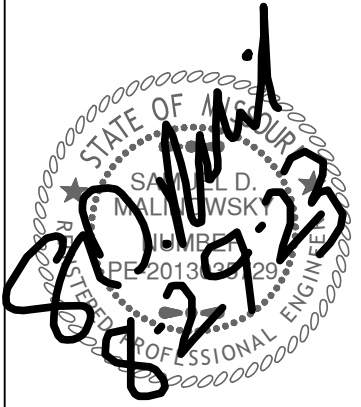




2. PORTLAND CEMENT CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH 6% ENTRAINED AIR $\pm 2\%$ AND SHALL MEET OR EXCEED THE SPECIFICATIONS SET FORTH IN THE LATEST EDITION OF THE MISSOURI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.



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.

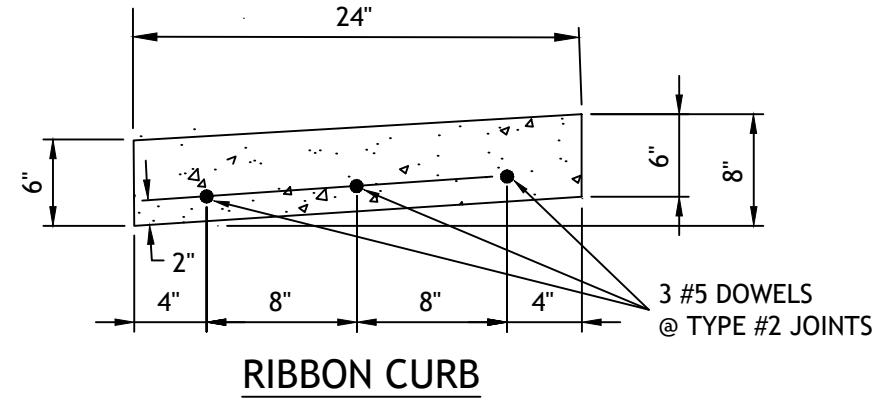


Revisions
8-29-23 CITY COMMENTS

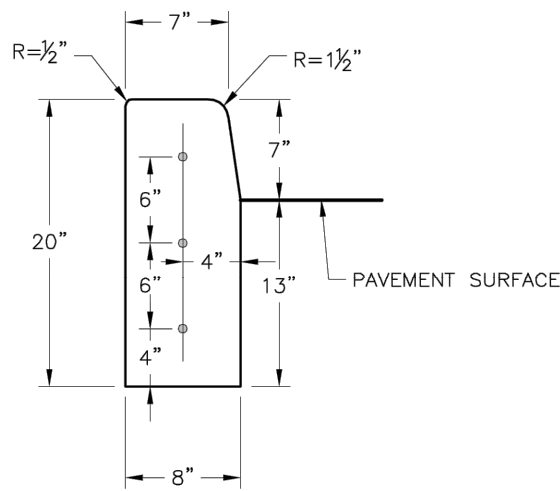
ARBOR WALK WEST
LOT 3
LEES SUMMIT, MO.

NOTES:

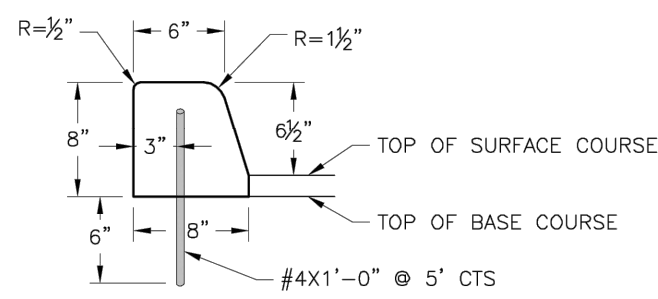
1. ALL CONCRETE SHALL BE KCMMB-4K
2. ALL JOINTS WITH EXISTING CURB SHALL BE TYPE 2 JOINTS.
3. A TYPE 2 JOINT SHALL BE PLACED AT ALL CURB RETURNS.
4. A TYPE 1 JOINT SHALL BE PLACED AT 15' CENTERS.
5. TYPE 'E' CURB SHALL NOT BE USED WITHOUT APPROVAL OF THE ENGINEER.
6. AB-3 MAY BE USED AS A LEVELLING COURSE TO BRING SUBGRADE TO PROPER ELEVATION. (6" MAX.)



