

PUBLIC SANITARY SEWER RELOCATION PLANS FOR
EPIC ELEMENTARY SCHOOL

LIBERTY, MO 64068
CITY PROJECT NO. 23-016
S12 T51N R32W

OWNER/DEVELOPER

LIBERTY PUBLIC SCHOOLS
8 VICTORY LANE
LIBERTY, MO. 64068
816-736-5300

UTILITY CONTACTS

WATER/SEWER
CITY OF LIBERTY, MO
UTILITIES DEPARTMENT
101 E. KANSAS STREET
LIBERTY, MO 64068
1-816-4394760
UTILITIES@LIBERTYMO.GOV

TELEPHONE
AT&T
500 E. 8TH STREET
KANSAS CITY, MO 64106
1-816-275-3850

ELECTRIC
EVERGY
8325 N. PLATTE PURCHASE
DR.
KANSAS CITY, MO 64118
1-816-420-4817

GAS
SPIRE ENERGY
7500 E. 35TH TERRACE
KANSAS CITY, MO 64129
1-816-472-3434
BEVERLY.PASSANTINO
BEVERLY.PASSANTINO@SPIREENERGY.COM

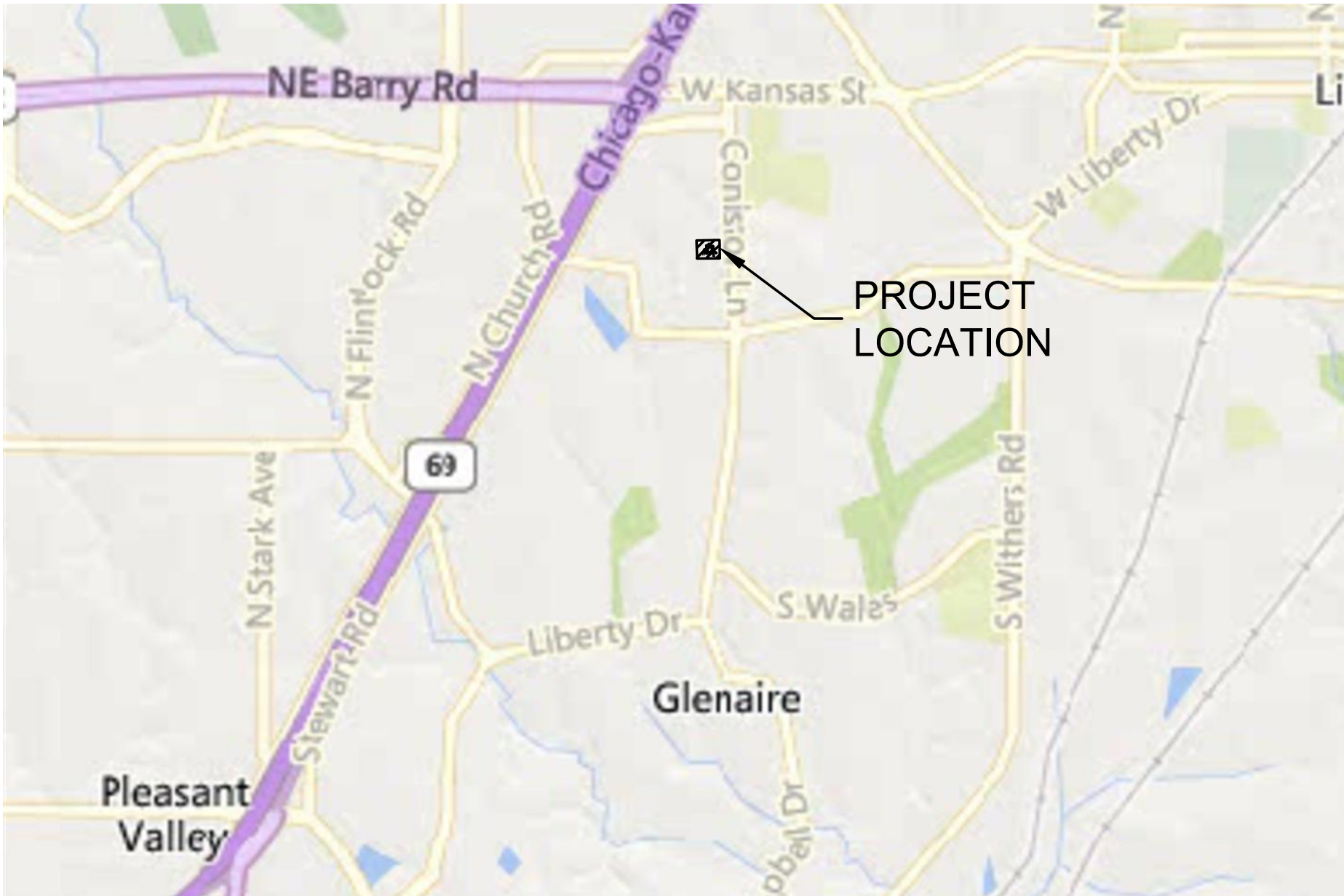
ONE-CALL
1-800-DIG-RITE

HIGHWAY DEPARTMENT
CLAY COUNTY HIGHWAY
DEPARTMENT AND GIS
16616 NE 116TH STREET
KEARNEY, MO 64060
816-407-3300

CITY ENGINEERING
CITY OF LIBERTY
ENGINEERING DIVISION
101 E. KANSAS STREET
LIBERTY, MO 64068
816-439-4503

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	EXISTING CONDITIONS & DEMO PLAN
3	GENERAL LAYOUT SHEET
4	SS LINE 1 PLAN & PROFILE
5	EROSION CONTROL PLAN
6	UTILITY DETAILS
7	EROSION CONTROL DETAILS

SUMMARY OF QUANTITIES			
DEMOLITION			
ITEM	UNIT	PLAN	AS-BUILT
12" DIP	LF	101	
4" SANITARY MANHOLE	EA	1	
PROPOSED IMPROVEMENTS			
12" PVC	LF	62	
4" SANITARY MANHOLE	EA	2	
EROSION CONTROL	LS	1	



LOCATION MAP

1"=2000'

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE
CURRENT KC METRO APWA SPECIFICATIONS UNLESS OTHERWISE INDICATED.

PREPARED & SUBMITTED BY:

MKEC ENGINEERING, INC.
11827 W. 112TH STREET, SUITE 200
OVERLAND PARK, KS 66210
913-317-9390

BRADEN L. TAYLOR, P.E. _____ DATE _____

I CERTIFY THESE PLANS WERE PREPARED BY ME OR UNDER MY IMMEDIATE
PERSONAL SUPERVISION.

APPROVAL BLOCK

APPROVED

CITY ENGINEER DATE _____
APPROVED FOR ONE YEAR FROM THIS DATE

REVIEWED

DIRECTOR OF UTILITIES DATE _____
APPROVED FOR ONE YEAR FROM THIS DATE

CONTROL POINTS & BENCHMARKS

- CP #1 5/8" REBAR W/ MKEC DESIGN CAP IN WEST
END OF SOUTH PARKING ISLAND.
N=1118511.465, E=2802330.970,
ELEV.=841.62
- CP #2 5/8" REBAR W/ MKEC DESIGN CAP.
N=1118791.534, E=2802278.628,
ELEV.=830.84
- CP #3 CHISELED PLUS IN NORTH EDGE OF STORM
MANHOLE.
N=1118658.631, E=2802426.460, ELEV=840.03

DATUM:
THE HORIZONTAL DATUM IS BASED ON THE MISSOURI
COORDINATE SYSTEM OF 1983, NAD83(2011), WEST ZONE.
COORDINATES SHOWN ARE STATE PLANE VALUES IN US
FEET.

ALL ELEVATIONS SHOWN ARE BASED ON THE NAVD 88
VERTICAL DATUM, GEOID 18 IN US FEET.

NOTE:
ALL CONTROL POINTS SHOWN HAVE ELEVATIONS
ESTABLISHED USING STANDARD SURVEYING PROCEDURES
AND CAN BE USED AS TEMPORARY BENCHMARKS. WHEN
USING A CONTROL POINT AS A TEMPORARY BENCHMARK,
IT IS RECOMMENDED THAT CROSS-CHECKS BE MADE TO
OTHER CONTROL POINTS OR BENCHMARKS TO CONFIRM
ELEVATIONS PRIOR TO USE.



11827 W. 112th Street, Suite 200
Overland Park, KS 66210
913-317-9390
Engineering No. 2001009384
Landscape No. 2006027138
Surveying No. 2006027138



BRADEN L. TAYLOR, P.E.
LSC- #2021001896

PUBLIC SANITARY SEWER PLANS FOR
EPIC ELEMENTARY SCHOOL
650 CONISTOR ST, LIBERTY, MO 64068

©2023
MKEC Engineering
All Rights Reserved
www.mkec.com
These drawings and their contents,
including, but not limited to, all concepts,
designs, & ideas are the exclusive
property of MKEC Engineering (MKEC),
and may not be used or reproduced in any
way without the express consent of MKEC.

COVER SHEET

PROJECT NO. 2302010295

DATE 08.25.2023

SCALE N/A

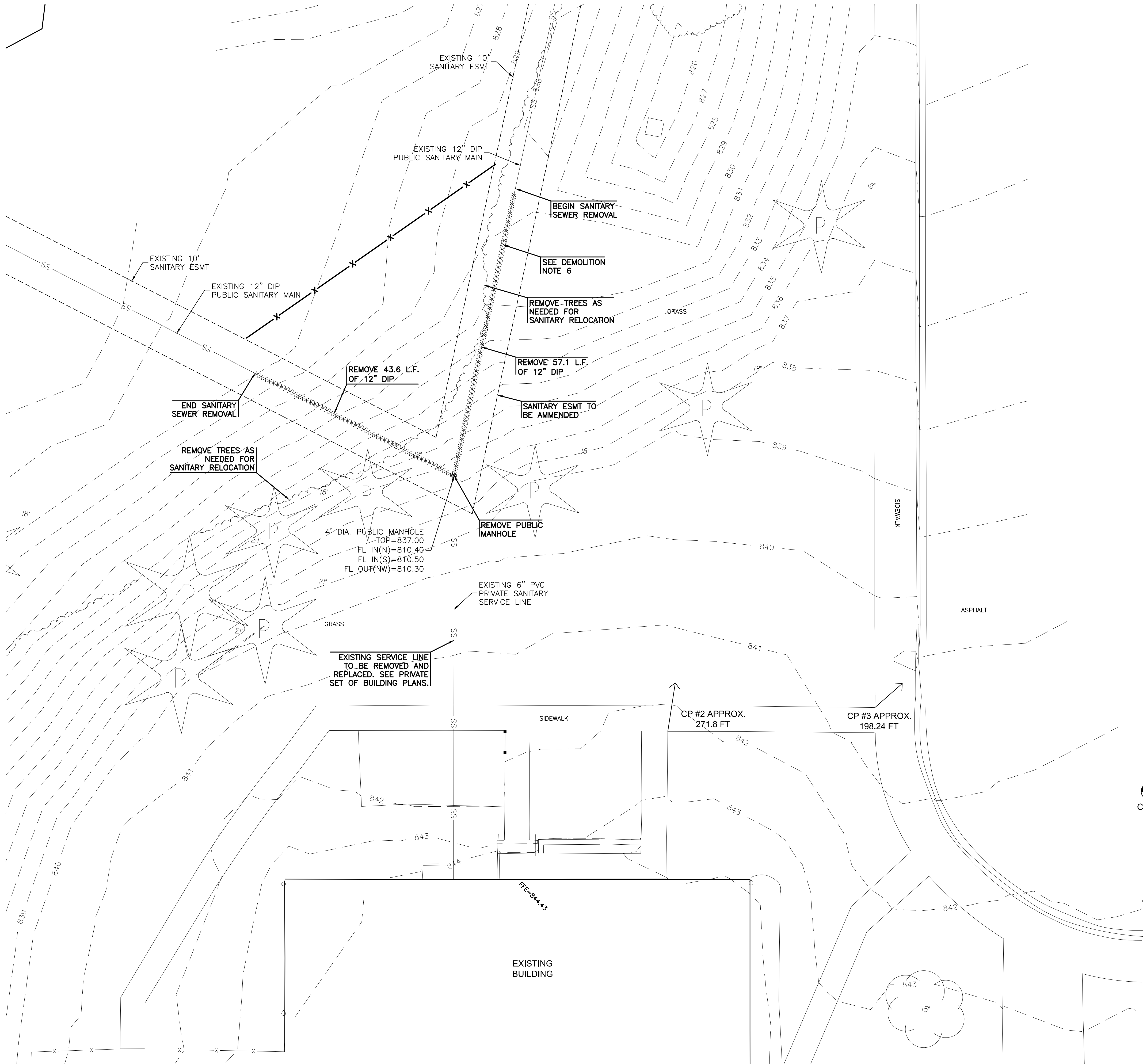
DESIGNED DRAWN CHECKED

SEK SEK BLT

NO. REVISION DATE

SHEET NO.

