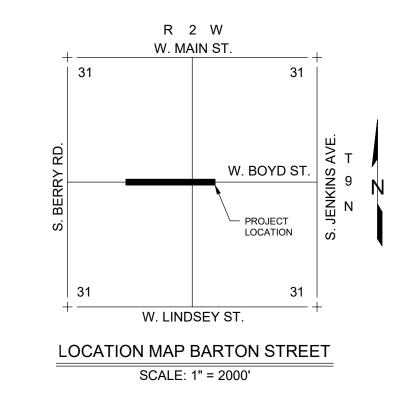
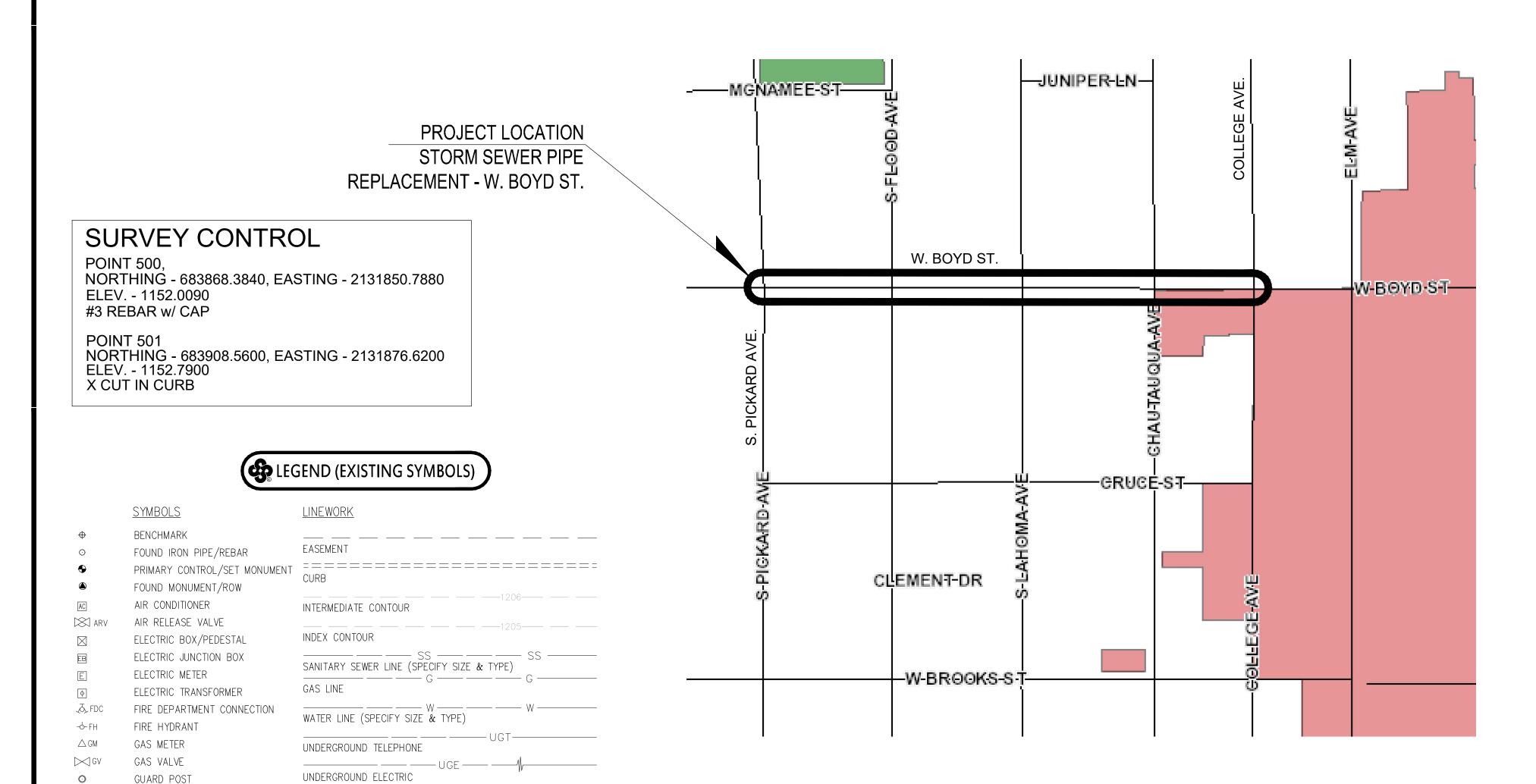
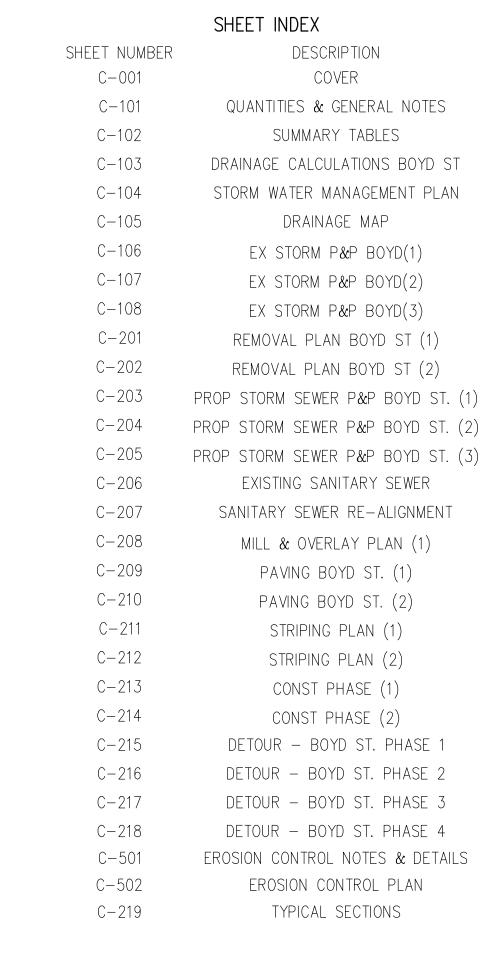
W. BOYD STREET STORM SEWER PIPE REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. A PART OF THE SW,SE,NW,NE/4, SECTION 31, T9N, R2W, I.M. NORMAN, CLEVELAND COUNTY, OKLAHOMA







ST-01 ST-02 ST-03

ST-10

ST-11

ST-15

ST-24 ST-29



CITY OF NORMAN STANDARD DRAWINGS SANITARY SEWER STORM SEWER SD - 01SS - 01W - 01SS-02 SD - 05W-09C SS-04A SD-06W - 13SS-04B SS-04C

OKJE811



CERTIFICATE OF AUTHORIZATION: CA 973 (PE/LS) EXPIRES 6/30/2026

W. BOYD STREET STORM SEWER **REPLACEMENT**

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

No.	Description	Date

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PROJECT NO: 23606900 ISSUE DATE: 11/4/2024 CONTACT: M.WILLIAMS

> ISSUED FOR CONSTRUCTION

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C-001

 \bowtie WV



LIGHT POLE

SIGN

POWER POLE

SANITARY MANHOLE

SPRINKLER HEAD

TV PEDESTAL

WATER FAUCET

WATER METER

WATER VALVE

DOWN GUY

TELEPHONE PEDESTAL

STORM SEWER MANHOLE

SANITARY SEWER CLEANOUT



OVERHEAD ELECTRIC

OVERHEAD TELEVISION

CHAIN LINK FENCE

BARBED WIRE FENCE

WOOD FENCE

FIBER OPTIC

RIGHT OF WAY

ROAD CENTERLINE

UNDERGROUND TELEVISION

PAY QUANTITIES (BASE BID)

ITEM#	ITEM	UNIT	QUANTITY	AS-BUIL
1.	SUPERPAVE, TYPE S5 (PG 70-28)	TON	170	
2.	TYPE A AGGREGATE	C.Y.	740	
	TACK COAT	GAL.	_	
3.			665	
4.	MANHOLE (6' DIAMETER) (14) (15) 36" x 23" R.C. ARCH PIPE (14)	EA.	9	
5.		L.F.	350	
6.	44" x 27" R.C. ARCH PIPE (14)	L.F.	1350	
7.	12" RCP (14)	L.F.	120	
8.	15" RCP (14)	L.F.	24	
9.	18" RCP (14)	L.F.	24	
10.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (04)(05)(14)			
11.	REMOVAL OF ASPHALT PAVEMENT (5)	S.Y.	1313	
12.	SAWING PAVEMENT	L.F.	3405	
13.	REMOVAL OF 12" STORM DRAIN PIPE (5) (14)		120	
14.	REMOVAL OF 15" STORM DRAIN PIPE (5) (14)		24	
15.	REMOVAL OF 18" STORM DRAIN PIPE (5) (14)	-	1750	
16.	REMOVAL OF 30" STORM DRAIN PIPE (5) (14)	L.F.	40	
17.	REMOVAL OF MANHOLE (5) (14)	EA.	5	
18.	REMOVAL OF CURB & GUTTER (5) (14)	L.F.	175	
19.	TRAFFIC STRIPE (THERMOPLASTIC)(24" WHITE)	L.F.	432	
20.	TRAFFIC STRIPE (THERMOPLASTIC)(4" YELLOW)	L.F.	2765	
21.	TRAFFIC STRIPE (THERMOPLASTIC)(6" WHITE)	L.F.	710	
22.	TRAFFIC STRIPE (ARROW)	EA.	2	
23.	TRAFFIC STRIPE (WORD)	EA.	1	
24.	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF (10)	S.D.	5040	
25.	DRUMS (10)	S.D.	1200	
26.	TYPE III BARRICADE (10)	S.D.	1200	
27.	DELIVER PORTABLE LONGITUDINAL BARRIER (10)	L.F.	125	
28.	(PL) PORTABLE LONGITUDINAL BARRIER DELINEATOR (10)	S.D.	15000	
29.	18" SOLID SLAB SODDING (1)(2)(3)		50	
30.		EA.	11	
31.	REMOVAL AND REPLACEMENT OF CHANNEL RETAINING WALL (5)	-		
32.		TON		
33.		LSUM		
34.	6" BARRIER CURB AND GUTTER	L.F.	175	
35.	6" CONCRETE DRIVEWAY (HES) (9)			
36.		LSUM		
37.	MOBILIZATION (0)	LSUM		
38.				
39.	()	LSUM	2	
40.	(PL) REMOVE AND RESET EXISTING SIGNS (11) LEAKAGE TESTING			
41.		LSUM		
41.	EROSION BARRIER (3)		50	
	DOGHOUSE MANHOLE (4' DIAMETER)	EA.	1	
43.	8' SANITARY SEWER PIPE (14)		165	
44.	REMOVAL OF CONCRETE DRIVEWAY (5)	S.Y.	43	
45.	4' DIAMETER MANHOLE (14)(15)		1	
46.	1" SERVICE LINE REMOVAL AND REPLACEMENT (7)(8)		20	
47.	8" CONCRETE UTILITY TRENCH REPAIR (HES) (16)	S.Y.	1400	
	1			

	PAY QUANTITIES (ADD ALTERNATE 1)			
ITEM#	ITEM	UNIT	QUANTITY	AS-BUILT
	ADD ALTERNATE 1			
1.	2" MILL OF ASPHALT PAVEMENT (5) (16) S.Y.	7557	
2.	SUPERPAVE, TYPE S5 (2" OVERLAY) (16) TON	850	

UTILITY CONTACTS

UTILITY PROVIDER	CONTACT NAME	PHONE NUMBER
OKLAHOMA NATURAL GAS	DEREK ROPER	405-556-6459
INDIAN NATIONS FIBER OPTIC	EDDIE TOMLINSON	520-522-3837
OG&E	RAE ANNE LAWRENCE	405-553-5785
COX COMMUNICATIONS	MARK BOWLING	405-417-4064

GENERAL NOTES

SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

FOR PROJECTS THAT INCLUDE WIDENING AND/OR RESURFACING, THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE POTENTIAL DROP-OFF HAZARDS AND SHALL SUBMIT A SEQUENCE OF ANY PORTION OF THE CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE OPERATIONS BEGIN. ANY PORTION OF THE CONSTRUCTION OPERATIONS, SUCH AS SUPERPAVE LAYING OPERATIONS, EXCAVATION FOR PAVEMENT WIDENING, OR EXTENSION OF ROADWAY STRUCTURES, SHALL BE LIMITED TO ONE SIDE AT A TIME, AND THE PROCEDURES OUTLINED IN THE PAVEMENT DROP=OFF TREATMENT STANDARD PDT-1-(LATEST REVISION) SHALL BE IMPLEMENTED. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 1 (ONE) DAY'S TIME WITHOUT APPROVAL BY THE ENGINEER. LIGHTS, SIGNS AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.

ALL TREES, BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER SHALL BE CLEANED OUT TO THE RIGHT-OF-WAY LINE, AT EACH STRUCTURE AND BRIDGE, IN A MANNER APPROVED BY THE ENGINEER. ALL COSTS TO BE INCLUDED IN OTHER ITEMS OF WORK.

ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COSTS TO BE INCLUDED IN OTHER ITEMS OF WORK.

IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED, THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. ALL COSTS TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COSTS OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. ANY REMAINING EXCESS SPOILS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAINS, TIRE MARKS, OR OTHER DISFIGUREMENT.

ALL FEATURES OF THIS PROJECT INCLUDING, BUT NOT LIMITED TO, PATHS, SIDEWALKS, CURB RAMPS, AND CROSSWALK MARKINGS WILL COMPLY WITH THE PUBLIC RIGHTS—OF—WAY ACCESSIBILITY GUIDELINES (PROWAG), PUBLISHED JULY 26, 2011. WHERE SPECIAL LIMITATIONS OF EXISTING FEATURES WITHIN THE LIMITS OF THE PROJECT PREVENT FULL COMPLIANCE WITH PROWAG, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE ENGINEER UPON DISCOVERY OF SUCH FEATURES. THE CONTRACTOR WILL NOT PROCEED WITH ANY OF THE WORK, WHICH IS NOT IN FULL COMPLIANCE WITH PROWAG, WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. ANY WORK WHICH IS NOT PERFORMED WITHIN THE GUIDELINES OF PROWAG FOR WHICH THE CONTRACTOR DOES NOT HAVE WRITTEN APPROVAL WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

THE CROSS SLOPE FOR PATHS, SIDEWALKS, AND RAMPS WITHIN THE LIMITS OF AN ACCESSIBLE ROUTE WILL NOT EXCEED 1:50 OR 2%.

RAMP LONGITUDINAL SLOPES WILL NOT EXCEED 1:12 OR 8.33%

THE CONTINUOUS PATH'S CROSS SLOPE WILL NOT EXCEED 2% THROUGH DRIVEWAYS. SEE DRIVEWAY DETAIL ON CITY OF NORMAN STANDARD DETAIL ST 16 (RESIDENTIAL DRIVEWAYS), ST 18 (COMMERCIAL DRIVEWAYS AND ALLEYS), AND ST 27.

ALL BASE OR PAVEMENT FAILURES THAT OCCUR AS A RESULT OF EXTENDED EXPOSURE TO INCLEMENT WEATHER SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL AGREE WITH THE CITY INSPECTOR AT THE END OF EACH WORKING DAY ON ALL REMOVAL ITEMS AND CONSTRUCTION ITEMS NOT MEASURABLE AFTER CONSTRUCTION IS COMPLETE.

ALL MATERIALS USED ON THIS PROJECT SHALL BE APPROVED BY THE ENGINEER IN WRITING.

THERE SHALL BE NO PAY ITEM REQUIRED FOR CONTRACTION OR EXPANSION JOINTS. THIS COST SHALL BE INCLUDED IN THE COST OF OTHER ITEMS.

CONTRACTOR SHALL CALL OKIE AT (405) 840-9957 OR 811 PRIOR TO ANY EXCAVATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PRESERVE ALL UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. THE CITY OF NORMAN SHALL NOT BE RESPONSIBLE FOR OR PAY FOR ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY UTILITY ABOVE OR BELOW GROUND.

CONTRACTOR TO ENSURE RESIDENTS MAINTAIN ACCESS TO THEIR PROPERTIES DURING THE CONSTRUCTION PROCESS.

ALL CONSTRUCTION PERFORMED UNDER THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE CITY OF NORMAN STANDARD SPECIFICATIONS AND CONSTRUCTION DRAWINGS AND THE SPECIAL PROVISIONS INCLUDED HEREIN. IN CASE OF CONFLICT BETWEEN STIPULATION OF THE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATION, THE SPECIAL PROVISIONS SHALL TAKE PRECEDENCE AND GOVERN. INTERPRETATION OF THE SPECIFICATIONS SHALL BE MADE BY THE ENGINEER.

THE WORK HEREIN CONTEMPLATED CONSISTS OF FURNISHING ALL TOOLS, LABOR, PLANT EQUIPMENT, MATERIALS AND PERFORMING ALL WORK NECESSARY FOR THE CONSTRUCTION, COMPLETE OF ALL IMPROVEMENTS, IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS.

CONTRACTOR SHALL MAINTAIN A CLEAN AND ORDERLY WORK SITE THROUGHOUT PROJECT AND ENSURE ALL DEBRIS AND POTENTIAL HAZARDS ARE MANAGED APPROPRIATELY.

CONTRACTOR TO ENSURE PROPER DRAINAGE OF THE SITE THROUGHOUT CONSTRUCTION.

CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING.

CONTRACTOR SHALL NOTIFY THE CITY A MINIMUM OF 72 HOURS PRIOR TO ANY STREET OR LANE CLOSURE.

GENERAL NOTES (ADD ALTERNATE 1)

REFERENCE ADD ALTERNATE LIMITS.