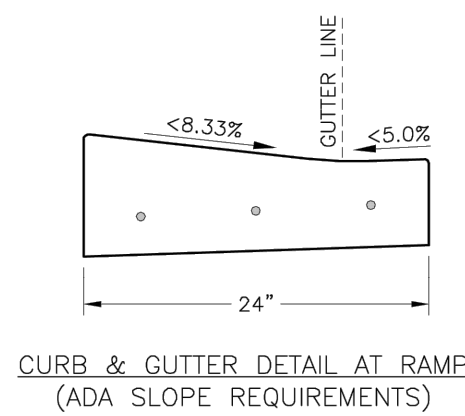
RIBBON CURB



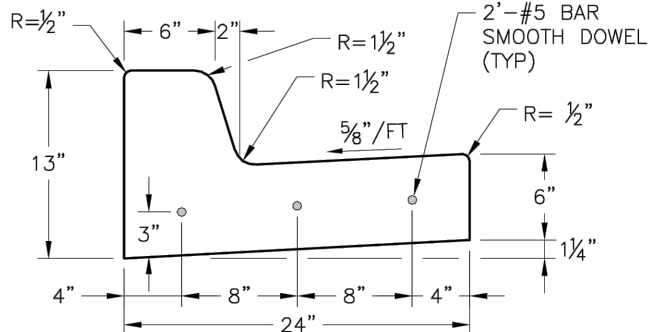
STRAIGHT CURB
(TYPE C-1)



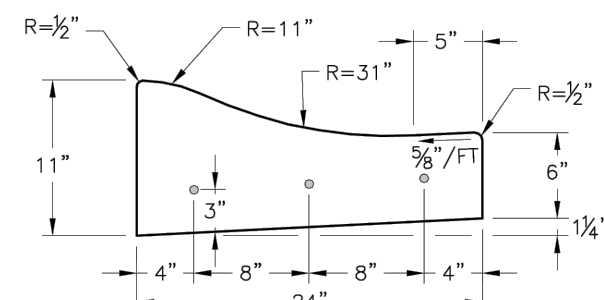
DOWELLED CURB
(TYPE DC)



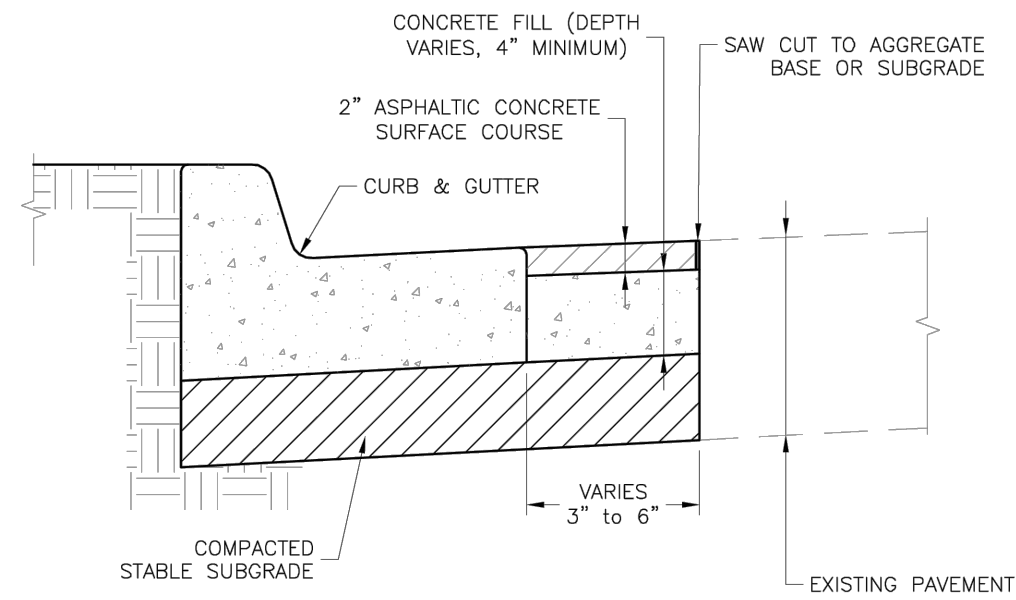
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



STRAIGHT BACK CURB &
GUTTER
(TYPE CG-1)



ROLL BACK CURB &
GUTTER
(TYPE CG-2)