P:\PROJECTS\2023\202010295_LIBERTY_EPIC.GYM ADDITION\0230295 CAD\SHTS\06 CIVIL\PPS\20292-05-2204-PIP.DWG
PLOTED: Thursday, August 31, 2023 @ 1:13 AM



CONTROL POINTS & BENCHMARKS

- CP #1 5/8" REBAR W/ MKEC DESIGN CAP IN WEST END OF SOUTH PARKING ISLAND.
N=1118511.465, E=2802330.970, ELEV.=841.62
- CP #2 5/8" REBAR W/ MKEC DESIGN CAP.
N=1118791.534, E=2802278.628, ELEV.=830.84
- CP #3 CHISELED PLUS IN NORTH EDGE OF STORM MANHOLE.
N=1118658.631, E=2802426.460, ELEV=840.03

DATUM:
THE HORIZONTAL DATUM IS BASED ON THE MISSOURI COORDINATE SYSTEM OF 1983, NAD83(2011), WEST ZONE. COORDINATES SHOWN ARE STATE PLANE VALUES IN US FEET.

ALL ELEVATIONS SHOWN ARE BASED ON THE NAVD 88 VERTICAL DATUM, GEOID 18 IN US FEET.

NOTE:
ALL CONTROL POINTS SHOWN HAVE ELEVATIONS ESTABLISHED USING STANDARD SURVEYING PROCEDURES AND CAN BE USED AS TEMPORARY BENCHMARKS. WHEN USING A CONTROL POINT AS A TEMPORARY BENCHMARK, IT IS RECOMMENDED THAT CROSS-CHECKS BE MADE TO OTHER CONTROL POINTS OR BENCHMARKS TO CONFIRM ELEVATIONS PRIOR TO USE.

SEE PLAN FOR LOCATIONS.

DEMOLITION NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR AND REPLACE EXISTING CONCRETE SIDEWALKS, CURB & GUTTER, AND ANY EXISTING PAVEMENT DAMAGED DURING CONSTRUCTION.
- EXCAVATED MATERIAL THAT IS NOT IMMEDIATELY LOADED AND HAULED OFF SITE SHALL BE STOCKPILED ON SITE. CONTRACTOR SHALL PROVIDE AND MAINTAIN THE APPROPRIATE BMP (COMPOST SOCK, GRAVEL FILTER BAGS, WADDLES, SILT FENCE, ETC.) AROUND STOCKPILE AREA TO PROTECT ADJACENT INLETS OR AREAS, ETC., UNTIL SUCH TIME THAT STOCKPILE IS REMOVED.
- CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY PRIOR TO THE START OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, RIGHT-OF-WAY, HAULING, AND LAND DISTURBANCE PERMITS WITH THE APPROPRIATE LOCAL JURISDICTION.
- CONTRACTOR SHALL DISPOSE OF ALL DEMOLITION ITEMS APPROPRIATELY PER LOCAL AND STATE REQUIREMENTS.
- PUBLIC SANITARY SEWER TO BE REMOVED AND RELOCATED PRIOR TO CONSTRUCTION OF BUILDING ADDITION.
- CONTRACTOR TO PROVIDE CONTINUED SANITARY SERVICE WITHOUT ANY INTERRUPTIONS. SANITARY BYPASS SHALL BE INSTALLED PRIOR TO DEMOLITION OF PUBLIC SANITARY MAIN. CONTRACTOR TO SCHEDULE PRECON MEETING WITH THE CITY TO DISCUSS SANITARY BYPASS PRIOR TO DEMOLITION OF PUBLIC SANITARY MAIN.

DEMOLITION LEGEND

- XXXXXXXXXXXXXXXXXXXX - UTILITY REMOVAL
- X-X-X - TREE PROTECTION

MKEC

11827 W. 112th Street, Suite 200
Overland Park, KS 66210
913.517.9300
Engineering No. 2001009384
Landscape No. 2006027138
Surveying No. 2006027138

STATE OF MISSOURI
BRADEN L. TAYLOR
NUMBER
PE-2021001896
8.31.23
PROFESSIONAL ENGINEER
BRADEN L. TAYLOR, P.E.
LISC-#2021001896

PUBLIC SANITARY SEWER PLANS FOR
EPIC ELEMENTARY SCHOOL
650 CONISTOR ST, LIBERTY, MO 64068

©2023
MKEC Engineering
All Rights Reserved
www.mkec.com
These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of MKEC Engineering (MKEC), and may not be used or reproduced in any way without the express consent of MKEC.

EXISTING
CONDITIONS &
DEMO PLAN

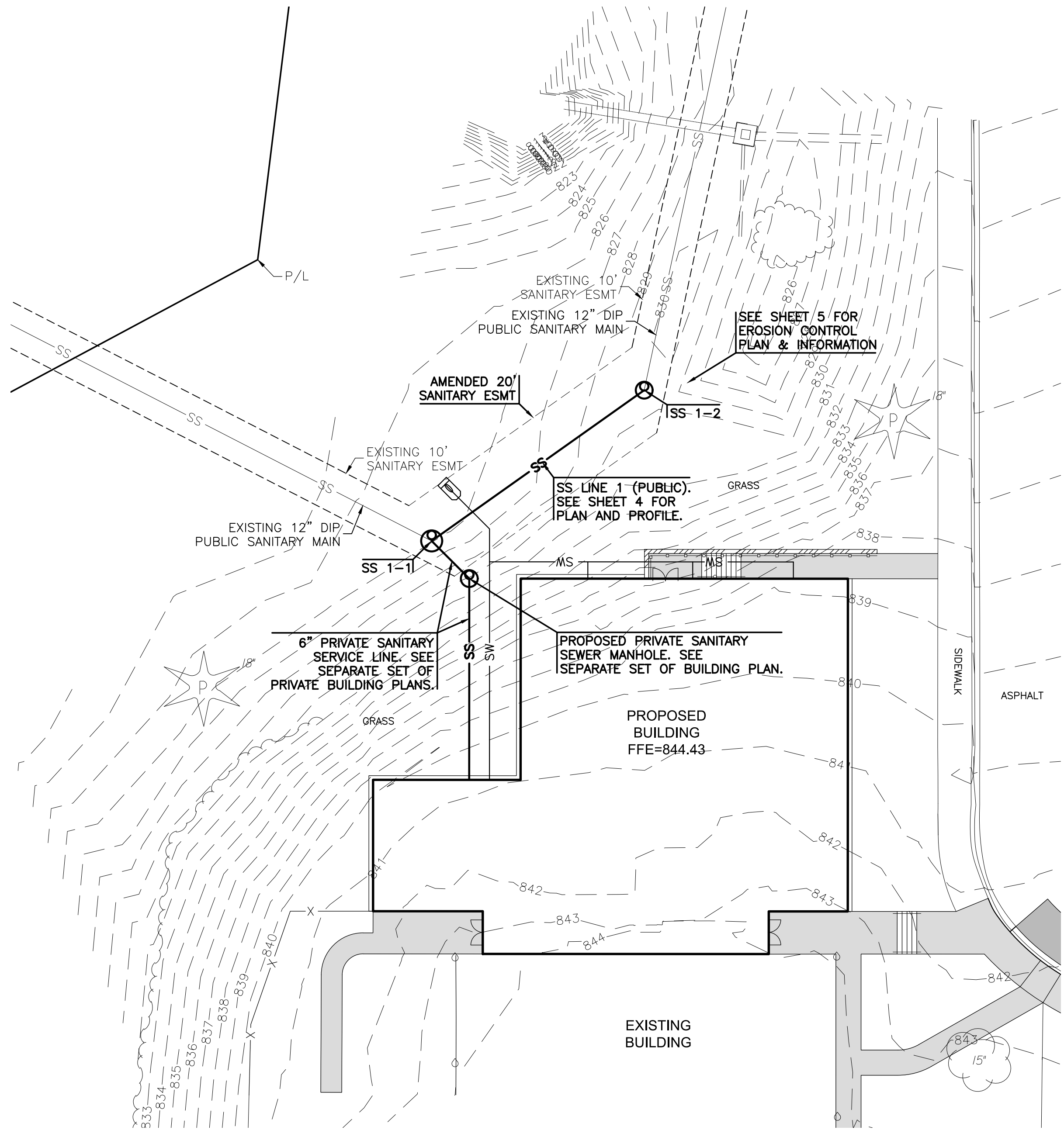
PROJECT NO.	2302010295	
DATE	08.25.2023	
SCALE	1"=10'	
DESIGNED	DRAWN	CHECKED
SEK	SEK	BLT
NO.	REVISION	DATE
SHEET NO.		

P:\PROJECTS\2023\202010295_LIBERTY_EPIC.GYM ADDITION\00_230295_CAD\SHITS\06_CIVIL\PIPS\230295_05-22\14-PIP.DWG
P:\PROJECTS\2023\202010295_LIBERTY_EPIC.GYM ADDITION\00_230295_CAD\SHITS\06_CIVIL\PIPS\230295_05-22\14-PIP.DWG
PLOTTED: Thursday, August 31, 2023 @ 11:58AM

GENERAL NOTES:

- THE CONTRACTOR, **PRIOR TO** ANY EXCAVATION OR NEW CONSTRUCTION, SHALL HAVE UTILITIES FIELD LOCATED BY THE APPROPRIATE UTILITY COMPANY AND/OR CITY/COUNTY DEPARTMENT.
- EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THESE PLANS, REPRESENTS THE BEST INFORMATION AVAILABLE TO THE ENGINEER. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. HOWEVER, ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING ALL UTILITIES WHETHER THESE UTILITIES ARE SHOWN ON THE PLANS, NOT SHOWN ON THE PLANS, OR SHOWN INCORRECTLY. UTILITIES DAMAGED THROUGH THE FAILURE OF THE CONTRACTOR TO OBTAIN THE LOCATION OF THOSE UTILITIES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. THE CONTRACTOR SHALL, PRIOR TO ANY EXCAVATION OR NEW CONSTRUCTION, HAVE ALL UTILITIES FIELD LOCATED BY THE APPROPRIATE UTILITY COMPANY, CITY OR COUNTY DEPARTMENT, OR ONE-CALL SERVICE.
- THE SITE PLAN IS BASED ON A SURVEY OF THE SITE. CONDITIONS OF THE SITE AT THE TIME OF CONSTRUCTION MAY VARY FROM THE SURVEYED CONDITIONS. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
- ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS SHALL BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
- NO CHANGES TO THE APPROVED CONSTRUCTION PLANS WILL BE PERMITTED WITHOUT PRIOR APPROVAL OF THE DESIGN ENGINEER.
- IF BLASTING IS REQUIRED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE AGENCIES TO OBTAIN THE REQUIRED PERMITS. IF BLASTING IS ALLOWED, THE CONTRACTOR SHALL PERFORM BLASTING OPERATIONS ACCORDING TO STATE REGULATIONS AND LOCAL ORDINANCES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY PINS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY PINS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH PINS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- CONTRACTOR TO HAVE REGISTERED LAND SURVEYOR RESET SECTION CORNER MONUMENT IF DISTURBED DURING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES, DIMENSIONS, AND PLAN SCALES AND SHALL IMMEDIATELY NOTIFY THE OWNER/ENGINEER/ARCHITECT OF ANY SUCH DISCREPANCIES. ALL QUANTITIES, DIMENSIONS, AND PLAN SCALES PROVIDED ARE FOR GENERAL INFORMATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL QUANTITIES NECESSARY FOR THE COMPLETION OF THE WORK AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE WORK DESCRIBED IN THE CONSTRUCTION DOCUMENTS IRRESPECTIVE OF THE QUANTITIES, DIMENSIONS, AND PLAN SCALES NOTED, NOT NOTED, OR NOTED INCORRECTLY.
- ANY CURB, GUTTER, SIDEWALKS, AND PAVING THAT IS DAMAGED IN EXCESS OF THE CONSTRUCTION SHOWN IN THIS PLAN SET SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
- ALL REMOVALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PER APPLICABLE STANDARDS (UNLESS OTHERWISE NOTED).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL WHEN WORKING WITHIN THE PUBLIC RIGHT-OF-WAY. ALL SUCH TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL" AND/OR LOCAL JURISDICTION SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL ENSURE ALL TRAFFIC CONTROL DEVICES ARE CLEAN, PROPERLY VISIBLE, OPERATING CORRECTLY, AND LOCATED PROPERLY. THE CONTRACTOR SHALL IMMEDIATELY REPLACE ANY DAMAGED, DEFACED, OR INOPERABLE, OR MISSING TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR IS TO PROVIDE PERMANENT SEEDING, FERTILIZING, MULCHING OR SODDING OF ALL DISTURBED AREAS. THIS WORK TO BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL SITE WORK FOR THIS PROJECT IS CONSIDERED "UNCLASSIFIED." THE TERM "UNCLASSIFIED" EXCAVATION SHALL BE DEFINED AS MEANING THE SITE CONTRACTOR BEARS THE ENTIRE RISK OF THE SOIL QUANTITIES AND/OR TYPES (E.G. ROCK, CLAY, PEAT, SILT, SHALE, ETC.) ENCOUNTERED ABOVE THE BOTTOM OF REQUIRED EXCAVATIONS AND OVER-EXCAVATED / TREATED SOILS AREAS. ABOVE THE BOTTOM OF REQUIRED EXCAVATIONS, THE SITE CONTRACTOR SHALL BEAR THE ENTIRE COST OF SUCH ADDITIONAL WORK IN THE EVENT IT BECOMES NECESSARY FOR UNSUITABLE SOILS TO BE HANDLED, REMOVED FROM THE SITE, OR FOR SUITABLE FILL MATERIAL TO BE IMPORTED TO THE SITE. THIS DEFINITION OF "UNCLASSIFIED" SUPERSEDES ANY CONTRARY DEFINITIONS OR STATEMENTS WHICH MAY BE CONTAINED IN THE SPECIFICATIONS, PLANS, OR OTHER CONTRACT DOCUMENTS. THE UNCLASSIFIED SITE SHALL INCLUDE ALL WORK ABOVE THE BOTTOM OF REQUIRED EXCAVATIONS AND/OR REQUIRED SOIL REMEDIATION/REPLACEMENT.
- PROPOSED CONTOURS SHOWN ON THESE PLANS ARE FINAL SURFACE CONTOURS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ADJUSTMENTS FOR PAVEMENT THICKNESS, SUBGRADE THICKNESS, TOPSOIL, REMOVALS, ETC.
- DEVELOPMENT PLANS ARE APPROVED INITIALLY FOR ONE (1) YEAR AFTER WHICH THEY AUTOMATICALLY BECOME VOID MUST BE UPDATED AND RE-APPROVED BY THE CITY ENGINEER BEFORE ANY CONSTRUCTION WILL BE PERMITTED.
- THE CITY OF LIBERTY PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF LIBERTY DESIGN CRITERIA, TECHNICAL SPECIFICATIONS AND CODE OF ORDINANCES. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OR DIMENSION AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF LIBERTY THROUGH APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY OTHER THAN THAT AS STATED ABOVE FRO THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS (APPROVED BY THE CITY OF LIBERTY) AND (1) COPY OF THE APPROPRIATE CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
- CONSTRUCTION OF THE IMPROVEMENTS SHOWN OR IMPLIED BY THIS SET OF DRAWINGS SHALL NOT BE INITIATED OR ANY PART THEREOF UNDERTAKEN UNTIL THE CITY ENGINEER IS NOTIFIED OF SUCH INTENT, AND ALL REQUIRED AND PROPERLY EXECUTED BONDS AND PERMIT FEES ARE RECEIVED AND APPROVED BY THE CITY ENGINEER.
- THE CITY OF LIBERTY TECHNICAL SPECIFICATIONS, LATEST EDITION, SHALL GOVERN CONSTRUCTION OF THIS PROJECT.
- ALL EXISTING UTILITIES INDICATED ON THE DRAWINGS ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER; HOWEVER, ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR TO OBTAIN THE LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- ALL BACKFILL SHALL BE TAMPED AND AT THE OPTION OF THE ENGINEER TESTED BY A CERTIFIED LABORATORY. WHERE FOOTINGS WILL BEAR ON COMPACTED FILL MATERIAL, THE PLACEMENT AND TESTING OF COMPACTED FILL SHALL COMPLY WITH THE APPROPRIATE COMPACTED FILL SECTION OF THE SOILS AND FOUNDATION CHAPTER OF THE INTERNATIONAL BUILDING CODE VERSION MOST RECENTLY ADOPTED BY CITY OF LIBERTY.
- CONTRACTOR SHALL NOT BE ALLOWED TO WORK SUNDAY. HOLIDAY OR SATURDAY WORK SHALL BE AS APPROVED IN ADVANCE BY THE CITY ENGINEER.
- ALL MATERIALS AND WORKMANSHIP ASSOCIATED WITH THIS PROJECT SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LIBERTY. THE CITY OF LIBERTY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE CITY OF LIBERTY STANDARDS AND TECHNICAL SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE CITY OF LIBERTY ENGINEERING SERVICES DEPARTMENT TWENTY-FOUR (24) HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION
- RELOCATION OF ANY WATER LINE, SEWER LINE OR SERVICE HEREOF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT HIS EXPENSE.
- CONSTRUCTION PERMITS WILL NOT BE ISSUED UNTIL THE CITY HAS RECEIVED A COPY OF MDNR LAND DISTURBANCE PERMIT APPLICATION. ALSO, SHOP DRAWINGS SUBMITTAL AND CITY APPROVAL REQUIRED PRIOR TO PERMITS BEING ISSUED.
- ALL PAVEMENT THAT IS DISTURBED/REMOVED AS PART OF THIS PROJECT SHALL BE REPLACED IN-KIND PER CITY OF LIBERTY TECHNICAL SPECIFICATIONS.



CITY OF LIBERTY SANITARY SEWER NOTES:

- ALL SANITARY STUBLINES SHALL BE LAID ON 2.00% OR GREATER GRADE UNLESS APPROVED OTHERWISE.
- MBF DENOTES MINIMUM BASEMENT FLOOR ELEVATION.
- THE CONTRACTOR SHALL INSTALL AND PROPERLY MAINTAIN A MECHANICAL PLUG AT ALL CONNECTION POINTS WITH EXISTING LINES UNTIL SUCH TIME THAT THE NEW LINE IS TESTED AND APPROVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VIDEO OF INSTALLED SANITARY MAINS CITY OF LIBERTY REVISED 2016 DC-5 INCLUDING DISTANCE LOGGING BETWEEN MANHOLES FOR VERIFICATION OF STUB LOCATIONS. VIDEO SHALL INCLUDE ALL LINES IN THESE DRAWINGS. DIGITAL VIDEO MUST BE RECEIVED AND REVIEWED BY THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THE SANITARY MAINS.
- CONNECTIONS TO EXISTING MANHOLES SHALL BE CORE DRILLED AND CONNECTED WITH A WATERTIGHT FERNCO GASKET OR APPROVED EQUAL. THE GASKET IS TO BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

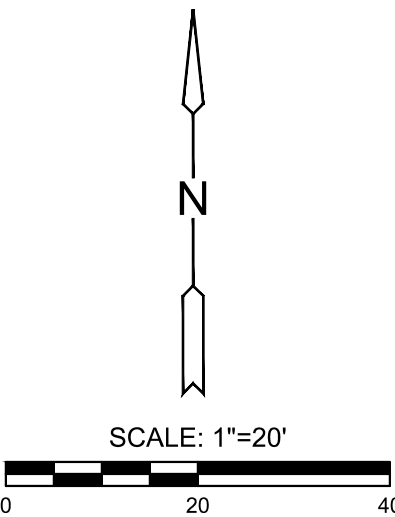
UTILITY NOTES:

- SEE SHEET 6 FOR UTILITY DETAILS.
- SANITARY SEWER PIPE SHALL BE ASTM D3034, SDR 26 PVC PIPE WITH BELL ENDS AND GASKETED JOINTS. GASKETS SHALL COMPLY WITH ASTM F477.
- PUBLIC SANITARY MAIN RELOCATION WORK TO BE COMPLETED PRIOR TO CONSTRUCTION OF THE BUILDING ADDITION. THE SCOPE OF WORK IS A SEWER MAIN RELOCATION. NO KNOWN ADDITIONAL FLOW WILL BE ADDED TO THE SEWER SYSTEM WITH THIS PROJECT.
- CONTRACTOR TO MAINTAIN THE SANITARY MAIN SERVICE DURING CONSTRUCTION. A TEMPORARY SANITARY BYPASS SHALL BE INSTALLED PRIOR TO DEMOLITION OF PUBLIC SANITARY MAIN TO ENSURE THE MAIN REMAINS IN USE. CONTRACTOR TO SCHEDULE PRE-CONSTRUCTION MEETING WITH THE CITY OF LIBERTY PRIOR TO STARTING ANY ON-SITE WORK.

SANITARY SEWER SERVICE LINE SUMMARY TABLE					
LINE	STRUCTURE	STATION	PIPE SIZE	FLOWLINE IN	LENGTH
SERVICE LINE 1	SS 1-1	10+00.00	6" PVC	822.00'	12.70'
* SS 1-1 HAS INSIDE DROP FOR SERVICE LINE 1					

LEGEND

- 6IN - TREE AND DIAMETER
- 3IN - TREE AND DIAMETER
- 18" - TREE STUMP AND DIAMETER
- SN - SIGN
- BUSH
- MAIL BOX
- POLE
- GATE
- POST / BOLLARD
- FLAG POLE
- FENCE
- EDGE OF TREES
- TELEPHONE RISER
- UGT - UNDERGROUND TELEPHONE LINE
- OHT - OVERHEAD TELEPHONE LINE
- CABLE TV RISER
- FO - FIBER OPTICS INDICATOR SIGN
- TV - UNDERGROUND CABLE TV LINE
- FOC - UNDERGROUND FIBER OPTIC CABLE
- POWER POLE AND DEADMAN
- LIGHT POLE
- ELECTRIC TRANSFORMER
- SCHOOL ZONE SIGNAL LIGHT
- TRAFFIC CONTROL BOX
- TRAFFIC SIGNAL LIGHT POLE
- UGE - UNDERGROUND ELECTRIC LINE
- OHE - OVERHEAD ELECTRIC LINE
- GAS METER
- GV - GAS VALVE
- G - GAS LINE
- SS - SANITARY SEWER MANHOLE
- CLEANOUT
- SS - SANITARY SEWER LINE
- INLET
- STORM WATER MANHOLE
- ROOF DRAIN
- GRATE INLET
- EXISTING STORM SEWER PIPE
- PROPOSED STORM SEWER PIPE
- SW - ROOF DRAIN LINE
- PD - PERFORATE DRAIN PIPE
- FIRE HYDRANT
- WV - WATER VALVE
- WM - WATER METER
- MONITORING WELL
- WM - WATER METER VAULT
- WS - WATER SPIGOT
- WL - WATER LINE
- FP - FIRE PROTECTION LINE
- IRRIGATION CONTROL VALVE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR



11827 W. 112th Street, Suite 200
Overland Park, KS 66210
913-517-8300
Engineering No. 2001009384
Landscape No. 2006027138
Surveying No. 2006027138



PUBLIC SANITARY SEWER PLANS FOR
EPIC ELEMENTARY SCHOOL
650 CONISTOR ST, LIBERTY, MO 64068

©2023
MKEC Engineering
All Rights Reserved
www.mkec.com
These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of MKEC Engineering (MKEC), and may not be used or reproduced in any way without the express consent of MKEC.