ROADWAY PAY QUANTITY NOTES

- (1) PRICE BID TO INCLUDE COST OF (10-20-10) FERTILIZER, ESTIMATED AT 200 POUNDS PER 1000 S.Y. OF SODDING. PRICE BID TO INCLUDE COST OF (18-46-0) FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRES OF TOPSOIL.
- (2) PRICE BID TO INCLUDED COST OF WATERING, ESTIMATED AT 40 GALLONS PER S.Y.
- (3) TEMPORARY EROSION AND SEDIMENT CONTROL SHALL CONSIST OF TEMPORARY MEASURES WITHIN THE PROJECT LIMITS AND MINIMIZE POLLUTION OF RIVERS STREAMS AND PRIVATE PROPERTIES. SUCH MEASURES MAY INCLUDE BERMS, DIKES, SLOPE DRAINS, BALE BARRIERS, SEDIMENT FILTERS, SEDIMENT BASINS, MULCHES, AND GRASSES. INCLUDES ALL UNPAVED AND DISTURBED AREAS WHICH SHALL RECEIVE SOLID SLAB SOD.
- (4) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, MANHOLES, HEADWALLS, PIPE SLEEVES (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES, AND OTHER STRUCTURES WITHIN THE RIGHT—OF—WAY.
- (5) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.
- (6) ESTABLISHMENT AND RE-ESTABLISHMENT OF HORIZONTAL AND VERTICAL CONTROL, INCLUDING THE SETTING AND RE-SETTING OF BENCHMARKS AND THE STAKING AND RE-STAKING OF RIGHT-OF-WAY, WILL BE INCLUDED IN THE PRICE BID FOR STAKING.
- (7) CONTRACTOR SHALL CONTACT CITY OF NORMAN LINE MAINTENANCE AT (405) 329-0703 PRIOR TO WATER LINE RELOCATION OPERATIONS TO SHUT DOWN WATER MAIN. CONTRACTOR IS NOT ALLOWED TO OPERATE VALVES.
- (8) CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO HOMEOWNERS TWENTY-FOUR (24) HOURS IN ADVANCE OF WATER MAIN SHUTOFF. NOTICE SHALL INCLUDE APPROXIMATE DURATION. SHUTOFF SHALL OCCUR DURING LOW FLOW TIMES, PREFERABLY MID-DAY, TO MINIMIZE IMPACT TO RESIDENTS.
- (9) PAY ITEM INCLUDE PROVIDING PROPERTY OWNER ACCESS AT ALL TIMES INCLUDING TEMPORARY MATERIAL AS REQUIRED.
- TRAFFIC PAY QUANTITY NOTES
- (10) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE ODOT STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS AND BARRICADES, WHICH ARE SHOWN WITH TYPE "A" LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.

(11) REMOVAL OF EXISTING SIGNS SHALL INCLUDE THE REMOVAL OF A COMPLETE SIGN ASSEMBLY WHICH MAY INCLUDE MULTIPLE SIGNS, POSTS, FOOTINGS, AND ANY FOOTINGS ADJACENT TO THE SIGN ASSEMBLY. WHEN APPROVED BY THE ENGINEER, FOOTINGS MAY BE OBLITERATED TO A POINT BELOW GROUND LEVEL IN LIEU OF BEING COMPLETELY REMOVED. SEE GENERAL CONSTRUCTION NOTES FOR DISPOSAL OF OLD CONCRETE FOOTING MATERIAL.

DEWATERING PAY QUANTITY NOTES

- (12) DEWATERING SHALL INCLUDE ALL COST ASSOCIATED WITH THE EXCAVATION AND DEWATERING REQUIRE TO CONSTRUCT STORM DRAINAGE PIPES, MANHOLES, SANITARY SEWER PIPES, AND MANHOLES IN THE DRY AND WORKABLE CONDITIONS. ALL WORK SHALL BE DONE IN THE ACCORDANCE TO THE CITY OF NORMAN STANDARD SPECIFICATIONS AND CONSTRUCTION DRAWINGS.
- (13) 3" SURGE ROCK SHALL BE USED FOR THE STABILIZATION AND COMPACTION OF THE GROUND DURING THE DEWATERING OF THE INSTALLATION OF THE PIPES AND MANHOLES.
- UTILITY POLE BRACING AND PROTECTION
- (14) INSTALLATION OF SANITARY SEWER, STORM SEWER PIPES, MANHOLES, REMOVAL OF PAVEMENT AND CURB AND GUTTER SHALL BE INCLUDED IN THE COST OF PLUMB OR BRACING OF UTILITY POLES AND THE PROTECTION OF UTILITY DOWN GUYS DURING CONSTRUCTION. AFTER CONSTRUCTION UTILITIES POLES SHALL BE TO THE ORIGINAL PLUMB BEFORE CONSTRUCTION AS DEEMED BY THE ENGINEER.

STORM SEWER NOTES

(15) ALL ITEMS ASSOCIATED WITH MANHOLES (FRAME, COVER, MASTIC MATERIAL) SHALL BE INCLUDED IN THE COST OF THIS ITEM.

PAVEMENT REPAIR - CONCRETE FOR UTILITY TRENCH

(16) ALL ITEMS ASSOCIATED WITH THE 8" (HES) UTILITY PAVEMENT TRENCH REPAIR (REBAR, PLACEMENT OF REBAR DOWELS, SAW CUT AFTER TRENCH HAS BEEN BACKFILLED AND PORTLAND CEMENT) SHALL BE INCLUDED WITHIN THIS ITEM.

ADD ALTERNATE 1 NOTES

(1) 2" MILL AND OVERLAY SHALL BE PERFORM UPON THE COMPLETION AND ACCEPTANCE OF THE STORM DRAIN PIPING INSTALLATION.

63 OKLAHOMA STATUTE ANNOTATED 63§981: ACTIVITY WITHIN SIX FEET OF HIGH VOLTAGE OVERHEAD LINE OR CONDUCTOR PROHIBITED:

NO PERSON, FIRM, CORPORATION OR ASSOCIATION SHALL, INDIVIDUALLY OR THROUGH AN AGENT OR EMPLOYEE AND NO PERSON AS AN AGENT OR EMPLOYEE OF ANY PERSON, FIRM, CORPORATION OR ASSOCIATION, SHALL PERFORM OR PERMIT ANY AGENT OR EMPLOYEE TO PERFORM ANY FUNCTION OR ACTIVITY UPON ANY LAND, BUILDING, HIGHWAY, OR OTHER PREMISES, WHEN IT IS POSSIBLE DURING THE PERFORMANCE OF SUCH ACTIVITY FOR ANY PERSON OR EMPLOYEE ENGAGED IN PERFORMING WORK CONNECTED WITH OR RELATED TO SUCH FUNCTION OR ACTIVITY TO MOVE TO OR TO BE PLACED IN A POSITION WITHIN SIX (6) FEET OF ANY HIGH VOLTAGE OVERHEAD ELECTRICAL LINE OR CONDUCTOR, OR WHEN IT IS POSSIBLE FOR ANY PART OF ANY TOOL, EQUIPMENT, MACHINERY OR MATERIAL TO BE USED BY ANY SUCH PERSON OR EMPLOYEE TO BE BROUGHT WITHIN SIX (6) FEET OF ANY SUCH OVERHEAD HIGH VOLTAGE LINE OR CONDUCTOR THROUGH ANY LATERAL, VERTICAL OR SWINGING MOTION DURING THE PERFORMANCE OF SUCH FUNCTION OR ACTIVITY.

300 Pointe Parkway Blvd. Yukon, Oklahoma 73099

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405.787.6270 † 405.787.6276 f

CERTIFICATE OF AUTHORIZATION: CA 973 (PE/LS) EXPIRES 6/30/2026

> W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE.
TO COLLEGE AVE.
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Key Pla

No	Description	Date

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PROJECT NO: 23606900

ISSUE DATE: 11/4/2024

CONTACT: M.WILLIAMS

QC by: M.LOVE

ISSUED FOR
CONSTRUCTION

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QUANTITIES & GENERAL NOTES

			SUM	IMARY OF REMO	VAL				
STATION RANGE	REMOVAL OF 18" CMP	REMOVAL OF 30" CMP	REMOVAL OF CURB	REMOVAL OF ASPHALT PAVEMENT	REMOVAL OF CHANNEL WALL	SAWING PAVEMENT	MANHOLE REMOVAL	DRIVEWAY REMOVAL	MILL & OVERLAY
	LF	LF	LF	SY	SY	LF	EA	EA	SY
W. BOYD STREET									
STA. 10+00.00 TO STA. 26+82	1750	40	152			3700			7557
STA. 10+21			10						
STA. 10+21 TO STA. 26+82				1313					
STA. 10+00					10				
STA. 11+48.23								1	
STA. 12+96.81								1	
STA. 11+24.72 TO STA. 13+31.59							5		
Total	1750	40	162	1313	10	3700	5	2	7557

	S	UMMARY OF SUF	RFACING		
STATION RANGE	STABILIZED SUBGRADE (5% LIME) P.C. CONCRI		SUPERPAVE TYPE "S5" ASPHALT FOR PAVEMENT	6" BARRIER CURB	TYPE "A" AGGREGATE
	CY	CY	CY	LF	CY
W. BOYD STREET					
STA. 14+59.75 TO STA. 35+63.81	323				
STA. 10+00.00 TO STA. 10+13.37		2			
STA. 10+00.00 TO STA. 35+63.81			148		
STA. 10+00.00 TO STA. 35+63.81					
STA. 10+00.00 TO STA. 35+63.81				10	
STA. 10+00.00 TO STA. 35+63.81					740
TOTALS	323	2	148	10	740

SUMMARY OF DRIVEWAYS											
LOCATION		ТҮРЕ	RADIUS	LENGTH	WIDTH	6" CONCRETE DRIVEWAY					
STATION	SIDE		FT	FT	FT	SY					
W. BOYD STREET											
STA. 11+48.23	RESIDENTIAL	CONCRETE	15	16	22	17					
STA. 12+96.81 RESIDENTIAL		CONCRETE	25	15	32	26					
TOTALS						43					

SUMMARY OF PAVEMENT MARKING											
STATION RANGE	TRAFFIC STRIPE TRAFFIC STR (THERMOPLASTIC) (THERMOPLA (24 INCH WIDE) (6 INCH WI		TRAFFIC STRIPE (THERMOPLASTIC) (4 INCH WIDE)	LEFT TURN ARROW	ONLY						
	WHITE	WHITE	YELLOW	WHITE	WHITE						
	LF	LF	LF	EA	EA						
W. BOYD STREET											
STA. 10+00.00 TO STA. 26+82	360	710	2750	2	1						
TOTALS	360	710	2750	2							

SUMMARY OF SIGNING										
LOCATION		DESCRIPTION	(PL) REMOVAL OF EXISTING SIGNS	(PL) REMOVE AND RESET EXISTING						
STATION	OFFSET		EA	EA						
W. BOYD STREET										
STA. 11+08	21.22' RT	W11-2		1						
STA. 11+99 23.42' RT		R2-1		1						
		TOTALS		2						

	SUMMARY OF TRAFF	IC CONTRO	L		
STATION RANGE	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF	DRUMS	TYPE III BARRICADES	(PL) PORTABLE LONGITUDINAI BARRIER	
	SD	SD	SD	SD	
W. BOYD STREET					
STA. 10+00.00 TO STA. 35+63.81	5040				
STA. 10+00.00 TO STA. 35+63.81		1200			
STA. 10+00.00 TO STA. 35+63.81			1200		
STA. 10+00.00 TO STA. 35+63.81				15000	
TOTAL	5040	1200	1200	1500	

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CONTACT: M.WILLIAMS

QC by: M.LOVE

QC Date:

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SUMMARY TABLES

 $C_{-}102$

STORM SEWER SYSTEM	PIPE SECTION	UPSTREAM STRUCTURE	TOP OF RIM ELEV.	MANHOLE DIAMETER	FLOW LINE IN ELEV.	FLOW LINE OUT ELEV.	PIPE SLOPE	PIPE LENGTH	EQUIV. ROUND PIPE SIZE	PIPE FRICTION COEFF.	PIPE VELOCITY	PIPE CAPACITY	100 YEAR STORM EVENT
			(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft)	(in)	n	(fps)	(cfs)	(cfs)
Boyd Existing	Pipe 1	MH1			1137.98	1137.63	0.01	34.13	30 RCP	0.013	8.36	41.02	98.77
Boyd Existing	A1-A2		INLET	A1			0.0000	26	RCP	0.013	0.00	0.00	0.00
Boyd Existing	A2-A3		INLET	A2			0.0000	130	RCP	0.013	0.00	0.00	0.00
Boyd Existing	D1-D2		INLET	D1			0.0000	26	RCP	0.013	0.00	0.00	0.00
Boyd Existing	D2-D3		INLET	D2			0.0000	19	RCP	0.013	0.00	0.00	0.00
Boyd Existing	E1-E2		INLET	E1			0.0000	26	RCP	0.013	0.00	0.00	0.00
Boyd Existing	E2-E5		INLET	E2			0.0000	28	RCP	0.013	0.00	0.00	0.00
Boyd Existing	E5-E6		JUNCTION BOX	E5			0.0000	170	RCP	0.013	0.00	0.00	0.00
Boyd Existing	E3-E4		INLET	E3			0.0000	26	RCP	0.013	0.00	0.00	0.00
Boyd Existing	E4-E6		INLET	E4			0.0000	55	RCP	0.013	0.00	0.00	0.00
Boyd Existing	E6-E7		JUNCTION BOX	E6			0.0000	189	RCP	0.013	0.00	0.00	0.00
Boyd Existing	MH 1	Pipe 2	1144.13	4.00	1138.08	1137.98							
Boyd Existing	Pipe 2	MH 2			1147.45	1138.08	0.0215	436.28	18 RCP	0.013	8.72	15.40	
Boyd Existing	MH 2	Pipe 3	1152.18	4.00	1147.37	1147.45							
Boyd Existing	Pipe 3	MH 3			1154.77	1147.37	0.0170	432.03	18 RCP	0.013	7.75	13.70	
Boyd Existing	MH 3	Pipe 4	1159.25	4.00	1154.60	1154.77							
Boyd Existing	Pipe 4	MH 4			1156.03	1154.60	0.0035	447.20	18 RCP	0.013	3.52	6.21	
Boyd Existing	MH 4	Pipe 5	1161.12	4.00	1156.22	1156.03							
Boyd Existing	Pipe 5	MH 5			1157.48	1156.22	0.0032	332.54	18 RCP	0.013	3.36	5.94	
Boyd Existing	MH 5		1161.58	4.00	-	1157.48							
Boyd Proposed	Pipe 1	MH1			1139.37	1138.00	0.04	34.13	36 RCP	0.013	18.87	133.40	98.77
Boyd Proposed	MH 1	Pipe 2	1144.13	6.00	1140.47	1139.37							
, '	15" EX. E	<u>'</u>			1140.87								
Boyd Proposed	Pipe 2	MH 2			1141.03	1140.47	0.0085	65.87	36 RCP	0.013	8.70	61.49	
Boyd Proposed	MH 2	Pipe 3	1144.70	6.00	1141.09	1141.03	0.0000	33.01	1101	0.010	50	01110	
Boyd Proposed	Pipe 3	MH 3		0.000	1144.79	1141.09	0.0100	370.46	36 RCP	0.013	9.44	66.70	
Boyd Proposed	MH 3	Pipe 4	1152.18	6.00	1146.41	1144.79	510.100	5.5110		31010	5111	GGING	
	12" EX. NE	- TT -	1102.10	0.00	1147.96								
	12" EX. SW				1148.00								
	12" EX. NW				1148.10								
	12" EX. SE				1148.13								
Boyd Proposed	Pipe 4	MH 4			1150.00	1146.41	0.0200	179.54	36 RCP	0.013	13.34	94.32	
Boyd Proposed	MH 4	Pipe 5	1155.50	6.00	1150.30	1150.00	0.0200	170.04	NOI	0.010	10.04	34.02	
Boyd Proposed	Pipe 5	MH 5	1100.00	0.00	1152.15	1150.30	0.0073	252.56	36 RCP	0.013	8.06	56.99	
Boyd Proposed	MH 5	Pipe 6	1158.80	6.00	1152.90	1152.15	0.0073	232.30	30 100	0.013	0.00	30.33	
Boyd i roposcu	12" EX. NE	1 lpc o	1130.00	0.00	1154.60	1132.13							
	12" EX. SE				1154.00								
	12" EX. NW				1155.01								
	12" EX. SW				1155.01								
Boyd Proposed	Pipe 6	MH 6			1155.11	1152.90	0.0085	197.44	36 RCP	0.013	8.70	61.49	
Boyd Proposed	MH 6	Pipe 7	1159.63	6.00	1154.55	1154.58	0.0000	107.77	OU NOF	0.013	0.10	01.49	
Boyd Proposed Boyd Proposed	Pipe 7	MH 7	1103.00	0.00	1154.05	1154.65	0.0025	249.78	36 RCP	0.013	4.72	33.35	
Boyd Proposed Boyd Proposed	MH 7	Pipe 8	1160.98	6.00	1155.28	1155.28	0.0020	240.10	ov nor	0.013	7.72	30.30	
	12" EX. NE	i ipo o	1100.30	0.00	1156.13	1100.20							
	12" EX. SE				1156.33								
Boyd Proposed	Pipe 8	MH 8			1155.65	1155.28	0.0025	150.36	36 RCP	0.013	4.72	33.35	
Boyd Proposed Boyd Proposed		мн 8 Pipe 9	1160.97	6.00		-	0.0020	100.00	JU KCF	0.013	4.12	33.33	
	MH 8 Pipe 9		1100.97	6.00	1155.65	1155.65	0.0020	400.07	26 000	0.040	E 47	20.52	
Boyd Proposed		MH 9	4400.00	6.00	1156.20	1155.65	0.0030	182.27	36 RCP	0.013	5.17	36.53	
Boyd Proposed	MH 9		1160.90	6.00	- 4456 02	1156.20							
	12" EX. SE				1156.93								
	12" EX. NE				1157.00								
	12" EX. SW				1157.00								



> W. BOYD STREET STORM SEWER REPLACEMENT

> FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

Key Plo

No.	Description	Date

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PROJECT NO: 23606900

ISSUE DATE: 11/4/2024

CONTACT: M.WILLIAMS

QC by: M.LOVE

QC Date:

ISSUED FOR CONSTRUCTION

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DRAINAGE CALCULATIONS BOYD ST

STORMWATER MANAGEMENT PLAN

BEGINNING AT S. PICKARD AVE. AND W. BOYD ST. EXTENDING EAST 1675' PROJECT LIMITS: TO COLLEGE AVE. AND W. BOYD ST. STORMWATER PIPE REPLACEMENT. PROJECT DESCRIPTION: SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES: 1. PLACE TEMPORARY SEDIMENT CONTROL DEVICES AT ALL OFF SITE DRAINAGE LOCATIONS. 2. PERFORM CLEARING & GRUBBING OPERATIONS, PRESERVING ANY EXISTING VEGETATION NOT IMPEDING CONSTRUCTION. 3. REMOVE AND STOCKPILE TOPSOIL. 4. ADD ADDITIONAL TEMPORARY SEDIMENT CONTROL DEVICES AND MAINTAIN AS NEEDED. 5. AS GRADING PROCEEDS, PLACE TEMPORARY MULCHING OR PERMANENT GRASS DEPENDING ON ULTIMATE SLOPES. 6. AS PERMANENT GRASSING IS ESTABLISHED (70% COVER), REMOVE TEMPORARY SEDIMENT CONTROL DEVICES. 0.30 AC AREA TO BE DISTURBED: _____ OFFSET AREA TO BE DISTURBED: ______ (FOR CONTRACTOR USE) WEIGHTED RUNOFF COEFFICIENT: 0.95 BEFORE CONSTRUCTION: -0.95 AFTER CONSTRUCTION: — IMHOFF CREEK NAME OF RECEIVING WATERS: NOTE: THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE CHARACTERISTICS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

SITE DESCRIPTION

EROSION AND SEDIMENT CONTROLS

	TEMPORARY	SEEDING			
X	PERMANENT	SODDING,	SPRIGGING	OR	SEEDING

_____ VEGETATIVE MULCHING

SOIL STABILIZATION PRACTICES:

_____ SOIL RETENTION BLANKET

____ Preservation of existing vegetation

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER FOR OVER 21 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

STRUCTURAL PRACTICES:

	TEMPORARY BRUSH SEDIMENT BARRIERS
X	TEMPORARY SILT FENCE
	TEMPORARY SILT DIKES
	TEMPORARY BALE BARRIERS
	DIVERSION, INTERCEPTOR OR PERIMETER DIKES
	DIVERSION, INTERCEPTOR OR PERIMETER SWALES
	SANDBAG BERMS
	ROCK FILTER DAMS
	TEMPORARY SLOPE DRAIN
	PAVED DITCH W/ DITCH LINER PROTECTION
	TEMPORARY DIVERSION CHANNELS
	RIP RAP
	TEMPORARY STREAM CROSSINGS
	TEMPORARY SEDIMENT BASINS
	TEMPORARY SEDIMENT TRAPS
	TEMPORARY SEDIMENT FILTERS
X	TEMPORARY SEDIMENT REMOVAL

OFFSITE VEHICLE TRACKING:

- X HAUL ROADS DAMPENED FOR DUST CONTROL
- ____X LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- X EXCESS DIRT ON ROAD REMOVED DAILY

INLET SEDIMENT FILTER

STABILIZED CONSTRUCTION EXIT

NOTES:

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

All erosion and sediment controls will be maintained in good working order from the beginning of construction until an acceptable vegetative cover is established. Inspection by the Contractor and any necessary repairs shall be performed once every 7 calendar days and within 24 hours after any storm event greater than 0.5 inches (1.25 cm) as recorded by a non-freezing rain gauge to be located on site. Potentially erodible areas, drainageways, material storage, structural devices, construction entrances and exits along with erosion and sediment control locations are examples of sites that need to be inspected.

