CONSTRUCTION PLANS FOR NON-ARTERIAL STREET MAINTENANCE AND WATERLINE REPLACEMENTS FOR ZONE 6142

E. 23RD ST. FROM S. 129TH E. AVE. TO S. 133RD E. AVE., S. 130TH E. AVE., S. 131ST E. AVE., S. 132ND E. AVE., AND S. 133RD E. AVE.

PROJECT NO.: 144642, SWD 10507, TMUA-W 14-35

ACCOUNT NO.: 6328-5453104-040522144642

ENGINEERING SERVICES DEPARTMENT
CITY OF TULSA, OKLAHOMA
TMUA-W 14-35

SYMBOL LEGEND

SCP	Survey Control Point	GUY	Power Anchor
PCM	Property Corner Monument	TRANS	Power Transformer
SCM	Section Corner Monument	WV	Water Valve
BM	Benchmark	WM	Water Meter
RWM	Right-of-way Marker	FT	Fire Hydrant
	Tree	GV	Gas Valve
		GM	Gas Meter
	Bush	TVR	Television Riser
BH	Bore Hole	TELR	Telephone Riser
TSP	Traffic Signal Pole	TELMH	Telephone Manhole
TSCB	Traffic Signal Control Box	SSMH	Sanitary Sewer Manhole
LP	Lightpole	SSCO	Sanitary Sewer Cleanout
	Sign	SSLH	Sanitary Sewer Lamphole
GP	Guardpost		Storm Drain Inlet Grate
AC	A/c Unit		Storm Drain Area Inlet
MB	Mailbox		Storm Drain Curb Inlet
ELR	Electric Riser	SDMH	Storm Drain Manhole
PP	Power Pole		

ADS MONUMENT #5

3" Brass Cap, Apparent Section Corner 9, 10, 16, 15 T-19-N, R-14-E at Center of Intersection of 21st Street and 145th E. Ave.
N 419859.808 E 2613551.879
NAVD 1988 Elev. 767.576'
Vertical Control Datum - NAVD '88

ADS MONUMENT #T218 OFFSET

5/8"Rebar - 2" Aluminum Cap - Flush - Stamped T218 OFFSET, Set N.W. of Intersection of 31st Street and HWY 169 Southbound Off-Ramp.
N 414399.443 E 2600036.380
NAVD 1988 Elev. 650.264
Vertical Control Datum - NAVD '88

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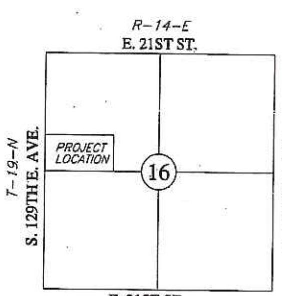
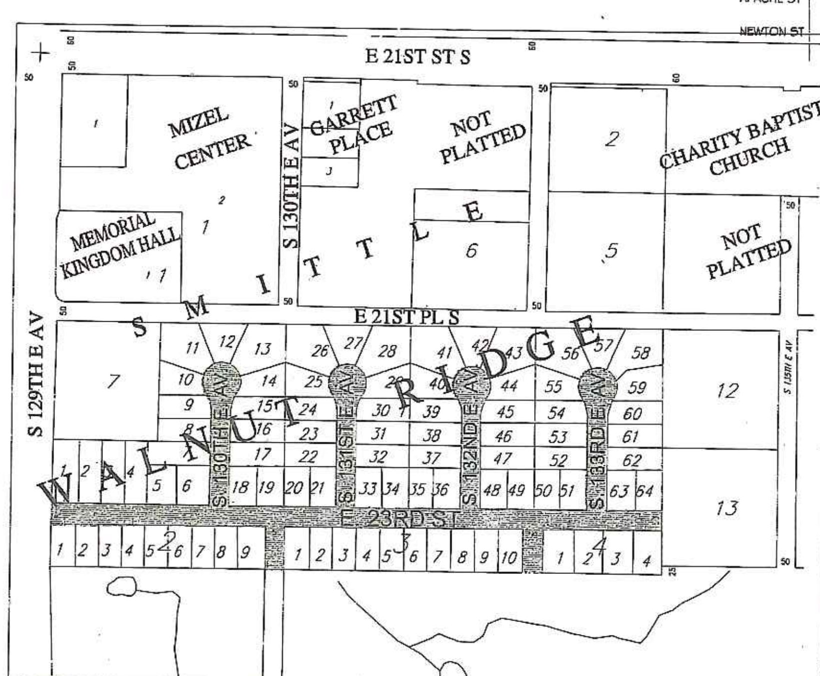
HORIZONTAL DATUM: OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD83 ZONE 3501 (NORTH ZONE)
ACCURACY - 3RD ORDER
VERTICAL DATUM: NAVD 1988
ACCURACY - 3RD ORDER

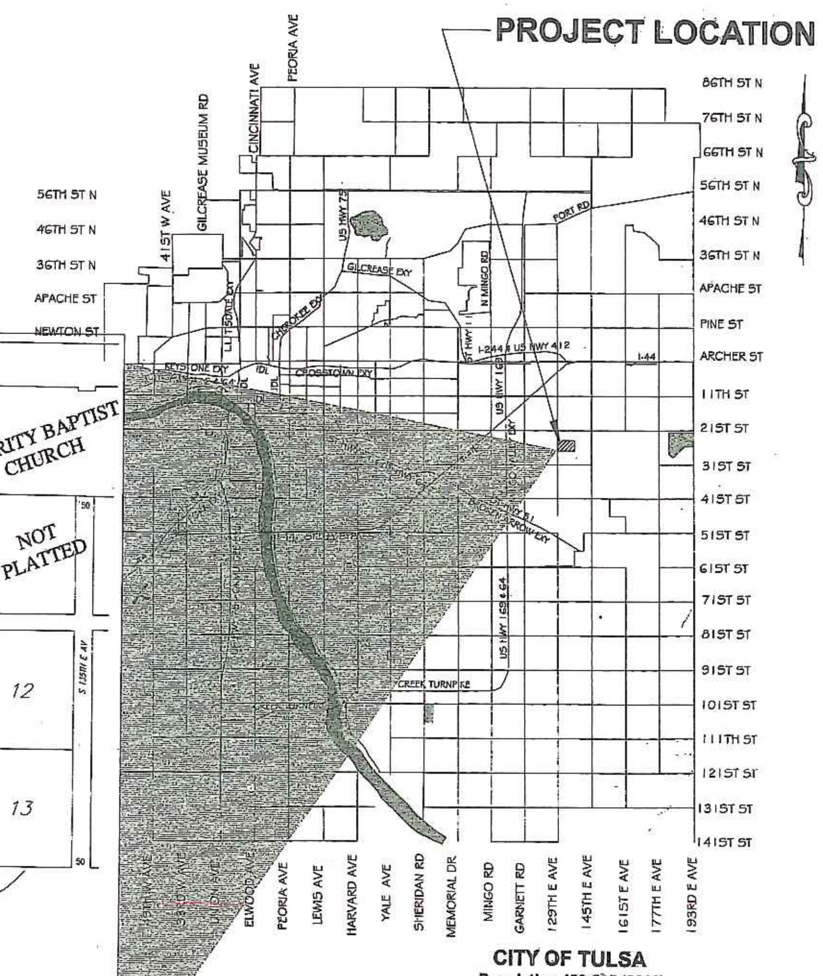


LOCATION MAP

DESIGN SPEED: 25 MPH
1.26 LN-MI REHABILITATION



PROJECT LOCATION



CITY OF TULSA
Population 403,505 (2016)

ENTIRE PROJECT IS WITHIN THE CORPORATE AND URBAN LIMITS OF THE CITY OF TULSA

UTILITY COORDINATION

AT&T (Alford Nichols)	(918) 596-4237
Cox Communication (Brandon Wade)	(918) 286-4716
ONG (Jonathon Meadows)	(918) 831-8215
AEP/PSO (Adam Fields)	(918) 250-6257
City of Tulsa (Chris Kovac)	(918) 596-9649

CURRENT CITY OF TULSA STANDARD SPECIFICATIONS AND STANDARD DETAILS GOVERN. ALL OTHER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY DESIGN.

THIS PROJECT COMPLIES WITH ALL OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ) REQUIREMENTS.

ENTIRE PROJECT IS WITHIN CORPORATE LIMITS OF CITY OF TULSA (COT).

INDEX TO DRAWINGS:

CITY OF TULSA STANDARDS:

STD NO.	DESCRIPTION
102	PROJECT SIGN
126	STD. SILT FENCE, & CONSTRUCTION ENTRANCE
304	BEDDING DETAIL - RIGID PIPE
411	STANDARD GUARDRAIL AND SIGN
608	SIGNS
625	REMOVAL OF TRAFFIC ITEMS
725	STD. PAVEMENT PATCH & REPAIR
726	ASPH. PAVEMENT STD. DETAILS
730	STD. ASPHALT PAVEMENT CUT & REPAIR
751	STD. PIPE BEDDING DETAIL FOR STORM SEWER
755	CONFIGURATIONS OF CAST IRON CURB INLETS
764	STD. REINFORCED CONCRETE STORM WATER INLETS
765	STD. STORMWATER FRAMES
766	STD. STORM WATER GRATES
767	STD. CAST IRON CURB
790	STD. SIDEWALK RAMP

ODOT STANDARDS:

STD NO.	DESCRIPTION
TCS1-1	TRAFFIC CONTROL CONSTRUCTION NOTES
TCS2-1	TRAFFIC CONTROL TABLES AND CHARTS
TCS3-1	TEMPORARY TRAFFIC CONTROL ELEMENTS
TCS4-1	TRAFFIC CONTROL DEVICES
TCS5-1	TYPICAL SIGN INSTALLATION
TCS6-1	CHANNELIZING DEVICES
TCS7-1	PLACEMENT OF ADVANCE WARNING SIGNS

Approved By:

Paul Zachary
City Engineer

01.23.20
Date

Advertisement Date:
01.31.20

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2/20/2019

Construction Plans for Project No. 144642 Non-Arterial Street Maintenance Zone 6142 E. 23RD ST., S. 130TH E. AVE. TO S. 133RD E. AVE., TMUA-W 14-35

PAY ITEM NOTES

1. ALL COSTS FOR REMOVING TREES, SHRUBS, STUMPS, POSTS, AND ALL OTHER DEBRIS AND/OR OBSTRUCTIONS NOT COVERED BY A SEPARATE PAY ITEM ARE INCLUDED IN THE PRICE BID.
2. THIS QUANTITY INCLUDES AN ADDITIONAL 5% ABOVE PLAN QUANTITY FOR UNDERCUTTING OF UNSUITABLE SUBGRADE MATERIAL OR ADDITIONAL PATCHING AS DIRECTED BY THE ENGINEER.
3. TYPE A AGGREGATE BASE WAS ESTIMATED TO BE USED AS THE BASE MATERIAL FOR 90% OF THE PATCHING. QUICK SET FLOWABLE FILL WAS ESTIMATED TO BE USED AS THE BASE MATERIAL FOR 10% OF THE PATCHING. ACTUAL QUANTITIES TO BE DETERMINED BY THE ENGINEER.
4. INCLUDES COMPACTION OF AGGREGATE TO 98% AASHTO T180 MODIFIED PROCTOR.
5. SEPARATOR FABRIC SHALL BE USED AT ALL PAVEMENT PATCHES AND RECONSTRUCTION SECTIONS. THE SEPARATOR FABRIC SHALL BE CUT AND OVERLAPPED A MINIMUM OF 2 FT AT ALL EDGES OF THE REPAIR.
6. THIS ITEM INCLUDES ALL COSTS ASSOCIATED WITH COLD MILLING AND TO PROVIDE BUTT JOINTS AS REQUIRED. NO ADDITIONAL PAYMENT SHALL BE MADE FOR COLD MILLING BEYOND THE AVERAGE DEPTH SHOWN ON THE TYPICAL SECTIONS.
7. CONSTRUCTION STAKING SHALL INCLUDE SURVEYING AND THE FURNISHING, PLACING, AND MAINTAINING OF THE CONSTRUCTION LAYOUT STAKES NECESSARY FOR THE PROPER
8. FABRIC REINFORCEMENT SHALL BE USED ON OVERLAY AREAS. THE COST OF BITUMINOUS BINDER FOR FABRIC REINFORCEMENT SHALL BE INCLUDED IN THE UNIT COST OF THIS PAY ITEM. THE BITUMINOUS BINDER SHALL MEET ODOT STANDARD SPECIFICATIONS AND THE RECOMMENDATIONS OF THE FABRIC REINFORCEMENT MANUFACTURER.COMPLETION AND INSPECTION OF THE ENTIRE PROJECT.
9. THIS PAY ITEM INCLUDES THE FOLLOWING:

A. SAW CUTTING
B. REMOVAL OF THE EXISTING CONCRETE AND/OR ASPHALTIC CONCRETE ROADWAY (CY)
C. TYPE S3 ASPHALTIC CONCRETE OR PC CONCRETE COMPLETE AND IN PLACE PER DETAIL
D. SEALING OF EDGES AND TACK COAT

DOES NOT INCLUDE THE FOLLOWING:

A. UNCLASSIFIED EXCAVATION
B. SUBGRADE METHOD B (SY)
C. SEPARATOR FABRIC (SY)
D. AGGREGATE BASE (TYPE A)
E. ASPHALT CONCRETE LEVELING OR SURFACE COURSE

10. WASTE MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE IN A MANNER APPROVED BY THE ENGINEER.
11. CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS DAMAGED OR REQUIRING RELOCATION DURING THE CONSTRUCTION OF THIS PROJECT TO THE SATISFACTION OF THE PROPERTY OWNER AND CITY ARBORIST. COST SHALL BE INCLUDED IN THE PRICE BID.
12. EROSION PROTECTION SHALL BE PLACED AROUND DRAINAGE INLETS AS REQUIRED TO PREVENT ENTRANCE OF EROSION MATERIAL. EROSION PROTECTION SHALL BE PLACED AS NECESSARY TO PREVENT EROSION WASH TO ADJACENT PROPERTY. ALL EROSION PROTECTION INSTALLED MUST BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT. EROSION PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AS DIRECTED BY THE ENGINEER, COST TO BE INCLUDED IN THE PRICE BID. THE PRICE INCLUDES THE COST OF SEDIMENT REMOVAL PER THE STORMWATER MANAGEMENT PLAN
13. THE PAY ITEM FOR SOLID SLAB SODDING INCLUDES QUANTITIES FOR PLACEMENT AND COMPACTION OF SUITABLE BACKFILL AND SOD AT EXISTING GRASS AREAS WHICH MAY BE DAMAGED DURING CONSTRUCTION OF CURBS, SIDEWALKS, DRIVEWAYS, AND OTHER MISCELLANEOUS ITEMS. THE QUANTITIES ARE BASED ON UTILIZING A 3 FOOT WIDE STRIP IN THESE AREAS. THE SOD SHALL BE OF LIKE KIND TO THE EXISTING SOD. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF DAMAGE TO EXISTING GRASS THAT EXCEEDS THESE LIMITS.
14. PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION.
15. COST OF WATERING AND FERTILIZING SHALL BE INCLUDED. FERTILIZERS SHALL BE 10-20-10 AND SHALL BE APPLIED AT THE RATE OF 1.5 LBS PER 10 SQ YDS. FERTILIZER SHALL BE APPLIED PER SECTION 230.04H OF ODOT STANDARD SPECIFICATIONS. WATERING SHALL BE APPLIED AS NECESSARY UNTIL VEGETATION IS ESTABLISHED OR UNTIL THE WORK IS ACCEPTED AS COMPLETE.
16. THE COST OF TACK COAT, EDGE JOINT SEAL MATERIAL AND SCREENINGS FOR BLOTTING, AND ALL LABOR ASSOCIATED WITH THESE ITEMS, SHALL BE INCLUDED IN ASPHALT CONCRETE.
17. ESTIMATED AT 112 LBS PER SQ YD PER 1 INCH THICK.
18. ODOT PAY FACTOR FOR AVERAGE LOT DENSITY SHALL NOT BE USED FOR THIS PROJECT. FAILURE TO REACH AVERAGE LOT DENSITY OF 92%-97% WILL RESULT IN REJECTION OF WORK.
19. LOCATIONS TO BE DETERMINED IN THE FIELD AND WORK TO BE PREFORMED AT THE DIRECTION OF THE FIELD ENGINEER. QUANTITY IS ESTIMATED AND MAY BE OMITTED IN ITS ENTIRETY.
20. THE USE OF FLY-ASH IN CONCRETE IS PROHIBITED.
21. ALL SAW CUTTING AND REMOVAL SHALL BE INCLUDED IN THE COST OF THE ITEM TO BE ADJUSTED, REMOVED, REPAIRED, OR REPLACED.
22. THIS ITEM SHALL BE MEASURED AS THE ACTUAL AMOUNT OF CURB AND/OR GUTTER INSTALLED. NO PAYMENT WILL BE MADE FOR CURB AND/OR GUTTER THROUGH DRIVEWAYS AND INLETS.
23. INCLUDES ALL COST OF SAWED JOINTS AND SEALING OF ALL JOINTS INCLUDING LONGITUDINAL JOINTS.
24. CURB, GUTTER, AND/OR SIDEWALK ASSOCIATED WITH THE DRIVEWAY AND THROUGH THE DRIVEWAY IS INCLUDED IN THE COST OF THE DRIVEWAY.
25. ONE SIDEWALK PANEL ON EACH SIDE OF DRIVEWAYS SHALL BE A MINIMUM OF 6" THICK OR MATCH EXISTING DRIVEWAY THICKNESS, WHICHEVER IS GREATER. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THE COST OF THE THICKENED SIDEWALK THROUGH THIS AREA.
26. THIS ITEM SHALL INCLUDE THE COST OF NEW MANHOLE FRAME AND COVER PER CITY OF TULSA STD NO.752, STD NO. 753, STD NO. 754, STD NO. 761 AND STD NO. 762.
27. ALL SANITARY AND STORM SEWER MANHOLE CASTINGS AND LIDS THAT ARE LOCATED IN THE STREET AND ARE DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH NEW LIDS AND CASTINGS AND THE OLD ONES SHALL BE SALVAGED AND DELIVERED TO THE METAL RECYCLE BINS IN THE STOCKROOM AREA AT SEWER OPERATIONS AND MAINTENANCE, 9319 E. 42" STREET NORTH, BETWEEN THE HOURS OF 7:30 AM AND 3:00 PM MONDAY THROUGH FRIDAY.
28. THE TOTAL COST FOR RUBBERIZED ASPHALT AND/OR SILICONE AT MANHOLES, VALVE BOXES, INLETS, AND INLET APRONS, SHALL BE INCLUDED.

