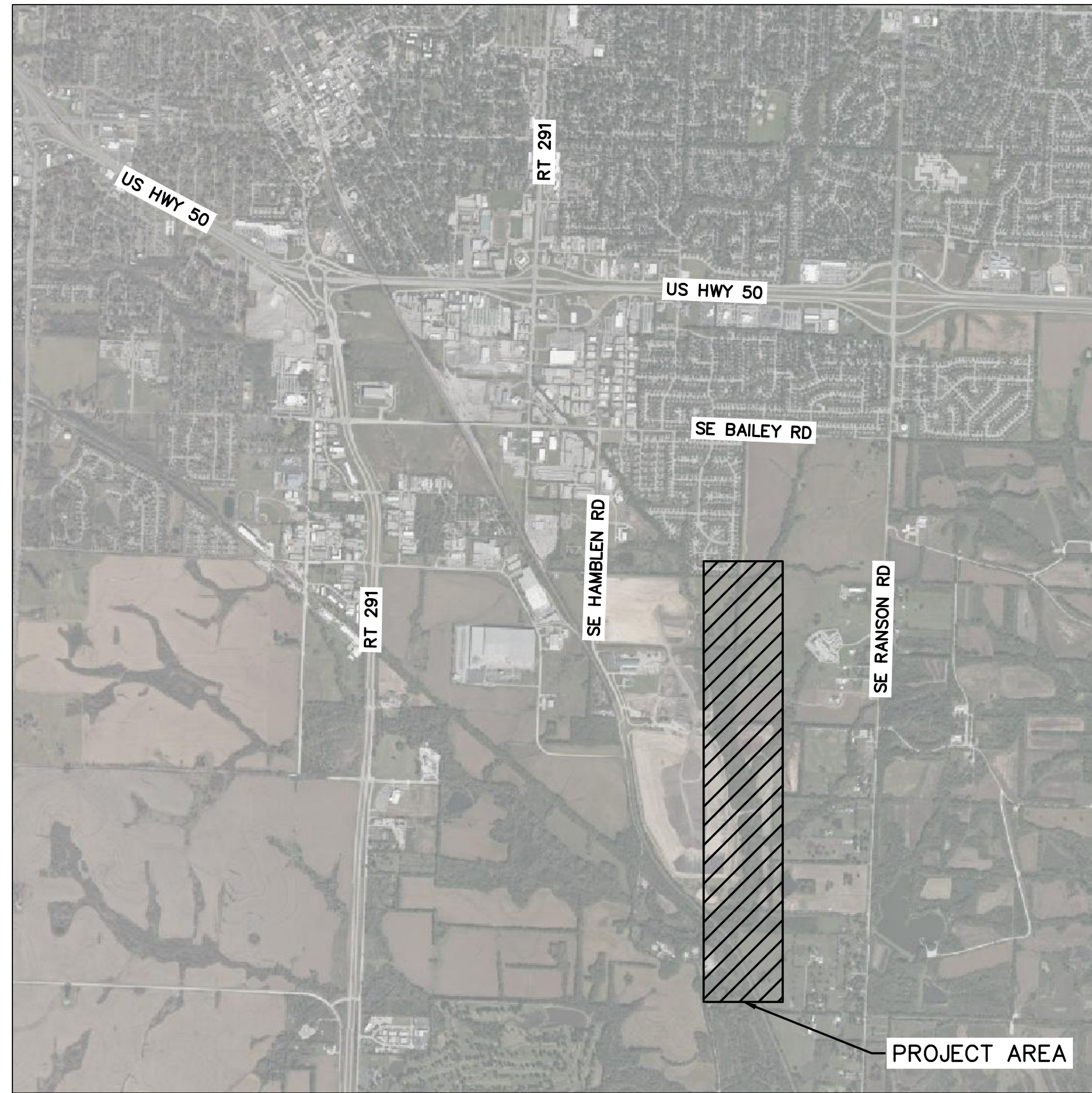


# BIG CREEK INTERCEPTOR SEWER UPSIZING LEE'S SUMMIT MIDDLE SCHOOL #4 LEE'S SUMMIT, MISSOURI 2021

UTILITY AND GOVERNING AGENCY CONTACT INFORMATION	
CITY OF LEE'S SUMMIT, MISSOURI	220 SE GREEN
CITY HALL	816.969.1000
BUILDING INSPECTIONS	816.969.1200
SPECIAL INSPECTIONS	816.969.1200
BUILDING PERMITS	816.929.1200
LAND DEVELOPMENT DIVISION/INSPECTIONS	816.969.1200
TRAFFIC OPERATIONS	816.969.1800
LEE'S SUMMIT WATER UTILITIES	1200 SE HAMBLEN ROAD LEE'S SUMMIT, MO 64081 816.969.1900
LEE'S SUMMIT PUBLIC WORKS	816.969.1800
SPIRE (MGE)	314.642.0500
EVERGY	8700 EAST FRONT STREET KANSAS CITY, MO 64120 816.471.5275
TELEPHONE SERVICE	
AT&T	816.221.1781
CABLE TELEVISION SERVICE	
SPECTRUM	877.772.2253
GOOGLE FIBER	877.454.6959

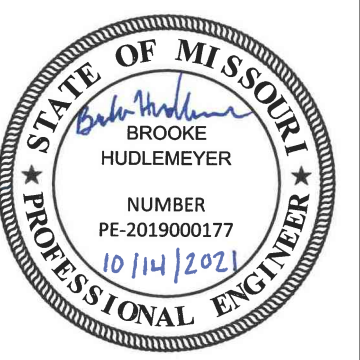


LOCATION MAP  
NOT TO SCALE

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FOR MDNR APPROVAL



REV. NO.	DATE	REVISIONS DESCRIPTION
1	8-25-2021	ASI #29 - REVISED PER CITY COMMENTS
2	10-14-2021	REVISED FOR MDNR SUBMITTAL

TITLE SHEET	2021
BIG CREEK INTERCEPTOR SEWER UPSIZING LEE'S SUMMIT MIDDLE SCHOOL #4	
LEE'S SUMMIT, MO	

drawn by: \_\_\_\_\_ NG  
checked by: \_\_\_\_\_ BH  
approved by: \_\_\_\_\_ BH  
QA/QC by: \_\_\_\_\_ JS  
project no.: 020-01030  
drawing no.: \_\_\_\_\_  
date: 07.15.2021

SHEET  
G1

**olsson**  
 Olsson - Civil Engineering  
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 1301 Burlington Street  
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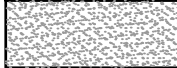
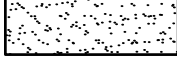
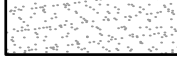



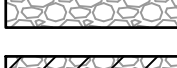
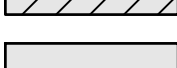
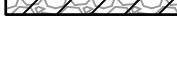

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 DATE: Oct 14, 2021 7:41am  
 USER: bhudlemeyer  
 XREFS: P\_PTLBK\_0200103







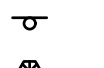



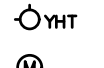



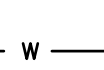
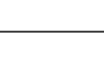
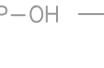

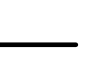
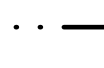
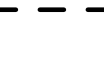



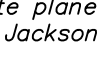




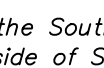
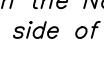
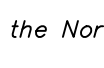

### ABBREVIATIONS

AB	ANCHOR BOLT	E	EAST, ELECTRIC	PC	PRESSURE CLASS
ABFV	AIR BUTTERFLY VALVE	EA.	EACH, EXHAUST AIR	PE	PLAIN END, POLYETHYLENE
AC	AIR CONDITIONING	EF	EACH FACE, EXHAUST FAN	POS	POSITION
ACV	AIR CHECK VALVE	ELEV.	ELEVATION	PSI	POUNDS PER SQUARE INCH
AD	ACCESS DOOR, AREA DRAIN, AIR DAMPER, ANODE, AUTOMATIC DAMPER	ENCL	ENCLOSURE	PSIG	POUNDS PER SQUARE INCH GAUGE
ADJ	ADJUSTABLE, ADJACENT	EOS	EDGE OF SURFACING	PVC	POLYVINYL CHLORIDE
ADMIN	ADMINISTRATION	EQ	EQUALIZATION, AS IN EQ BASIN	RCP	REINFORCED CONCRETE PIPE
AFF	ABOVE FINISH FLOOR	EQUIP	EQUIPMENT	REINF.	REINFORCING
AH	AHEAD, ACCESS HATCH	EW	EACH WAY	REQ'D	REQUIRED
AHU	AIR HANDLING UNIT	EWFF	EACH WAY EACH FACE	RJ	RESTRAINED JOINT
ALT	ALTERNATE, ALTERNATIVE	EXIST.	EXISTING	S	SOUTH, SEWER
ALUM.	ALUMINUM	EXP.	EXPANSION, EXPOSED	SCH.	SCHEDULE
AP	ACCESS PANEL	EXT	EXTENSION, EXTERIOR, EXTERNAL	SE	SOUTHEAST
APPR	APPROACH	F	DEGREES FAHRENHEIT, FLUORIDE	SEC	SECOND
APPROX	APPROXIMATE	FC	FINAL CLARIFIER	SF	SQUARE FEET
ARCH	ARCHITECTURAL	FD	FLOOR DRAIN, FIRE DAMPER	SQ.	SQUARE
ASSY	ASSEMBLY	FIN	FINISH	S.S.	STAINLESS STEEL
AUTO	AUTOMATIC	FIT	FLOW INDICATING TRANSMITTER	STA	STATION
AUX	AUXILIARY	FL	FLOOR	STD	STANDARD
AVG	AVERAGE	FLEX	FLEXIBLE	STG	SOUTHWEST
AWG	AMERICAN WIRE GAGE	FLG.	FLANGE, FLASHING	S.Y.	SQUARE YARD
BAL	BALANCE	FRP	FIBERGLASS REINFORCED PLASTIC PIPE		
BF	BLIND FLANGE	FT	FOOT		
BFV	BUTTERFLY VALVE	FTG.	FOOTING		
BH	BIRD HOUSE	FWD	FORWARD		
BHP	BRAKE HORSEPOWER	GA	GAUGE		
BLDG	BUILDING	GAL	GALLON		
BLK	BLOCK	GALV.	GALVANIZED		
BLR	BLOWER	GEN	GENERAL, GENERATOR		
BM	BENCHMARK	GND	GROUND		
BOT.	BOTTOM	GPB	GALLONS PER MINUTE		
BRG	BEARING				
BS	BOTH SIDES	HM	HOLLOW METAL		
BSMT	BASEMENT	HOA	HAND/OFF/AUTO SWITCH		
B&S	BELL AND SPIGOT	HORIZ	HORIZONTAL		
BTU	BRITISH THERMAL UNIT	HP	HORSEPOWER		
BTUH	BRITISH THERMAL UNIT-HOUR	HR	HOUR, HANDRAIL		
BU	BELL-UP	HVAC	HEATING, VENTILATION AND AIR CONDITIONING		
BV	BALL VALVE	HWL	HIGH WATER LEVEL		
CD	CEILING DIFFUSER, CONTROL DAMPER				
CENTR	CENTRIFUGAL	ID	INSIDE DIAMETER, INLET DAMPER		
CFM	CUBIC FEET PER MINUTE	IF	INSIDE FACE		
CI	CAST IRON	IN	INCHES		
CIP	CAST IRON PIPE	INV.	INVERT		
CL	CENTER LINE				
CLG	CEILING				
CLR.	CLEAR (ANCE)				
CMP	CORRUGATED METAL PIPE				
CMU	CONCRETE MASONRY UNIT	LAB	LABORATORY		
CO	CLEAN OUT	LB(S)	POUND(S)		
COM	COMMUNUTOR	LF	LINEAR FEET		
COMP	COMPRESSOR, COMPRESSED	LIN.	LINEAL, LINEAR		
CONC.	CONCRETE	LS	LEVEL SWITCH		
CONST	CONSTRUCTION	LT	LEVEL TRANSMITTER		
CONT	CONTINUE (OUS), (ATION)	LWL	LOW WATER LEVEL		
CP	CONTROL POINT				
CPLG	COUPLING	MAX.	MAXIMUM		
CTR(S)	CENTER(S)	MG	MILLION GALLONS		
CTS	COPPER TUBE SIZE	MGD	MILLION GALLONS PER DAY		
CU	CUBIC	MH	MANHOLE, MOUNTING HEIGHT		
CV	CHECK VALVE	MIN.	MINIMUM		
CW	COLD WATER	MISC	MISCELLANEOUS		
CY	CUBIC YARD	MJ	MECHANICAL JOINT		
		MW	MONITORING WELL		
		MXR	MIXER		
DBL	DOUBLE	N	NORTH		
DDC	DIRECT DIGITAL CONTROL	NA	NOT APPLICABLE		
DEC	DECANT	NAVD	NORTH AMERICAN VERTICAL DATUM		
DEG	DEGREE	NE	NORTHEAST		
DEPT	DEPARTMENT	NOM	NOMINAL		
DIA.	DIAMETER	NW	NORTHWEST		
DIM	DIMENSION				
DIP	DUCTILE IRON PIPE				
DOP	DISSOLVED OXYGEN PROBE	O.C.	ON CENTER		
DWG(S)	DRAWING(S)	O.D.	OUTSIDE DIAMETER		
DWL(S)	DOWEL(S)	OHWM	ORDINARY HIGH WATER MARK		
		OZ	OUNCE		

### MATERIALS

	EARTH OR GRADE		FLOWABLE FILL
	CONCRETE ACCESS DRIVE		NON-SHRINK GROUT
	CONCRETE, PRECAST OR PRESTRESSED CONCRETE		PEA GRAVEL
	BAR GRATING		CRUSHED ROCK/GRAVEL
	ASPHALT REPAIR		CRUSHED ROCK/GRAVEL REPAIR
	ASPHALT		

### LEGEND

	BIRDHOUSE
	CONTROL POINT-BENCHMARK
	CURB STOP
	ELECTRIC METER
	GRATE
	LIGHT POLE
	POWER POLE
	SIGN
	STEEL POST
	PROPOSED SANITARY SEWER MANHOLE
	EXIST. SANITARY SEWER MANHOLE
	SANITARY SEWER VALVE
	TRANSFORMER
	WOOD POST
	YARD HYDRANT
	METERING MANHOLE
	EXISTING CONTOUR LINE
	NEW CONTOUR LINE
	TREE MASS
	PROPOSED GRAVITY SANITARY SEWER
	EXISTING GRAVITY SANITARY SEWER
	WATER
	EXIST. PIPING
	OVERHEAD POWER
	UNDERGROUND POWER
	PERMANENT EASEMENT
	TEMPORARY CONSTRUCTION EASEMENT
	LIMITS/STAGING AREA
	PROPERTY LINE
	SECTION LINE
	RAILROAD CENTER LINE

### CONTROL POINT AND BENCHMARKS

Basis of coordinates shown hereon are based on Missouri state plane coordinate system, West Zone, and scaled to ground coordinates utilizing a combined adjustment factor of 0.9998986, holding Jackson County GPS Control Point JA-45 as a base point. Distances shown hereon are ground distances in US Survey Feet.

**MO DNR JA-45:**  
KC Metro Aluminum GRS Disk set in concrete ±3' below pavement on shoulder of SE Ranson Rd. Stamped "JA-45".  
N: 994990.746  
E: 2834265.611  
Elev.: 1046.26'

**Olsson #100:**  
Set 1/2" Rebar with Olsson Control Cap. Set in the grass on the North Side of SE Bailey Rd.  
N: 993598.83  
E: 2831586.70  
Elevation: 1032.16'

**Ties:**  
1. SW 66.88' to the NE corner of the concrete sidewalk on the South side of SE Bailey Rd.  
2. SSW 82.19' to the center of a power pole on the South side of SE Bailey Rd.  
3. East 254.38' to the NW corner of a concrete curb inlet on the North side of SE Bailey Rd.  
4. East ±298' to the centerline of Country Ln. on the North side of SE Bailey Rd.

**Olsson #101:**  
Set 1/2" Rebar with Olsson Control Cap. Set in the grass on the North side of SE Bailey Rd.  
N: 993561.11  
E: 2832755.84  
Elevation: 1014.26'

**Ties:**  
1. East 80.94' to the NW corner of a concrete curb inlet on the North side of SE Bailey Rd.  
2. SE 91.53' to the SW corner of a concrete curb inlet on the South side of SE Bailey Rd.  
3. NE 94.82' to the SW corner of a concrete overflow structure on the South side of a pond on the North side of SE Bailey Rd.  
4. West ±871' to the centerline of Country Ln. on the North side of SE Bailey Rd.

**Olsson #102:**  
Set 1/2" Rebar with Olsson Control Cap. Set in the grass ±58' East of the East end of SE 15th St.  
N: 992084.37  
E: 2831530.63  
Elevation: 1012.56'

**Ties:**  
1. NW 67.97' to the center of a water valve on the North side of SE 15th St.  
2. West 59.33' to the center of a sanitary manhole on the South side of SE 15th St.  
3. WSW 57.28' to the SE corner of the East end of the concrete sidewalk on the South side of SE 15th St.  
4. North ±15' to the Easterly prolongation of the centerline of SE 15th St.

**Olsson #103:**  
Set 1/2" Rebar with Olsson Control Cap. Set in the grass ±62' East of the East end of SE Cape Dr.  
N: 991553.72  
E: 2831514.48  
Elevation: 1000.43'

**Ties:**  
1. NW 76.12' to the center of a telephone pedestal on the North side of SE Cape Dr.  
2. SW 67.00' to the center of a water valve on the South side of SE Cape Dr.  
3. SW 70.06' to the SE corner of the East end of the concrete sidewalk on the South side of SE Cape Dr.  
4. North ±4' to the Easterly prolongation of the centerline of SE Cape Dr.

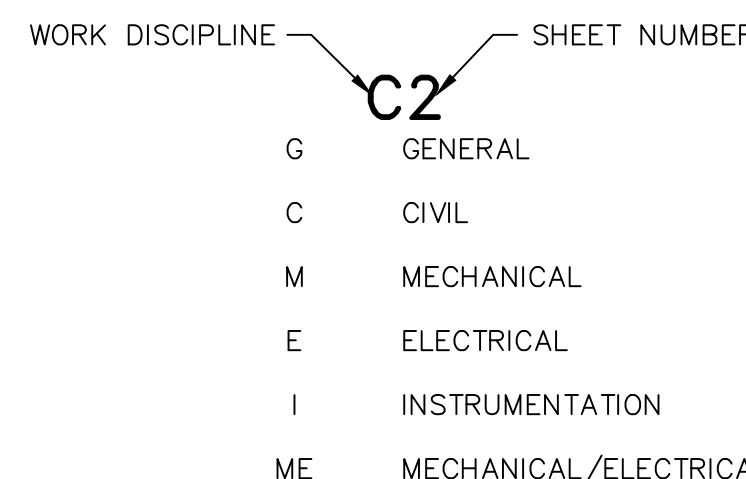
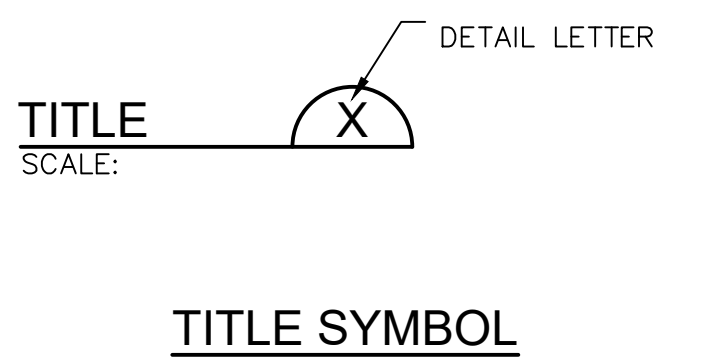
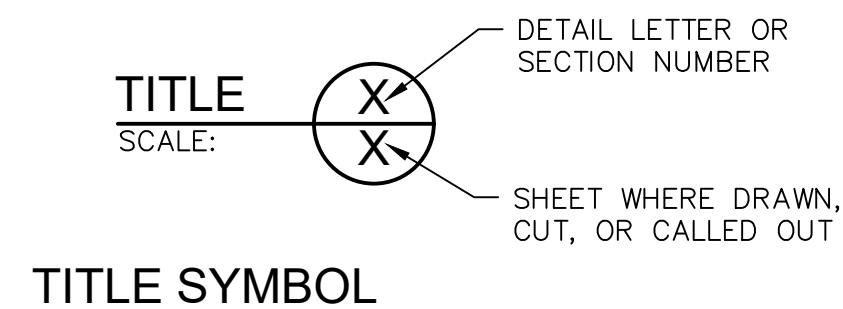
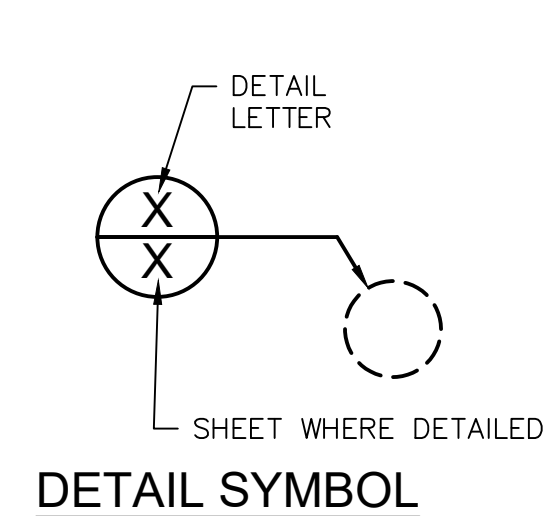
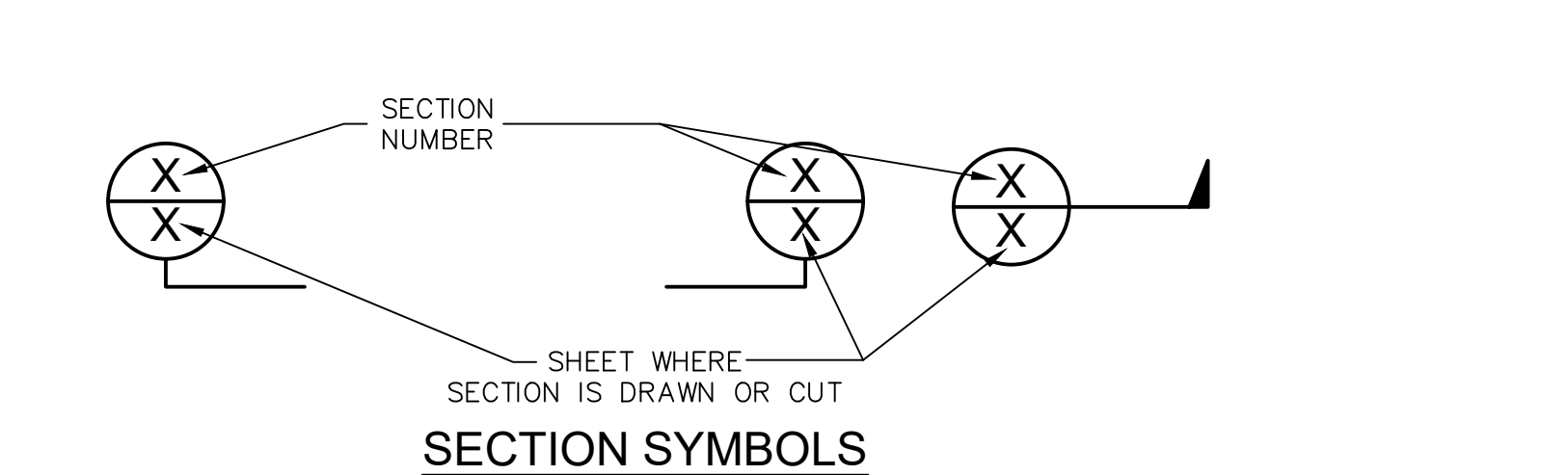
**Olsson #403:**  
Set 5/8" rebar in grass field.  
N: 989924.44  
E: 2830822.77  
Elevation: 969.48'