WASTE MATERIALS:

Proper management and disposal of construction waste material is required by the Contractor. Materials include stockpiles, surplus, debris and all other by—products from the construction process. Practices include disposal, proper materials handling, spill prevention and cleanup measures. Controls and practices shall meet the requirements of all Federal, State and Local agencies.

HAZARDOUS MATERIALS:

Proper management and disposal of hazardous waste materials is required. The Contractor is responsible for following manufacturer's recommendations, State and Federal regulations to ensure correct handling, disposal, spill prevention and cleanup measures. Examples include but are not limited to: paints, acids, cleaning solvents, chemical additives, concrete curing compounds and contaminated soils.

GENERAL NOTES:

A Stormwater Pollution Prevention Plan (SW3P) is required to comply with the Oklahoma Pollution Discharge Elimination Systems (OPDES) regulations. This plan is initiated during the design phase, confirmed in the pre—work meetings and available on the job site along with copies of the Notice of Intent (NOI) forms that have been filed with the Oklahoma Department of Environmental Quality (ODEQ). The plan must be kept current with up—to—date amendments during the progression of the project. The basic goal of stormwater management is to improve water quality by reducing pollutants in storm water discharges. Runoff from construction sites has a potential for pollution due to exposed soils and the presence of hazardous materials used in the construction process. The prevention of soil erosion, containment of hazardous materials and/or the interception of these pollutants before leaving the construction site are the best practices for controlling stormwater pollution.

The following Subsections of ODOT's Standard Specifications book should be noted:

103.05 Bonding Requirements

104.10 Final Cleaning Up

104.14 Contractor's Responsibility for Work

106.08 Storage of Materials

107.01 Laws To Be Observed

107.15 Stormwater Management

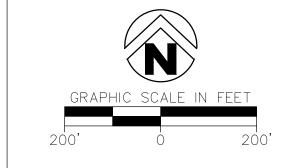
220.01 — 05 Temporary Erosion, Sedimentation and Stormwater Pollution Prevention and Control

In addition:

ODOT Special Provision 220—1 Management of Erosion Sedimentation, and Stormwater Pollution Prevention and Control.

"ODEQ General Permit (OKR10) for Storm Water Discharges From Construction Activities within the State of Oklahoma." ODEQ, Water Quality Division, September 13, 2007.

DESIGN		STORM SEWER REPLACEMENT CLEVELAND COUNTY
DETAIL		STORMWATER MANAGEMENT PLAN
CHECK		FOR W. BOYD STREET
SQUAD	СТА	
FNGR.		$_{ extsf{SHFFT NO}}$ C $-$ 1 0 4



W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

Key Plo

Tc = 36.08 min.

 $Q_2 = 45.63 \text{ cfs.}$ $Q_5 = 59.77 \text{ cfs.}$

 $Q_{10} = 69.10 \text{ cfs}$

 $Q_{25} = 82.79 \text{ cfs}$

 $Q_{50} = 92.59 \text{ cfs}$

 $Q_{100} = 104.02 \text{ cfs}$

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PROJECT NO: 23606900

ISSUE DATE: 11/4/2024

CONTACT: M.WILLIAMS

QC by: M.LOVE

ISSUED FOR CONSTRUCTION

30" STORM SEWER REPLACEMENT

DRAINAGE MAP

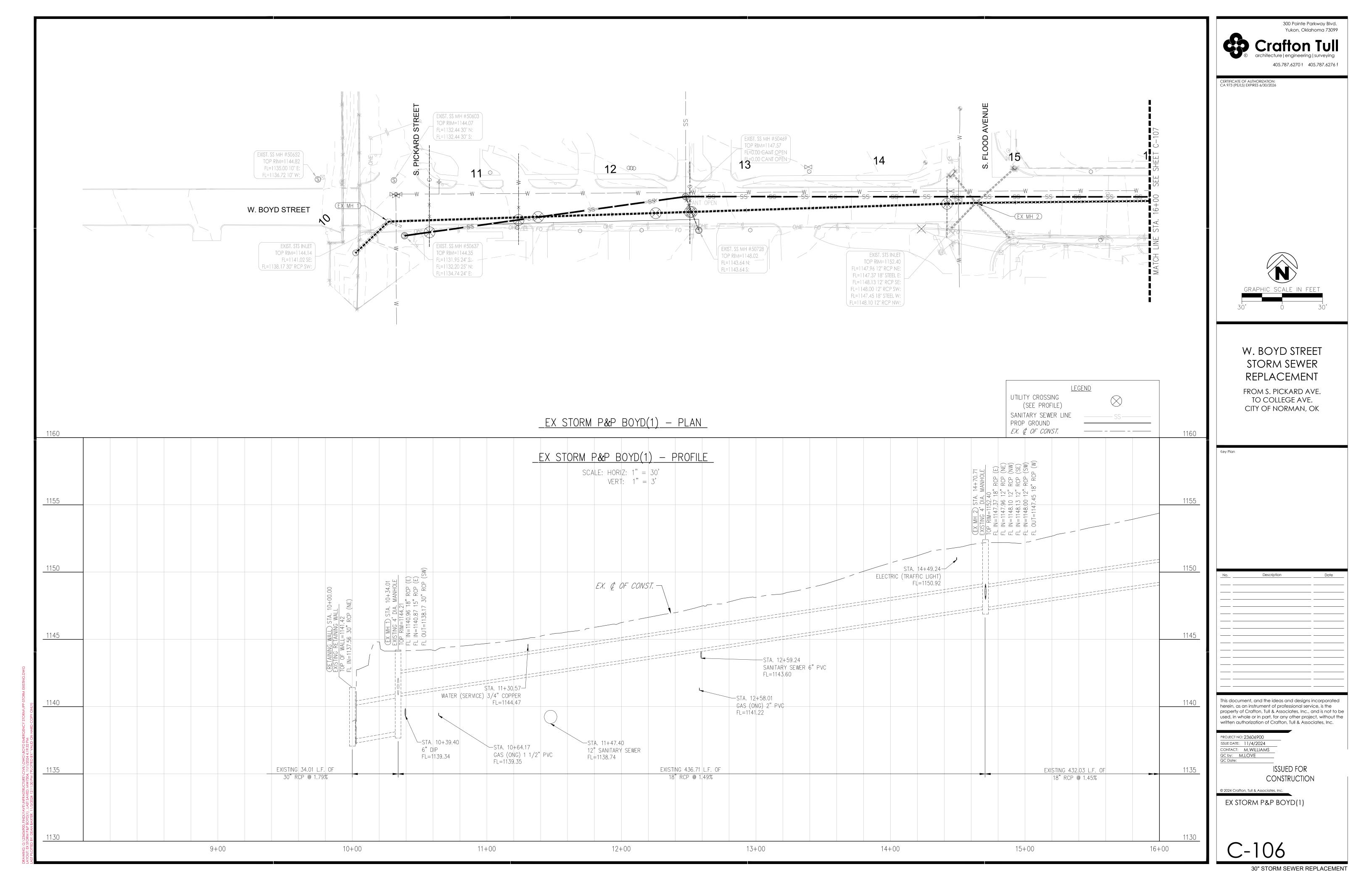
C-105

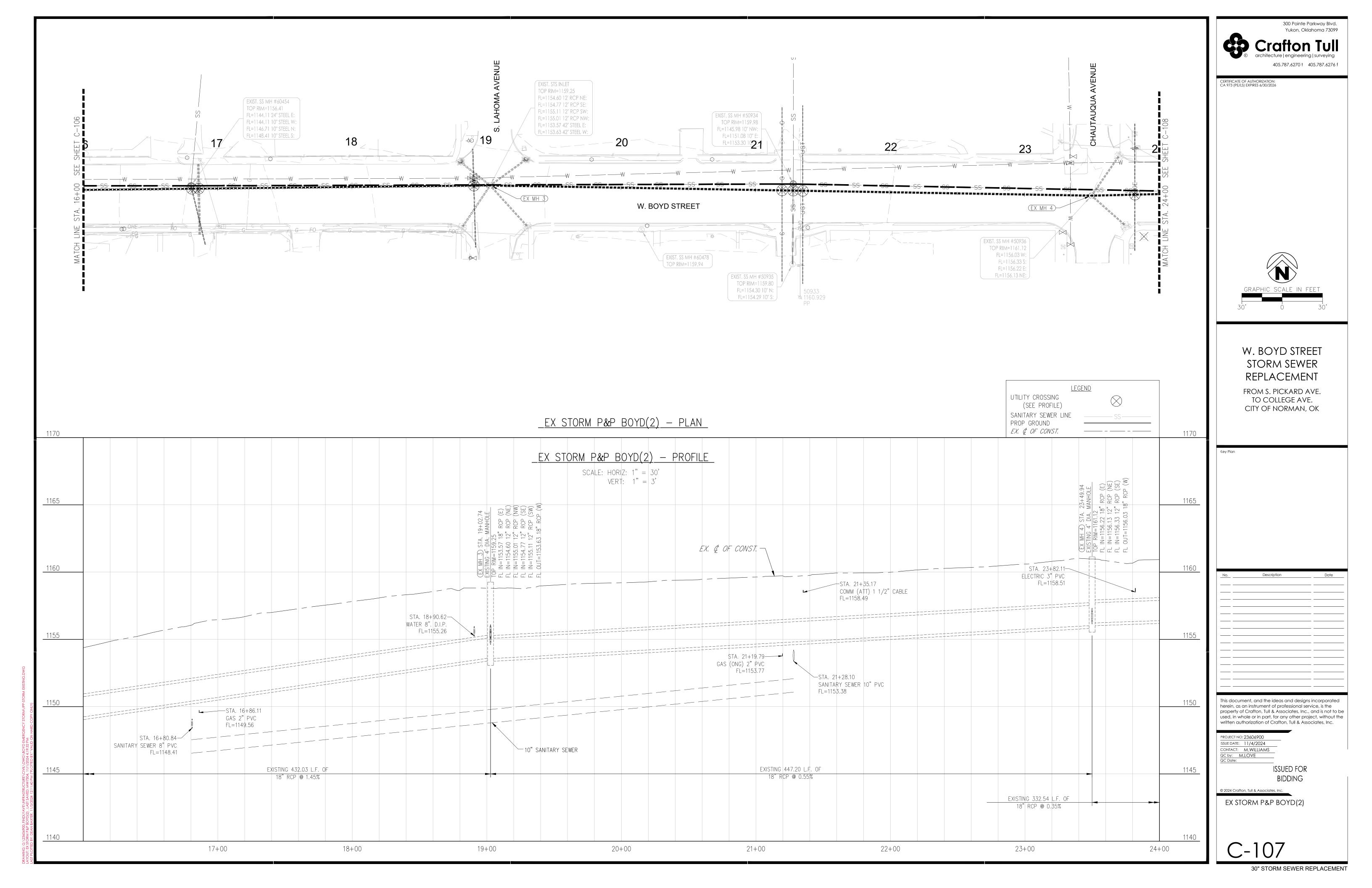
DRAWING: G:\23606900_FINDLYAVE\INFRASTRUCTURE\CIVIL\DWG\BOYD EMERGENCY STORM\IDRAINAGE. LAYOUT: DRAINAGE MAP BOYD , LAST SAVED: JD7434, 10/31/2024 3:36:40 PM McNamee St

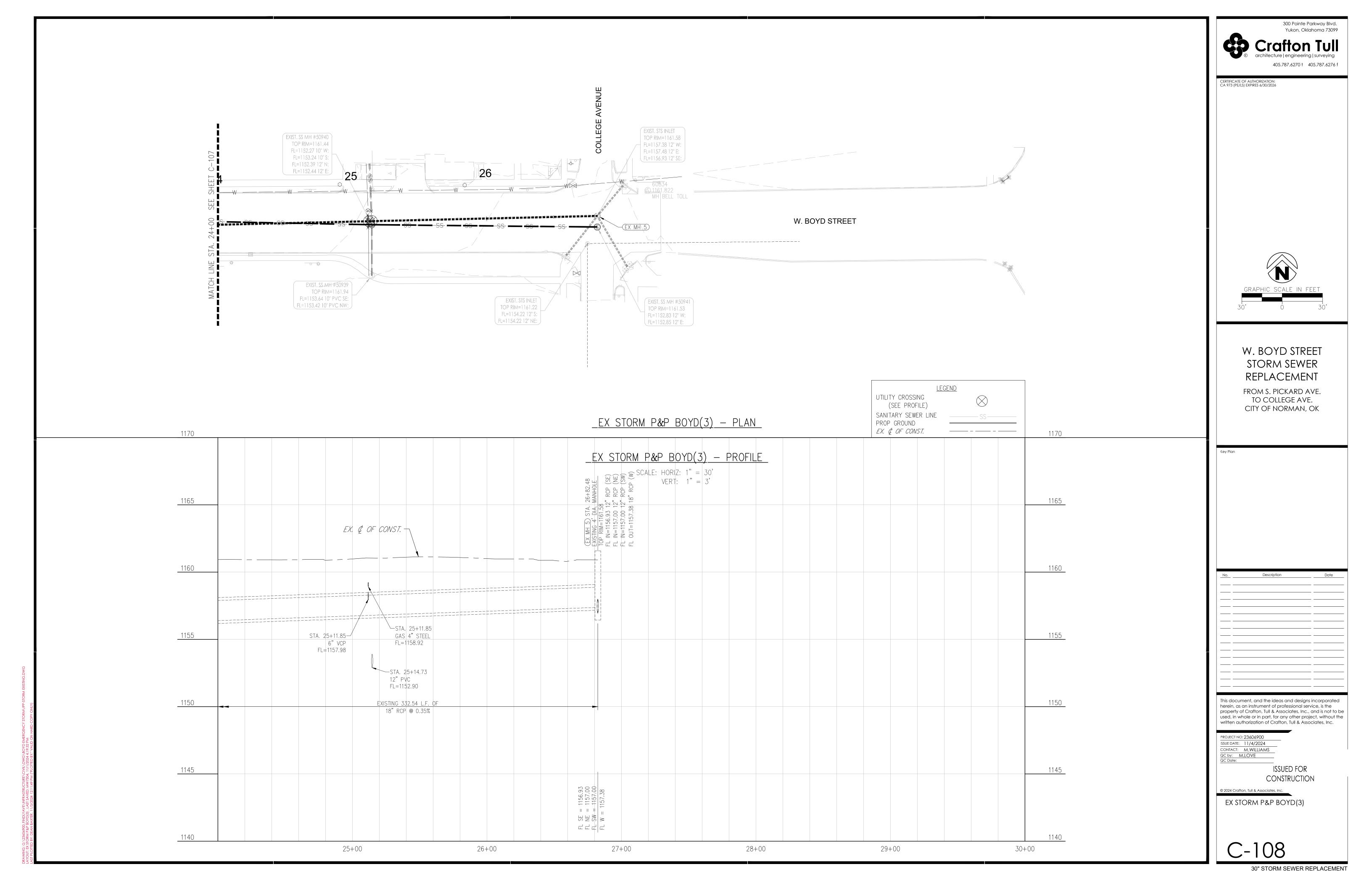
W. BOYD ST. BASIN 28.44 AC.