PAY ITEM NOTES (cont.)

29. ALL HOUSE NUMBERS SHALL BE REPLACED/ REESTABLISHED THROUGHOUT PROJECT LIMITS. COST TO BE INCLUDED IN URBAN RIGHT OF WAY RESTORATION. CONTRACTOR SHALL REESTABLISH DRAINS, ROOF DRAINS AND OTHER DRAINAGE THROUGH THE CURBS IN ACCORDANCE WITH CITY OF TULSA STANDARD 758.
30. REINFORCED CONCRETE PIPE TO BE CLASS III. ALL REINFORCED CONCRETE PIPE AND MANHOLES TO BE SUPPLIED WITH AN OMNI-FLEX JOINT GASKET OR APPROVED EQUAL. MASTIC JOINT SEALANT SHALL NOT BE ALLOWED.
31. INCLUDES THE COST REQUIRED TO MAKE CONNECTION AND REMOVAL OF EXISTING INLETS. THE COST OF PC CONCRETE CURB AND GUTTER THROUGH THE INLET, 5' EACH SIDE OF THE INLET, AND THE PC CONCRETE INLET APRON SHALL BE INCLUDED. GRATE AND FLOWLINE ELEVATIONS SHALL MATCH EXISTING CONDITIONS UNLESS OTHERWISE NOTED IN THE PLANS.
32. QUICK SET FLOWABLE FILL TO BE USED TO BACKFILL AROUND STREET CURB INLETS AND PIPES AS DIRECTED BY THE ENGINEER.
33. ALL INLETS COMPLETE IN PLACE SHALL BE CAST IN PLACE CONCRETE OR PRECAST CONCRETE. NO BRICK INLETS SHALL BE ALLOWED. THIS PAY ITEM INCLUDES INLET FRAME, GRATE, HOOD AND CONCRETE.
34. NO MASONRY STRUCTURES SHALL BE CONSTRUCTED WITHIN THE RIGHT OF WAY.
35. ADDITIONAL DEPTH IN INLET SHALL BE MEASURED AND PAID FOR ALL INLETS EXCEEDING 3.71 VERTICAL FT, CALCULATED FROM THE CENTER ELEVATION OF THE LOWEST CAST IRON CURB TO THE FLOWLINE OF THE OUTLET PIPE.
36. ~~ALL PLASTIC PAVEMENT MARKINGS SHALL BE~~: NOT USED

~~THERMOPLASTIC PAVEMENT MARKINGS SHALL ONLY BE APPLIED WHEN THE SURFACE TEMPERATURE EXCEED 55°F FOR ALL OF THE SIX HOURS PRIOR TO INSTALLATION AND MAXIMUM WIND GUSTS ARE BELOW 15 MPH AT THE TIME OF APPLICATION. PRICE BID TO INCLUDE FLEX TABS OR LIKE KIND FOR POST CONSTRUCTION LANE MARKING/SEPARATION. MECHANICALLY APPLIED PREFORMED PLASTIC TAPE (COLD TAPE") WILL NOT BE ACCEPTED.~~

37. REFLECTORIZED SHEETING ON SIGNS AND BARRICADES SHALL BE OF A CUBIC PRISMATIC TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE IX RETROREFLECTIVE SHEETING. REFLECTORIZED SHEETING ON DRUMS AND TUBE CHANNELIZERS SHALL BE OF A HIGH-INTENSITY TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE III RETROREFLECTIVE SHEETING.
38. IF WARNING LIGHTS ARE TO BE USED ON TRAFFIC CONTROL DEVICES, TYPE "A" LIGHTS SHALL ONLY BE USED ON DEVICES WARNING OF UNEXPECTED HAZARDS, AND SHALL NOT BE USED FOR DELINEATION OF THE TRAVELED WAY. ONLY TYPE "C" WARNING LIGHTS SHALL BE USED FOR DELINEATION OF THE TRAVELED WAY, AND TYPE "C" LIGHTS SHALL NOT BE USED FOR ANY OTHER PURPOSE.
39. THE PAY ITEM FOR FLAGGER SHALL BE PAID FOR ON A FLAG DAY (F.D.) BASIS. ONE F.D. IS ONE COMPLETE WORKDAY AS PERFORMED BY THE CONTRACTOR SET FORTH IN THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
40. THE CONTRACTOR SHALL BE PAID FOR UNCLASSIFIED EXCAVATION ON THE BASIS OF PLAN QUANTITY. ANY ADDITIONAL EXCAVATION REQUIRED OR OVERRUN OF PLAN QUANTITY WILL BE PAID FOR ON THE BASIS OF UNIT PRICE BID FOR THE ITEM. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SURVEY TO VERIFY ANY ADDITIONAL QUANTITIES.
41. A CERTIFIED ARBORIST SHALL OVERSEE ALL PLANTINGS. CONTACT CITY ARBORIST TO ACCEPT FINAL PLANTINGS. CONTACT #: 918-596-2548
42. TREE GRATES ARE NOT ACCEPTABLE PER CITY ARBORIST. CONCRETE PAVERS ARE TO BE USED AS NECESSARY AROUND TREES.
43. NOT USED.
44. NOT USED.
45. NOT USED.
46. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL REQUIRED FOR COMPLETION OF THE PROJECT.
47. THE COST TO REPLACE REMOVED OR DAMAGED SECTION CORNERS AND ALL OTHER PERMANENT RIGHT OF WAY MARKERS SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NO ADDITIONAL PAYMENT WILL BE MADE.
48. ~~ALL EXISTING DRAINAGE STRUCTURES SHALL BE CLEANED AND CLEARED OF ALL SEDIMENTATION AND DEBRIS TO THE RIGHT OF WAY. COST OF CLEARING SHALL BE INCLUDED IN THE PRICE BID.~~ NOT USED
49. NOT USED.
50. PG 70-28 OK OR PG 76-28 OK MAY BE DESIRABLE IN HIGH VOLUME AREAS WHERE SLOW, STANDING, OR TURNING TRAFFIC OCCURS, SUCH AS URBAN INTERSECTIONS OR OFF-RAMPS. OFF RAMPS SHOULD AT LEAST USE THE SAME BINDER AS THE MAINLINE.

A HIGHER GRADE OF ASPHALT BINDER THAN INDICATED ON THE PLANS MAY BE USED, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

BINDER GRADE	MESALs	ADT	NOTES
PG 64-22 OK	< 3	< 5,000	USE WHEN MORE THAN 4-6 INCHES BELOW THE SURFACE. ALSO USE FOR SHOULDERS, DRIVEWAYS, BELOW PCC, AND TEMPORARY CONSTRUCTION.
PG 70-28 OK	< 10	< 10,000	USE ONLY IN THE TOP 4-6 INCHES FOR DRIVING LANES.
PG 76-28 OK	>= 10	>= 10,000	USE ONLY IN THE TOP 4-6 INCHES FOR DRIVING LANES .
PG 76-28 E	--	--	CONTACT ODOT MATERIALS DIVISION FOR RECOMMENDED USE.

USE ADT ONLY WHEN ESAL COMPUTATIONAL DATA IS NOT AVAILABLE. CALCULATE THE DESIGN ESALs BASED ON 20 YEARS.

PAY ITEM NOTES (cont.)

51. PAY ITEM INCLUDES REMOVAL OF ALL STRUCTURES AND OBSTRUCTIONS WITHIN PROJECT LIMITS NOT SPECIFIED BY OTHER ITEMS OF WORK.
52. NOT USED.
53. INCLUDES SAWING NOT INCLUDED IN OTHER ITEMS OF WORK.
54. STANDARD BEDDING MATERIAL TO BE TYPE A AGGREGATE BASE COMPACTED TO 95% STANDARD PROCTOR DENSITY. AGGREGATE BASE IN ROADWAY SHALL BE 98% MODIFIED PROCTOR.
55. ~~QUANTITY SHALL BE MEASURED AND PAID FOR AS FOLLOWS~~: NOT USED

~~A. FOR ANY CAS AT-IN-PLACE R PRECAST REINFORCED CONCRETE BOX (RCB) LARGER THAN 4' BY 4', USE NEATLINES THAT ARE 4" BELOW THE BOTTOM OF THE RCB AND 4'-8" BEYOND THE OUTSIDE WALL.~~

~~B. UNDER ROADWAY PAY QUANTITY SHALL BE PAID FOR FROM THE BOTTOM OF TRENCH, AS DESCRIBED, TO THE BOTTOM OF ROADWAY AGGREGATE BASE.~~

56. FOR INLET DESIGN NUMBERS AND CONFIGURATIONS REFER TO CITY OF TULSA STANDARD NO. 755. INLET DETAIL / LIST WILL BE PROVIDED IN THE PLANS FOR CONFIGURATIONS NOT SHOWN IN CITY OF TULSA STANDARDS..
57. NOT USED.
58. MOBILIZATION FOR THE PROJECT (EXCLUDING WATER MOBILIZATION) IS TO BE INCLUDED IN THIS PAY ITEM. THE MAXIMUM ALLOWABLE AMOUNT WILL BE IN ACCORDANCE WITH THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION TABLE 641:1.
59. CONTRACTOR SHALL COORDINATE WITH HOMEOWNERS TO RESET ALL PAVERS, LANDSCAPE STONE, PRIVATE SIDEWALKS AND FENCES THAT ARE DISTURBED DURING CONSTRUCTION OPERATIONS. ALL MATERIALS, LABOR, AND EQUIPMENT REQUIRED FOR RESETTING OF SUCH ITEMS IS TO BE INCLUDED IN PRICE BID FOR URBAN RIGHT OF WAY RESTORATION.
60. UNCLASSIFIED EXCAVATION INCLUDES REMOVAL OF AGGREGATE BASE ANDMODIFIED SUBGRADE UNDER EXISTING PAVEMENT TO BE REPAIRED.
61. PRICE BID SHALL INCLUDE MAINTENANCE, SEDIMENT REMOVAL, DISPOSAL, AND REMOVAL OF FILTERS AT PROJECT COMPLETION.
62. NOT USED.
63. SHALL INCLUDE ALL COSTS ASSOCIATED WITH PLUGGING/PATCHING HOLES IN EXISTING STRUCTURES TO REMAIN.
64. NOT USED.
65. ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.
66. NOT USED.
67. NOT USED
68. NOT USED

BEFORE YOU DIG 811 CALL OKIE

ROADWAY PAY QUANTITIES & PAY ITEM NOTES

PROJECT NO. 144642 MZ 6142

NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE					
			PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
			NOT TO SCALE	DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.	JB	2/19	
			HORIZONTAL:	LEAD ENGR.	D	3/19	
				FIELD MGR.	RBN	4/19	
			VERTICAL	RECOMMENDED: HAS 4-19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/22/20
			ATLAS PAGE NO: 301				SHEET 2 OF 52 SHEETS

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2/20/2019

PAY ITEMS

ITEM	SPEC. NO.	DESCRIPTION	PAY ITEM NOTE	UNIT	TOTAL QUANTITY
1	201(A)	CLEARING AND GRUBBING	1,48,51	ACRE	0.5
2	202(A)	UNCLASSIFIED EXCAVATION	2,10,40,60	CY	3241
3	221(C)	TEMPORARY SILT FENCE	12,61	LF	300
4	221(K)	TEMPORARY FIBER LOG	12,61	LF	170
5	230(A)	SOLID SLAB SODDING	13,14,15	SY	2698
6	303(A)	AGGREGATE BASE TYPE A	2,3,4	CY	3032
7	310(B)	SUBGRADE METHOD B	2	SY	10371
8	325	SEPARATOR FABRIC	2,5	SY	12963
9	409	FABRIC REINFORCEMENT	8	SY	4118
10	411(B)	SUPERPAVE, TYPE S3 (PG 64-22)	16,17,18,50	TON	1731
11	411(C)	SUPERPAVE, TYPE S4 (PG 64-22) INSOLUBLE	16,17,18,50	TON	1106
12	411(D)	SUPERPAVE, TYPE S5 (PG 64-22)	16,17,18,19,50	TON	207
13	412	COLD MILL PAVEMENT	6	SY	3698
14	509(B)	CLASS A CONCRETE	20,23	CY	18
15	609(B)	COMBINED CURB AND GUTTER (6" BARRIER)	3,20,22,23,24	LF	2547
16	610(A)	4" CONCRETE SIDEWALK	20,23,24,25	SY	2760
17	610(B)	6" CONCRETE DRIVEWAY (H.E.S.)	20,23,24,25	SY	2067
18	610(I)	TACTILE WARNING DEVICE		SF	176
19	611(G)	INLET DESIGN NO. 2, COMPLETE IN PLACE	26,31,32,33,34,35,56	EA	9
20	611 (G)	INLET DESIGN NO. 2(2A), COMPLETE IN PLACE	26,31,32,33,34,35,56	EA	2
21	612(A)	MANHOLE ADJUSTED TO GRADE (PUBLIC)	20,21,26,27,28	EA	6
22	612(E)	VALVE BOXES ADJUSTED TO GRADE	20,21,27,28	EA	2
23	613(A)	RCP, 18 INCH ROUND, COMPLETE IN PLACE	30,32,45	LF	55
24	619(B)	REMOVAL OF EXISTING DRIVEWAYS	10,21,63,65,53	SY	2067
25	619(B)	REMOVAL OF EXISTING PAVEMENT	10,21,63,65,53	SY	6181
26	619(B)	REMOVAL OF EXISTING CURB AND GUTTER	10,21,63,65,53	LF	2547
27	619(B)	REMOVAL OF EXISTING SIDEWALK	10,21,63,66,53	SY	2760
28	641	MOBILIZATION	58	EA	1
29	642	CONSTRUCTION STAKING	7,47	EA	1
30	850(A)	SHEET ALUMINUM SIGN	37	SF	53
31	851(B)	1 1/2" SQUARE TUBE		LF	14
32	851(C)	1 3/4" SQUARE TUBE		LF	70
33	851(D)	2 " SQUARE TUBE		LF	15
34	880(B)	SIGNS 0.00 TO 6.25 SF	37,38,46	SD	1920
35	880(B)	SIGNS 6.26 TO 15.99 SF	37,38,46	SD	1920
36	880(B)	SIGNS 16.00 AND UP	37,38,46	SD	1920
37	880(C)	BARRICADES (TYPE III)	37,38,46	SD	3600
38	880(E)	TYPE "A" WARNING LIGHT	38	SD	7200
39	880(E)	TYPE "C" WARNING LIGHT	38	SD	3600
40	880(F)	DRUMS	37,38,46	SD	1920
41	880(G)	TUBE CHANNELIZERS	37,46	SD	500
42	880(I)	FLAGGER	39	FD	100
43	SPECIAL	PROJECT SIGN (CITY OF TULSA)	46	EA	1
44	SPECIAL	TYPE I AC PATCH	9,19	CY	122
45	SPECIAL	CURB RAMP TYPE "A"		EA	10
46	SPECIAL	CURB RAMP TYPE "D"		EA	12
47	SPECIAL	URBAN RIGHT-OF-WAY RESTORATION	11,14,29,41,42,59	EA	1
48	COT 202	QUICK SET FLOWABLE FILL	19,32	CY	82
49	SPECIAL	OWNER ALLOWANCE		ALLOW	1

BEFORE YOU DIG CALL OKIE 811

ROADWAY PAY QUANTITIES & PAY ITEM NOTES

PROJECT NO. 144642 MZ 6142

NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
			NOT TO SCALE	DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.	JO	2/19	
			HORIZONTAL:	LEAD ENGR.	DJ	3/19	
				FIELD MGR.	RBV	4/19	
			VERTICAL	RECOMMENDED: HAS 4.15 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO: 301				SHEET 3 OF 52 SHEETS