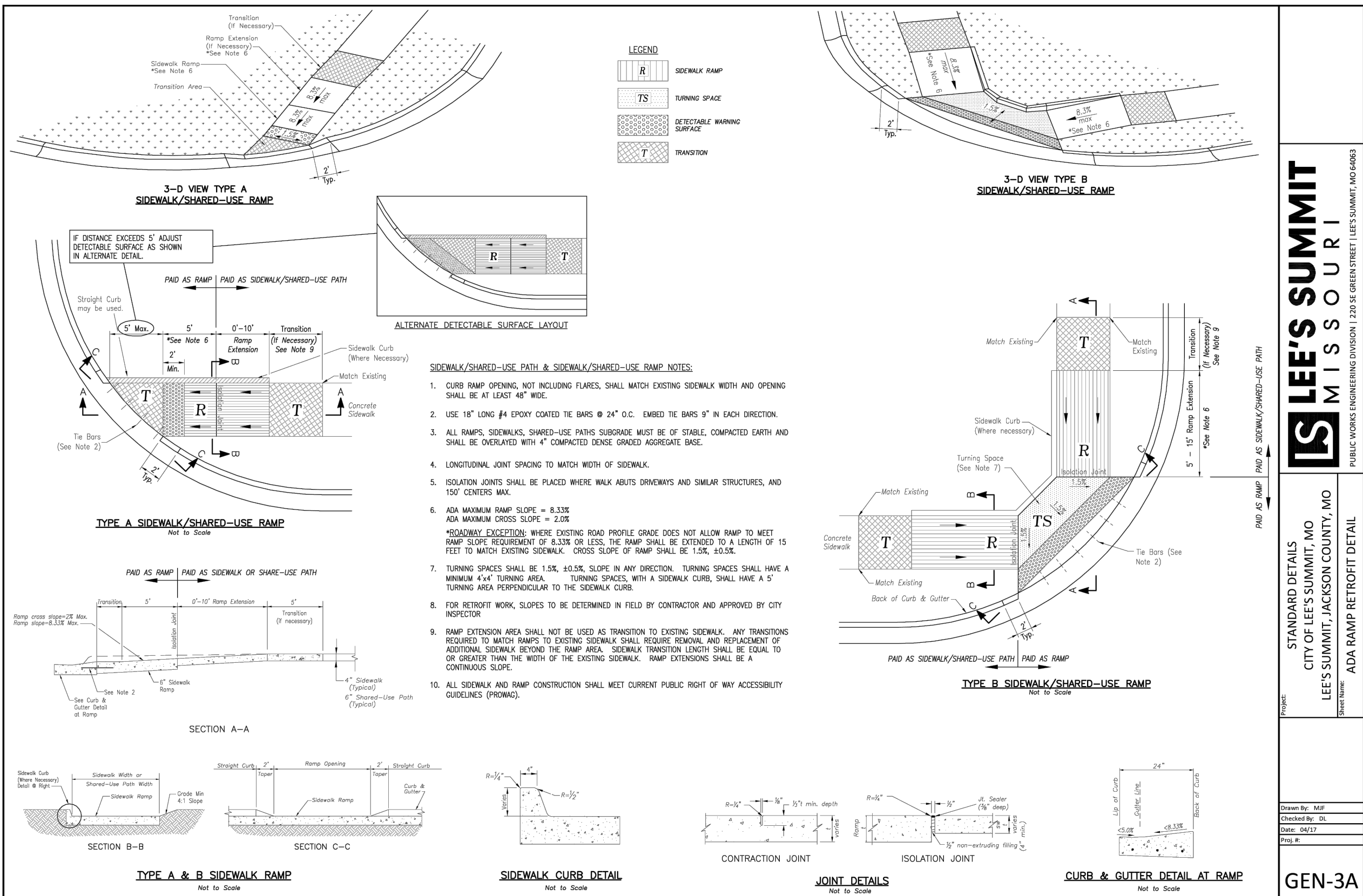
CURB REPLACEMENT DETAIL

GENERAL NOTES

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