**Ties:**  
1. East 9.5' to the center of a sanitary manhole on West side of creek.

**Olsson #600:**  
Set 1/2" Rebar with Olsson Control Cap. Set in the grass near SW corner of go-cart track.  
N: 983054.60  
E: 2831999.14  
Elevation: 948.63'

**Ties:**  
1. NNW ±9.0' to North edge of asphalt track.

### SYMBOLS LEGEND



### SHEET DESIGNATION

G	GENERAL
C	CIVIL
M	MECHANICAL
E	ELECTRICAL
I	INSTRUMENTATION
ME	MECHANICAL/ELECTRICAL

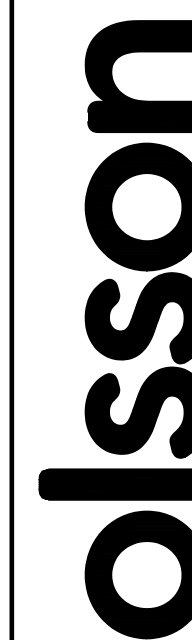
Basis of elevations shown hereon are based upon NAVD '88 utilizing MoDOT's continuously monitored GNSS system and holding the elevation of JA-45 elevation 1046.26'

**Olsson Benchmark #1:**  
Set chiseled square cut on center front face of a curb inlet on North side of SE Bailey Rd. ±42' West of Country Ln.  
Elevation: 1028.43'

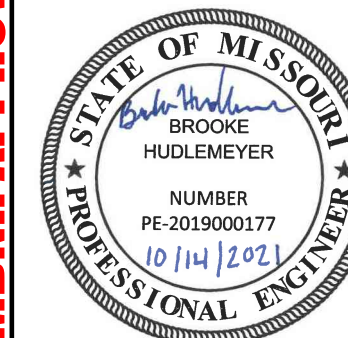
**Olsson Benchmark #2:**  
Set chiseled square cut on SE corner of overflow structure on South side of pond on North side of SE Bailey Rd. ±962' East of Country Ln.  
Elevation: 1017.13'

**Olsson Benchmark #3:**  
Set chiseled "+" cut on SSE flange bolt of fire hydrant in the NW quadrant of the intersection of SE 15th St. and SE Dalton Dr.  
Elevation: 1016.27'

**Olsson Benchmark #4:**  
Set chiseled square cut on edge of sidewalk at the West center of a curb inlet in the NW quadrant of the intersection of SE Cape Dr. and SE Dalton Dr.  
Elevation: 999.24'



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



FOR MDNR APPROVAL

REV. NO.	DATE	REVISIONS DESCRIPTION
1	8-25-2021	AS1 #29 - REVISED PER CITY COMMENTS
2	10-14-2021	REVISED FOR MDNR SUBMITTAL

LEGENDS ABBREVIATIONS & SYMBOLS  
BIG CREEK INTERCEPTOR SEWER UPSIZING  
LEE'S SUMMIT MIDDLE SCHOOL #4  
2021  
LEE'S SUMMIT, MO

drawn by:	NG
checked by:	BH
approved by:	BH
QA/QC by:	JS
project no.:	020-01030
drawing no.:	
date:	07.15.2021

SHEET  
G2



DWG: \\oa.ad.oacconsulting.com\ite-nst\projects-direct\2020\0001-0500\020-0103\40-Design\AutoCAD\Final Plans\Sheets\WTWW\P\_GEN\_0200103.dwg  
 DATE: Oct 14, 2021 7:41am XREFS: P\_PTLBK\_0200103 P\_PBASE\_0200103 V\_XTOPO-2\_00103 V\_XBOU-2\_00103 C\_PBASE\_0200103 USER: bhudlemeyer

**GENERAL NOTES**

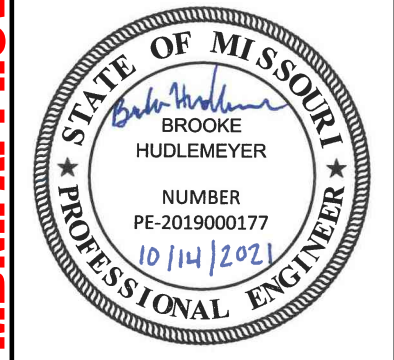
1. CONSTRUCTION OF THE IMPROVEMENTS SHOWN OR IMPLIED BY THIS SET OF PLANS SHALL NOT BE INITIATED OR ANY PART THEREOF UNDERTAKEN UNTIL THE CITY IS NOTIFIED.
2. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS AND ONE (1) COPY OF THE APPROPRIATE CONSTRUCTION SPECIFICATIONS AND PROJECT MANUAL AT THE JOB SITE AT ALL TIMES.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
4. THE ACCURACY AND ADEQUACY OF THE ALIGNMENTS, DIMENSIONS, AND ELEVATIONS SHALL BE CONFIRMED BY THE CONTRACTOR AT THE JOB SITE.
5. CONTRACTOR SHALL NOTIFY THE CITY'S REPRESENTATIVE AT LEAST 48 HOURS PRIOR TO BEGINNING ANY WORK. CONTRACTOR SHALL NOTIFY RESIDENTS OF CONSTRUCTION ACTIVITIES AT LEAST 48 HOURS BEFORE WORK BEGINS AND SHALL PROVIDE AND MAINTAIN A TEMPORARY SURFACE FOR ACCESS UNTIL PERMANENT RESTORATION IS COMPLETE.
6. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE UTILITY COMPANIES WHICH HAVE FACILITIES IN THE VICINITY 72 HOURS PRIOR TO THE CONSTRUCTION TO BE PERFORMED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITY LINES, WHETHER SHOWN ON THESE PLANS OR NOT, PRIOR TO ANY EXCAVATION. ALL EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND ARE APPROXIMATE ONLY. SOME SERVICE LINES FROM BUILDING TO MAIN HAVE UNKNOWN LOCATIONS AND MAY CONFLICT WITH THE PLAN. RELOCATION OF SAID SERVICE LINES REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE COORDINATED WITH THE UTILITY COMPANY. RELOCATION OF SANITARY SEWER AND SERVICES SHALL BE PERFORMED BY THE CONTRACTOR WITH PAYMENT BEING DETERMINED BY THE INSTALLED QUANTITY AT THE CORRESPONDING BID UNIT PRICE. RELOCATION OF ALL OTHER UTILITIES WILL BE PERFORMED ONLY BY THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR, PRIOR TO CONSTRUCTION, SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES. THE REPAIR OF ANY DAMAGE TO SAID UTILITIES SHALL BE AT THE COST TO THE CONTRACTOR. ANY UTILITIES FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CITY'S REPRESENTATIVE. THE NAMES AND TELEPHONE NUMBERS OF UTILITY COMPANIES ARE ON THE TITLE SHEET.
7. CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THERE FROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS, CODES, AND ORDINANCES. OPEN BURNING OF DEBRIS SHALL NOT BE PERMITTED.
8. ALL TREES AND BRUSH WITHIN THE PERMANENT EASEMENT SHALL BE REMOVED.
9. TREES 12" IN DIAMETER AND GREATER WITHIN THE DISTURBED AREA SHALL BE MARKED BY THE CONTRACTOR AND APPROVED FOR REMOVAL BY THE CITY OR THE CITY'S REPRESENTATIVE.
10. REMOVAL AND DISPOSAL OF BUSHES AND TREES SHALL BE CONSIDERED SUBSIDIARY TO THE BID PRICE FOR "CLEARING AND GRUBBING".
11. TREE CLEARING & REMOVAL ONLY ALLOWED BETWEEN THE DATES OF NOVEMBER 1ST AND MARCH 31ST.
12. EXISTING TREES NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. TREES DAMAGED DURING CONSTRUCTION SHALL BE PRUNED AND WOUNDS PROTECTED AS APPROVED BY THE CITY'S REPRESENTATIVE.
13. ALL WORK SHALL BE CONFINED WITHIN THE EASEMENTS AND CONSTRUCTION ACCESS AREAS. THE CONTRACTOR SHALL LIMIT LAND DISTURBANCE TO THE MINIMUM NECESSARY FOR COMPLETING THE PROPOSED WORK. DRIVEWAYS AND OTHER AREAS INSIDE AND OUTSIDE OF THE CONSTRUCTION LIMITS DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT EXISTING BEFORE THE DAMAGE OCCURRED.
14. ALL CONTRACTOR STOCKPILING, STAGING, AND EMPLOYEE PARKING SHALL BE CONFINED TO THE TEMPORARY EASEMENTS AS DESIGNATED ON THE PLANS. IF THE CONTRACTOR BELIEVES THAT HE REQUIRES MORE WORKING ROOM THAN IS PROVIDED, THE CONTRACTOR, AT HIS EXPENSE, MAY OBTAIN AGREEMENTS WITH PROPERTY OWNERS FOR ADDITIONAL TEMPORARY ACCESS. THE CONTRACTOR SHALL PROVIDE THE OWNER AND CITY WITH COPIES OF ANY AGREEMENTS REACHED FOR SAID ACCESS.
15. NO MATERIALS OR EQUIPMENT SHALL BE STORED IN UNION PACIFIC RIGHT OF WAY.
16. IT IS ANTICIPATED THAT GROUNDWATER SEEPAGE WILL BE ENCOUNTERED ON THE PROJECT. IF WATER SEEPAGE IS ENCOUNTERED DURING EXCAVATION, USE OF TEMPORARY DEWATERING TECHNIQUES MAY BE NECESSARY.
17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EARTHWORK QUANTITIES. NO CLASSIFICATION OF EXCAVATED MATERIALS WILL BE MADE. NO ADDITIONAL PAYMENT WILL BE MADE FOR ROCK EXCAVATION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING THE AMOUNT OF ROCK EXCAVATION, IF ANY, TO BE INCLUDED IN HIS BID. EXCAVATION WORK SHALL INCLUDE THE REMOVAL AND SUBSEQUENT HANDLING OF ALL MATERIALS EXCAVATED OR OTHERWISE REMOVED IN PERFORMANCE OF THE WORK, REGARDLESS OF THE TYPE, CHARACTER, COMPOSITION, OR CONDITION THEREOF. ALL FILL AND BACKFILL MATERIAL SHALL CONSIST OF EARTH OR OTHER APPROVED MATERIAL FREE FROM ORGANIC MATTER WITH ALL UNDESIRABLE MATERIAL REMOVED.
18. THE TOP 6" OF ALL FILL SHALL BE TOP SOIL, AND SHALL BE APPROVED BY THE CITY'S REPRESENTATIVE PRIOR TO SOD OR SEED INSTALLATION. ALL BACK FILL SHALL BE TAMPED AND ORGANIC TOP SOIL PLACED THEREAFTER FOLLOWED BY SEEDING OR SOD AS REQUIRED BY THE SPECIFICATIONS. NO EXTRA PAYMENT WILL BE MADE FOR IMPORTED FILL MATERIAL REQUIRED TO CONSTRUCT FILLS TO LINES AND GRADES INDICATED ON THE DRAWINGS.
19. ALL DISTURBED AREAS SHALL BE SEEDED WITH THE NATIVE GRASSES MIX AS SPECIFIED IN THE KCAPWA SECTION 2403.
20. CONTRACTOR SHALL PERFORM A PRECONSTRUCTION PHOTO SURVEY OF THE PROJECT AREA.
21. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-BUILT INFORMATION TO THE OWNER AND ENGINEER OF ALL SANITARY SEWER PIPE AND STRUCTURES CONSTRUCTED WITHIN THESE PLANS.
22. CONTRACTOR SHALL VERIFY ALL PROPOSED MANHOLE TOP ELEVATIONS, INVERT DEPTHS AND PIPE SIZES PRIOR TO ORDERING MANHOLES.
23. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LEE'S SUMMIT STANDARDS AND SPECIFICATIONS, THE AMERICAN PUBLIC WORKS ASSOCIATION-KANSAS CITY METROPOLITAN CHAPTER (KCAPWA), AND THE SUPPLEMENTARY CONDITIONS FOR THIS JOB.
24. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFETY OF THE CONSTRUCTION WORKERS AND THE PUBLIC.
25. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR KEEPING THE PUBLIC STREETS IN THE VICINITY OF THE JOB SITE CLEAN AND FREE OF ROCKS, SOILS, AND DEBRIS.
26. THE CONTRACTOR SHALL NOT CHANGE OR DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER AND ENGINEER.
27. THE CONTRACTOR SHALL AT NO TIME LEAVE EQUIPMENT OR MATERIALS IN LOCATIONS THAT WILL OBSTRUCT THE EXISTING CREEK AND STREAMS.
28. CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE FLOWS AROUND EACH SEGMENT OF PIPE THAT IS TO BE REPLACED OR REFURBISHED. CONTRACTOR SHALL HAVE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE WORK ON THE PIPE SEGMENT PRIOR TO ISOLATING THE SEGMENT AND BEGINNING BYPASS PUMPING OPERATIONS.
29. CONTRACTOR SHALL USE ADEQUATE DUST CONTROL MEASURES DURING ALL PHASES OF THE WORK.
30. ALL WORK ON UNION PACIFIC RAILROAD RIGHT OF WAY MUST CONFORM TO UNION PACIFIC RAILROAD REQUIREMENTS.
31. GEOTECHNICAL INFORMATION SHOWN ON PLANS WAS PROVIDED TO OLSSON IN COOK, FLATT, & STROBEL ENGINEERS' REPORT ENTITLED "GEOTECHNICAL EXPLORATION AND RECOMMENDATIONS", DATED JUNE 24, 2021. A COPY OF THE REPORT IS INCLUDED AS AN ATTACHMENT TO THE PROJECT SPECIFICATIONS FOR THE CONTRACTOR'S INFORMATION.
32. ANY CONSTRUCTION OR MATERIALS TO BE INSTALLED IN ACCORDANCE WITH PENDING UNION PACIFIC RAILROAD UTILITY CROSSING PERMIT ARE SUBJECT TO CHANGE PENDING RAILROAD APPROVAL.

32. ANY CONSTRUCTION OR MATERIALS TO BE INSTALLED IN ACCORDANCE WITH PENDING UNION PACIFIC RAILROAD UTILITY CROSSING PERMIT ARE SUBJECT TO CHANGE PENDING RAILROAD APPROVAL.

**EROSION CONTROL NOTES**

1. SILTATION AND EROSION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL SYSTEMS, REPLACING DAMAGED OR FAILED EROSION CONTROL DEVICES, AND INSPECTING THE SITE IN ORDER TO REPAIR THE EROSION CONTROL SYSTEMS WITHIN 24 HOURS AFTER A RAINFALL EVENT. EROSION AND SEDIMENT CONTROL MUST BE IN PLACE PRIOR TO THE DISTURBANCE OF THE GROUND.
2. FIELD ADJUSTMENTS TO EROSION AND SEDIMENT CONTROL MAY BE REQUIRED DEPENDING ON THE SITE CONDITIONS. THIS PLAN SHOULD BE USED AS A GUIDE AND REPRESENTS THE MINIMUM EROSION CONTROL DEVICES REQUIRED. ADDITIONAL EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
3. ALL FINES ASSOCIATED WITH EROSION CONTROL VIOLATIONS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
4. CONTRACTOR SHALL MAINTAIN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON SITE IN ACCORDANCE WITH DNR REGULATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED WITH A HEALTHY STAND OF PERMANENT VEGETATION.
6. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY STABILIZATION AS REQUIRED.
7. ALL EROSION CONTROL DEVICES SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION AS ADOPTED.

**FOR MDNR APPROVAL**



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	8-25-2021	AS1 #29 - REVISED PER CITY COMMENTS	
2	10-14-2021	REVISED FOR MDNR SUBMITTAL	

GENERAL NOTES	2021
BIG CREEK INTERCEPTOR SEWER UPSIZING LEE'S SUMMIT MIDDLE SCHOOL #4	2021
LEE'S SUMMIT, MO	2021
drawn by: _____ NG checked by: _____ BH approved by: _____ BH QA/QC by: _____ JS project no.: 020-01030 drawing no.: _____ date: 07.15.2021	

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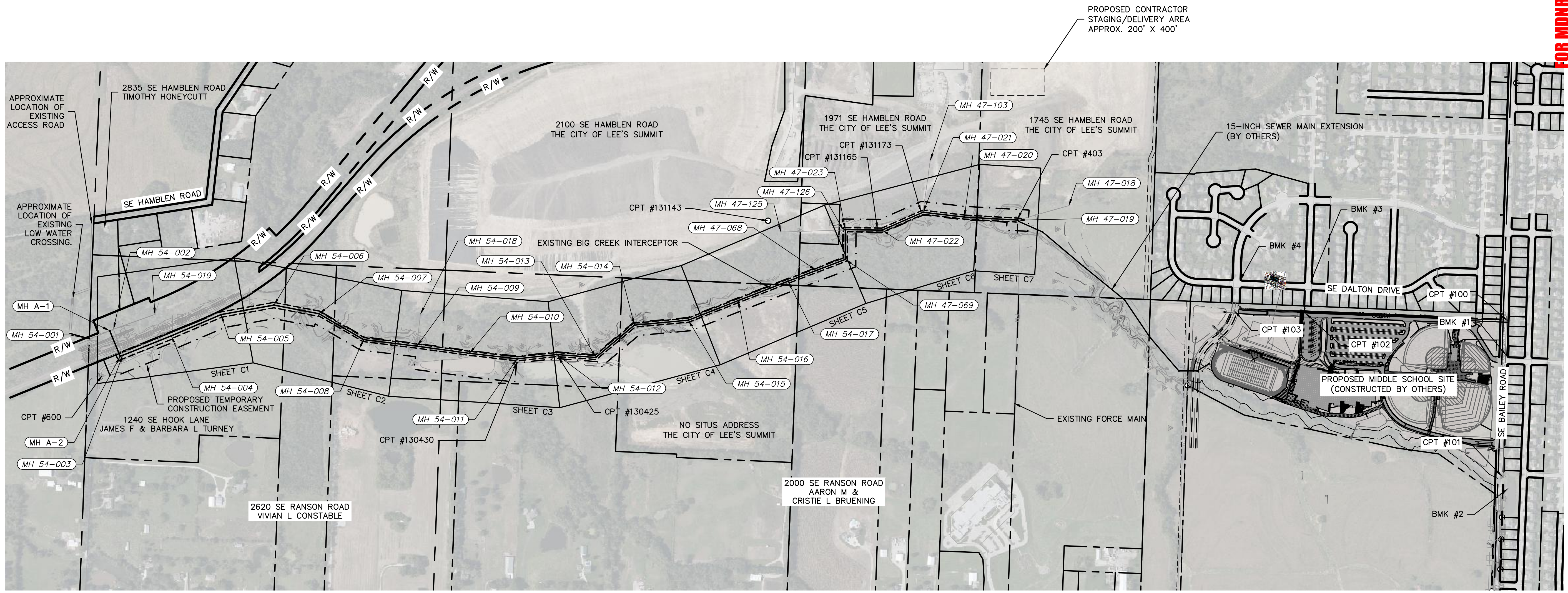


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 USER: bhudlemeyer

SUMMARY OF QUANTITIES		
DESCRIPTION	QUANTITY	UNIT
MOBILIZATION	1	LS
CONSTRUCTION SURVEY AND STAKING	1	LS
CLEARING AND GRUBBING	1	LS
ABANDON STEEL CASING	1	LS
SEEDING	1	LS
SITE RESTORATION	1	LS
EROSION CONTROL	1	LS
DEWATERING	1	LS
BYPASS PUMPING	1	LS
24-INCH DIAMETER PVC GRAVITY SEWER (PS115) (LESS THAN 15 FEET DEEP)	1,650	LF
24-INCH DIAMETER PVC GRAVITY SEWER (PS115) (15 FEET DEEP OR GREATER)	1,950	LF
24-INCH DIAMETER DIP GRAVITY SEWER (SPECIAL THICKNESS CLASS 50) (LESS THAN 15 FEET DEEP)	1600	LF
24-INCH DIAMETER DIP GRAVITY SEWER (SPECIAL THICKNESS CLASS 50) (15 FEET DEEP OR GREATER)	250	LF