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2/20/2019

SUMMARY OF WATER LINE QUANTITIES

ITEM NO.	SPEC NO.	DESCRIPTION	PAY NOTE	UNITS	TOTAL
50	COT 301	RIGHT-OF-WAY-CLEARING AND RESTORING	4,5,6,7,22	SY	523
51	COT 302	EXCAVATION AND BACKFILL, UNCLASSIFIED	14	CY	507
52	COT 303	MOBILIZATION		EA	1
53	COT 304	CONSTRUCTION STAKING		EA	1
54	COT 307	8 INCH DIP, CL51 POLYETHYLENE WRAPPED, RJ	1,2,3,8,9,11,27	LF	105
55	COT 312	8 INCH DUCTILE IRON SLEEVE, RJ	2,8, 12	EA	4
56	COT 312	8 INCH X 6 INCH DUCTILE IRON TEE, RJ	2,8	EA	4
57	COT 315	3/4" INCH WATER METER CAN, LID & RIM			33
58	COT 317	8 INCH GATE VALVE, RJ	8	EA	8
59	COT 317	3-WAY FIRE HYDRANT, IN PLACE		EA	4
60	COT 318	VALVE BOX	21	EA	8
61	COT 330	EROSION CONTROL (TEMPORARY SILT FENCE)		LF	60
62	COT 330	EROSION CONTROL (TEMPORARY FIBER LOG)		LF	48
63	SPECIAL	CONSTRUCTION AS-BUILT	24,25,27	EA	1
64	SPECIAL	OWNER ALLOWANCE	18	ALLOW	1
DIP AWWA C-151 CL51 PIPE (MATERIAL OPTION 1)					
65	COT 307	6 INCH DIP, CL51 POLYETHYLENE WRAPPED	1,2,3,9,11,27	LF	749
66	COT 307	6 INCH DIP, CL51 POLYETHYLENE WRAPPED, RJ	1,2,3,8,9,11,27	LF	1595
67	COT 312	6 INCH X 4 INCH DUCTILE IRON REDUCER, RJ	2,8	EA	4
68	COT 312	4 INCH DUCTILE IRON SLEEVE, RJ	2,8,12	EA	4
69	COT 312	6 INCH DUCTILE IRON PIPE 11-1/4 DEG BEND, RJ	2,8	EA	40
70	COT 312	6 INCH DUCTILE IRON PIPE 22-1/2 DEG BEND, RJ	2,8	EA	33
71	COT 312	6 INCH DUCTILE IRON PIPE 45 DEG BEND, RJ	2,8	EA	24
72	COT 312	6 INCH X 6 INCH DUCTILE IRON TEE, RJ	2,8	EA	4
73	COT 315	3/4" INCH WATER SERVICE CONNECTION (SHORT)	15,16	EA	33
74	COT 328	6 INCH BORE		LF	26
PVC AWWA C900 CLASS 200 DR-14 PIPE (MATERIAL OPTION 2)					
75	COT 309	6 INCH ~~DIP,~~ PVC AWWA C900 CLASS 200 DR-14, RJ	1,2,3,8,9,10,27	LF	1595
76	COT 309	6 INCH PVC AWWA C900 CLASS 200 DR-14	1,2,3,8,9,10,27	LF	749
77	COT 312	6 INCH X 4 INCH DUCTILE IRON REDUCER, RJ	2,8	EA	4
78	COT 312	4 INCH DUCTILE IRON SLEEVE, RJ	2,8,12	EA	4
79	COT 312	6 INCH DUCTILE IRON PIPE 11-1/4 DEG BEND, RJ	2,8,12	EA	40
80	COT 312	6 INCH DUCTILE IRON PIPE 22-1/2 DEG BEND, RJ	2,8	EA	33
81	COT 312	6 INCH DUCTILE IRON PIPE 45 DEG BEND, RJ	2,8	EA	24
82	COT 312	6 INCH X 6 INCH DUCTILE IRON TEE, RJ	2,8	EA	4
83	~~COT 312~~	~~6 INCH DUCTILE IRON TO 6IN PVC ADAPTOR, RJ~~	~~2,8,12~~	~~EA~~	~~16~~
84	COT 315	3/4" INCH WATER SERVICE CONNECTION (SHORT)	15,16	EA	33
85	COT 328	6 INCH BORE		LF	26
HDPE AWWA C906 PE4710 DR-11 (DIPS) PIPE (MATERIAL OPTION 3)					
86	COT 307	6 INCH DIP, CL51 POLYETHYLENE WRAPPED, RJ	1,2,3,8,9,11,27	LF	32
87	COT 309	8 INCH HDPE AWWA C906 PE4710 DR-11 (DIPS)	1,2,3,8,9,10,19,27	LF	2312
88	COT 312	4 INCH DUCTILE IRON SLEEVE, RJ	2,8,12	EA	4
89	COT 312	6 INCH DUCTILE IRON SLEEVE, RJ	2,8,12	EA	4
90	COT 312A	8 INCH HDPE 45 DEG BEND, RJ	2,8	EA	24
91	COT 312A	8 INCH X 8 INCH HDPE TEE (DIPS), RJ	20	EA	4
92	COT 312A	HDPE ANCHOR, COMPLETE IN PLACE	26	EA	8
93	COT 312A	8 INCH X 4 INCH DUCTILE IRON REDUCER, RJ		EA	4
94	COT 312A	8 INCH X 6 INCH DUCTILE IRON REDUCER, RJ		EA	12
95	COT 312A	8 INCH HDPE MJ ADAPTOR (DIPS) (RJ)		EA	8
96	COT 315	3/4" INCH WATER SERVICE CONNECTION (SHORT)	15,16	EA	33
97	COT 328	8 INCH BORE		LF	26
98	COT 317	8 INCH GATE VALVE, RJ	8	EA	8

WATERLINE PAY ITEM NOTES

1. TESTING AND CHLORINATION OF WATER MAINS SHALL BE PERFORMED BY THE CITY OF TULSA. TESTING, CHLORINATION, AND FLUSHING SHALL BE DONE IN ACCORDANCE WITH SECTION 109.3 OF THE GENERAL SPECIFICATIONS.
   A. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PLUGS WITH ADEQUATE BLOCKING OR RESTRAINTS, PLUS CORPORATION STOPS, AS DIRECTED BY CITY TESTING PERSONNEL, THEN, ONCE TESTING, CHLORINATION AND FLUSHING BY CITY PERSONNEL IS COMPLETED, REMOVE TEMPORARY BLOCKING AND TIE INTO EXISTING SYSTEM, USING FITTINGS SWABBED INTERNALLY WITH 2% BLEACH SOLUTION.
   B. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAIN SHALL BE PERFORMED BY CITY PERSONNEL ON MAINS WHICH ARE PHYSICALLY DISCONNECTED FROM THE EXISTING WATER SYSTEM. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAINS SHALL NOT BE PERFORMED AGAINST VALVES WHICH ARE PHYSICALLY CONNECTED TO EXISTING SYSTEM.
   C. ALL COSTS FOR TEMPORARY PLUGS, BLOCKING, RESTRAINING, CORPORATION STOPS, TUBING, THREADED CONNECTIONS, BLEACH AND OTHER INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.
2. BURIED BOLTS, HARNESS LUGS, AND COUPLINGS SHALL BE GIVEN TWO COATS OF KOPPER'S BITUMASTIC 300-M (DRY MIL THICKNESS OF 16 MILS) OR EQUAL. COST TO BE INCLUDED IN UNIT PRICE BID FOR PIPE AND FITTINGS.
3. CONTRACTOR TO EXCAVATE ALL UTILITY CROSSINGS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ON THE PROPOSED WATER MAIN TO AVOID UTILITY CONFLICTS. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. COST FOR EXCAVATING UTILITY CROSSINGS SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE.
4. CONTRACTOR SHALL INSURE ALL POLES WHICH ARE AFFECTED BY TRENCHING CONDITIONS ARE BRACED BY OWNERS. PAYMENT SHALL BE INCLUDED IN "RIGHT-OF-WAY CLEARING AND RESTORING". NO ADDITIONAL PAYMENT SHALL BE MADE.
5. ALL HYDRANTS, VALVES AND OTHER FITTINGS FROM ABANDONED WATER MAINS SHALL BE SALVAGED AND DELIVERED TO SOUTH YARD, 2317 S JACKSON. PAYMENT TO BE MADE UNDER RIGHT OF WAY CLEARING AND RESTORATION. NO ADDITIONAL PAYMENT SHALL BE MADE.
6. CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS, ROOF DRAINS, AND FENCING DAMAGED IN THE ZONE OF CONSTRUCTION DURING THE COURSE OF CONSTRUCTION TO SATISFACTION OF THE PROPERTY OWNER. PAYMENT SHALL BE INCLUDED IN RIGHT-OF-WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENT SHALL BE MADE.
7. COST OF ANY TEMPORARY LIVESTOCK FENCING AND POLES SHALL BE INCLUDED IN COST OF RIGHT OF WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENT SHALL BE MADE.
8. ALL COSTS FOR COMPONENTS NECESSARY TO RESTRAIN JOINTS FOR PIPE AND FITTINGS DESIGNATED RESTRAINED JOINT ("RJ") SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE OR FITTINGS.
   A. DUCTILE IRON PIPE RESTRAINED JOINT SYSTEMS: US PIPE TRFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, AMERICAN FLEXRING, EBAA MEGALUG, SMITH-BLAIR CAMLOCK, CLOW TUFGRIP OR EQUAL SHALL BE USED ON THIS PROJECT. SHOULD RJ PIPE BE SPECIFIED THROUGH UNCASED BORES, ONLY USPIPE TRFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, OR AMERICAN FLEXRING IS TO BE USED. LOCKING GASKETS NOT PERMITTED;
   B. POLYVINYL CHLORIDE (PVC) RESTRAINED JOINT SYSTEMS: EBAA MEGALUG, STAR STARGRIP OR EQUAL SHALL BE USED ON THIS PROJECT. LOCKING GASKETS NOT PERMITTED; SHOULD RJ PIPE BE SPECIFIED ON BORE CASING IS REQUIRED.
   C. HIGH DENSITY POLYETHYLENE (HDPE) RESTRAINED JOINT SYSTEMS: EBAA MEGALUG, STAR STARGRIP OR EQUAL SHALL BE USED ON THIS PROJECT.

   NO ADDITIONAL PAYMENT SHALL BE MADE.
9. ALL CUT ENDS AND WHERE SALVAGED FITTINGS HAVE BEEN REMOVED FROM ABANDONED WATER LINES LEFT IN PLACE, SHALL BE PLUGGED WITH 24-IN OF CONCRETE INSIDE THE PIPE. COST OF CONCRETE PLUGGING TO BE INCLUDED IN UNIT PRICE BID FOR PIPE. NO ADDITIONAL PAYMENT SHALL BE MADE.
10. TRACER WIRE AND DETECTABLE MYLAR MARKING TAPE SHALL BE INSTALLED ABOVE ALL PVC AND HDPE PIPE, TERMINATING ONLY ONTO HYDRANTS JUST ABOVE GROUND LEVEL AS PER CONST SPEC 310. COST OF TRACER WIRE AND DETECTABLE MYLAR TAPE SHALL BE INCLUDED IN UNIT PRICE BID FOR PVC AND HDPE PIPE. CONST SPEC 310.1 NOW ALLOWS #12 COPPER-CLAD STEEL (CCS) WIRE, 21% CONDUCTIVITY, IN LIEU OF #8 COPPER WIRE AS TRACER WIRE ATOP PVC AND HDPE PIPE.
11. DETECTABLE MYLAR MARKING TAPE SHALL BE INSTALLED OVER DUCTILE IRON PIPE AS PER CONST SPEC 307.3 AND 307.4. COST WILL BE INCLUDED IN COST OF DUCTILE IRON PIPE.
12. ALL LABOR, MATERIALS, AND EQUIPMENT TO CONNECT PROPOSED WATER MAINS TO EXISTING WATER MAINS ARE INCLUDED IN COST OF SLEEVES/ADAPTORS. CONTRACTOR TO EXCAVATE ALL EXISTING WATER MAINS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ACCORDINGLY. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. COST FOR EXCAVATING EXISTING WATER MAINS SHALL BE INCLUDED IN UNIT PRICE BID FOR SLEEVES. NO ADDITIONAL PAYMENT SHALL BE MADE.
13. ~~(OPTIONAL) AT THE DIRECTION OF THE ENGINEER, CONTRACTOR SHALL FURNISH A "LICENSED AND BONDED PLUMBER", WHICH SHALL INCLUDE ALL COSTS OF LABOR, TOOLS, PERMIT FEES, AND EQUIPMENT TO REROUTE THE EXISTING CUSTOMER SERVICE ON CUSTOMER PROPERTY TO THE PROPOSED CUSTOMER METER CAN. COST SHALL NOT EXCEED AN ALLOWANCE OF $1000 PER OCCURRENCE. MATERIALS SHALL BE PAID UNDER SEPARATE BID ITEMS. NO ADDITIONAL PAYMENT SHALL BE MADE.~~ NOT USED
14. CONTRACTOR IS REMINDED TO BACKFILL ALL TRENCHES EXCAVATED ACROSS ANY EXISTING OR PROPOSED DRIVING OR PARKING SURFACE WITH 1½-IN TYPE A AGGREGATE BASE, PLACED IN 8-INCH MAXIMUM LIFTS AND COMPACTED TO 98% MODIFIED PROCTOR DENSITY. COST TO BE INCLUDED IN COST OF EXCAVATION AND BACKFILL. NO ADDITIONAL PAYMENT SHALL BE MADE.
15. WATER SERVICE CONNECTIONS SHALL INCLUDE COST OF MATERIAL, LABOR AND EQUIPMENT TO REMOVE AND INSTALL SADDLES, SERVICE CLAMPS, CORPORATION STOPS, BENDS, 3-PART UNIONS, COUPLINGS, SETTERS AND ANY OTHER INCIDENTALS REQUIRED FOR A COMPLETE WATER SERVICE CONNECTION WITH EXCEPTION OF METER CANS, RIMS AND LIDS. NO ADDITIONAL PAYMENT SHALL BE MADE. METER CANS, LIDS AND RIMS SHALL BE PAID AS A SEPARATE BID ITEM.
   A. SHORT SERVICE SHALL BE ANY SERVICE LINE THAT IS 25-FEET OR LESS IN LENGTH. SHORT SERVICES DO NOT INCLUDE PAVEMENT REPLACEMENT. I.E. ¾-INCH WATER SERVICE CONNECTIONS (SHORT SERVICE)
   B. LONG SERVICE SHALL BE ANY SERVICE LINE THAT IS GREATER THAN 25-FEET UP TO 80-FEET IN LENGTH. LONG SERVICES INCLUDE PAVEMENT REPLACEMENT AND/ OR COST TO BORE. EXAMPLE: ¾-IN WATER SERVICE CONNECTIONS (LONG SERVICE)
   C. ~~SHORT AND LONG SERVICE LINES EXCEEDING THE ABOVE PARAMETERS WILL BE COMPENSATED FOR LINEAR FOOTAGE ABOVE AND BEYOND. COMPENSATION SHALL BE PAID AS "SERVICE LINES, EXTENSION", PER LF~~
16. SERVICE LINES ON NON-ARTERIALS SHALL BE EITHER COPPER TUBING (TYPE K SOFT ANNEALED CONFORMING TO ASTM B 88) OR PEX TUBING (UPONOR AQUA PEX 5206 BLUE CONFORMING TO ASTM F876/F877/F2023). PEX TUBING IS NOT PERMITTED WITHIN ARTERIAL RIGHT OF WAY.
17. ~~CONTRACTOR'S PLUMBER SHALL PROVIDE AN INFORMATIONAL BROCHURE TO THE PROPOERTY OWNERS OUTLINING THE STEPS REQUIRED TO THOROUGHLY FLUSH THEIR WATERLINES AFTER CONNECTION TO THE NEW WATER MAIN. ALL COSTS TO PRODUCE AND DISTRIBUTE THE BROCHURE SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM.~~ NOT USED
18. THE "OWNER ALLOWANCE" CAN BE USED FOR VARIOUS WORK AND MISCELLANEOUS ITEMS NOT IDENTIFIED IN THE CONTRACT DOCUMENTS WITH THE FOLLOWING PROVISIONS: THE ALLOWANCE SHALL BE USED FOR COST OF MATERIALS, LABOR, INSTALLATION AND OVERHEAD AND PROFIT FOR ADDITIONAL WORK AND MISCELLANEOUS ITEMS THAT ARE NOT IDENTIFIED IN THE CONSTRUCTION DOCUMENTS AND PLANS, AND NOT INCLUDED IN THE BID ITEMS OF THE CONTRACT.
   A. THE ALLOWANCE SHALL BE USED ONLY AT THE DISCRETION OF THE CITY. ANY ALLOWANCE BALANCE REMAINING AT THE COMPLETION OF THE PROJECT WILL BE CREDITED BACK TO THE CITY ON THE FINAL APPLICATION FOR PAYMENT SUBMITTED BY THE CONTRACTOR.
   B. THE CONTRACTOR SHALL PROVIDE, TO THE CITY, A WRITTEN REQUEST FOR THE USE OF ANY ALLOWANCE, WITH A SCHEDULE OF VALUES, AND ALL ASSOCIATED BACKUP INFORMATION, INCLUDING ANY TIME EXTENSIONS REQUIRED TO PERFORM THE WORK.
   C. THE CONTRACTOR SHALL PROCEED WITH THE WORK INCLUDED IN THE ALLOWANCE ONLY AFTER RECEIVING A WRITTEN ORDER, FROM THE ENGINEER AND CITY AUTHORIZING SUCH WORK. PROCEEDING WITH WORK IN THE ALLOWANCE WITHOUT A WRITTEN ORDER FROM THE CITY WILL BE AT THE CONTRACTOR'S EXPENSE.
19. WHERE PLANS IDENTIFY A 22.5-DEG OR 11.25-DEG VERTICAL OR HORIZONTAL BEND, HDPE WILL BE DEFLECTED PER MANUFACTURER'S MINIMUM ALLOWABLE BEND RADIUS.
20. WHERE PLANS IDENTIFY A CROSS, HDPE WILL USE TWO (2) TEE'S. NO ADDITIONAL PAYMENT SHALL BE MADE.
21. TOP OF VALVE BOX SHALL BE FLUSH WITH FINISHED GRADE.
22. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING IMPROVEMENTS. LIMITS OF DISTURBANCE SHALL NOT EXCEED 9-FEET CENTERED ON THE WATERLINE. ANY DISTURBANCE OUTSIDE OF THIS AREA SHALL BE RESTORED AT THE CONTRACTORS EXPENSE STREETS, DRIVEWAYS AND ASSOCIATED ITEMS SHALL BE PAID FOR UNDER OTHER ITEMS OF WORK.
23. ~~THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION. THE CONTRACTOR SHALL REPLACE THE SOD TO MATCH IN KIND AND QUALITY. LIMITS OF DISTURBANCE SHALL NOT EXCEED 9-FEET CENTERED ON THE WATERLINE. ANY DISTURBANCE OUTSIDE OF THIS AREA SHALL BE RESTORED AT THE CONTRACTORS EXPENSE.~~ NOT USED
24. SPOT ELEVATIONS ON THE MAIN WATER LINE RELATIVE TO FINISHED GRADE SHALL BE PROVIDED AT EACH 100-FT INTERVAL, COMPLETE WITH STATION AND OFFSET. IN ADDITION, ALL VALVES, FITTINGS, FIRE HYDRANTS (TOP OF NUT) AND OTHER MAJOR APPURTENANT ITEMS SHALL BE SHOWN WITH THE PROPER DESCRIPTION, STATION, OFFSET AND ELEVATION.
25. SPOT ELEVATIONS ON WATER METER CANS, VAULTS, SHALL BE SHOWN WITH THE PROPER DESCRIPTION (METER TYPE, METER SIZE, METER NUMBER, SERVICE MATERIAL, SERVICE SIZE), STATION, OFFSET AND ELEVATION.
26. WORK UNDER THIS ITEM SHALL INCLUDE FURNISHING AND INSTALLING HDPE WALL ANCHOR AS SHOWN ON DRAWINGS OR AS DIRECTED BY THE ENGINEER. THE UNIT PRICE SHALL INCLUDE THE COST OF ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED. NO ADDITIONAL PAYMENT SHALL BE MADE FOR EXCAVATION, BACKFILLING, OR CONCRETE BLOCKING.
27. PRESSURE TESTING AND CHLORINATION OF WATER MAINS SHALL NOT BE PERFORMED UNTIL THE CITY INSPECTOR HAS RECEIVED REQUIRED CONSTRUCTION AS-BUILT RECORDS.