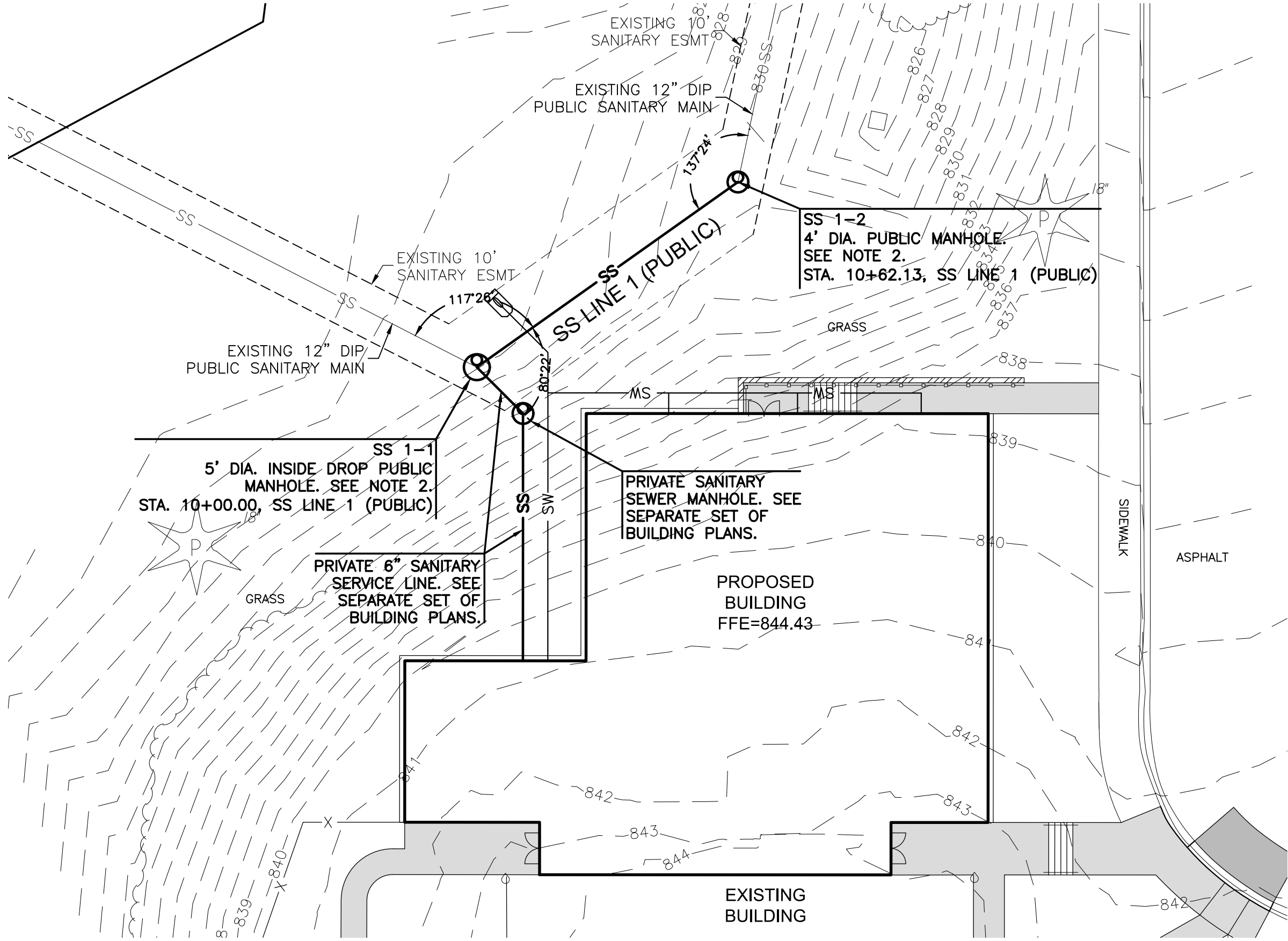
GENERAL
LAYOUT SHEET

PROJECT NO.	2302010295
DATE	08.25.2023
SCALE	1"=20'

DESIGNED	DRAWN	CHECKED
SEK	SEK	BLT

NO.	REVISION	DATE

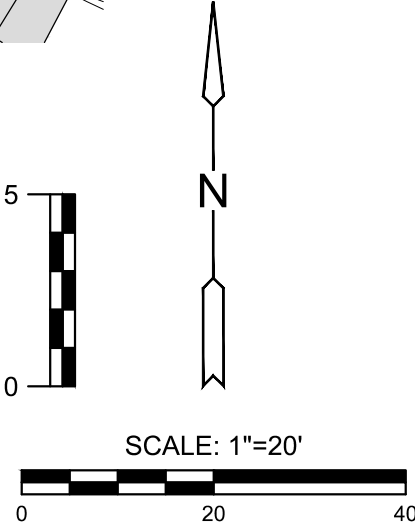
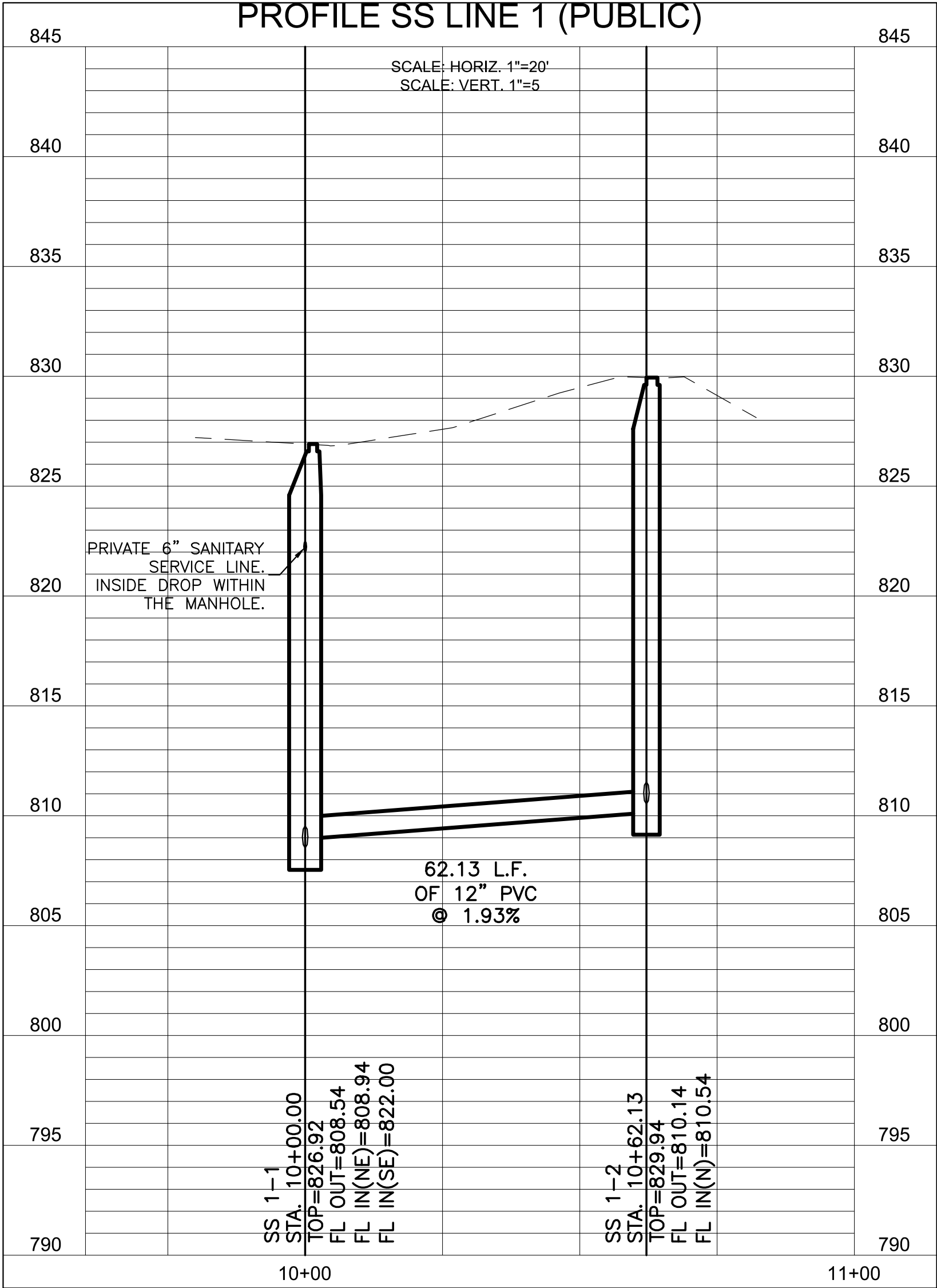
SHEET NO.



NOTES:

- SEE SHEET 3 FOR UTILITY NOTES.
- CONTRACTOR TO FIELD VERIFY ANGLES AND FLOWLINES OF THE EXISTING PUBLIC SANITARY MAIN PRIOR TO TRENCHING PROPOSED SANITARY MAIN AND THE FABRICATION OF PROPOSED PUBLIC MANHOLES.
- CONNECT TO EXISTING 12" SANITARY MAIN USING DOGHOUSE PER SANITARY SEWER DOGHOUSE MANHOLE DETAIL ON SHEET 6. ALL OTHER CONNECTIONS SHALL FOLLOW THE STANDARD PRECAST MANHOLE DETAIL SHOWN ON SHEET 6.

PLAN SS LINE 1 (PUBLIC)
PROFILE SS LINE 1 (PUBLIC)



11827 W. 112th Street, Suite 200
Overland Park, KS 66210
913-517-8300
Engineering No. 2001009384
Landscape No. 2006027138
Surveying No. 2006027138



BRADEN L. TAYLOR, P.E.
LISC #2021001896

PUBLIC SANITARY SEWER PLANS FOR
EPIC ELEMENTARY SCHOOL
650 CONISTOR ST, LIBERTY, MO 64068

©2023
MKEC Engineering
All Rights Reserved
www.mkec.com
These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of MKEC Engineering (MKEC), and may not be used or reproduced in any way without the express consent of MKEC.

SS LINE 1 PLAN & PROFILE

PROJECT NO. 2302010295

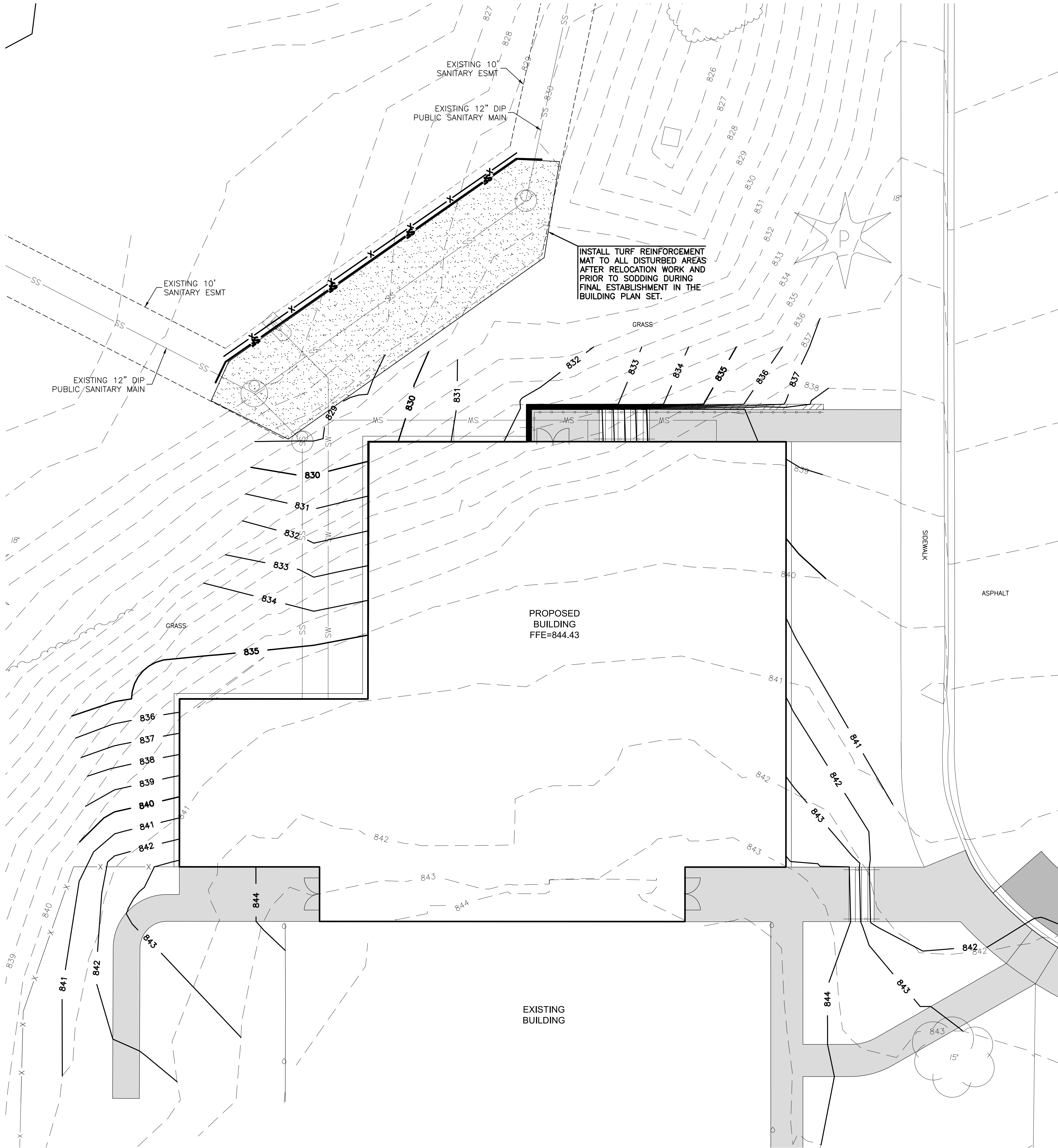
DATE 08.25.2023

SCALE 1"=20'

DESIGNED DRAWN CHECKED
SEK SEK BLT

NO. REVISION DATE

SHEET NO.