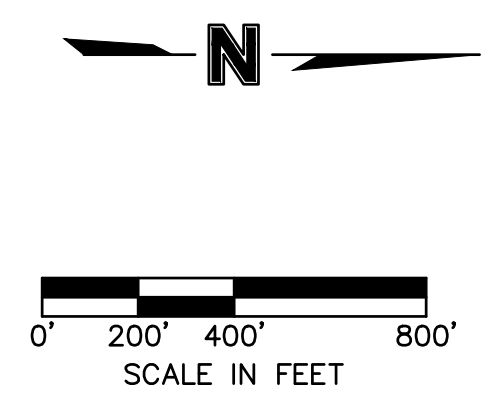
SUMMARY OF QUANTITIES		
DESCRIPTION	QUANTITY	UNIT
30-INCH DIAMETER PVC GRAVITY SEWER (PS115) (15 FEET DEEP OR GREATER)	1,500	LF
30-INCH DIAMETER DIP GRAVITY SEWER (SPECIAL THICKNESS CLASS 50) (LESS THAN 15 FEET DEEP)	400	LF
30-INCH DIAMETER DIP GRAVITY SEWER (SPECIAL THICKNESS CLASS 50) (15 FEET DEEP OR GREATER)	350	LF
42-INCH INNER DIAMETER STEEL CASING PIPE (0.625-INCH WALL THICKNESS)	170	LF
REMOVE EXISTING MANHOLE	22	EA
60-INCH ID STANDARD MANHOLE (8 FOOT STANDARD DEPTH)	19	EA
60-INCH ID DROP MANHOLE (8 FOOT STANDARD DEPTH)	EA	EA
60-INCH ID STANDARD MANHOLE ADDITIONAL VERTICAL FEET	165	VF
60-INCH ID DROP MANHOLE ADDITIONAL VERTICAL FEET	10	EA
72-INCH ID STANDARD MANHOLE (8 FOOT STANDARD DEPTH)	1	EA
72-INCH ID STANDARD MANHOLE OVER EXISTING SEWER (8 FOOT STANDARD DEPTH)	1	EA
72-INCH ID STANDARD MANHOLE ADDITIONAL DEPTH	25	VF

SUMMARY OF QUANTITIES		
DESCRIPTION	QUANTITY	UNIT
STREAM RESTORATION (INCLUDING STREAM STABILIZATION)	1	LS
IMPERVIOUS TRENCH CHECK	100	LF
REINFORCED CONCRETE ENCASEMENT	400	LF
POND REGRADING	1	LS



PROPOSED CONTRACTOR STAGING/DELIVERY AREA APPROX. 200' X 400'

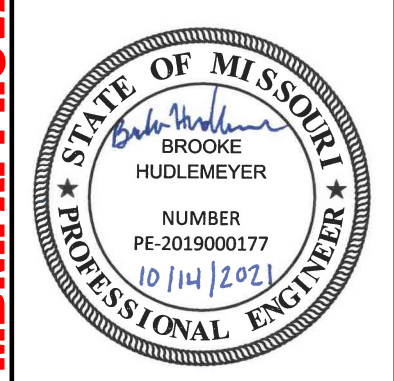
**CONTRACTOR'S NOTE:**  
 EXISTING ACCESS ROAD FROM SE HAMBLEN ROAD AND LOW WATER CROSSING ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY SUITABILITY OF EXISTING ACCESS ROAD. ANY NECESSARY IMPROVEMENTS SHALL BE CONSTRUCTED BY THE CONTRACTOR FOR NO DIRECT PAY.



FOR MDNR APPROVAL

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REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	8-25-2021	AS1 #29 - REVISED PER CITY COMMENTS	
2	10-14-2021	REVISED FOR MDNR SUBMITTAL	

GENERAL LAYOUT

BIG CREEK INTERCEPTOR SEWER UPSIZING  
 LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT, MO

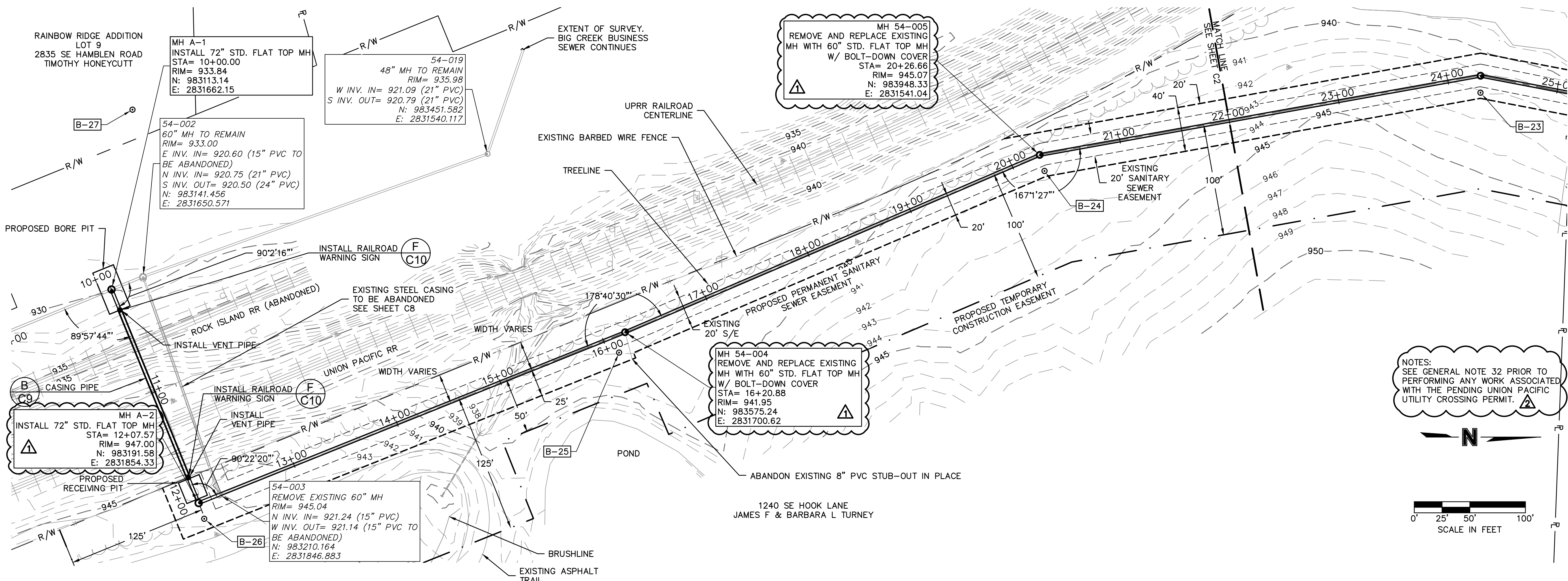
2021

REVISIONS

drawn by: NG  
 checked by: BH  
 approved by: BH  
 QA/QC by: JS  
 project no.: 020-01030  
 drawing no.:  
 date: 07.15.2021



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 USER: bhudlemeyer



NOTES:  
 SEE GENERAL NOTE 32 PRIOR TO PERFORMING ANY WORK ASSOCIATED WITH THE PENDING UNION PACIFIC UTILITY CROSSING PERMIT.

SCALE IN FEET  
 0' 25' 50' 100'

FOR MDNR APPROVAL



REV. NO.	DATE	REVISIONS DESCRIPTION
1	8-25-2021	ASI #29 - REVISED PER CITY COMMENTS
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SANITARY PLAN AND PROFILE  
 STATION 10+00 TO 22+00

BIG CREEK INTERCEPTOR SEWER UPSIZING  
 LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT, MO

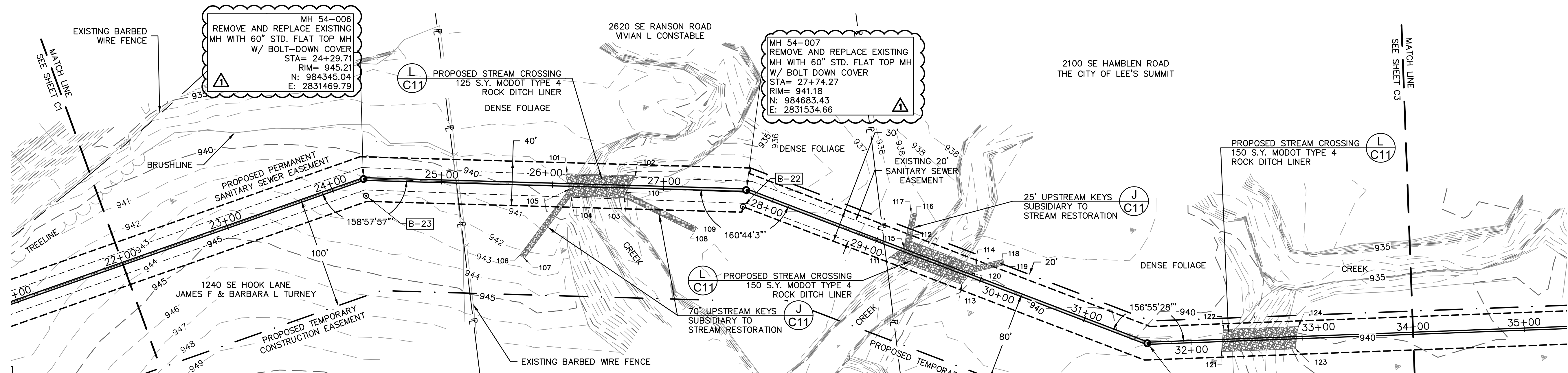
2021

drawn by: NG  
 checked by: BH  
 approved by: BH  
 QA/QC by: JS  
 project no.: 020-01030  
 drawing no.:  
 date: 07.15.2021



USER: bhudlemeyer

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**ROCK BLANKET KEY TABLE**

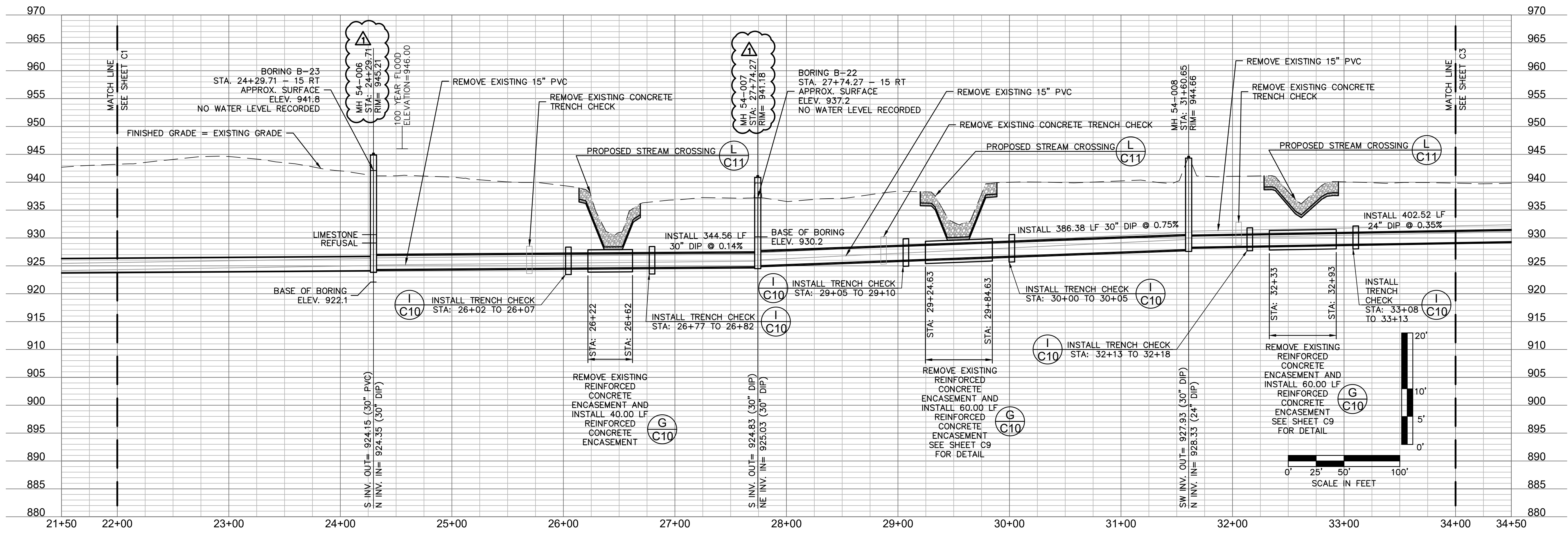
POINT #	NORTHING	EASTING	REMARKS
101	984526.64	2831494.42	SW CORNER OF STREAM RESTORATION
102	984586.96	2831505.99	NW CORNER OF STREAM RESTORATION
103	984574.14	2831523.89	NE CORNER OF STREAM RESTORATION
104	984526.93	2831514.84	SE CORNER OF STREAM RESTORATION
105	984526.37	2831508.43	SW CORNER OF KEY
106	984473.07	2831559.84	SE CORNER OF KEY
107	984476.54	2831563.44	NE CORNER OF KEY
108	984631.14	2831564.52	E CORNER OF KEY
109	984634.05	2831560.45	N CORNER OF KEY

**ROCK BLANKET KEY TABLE**

POINT #	NORTHING	EASTING	REMARKS
110	984576.46	2831519.41	W CORNER OF KEY
111	984801.53	2831614.94	SE CORNER OF STREAM RESTORATION
112	984822.35	2831603.72	SW CORNER OF STREAM RESTORATION
113	984861.33	2831649.46	NE CORNER OF STREAM RESTORATION
114	984876.54	2831635.10	NW CORNER OF STREAM RESTORATION
115	984815.30	2831608.07	S CORNER OF KEY
116	984831.39	2831580.41	N CORNER OF KEY
117	984826.73	2831578.60	W CORNER OF KEY
118	984901.47	2831633.22	NW CORNER OF KEY

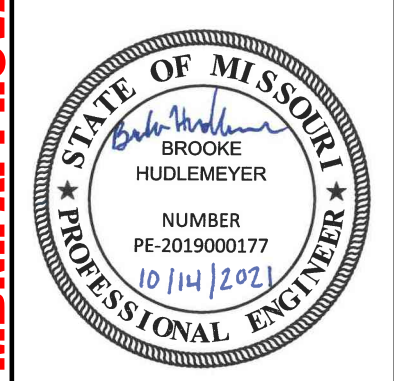
**ROCK BLANKET KEY TABLE**

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119	984901.84	2831638.21	NE CORNER OF KEY
120	984870.77	2831640.54	SE CORNER OF KEY
121	985082.32	2831746.61	SE CORNER OF STREAM RESTORATION
122	985087.66	2831727.12	SW CORNER OF STREAM RESTORATION
123	985148.44	2831754.78	NE CORNER OF STREAM RESTORATION
124	985154.24	2831735.34	NW CORNER OF STREAM RESTORATION



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1	8-25-2021	ASI #29 - REVISED PER CITY COMMENTS
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SANITARY PLAN AND PROFILE  
 STATION 22+00 TO 34+00

BIG CREEK INTERCEPTOR SEWER UPSIZING  
 LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT, MO

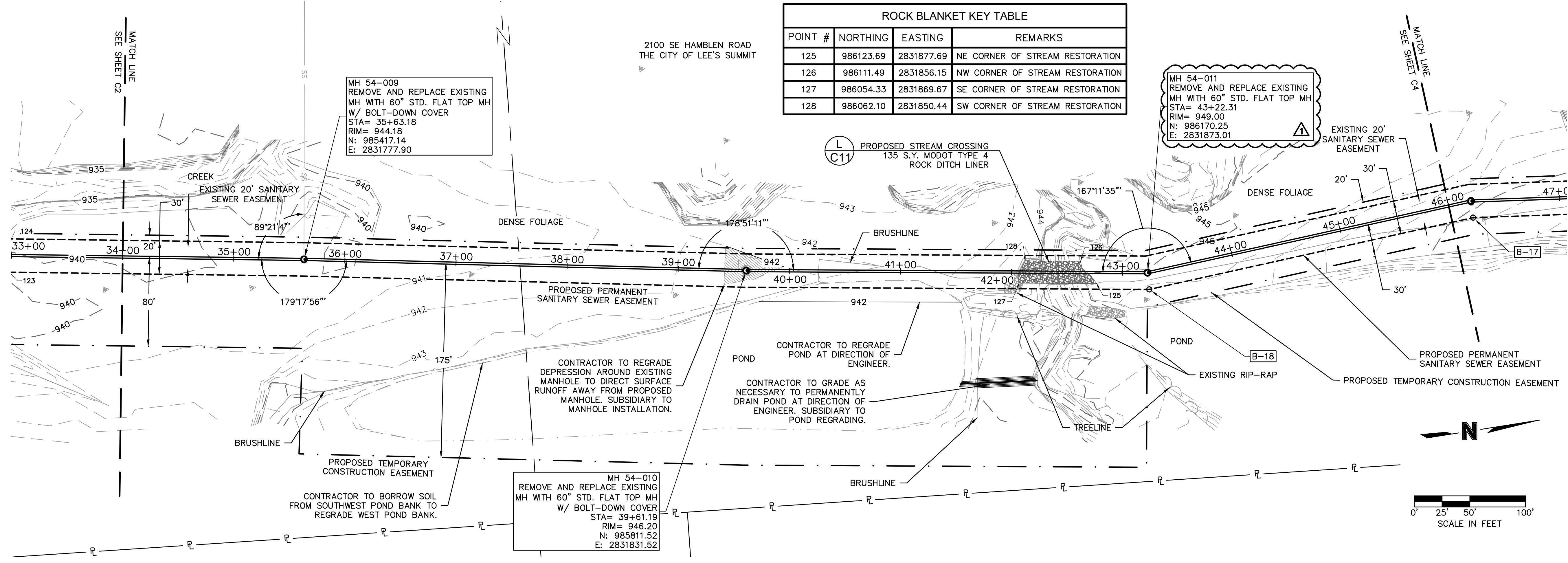
2021

drawn by: \_\_\_\_\_ NG  
 checked by: \_\_\_\_\_ BH  
 approved by: \_\_\_\_\_ BH  
 QA/QC by: \_\_\_\_\_ JS  
 project no.: 020-01030  
 drawing no.: \_\_\_\_\_  
 date: 07.15.2021

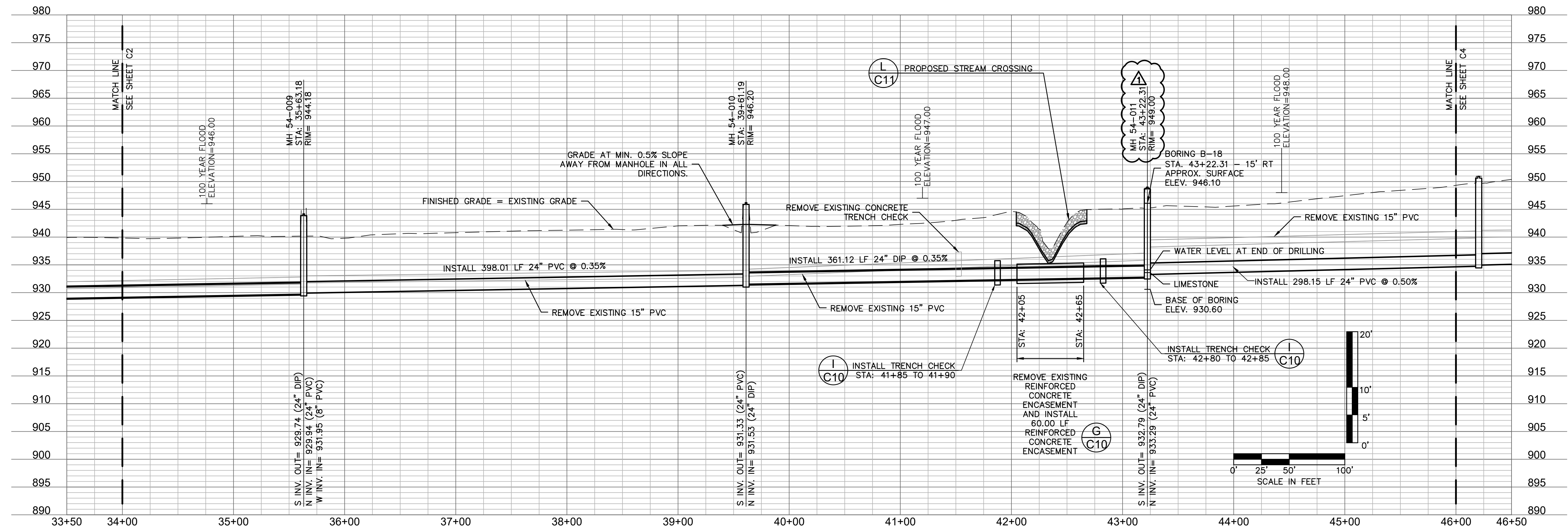


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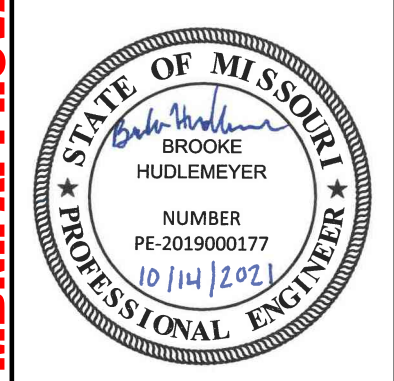
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125	986123.69	2831877.69	NE CORNER OF STREAM RESTORATION
126	986111.49	2831856.15	NW CORNER OF STREAM RESTORATION
127	986054.33	2831869.67	SE CORNER OF STREAM RESTORATION
128	986062.10	2831850.44	SW CORNER OF STREAM RESTORATION



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SANITARY PLAN AND PROFILE  
STATION 34+00 TO 46+00