BEFORE YOU DIG CALL OKIE 811

TMUA-W 14-35

WATERLINE QUANTITIES & PAY ITEM NOTES

PROJECT NO. 144642 MZ 6142

NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE
REV. PAY ITEMS	KS	9/19

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APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 4 OF 52 SHEETS

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2/20/2019

ROADWAY CONSTRUCTION NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2009 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE CURRENT CITY OF TULSA ENGINEERING SERVICES DEPARTMENT'S STANDARD SPECIFICATIONS AND STANDARD DETAILS AND STANDARD DRAWINGS AND CITY OF TULSA SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING SAFETY, HEALTH AND SANITATION. THE CONTRACTOR SHALL PROVIDE ALL SAFEGUARDS, SAFETY DEVICES AND PROTECTIVE EQUIPMENT, AND TAKE ANY OTHER NEEDED ACTION ON AS HIS OWN RESPONSIBILITY OR AS THE ENGINEER MAY DETERMINE REASONABLY NECESSARY TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.
3. PAY ITEMS SHALL BE AS SPECIFIED ON THE CITY OF TULSA OR ON THE ODOT STANDARD DRAWINGS EXCEPT AS MODIFIED BY THE CONTRACT.
4. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.
5. THE LOCATIONS OF THE UTILITIES ARE SHOWN ACCORDING TO ALL AVAILABLE INFORMATION. THE CONTRACTOR SHALL NOTIFY EACH UTILITY OWNER PRIOR TO COMMENCEMENT OF WORK ; AT&T, PUBLIC SERVICE COMPANY OF OKLAHOMA (AEP), OKLAHOMA NATURAL GAS TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS. THE FOLLOWING IS A LIST OF UTILITY OWNERS (ONG), COX COMMUNICATIONS, MCI/VERIZON, EASYTEL COMMUNICATIONS, WELLSCO VALLOR TELECOM, CITY OF TULSA-WATER AND SEWER, CITY OF TULSA-TRAFFIC OPERATIONS. SEE TITLE SHEET FOR CONTACT INFORMATION.
6. THE CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF OKLAHOMA ONE-CALL SYSTEM, INC. NOTICE OF ANY EXCAVATION NO SOONER THAN TEN DAYS NOR LATER THAN 48 HOURS , EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO THE COMMENCEMENT OF WORK. PHONE 1-800-522-6543.
7. THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PREVENT EXCESS MOISTURE FROM INCLEMENT WEATHER OR OTHER SOURCES FROM ENTERING ANY STREET EXCAVATION. IF EXCESS MOISTURE DOES ENTER THE EXCAVATION THROUGH THE NEGLIGENCE OF THE CONTRACTOR AND THE ADJOINING PAVEMENT IS ADVERSELY EFFECTED BY THE EXCESS MOISTURE, THE CONTRACTOR SHALL REPLACE THE ADJOINING PAVEMENT AND SUBBASE AT HIS SOLE EXPENSE.
8. THE CONTRACTOR SHALL PRESERVE THE INTEGRITY OF THE SANITARY SEWER STRUCTURES AND ALL OTHER UTILITY STRUCTURES WITHIN THE PROJECT EXTENTS.
9. THE CONTRACTOR SHALL WORK IN COOPERATION WITH THE CITY OF TULSA TO ESTABLISH, INSTALL, MAINTAIN, AND OPERATE COMPLETE, ADEQUATE, AND SAFE TRAFFIC CONTROLS DURING THE ENTIRE CONSTRUCTION PERIOD. ALL FLAGMEN, BARRICADES, AND TRAFFIC CONTROL DEVICES SHALL BE APPROVED BY THE FIELD ENGINEERING REPRESENTATIVE.
10. CONSTRUCTION SIGNAGE WILL BE INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT ADDITION, AND APPLICABLE ODOT STANDARD DRAWINGS. THE CONTRACTOR SHALL PROVIDE A PROPOSED TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK.
11. THE CONTRACTOR SHALL NOTIFY THE CITY OF TULSA FIELD ENGINEERING, 918-596-9404, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK OR PRIOR TO REMOVING TRAFFIC SIGNS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ALL EXISTING TRAFFIC SIGNS AND MARKINGS REMOVED OR DAMAGED AS LISTED IN THE SIGNAGE SCHEDULE FOR THE PROJECT. ALL SIGNS AND POLES PROVIDED SHALL BE NEW AND UNDAMAGED AND SHALL MEET THE REQUIREMENTS OF COT SPECIFICATION 608 TRAFFIC SIGNS. ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPECIFICATION 625 REMOVAL OF TRAFFIC ITEMS.
13. THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARATION AND DISTRIBUTION OF A WRITTEN NOTICE TO RESIDENTS 48 HOURS PRIOR TO BEGINNING PAVEMENT REMOVAL AND MILLING AND OVERLAY OPERATIONS.
14. LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH THE PROJECT AT ALL TIMES.
15. ALL PUBLIC AND PRIVATE STREETS AND DRIVES SHALL BE ACCESSIBLE AT ALL TIMES.
16. ALL BROKEN CONCRETE, WASTE MATERIAL, AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE DISPOSAL OF THIS MATERIAL.
17. ALL EXCAVATED MATERIAL NOT REQUIRED IN THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER WITHOUT COST TO THE CITY. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF ANY MATERIAL IS STORED ON THE PROJECT SITE AND/OR DISPOSED OF WITHIN THE CITY LIMITS.
18. ALL TREES, BRUSH AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER IS TO BE CLEANED OUT TO THE RIGHT-OF-WAY LINE IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK. TREES OUTSIDE THE FILL SLOPES AND THE TOP OF CUT SLOPES SHALL NOT BE DISTURBED EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.
19. WHERE MATERIALS ARE TRANSPORTED IN THE PROSECUTION OF WORK, VEHICLES SHALL NOT BE LOADED BEYOND THE CAPACITY RECOMMENDED BY THE VEHICLE MANUFACTURER OR AS PRESCRIBED BY ANY FEDERAL, STATE OR LOCAL LAW OR REGULATION.
20. ANY DAMAGE TO THE ROADWAY PAVEMENT, CURB, DRIVEWAYS OR SIDEWALK CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED TO THE ENGINEER'S SATISFACTION AND SHALL BE ACCOMPLISHED AT THE CONTRACTOR'S SOLE EXPENSE. ALL DISTURBED ITEMS SHALL BE REPAIRED TO MATCH EXISTING MATERIALS AND PATTERNING.
21. IF THE CONTRACTOR ENCOUNTERS VOIDS WHEN PATCHING STREETS, THE CONTRACTOR SHALL CALL FIELD ENGINEERING AT 918-596-7814 FOR AN INSPECTION BEFORE PROCEEDING WITH WORK.
22. THE PROJECT SHALL BE CONSTRUCTED WITH CONTINUOUS FLOW OF MATERIAL SUPPLIED TO THE PROJECT SUCH THAT THE LAYDOWN MACHINE WILL REMAIN IN MOTION. ANY DELAY IN FORWARD PROGRESSION OF THE LAYDOWN MACHINE MAY REQUIRE A TRANSVERSE JOINT AS DIRECTED BY THE ENGINEER.
23. NO FLY ASH IS ALLOWED TO BE USED ON THIS PROJECT.
24. PHYSICAL TESTING FOR QUALITY ASSURANCE SHALL BE FURNISHED BY THE CITY.
25. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY QUALITY CONTROL TESTING TO ENSURE THAT PROJECT REQUIREMENTS ARE MET.
26. MASONRY STRUCTURES SHALL NOT BE CONSTRUCTED WITHIN THE STREET RIGHT-OF-WAY.
27. ALL CONCRETE CURB AND GUTTERS SHALL BE MONOLITHIC POURS. DOWELED-ON CURBS WILL NOT BE ALLOWED.
28. NO LIFTING HOLES WILL BE ALLOWED ON ANY REINFORCED CONCRETE PIPES OR REINFORCED CONCRETE BOXES.
29. CURB RAMP CONSTRUCTION SHALL COMPLY WITH THE CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS.
30. REFLECTORIZED SHEETING ON SIGNS AND BARRICADES SHALL BE OF A CUBIC PRISMATIC TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE IX RETROREFLECTIVE SHEETING. REFLECTORIZED SHEETING ON DRUMS AND TUBE CHANNELIZERS SHALL BE OF A HIGH-INTENSITY TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE III RETROREFLECTIVE SHEETING.
31. ALL SANITARY AND STORM SEWER MANHOLE CASTINGS AND LIDS THAT ARE LOCATED IN THE STREET AND ARE DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH NEW LIDS AND CASTINGS AND THE OLD ONES SHALL BE SALVAGED AND DELIVERED TO THE METAL RECYCLE BINS IN THE STOCKROOM AREA AT SEWER OPERATIONS AND MAINTENANCE, 9319 E. 42ND STREET NORTH, BETWEEN THE HOURS OF 7:30 AM AND 3:00 PM MONDAY THROUGH FRIDAY.
32. THE SIGN PLACEMENT STATIONING AND LOCATIONS SHOWN ON THE PLAN SHEETS AND SUMMARY SHEETS ARE APPROXIMATE. EXACT STATIONING AND LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH CITY OF TULSA STANDARDS, CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES, OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.
33. POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE. EXACT LENGTHS SHALL BE DETERMINED BY A FIELD SURVEY CONDUCTED BY THE CONTRACTOR.
34. ALL ASPHALT STREETS THAT ARE TO BE RECONSTRUCTED SHALL BE LEFT WITH A DRIVABLE SURFACE AT ALL TIMES. THE CONTRACTOR WILL NOT BE ALLOWED TO MILL OFF ALL THE ASPHALT BEFORE EXCAVATION BEGINS.
35. THE CONTRACTOR SHALL REPLACE ANY SECTION CORNERS OR OTHER PERMANENT RIGHT OF WAY MARKERS REMOVED OR DISTURBED AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT. REPLACEMENT OF SECTION CORNERS OR ANY OTHER MONUMENTS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR AUTHORIZED TO PERFORM WORK IN THE STATE OF OKLAHOMA.

ROADWAY CONSTRUCTION NOTES (CONT.)

36. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL AND MAINTENANCE OF THE STORMWATER DRAINAGE. STORMWATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED.
37. STRAW OR HAY BALES AS STORMWATER BEST MANAGEMENT PRACTICES ARE NO LONGER ALLOWED ON CONSTRUCTION PROJECTS.
38. THE CONTRACTOR MUST CALL 1-800-458-4251 IMMEDIATELY IF A NATURAL GAS PIPELINE IS CUT, DAMAGED, OR OTHERWISE DISTURBED.
39. PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, OR OTHER DISFIGUREMENT.
40. ALL FEATURES OF THIS PROJECT INCLUDING, BUT NOT LIMITED TO, SIDEWALKS, CURB RAMPS, AND CROSSWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES, AND THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY, PUBLISHED ON JULY 26, 2011 BY THE U.S. ACCESS BOARD. WHERE SPATIAL LIMITATIONS OR EXISTING FEATURES WITHIN THE LIMITS OF THE PROJECT PREVENT FULL COMPLIANCE WITH THIS ACT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER UPON DISCOVERY OF SUCH FEATURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY ASPECT OF THE WORK, WHICH IS NOT IN FULL COMPLIANCE WITH THE ADA WITHOUR PRIOR WRITTEN APPROVAL FROM THE ENGINEER. ANY WORK WHICH IS NOT PERFORMED WITHIN THE GUIDELINES OF THE ADA, FOR WHICH THE CONTRACTOR DOES NOT HAVE WRITTEN APPROVAL, SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
41. ALL TRENCH WIDTHS & BEDDING MATERIAL SHALL BE AS SHOWN ON COT STANDARD PIPE BEDDING DETAIL, STANDARD NO. 751. SPECIFIED TRENCH WIDTHS SHALL BE MAINTAINED FULL DEPTH FROM THE FLOWLINE TO THE GRADING TEMPLATE. THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED.
42. THE CONTRACTOR SHALL NOTIFY THE METROPOLITAN TULSA TRANSIT AUTHORITY (MTTA), ERIC SMITH 918-830-0024, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK, LANE CLOSURES OR PRIOR TO DETOURING TRAFFIC.
43. CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN THE FLOOD PLAIN.
44. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ALL EXISTING NEIGHBORHOOD, MTTA,ECT. TRAFFIC SIGNS SHOWN TO BE REUSED DUE TO THEIR NEGLIGENCE.