CITY OF LIBERTY EROSION CONTROL NOTES:

1. EROSION PROTECTION SHALL BE IN PLACE PRIOR TO AREAS BEING DISTURBED. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED AND MULCHED, OR SODDED, IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF LIBERTY AND GOOD ENGINEERING PRACTICES. THIS SHALL BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER COMPLETING THE WORK, IN ANY AREA. IF THIS IS OUTSIDE OF THE SEEDING PERIOD, SILT BARRIERS OR OTHER SIMILARLY EFFECTIVE MEASURES SHALL REMAIN UNTIL SUCH TIME THAT THE AREAS CAN BE SEEDED AND A STAND OF GRASS ESTABLISHED.
2. ALL EROSION CONTROL MEASURES, TEMPORARY OR PERMANENT, REQUIRE MAINTENANCE TO PRESERVE THEIR EFFECTIVENESS. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED IMMEDIATELY AFTER EACH HEAVY RAINSTORM AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY. ALL COSTS ASSOCIATED WITH THE REPAIR WORK INCLUDING RELATED INCIDENTALS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
3. SITE INSPECTION REPORTS SHALL BE COMPLETED PER THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOLLOWING REGULARLY SCHEDULED SITE INSPECTIONS BY THE DEVELOPER (OR REPRESENTATIVE) AT LEAST ONCE PER SEVEN CALENDAR DAYS. A LOG OF EACH INSPECTION AND A COPY OF THE INSPECTION REPORT SHALL BE KEPT ON FILE BY THE DEVELOPER AND BE MADE AVAILABLE TO CITY PROJECT INSPECTORS UPON REQUEST.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL SEED, MULCH, OR OTHERWISE STABILIZE ANY DISTURBED AREA WHERE THE LAND DISTURBANCE ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS. INITIAL STABILIZATION ACTIVITIES SHALL BE COMPLETED WITHIN 14 DAYS AFTER SOIL DISTURBING ACTIVITIES HAVE CEASED. ALL SEEDING ACTIVITY SHALL INCLUDE MULCHING OR EQUIVALENT SOIL STABILIZING BMP MEASURE OF THE DISTURBED AREA. THE CONTRACTOR SHALL PERFORM INSPECTIONS OF EROSION AND SEDIMENT CONTROL MEASURES AT LEAST ONCE PER WEEK AND WHENEVER A RAINFALL TOTAL OF 0.5 INCHES OR GREATER IS OBSERVED BASED ON A SINGLE MONITORING EVENT; OR BASED ON THE CUMULATIVE TOTAL OF TWO CONSECUTIVE MONITORING EVENTS WHEN THE RAINFALL TOTAL OF THE FIRST MONITORING EVENT IS LESS THAN 0.5 INCHES. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG INCLUDING THE INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS AS TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL MEASURES, ACTIONS NECESSARY TO CORRECT DEFICIENCIES, WHEN DEFICIENCIES ARE CORRECTED, AND THE SIGNATURE OF THE PERSON PERFORMING THE INSPECTION. CONTRACTOR SHALL ADD EROSION CONTROL MEASURES AS NECESSARY TO CONTROL SEDIMENT RUNOFF FROM THE SITE, ADDITIONAL MEASURES SHALL BE AT THE CONTRACTORS EXPENSE.
2. CONCRETE WASH OR RINSE WATER FROM CONCRETE MIXING EQUIPMENT, TOOLS AND/OR READY-MIX TRUCKS, TOOLS, ETC. MAY NOT BE DISCHARGED INTO OR BE ALLOWED TO RUN DIRECTLY INTO ANY EXISTING WATER BODY OR STORM INLET. ONE OR MORE LOCATIONS FOR CONCRETE WASH OUT 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 AND EXCESS WATER EVAPORATED OR INFILTRATED INTO THE GROUND.
3. CHEMICALS OR MATERIALS CAPABLE OF CAUSING POLLUTION MAY ONLY BE STORED ONSITE IN THEIR ORIGINAL CONTAINER. MATERIALS STORED OUTSIDE MUST BE IN CLOSED AND SEALED WATER-PROOF CONTAINERS AND LOCATED OUTSIDE OF DRAINAGE WAYS OR AREAS SUBJECT TO FLOODING. LOCKS AND OTHER MEANS TO PREVENT OR REDUCE VANDALISM SHALL BE USED. SPILLS WILL BE REPORTED AS REQUIRED BY LAW AND IMMEDIATE ACTIONS TAKEN TO CONTAIN THEM.
4. SEE SHEET 7 FOR EROSION CONTROL DETAILS.
5. CONTRACTOR TO KEEP ALL SEDIMENT FROM EXISTING OR PROPOSED PAVEMENT.
6. CONTRACTOR TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF CITY, STATE, AND FEDERAL REGULATIONS FOR EROSION CONTROL.
7. ALL DISTURBED AREAS SHALL BE SODDED UPON COMPLETION OF BUILDING ADDITION PROJECT. SEE SEPARATE SET OF BUILDING PLANS FOR SODDING NOTES.