BIG CREEK INTERCEPTOR SEWER UPSIZING  
LEE'S SUMMIT MIDDLE SCHOOL #4

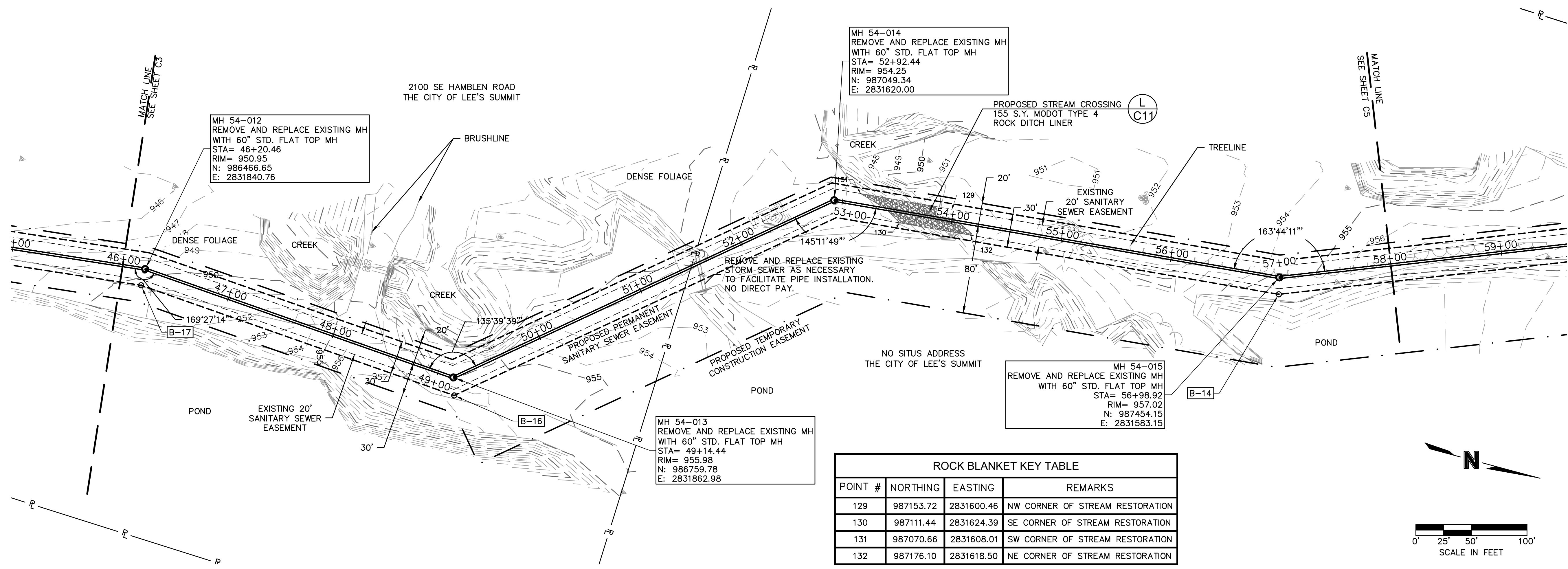
LEE'S SUMMIT, MO

2021

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checked by: BH  
approved by: BH  
QA/QC by: JS  
project no.: 020-01030  
drawing no.:  
date: 07.15.2021

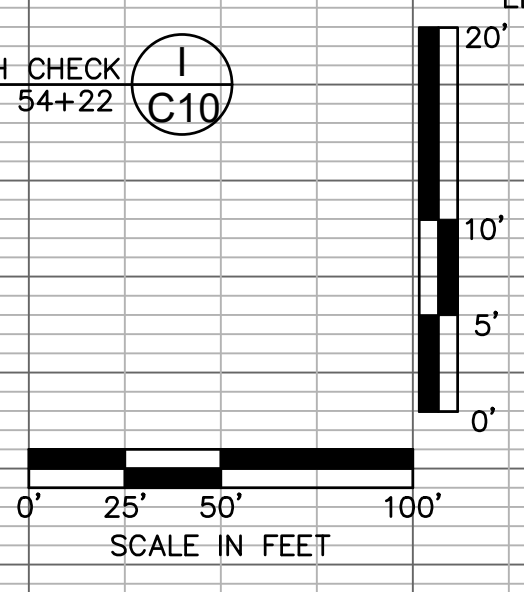
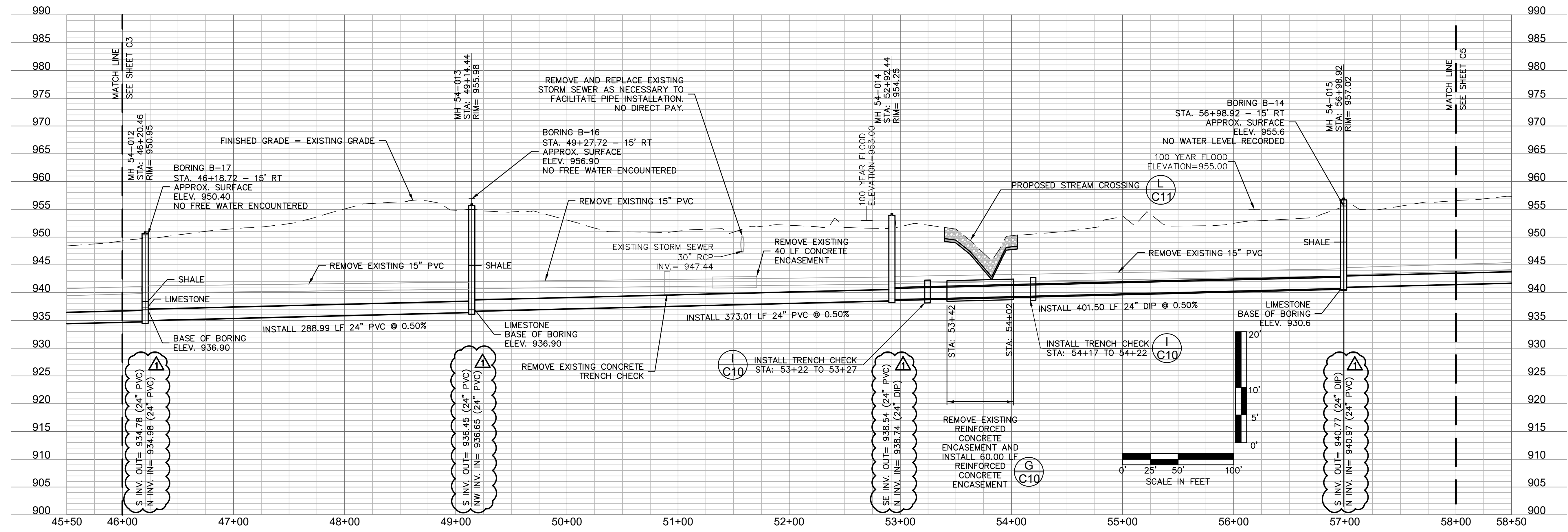
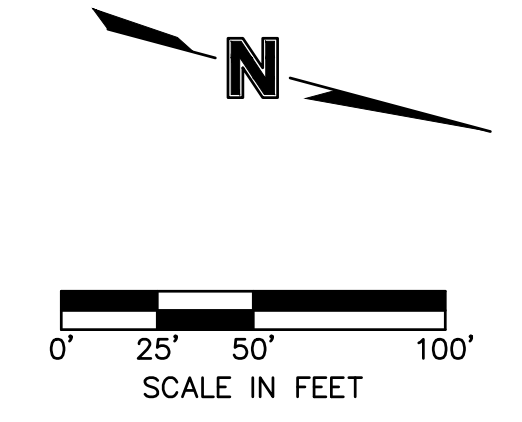


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 USER: bhudlemeyer



**ROCK BLANKET KEY TABLE**

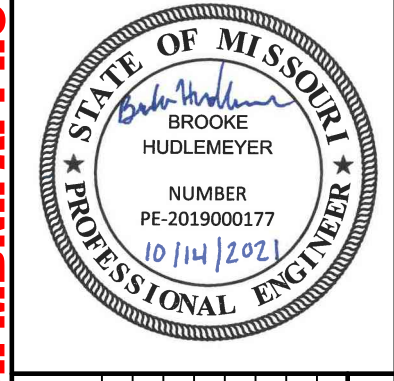
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130	987111.44	2831624.39	SE CORNER OF STREAM RESTORATION
131	987070.66	2831608.01	SW CORNER OF STREAM RESTORATION
132	987176.10	2831618.50	NE CORNER OF STREAM RESTORATION



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**SANITARY PLAN AND PROFILE**  
 STATION 46+00 TO 58+00

**BIG CREEK INTERCEPTOR SEWER UPSIZING**  
 LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT, MO

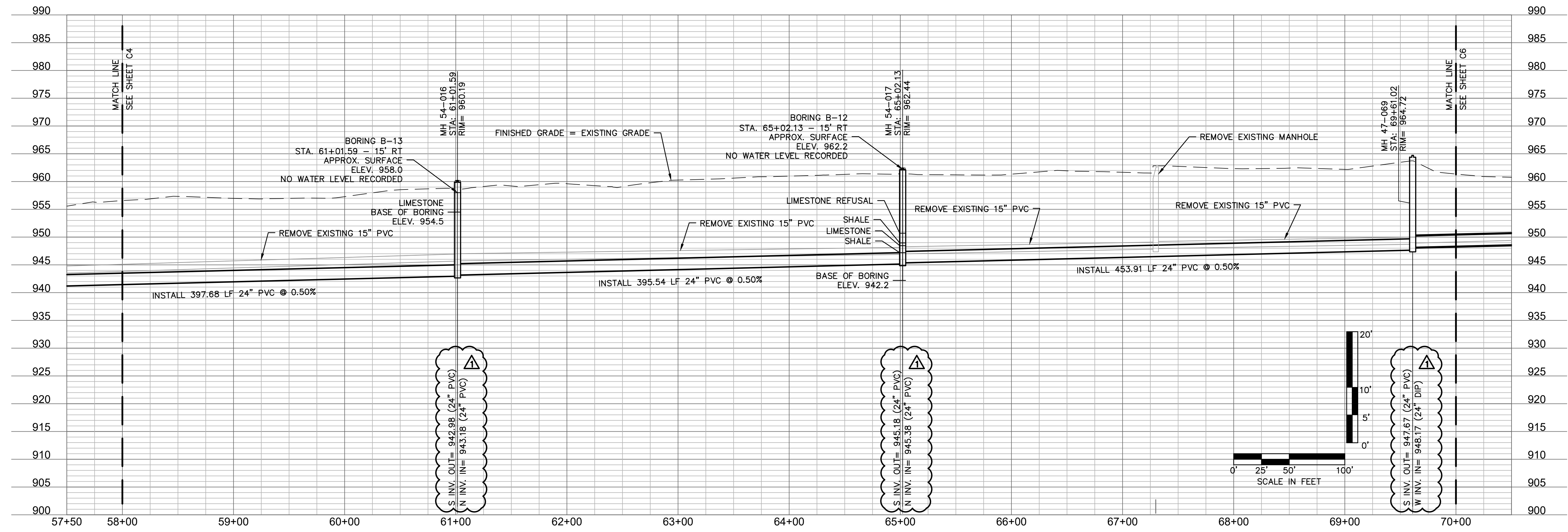
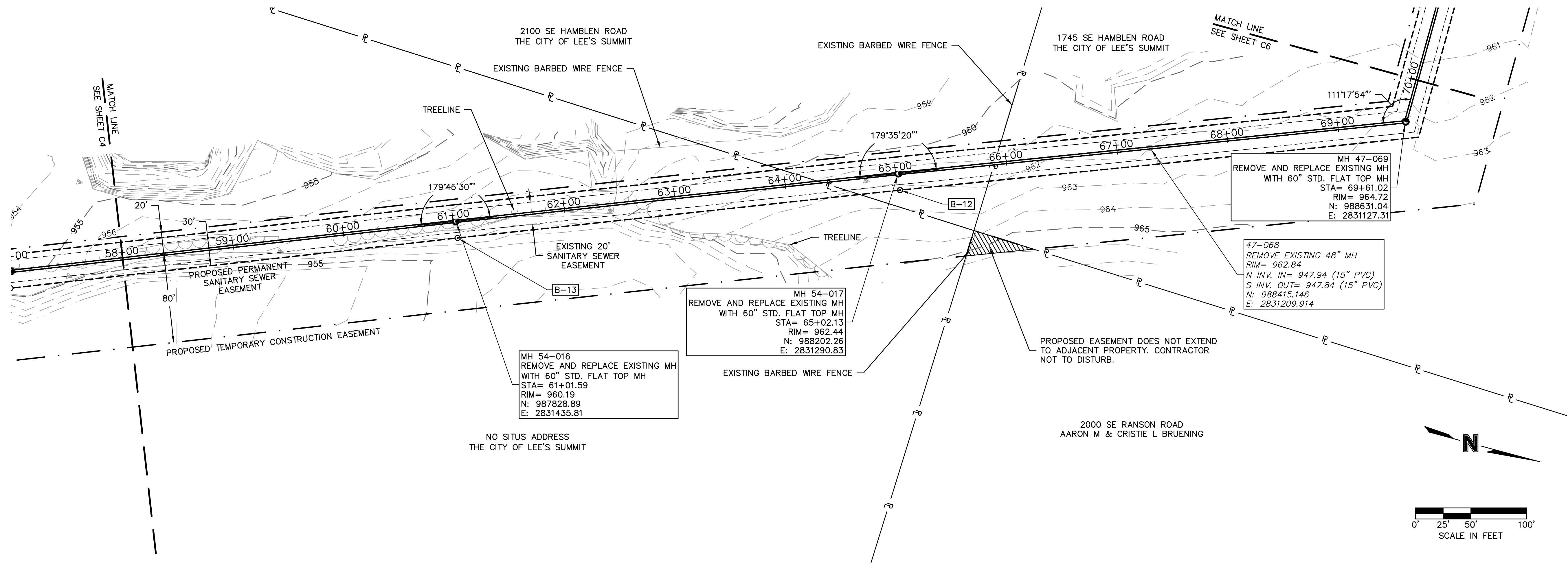
2021

drawn by: NG  
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 approved by: BH  
 QA/QC by: JS  
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 drawing no.:  
 date: 07.15.2021

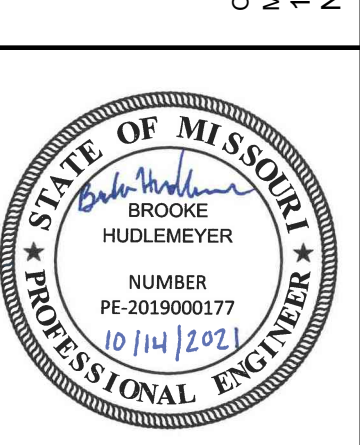


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1	8-25-2021	ASI #29 - REVISED PER CITY COMMENTS
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SANITARY PLAN AND PROFILE  
STATION 58+00 TO 70+00

BIG CREEK INTERCEPTOR SEWER UPSIZING  
LEE'S SUMMIT MIDDLE SCHOOL #4

2021

LEE'S SUMMIT, MO

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checked by: \_\_\_\_\_ BH  
approved by: \_\_\_\_\_ BH  
QA/QC by: \_\_\_\_\_ JS  
project no.: 020-01030  
drawing no.: \_\_\_\_\_  
date: 07.15.2021

SHEET C5

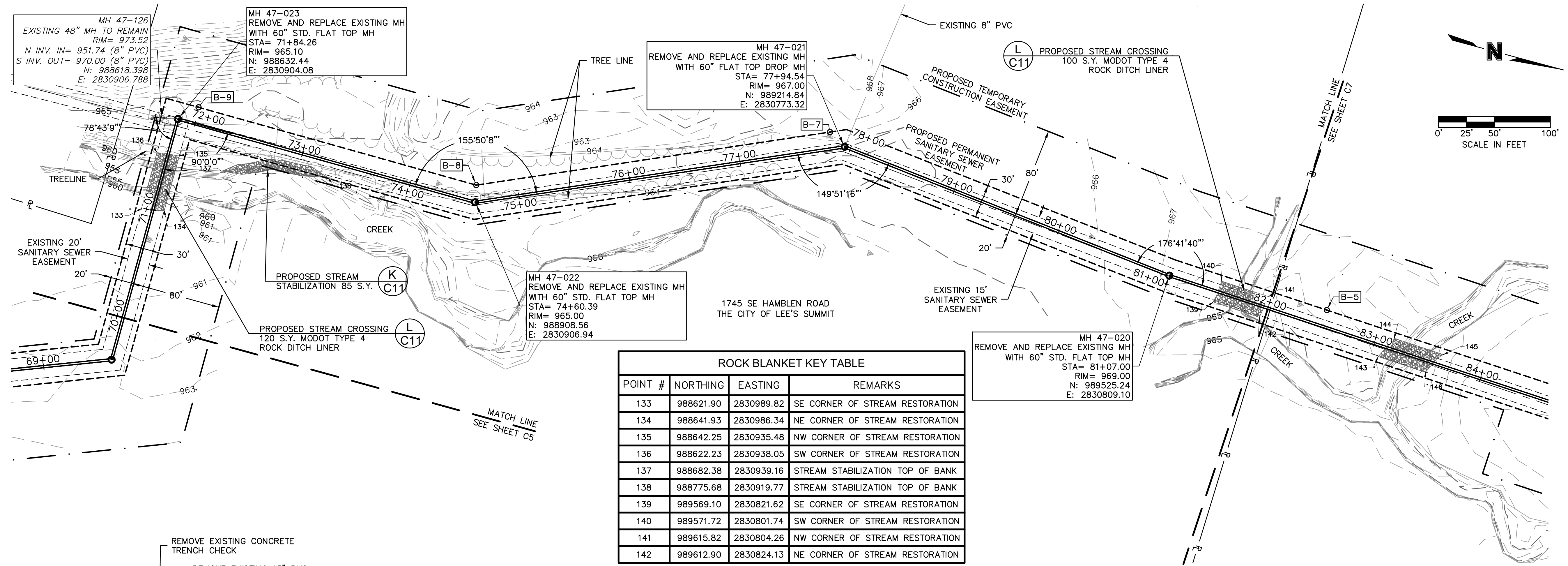
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North Kansas City, MO 64116  
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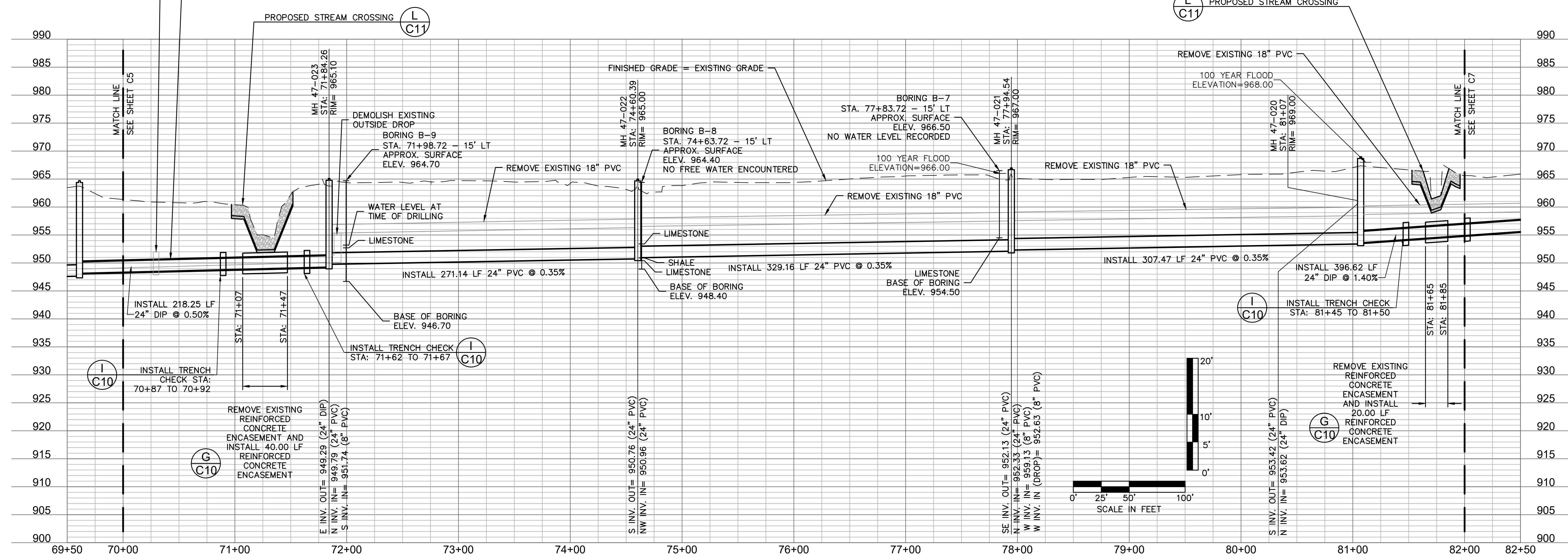
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**ROCK BLANKET KEY TABLE**

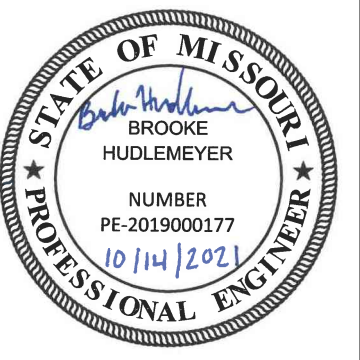
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133	988621.90	2830989.82	SE CORNER OF STREAM RESTORATION
134	988641.93	2830986.34	NE CORNER OF STREAM RESTORATION
135	988642.25	2830935.48	NW CORNER OF STREAM RESTORATION
136	988622.23	2830938.05	SW CORNER OF STREAM RESTORATION
137	988682.38	2830939.16	STREAM STABILIZATION TOP OF BANK
138	988775.68	2830919.77	STREAM STABILIZATION TOP OF BANK
139	989569.10	2830821.62	SE CORNER OF STREAM RESTORATION
140	989571.72	2830801.74	SW CORNER OF STREAM RESTORATION
141	989615.82	2830804.26	NW CORNER OF STREAM RESTORATION
142	989612.90	2830824.13	NE CORNER OF STREAM RESTORATION



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BY

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1	8-25-2021	AS1 #29 - REVISED PER CITY COMMENTS
2	10-14-2021	REVISED FOR MDNR SUBMITTAL