WATER CONSTRUCTION NOTES

1. THE CITY OF TULSA FIELD ENGINEERING DEPARTMENT SHALL INSPECT ALL TRENCHING, BEDDING, PIPE INSTALLATION, BACKFILL AND COMPACTION.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT STANDARD SPECIFICATIONS AND STANDARD DETAILS, CITY OF TULSA ENGINEERING SERVICES DEPARTMENT.
3. EXISTING SERVICE CONNECTIONS ARE TO BE KEPT IN SERVICE UNTIL CONNECTIONS TO NEW MAIN ARE MADE. ALL SERVICE LINE RECONNECTIONS SHALL BE MADE BY THE CONTRACTOR. SERVICE RECONNECTIONS SHALL BE INSTALLED AS PER CITY OF TULSA STANDARD SPECIFICATIONS AND STANDARD DETAILS.
4. MINIMUM COVER OVER WATER LINES SHALL BE AS NOTED ON PLANS.
5. CONTRACTOR SHALL REPLACE EXISTING GRASS WITH SEED/SOD OF SAME TYPE AND VARIETY OR AS NOTED ON PLANS.
6. CONTRACTOR SHALL BORE EXISTING TREES UNDER DRIP LINE, UNLESS DIRECTED OTHERWISE BY ENGINEER.
7. CONTRACTOR SHALL BORE EXISTING DRIVEWAYS, UNLESS DIRECTED OTHERWISE BY ENGINEER.
8. CITY CREWS ONLY ARE TO OPERATE ALL VALVES. CONTRACTOR SHALL NOTIFY CITY THRU INSPECTOR.
9. CONTRACTOR SHALL PROVIDE AT LEAST 48 HOUR NOTICE TO ALL RESIDENTS OR BUSINESSES AFFECTED BEFORE TURNING OFF ANY WATER. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING DOOR HANGERS ON AFFECTED HOMES AND BUSINESSES.
10. CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF THE OKLAHOMA ONE-CALL SYSTEM, INC, NOTICE OF ANY EXCAVATION NO SOONER THAN 48 HOURS OR LATER THAN 10 DAYS, EXCLUDING SATURDAYS, SUNDAYS, LEGAL HOLIDAYS PRIOR TO COMMENCEMENT OF WORK, PHONE 1-800-522-6543.
11. LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH PROJECT AT ALL TIMES. OPEN CUT STREET CROSSINGS REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WITH TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH CURRENT MUTCD REQUIREMENTS.
12. ANY DAMAGE CAUSED BY CONTRACTOR TO ADJACENT TRAFFIC SIGNAL INFRASTRUCTURE SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE TRAFFIC ENGINEER.
13. PRIOR TO PAVEMENT SAWING AND EXCAVATION NEAR SIGNALIZED INTERSECTION, CONTRACTOR SHALL CONTACT ENGINEERING SERVICES, TRAFFIC OPERATIONS, 918-596-9766, FOR SITE SPECIFIC, UNDERGROUND TRAFFIC UTILITY LOCATES.
14. CONSTRUCTION FOR ALL ENGINEERING SERVICES FACILITIES SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF TITLE 252, DEPARTMENT OF ENVIRONMENTAL QUALITY, CHAPTER 626, PUBLIC WATER SUPPLY CONSTRUCTION STANDARDS, OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ).
15. ALL EXCAVATED MATERIAL NOT REQUIRED IN OTHER AREAS OF THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER WITHOUT COST TO THE CITY. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF ANY EXCESS MATERIAL IS TO BE DISPOSED OF WITHIN THE CITY LIMITS OF TULSA.
16. ANY CHANGES FROM APPROVED PLANS SHALL BE SUBMITTED TO THE CITY OF TULSA FOR WRITTEN APPROVAL PRIOR TO INSTALLATION.
17. WATER OPERATIONS SHALL OPERATE ALL VALVES ON TRANSMISSION MAINS (16" AND LARGER). CONTRACTOR SHALL OPERATE ALL VALVES ON DISTRIBUTION MAINS (SMALLER THAN 16") WITH THE COORDINATION OF FIELD ENGINEERING AND WATER OPERATIONS AND IN THE PRESENCE OF A FIELD ENGINEERING INSPECTOR.
    A. ATTEMPTS WILL BE MADE WITH ASSISTANCE FROM THE CONTRACTOR TO NOTIFY ALL AFFECTED CUSTOMERS 48-HOURS IN ADVANCE PARTICULARLY IF COMMERCIAL OR INDUSTRIAL CUSTOMERS ARE INVOLVED. PRIOR TO SHUTDOWN, FIELD ENGINEERING WILL NOTIFY WATER OPERATIONS, AT 918-596-9488, GIVING AN ESTIMATED DOWNTIME, WATER OPERATIONS WILL NOTIFY THE FIRE DEPARTMENT OF ALL FIRE HYDRANTS OUT OF SERVICE AND WHEN THEY ARE BACK IN SERVICE, BY STREET ADDRESS OR INTERSECTION.
    B. WHERE COMMERCIAL, INDUSTRIAL, OR CRITICAL CUSTOMERS ARE AFFECTED, AND FOR ALL LINES 16-INCH AND LARGER IN SIZE, FIELD ENGINEERING WILL REQUEST WATER OPERATIONS TO SHUT DOWN THE MAIN. THERE WILL BE A MINIMUM OF 48-HOUR NOTICE TO WATER OPERATIONS.

BEFORE YOU DIG
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CALL OKIE

CONSTRUCTION & TRAFFIC CONTROL NOTES							
PROJECT NO. 144642 MZ 6142							
NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142							
CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT							
REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
			NOT TO SCALE	DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.	JB	2/19	
			HORIZONTAL:	LEAD ENGR.	DJ	3/19	
				FIELD MGR.	CBV	4/19	
			VERTICAL	RECOMMENDED: HAS 4·19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO:	301			SHEET 5 OF 52 SHEETS

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PAY ITEMS						PAY ITEMS BY STREET						
ITEM	SPEC. NO.	DESCRIPTION	PAY ITEM NOTE	UNIT	TOTAL QUANTITY	E. 23RD ST.	S. 130TH E. AVE.	S. 131ST E. AVE. (S)	S. 131ST E. AVE. (N)	S. 132ND E. AVE.	S. 133RD E. AVE. (S)	S. 133RD E. AVE. (N)
1	201(A)	CLEARING AND GRUBBING	1,48,51	ACRE	0.5							
2	202(A)	UNCLASSIFIED EXCAVATION	2,10,40,60	CY	3241	2023	95	114	522	200	102	184
3	221(C)	TEMPORARY SILT FENCE	12,61	LF	300	200	20	10	20	20	10	20
4	221(K)	TEMPORARY FIBER LOG	12,61	LF	170	70	20	20	10	10	20	20
5	230(A)	SOLID SLAB SODDING	13,14,15	SY	2698	1211	330	94	329	316	93	325
6	303(A)	AGGREGATE BASE TYPE A	2,3,4	CY	3032	1864	95	105	488	200	95	184
7	310(B)	SUBGRADE METHOD B	2	SY	10371	6549	198	367	1952	508	331	466
8	325	SEPARATOR FABRIC	2,5	SY	12963	8186	247	459	2440	634	414	583
9	409	FABRIC REINFORCEMENT	8	SY	4118	0	1369	0	0	1369	0	1380
10	411(B)	SUPERPAVE, TYPE S3 (PG 64-22)	16,17,18,50	TON	1731	1266	0	65	339	0	60	0
11	411(C)	SUPERPAVE, TYPE S4 (PG 64-22) INSOLUBLE	16,17,18,50	TON	1106	507	138	26	136	138	24	139
12	411(D)	SUPERPAVE, TYPE S5 (PG 64-22)	16,17,18,19,50	TON	207	0	69	0	0	69	0	69
13	412	COLD MILL PAVEMENT	6	SY	3698	0	1228	0	0	1232	0	1238
14	509(B)	CLASS A CONCRETE	20,23	CY	18	18	0	0	0	0	0	0
15	609(B)	COMBINED CURB AND GUTTER (6" BARRIER)	3,20,22,23,24	LF	2547	1940	51	16	95	195	18	232
16	610(A)	4" CONCRETE SIDEWALK	20,23,24,25	SY	2760	1247	340	88	338	321	85	341
17	610(B)	6" CONCRETE DRIVEWAY (H.E.S.)	20,23,24,25	SY	2067	956	266	52	207	281	45	260
18	610(I)	TACTILE WARNING DEVICE		SF	176	176	0	0	0	0	0	0
19	611(G)	INLET DESIGN NO. 2, COMPLETE IN PLACE	26,31,32,33,34,35,56	EA	9	3	2	0	2	1	0	1
20	611(G)	INLET DESIGN NO. 2(A), COMPLETE IN PLACE	26,31,32,33,34,35,56	EA	2	2	0	0	0	0	0	0
21	612(A)	MANHOLE ADJUSTED TO GRADE (PUBLIC)	20,21,26,27,28	EA	6	5	1	0	0	0	0	0
22	612(E)	VALVE BOXES ADJUSTED TO GRADE	20,21,27,28	EA	2	2	0	0	0	0	0	0
23	613(A)	RCP, 18 INCH ROUND, COMPLETE IN PLACE	30,32,45	LF	55	35	10	0	5	5	0	0
24	619(B)	REMOVAL OF EXISTING DRIVEWAYS	10,21,63,65,53	SY	2067	956	266	52	207	281	45	260
25	619(B)	REMOVAL OF EXISTING PAVEMENT	10,21,63,65,53	SY	6181	4523	0	232	1210	0	216	0
26	619(B)	REMOVAL OF EXISTING CURB AND GUTTER	10,21,63,65,53	LF	2547	1940	51	16	95	195	18	232
27	619(B)	REMOVAL OF EXISTING SIDEWALK	10,21,63,66,53	SY	2760	1247	340	88	338	321	85	341
28	641	MOBILIZATION	58	EA	1							
29	642	CONSTRUCTION STAKING	7,47	EA	1							
30	850(A)	SHEET ALUMINUM SIGN	37	SF	53	53	0	0	0	0	0	0
31	851(B)	1 1/2" SQUARE TUBE		LF	14	14	0	0	0	0	0	0
32	851(C)	1 3/4" SQUARE TUBE		LF	70	70	0	0	0	0	0	0
33	851(D)	2 " SQUARE TUBE		LF	15	15	0	0	0	0	0	0
34	880(B)	SIGNS 0.00 TO 6.25 SF	37,38,46	SD	1920							
35	880(B)	SIGNS 6.26 TO 15.99 SF	37,38,46	SD	1920							
36	880(B)	SIGNS 16.00 AND UP	37,38,46	SD	1920							
37	880(C)	BARRICADES (TYPE III)	37,38,46	SD	3600							
38	880(E)	TYPE "A" WARNING LIGHT	38	SD	7200							
39	880(E)	TYPE "C" WARNING LIGHT	38	SD	3600							
40	880(F)	DRUMS	37,38,46	SD	1920							
41	880(G)	TUBE CHANNELIZERS	37,46	SD	500							
42	880(I)	FLAGGER	39	FD	100							
43	SPECIAL	PROJECT SIGN (CITY OF TULSA)	46	EA	1							
44	SPECIAL	TYPE I AC PATCH	9,19	CY	122	0	19	0	0	55	0	48
45	SPECIAL	CURB RAMP TYPE "A"		EA	10	10	0	0	0	0	0	0
46	SPECIAL	CURB RAMP TYPE "D"		EA	12	12	0	0	0	0	0	0
47	SPECIAL	URBAN RIGHT-OF-WAY RESTORATION	11,14,29,41,42,59	EA	1							
48	COT 202	QUICK SET FLOWABLE FILL	19,32	CY	82	37	5	3	10	13	2	12
49	SPECIAL	OWNER ALLOWANCE		ALLOW	1							

ROADWAY PAVING SUMMARY
PROJECT NO. 144642 MZ 6142
NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CCO	11/2014	APPROVED:
			NOT TO SCALE	DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.	JG	2/19	
			HORIZONTAL:	LEAD ENGR.	DJ	3/19	
				FIELD MGR.	RBW	4/19	
			VERTICAL	RECOMMENDED DESIGN MANAGER	HPH	4-19	CITY ENGINEER
			FILE:	DRAWING:			DATE: 6/23/20
			ATLAS PAGE NO: 301				SHEET 6 OF 52 SHEETS

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SUMMARY OF WATER LINE QUANTITIES					PER LINE			
ITEM NO.	SPEC NO.	DESCRIPTION	UNITS	TOTAL	LINE A	LINE B	LINE C	LINE D
50	COT 301	RIGHT-OF-WAY CLEARING AND RESTORING	SY	523	116	134	134	139
51	COT 302	EXCAVATION AND BACKFILL, UNCLASSIFIED	CY	507	129	122	128	128
52	COT 303	MOBILIZATION	EA	1	-	-	-	-
53	COT 304	CONSTRUCTION STAKING	EA	1	-	-	-	-
54	COT 307	8 INCH DIP, CL51 POLYETHYLENE WRAPPED, RJ	LF	105	8	38	29	30
55	COT 312	8 INCH DUCTILE IRON SLEEVE, RJ	EA	4	1	1	1	1
56	COT 312	8 INCH X 6 INCH DUCTILE IRON TEE, RJ	EA	4	1	1	1	1
57	COT 315	3/4" INCH WATER METER CAN, LID & RIM		33	8	8	9	8
58	COT 317	6 INCH GATE VALVE, RJ	EA	8	2	2	2	2
59	COT 317	3-WAY FIRE HYDRANT, IN PLACE	EA	4	1	1	1	1
60	COT 318	VALVE BOX	EA	8	2	2	2	2
61	COT 330	EROSION CONTROL (TEMPORARY SILT FENCE)	LF	60	15	15	15	15
62	COT 330	EROSION CONTROL (TEMPORARY FIBER LOG)	LF	48	12	12	12	12
63	SPECIAL	CONSTRUCTION AS-BUILT	EA	1	-	-	-	-
64	SPECIAL	OWNER ALLOWANCE	ALLOW	1	-	-	-	-

DIP AWWA C-151 CL51 PIPE (MATERIAL OPTION 1)								
65	COT 307	6 INCH DIP, CL51 POLYETHYLENE WRAPPED	LF	749	142	203	202	202
66	COT 307	6 INCH DIP, CL51 POLYETHYLENE WRAPPED, RJ	LF	1595	446	380	384	385
67	COT 312	6 INCH X 4 INCH DUCTILE IRON REDUCER, RJ	EA	4	1	1	1	1
68	COT 312	4 INCH DUCTILE IRON SLEEVE, RJ	EA	4	1	1	1	1
69	COT 312	6 INCH DUCTILE IRON PIPE 11-1/4 DEG BEND, RJ	EA	40	11	11	9	9
70	COT 312	6 INCH DUCTILE IRON PIPE 22-1/2 DEG BEND, RJ	EA	33	7	8	9	9
71	COT 312	6 INCH DUCTILE IRON PIPE 45 DEG BEND, RJ	EA	24	8	8	4	4
72	COT 312	6 INCH X 6 INCH DUCTILE IRON TEE, RJ	EA	4	1	1	1	1
73	COT 315	3/4" INCH WATER SERVICE CONNECTION (SHORT)	EA	33	8	8	9	8
74	COT 328	6 INCH BORE	LF	26	0	26	0	0

PVC AWWA C900 CLASS 200 DR-14 PIPE (MATERIAL OPTION 2)								
75	COT 309	6 INCH [illegible], PVC AWWA C900 CLAS 200 DR-14 ., RJ	LF	1595	446	380	384	385
76	COT 309	6 INCH PVC AWWA C900 CLASS 200 DR-14	LF	749	142	203	202	202
77	COT 312	6 INCH X 4 INCH DUCTILE IRON REDUCER, RJ	EA	4	1	1	1	1
78	COT 312	4 INCH DUCTILE IRON SLEEVE, RJ	EA	4	1	1	1	1
79	COT 312	6 INCH DUCTILE IRON PIPE 11-1/4 DEG BEND, RJ	EA	40	11	11	9	9
80	COT 312	6 INCH DUCTILE IRON PIPE 22-1/2 DEG BEND, RJ	EA	33	7	8	9	9
81	COT 312	6 INCH DUCTILE IRON PIPE 45 DEG BEND, RJ	EA	24	8	8	4	4
82	COT 312	6 INCH X 6 INCH DUCTILE IRON TEE, RJ	EA	4	1	1	1	1
83	~~COT 312~~	~~6 INCH DUCTILE IRON TO 6IN PVC ADAPTOR, RJ~~	~~EA~~	~~16~~	~~4~~	~~2~~	~~2~~	~~2~~
84	COT 315	3/4" INCH WATER SERVICE CONNECTION (SHORT)	EA	33	8	8	9	8
85	COT 328	6 INCH BORE	LF	26	0	26	0	0

HDPE AWWA C906 PE4710 DR-11 (DIPS) PIPE (MATERIAL OPTION 3)								
86	COT 307	6 INCH DIP, CL51 POLYETHYLENE WRAPPED, RJ	LF	32	8	8	8	8
87	COT 309	8 INCH HDPE AWWA C906 PE4710 DR-11 (DIPS)	LF	2312	580	575	578	579
88	COT 312	4 INCH DUCTILE IRON SLEEVE, RJ	EA	4	1	1	1	1
89	COT 312	6 INCH DUCTILE IRON SLEEVE, RJ	EA	4	1	1	1	1
90	COT 312A	8 INCH HDPE 45 DEG BEND, RJ	EA	24	8	8	4	4
91	COT 312A	8 INCH X 8 INCH HDPE TEE (DIPS), RJ	EA	4	1	1	1	1
92	COT 312A	HDPE ANCHOR, COMPLETE IN PLACE	EA	8	2	2	2	2
93	COT 312A	8 INCH X 4 INCH DUCTILE IRON, REDUCER, RJ	EA	4	1	1	1	1
94	COT 312A	8 INCH X 6 INCH DUCTILE IRON, REDUCER, RJ	EA	12	3	3	3	3
95	COT 312A	86 INCH HDPE MJ ADAPTOR (DIPS) (RJ)	EA	8	2	2	2	2
96	COT 315	3/4" INCH WATER SERVICE CONNECTION (SHORT)	EA	33	8	8	9	8
97	COT 328	8 INCH BORE	LF	26	0	86	0	0