EROSION CONTROL LEGEND

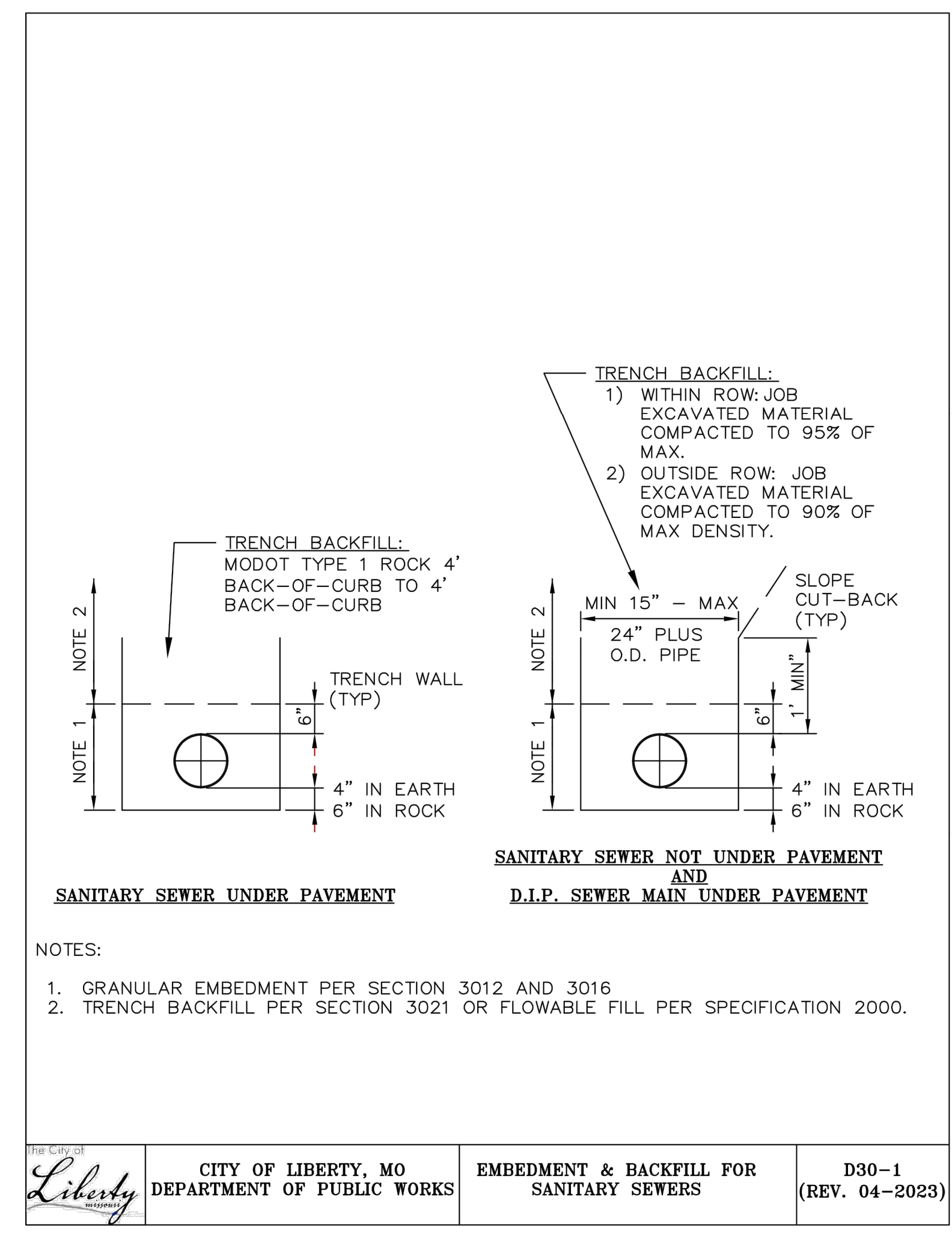
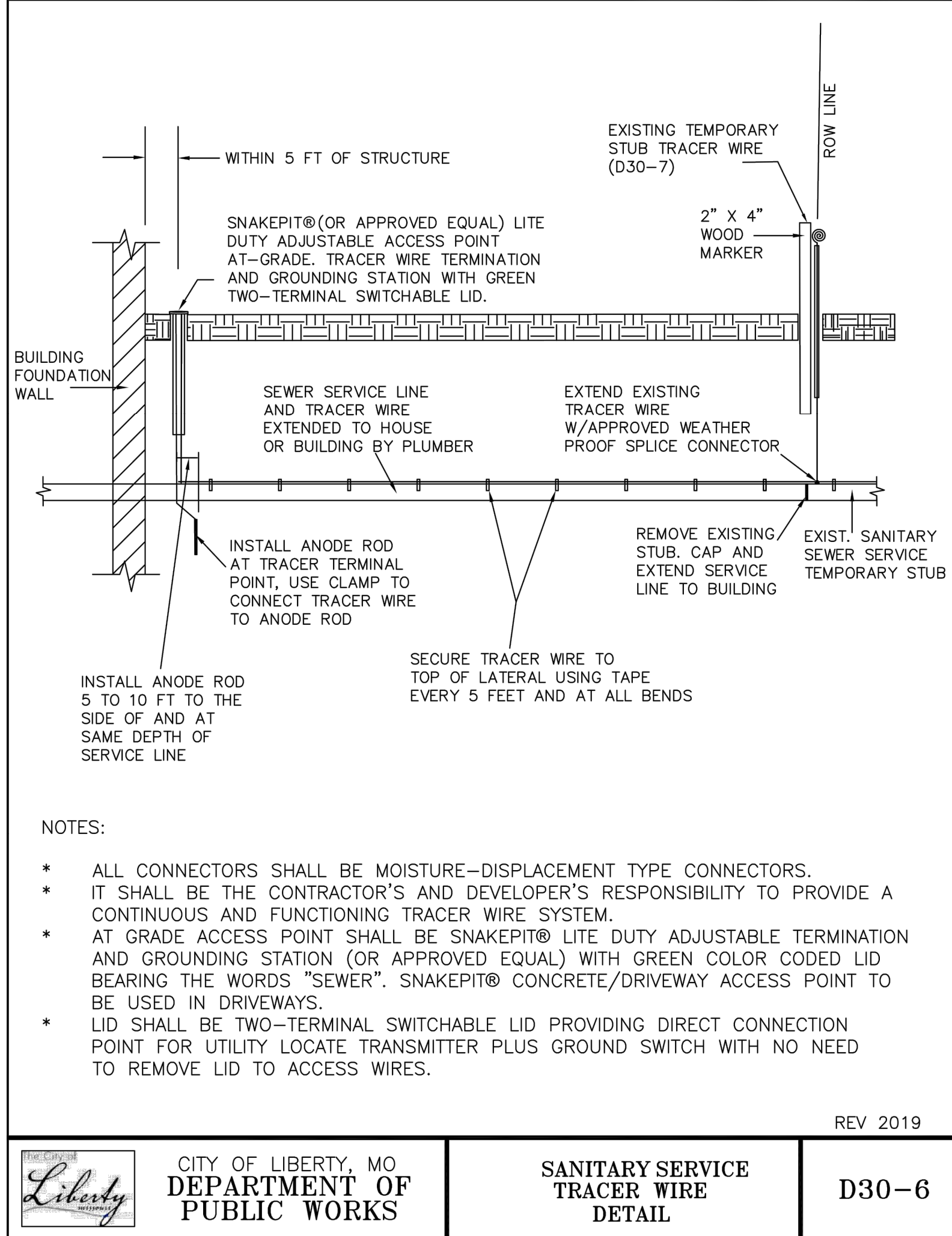
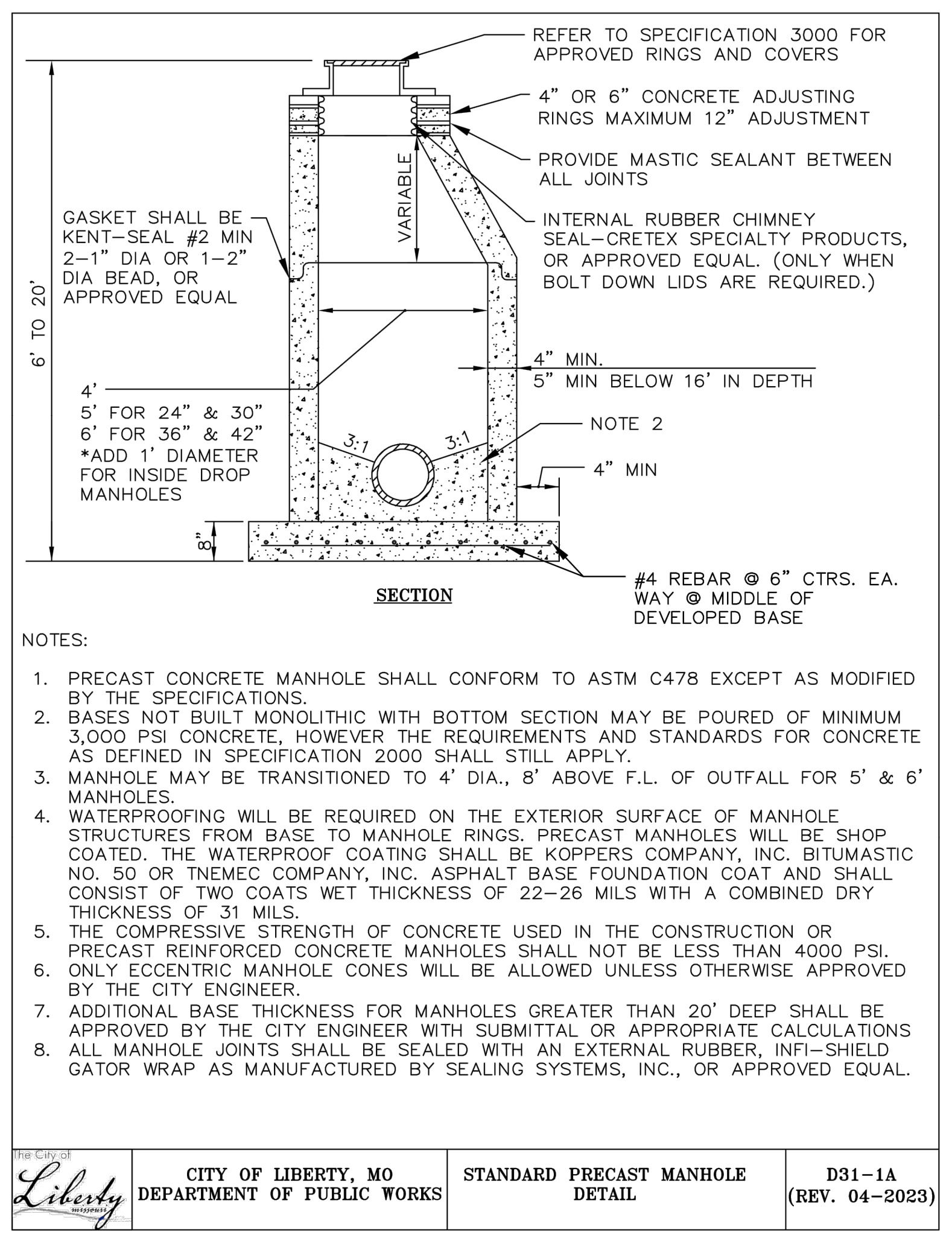
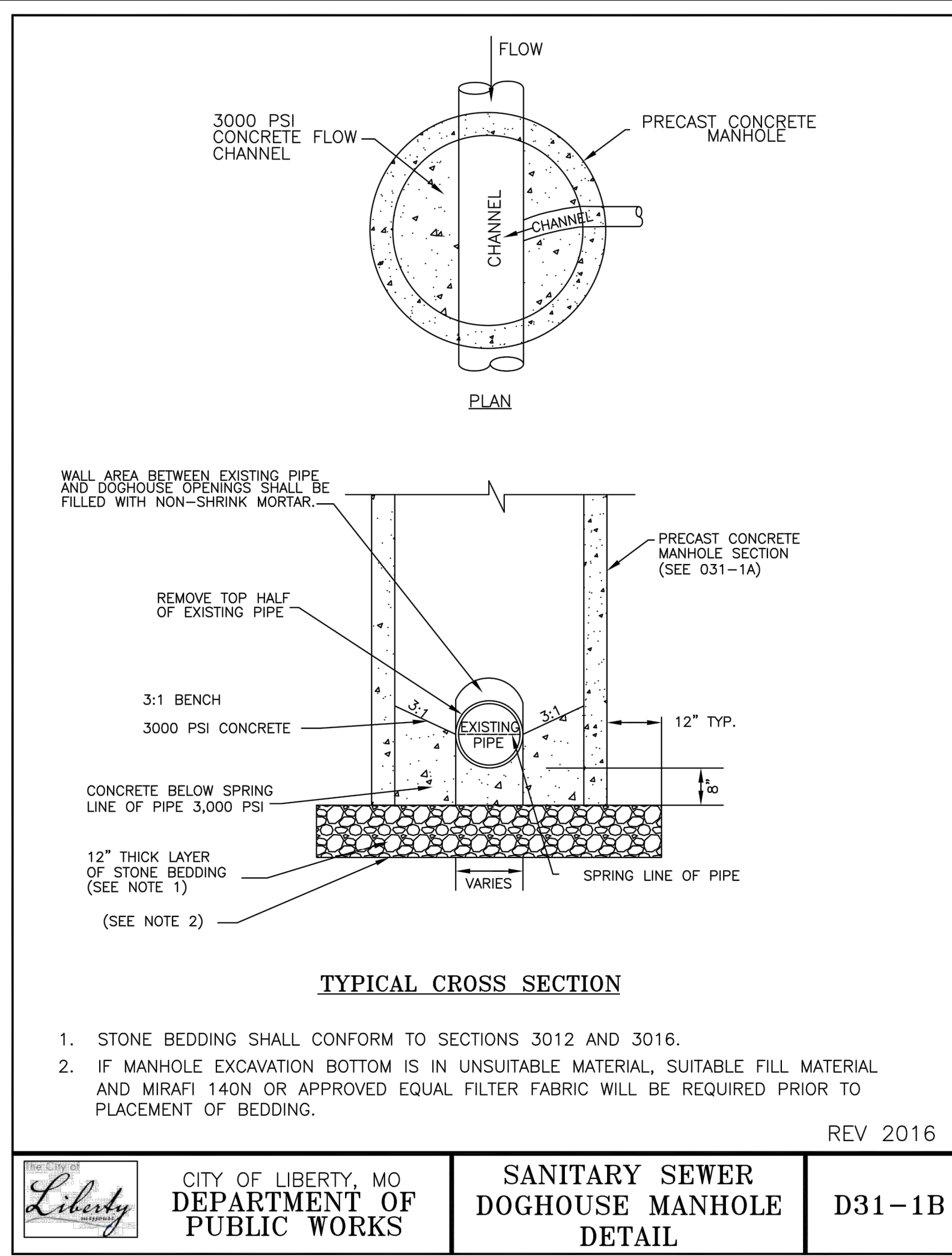
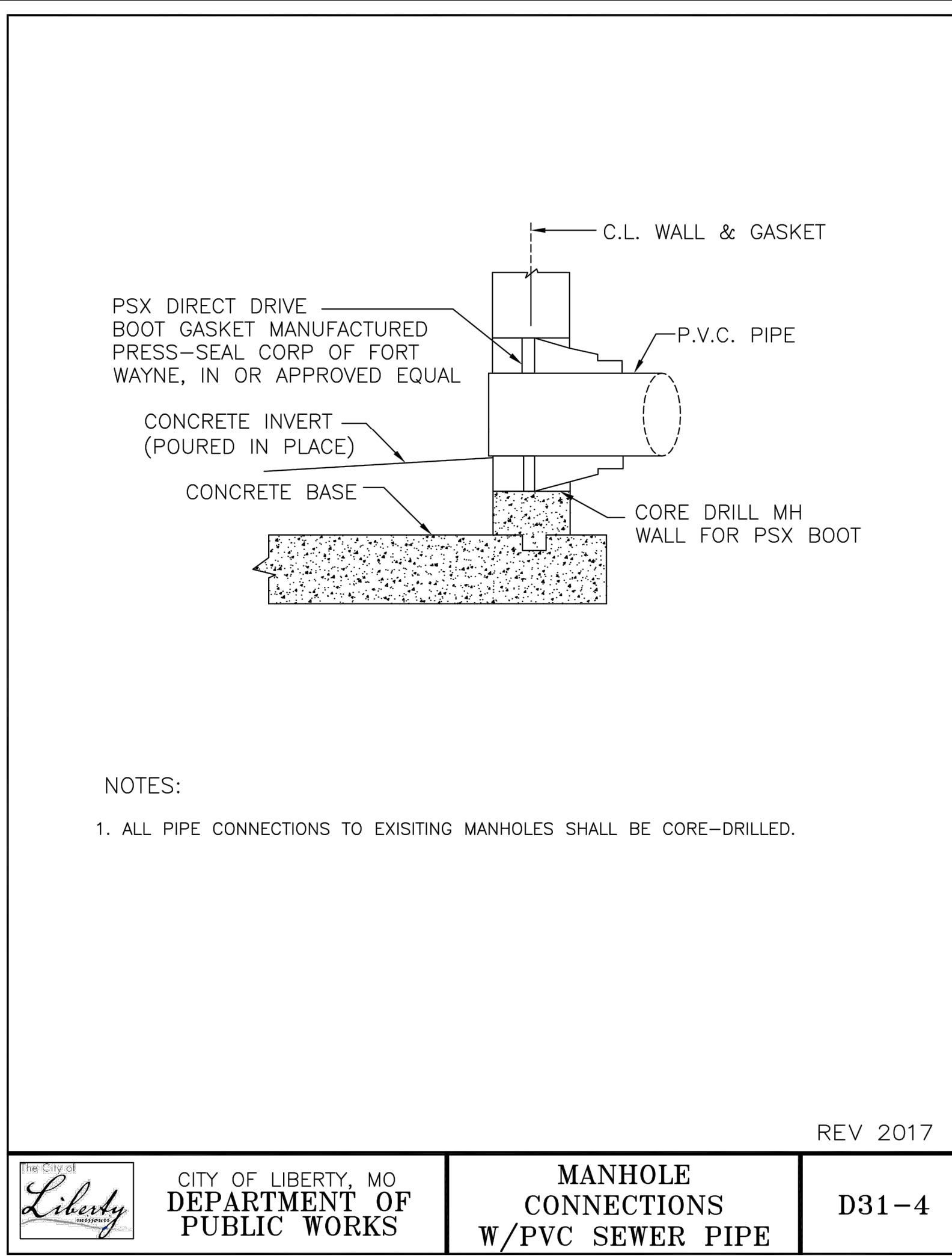
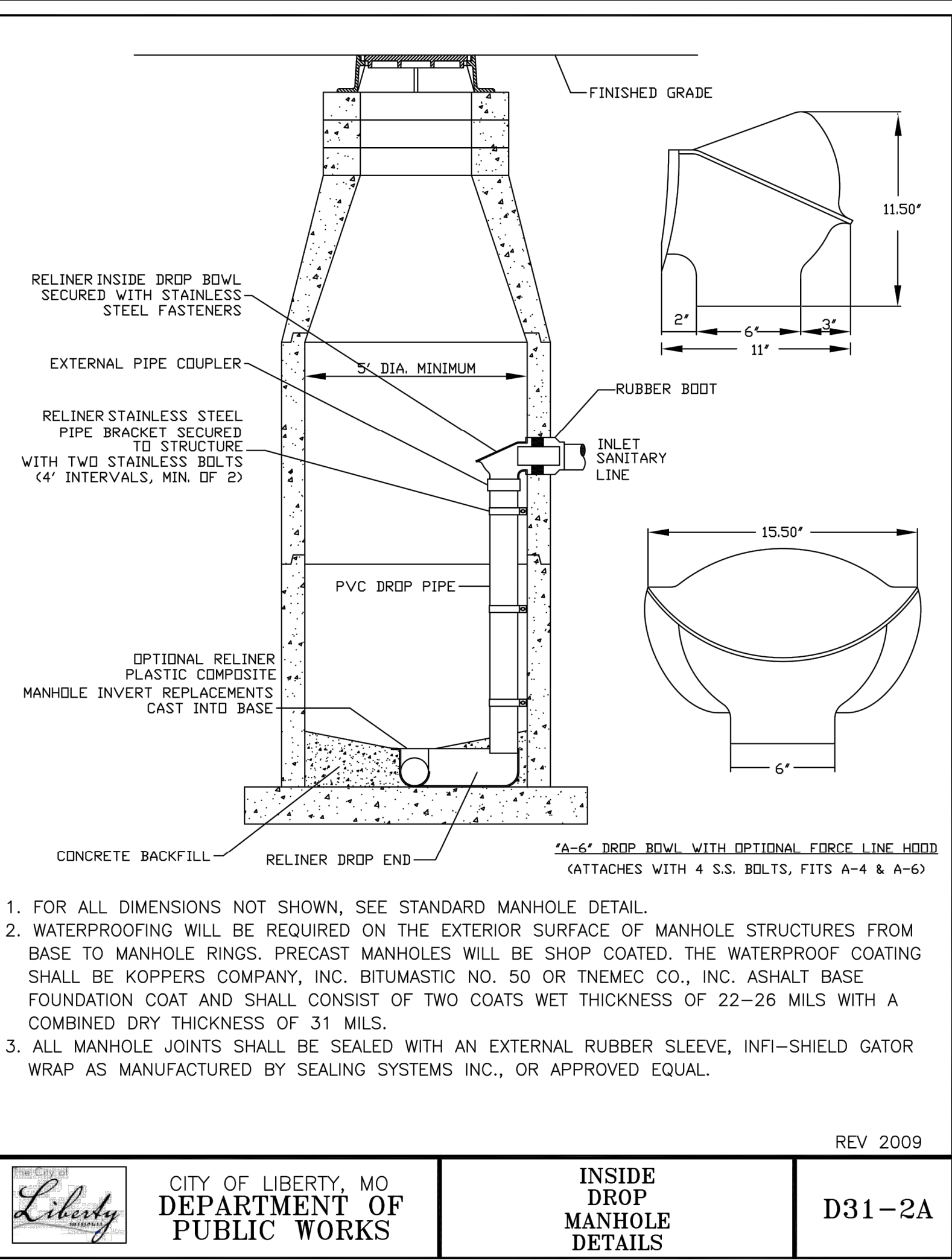
- INLET PROTECTION
- SILT FENCE
- NORTH AMERICAN GREEN S150 TURF REINFORCEMENT MAT
- TREE PROTECTION