**SANITARY PLAN AND PROFILE**  
 STATION 70+00 TO 82+00

**BIG CREEK INTERCEPTOR SEWER UPSIZING**  
 LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT, MO

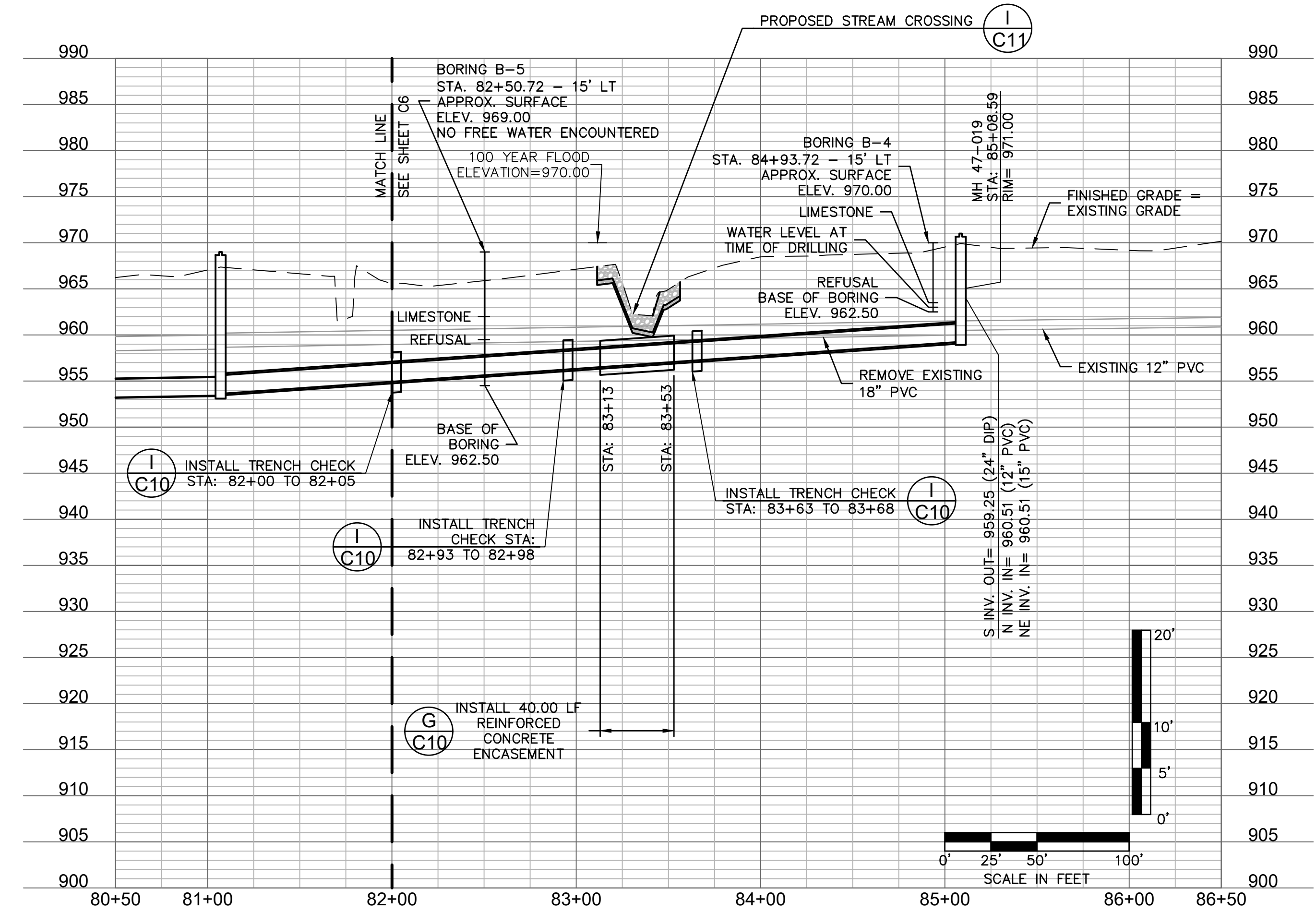
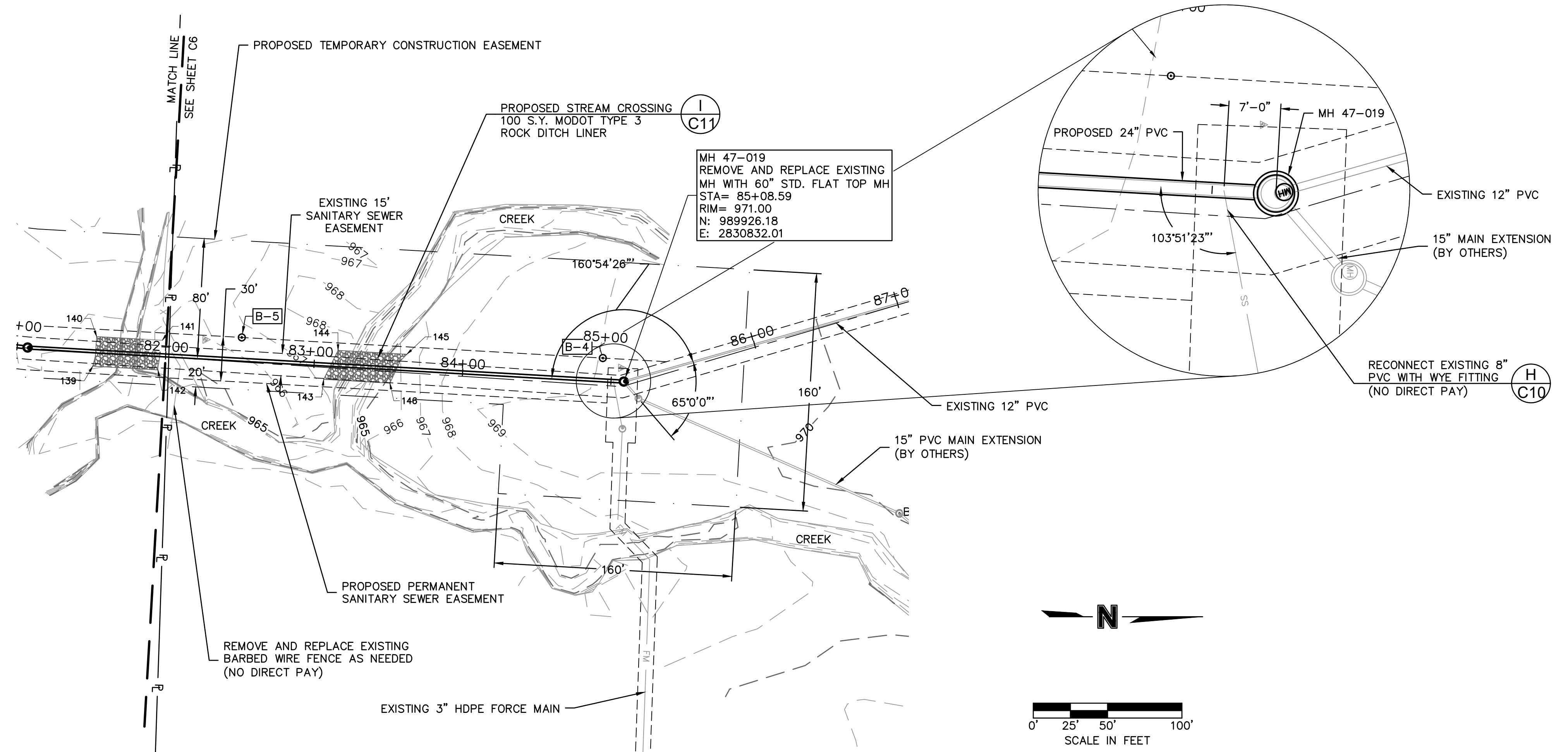
2021

REVISIONS

drawn by: NG  
 checked by: BH  
 approved by: BH  
 QA/QC by: JS  
 project no.: 020-01030  
 drawing no.:  
 date: 07.15.2021

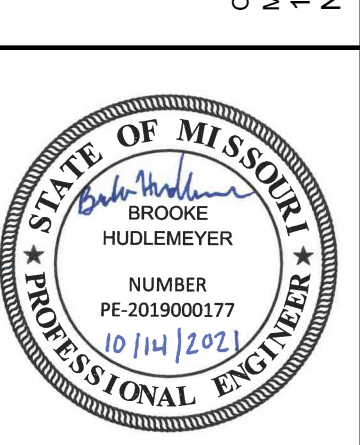


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 USER: bhudlemeyer



ROCK BLANKET KEY TABLE			
POINT #	NORTHING	EASTING	REMARKS
143	989724.38	2830830.50	SE CORNER OF STREAM RESTORATION
144	989734.03	2830811.01	SW CORNER OF STREAM RESTORATION
145	989780.23	2830813.65	NW CORNER OF STREAM RESTORATION
146	989768.87	2830833.04	NE CORNER OF STREAM RESTORATION

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REV. NO.	DATE	REVISIONS DESCRIPTION
1	8-25-2021	ASI #29 - REVISED PER CITY COMMENTS
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SANITARY PLAN AND PROFILE  
STATION 82+00 TO 85+08.59

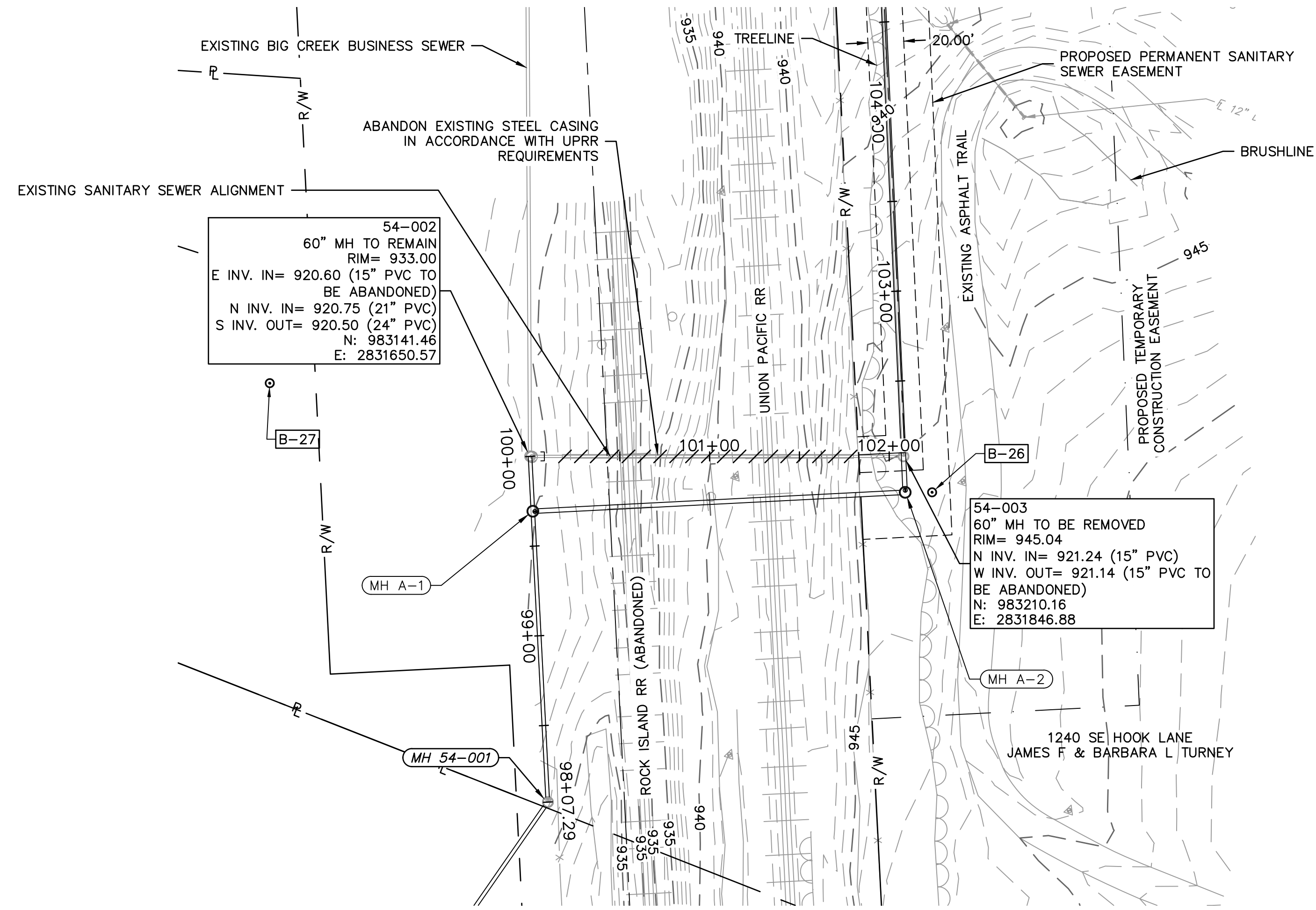
BIG CREEK INTERCEPTOR SEWER UPSIZING  
LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT, MO

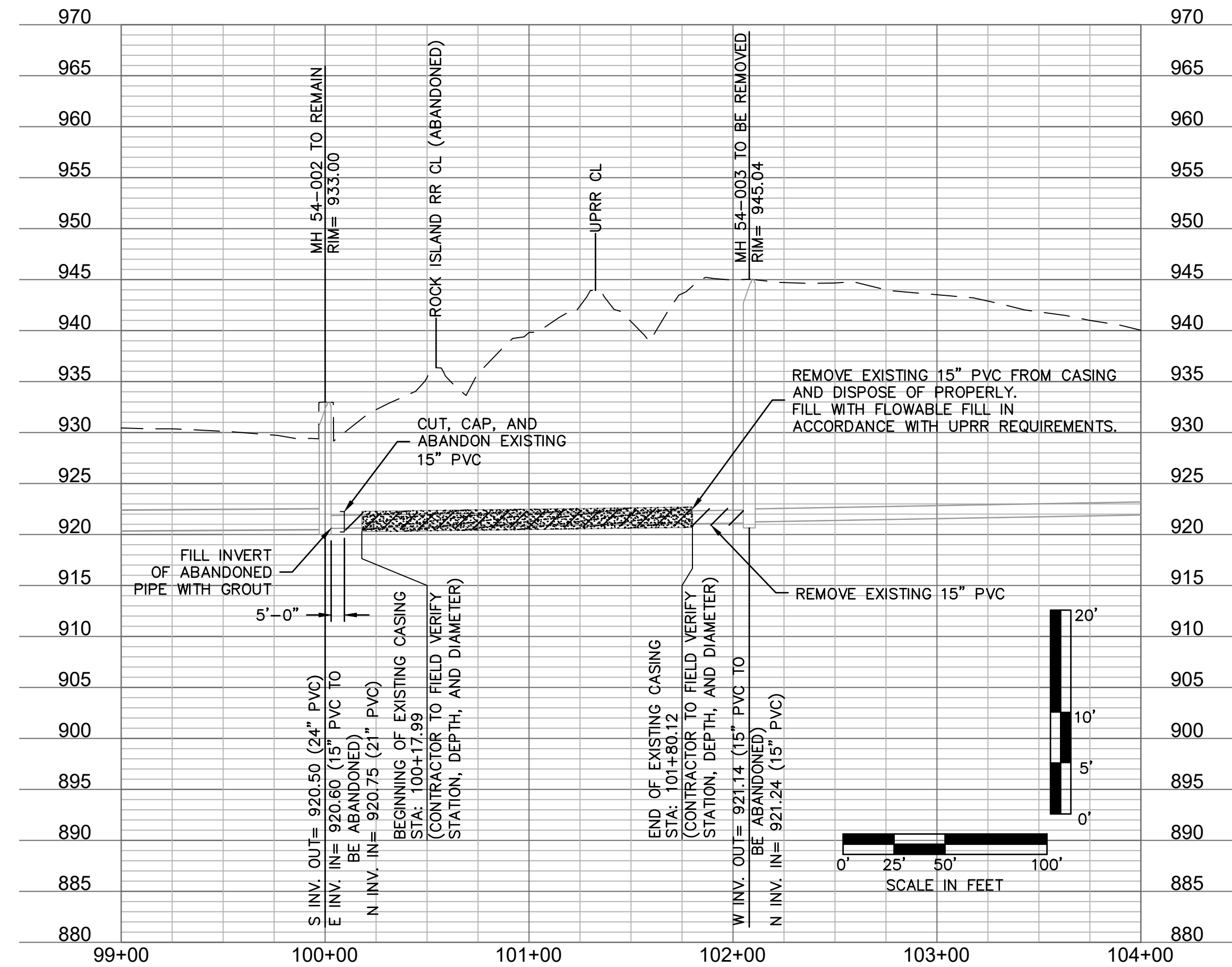
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drawing no.:  
date: 07.15.2021

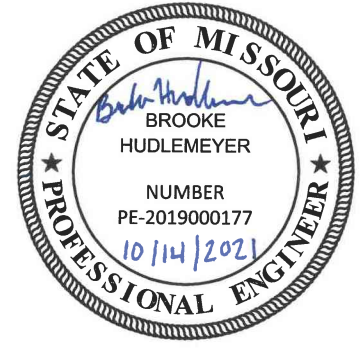




NOTES:  
 SEE GENERAL NOTE 32 PRIOR TO PERFORMING ANY WORK ASSOCIATED WITH THE PENDING UNION PACIFIC UTILITY CROSSING PERMIT.



FOR MDNR APPROVAL



REV. NO.	DATE	REVISIONS DESCRIPTION
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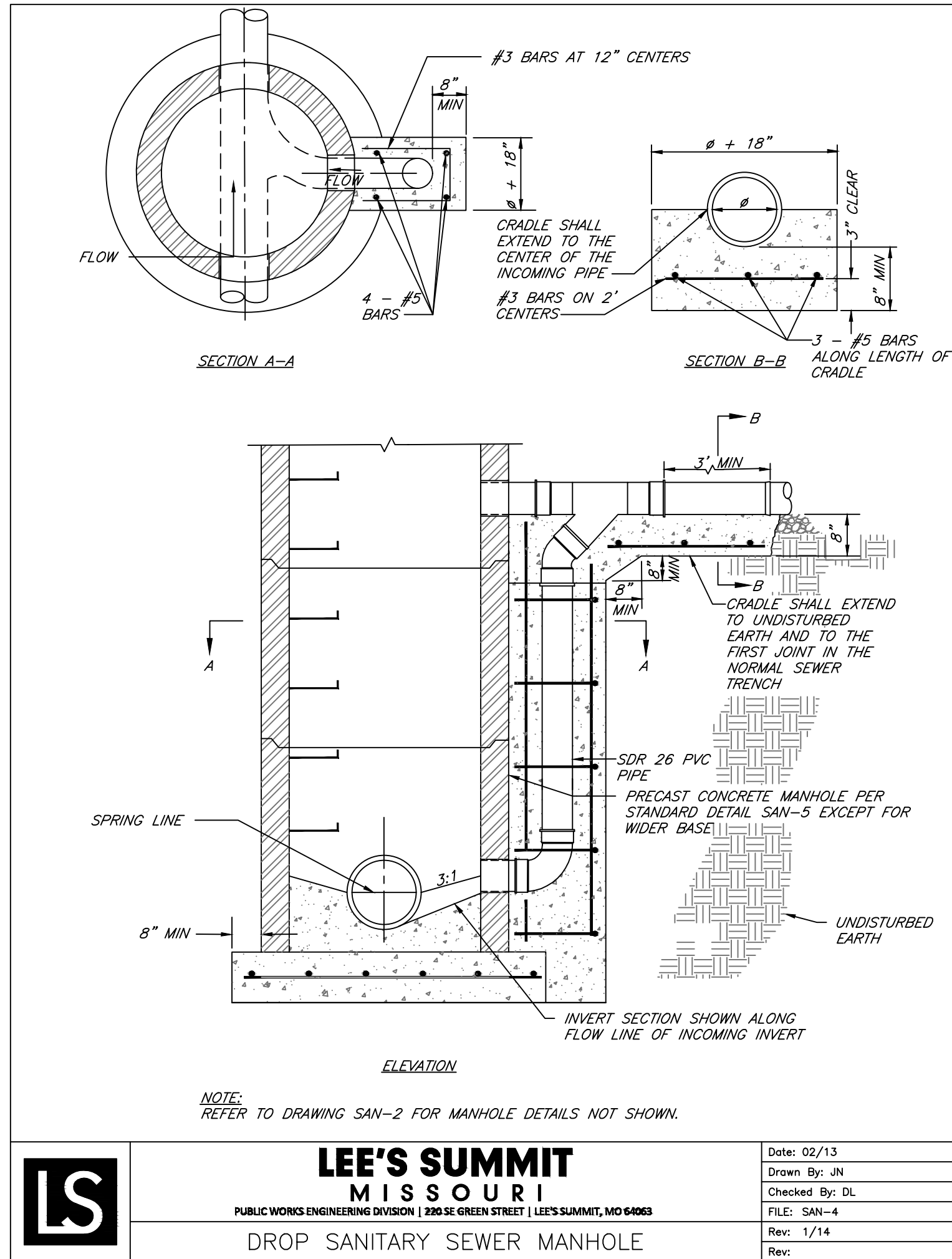
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BIG CREEK INTERCEPTOR SEWER UPSIZING LEE'S SUMMIT MIDDLE SCHOOL #4	
LEE'S SUMMIT, MO	2021

drawn by: NG  
 checked by: BH  
 approved by: BH  
 QA/QC by: JS  
 project no.: 020-01030  
 drawing no.:  
 date: 07.15.2021