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WATERLINE SUMMARY

PROJECT NO. 144642 MZ 6142

ZONE 6142

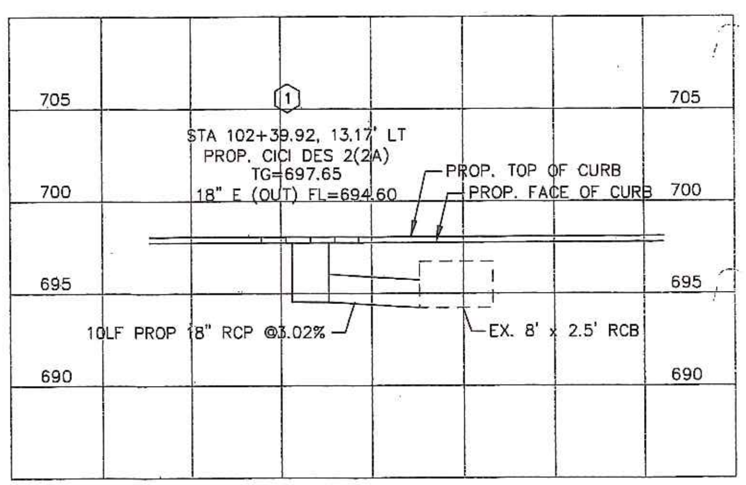
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
REV. PAY ITEMS	KS	9/19		DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.	JB	2/19	
			HORIZONTAL:	LEAD ENGR.			
				FIELD MGR.	[illegible]	4/19	
			VERTICAL	RECOMMENDED: HAS 4·19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO:	301			SHEET 7 OF 52 SHEETS

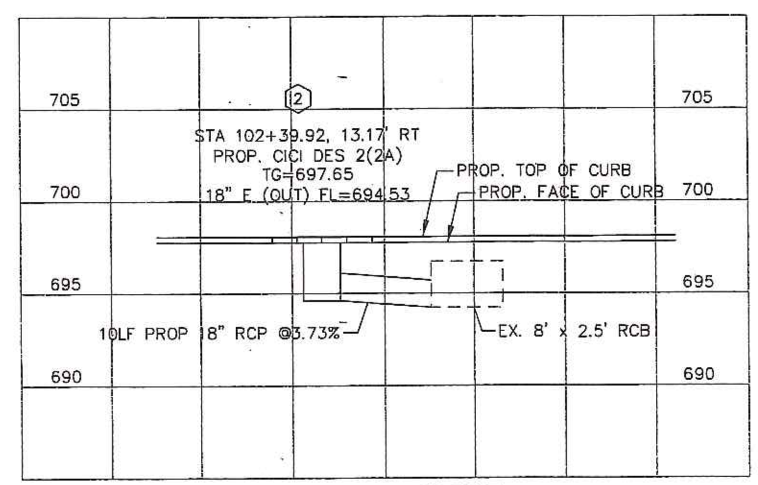
SUMMARY OF STORM SEWER STRUCTURES

NO.	STREET	STA.	OFFSET	EXISTNG STRUCTURE TYPE	PROPOSED STRUCTURE TYPE	EXISTING TOP ELEV.	PROPOSED TOP ELEV.	INCOMING PIPE 1	INCOMING PIPE 2	INCOMING PIPE 3	OUTGOING PIPE
1	E. 23rd Street	102+39.92	13' L	CICI DES 1	CICI DES 2(2A)	697.30	697.65	-	-	-	15" SE 694.60
2	E. 23rd Street	102+39.92	13' R	CICI DES 1	CICI DES 2(2A)	697.28	697.65	-	-	-	15" NE 694.53
3	E. 23rd Street	102+55.88	1' R	STMH #528	ADJUSTED TO GRADE	697.97	698.07	15" NW	15" SW	24" E	8X2.5 RCB N 694.52
4	E. 23rd Street	104+81.14	13' L	CICI DES 1	CICI DES 2	698.53	698.40	-	-	-	18" S 696.33
5	E. 23rd Street	104+82.94	0' R	STMH #529	ADJUSTED TO GRADE	699.24	699.24	15" N 695.89	24" E 695.59	-	24" W 695.59
6	E. 23rd Street	106+26.54	0' L	STMH #530	ADJUSTED TO GRADE	700.46	700.42	18" S 696.56	24" E 696.21	-	24" W 696.21
7	E. 23rd Street	106+29.00	13' R	CICI DES 1	CICI DES 2	699.80	699.90	-	-	-	18" N 697.10
8	E. 23rd Street	107+73.89	0' L	STMH #531	ADJUSTED TO GRADE	702.32	702.48	18" NE 697.47	15" E 697.22	-	24" W 697.22
9	E. 23rd Street	111+41.47	0' L	STMH #532	ADJUSTED TO GRADE	709.57	710.04	15" N 705.52	15" E 705.52	-	18" W 705.52
10	E. 23rd Street	111+43.46	13' L	CICI DES	CICI DES 2	708.97	709.30	-	-	-	18" S 705.87
11	E. 23rd Street	114+09.99	0' L	STMH #533	ADJUSTED TO GRADE	717.00	717.17	18" NE 712.08	-	-	15" W 712.08
12	S. 130th E. Ave.	201+93.93	13' L	CICI DES 2	CICI DES 2	698.46	698.46	18" E 695.16	-	-	18" W 695.16
13	S. 130th E. Ave.	201+94.53	13' R	CICI DES 2	CICI DES 2	698.38	698.38	-	-	-	18" W 695.57
14	S. 131st E. Ave.	401+39.91	13' R	CICI DES 1	CICI DES 2	701.51	701.49	-	-	-	18" SW 698.26
15	S. 131st E. Ave.	403+67.95	34' L	CICI DES 2	CICI DES 2	701.50	701.50	-	-	-	12" NE 699.55
16	S. 132nd E. Ave.	503+69.33	33' L	CICI DES 2	CICI DES 2	705.67	705.67	-	-	-	15" NE 702.32
17	S. 133rd E. Ave.	700+39.64	13' R	CICI DES 2	CICI DES 2	717.94	717.73	-	-	-	18" SW 714.04

*Please note the scope of this project did not include the replacement of the storm water trunk lines only the inlets and feed lines were sized and replaced as needed.



E. 23RD STREET



E. 23RD STREET

H:\303859 Consultant Mgmt\303859-12 144642\CD\DRAWINGS\02_Final\08_Structures_Summary.dgn

2/20/2019

SUMMARY OF STRUCTURES

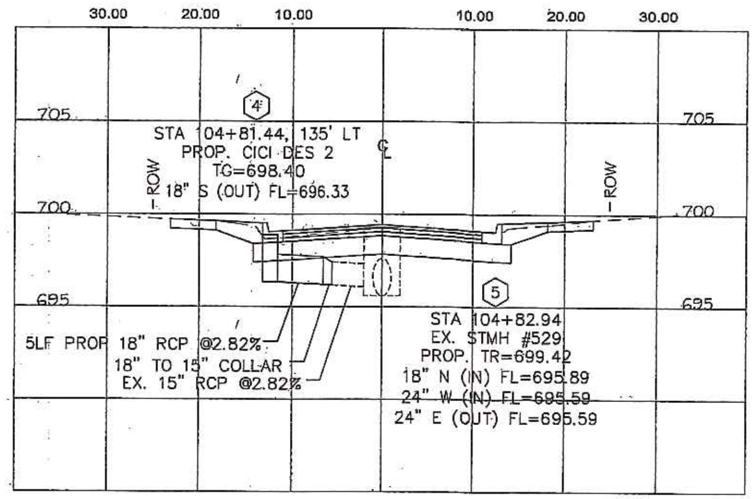
PROJECT NO. 144642 MZ 6142

NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142

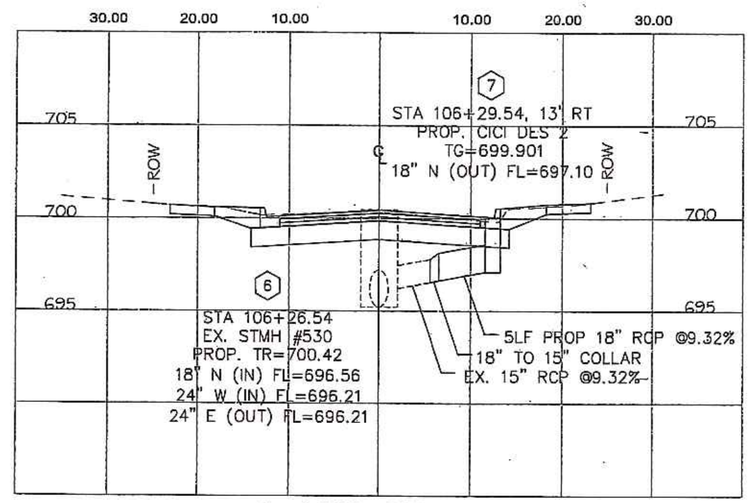
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

CG 3/19

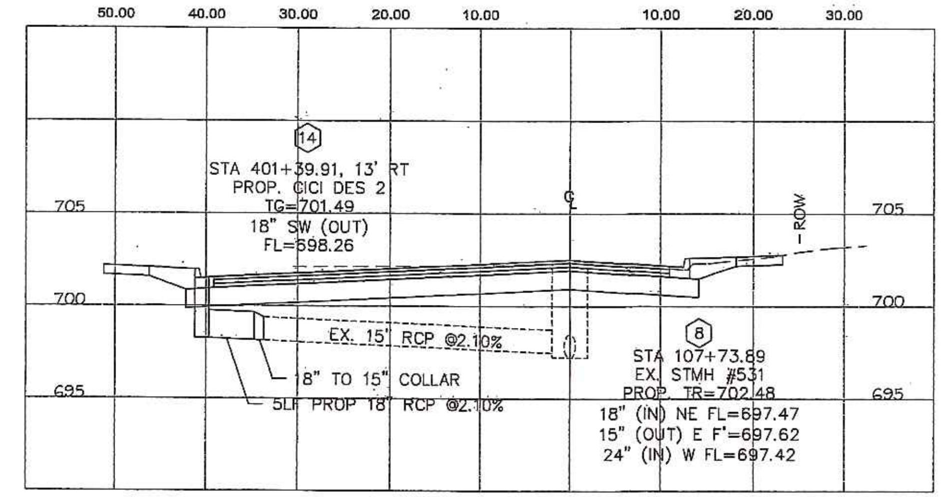
REVISION	BY	DATE					
			PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
			NOT TO SCALE	DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.	JA	2/19	
			HORIZONTAL:	LEAD ENGR.	BDL	3/19	
				FIELD MGR.	KSV	4/19	
			VERTICAL	RECOMMENDED: HAS 4·19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO: 301				SHEET 8 OF 52 SHEETS



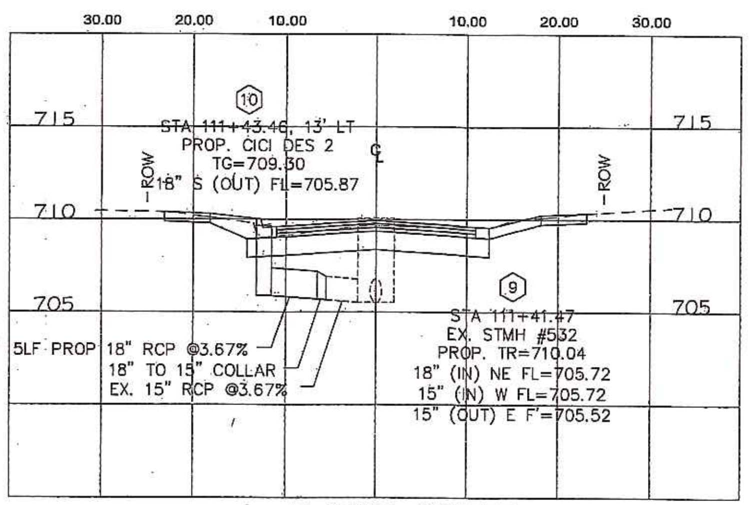
E. 23RD STREET



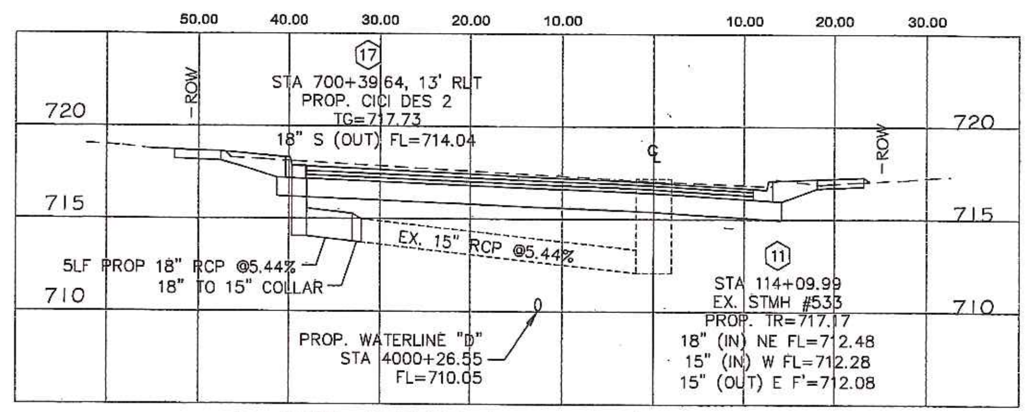
E. 23RD STREET



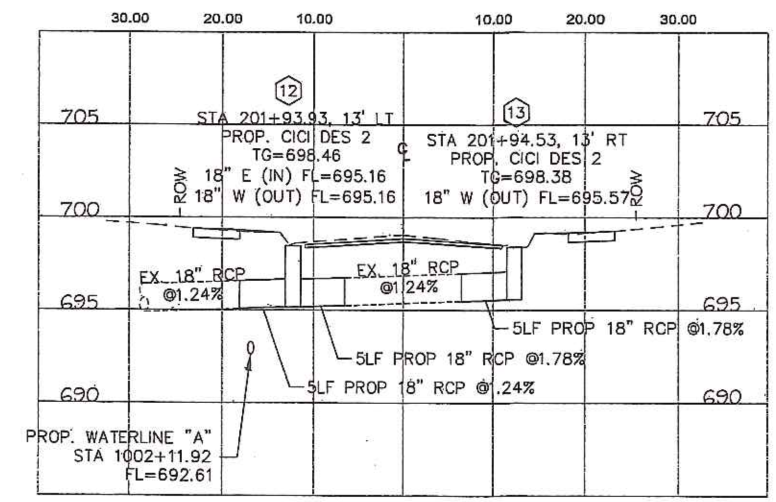
E. 23RD STREET AND S. 131ST E. AVE.



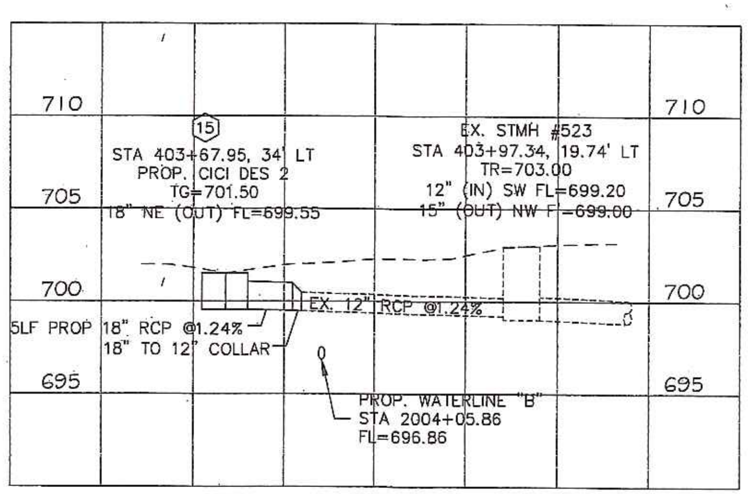
E. 23RD STREET



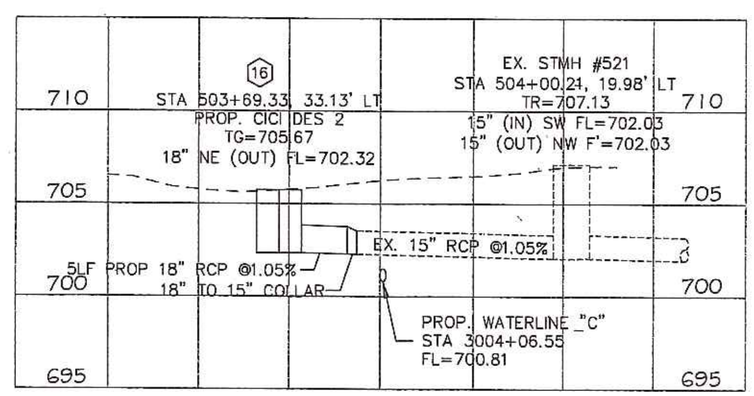
E. 23RD STREET AND S. 133RD E. AVE.