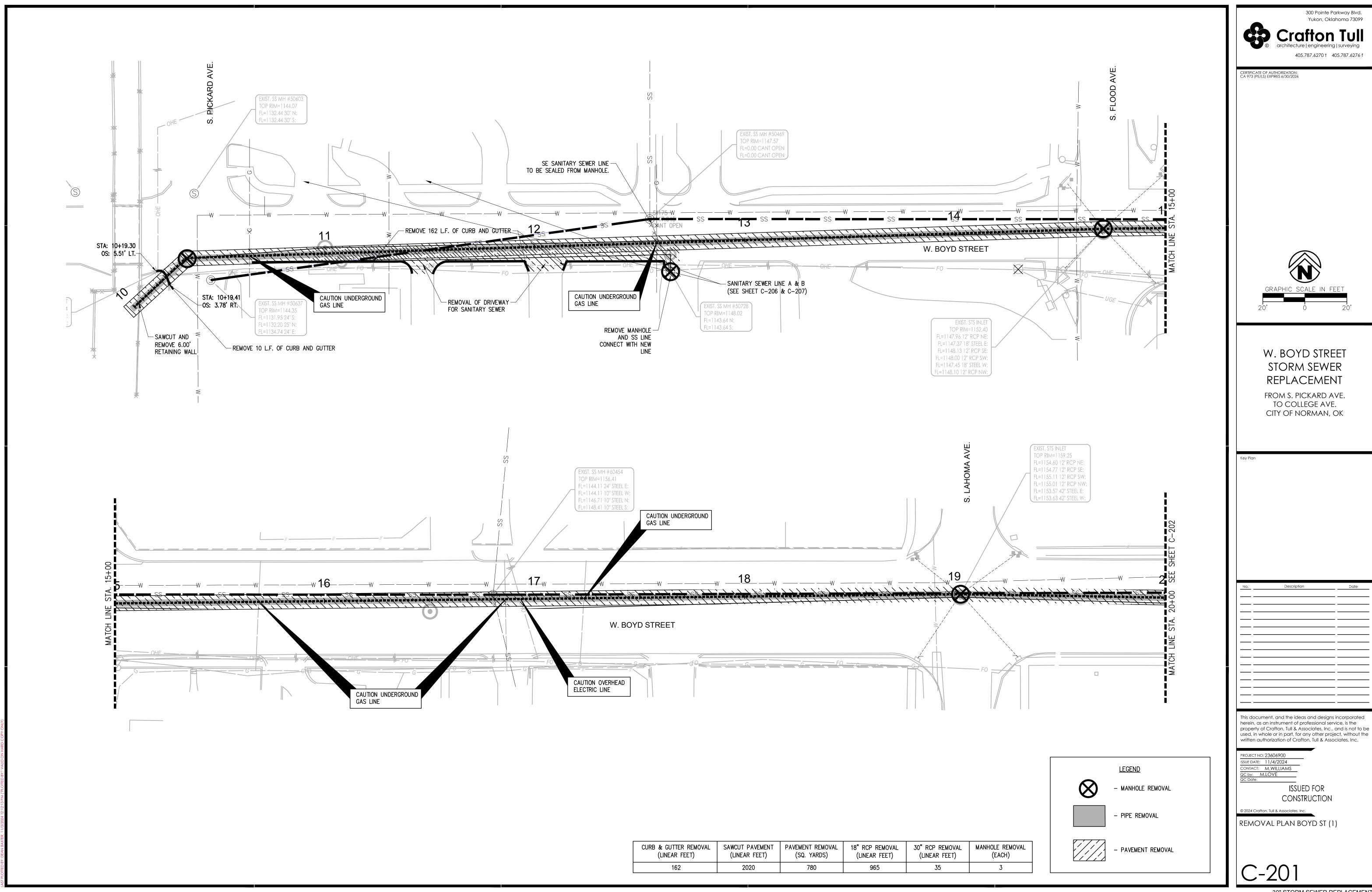
RESIDENT STANDARD TO COLORS TO COLOR

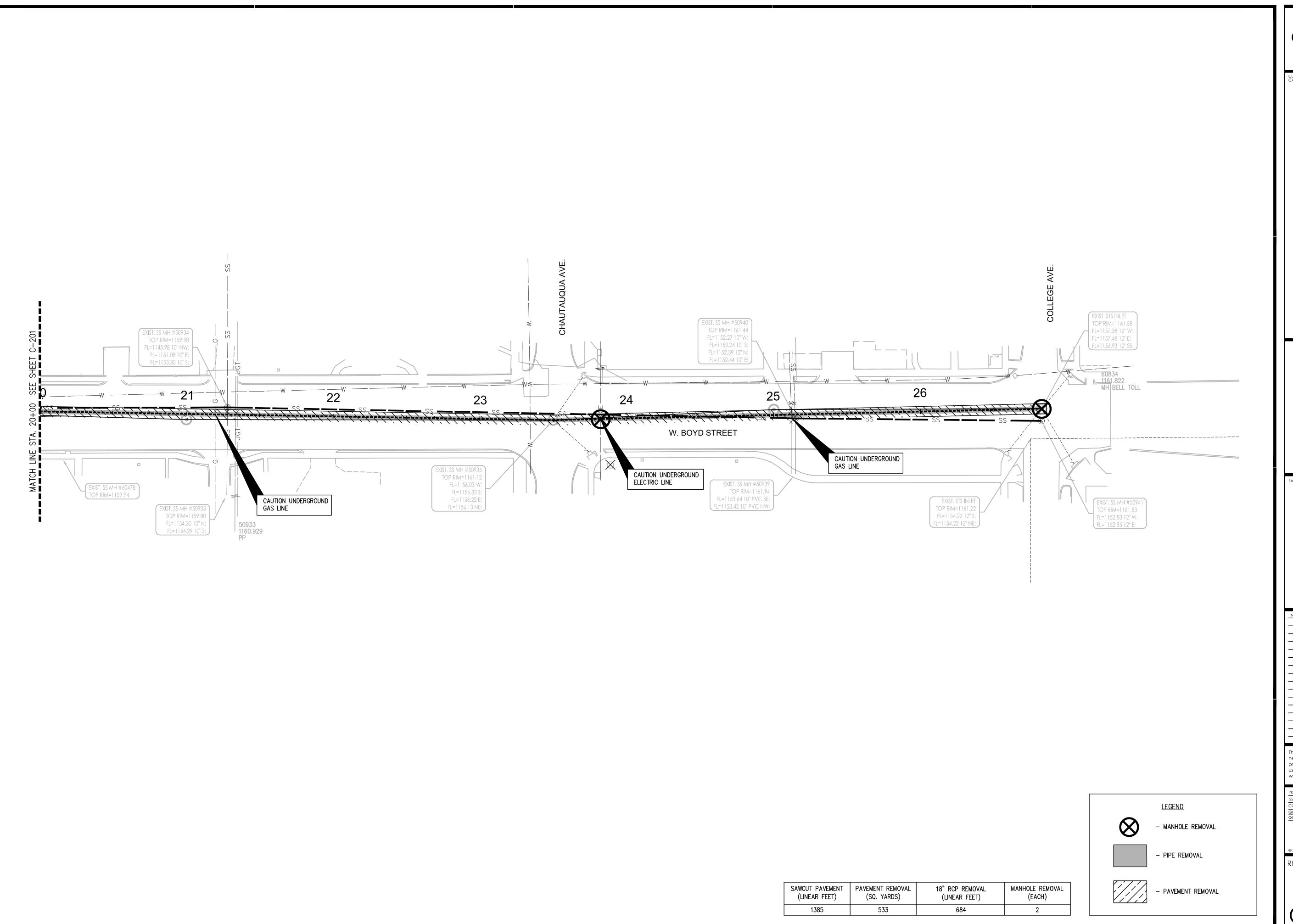
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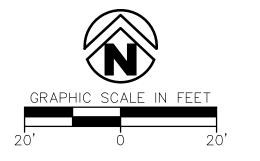












W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

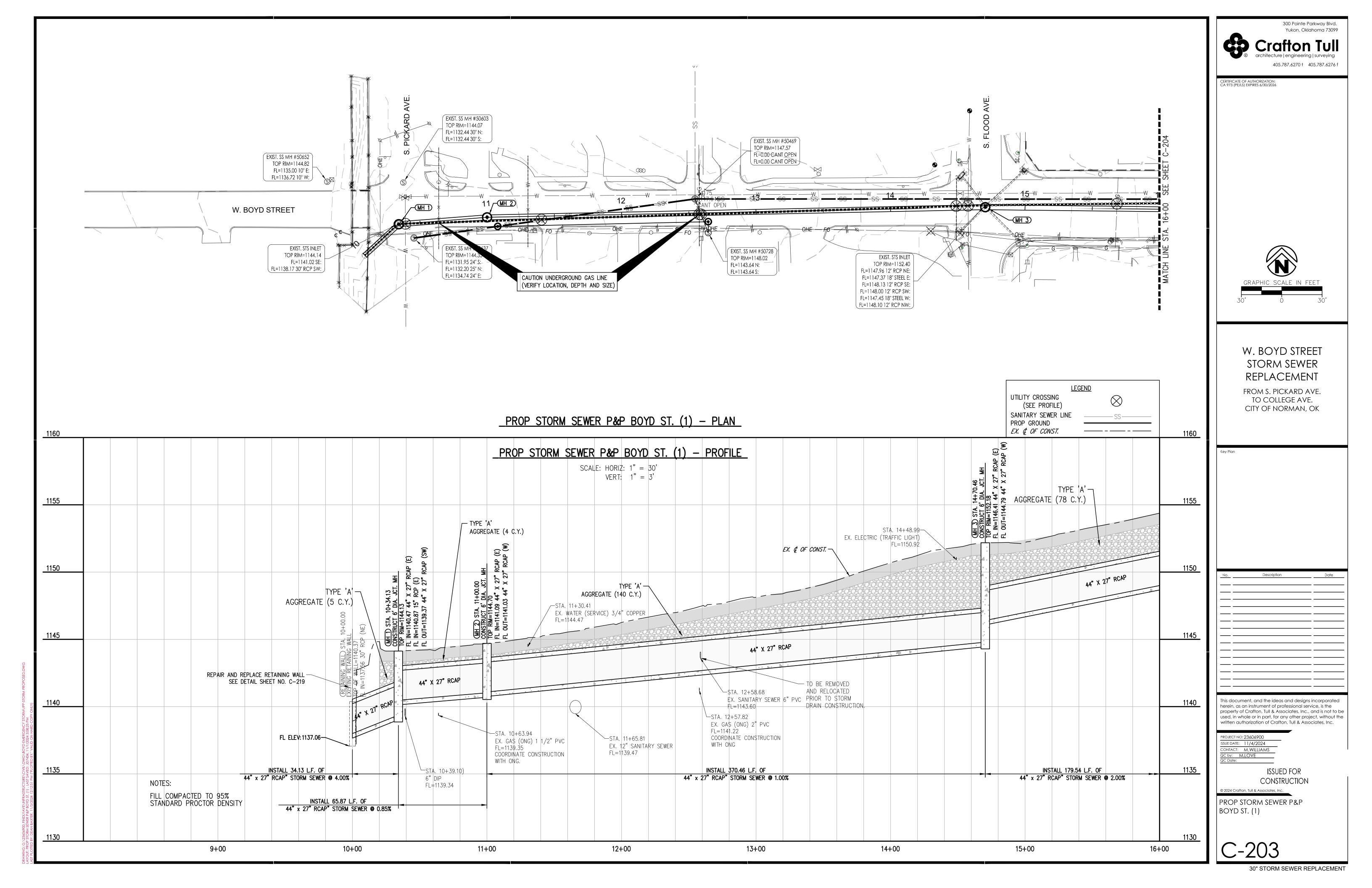
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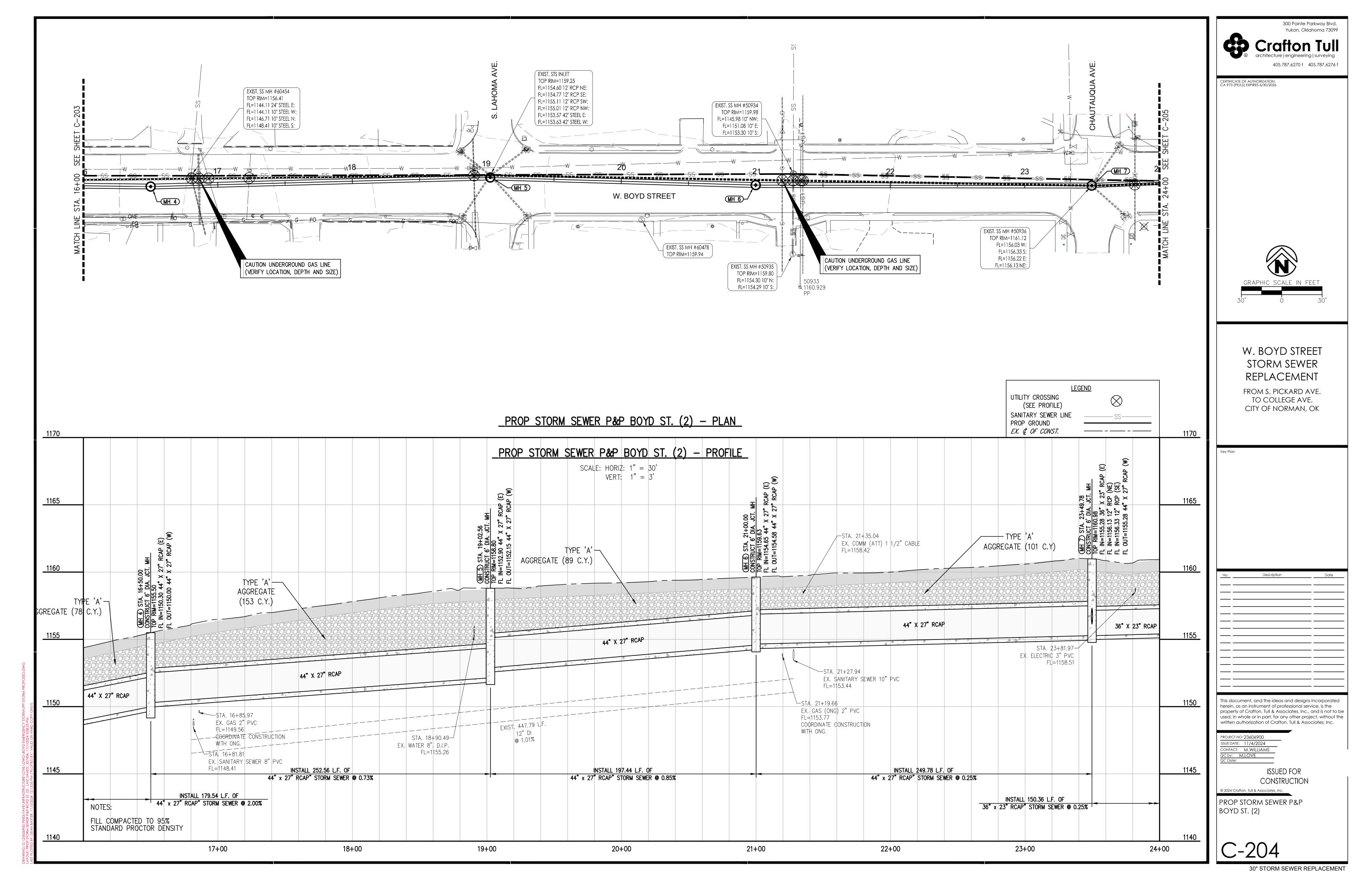
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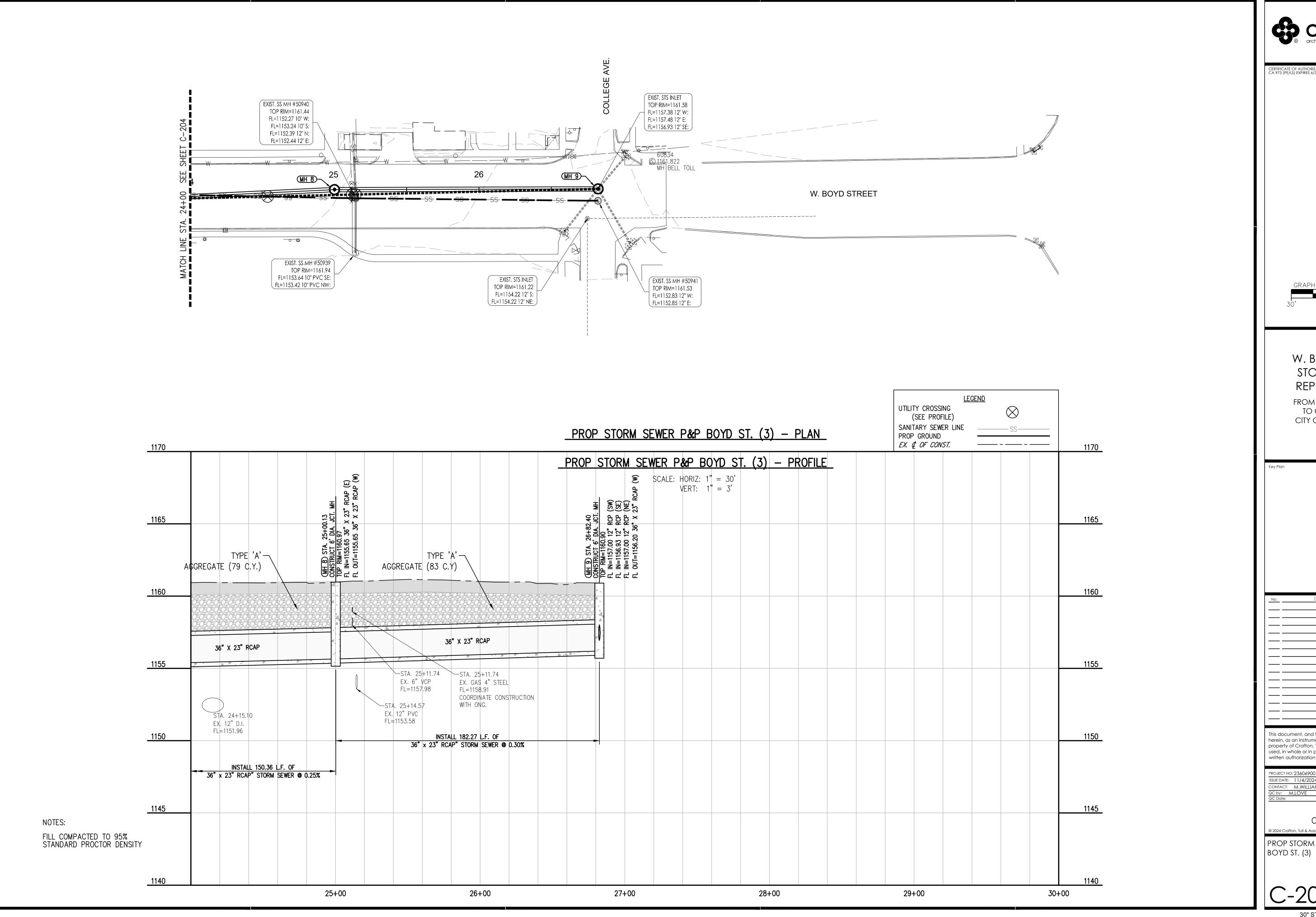
PROJECT NO: 23606900 ISSUE DATE: 11/4/2024
CONTACT: M.WILLIAMS
QC by: M.LOVE

> **ISSUED FOR** CONSTRUCTION

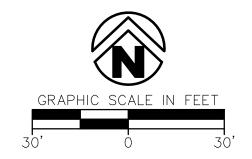
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W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