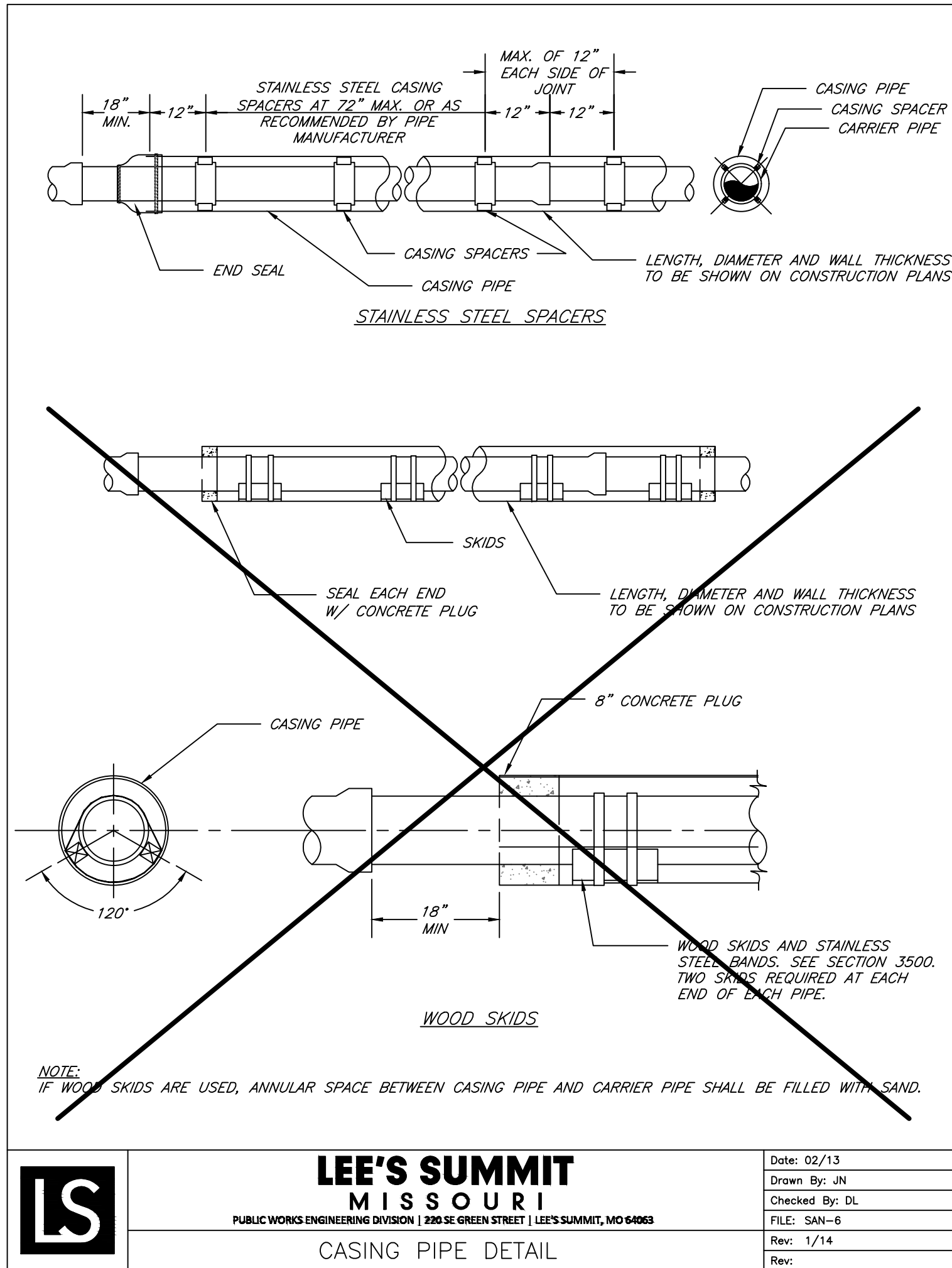


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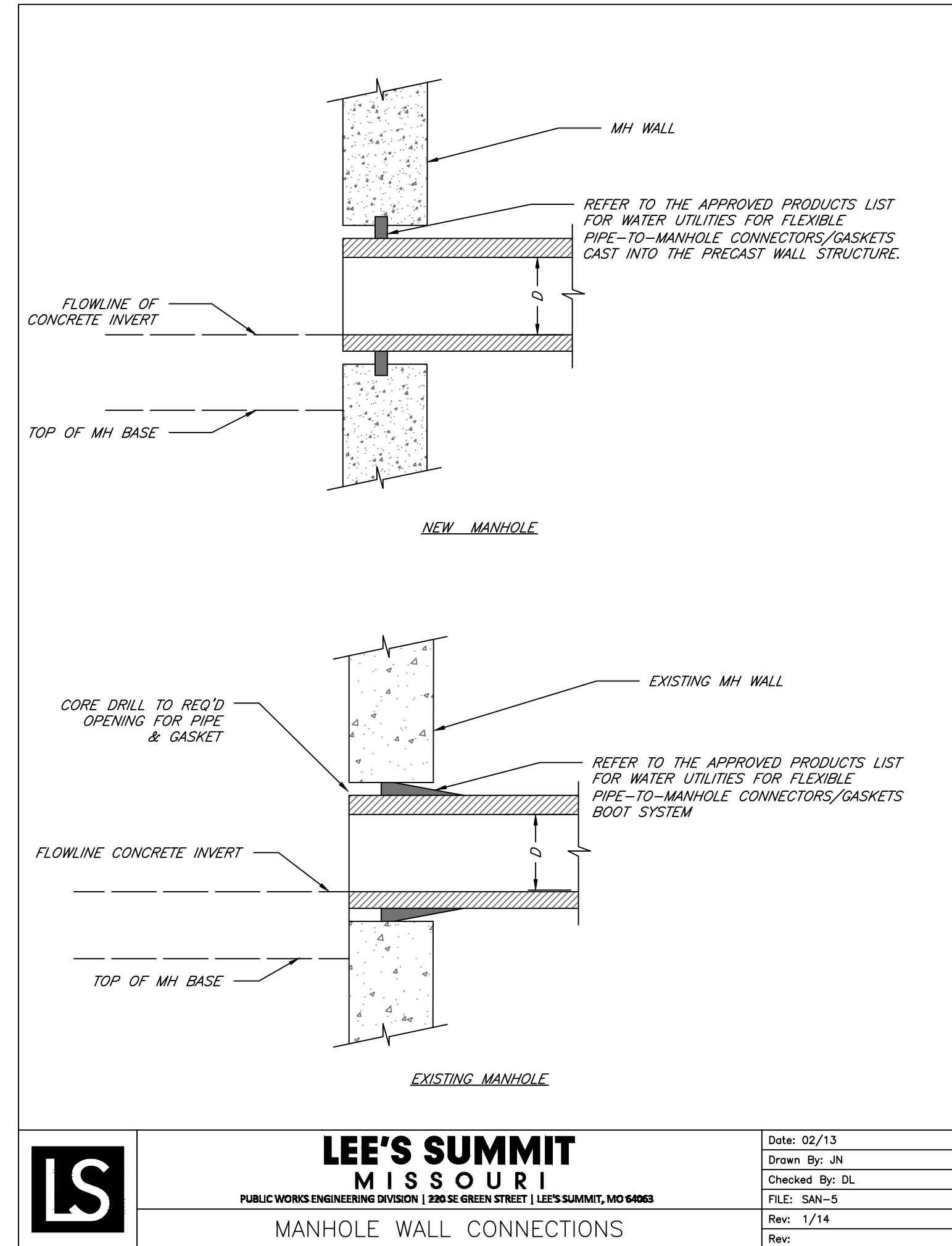
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DROP SANITARY SEWER MANHOLE DETAIL **A**  
SCALE: NOT TO SCALE



CASING PIPE DETAIL **B**  
SCALE: NOT TO SCALE



MANHOLE CONNECTIONS DETAIL **C**  
SCALE: NOT TO SCALE

NOTES:  
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FOR MDNR APPROVAL



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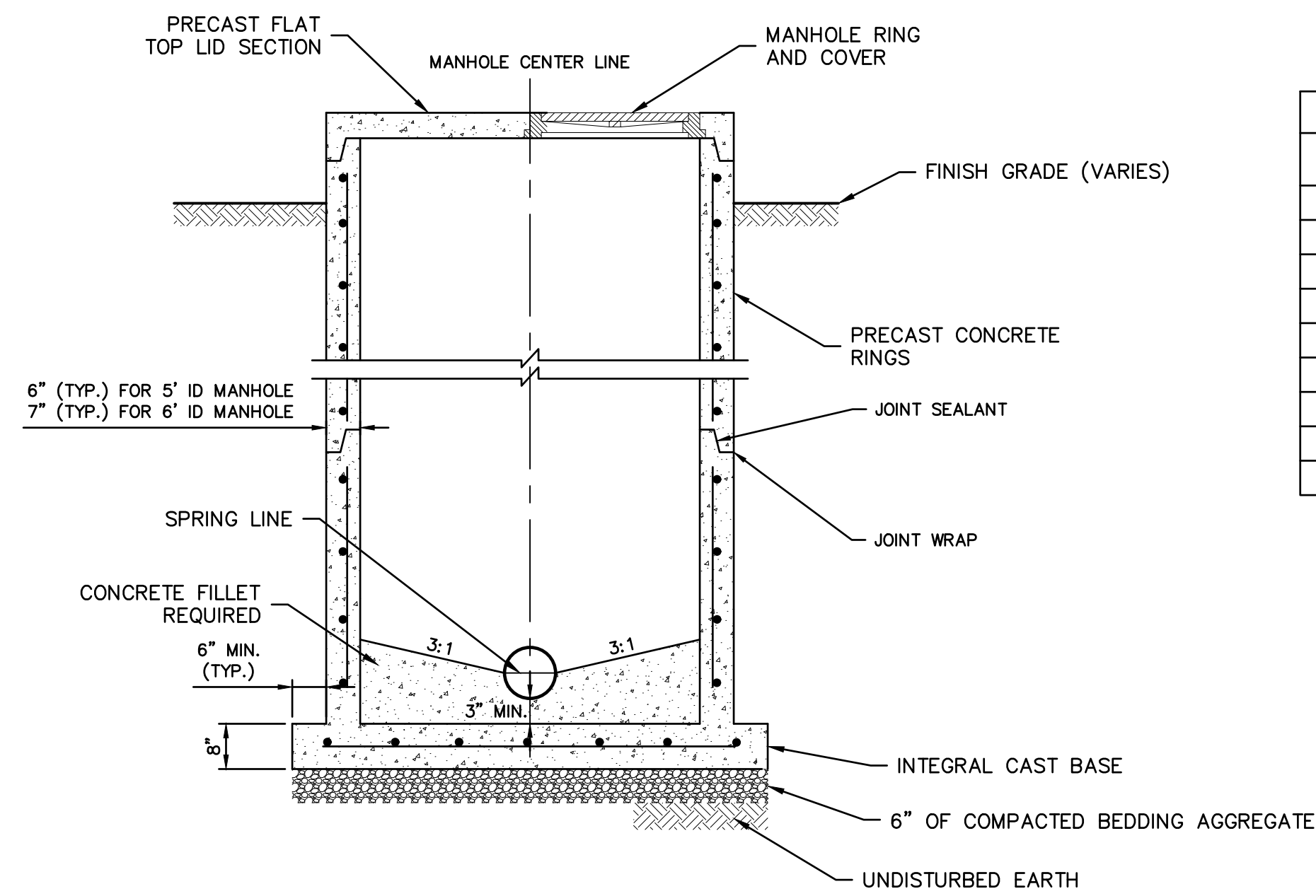
STANDARD DETAILS	BY	DATE	2021
BIG CREEK INTERCEPTOR SEWER UPSIZING LEE'S SUMMIT MIDDLE SCHOOL #4			
LEE'S SUMMIT, MO			

drawn by:	JN
checked by:	BH
approved by:	BH
QA/QC by:	JS
project no.:	020-01030
drawing no.:	
date:	07.15.2021

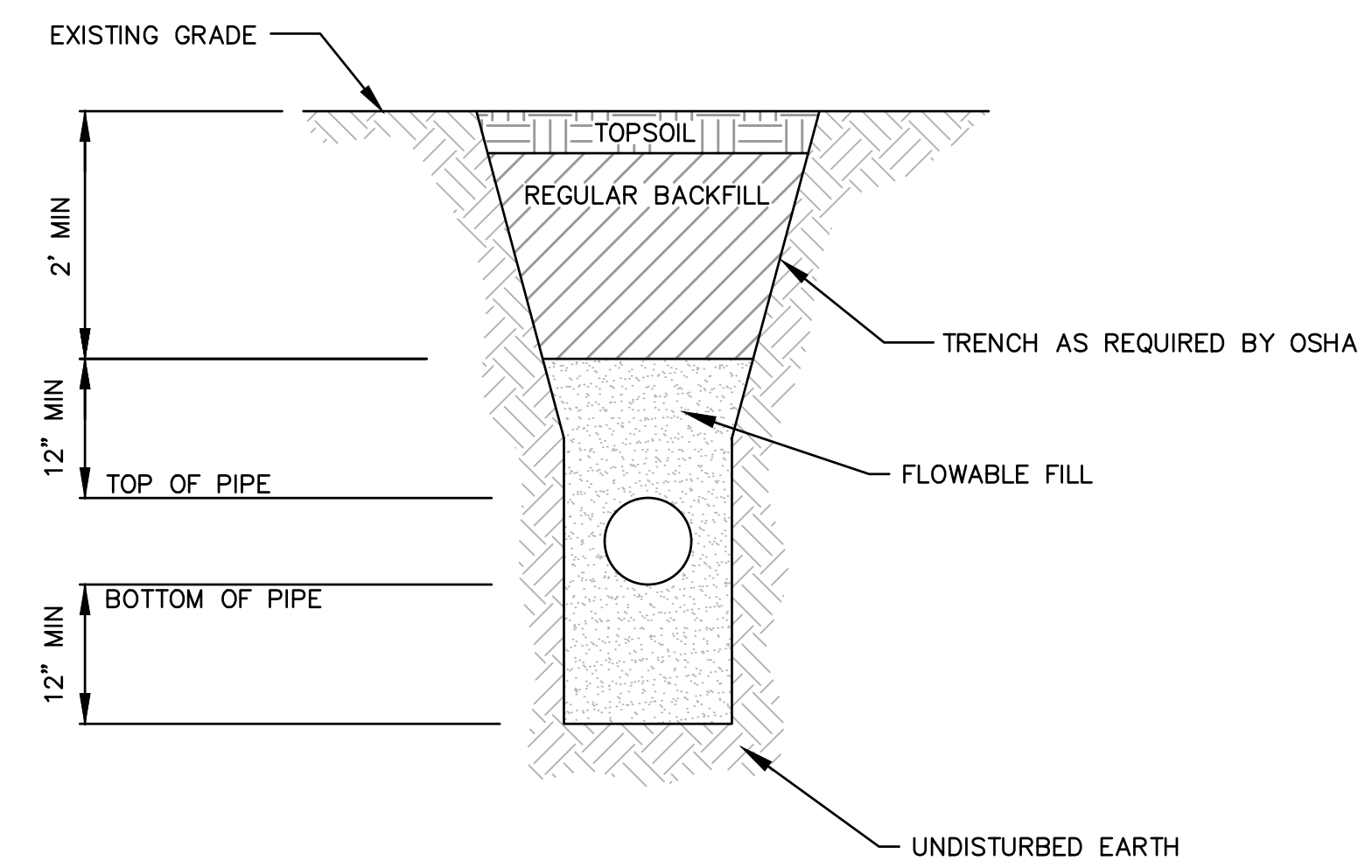


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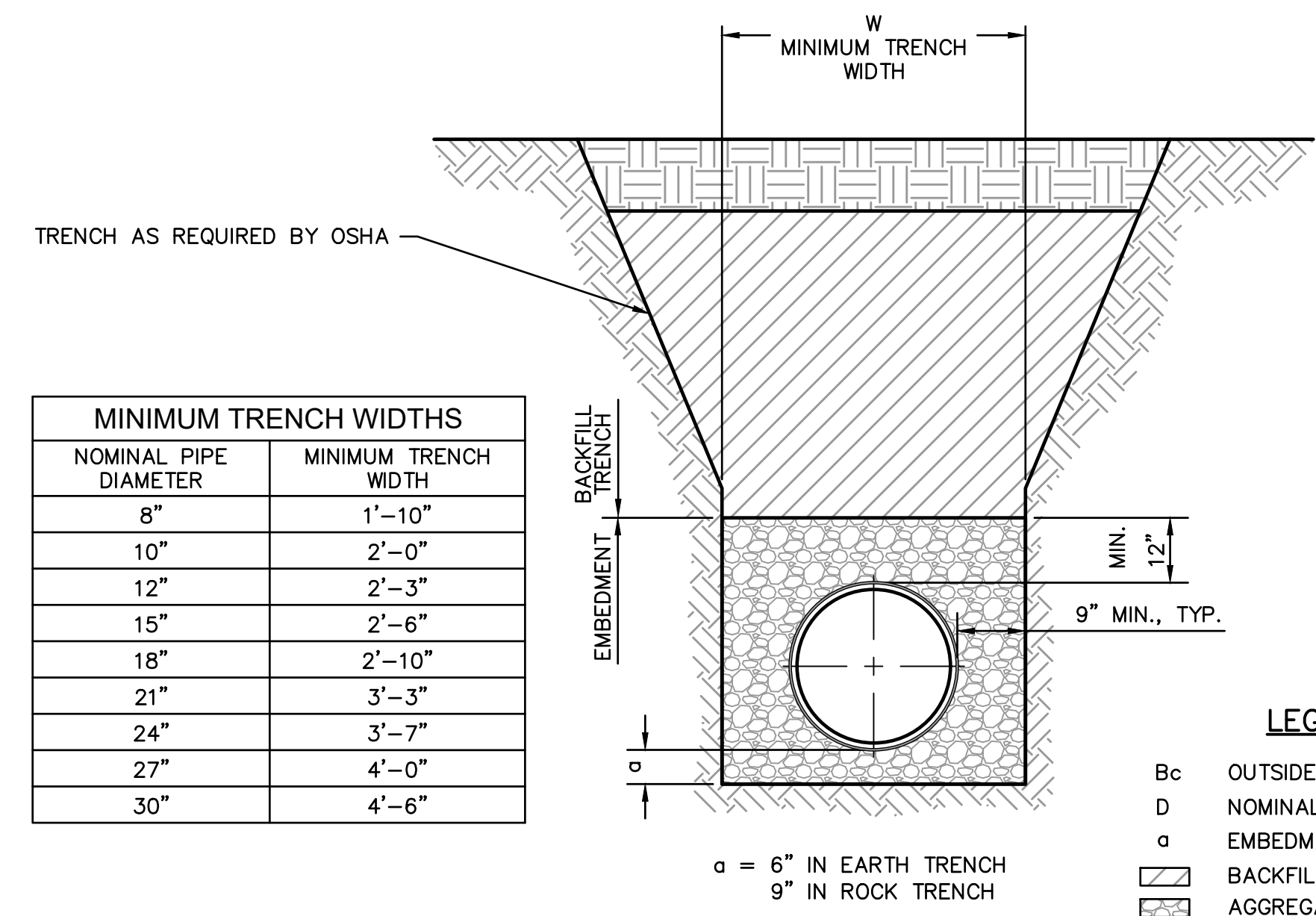


STANDARD FLAT TOP MANHOLE DETAIL (D)  
SCALE: NOT TO SCALE

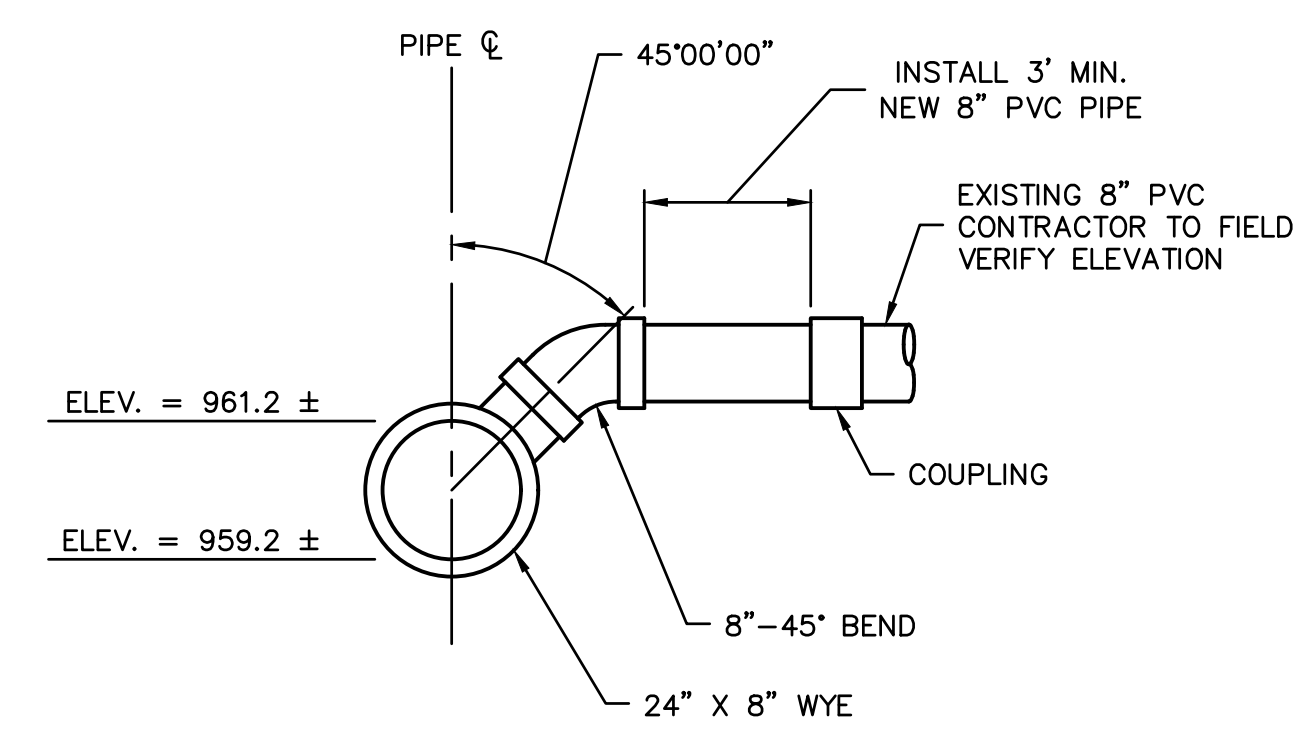


IMPERVIOUS TRENCH CHECK DETAIL (I)  
SCALE: NOT TO SCALE

NOMINAL PIPE DIAMETER	MINIMUM TRENCH WIDTH
8"	1'-10"
10"	2'-0"
12"	2'-3"
15"	2'-6"
18"	2'-10"
21"	3'-3"
24"	3'-7"
27"	4'-0"
30"	4'-6"