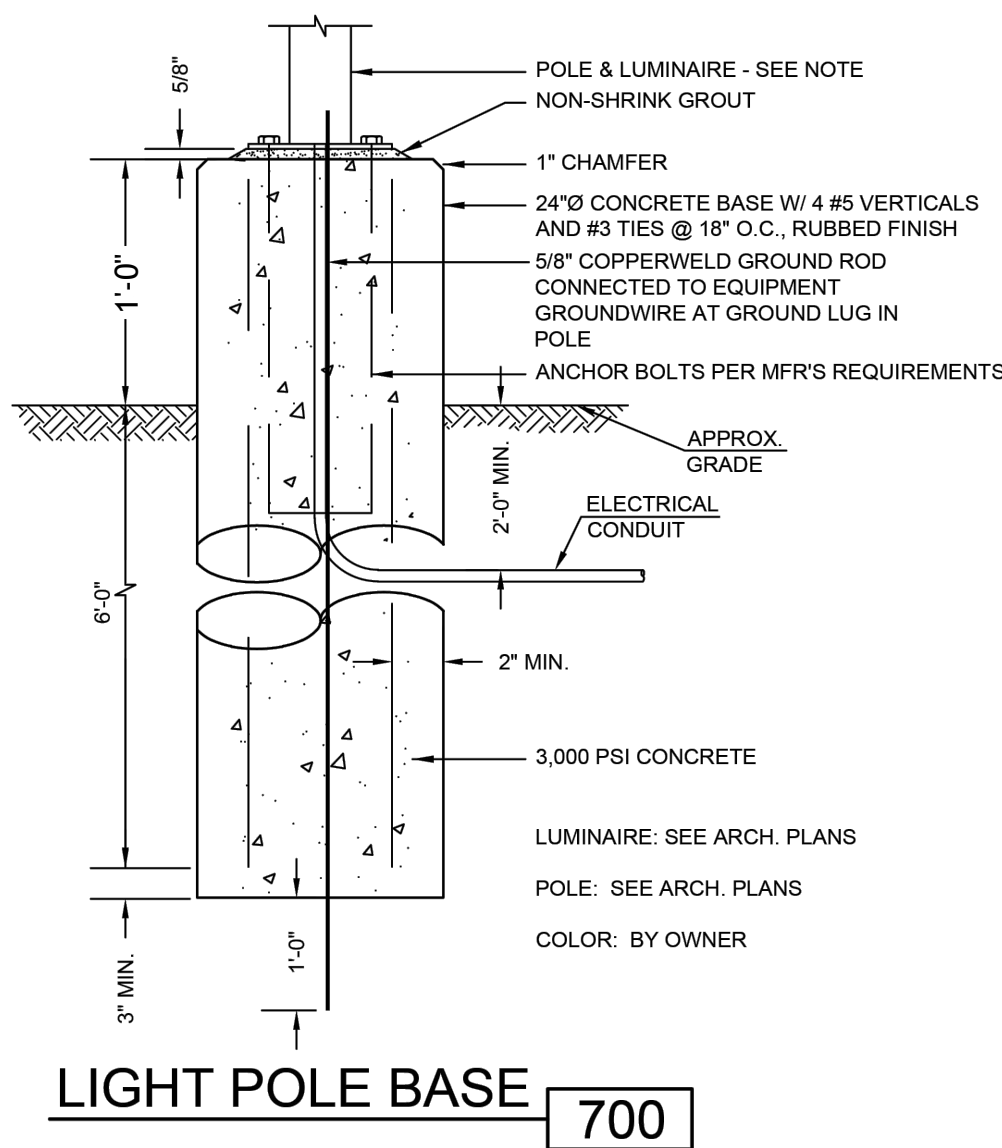
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
CURB & GUTTER DETAIL