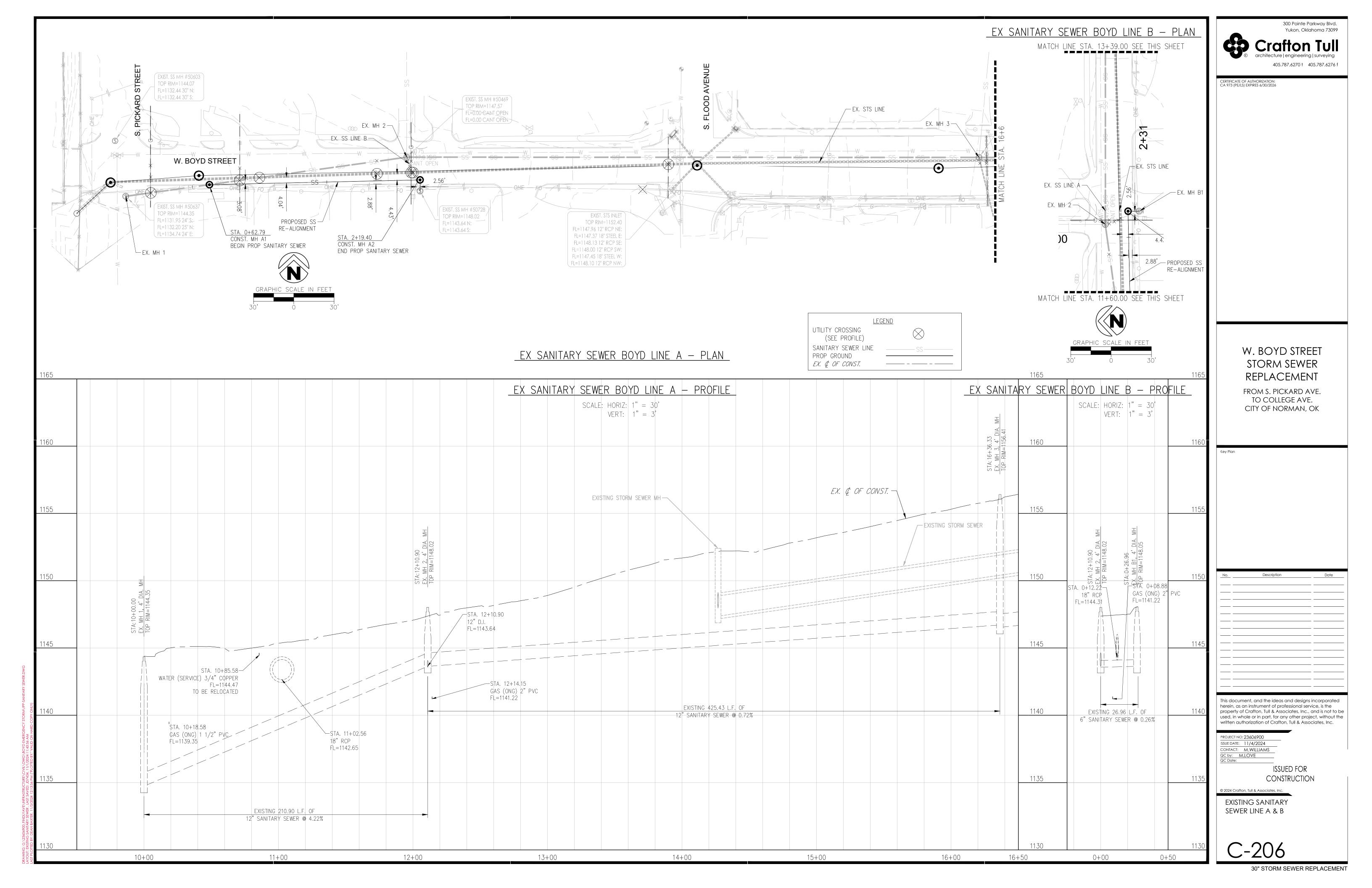
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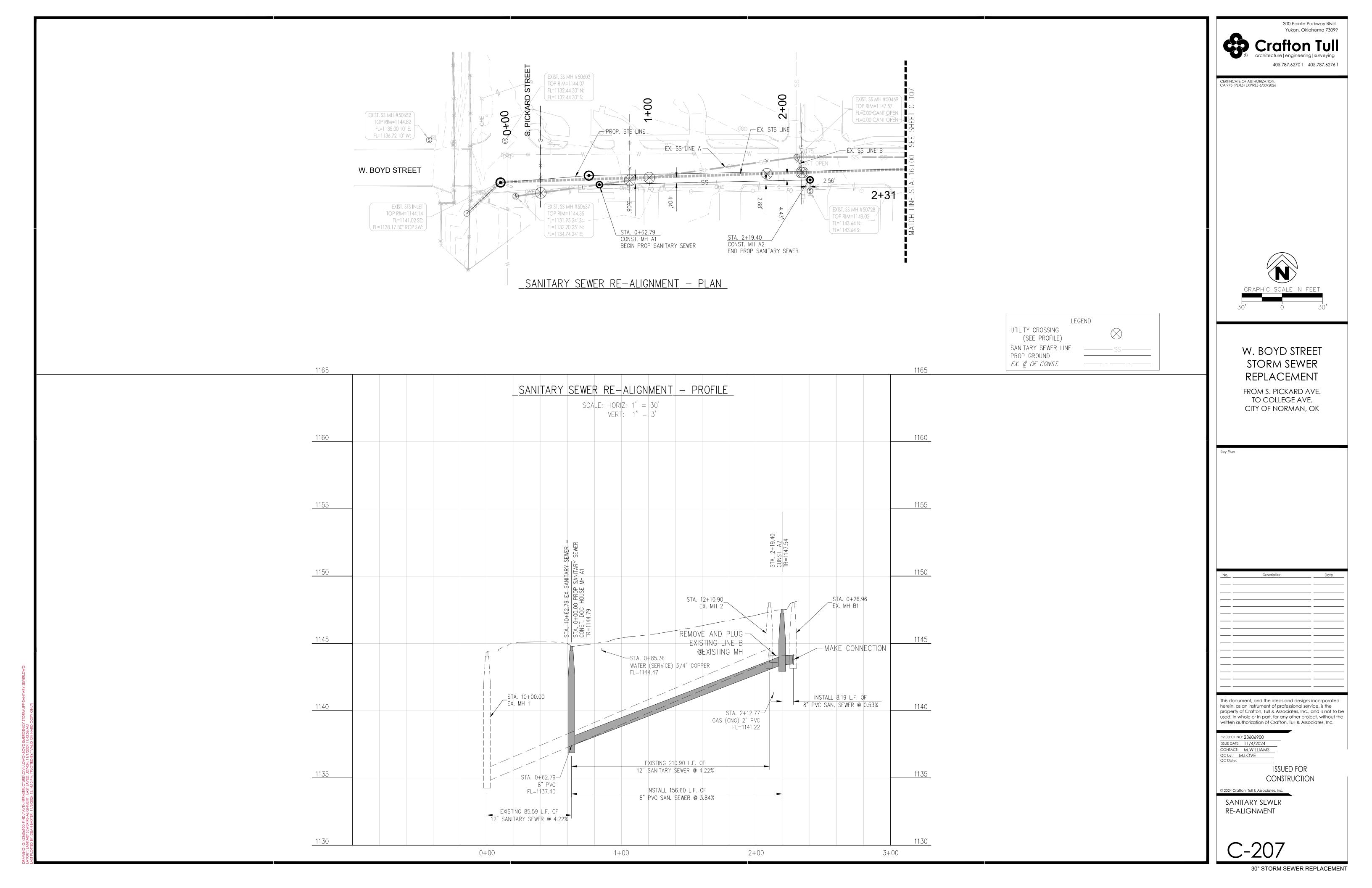
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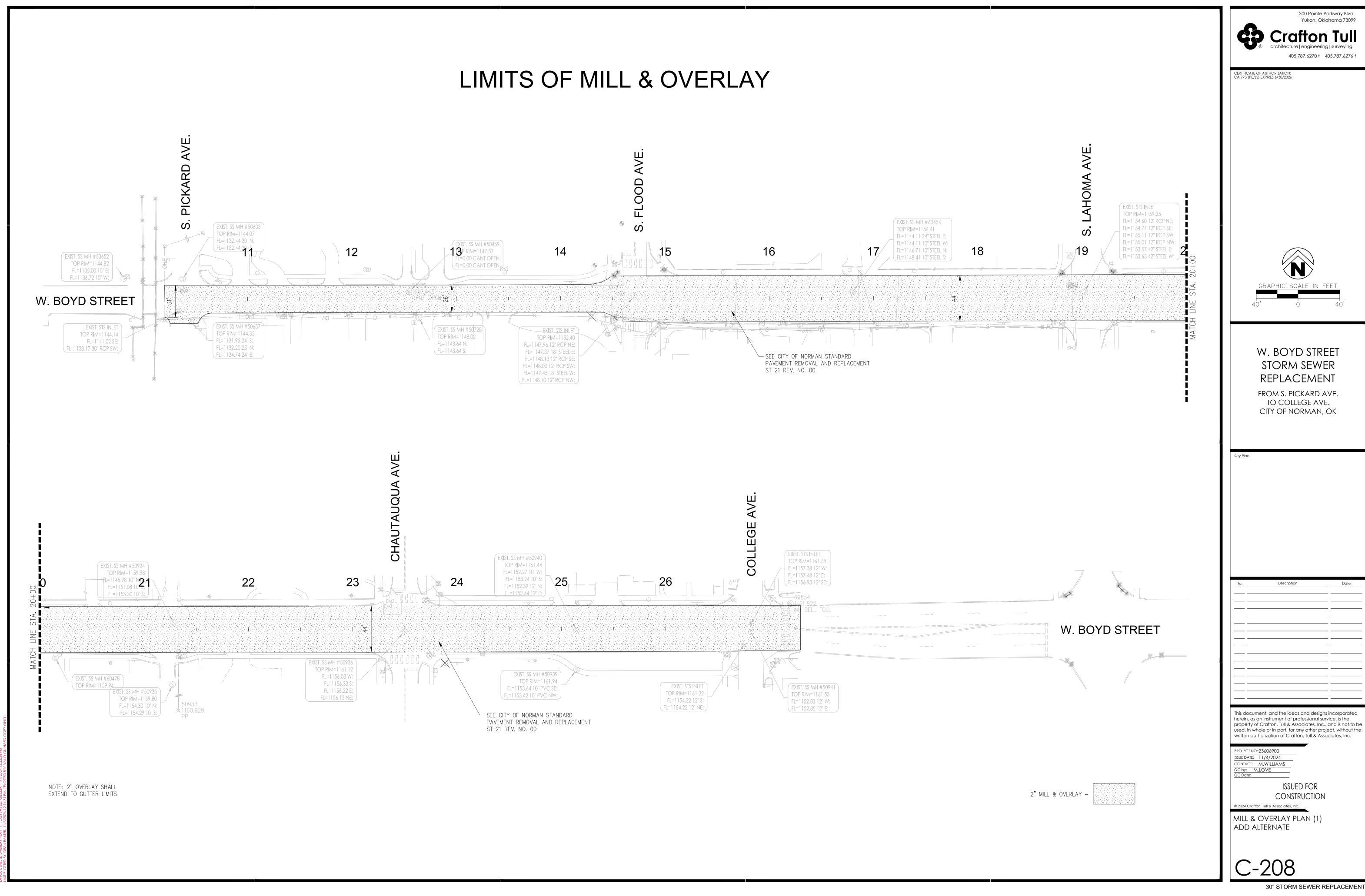
PROJECT NO: 23606900 ISSUE DATE: 11/4/2024 CONTACT: M.WILLIAMS
QC by: M.LOVE
QC Date:

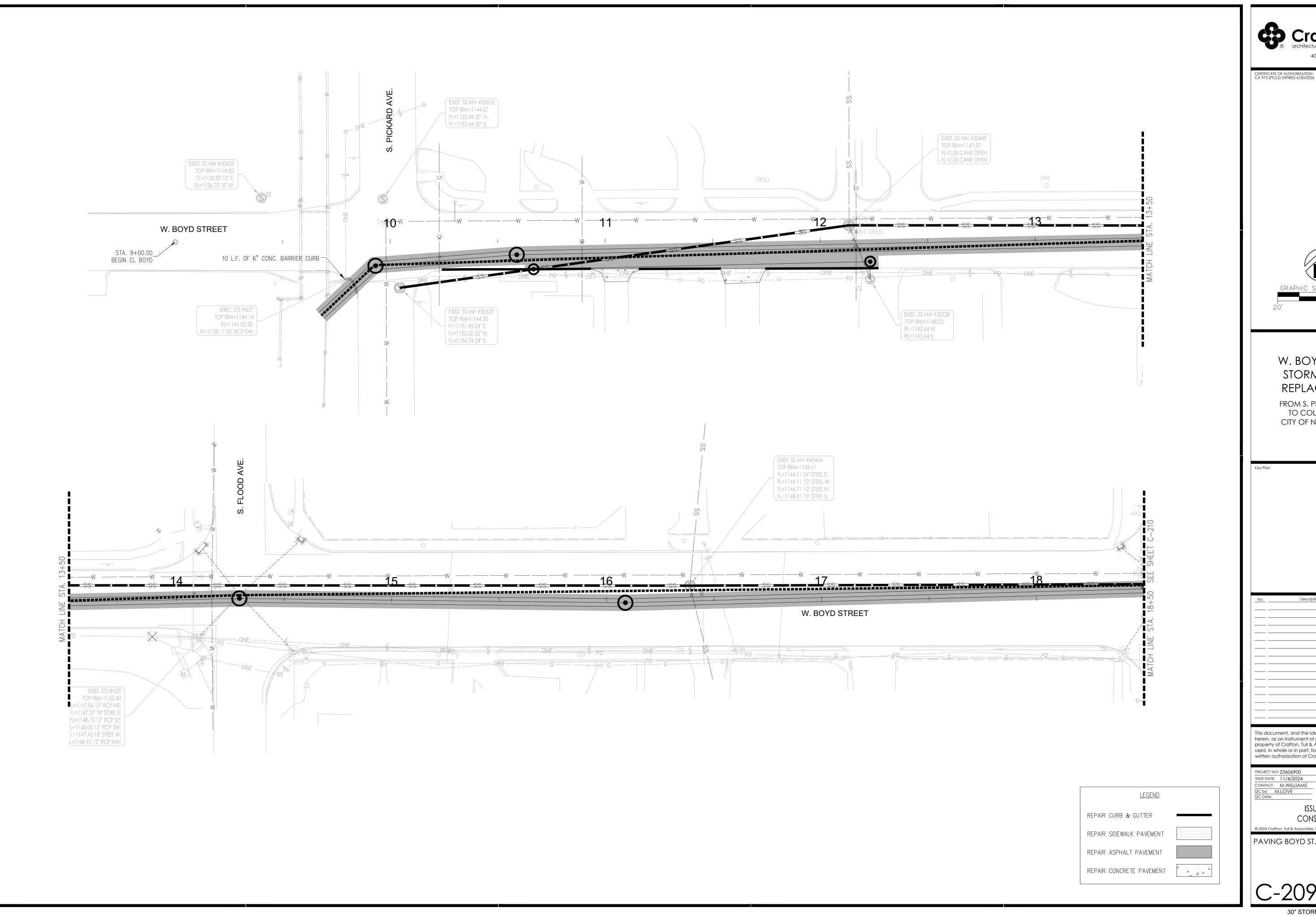
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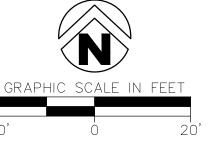












W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

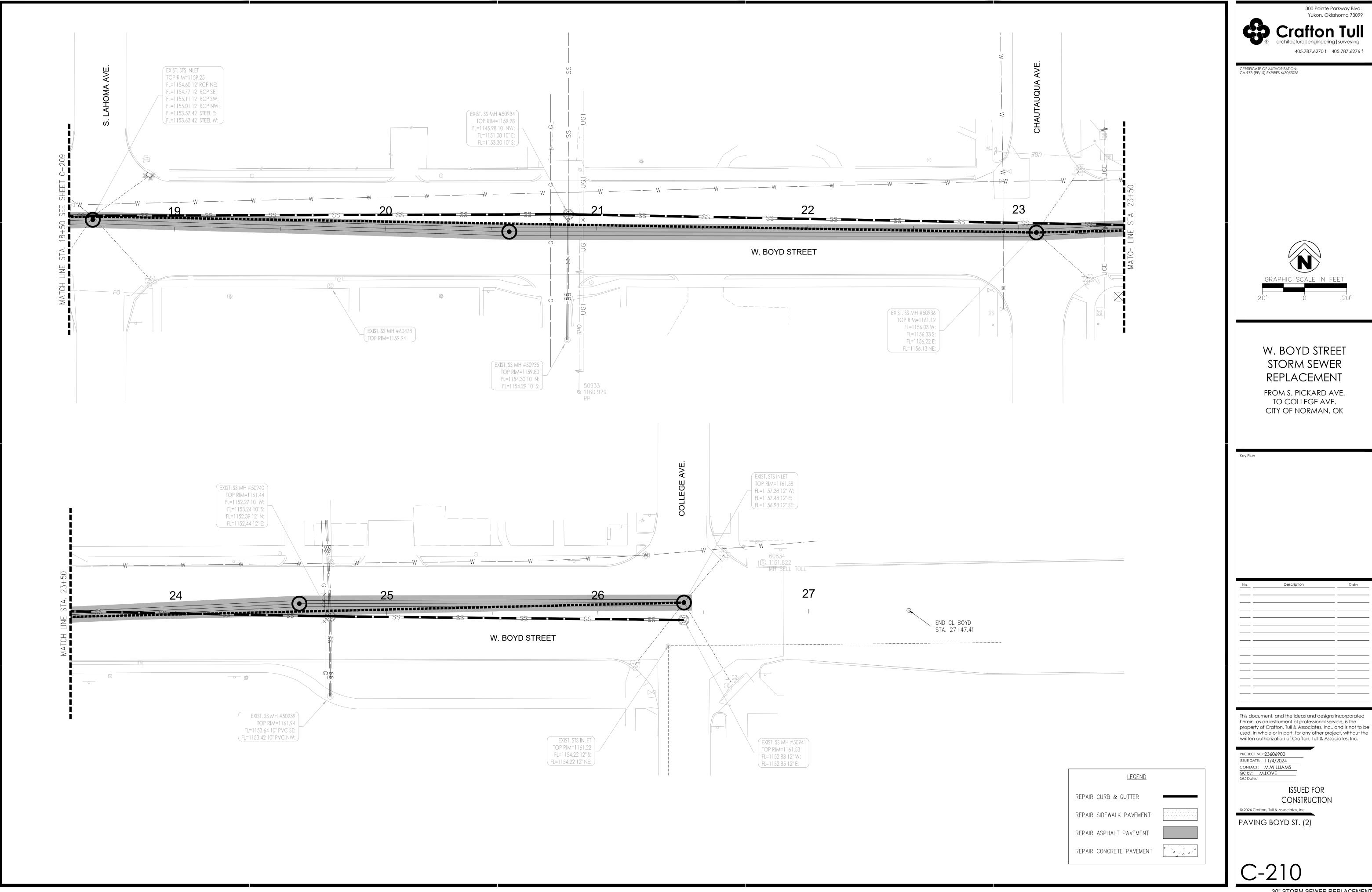
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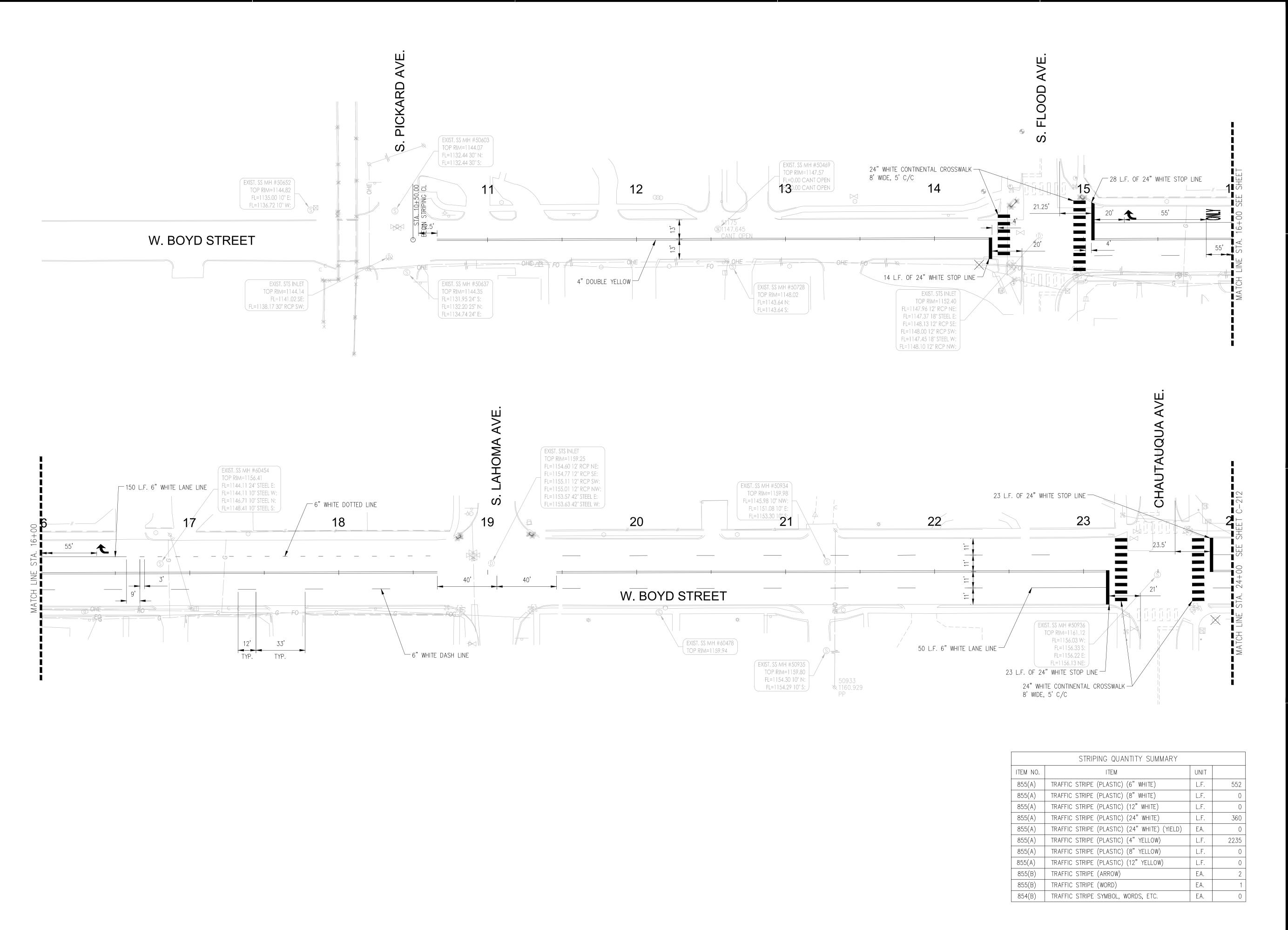
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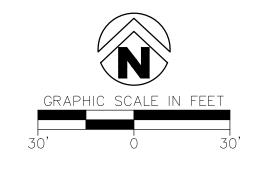
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PAVING BOYD ST. (1)