S. 130TH E. AVE.



S. 131ST E. AVE.



S. 132ND E. AVE.

BEFORE YOU DIG
811
CALL OKIE

STORMWATER PROFILES
PROJECT NO. 144642 ZONE 6142
NON-ARTERIAL STREET MAINTENANCE
FOR ZONE 6142
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
			NOT TO SCALE	DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.		2/19	
			HORIZONTAL: 1" = 10'	LEAD ENGR.		3/19	
				FIELD MGR.		4/19	
			VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HAS	4.19	CITY ENGINEER
			FILE:	DRAWING:			DATE: 6/23/20
			ATLAS PAGE NO: 301				SHEET 9 OF 52 SHEETS

MAINTENANCE ZONE 6142 DRIVEWAY REMOVAL & REPLACEMENT SCHEDULE

SHEET	DRIVEWAY CONSTRUCTION PHASE	ROADWAY CENTERLINE STA.	SIDE OF STREET	RADIUS UP STA.	RADIUS DOWN STA.	WIDTH (FT)	DEPTH (FT)	CONC AREA (SY)	AGG AREA (CY)	EXISTING SLOPE %	PROP. SLOPE %	DESCRIPTION	ADDRESS
19	Roadway	100+08.07	R	5	5	10	12	17	3	7.76	8.34	Concrete	12902 E. 23rd St.
19	Roadway	100+15.77	L	5	5	20	13	33	5	5.62	7.24	Concrete	12901 E. 23rd St.
19	Roadway	100+78.69	R	5	5	10	12	18	3	8.62	5.87	Concrete	12908 E. 23rd St.
19	Roadway	100+85.79	L	5	5	17	13	28	5	10.00	8.21	Concrete	12907 E. 23rd St.
19	Roadway	101+41.93	L	5	5	10	13	17	3	6.08	7.96	Concrete	12911 E. 23rd St.
19	Roadway	101+44.03	R	5	5	18	12	29	5	7.08	8.52	Concrete	12912 E. 23rd St.
19	Roadway	102+06.80	R	5	5	18	12	29	5	10.84	10.69	Concrete	12918 E. 23rd St.
19	Roadway	102+09.53	L	5	5	18	13	28	5	10.96	9.95	Concrete	12917 E. 23rd St.
19	Roadway	102+67.35	R	5	5	18	12	28	5	13.92	10.11	Concrete	12922 E. 23rd St.
19	Roadway	102+75.05	L	5	5	18	13	29	5	8.12	9.39	Concrete	12921 E. 23rd St.
19	Roadway	103+27.96	R	5	5	18	12	28	5	12.76	11.13	Concrete	12928 E. 23rd St.
19	Roadway	103+53.60	L	5	5	18	12	28	5	7.06	8.14	Concrete	12927 E. 23rd St.
19	Roadway	103+91.88	R	5	5	18	12	27	5	8.77	9.04	Concrete	12932 E. 23rd St.
20	Roadway	104+52.58	R	5	5	19	12	24	4	8.88	6.99	Concrete	13002 E. 23rd St.
20	Roadway	104+96.71	L	5	5	18	12	28	5	10.44	8.03	Concrete	13005 E. 23rd St.
20	Roadway	105+56.39	L	5	5	10	12	17	3	11.49	8.25	Concrete	13009 E. 23rd St.
20	Roadway	106+30.55	L	5	5	18	12	28	5	10.05	9.23	Concrete	13103 E. 23rd St.
20	Roadway	106+92.21	L	5	5	18	12	28	5	8.01	5.72	Concrete	13109 E. 23rd St.
20	Roadway	106+96.34	R	5	5	15	12	24	4	7.97	6.46	Concrete	13108 E. 23rd St.
20	Roadway	107+61.72	R	5	5	18	12	28	5	7.87	7.83	Concrete	13112 E. 23rd St.
20	Roadway	108+16.93	R	5	5	10	12	17	3	8.22	6.56	Concrete	13118 E. 23rd St.
20	Roadway	108+27.45	L	5	5	18	12	28	5	10.95	6.86	Concrete	13119 E. 23rd St.
20	Roadway	108+79.74	R	5	5	10	12	17	3	8.44	7.06	Concrete	13122 E. 23rd St.
20	Roadway	108+88.96	L	5	5	18	12	28	5	11.61	9.53	Concrete	13123 E. 23rd St.
21	Roadway	109+46.10	R	5	5	18	12	28	5	12.00	12.78	Concrete	13128 E. 23rd St.
21	Roadway	109+54.76	L	5	5	10	12	17	3	15.00	11.42	Concrete	13129 E. 23rd St.
21	Roadway	110+03.35	R	10	3	10	12	17	3	16.00	10.74	Concrete	13132 E. 23rd St.
21	Roadway	110+25.44	L	5	5	18	11	26	4	8.23	6.70	Concrete	13133 E. 23rd St.
21	Roadway	110+65.62	R	5	5	10	12	17	3	10.25	11.21	Concrete	13138 E. 23rd St.
21	Roadway	111+34.74	R	5	5	18	12	28	5	9.63	11.92	Concrete	13202 E. 23rd St.
21	Roadway	111+54.84	L	5	5	10	12	17	3	11.81	7.01	Concrete	13203 E. 23rd St.
21	Roadway	112+17.91	L	5	5	18	12	28	5	9.55	7.97	Concrete	13209 E. 23rd St.
21	Roadway	112+88.61	L	5	5	18	12	28	5	13.56	9.98	Concrete	13303 E. 23rd St.
21	Roadway	113+53.55	L	5	5	18	12	28	5	15.00	11.95	Concrete	13309 E. 23rd St.
21	Roadway	113+93.39	R	5	5	18	12	28	5	7.45	9.48	Concrete	13312 E. 23rd St.
22	Roadway	114+74.03	R	5	5	18	12	28	5	3.85	9.27	Concrete	13316 E. 23rd St.
22	Roadway	114+80.98	L	5	5	10	12	17	3	14.24	14.99	Concrete	13319 E. 23rd St.
22	Roadway	115+41.20	R	5	5	10	12	17	3	15.24	6.64	Concrete	13322 E. 23rd St.
22	Roadway	115+44.63	L	5	5	16	12	25	4	13.37	13.40	Concrete	13323 E. 23rd St.
23	Roadway	201+77.07	L	5	5	10	12	17	3	11.28	*	Concrete	2220 S. 130th E. Ave.
23	Roadway	201+78.93	R	5	5	10	12	17	3	7.93	*	Concrete	2219 S. 130th E. Ave.
23	Roadway	202+34.34	L	5	5	15	12	24	4	10.99	*	Concrete	2216 S. 130th E. Ave.
23	Roadway	202+39.08	R	5	5	11	12	17	3	10.37	*	Concrete	2215 S. 130th E. Ave.
23	Roadway	202+94.37	L	5	5	19	12	31	5	8.45	*	Concrete	2210 S. 130th E. Ave.
23	Roadway	202+96.27	R	5	5	19	12	30	5	8.37	*	Concrete	2209 S. 130th E. Ave.
23	Roadway	203+52.38	R	5	5	18	12	26	4	9.37	*	Concrete	2205 S. 130th E. Ave.
23	Roadway	203+53.90	L	5	5	18	12	25	4	10.47	*	Concrete	2206 S. 130th E. Ave.
23	Roadway	203+86.47	L	5	5	18	12	25	4	10.85	*	Concrete	2204 S. 130th E. Ave.
23	Roadway	203+92.78	L	5	5	10	12	14	2	10.55	*	Concrete	2201 S. 130th E. Ave.
23	Roadway	203+86.52	R	5	5	18	12	26	4	8.45	*	Concrete	2203 S. 130th E. Ave.
24	Roadway	300+77.81	R	5	5	18	12	26	4	9.09	*	Concrete	2303 S. 131st E. Ave.
24	Roadway	300+77.86	L	5	5	18	12	26	4	11.07	*	Concrete	2302 S. 131st E. Ave.
25	Roadway	401+72.61	L	5	5	18	12	27	5	10.63	*	Concrete	2220 S. 131st E. Ave.
25	Roadway	401+74.39	R	5	5	19	12	29	5	9.23	*	Concrete	2219 S. 131st E. Ave.
25	Roadway	402+34.65	L	5	5	18	12	28	5	7.06	*	Concrete	2216 S. 131st E. Ave.
25	Roadway	402+39.04	R	5	5	10	12	17	3	10.51	*	Concrete	2215 S. 131st E. Ave.
25	Roadway	402+94.94	R	5	5	19	12	31	5	10.91	*	Concrete	2209 S. 131st E. Ave.
25	Roadway	402+98.88	L	5	5	11	12	20	3	8.34	*	Concrete	2210 S. 131st E. Ave.
25	Roadway	403+51.86	L	5	5	18	12	26	4	9.93	*	Concrete	2206 S. 131st E. Ave.
25	Roadway	403+57.11	R	5	5	10	12	16	3	11.24	*	Concrete	2205 S. 131st E. Ave.
25	Roadway	403+86.52	L	5	5	19	12	25	4	7.98	*	Concrete	2204 S. 131st E. Ave.
25	Roadway	403+93.14	L	5	5	11	12	16	3	9.87	*	Concrete	2201 S. 131st E. Ave.
25	Roadway	403+84.89	R	5	5	18	12	27	4	11.5	*	Concrete	2203 S. 131st E. Ave.
26	Roadway	501+73.07	R	5	5	18	12	27	5	14.58	*	Concrete	2219 S. 132nd E. Ave.
26	Roadway	501+79.61	L	5	5	10	12	16	3	7.64	*	Concrete	2220 S. 132nd E. Ave.
26	Roadway	502+33.11	R	5	5	18	12	27	5	11.46	*	Concrete	2215 S. 132nd E. Ave.
								1590	265				

* REPLACE AS EXISTING

MAINTENANCE ZONE 6142 DRIVEWAY REMOVAL & REPLACEMENT SCHEDULE (CONT.)

SHEET	DRIVEWAY CONSTRUCTION PHASE	ROADWAY CENTERLINE STA.	SIDE OF STREET	RADIUS UP STA.	RADIUS DOWN STA.	WIDTH (FT)	DEPTH (FT)	CONC AREA (SY)	AGG AREA (CY)	EXISTING SLOPE %	PROP. SLOPE %	DESCRIPTION	ADDRESS
26	Roadway	502+34.58	L	5	5	18	12	27	4	6.49	*	Concrete	2216 S. 132nd E. Ave.
26	Roadway	502+94.15	L	5	5	19	12	31	5	6.38	*	Concrete	2210 S. 132nd E. Ave.
26	Roadway	502+93.01	R	5	5	19	12	29	5	12.02	*	Concrete	2209 S. 132nd E. Ave.
26	Roadway	503+48.96	L	5	5	18	12	26	4	8.68	*	Concrete	2206 S. 132nd E. Ave.
26	Roadway	503+52.99	R	5	5	18	12	26	4	8.65	*	Concrete	2205 S. 132nd E. Ave.
26	Roadway	503+86.53	L	5	5	18	12	24	4	7.68	*	Concrete	2204 S. 132nd E. Ave.
26	Roadway	503+86.41	R	5	5	18	12	24	4	9.98	*	Concrete	2203 S. 132nd E. Ave.
26	Roadway	503+94.09	L	5	5	18	12	25	4	11.9	*	Concrete	2201 S. 132nd E. Ave.
27	Roadway	600+68.31	L	5	5	18	12	28	5	8.94 -	*	Concrete	2305 S. 133rd E. Ave.
27	Roadway	600+72.24	R	5	5	10	12	17	3	11.32	*	Concrete	2306 S. 133rd E. Ave.
28	Roadway	701+72.99	L	5	5	17	12	27	4	5.18	*	Concrete	2220 S. 133rd E. Ave.
28	Roadway	701+74.88	R	5	5	17	12	26	4	5.68	*	Concrete	2219 S. 133rd E. Ave.
28	Roadway	702+33.23	R	5	5	17	12	26	4	5.26	*	Concrete	2215 S. 133rd E. Ave.
28	Roadway	702+39.92	L	5	5	10	12	16	3	4.66	*	Concrete	2216 S. 133rd E. Ave.
28	Roadway	702+97.64	R	5	5	11	12	18	3	10.20	*	Concrete	2209 S. 133rd E. Ave.
28	Roadway	702+97.82	L	5	5	11	12	20	3	7.21	*	Concrete	2210 S. 133rd E. Ave.
28	Roadway	703+51.99	R	5	5	19	12	26	4	10.49	*	Concrete	2205 S. 133rd E. Ave.
28	Roadway	703+52.88	L	5	5	18	12	26	4	8.00	*	Concrete	2206 S. 133rd E. Ave.
28	Roadway	703+82.75	R	5	5	18	12	23	4	9.95	*	Concrete	2203 S. 133rd E. Ave.
28	Roadway	703+86.72	L	5	5	19	12	26	4	11.47	*	Concrete	2204 S. 133rd E. Ave.
28	Roadway	703+94.27	L	5	5	20	12	26	4	12.22	*	Concrete	2201 S. 133rd E. Ave.
								516	86				

* REPLACE AS EXISTING

POST-MOUNTED SIGN SUMMARY

POST #	STREET	LOCATION	SQUARE TUBE LENGTH (FT)			SIGN	DESCRIPTION	MUTCD	SIZE	AREA
			1-1/2"	1-3/4"	2"	I.D.		I.D.	(W X H, IN.)	S.F.
1	E. 23rd Street S.	100+00 LT		10	2.5	A	"STOP" Sign	R1-1	30 X 30	5.18
			2.0			B	Street Sign (S. 129th E. Ave.) x 2	C.O.T.	2@ 24X9	3.00
						B	Street Sign (E. 23rd Street S.) x 2	C.O.T.	2@ 4X9	3.00
							"Alert Neighbors"			
2	E. 23rd Street S.	104+68 LT	2.0	10		B	Street Sign (E. 23rd Street S.) x 2	C.O.T.	2@ 24X9	3.00
						B	Street Sign (S. 130th E. Ave.) x 2	C.O.T.	2@ 24X9	3.00
3	E. 23rd Street S.	106+22 RT	2.0	10	2.5	A	"NO OUTLET" Sign	R1-1	30 X 30	5.18
						B	Street Sign (E. 23rd Street S.) x 2	C.O.T.	2@ 24X9	3.00
						B	Street Sign (S. 131st E. Ave.) x 2	C.O.T.	2@ 24X9	3.00
							"Alert Neighbors"			
4	-E. 23rd Street S.	107+97 LT	2.0	10	2.5	B	Street Sign (E. 23rd Street S.) x 2	C.O.T.	2@ 24X9	3.00
						B	Street Sign (S. 131st E. Ave.) x 2	C.O.T.	2@ 24X9	3.00
							"Alert Neighbors"			
5	E. 23rd Street S.	111+29 LT	2.0	10	2.5	B	Street Sign (E. 23rd Street S.) x 2	C.O.T.	2@ 24X9	3.00
						B	Street Sign (S. 132nd E. Ave.) x 2	C.O.T.	2@ 24X9	3.00
6	E. 23rd Street S.	112+94 RT	2.0	10	2.5	B	Street Sign (E. 23rd Street S.) x 2	C.O.T.	2@ 24X9	3.00
						B	Street Sign (S. 133rd E. Ave.) x 2	C.O.T.	2@ 24X9	3.00
7	E. 23rd Street S.	114+60 LT	2.0	10	2.5	B	Street Sign (E. 23rd Street S.) x 2	C.O.T.	2@ 24X9	3.00
						B	Street Sign (S. 133rd E. Ave.) x 2	C.O.T.	2@ 24X9	3.00
TOTALS			14	70	15					52.36

TREES TO BE REMOVED

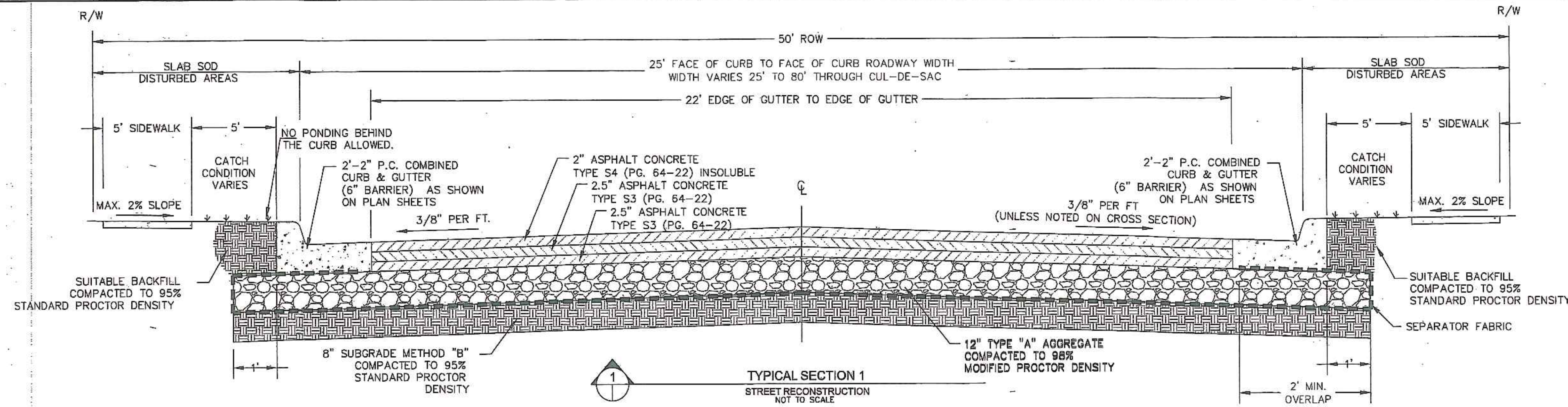
STA.	ADDRESS	DISTANCE FROM BACK OF CURB	TREE SIZE	DESIGNATED
111+38	13203 E. 23RD STREET	APPROX. 11'	25"	MARKED WITH GREEN "X"