GEN-4



STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
ADA RAMP RETROFIT DETAIL

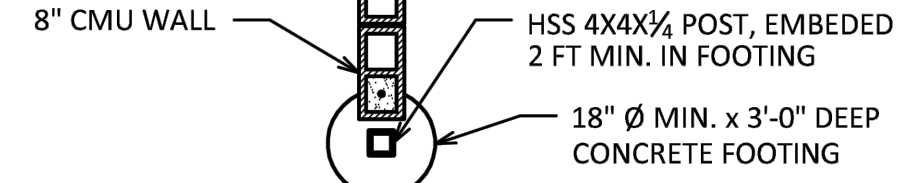
GEN-3A



LIGHT POLE BASE
700



PK1

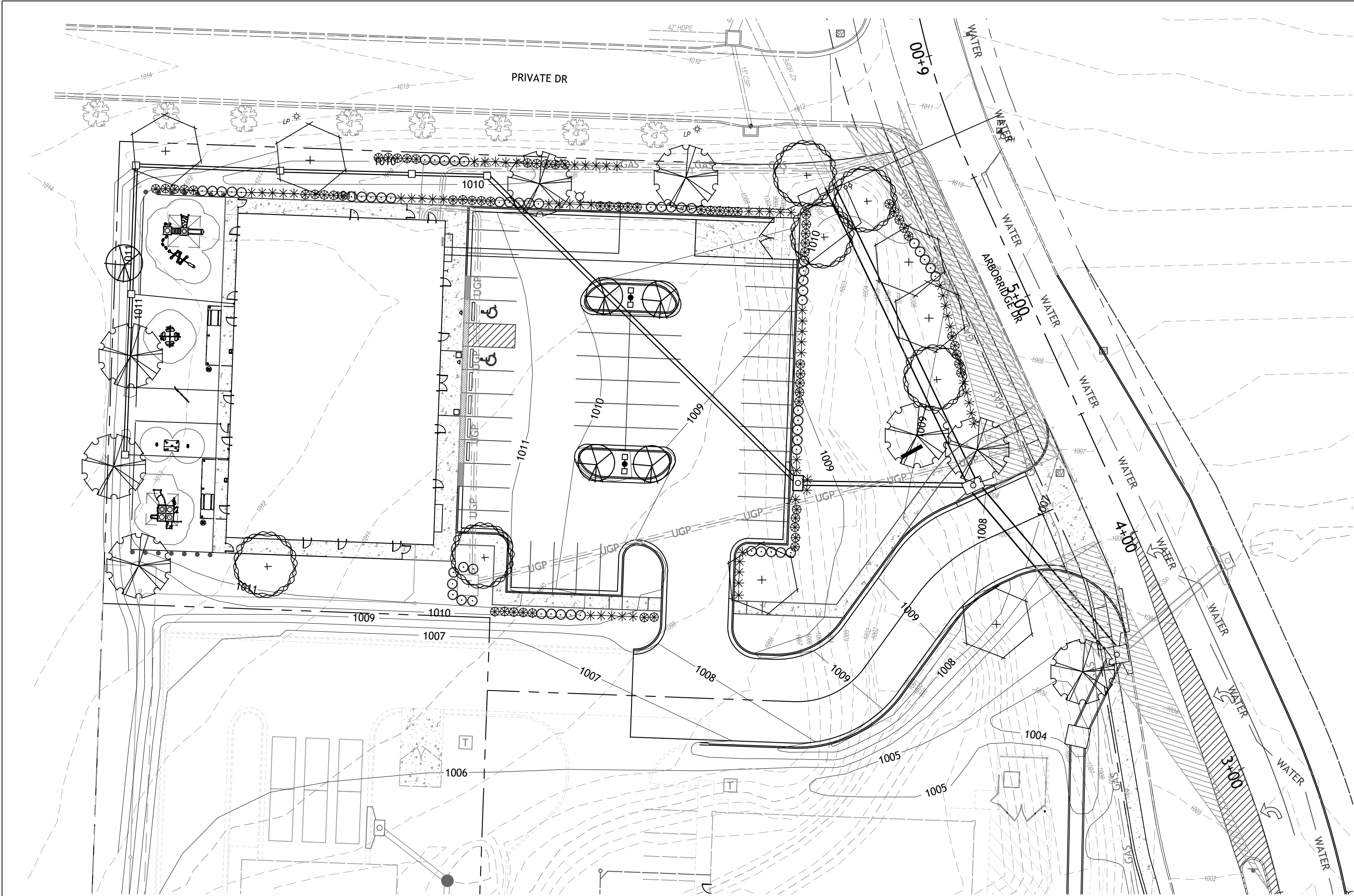


DETAIL A - GATE POST FOOTING

CMU WALL ENCLOSURE

DETAIL B - TYPICAL WALL SECTION





LANDSCAPE NOTES
CONTRACTOR REQUIRED TO LOCATE ALL UTILITIES BEFORE INSTALLATION TO BEGIN.

CONTRACTOR SHALL VERIFY ALL LANDSCAPE MATERIAL QUANTITIES AND SHALL REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

NO PLANT MATERIAL SUBSTITUTIONS ARE ALLOWED WITHOUT LANDSCAPE ARCHITECT OR OWNERS APPROVAL.

CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK AND PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF THE WORK BY THE OWNER. ANY PLANT MATERIAL WHICH DIES DURING THE ONE YEAR GUARANTEE PERIOD SHALL BE REPLACED BY THE CONTRACTOR DURING NORMAL PLANTING SEASONS.

CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE PLANTS UNTIL COMPLETION OF THE JOB AND ACCEPTANCE BY THE OWNER.

ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY STOCK AS DETERMINED IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN, FREE OF PLANT DISEASES AND PEST, OF TYPICAL GROWTH OF THE SPECIES AND HAVING A HEALTHY, NORMAL ROOT SYSTEM.

SIZES INDICATED ON THE PLANT LIST ARE THE MINIMUM, ACCEPTABLE SIZE. IN NO CASE WILL SIZES LESS THAN SPECIFIED BE ACCEPTED.

ALL SHRUB BEDS WITHIN LAWN AREAS TO RECEIVE A MANICURED EDGE.

ALL SHRUB BEDS SHALL BE MULCHED WITH 3" OF SHREDDED CEDAR MULCH.

ALL AREAS TO BE FERTILIZED & SODDED WITH A TURF-TYPE-TALL FESCUE SEED BLEND.

LOT 1 SITE DATA:

HWY 150 264'
REQUIRED:
STREET TREES 1/30' = 9
PARKING LOT SHRUBS 12/40' = 79

PROVIDED:
SHADE TREES = 9
SHRUBS = 80

ARBOR RIDGE DRIVE 188'
REQUIRED:
STREET TREES 1/30' = 6
PARKING LOT SHRUBS 12/40' = 56

PROVIDED:
SHADE TREES = 9
SHRUBS = 56

INTERIOR PARKING
TOTAL PARKING SURFACE = 13,869sf
REQUIRED
5% LANDSCAPE AREA = 693sf
PROVIDED = 992sf

OPEN SPACE TREES
TOTAL SITE 1.51ac (65,775sf)
BUILDING AREA 4,569sf
OPEN SPACE 61,206sf

REQUIRED TREES
1 / 5,000sf = 12

PROVIDED
SHADE TREES = 5
ORNAMENTALS = 7

OPEN SPACE SHRUBS
REQUIRED
2 / 5,000sf = 24
PROVIDED = 36

LOT 2 SITE DATA:

HWY 150 117'
REQUIRED:
STREET TREES 1/30' = 4
PARKING LOT SHRUBS 12/40' = 35

PROVIDED:
SHADE TREES = 4
SHRUBS = 35

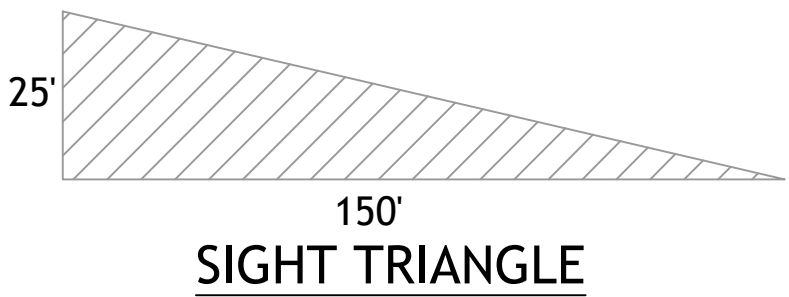
INTERIOR PARKING
TOTAL PARKING SURFACE = 8,764sf
REQUIRED
5% LANDSCAPE AREA = 438sf
PROVIDED = 1,253sf

OPEN SPACE TREES
TOTAL SITE 0.93ac (40,510sf)
BUILDING AREA 1,800sf
OPEN SPACE 38,710sf

REQUIRED TREES
1 / 5,000sf = 8

PROVIDED
SHADE TREES = 5
ORNAMENTALS = 3

OPEN SPACE SHRUBS
REQUIRED
2 / 5,000sf = 12
PROVIDED = 21



LOT 3 SITE DATA:

PRIVATE DR 298'
REQUIRED:
STREET TREES 1/30' = 10
PARKING LOT SHRUBS 12/40' = 89

PROVIDED:
EXISTING TREES = 6
SHADE TREES = 4
SHRUBS = 90

ARBOR RIDGE DRIVE 233'
REQUIRED:
STREET TREES 1/30' = 8
PARKING LOT SHRUBS 12/40' = 70

PROVIDED:
SHADE TREES = 8
SHRUBS = 70

INTERIOR PARKING
TOTAL PARKING SURFACE = 16,788sf
REQUIRED
5% LANDSCAPE AREA = 893sf
PROVIDED = 1,111sf

OPEN SPACE TREES
TOTAL SITE 1.45ac (63,162sf)
BUILDING AREA 10,000sf
OPEN SPACE 56,646sf

REQUIRED TREES
1 / 5,000sf = 11

PROVIDED
SHADE TREES = 6
ORNAMENTALS = 5

OPEN SPACE SHRUBS
REQUIRED
2 / 5,000sf = 22
PROVIDED = 31

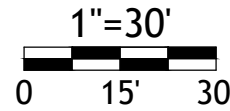
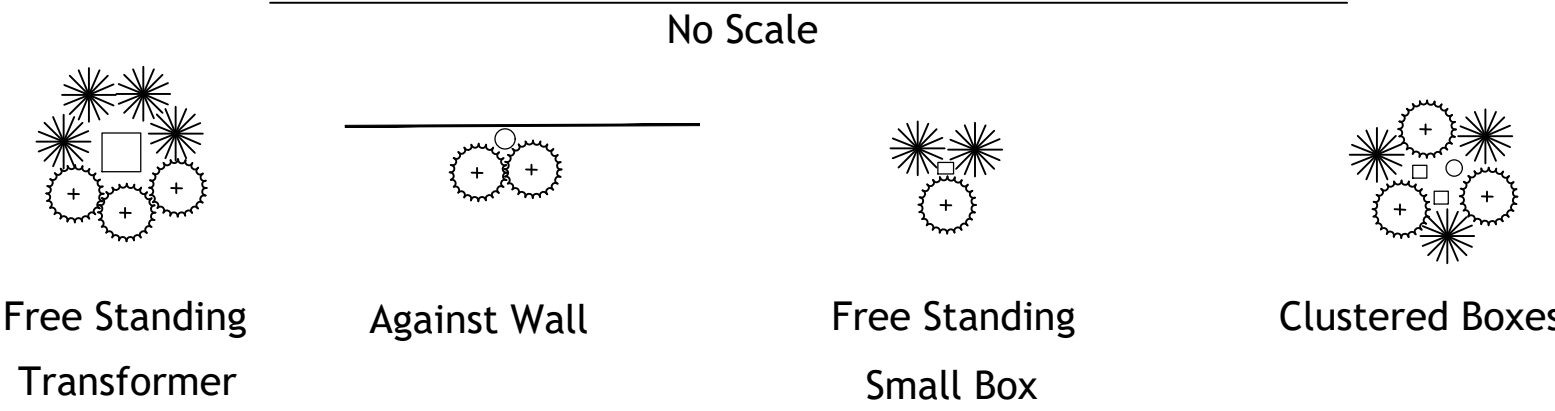
Shrub List

Symbol	Quantity	Common Name	Botanical Name	Size	Condition	Spacing
	102	Seagreen Juniper	Juniperus Chinensis 'Seagreen'	18"-24"sp.	Cont.	4'o.c.
	67	Dwarf Winged Euonymus	Euonymus Alatus 'Compactus'	18"-24"sp.	Cont.	4'o.c.
	60	Morning Light Maiden Grass	Miscanthos Sinensis 'Morning Light'	18"-24"sp.	Cont.	4'o.c.

Tree List

Symbol	Quantity	Common Name	Botanical Name	Size	Condition	Spacing
	6	October Glory Maple	Acer Rubrum 'October Glory'	3" cal	BB	As Shown
	6	Skyline Honeylocust	Gleditsia Triacanthos 'Skyline'	3" cal	BB	As Shown
	8	Swamp White Oak	Quercus Bicolor	3"cal	BB	As Shown
	5	Golden Raintree	Koelreuteria Paniculata	3"cal	BB	As Shown