W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE.
TO COLLEGE AVE.
CITY OF NORMAN, OK

Key Pla

No.	Description	Date

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PROJECT NO: 23606900

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CONTACT: M.WILLIAMS

QC by: M.LOVE

QC Date:

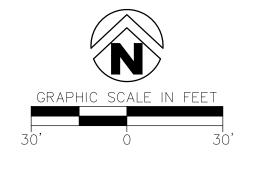
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STRIPING PLAN (1)

C-21





W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

Key Plan

No	Description	Date

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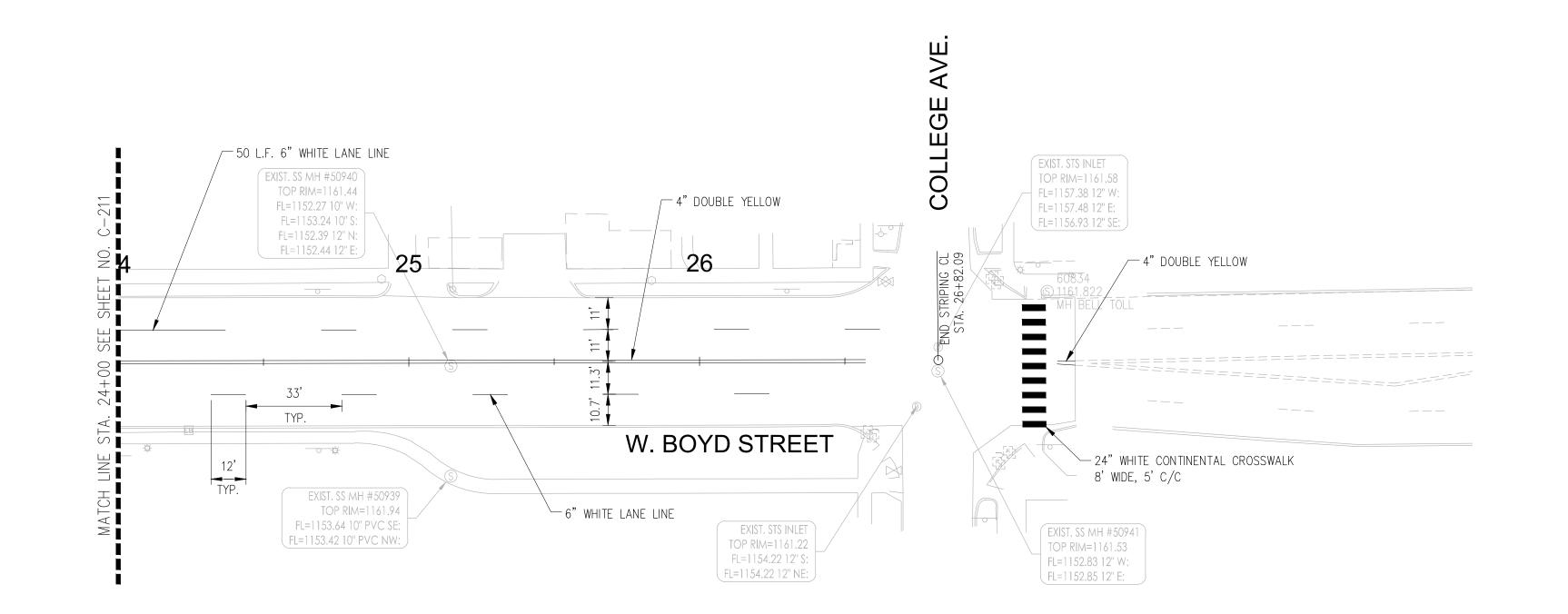
QC by: M.LOVE

QC Date:

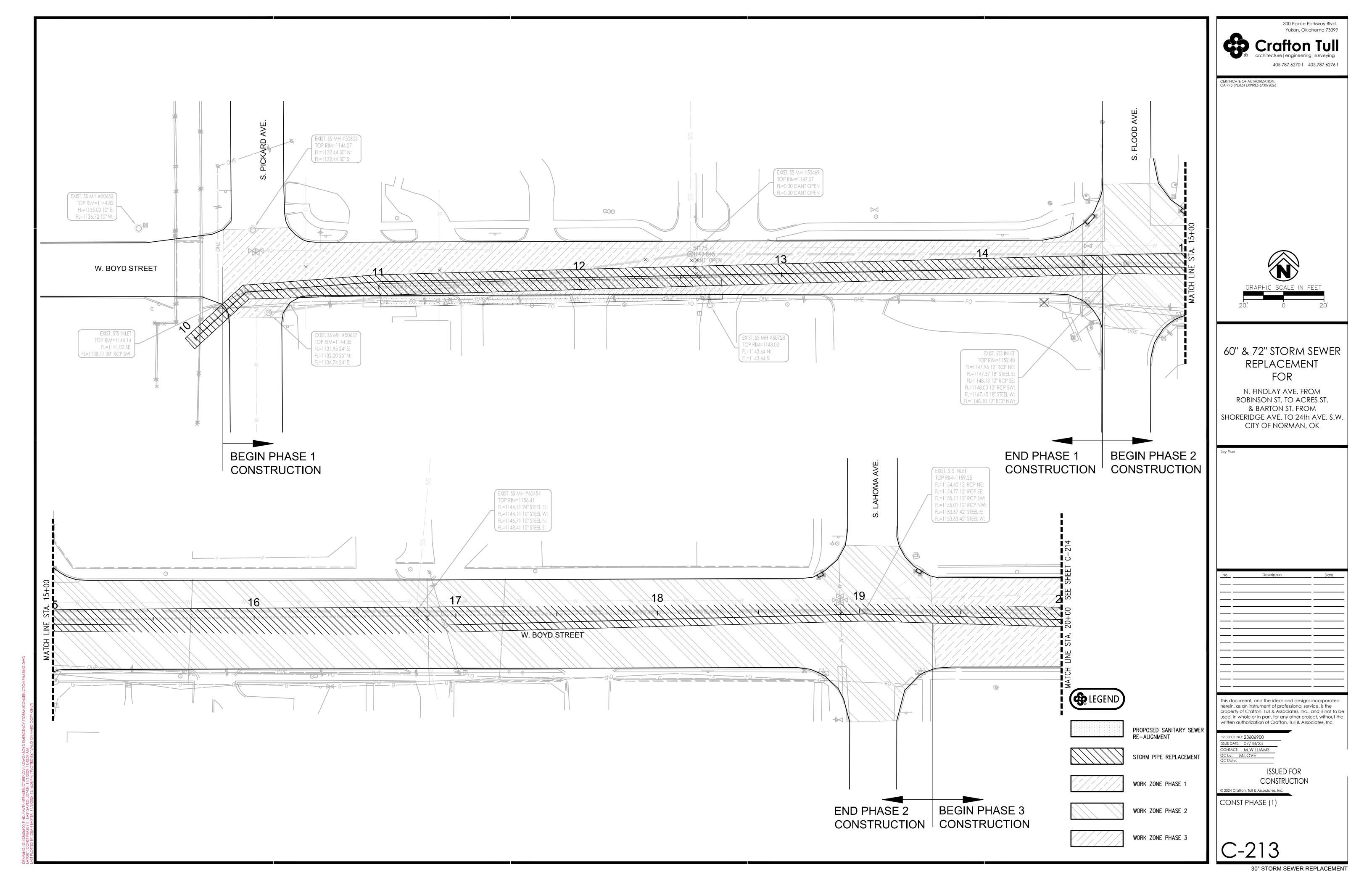
issued for Construction

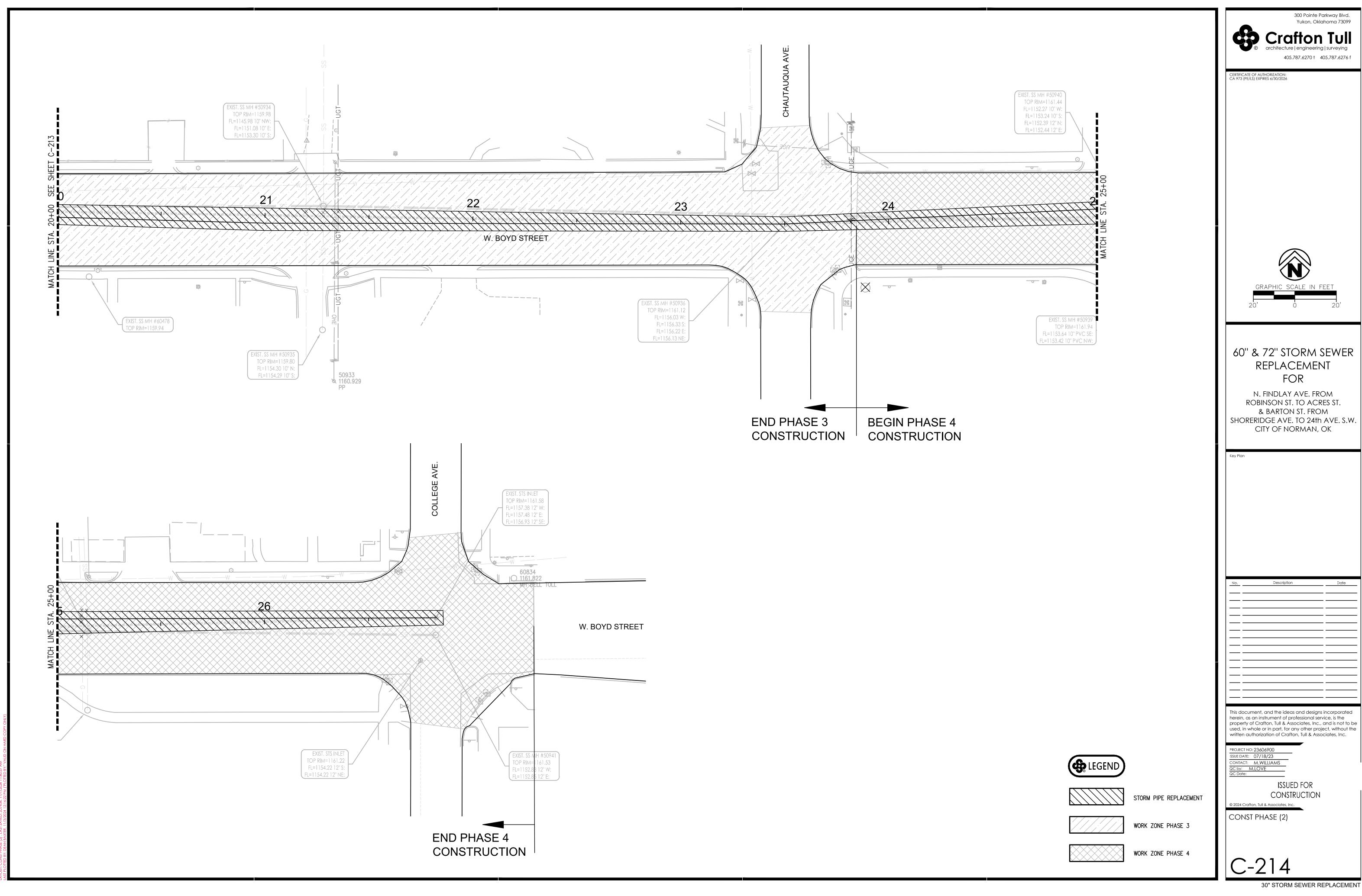
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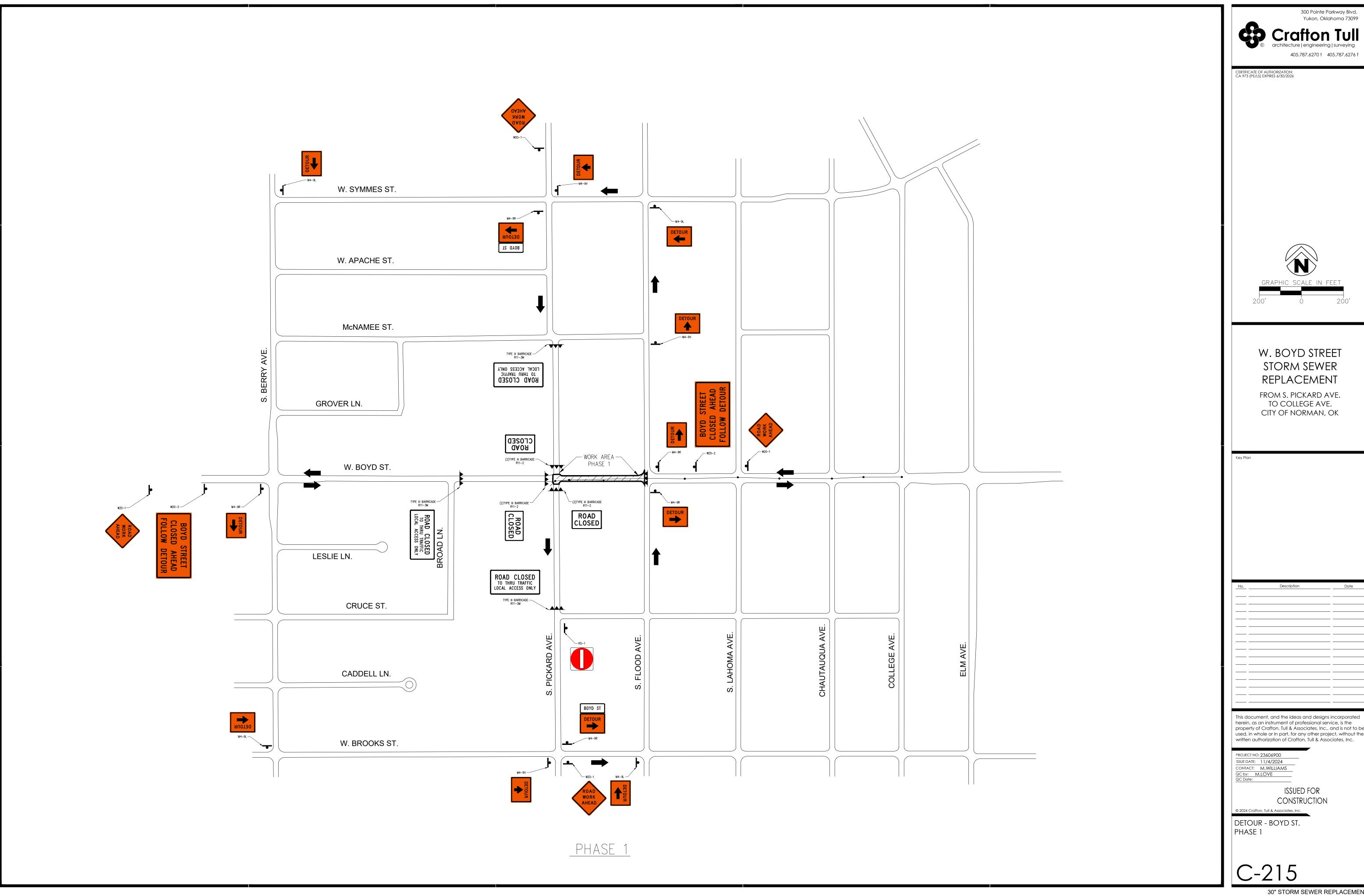
STRIPING PLAN (2)