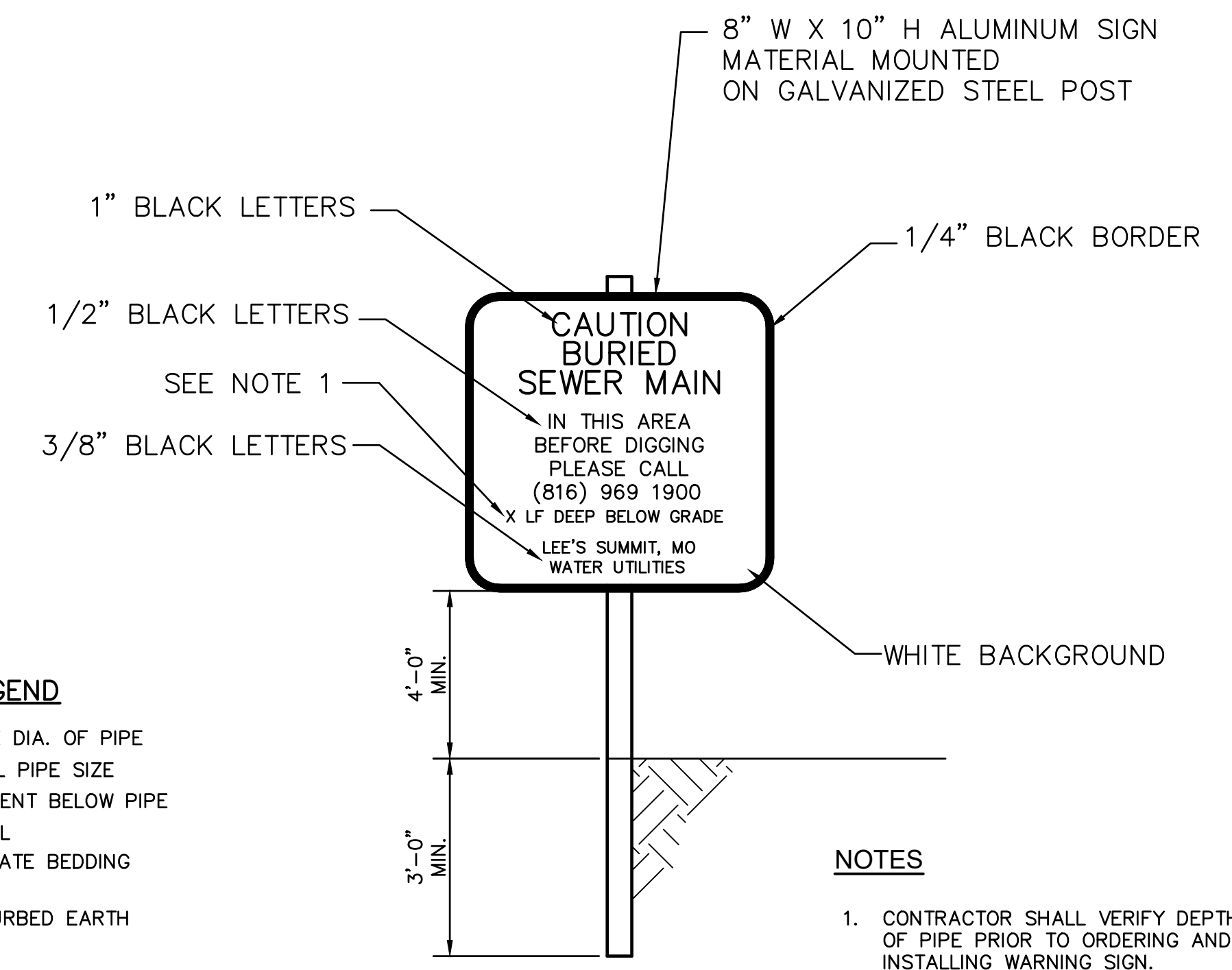


TYPICAL PIPE EMBEDMENT DETAIL (E)  
SCALE: NOT TO SCALE

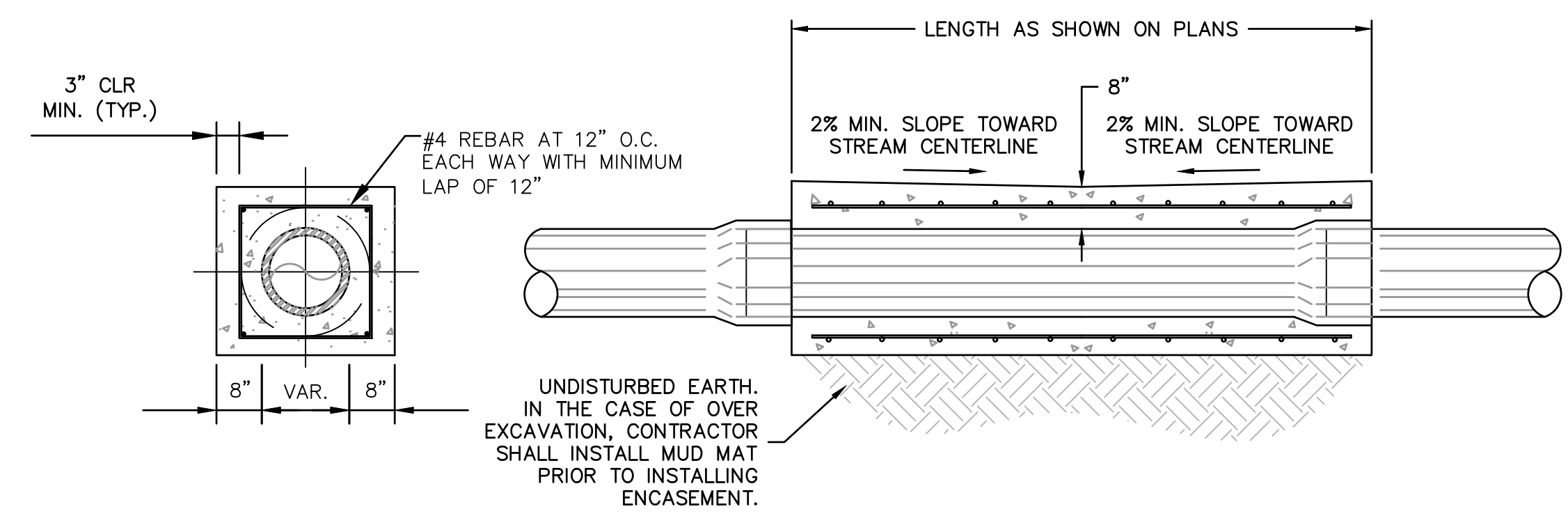


TEE FITTING CONNECTION DETAIL (H)  
SCALE: NOT TO SCALE

- LEGEND**
- Bc OUTSIDE DIA. OF PIPE
  - D NOMINAL PIPE SIZE
  - a EMBEDMENT BELOW PIPE
  - BACKFILL
  - AGGREGATE BEDDING
  - TOPSOIL
  - UNDISTURBED EARTH



RAILROAD WARNING SIGNS DETAIL (F)  
SCALE: NOT TO SCALE



REINFORCED CONCRETE ENCASEMENT DETAIL (G)  
SCALE: NOT TO SCALE

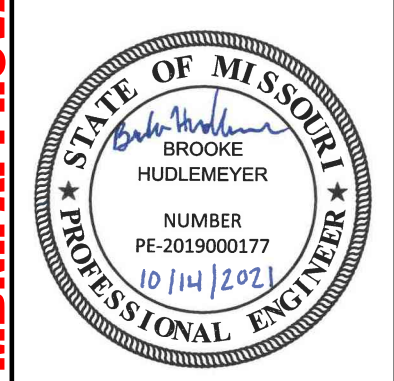
NOTE: INTERMEDIATE PIPE BELLS NOT SHOWN FOR CLARITY. INTERMEDIATE PIPE BELLS SHALL BE ENCASE.

NOTES:  
SEE GENERAL NOTE 32 PRIOR TO PERFORMING ANY WORK ASSOCIATED WITH THE PENDING UNION PACIFIC UTILITY CROSSING PERMIT.

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STANDARD DETAILS

BIG CREEK INTERCEPTOR SEWER UPSIZING  
LEE'S SUMMIT MIDDLE SCHOOL #4

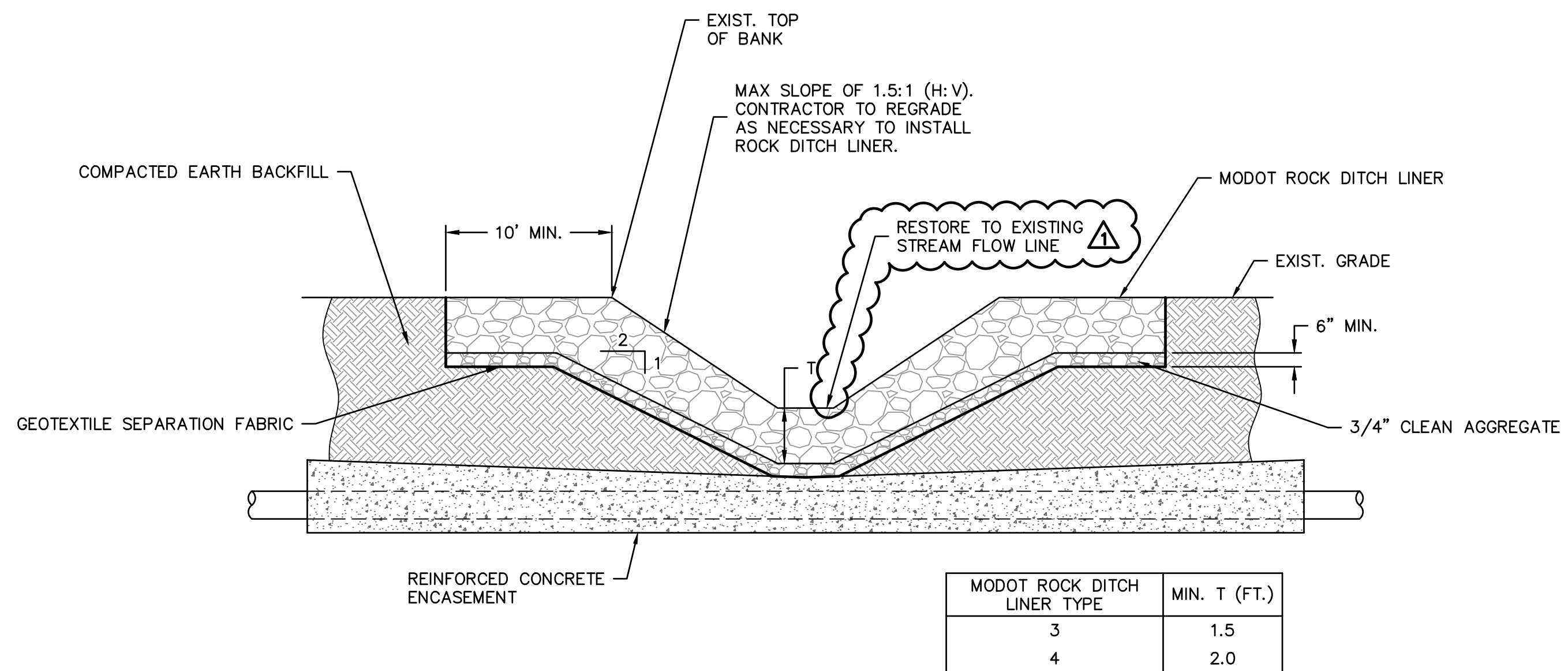
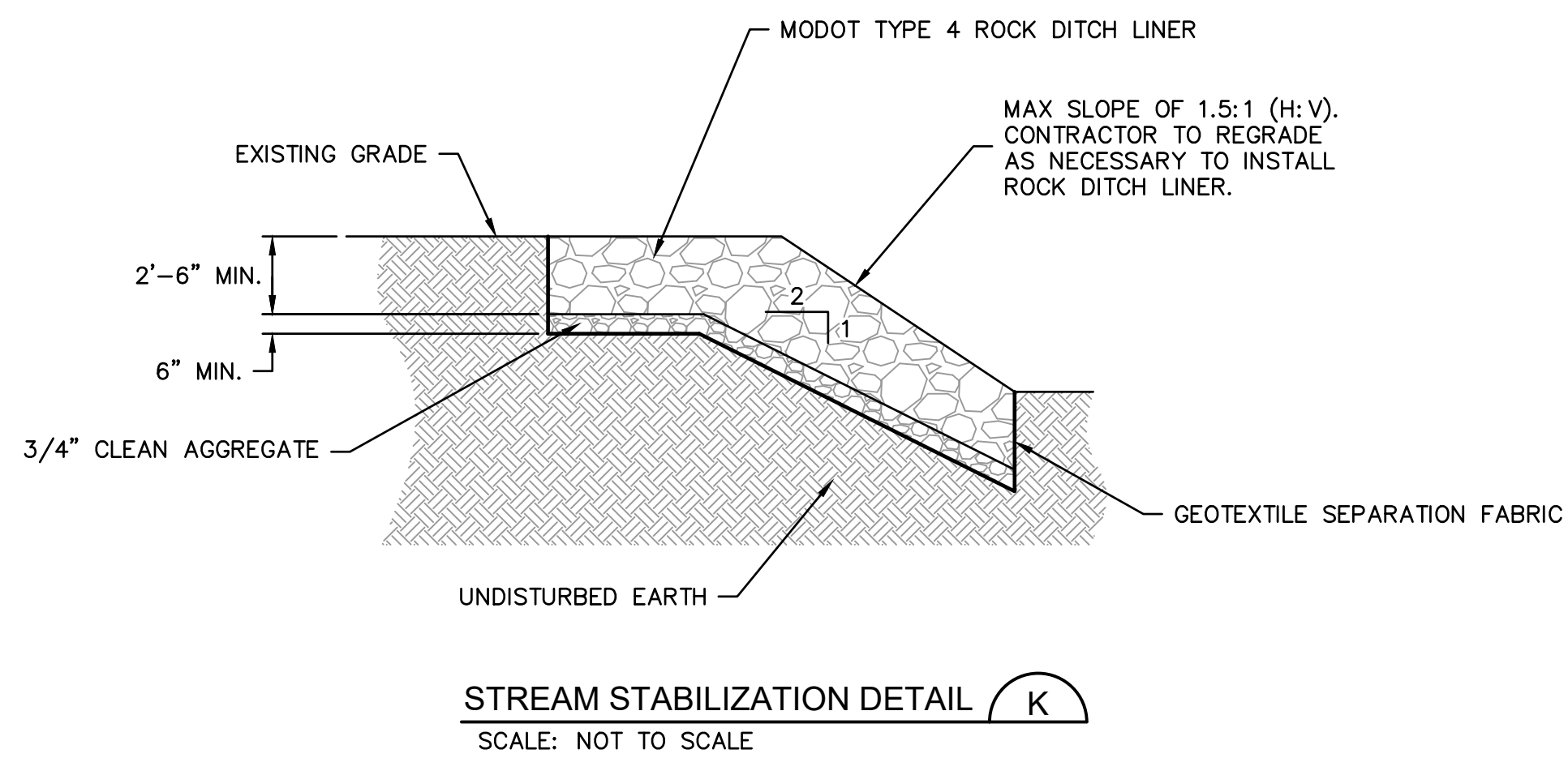
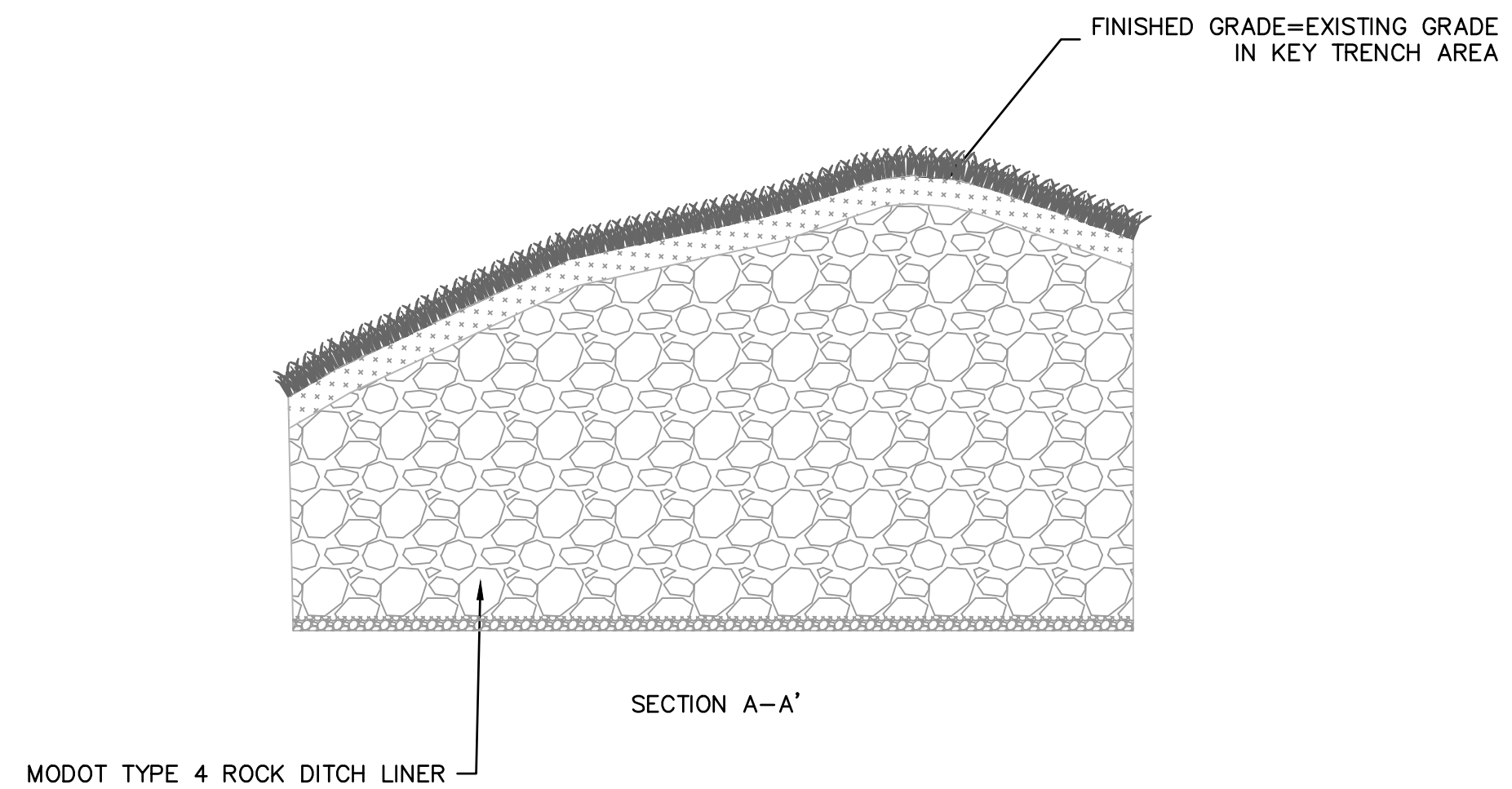
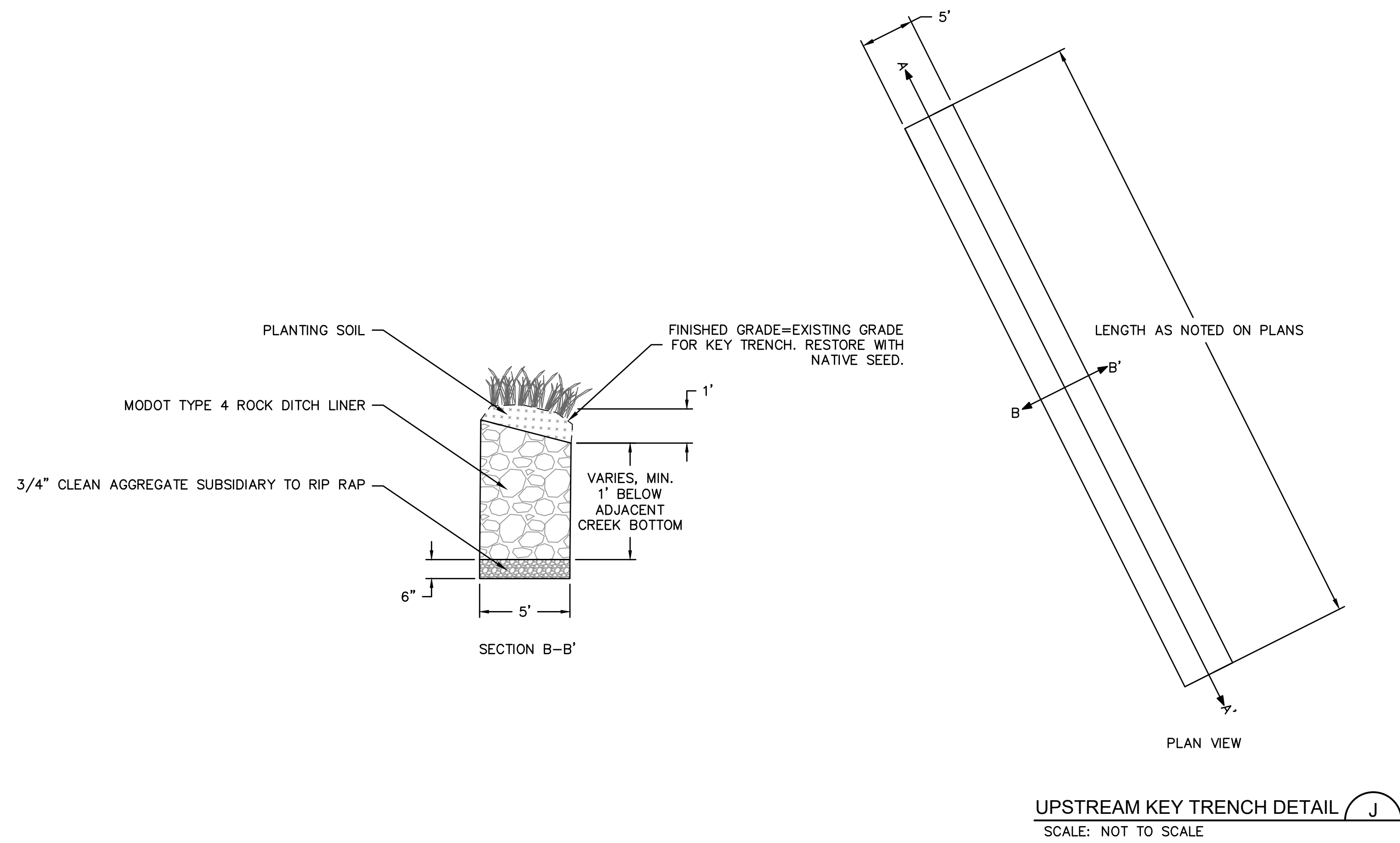
LEE'S SUMMIT, MO