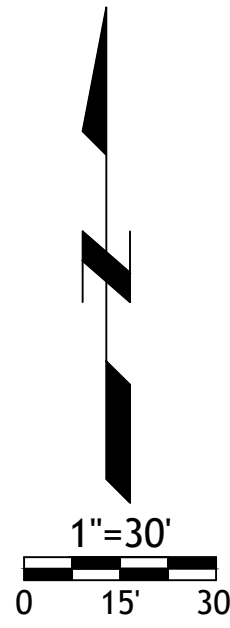
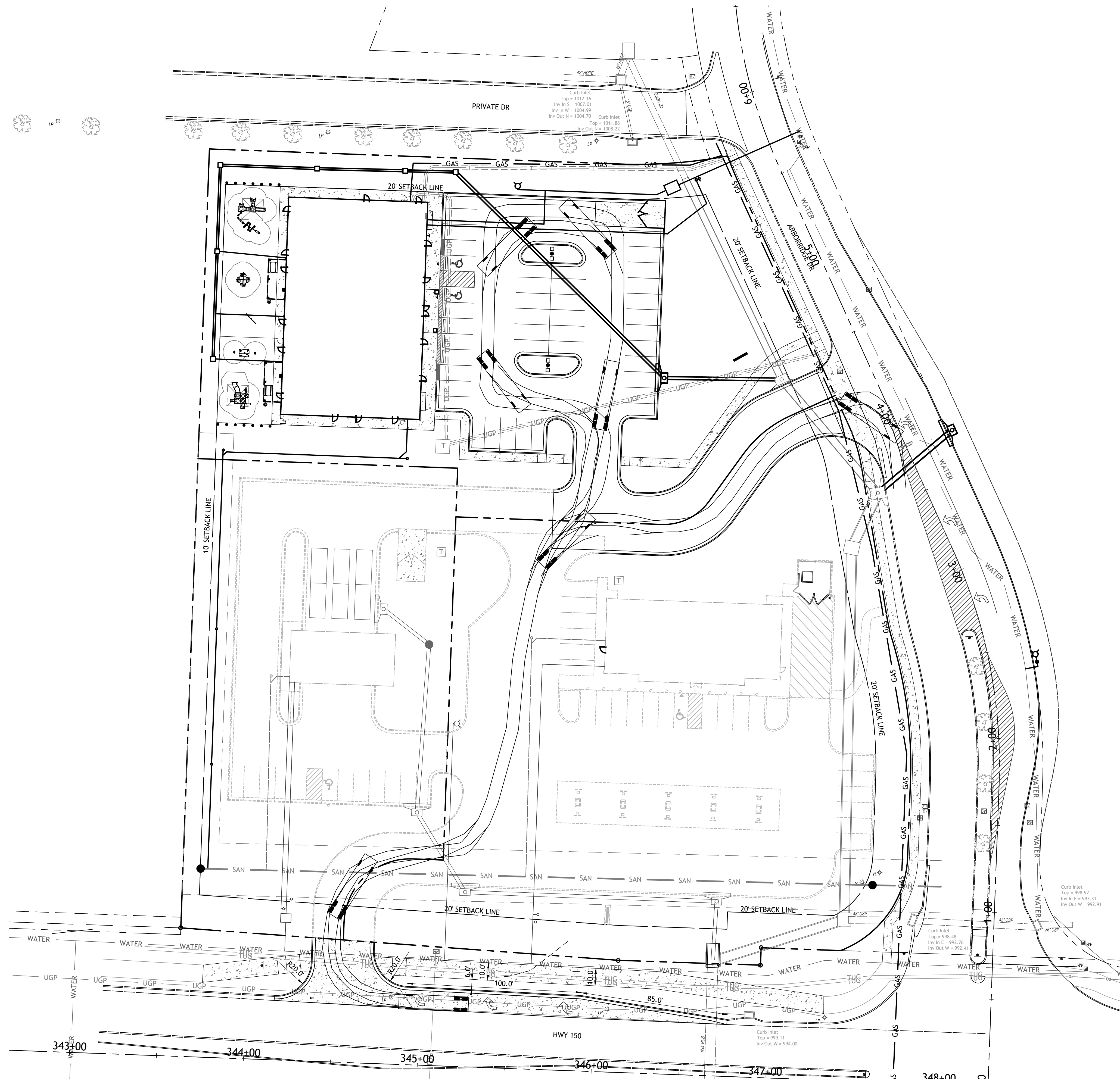
Typical Utility Box Screening Details



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.

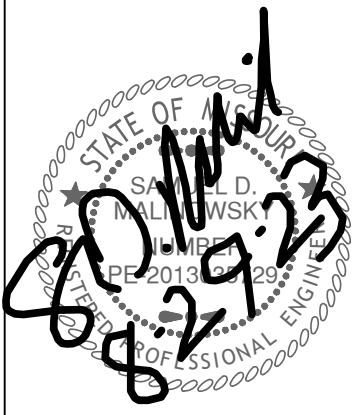


Revisions
8-29-23 CITY COMMENTS



SM Engineering
SME
 1310 WESTLOOP
 PL SUITE #315
 MANHATTAN KS, 66502
 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

ARBOR WALK WEST
 LOT 3
 LEES SUMMITT, MO.

sheet
C15.0
 Civil
 FIRE TRUCK
 MOVEMENTS
 19 JULY 2023