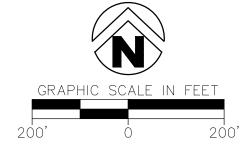
STRIPING QUANTITY SUMMARY				
ITEM NO.	ITEM	UNIT		
855(A)	TRAFFIC STRIPE (PLASTIC) (6" WHITE)	L.F.	158	
855(A)	TRAFFIC STRIPE (PLASTIC) (8" WHITE)	L.F.	0	
855(A)	TRAFFIC STRIPE (PLASTIC) (12" WHITE)	L.F.	0	
855(A)	TRAFFIC STRIPE (PLASTIC) (24" WHITE)	L.F.	72	
855(A)	TRAFFIC STRIPE (PLASTIC) (24" WHITE) (YIELD)	EA.	0	
855(A)	TRAFFIC STRIPE (PLASTIC) (4" YELLOW)	L.F.	530	
855(A)	TRAFFIC STRIPE (PLASTIC) (8" YELLOW)	L.F.	0	
855(A)	TRAFFIC STRIPE (PLASTIC) (12" YELLOW)	L.F.	0	
855(B)	TRAFFIC STRIPE (ARROW)	EA.	0	
855(B)	TRAFFIC STRIPE (WORD)	EA.	0	
854(B)	TRAFFIC STRIPE SYMBOL, WORDS, ETC.	EA.	0	







300 Pointe Parkway Blvd. Yukon, Oklahoma 73099 405.787.6270 † 405.787.6276 f



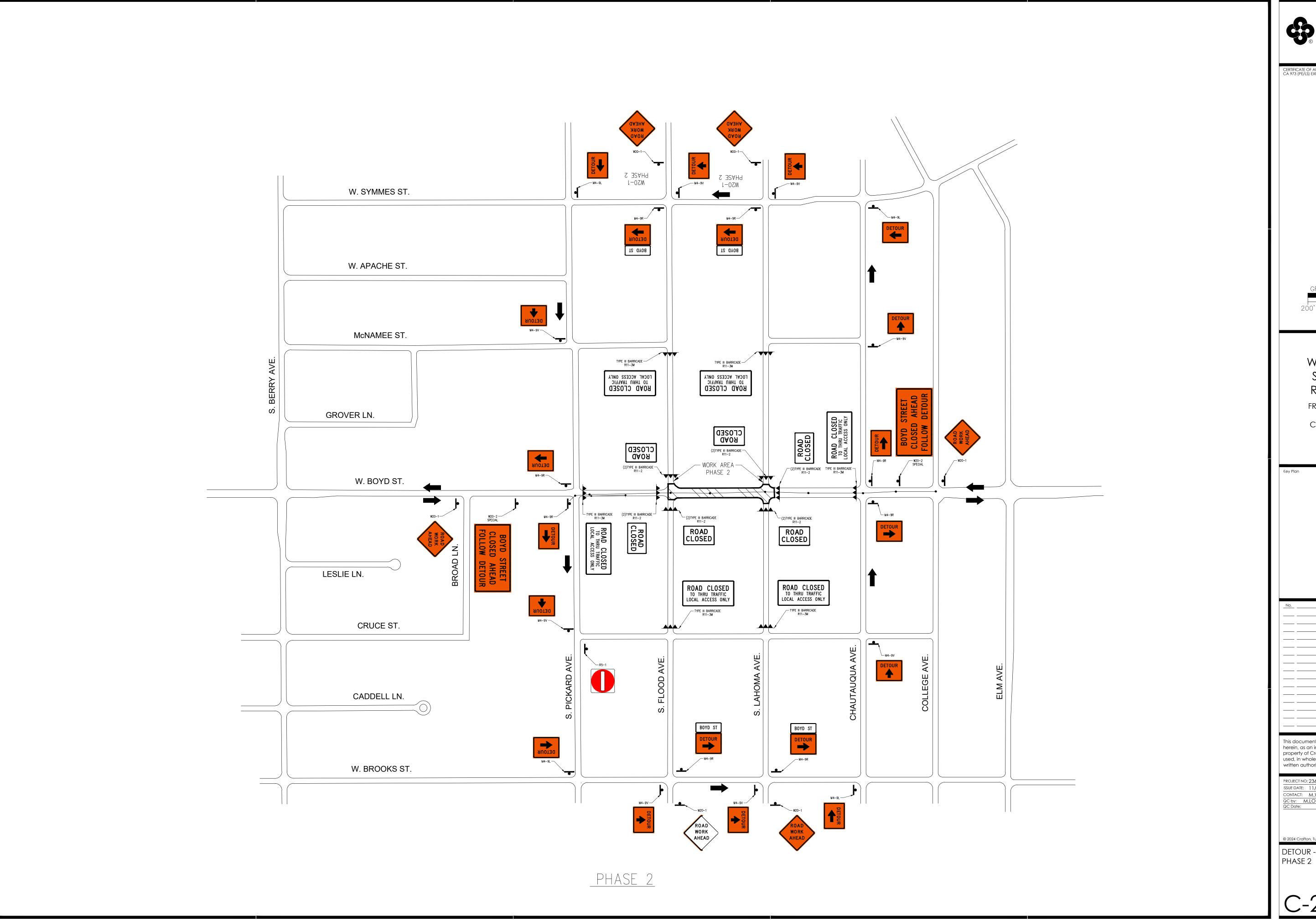
STORM SEWER REPLACEMENT

TO COLLEGE AVE. CITY OF NORMAN, OK

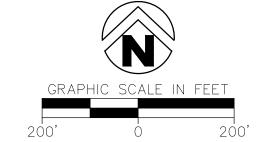
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CONSTRUCTION







W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

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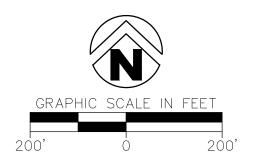
PROJECT NO: 23606900 ISSUE DATE: 11/4/2024

CONTACT: M.WILLIAMS QC by: M.LOVE QC Date:

> ISSUED FOR CONSTRUCTION

DETOUR - BOYD ST.





W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

No.	Description	Date
		,

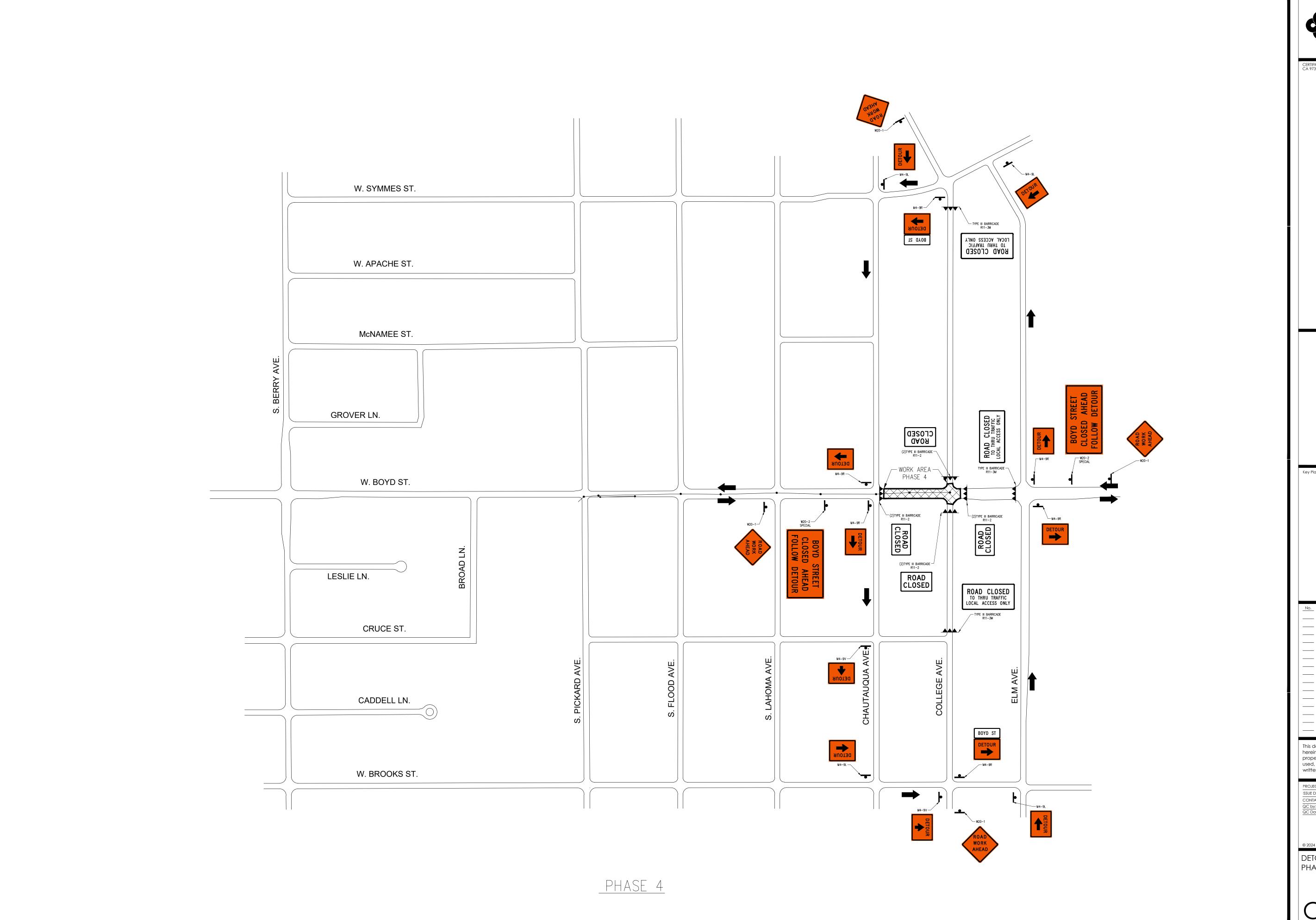
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PROJECT NO: 23606900

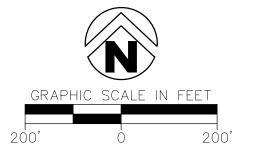
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QC by: M.LOVE
QC Date:

ISSUED FOR CONSTRUCTION

DETOUR - BOYD ST. PHASE 3







W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

No.	Description	Date
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PROJECT NO: 23606900

ISSUE DATE: 11/4/2024

CONTACT: M.WILLIAMS

QC by: M.LOVE

QC Date:

issued for Construction

DETOUR - BOYD ST.
PHASE 4

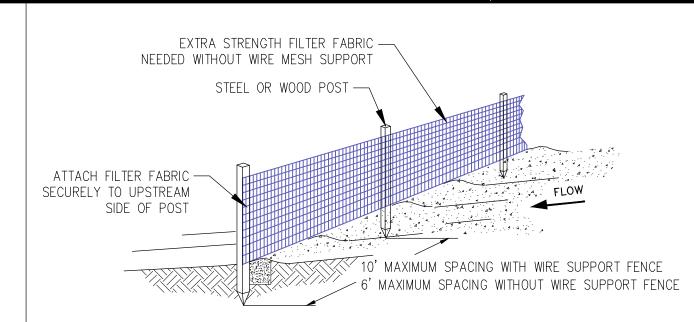
- 2. PLACE CURB TYPE ROCK BAG BARRIER ON GENTLY SLOPING STREET, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNNOFF.
- 3. BAGS OF WOVEN GEOTEXTILE FABRIC, FILLED WITH GRAVEL MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT. 4. LEAVE ONE SANDBAG GAP IN THE TOP ROW ON THE SIDE AWAY FROM FLOW, TO PROVIDE A SPILLWAY; OR IN THE CENTER IF PONDING IS NEEDED ON BOTH SIDES.
- 5. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY

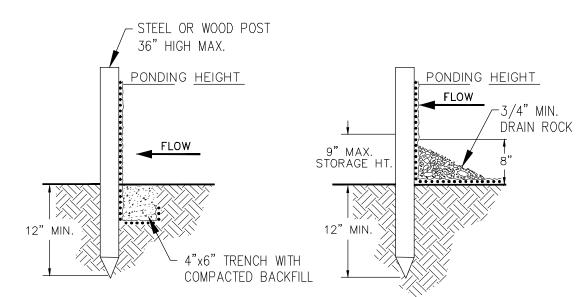
ROCK CHECK DAM

DIVERSION RIDGE REQUIRED WHERE GRADE EXCEEDS 2% ROADWAY SECTION A-A SPILLWAY USE ROCK BAGS TO CHANNELIZE ROCK BAGS, OR CONTINUOUS RUNOFF TO BASIN AS REQUIRED. SEE GEOSYNTHETIC FABRIC BERM OF -EQUIVALENT HEIGHT ROCK BAGS MUST BE SUPPLY WATER TO WASH -WHEELS IF NECESSARY PLACED SUCH THAT NO GAPS ARE EVIDENT 2" - 3" COURSE AGGREGATE - DIVERSION RIDGE PLAN NOTES:

- 1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP
- 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. . WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- 4. ROCK BAGS OR SANDBAGS SHALL BE PLACED SUCH THAT NO GAPS ARE EVIDENT. SEE NOTES ERO-03.

ROCK CONSTRUCTION ENTRANCE DETAIL





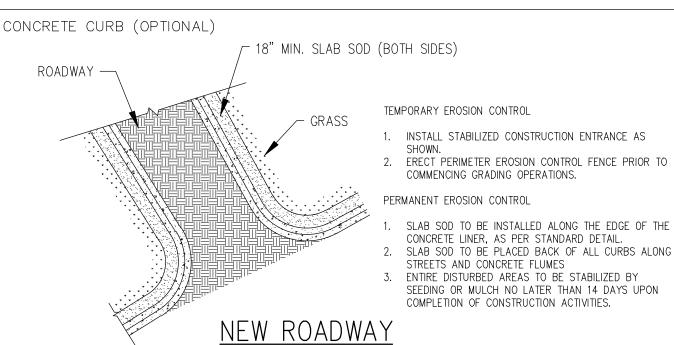
TRENCH DETAIL

INSTALLATION WITHOUT TRENCHING

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

- INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM
- 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

SILT FENCE INSTALLATION DETAILS



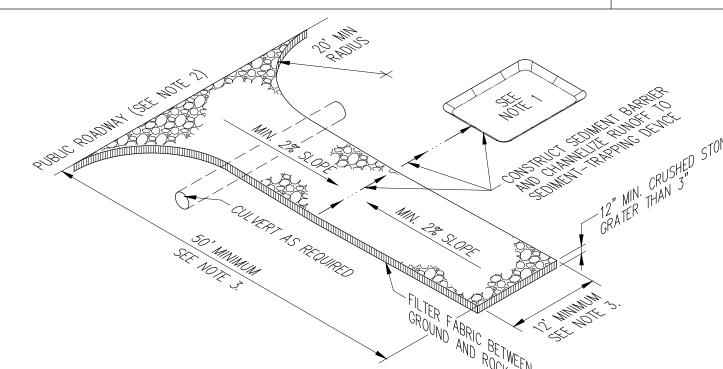
TEMPORARY EROSION CONTROL INSTALL STABILIZED CONSTRUCTION ENTRANCE AS 2. ERECT PERIMETER EROSION CONTROL FENCE PRIOR TO COMMENCING GRADING OPERATIONS. PERMANENT EROSION CONTROL CONCRETE LINER, AS PER STANDARD DETAIL.

> STREETS AND CONCRETE FLUMES 3. ENTIRE DISTURBED AREAS TO BE STABILIZED BY SEEDING OR MULCH NO LATER THAN 14 DAYS UPON COMPLETION OF CONSTRUCTION ACTIVITIES.

HEADWALL SHOWN ONLY FOR CLARITY. — SEE SITE AND GRADING PLANS FOR SITE-SPECIFIC APPLICATIONS. SEE SITE PLAN FOR DIMENSIONS AND LIMITS OF RIP-PAP. PERMANENT RIP-RAP SHALL BE GROUTED AS SPECIFIED.

STONES SHALL CONSIST OF FIELD STONE OR ROUGH, UNHEWN QUARRY STONE AS NEARLY UNIFORM IN SIZE AS PRACTICAL. STONES SHALL BE DENSE, RESISTANT TO THE ACTION OF WIND AND WATER, AND SUITABLE IN ALL ASPECTS FOR THE INTENDED USE. ALL STONES SHALL WEIGH BETWEEN 50-150 POUNDS EACH AND AT LEAST 60% OF THE STONES SHALL WEIGH MORE THAN 100 POUNDS EACH.

RIP-RAP SLOPE PROTECTION



- 1. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCE/EXIT IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES EXIT ONTO THE PUBLIC ROADS. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF SITE.
- 2. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- 3. LENGTH AND WIDTH TO SUIT SITE, CONSTRUCTION TRAFFIC AND EFFECTIVENESS.

STABILIZED CONSTRUCTION EXIT (ENTRANCE)

PHASE I

- INSTALL STABILIZED CONSTRUCTION ENTRANCES/EXITS. PREPARE TEMPORARY PARKING AND STORAGE AREAS. UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING: TRAILER, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASH-OUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., DENOTE THEM ON THE SITE MAPS IMMEDIATELY AND NOTE ANY CHANGES IN THE LOCATIONS AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.
- CONSTRUCT THE SEDIMENTATION AND SEDIMENT TRAP BASINS. HALT ALL ACTIVITIES AND CONTACT THE CIVIL ENGINEER CONSULTANT TO PERFORM
- INSPECTION OF BMPs. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH ENGINEER AND ALL GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.
- CLEAR AND GRUB THE SITE. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES. BEGIN GRADING THE SITE.

PHASE II

TEMPORARILY SEED DENUDED AREAS.

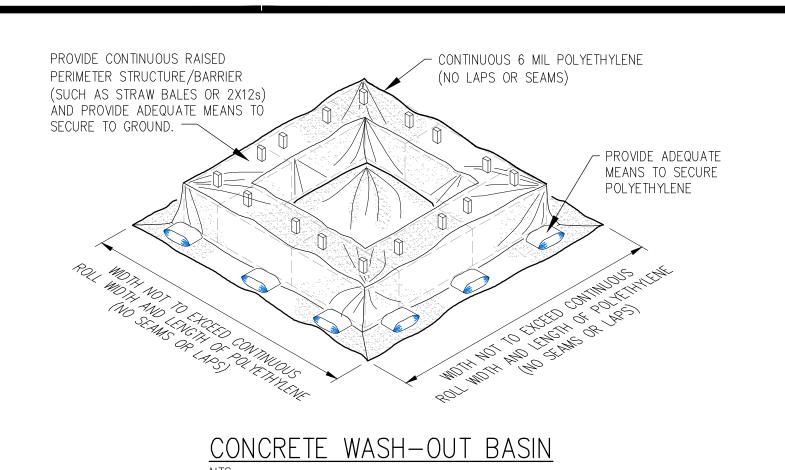
CONSTRUCT THE SILT FENCES ON THE SITE.

- INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
- INSTALL RIP-RAP AROUND OUT STRUCTURES.
- INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES. PREPARE SITE FOR PAVING.
- PAVE SITE. INSTALL INLET PROTECTION DEVICES.
- COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.
- REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IF SITE IS STABILIZED.

GENERAL EROSION NOTES:

A. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING (SITE MAP), THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS SECTION 312800 (EROSION AND SEDIMENTATION CONTROL). PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

- B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND THE STATE OF OKLAHOMA NATIONAL POLLUTANT DISCHARGE LIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR
- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES
- BEST MANAGEMENT PRACTICES (BMP) AND CONTROLS SHALL CONFORM TO FEDERAL STATE OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AND APPLICABLE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR
- SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON THE SITE AT ALL TIMES.
- CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- GENERAL CONTRACTOR SHALL DENOTE THE TEMPORARY PARKING AND STORAGE SLAB SOD TO BE INSTALLED ALONG THE EDGE OF THE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, AND AREA FOR PORTABLE FACILITIES, OFFICE TRAILERS AND TOILET FACILITIES.
 - ALL WASH WATER (CONCRETE TRUCKS, VEHICLE AND EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
 - SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN UP FUEL OR CHEMICAL SPILLS AND LEAKS.
 - DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM-BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
 - RUBBISH, TRASH, GARBAGE, LITTER OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM BEING BLOWN OR WASHED OFF-SITE.
 - ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN AND SWPPP SHALL BE INITIATED AS SOON AS POSSIBLE.
 - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS SHALL BE TEMPORARY SEEDED.
 - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
 - O. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCE/EXIT IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES EXIT ONTO THE PUBLIC ROADS. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF-SITE.
 - ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
 - CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
 - ON-SITE AND OFF-SITE STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH THE GENERAL PERMIT.
 - SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
 - DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.
 - U. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

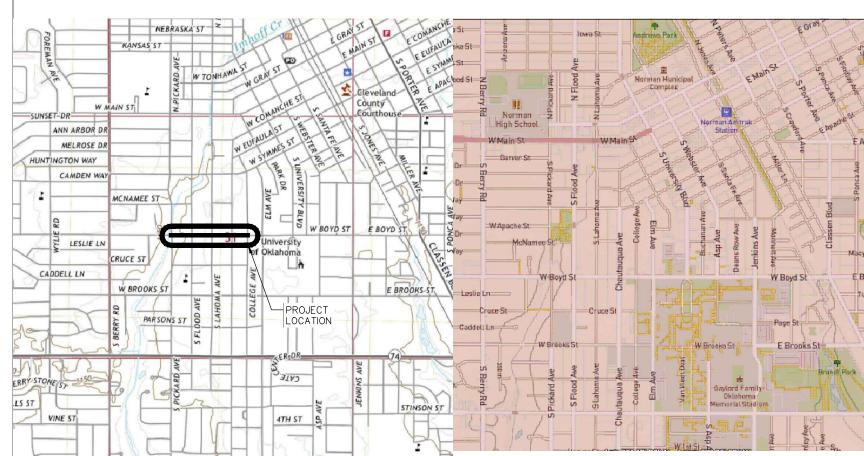


SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JU CONSTRUCTION SEQUENCE ROUGH GRADE / SEDIMENT CONTROL TEMPORARY CONTROL MEASURES STRIP & STOCKPILE TOPSOIL STORM FACILITIES TEMPORARY CONSTRUCTION ROADS FOUNDATION / BUILDING CONSTRUCTION SITE CONSTRUCTION PERMANENT CONTROL STRUCTURES FINISH GRADING LANDSCAPING/SEED/FINAL STABILIZATION

> DEVELOPER/OWNER: ENTER DEVELOPER INFORMATION ACREAGE SUMMARY MPERVIOUS AREA 2.49 ACRES SEEDED AREA 0.01 ACRES SITE OPERATOR/GENERAL CONTRACTOR: TOTAL DISTURBED | 2.5 ACRES SUPERINTENDENT:

ENTER BENCHMARK INFORMATION





CERTIFICATE OF AUTHORIZATION: CA 973 (PE/LS) EXPIRES 6/30/2026

W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

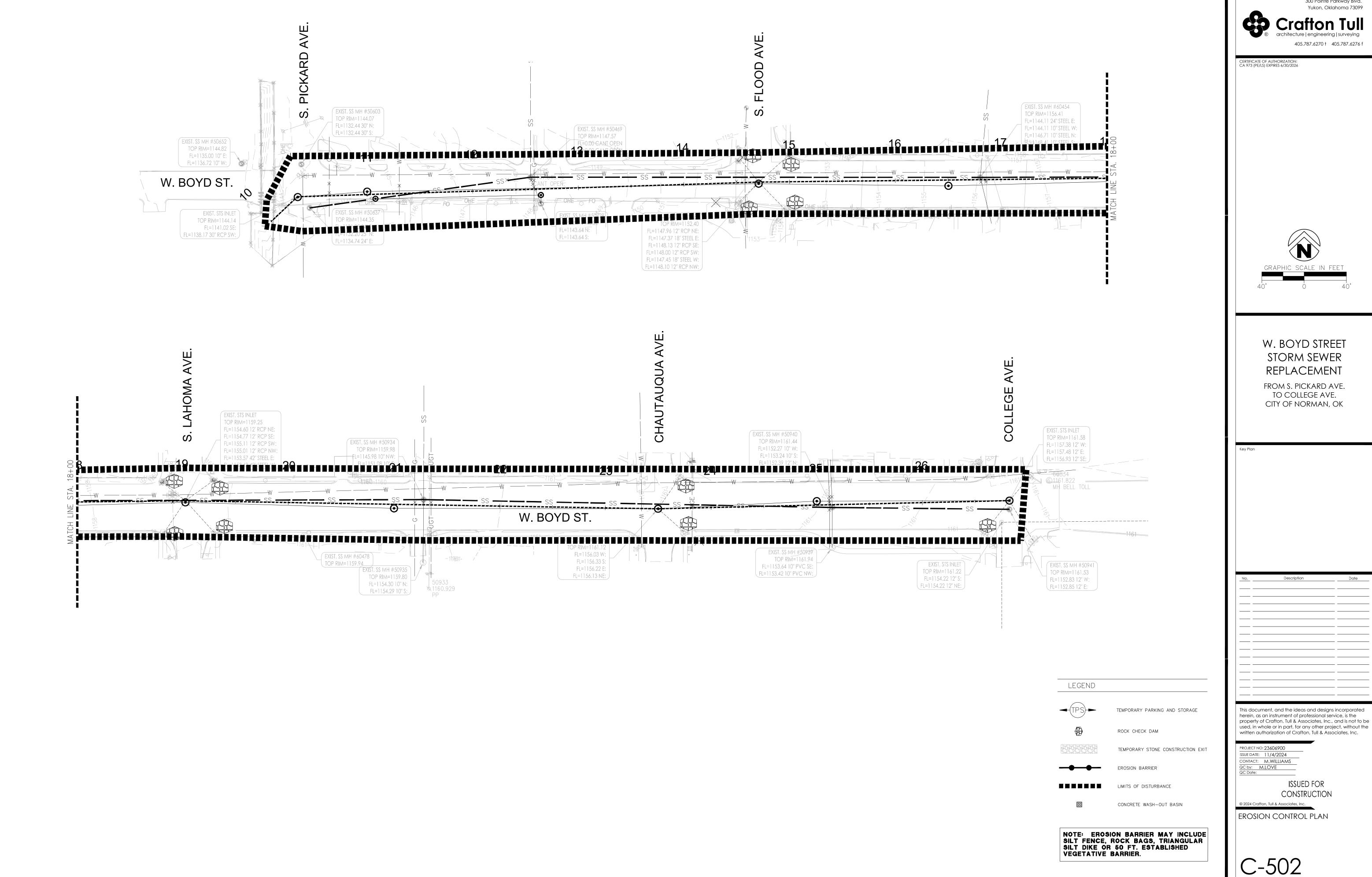
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PROJECT NO: 2360690 SSUE DATE: 11/4/2024

ISSUED FOR

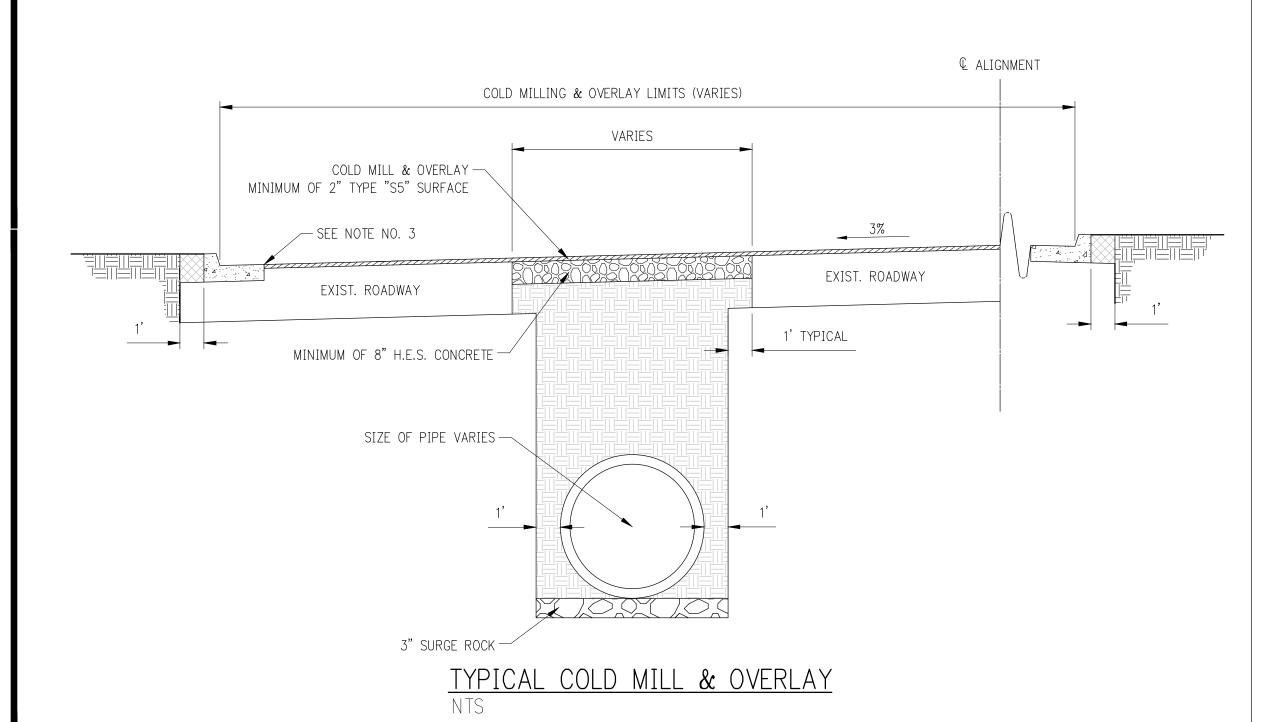
CONSTRUCTION

© 2024 Crafton, Tull & Associates, Inc EROSION CONTROL NOTES & DETAILS



300 Pointe Parkway Blvd.

REMOVAL AND REPAIR OF CHANNEL RETAINING WALL



- NOTE:

 1. PAVING SECTION SHOWN IS MINIMUM ALLOWED. STREET PAVING SHALL BE DESIGNED IN ACCORDANCE WITH THE CITY'S "ENGINEERING DESIGN CRITERIA".
- 2. DOWELS REQUIRED FOR PCC PAVING 8" THICK, OR GREATER, IN ACCORDANCE WITH STANDARD SPECIFICATIONS SECTION 2304.4.A.
- 3. ASPHALT SURFACE SHALL BE $\frac{1}{4}$ " ABOVE EDGE OF CONCRETE GUTTER. THE GUTTER MAY BE
- REDUCED TO 5 $\frac{3}{4}$ " TO ACCOMMODATE THIS REQUIREMENT. 4. PAVEMENT SECTION TO BE SUPER-ELEVATED AT ROADWAY CURVES.

SUBGRADE

TABLE-4: MINIMUM NEW FLEXIBLE-PAVEMENT THICKNESSES

LAYER TYPE THICKNESS (INCHES) MATERIAL TYPE

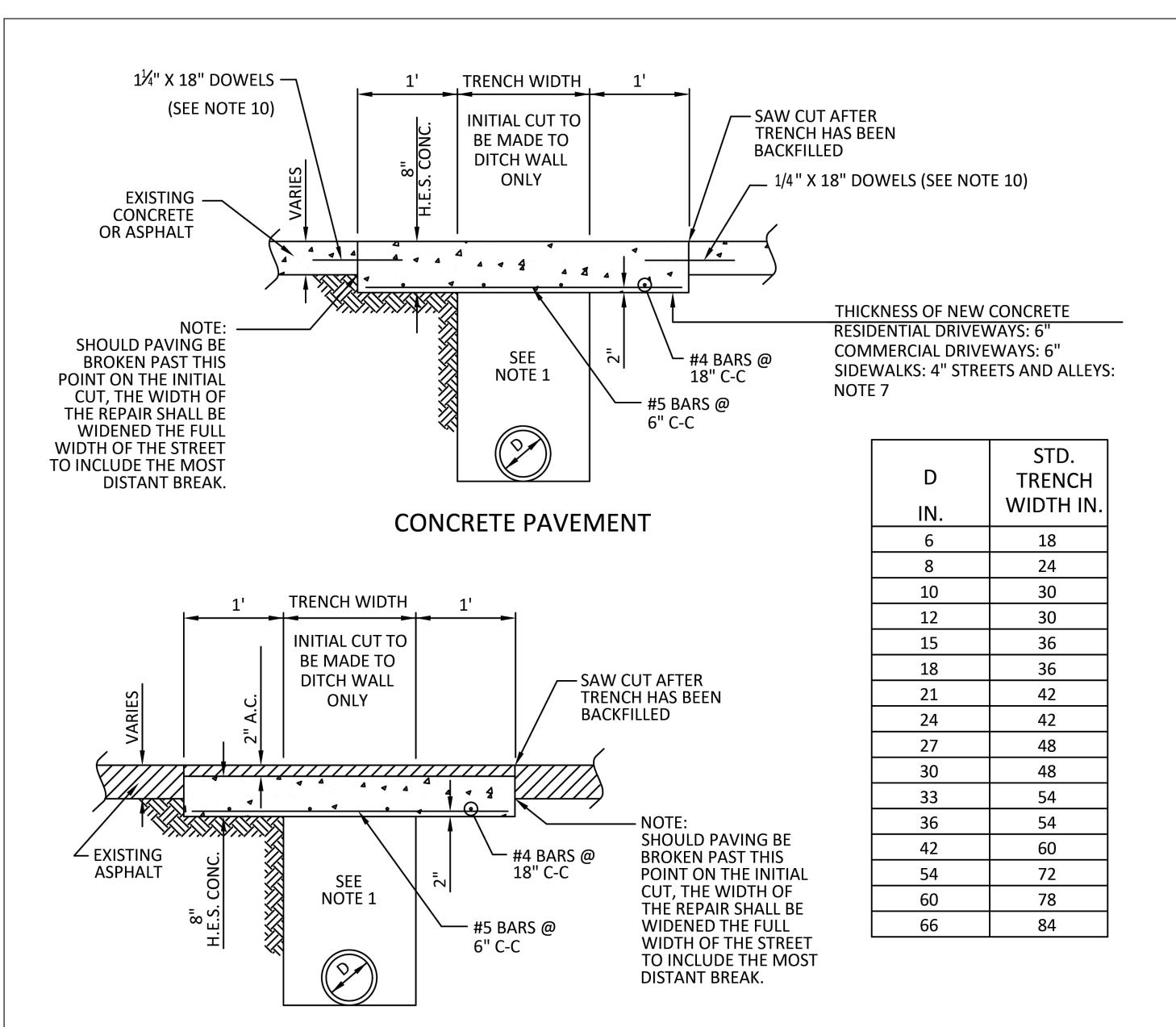
ASPHALTIC CONCRETE 2.0 S5 (PG 70–28 OK)

CONCRETE 8.0 H.E.S. CONCRETE

BACKFILL TO TOP OF PIPE TYPE A AGGREGATE

PER DEWATERING REQ.

3" SURGE ROCK



NOTES:

ASPHALT PAVEMENT

- 1. ALL PUBLIC ROADS AND DRIVE CROSSINGS ARE TO BE BACKFILLED WITH ODOT 703.01 TYPE A AGGREGATE BASE OR FLOWABLE FILL.
- 2. REMOVE AND REPLACE PAVEMENT TO NEAREST JOINT IF PROPOSED SAW CUT IS LESS THAN 3' FROM JOINT.
- 3. NO PAYMENT WILL BE MADE FOR REPLACEMENT OF PAVEMENT OUTSIDE OF STD. PAY WIDTH DUE TO TRENCH EXCAVATION WIDER THAN STANDARD TRENCH WIDTH.
- 4. PAY QUANTITY WILL INCLUDE REPLACEMENT OF PAVEMENT DUE TO SQUARING OF DIAGONAL CUTS.
- 5. FOR SERVICE LINES 52" AND SMALLER, THE STD. PAY WIDTH SHALL BE 2.2'.
- 6. WHERE TRENCH EXCAVATION IS WITHIN 12" OF BACK OF CURB STANDARD NO. GC-02 SHALL APPLY.
- 7. NEW PCC TO BE 2" THICKER THAN EXISTING PAVING, 8" MINIMUM.
- 8. CONCRETE SHALL BE 3500 PSI HIGH EARLY STRENGTH CONCRETE PER ODOT 701.01(A).
- 9. CITY ENGINEER SHALL DECIDE WHICH TYPE OF REPAIR TO MAKE.
- 10. 1" DIA. BY 18" LONG DOWELS SPACED AT 12" CENTERS ARE REQUIRED IF ADJACENT PAVEMENT IS CONCRETE.
- 11. REFERENCE THE CURRENT VERSION OF THE CITY'S COMPREHENSIVE TRANSPORTATION PLAN AND ENGINEERING DESIGN CRITERIA FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

PAVEMENT REMOVAL AND REPLACEMENT

ITY ENGINEER APPROVAL:			CITY OF NORMAN, OKLAHOMA			
PPROVAL DATE:	REVISION DATE:	02/2023	REV. NO.	00	DRAWING NO. ST 21	



CERTIFICATE OF AUTHORIZATIO

W. BOYD STREET STORM SEWER REPLACEMENT

FROM S. PICKARD AVE. TO COLLEGE AVE. CITY OF NORMAN, OK

Key Plan

No.	Description	Date

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PROJECT NO: 23606900
ISSUE DATE: 11/4/2024
CONTACT: M.WILLIAMS
QC by: M.LOVE

issued for Construction

TYPICAL SECTIONS