EROSION CONTROL PLAN

PROJECT NO.	2302010295	
DATE	08.25.2023	
SCALE	1"=10'	
DESIGNED	DRAWN	CHECKED
SEK	SEK	BLT
1	CITY COMMENTS	08.01.23
NO.	REVISION	DATE

SHEET NO.



11827 W. 112th Street, Suite 200
Overland Park, KS 66210
913-517-9310
Engineering No. 2001009384
Landscape No. 2006027138
Surveying No. 2006027138

BRADEN L. TAYLOR, P.E.
LISC. #2021001896

PUBLIC SANITARY SEWER PLANS FOR

EPIC ELEMENTARY SCHOOL

650 CONISTOR ST, LIBERTY, MO 64068

©2023
MKEC Engineering
All Rights Reserved
www.mkec.com
These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of MKEC Engineering (MKEC), and may not be used or reproduced in any way without the express consent of MKEC.

UTILITY DETAILS		
PROJECT NO.	2302010295	
DATE	08.25.2023	
SCALE	N/A	
DESIGNED	DRAWN	CHECKED
SEK	SEK	BLT
NO.	REVISION	DATE
SHEET NO.		
6 OF 7		

SILT FENCE NOTES:
A) INSTALLATION:

1. THE HEIGHT OF SILT FENCE SHALL BE A MINIMUM OF 18 INCHES ABOVE THE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 34 INCHES ABOVE THE GROUND SURFACE.
2. THE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE UNAVOIDABLE, FILTER CLOTH SHALL BE SECURELY SPLICED TOGETHER ONLY AT SUPPORT POSTS, WITH A MAX 6 INCH OVERLAP.
3. DIG A TRENCH AT LEAST 8 INCHES DEEP AND 4 INCHES WIDE ALONG THE TRENCH ALIGNMENT.
4. DRIVE POSTS AT LEAST 24 INCHES INTO THE GROUND ON THE DOWNSLOPE SIDE OF THE TRENCH. SPACE POSTS A MAXIMUM OF 6 FEET APART.
5. THE SEDIMENT FABRIC SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING A MINIMUM OF ONE INCH LONG, HEAVY-DUTY WIRE STAPLES OR TIE-WIRES, AND EIGHT INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
6. PLACE THE BOTTOM 1 FOOT OF FABRIC IN THE MINIMUM-OF-6-INCH DEEP TRENCH, LAPPING TOWARD THE UPSLOPE SIDE. BACK FILL WITH COMPACTED EARTH OR GRAVEL.
7. IF A SILT FENCE IS TO BE CONSTRUCTED ACROSS A DITCH LINE OR SWALE, IT MUST BE OF SUFFICIENT LENGTH TO ELIMINATE ENDFLOW, AND THE PLAN CONFIGURATION SHALL RESEMBLE AN ARC OR HORSESHOE, PLACED ON A CONTOUR, WITH THE ENDS ORIENTED UPSLOPE.
8. EXTRA-STRENGTH SEDIMENT FABRIC SHALL BE USED WITH A MAXIMUM 8-FOOT SPACING OF POSTS.
9. TO REDUCE MAINTENANCE, EXCAVATE A SHALLOW SEDIMENT STORAGE AREA IN THE UPSLOPE SIDE OF THE FENCE. PROVIDE GOOD ACCESS IN AREA OF HEAVY SEDIMENTATION FOR CLEAN OUT AND MAINTENANCE.
10. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
11. INSTALLATION WITH SLICING METHOD IS PREFERRED.

B) TROUBLESHOOTING:

1. DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES, BEFORE FENCE INSTALLATION SO UTILITIES ARE NOT DISTURBED.
2. GRADE ALIGNMENT OF FENCE NEEDED TO PROVIDE A BROAD, NEARLY LEVEL AREA UPSTREAM OF FENCE TO ALLOW SEDIMENT COLLECTION AREA.

C) INSPECTION MAINTENANCE:

1. INSPECT SILT FENCES AT LEAST ONCE A WEEK AND AFTER EACH 1/2" OF RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. AVOID DAMAGING OR UNDERMINING THE FENCE DURING CLEANOUT. SEDIMENT ACCUMULATION SHOULD NOT EXCEED 1/2 THE HEIGHT OF THE FENCE.
4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY AND COMPLETELY STABILIZED.

REV 2009



CITY OF LIBERTY, MO
DEPARTMENT OF
PUBLIC WORKS

SILT FENCE
NOTES

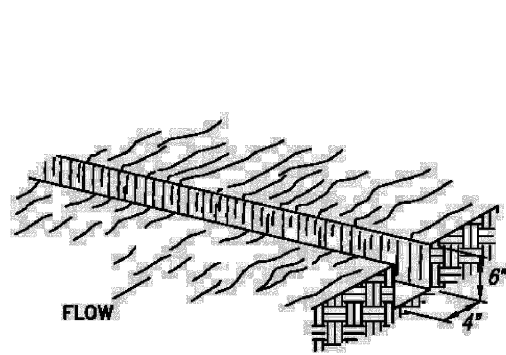
D83-9B

Erosion and Sediment Control Manual
City of Liberty

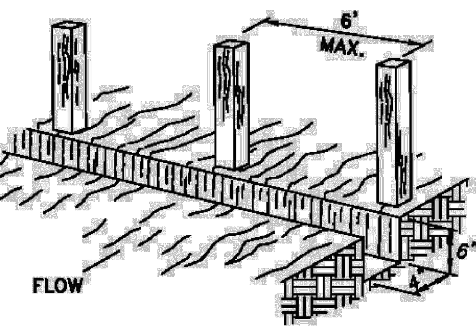
Revised 2009

EC - 36

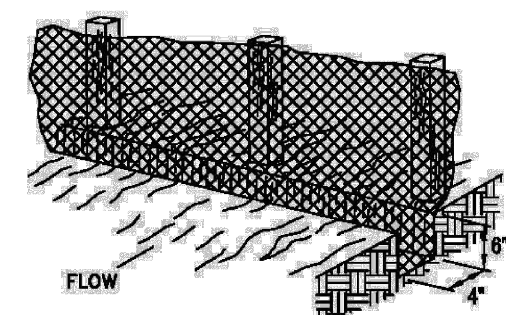
1. EXCAVATE A 6"x4" TRENCH



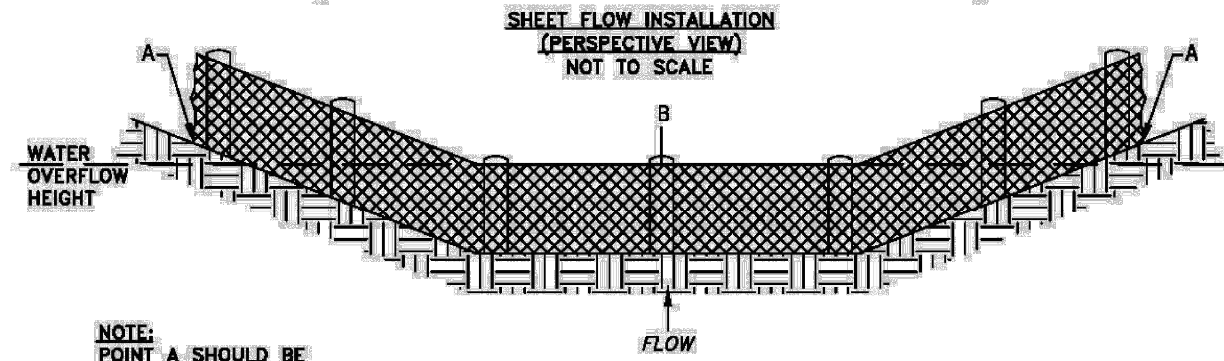
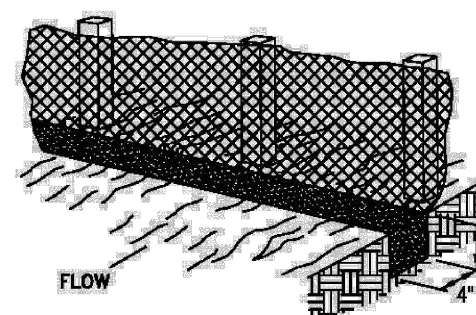
2. SET THE STAKES ALONG THE DOWN SLOPE SIDE OF THE TRENCH.