2021

drawn by: NG  
checked by: BH  
approved by: BH  
QA/QC by: JS  
project no.: 020-01030  
drawing no.:  
date: 07.15.2021

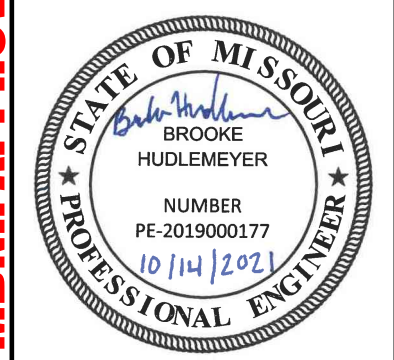


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 XREFS: P\_PTLBK\_0200103



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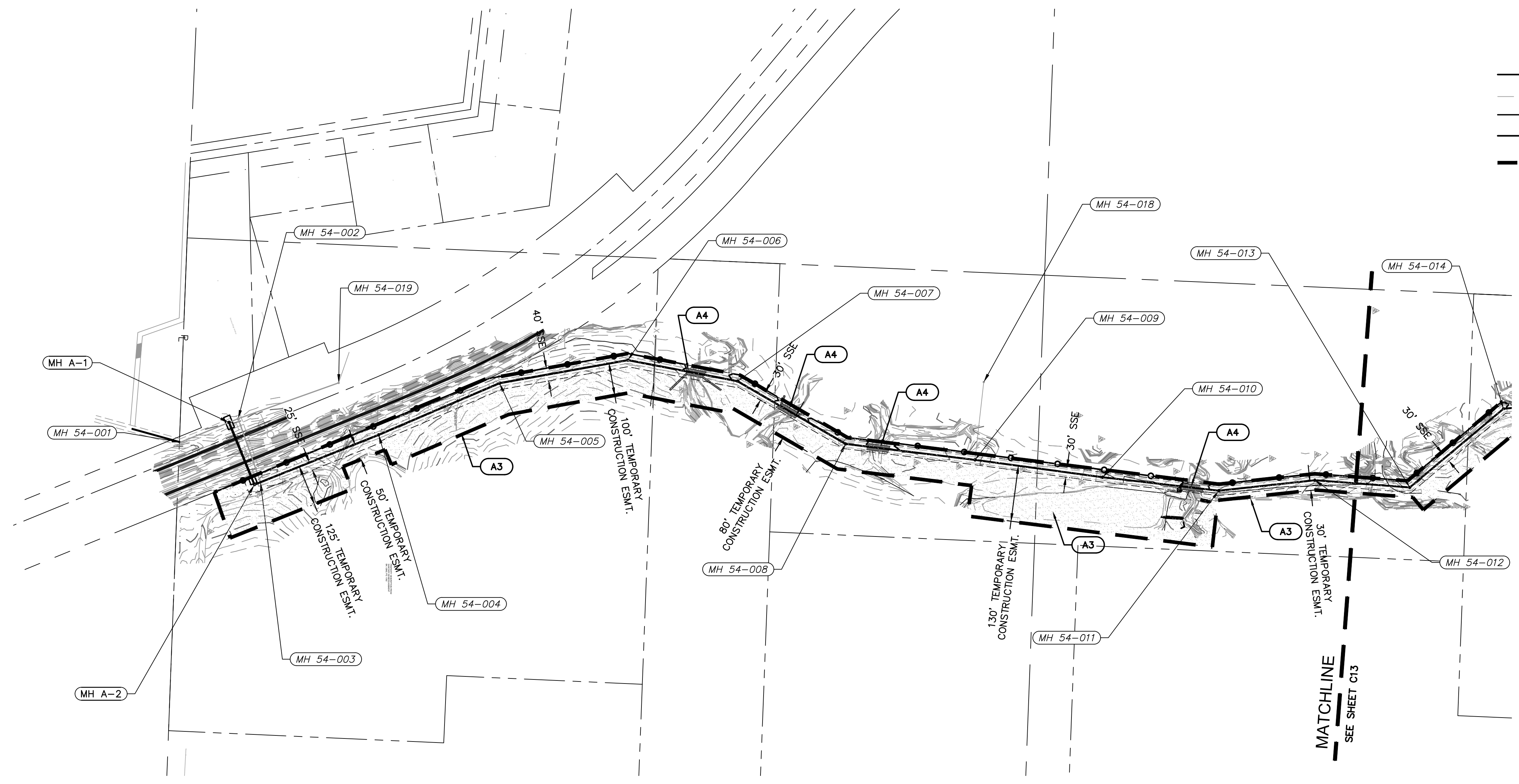
STANDARD DETAILS	2021
BIG CREEK INTERCEPTOR SEWER UPSIZING LEE'S SUMMIT MIDDLE SCHOOL #4	
LEE'S SUMMIT, MO	

drawn by: NG  
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 project no.: 020-01030  
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USER: bhudlemeyer

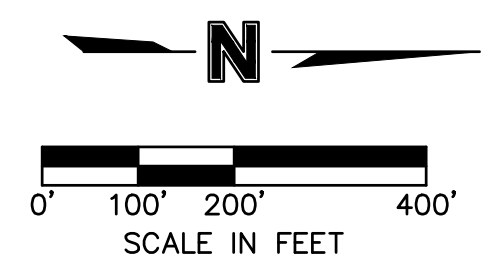
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**LEGEND**

- PROPERTY LINE
- - - 830 - - - EXISTING CONTOUR
- 830 — PROPOSED CONTOUR
- ○ ○ ○ ○ SEDIMENT FENCE
- - - - - LIMITS OF DISTURBANCE
- X1 ○ EROSION CONTROL REFERENCE NUMBER
- [Hatched Box] REPLACE TOP SOIL, SEED MULCH, SOD, LANDSCAPE

EROSION CONTROL STAGING CHART				
PROJECT STAGE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRE-CONSTRUCTION	A1	TEMPORARY CONSTRUCTION ENTRANCE	B	CONTRACTOR TO COORDINATE LOCATION AS NECESSARY
	A2	CONCRETE WASHOUT	B	CONTRACTOR TO COORDINATE LOCATION AS NECESSARY
	A3	SILT FENCE	B	INSTALL AS INDICATED ON PLANS
	A4	REINFORCED STREAM CROSSING	N/A	INSTALL AS INDICATED ON PLANS
B - FINAL STABILIZATION	B1	REPLACE TOP SOIL, SEED MULCH	N/A	ESTABLISH PERENNIAL VEGETATION WITH A 70% DENSITY OVER 100% OF DISTURBED AREA.



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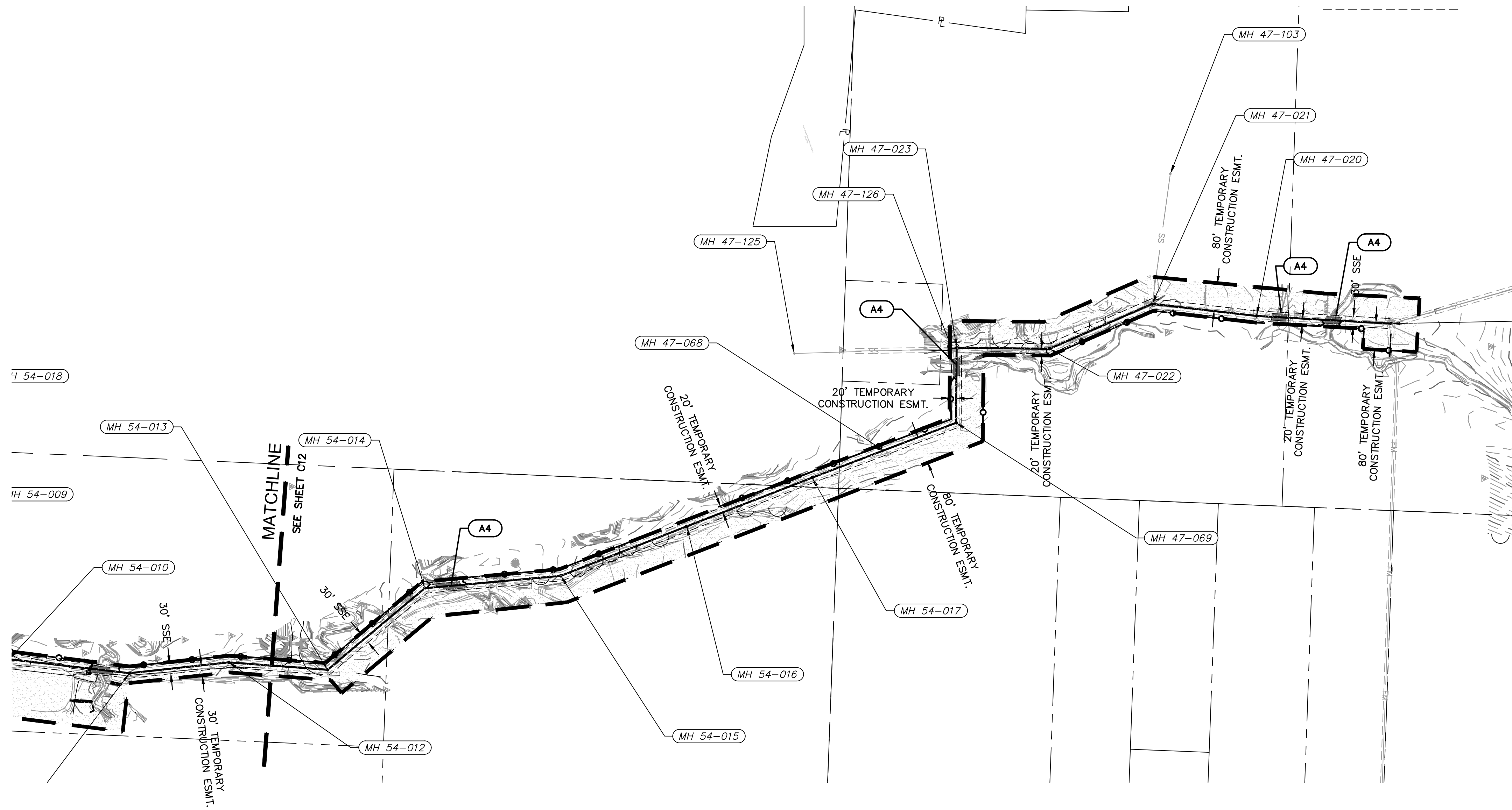
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1	8-25-2021	ASI #29 - REVISED PER CITY COMMENTS	
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EROSION CONTROL PLAN	2021
BIG CREEK INTERCEPTOR SEWER UPSIZING LEE'S SUMMIT MIDDLE SCHOOL #4	
LEE'S SUMMIT, MO	

drawn by: NG  
 checked by: BH  
 approved by: BH  
 QA/QC by: JS  
 project no.: 020-01030  
 drawing no.:  
 date: 07.15.2021



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**LEGEND**

- PROPERTY LINE
- 830 EXISTING CONTOUR
- 830 PROPOSED CONTOUR
- SEDIMENT FENCE
- LIMITS OF DISTURBANCE
- EROSION CONTROL REFERENCE NUMBER
- REPLACE TOP SOIL, SEED MULCH, SOD, LANDSCAPE

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B - FINAL STABILIZATION	B1	REPLACE TOP SOIL, SEED MULCH	N/A	ESTABLISH PERENNIAL VEGETATION WITH A 70% DENSITY OVER 100% OF DISTURBED AREA.

SCALE IN FEET

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**EROSION CONTROL PLAN**

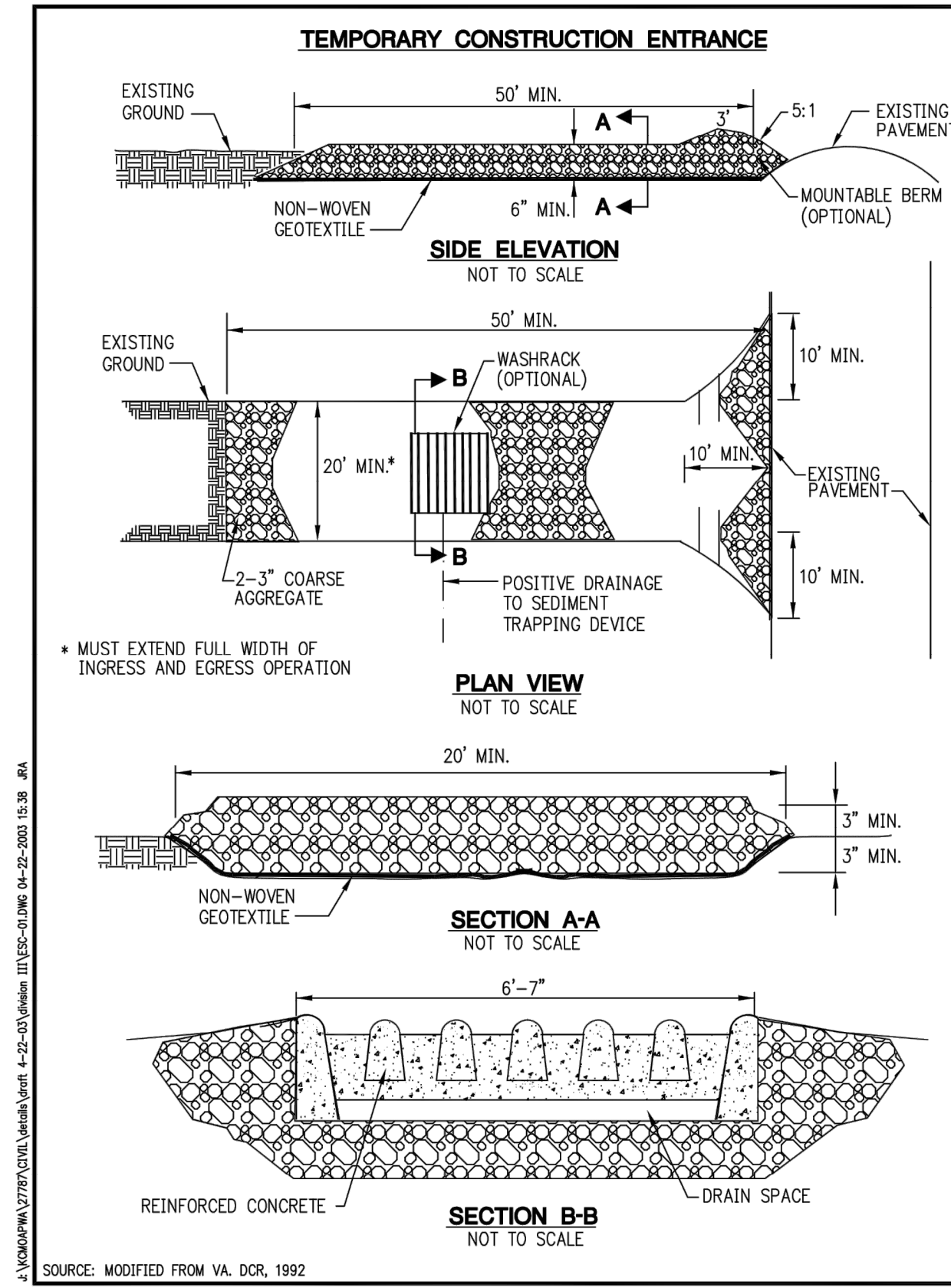
BIG CREEK INTERCEPTOR SEWER UPSIZING  
 LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT, MO 2021

drawn by: NG  
 checked by: BH  
 approved by: BH  
 QA/QC by: JS  
 project no.: 020-01030  
 drawing no.:  
 date: 07.15.2021

**SHEET**  
C13





**TEMPORARY CONSTRUCTION ENTRANCE PAD NOTES:**

**A) INSTALLATION:**

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2%, CONSTRUCT A 6-TO 8-INCH HIGH RIDGE WITH 3:1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
4. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS.
5. PLACE STONE TO DIMENSIONS AND GRADE AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE.
7. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.

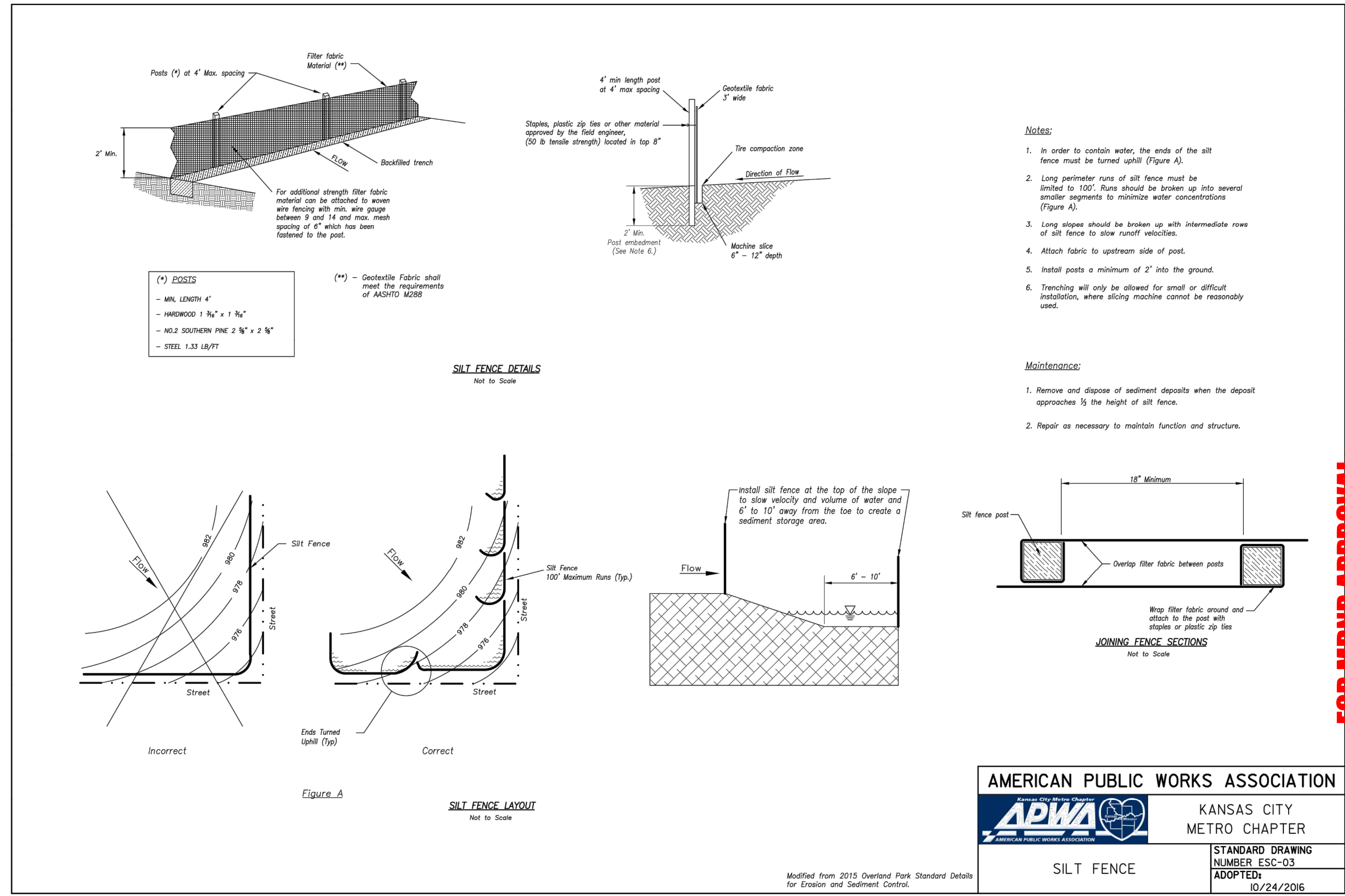
**B) TROUBLESHOOTING:**

1. CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
  - a. INADEQUATE RUNOFF CONTROL TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROAD - INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES.
  - b. SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL - INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC.
  - c. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC - EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY.

**C) INSPECTION AND MAINTENANCE:**

1. INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER 1/2-INCH OR GREATER STORM EVENTS.
2. RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL.
3. TOPDRESS WITH CLEAN 2-AND 3-INCH STONE AS NEEDED.
4. IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROAD. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.
5. REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED.

<b>AMERICAN PUBLIC WORKS ASSOCIATION</b>	
	KANSAS CITY METROPOLITAN CHAPTER
TEMPORARY CONSTRUCTION ENTRANCE	STANDARD DRAWING NUMBER ESC-01 ADOPTED:



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<b>olsson</b>							
Olsson - Civil Engineering Missouri Certificate of Authority # 001592 1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 www.olson.com							
BY							
DATE							
REV. NO.							
1	8-25-2021 ASI #29 - REVISED PER CITY COMMENTS						
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EROSION CONTROL DETAILS	2021						
BIG CREEK INTERCEPTOR SEWER UPSIZING LEE'S SUMMIT MIDDLE SCHOOL #4							
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