3. STAPLE GEOTEXTILE MATERIAL TO STAKES AND EXTEND IT INTO AND AROUND THE BOTTOM OF THE TRENCH.



4. BACK FILL AND COMPACT THE EXCAVATED SOIL OVER THE GEOTEXTILE IN THE TRENCH.



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)
NOT TO SCALE

WATER
OVERFLOW
HEIGHT

NOTE:
POINT A SHOULD BE
HIGHER THAN POINT B.

DRAINAGE WAY INSTALLATION
(FRONT ELEVATION)
NOT TO SCALE

REV 2009



CITY OF LIBERTY, MO
DEPARTMENT OF
PUBLIC WORKS

SILT
FENCE

D83-9A

Erosion and Sediment Control Manual
City of Liberty

Revised 2009

EC - 35

EROSION CONTROL BLANKET NOTES:

A) SITE PREPARATION:
AFTER SITE HAS BEEN SHAPED AND GRADED, PREPARE A FRIABLE SEEDBED RELATIVELY FREE FROM CLODS AND ROCKS MORE THAN 1 1/2 INCHES IN DIAMETER AND ANY FOREIGN MATERIAL THAT WILL PREVENT UNIFORM CONTACT OF THE BLANKET WITH THE SOIL SURFACE.

B) PLANTING:
LIME, FERTILIZE, AND SEED IN ACCORDANCE WITH SEEDING OR PLANTING PLAN. WHERE GROUND COVERS ARE TO BE PLANTED, LAY THE PROTECTIVE COVERING FIRST AND THEN PLANT THROUGH THE MATERIAL AS PER PLANTING PLAN.

C) LAYING AND STAPLING:
1. START LAYING THE BLANKET FROM THE TOP OF THE CHANNEL OR SLOPE AND UNROLL DOWN-GRADE. ALLOW TO LAY LOOSELY ON SOIL. DO NOT STRETCH.
2. UPSLOPE ENDS OF THE BLANKET SHOULD BE BURIED IN AN ANCHOR SLOT NO LESS THAN 6-INCHES DEEP. TAMP EARTH FIRMLY OVER THE MATERIAL.
3. WHERE MULTIPLE WIDTHS ARE Laid SIDE BY SIDE, THE ADJACENT EDGES SHALL BE OVERLAPPED A MINIMUM OF 6 INCHES AND STAPLED TOGETHER.
4. STAPLES SHALL BE PLACED PER MANUFACTURER'S RECOMMENDATIONS.

D) TROUBLESHOOTING:
CONSULT WITH THE ENGINEER IF ANY OF THE FOLLOWING OCCUR:
1. MOVEMENT OF THE BLANKET OR EROSION UNDER THE BLANKET IS OBSERVED.
2. VARIATIONS IN TOPOGRAPHY ON SITE INDICATE EROSION CONTROL MAT WILL NOT FUNCTION AS INTENDED; CHANGES IN PLAN MAY BE NEEDED, OR A BLANKET WITH A SHORTER OR LONGER LIFE MAY BE NEEDED.
3. DESIGN SPECIFICATIONS FOR SEED VARIETY, SEEDING DATES, OR EROSION CONTROL MATERIALS CANNOT BE MET; SUBSTITUTION MAY BE REQUIRED. UNAPPROVED SUBSTITUTIONS COULD RESULT IN FAILURE TO ESTABLISH VEGETATION.

E) MAINTENANCE & INSPECTION:
INSPECT CONTROLS AFTER EACH RAIN EVENT OF 1/2 INCH OR GREATER, AND EVERY 7 DAYS UNTIL VEGETATION IS ESTABLISHED. LOOK FOR EROSION OR UNDERMINING BENEATH THE NETTING, BLANKETS, OR MATS. IF ANY AREA SHOWS EROSION, PULL BACK THAT PORTION OF THE MATERIAL, ADD SOIL, AND RESEED. RESECURE THE MATERIAL IN PLACE. IF NETTING, BLANKETS OR MATS BECOME DISLOCATED OR DAMAGED, REPAIR OR REPLACE AND RESECURE IMMEDIATELY.

F) JOINING BLANKETS:
OVERLAP THE END OF THE PREVIOUS ROLL A MINIMUM OF 6 INCHES AND STAPLE. STAPLE ACROSS THE END OF THE ROLL JUST BELOW THE ANCHOR SLOT AND ACROSS THE MATERIAL EVERY 6 INCHES.

G) TERMINAL END:
AT THE POINT AT WHICH THE MATERIAL IS DISCONTINUED, OR WHERE THE BLANKET MEETS A STRUCTURE OF SOME TYPE, STAPLE A MINIMUM OF EVERY 12 INCHES.

H) FINAL CHECK:
THESE INSTALLATION CRITERIA MUST BE ADHERED TO:
1. ALL DISTURBED AREAS ARE SEEDDED.
2. PROTECTIVE BLANKET IS IN UNIFORM CONTACT WITH THE SOIL.
3. ALL LAP JOINTS ARE SECURE.
4. ALL STAPLES ARE DRIVEN FLUSH WITH THE GROUND.

REV 2009



CITY OF LIBERTY, MO
DEPARTMENT OF
PUBLIC WORKS

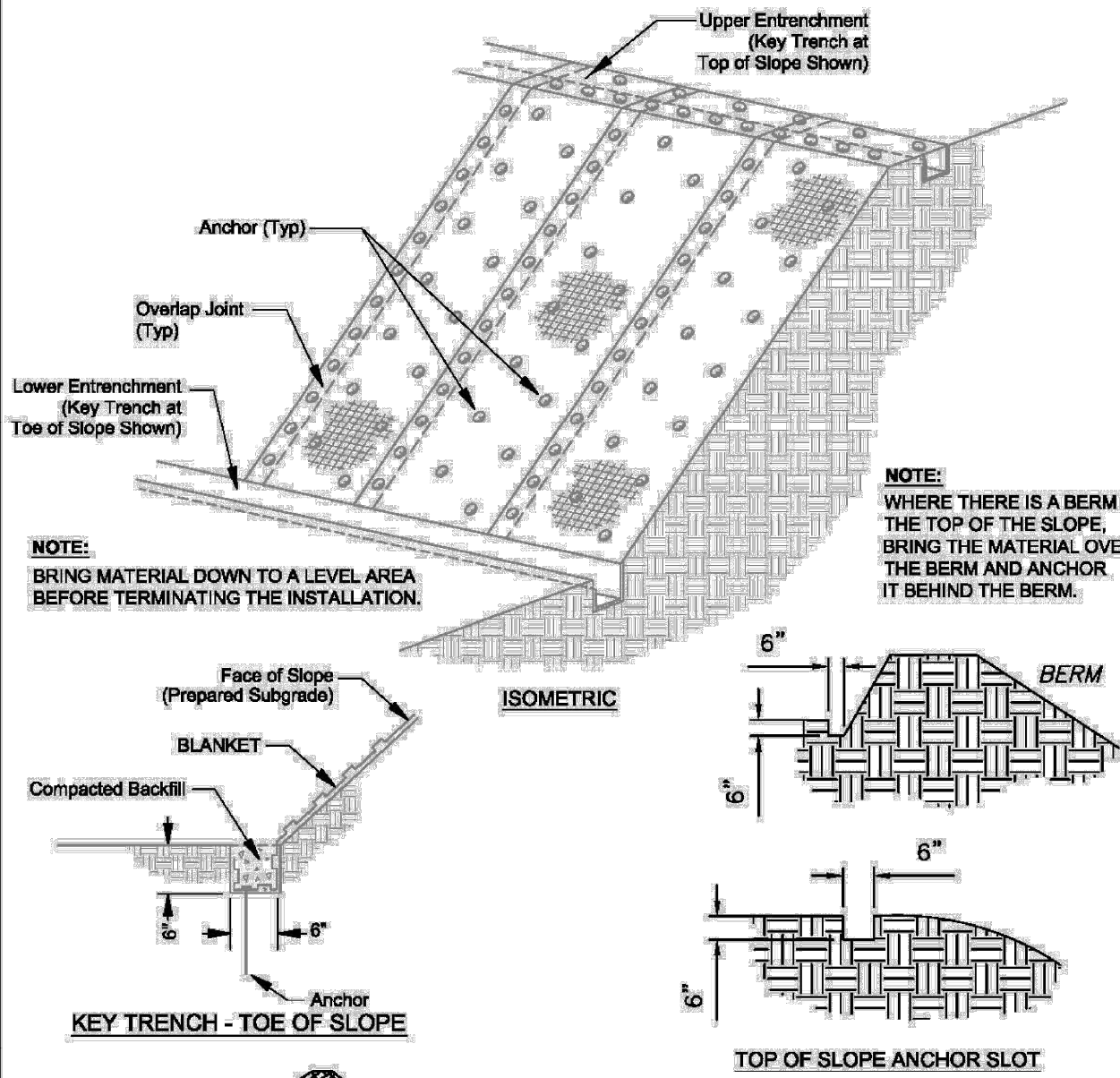
EROSION CONTROL
BLANKETS

D83-1B

Erosion and Sediment Control Manual
City of Liberty

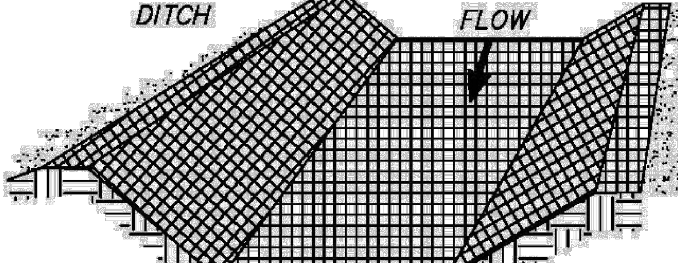
Revised 2009

EC - 14

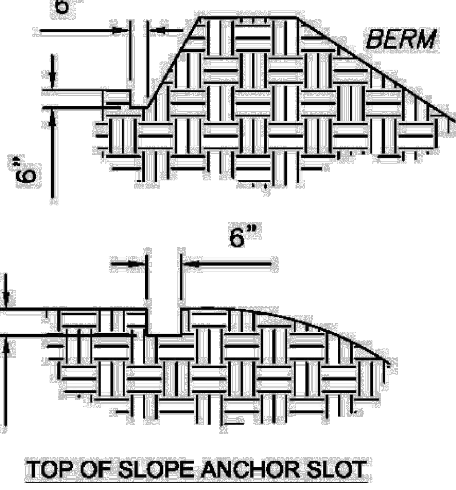


NOTE:
BRING MATERIAL DOWN TO A LEVEL AREA
BEFORE TERMINATING THE INSTALLATION.

NOTE:
WHERE THERE IS A BERM AT
THE TOP OF THE SLOPE,
BRING THE MATERIAL OVER
THE BERM AND ANCHOR
IT BEHIND THE BERM.



KEY TRENCH - TOE OF SLOPE



TOP OF SLOPE ANCHOR SLOT

NOTE:
IN DITCHES, APPLY PROTECTIVE
COVERING PARALLEL TO THE DIRECTION
OF FLOW. USE CHECK SLOTS AS REQUIRED.
AVOID JOINING MATERIAL IN THE CENTER
OF THE DITCH IF AT ALL POSSIBLE.
FOLLOW BLANKET MANUFACTURER'S
RECOMMENDATIONS FOR ALLOWABLE
VELOCITY AND SHEAR STRESS.

REV 2009



CITY OF LIBERTY, MO
DEPARTMENT OF
PUBLIC WORKS

EROSION CONTROL
BLANKETS

D83-1A

Erosion and Sediment Control Manual
City of Liberty

Revised 2009

EC - 13



MKEC

11827 W. 112th Street, Suite 200
Overland Park, KS 66210
913-517-9310
Engineering No. 2001009384
Landscape No. 2006027138
Surveying No. 2006027138



BRADEN L. TAYLOR, P.E.
LISC. #2021001896

PUBLIC SANITARY SEWER PLANS FOR
EPIC ELEMENTARY SCHOOL
650 CONISTOR ST, LIBERTY, MO 64068

©2023
MKEC Engineering
All Rights Reserved
www.mkec.com
These drawings and their contents,
including, but not limited to, all concepts,
designs, & ideas are the exclusive
property of MKEC Engineering (MKEC),
and may not be used or reproduced in any
way without the express consent of MKEC.

**EROSION
CONTROL
DETAILS**

PROJECT NO. 2302010295

DATE 08.25.2023

SCALE N/A

DESIGNED DRAWN CHECKED

SEK SEK BLT

NO. REVISION DATE

SHEET NO.