LIGHTPOLES TO BE RELOCATED

STA.	ADDRESS	DISTANCE FROM CENTERLINE
104+62	13005 E. 23RD STREET	27.5' LT
107+91	13119 E. 23RD STREET	29.6' LT

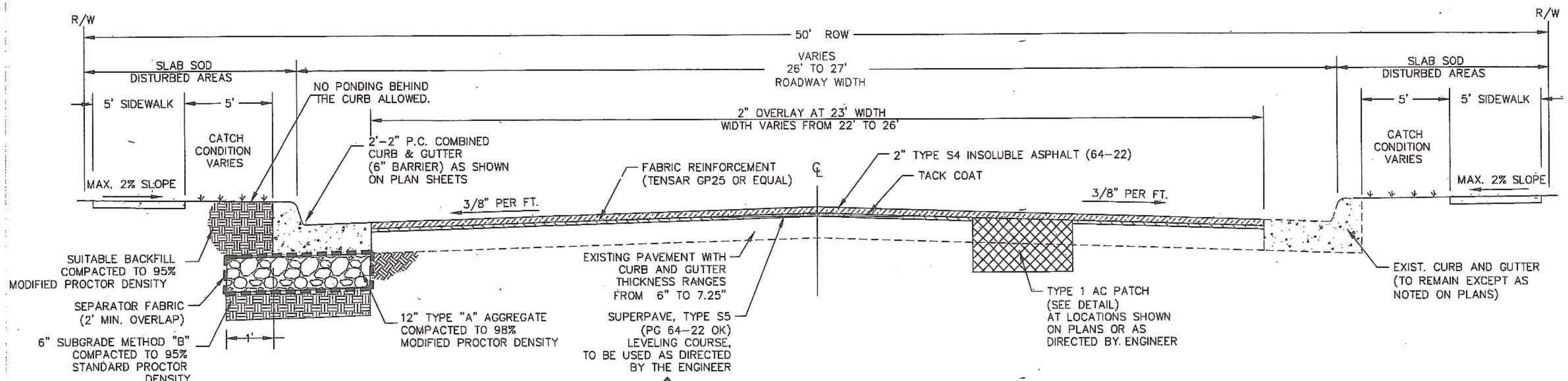
MISCELLANEOUS SUMMARIES
PROJECT NO. 144642 MZ 6142
NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE: NOT TO SCALE				APPROVED:
				DRAWN	CGD	11/2014	
				DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.	JB	2/19	
			HORIZONTAL:	LEAD ENGR.	(D)	3/19	
				FIELD MGR.	BV	4/19	
			VERTICAL	RECOMMENDED: HAS 4-19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO: 301				SHEET 10 OF 52 SHEETS



TYPICAL SECTION 1
STREET RECONSTRUCTION
NOT TO SCALE

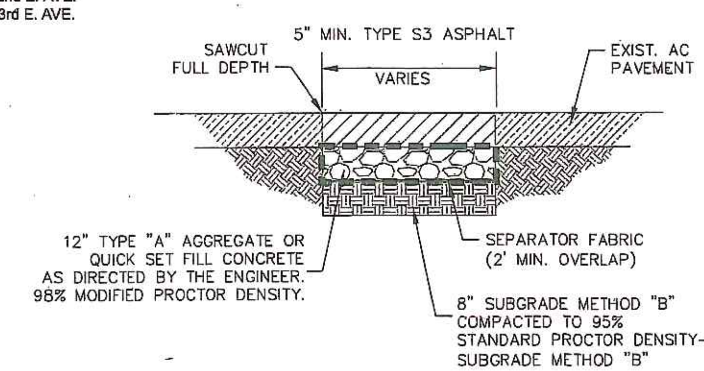
STA. 100+00.00 TO STA. 115+81.68 E. 23rd ST. S.
STA. 300+00.00 TO STA. 301+00.11 S. 131st E. AVE.
STA. 400+38.15 TO STA. 403+84.27 S. 131st E. AVE.
STA. 600+00.00 TO STA. 600+90.97 S. 133rd E. AVE.



TYPICAL SECTION 2
ASPHALTIC CONCRETE MILL AND
OVERLAY OF EXISTING AC PAVEMENT
NOT TO SCALE

STA. 200+38.67 TO STA. 203+46.22 S. 130th E. AVE.
STA. 500+38.22 TO STA. 503+84.17 S. 132nd E. AVE.
STA. 700+38.50 TO STA. 703+46.35 S. 133rd E. AVE.

BEFORE YOU DIG
811
CALL OKIE



TYPE 1 AC PATCH
NON-ARTERIAL
NOT TO SCALE

TYPICAL SECTIONS & DETAILS (1)
PROJECT NO. 144642 ZONE 6142
NON-ARTERIAL STREET MAINTENANCE
FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CCQ	11/2014	APPROVED:
			NOT TO SCALE	DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.		2/19	
			HORIZONTAL:	LEAD ENGR.		3/19	
				FIELD MGR.		4/19	
			VERTICAL	RECOMMENDED: DESIGN MANAGER	HRS	4-19	CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO:	301			SHEET 11 OF 52 SHEETS

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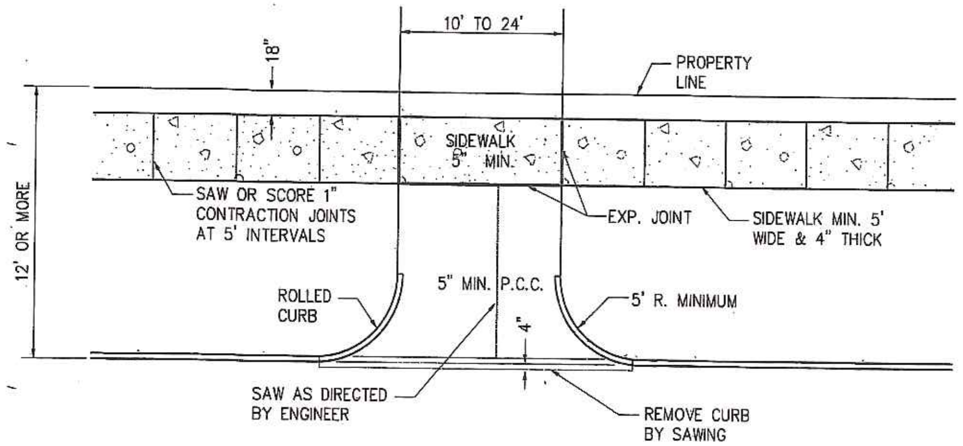
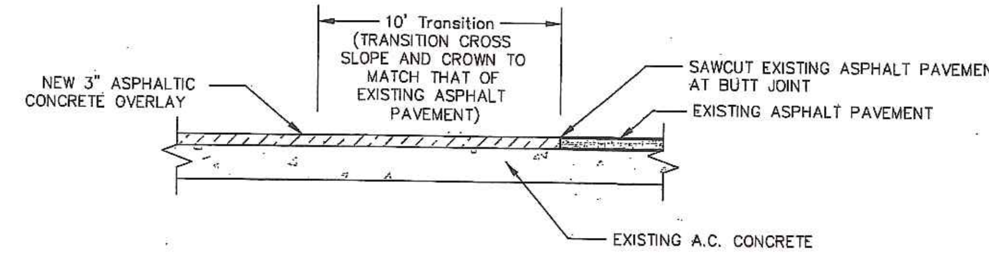
2/20/2019

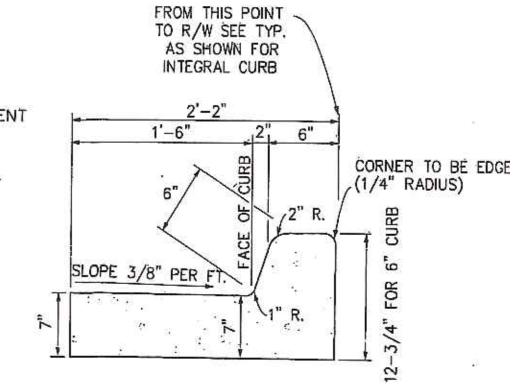


TYPICAL DRIVEWAY DEPTH



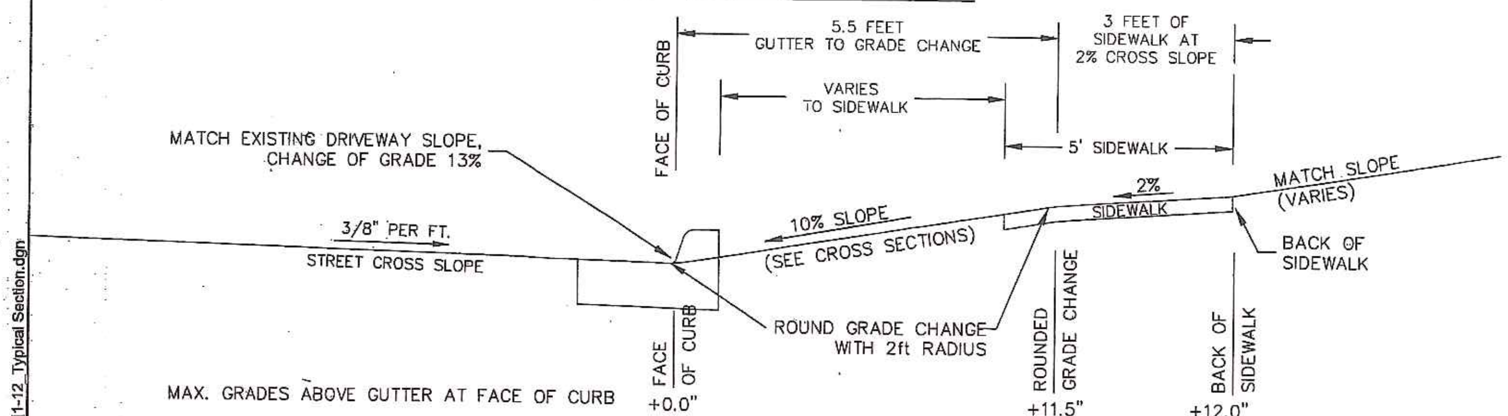
BUTT JOINT DETAIL ON SECONDARY STREETS

TYPICAL PAVEMENT SECTION
NOT TO SCALE



2'-2" CURB AND GUTTER

6" BARRIER TYPE
NOT TO SCALE

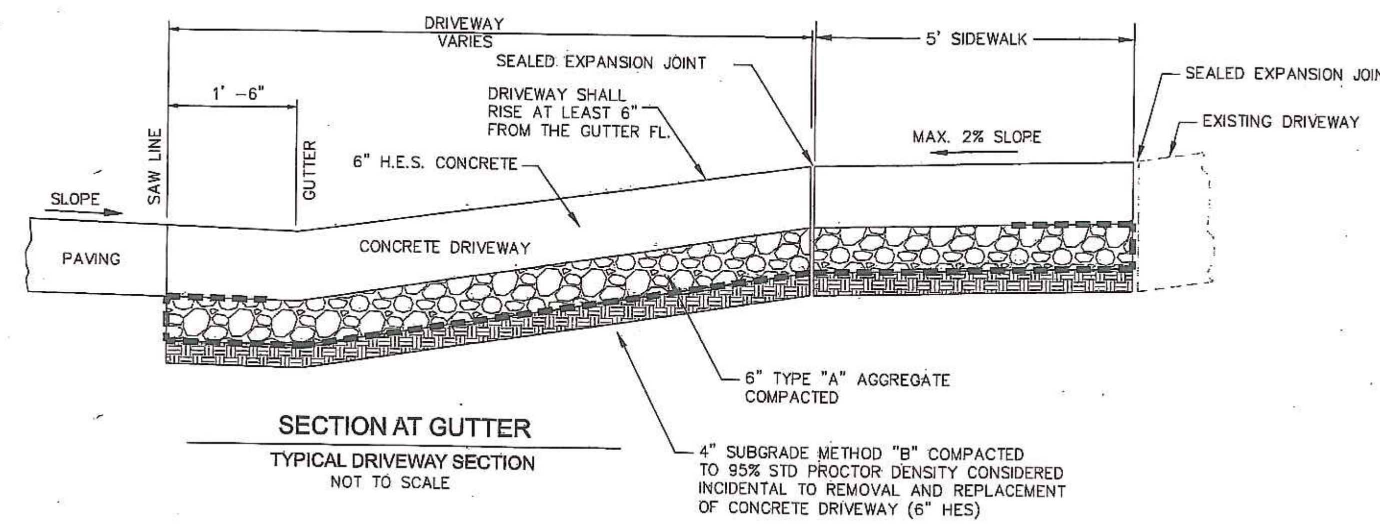


TYPICAL SECTION STEEP DRIVEWAY SMOOTHING

NOT TO SCALE

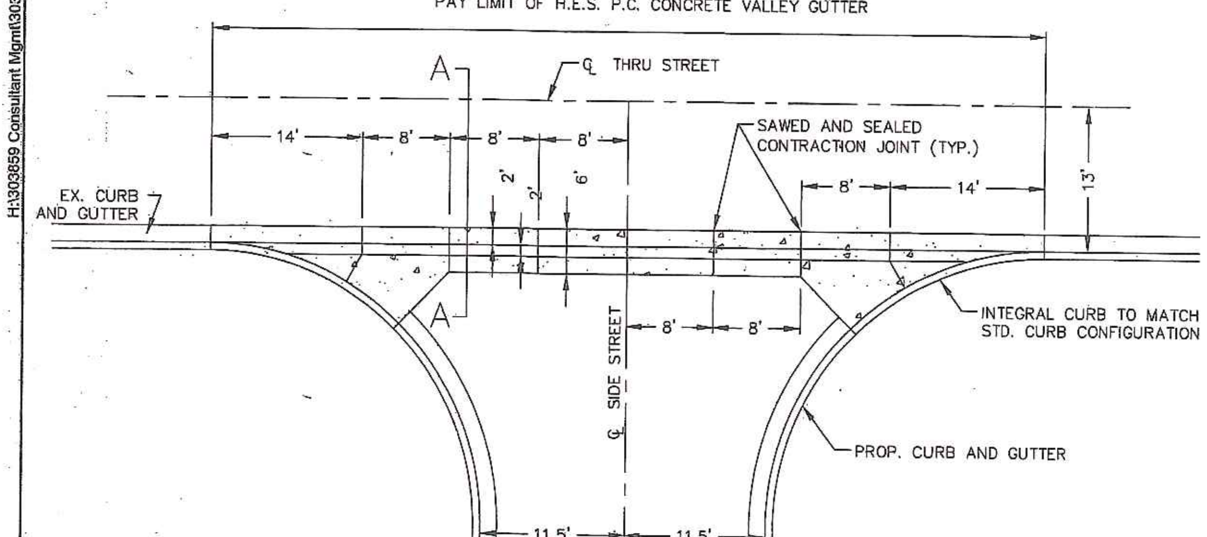
NOTE:

1. STEEP DRIVEWAYS ARE SLOPES THAT ARE 12% OR GREATER.
2. ALL GRADE CHANGES SHALL BE ROUNDED OFF WITH A 2' RADIUS.
3. DRIVEWAYS HAVE TWO GRADE CHANGES; A) COMING OFF OF THE STREET THE MAX GRADE IS 12% AND B) GOING FROM THE FACE OF CURB TO THE SIDEWALK THE MAX GRADE IS 17% (THE MAX GRADE CHANGE SHALL NOT EXCEED 15% OR MATCH EXISTING GRADE CHANGE).
4. A DRIVEWAY SLOPE OF 14% WAS USED FOR EXAMPLE ONLY.



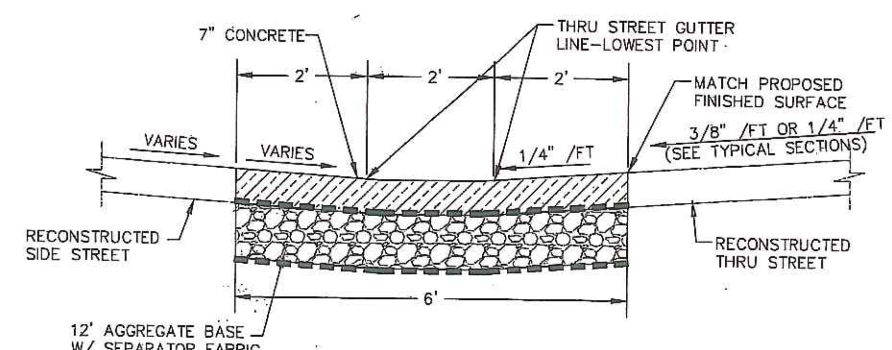
SECTION AT GUTTER

TYPICAL DRIVEWAY SECTION
NOT TO SCALE



TYPICAL H.E.S. P.C. CONCRETE VALLEY GUTTER

NOT TO SCALE



SECTION A-A

NOT TO SCALE

NOTE: VALLEY GUTTER TO BE PAID FOR UNDER ITEM 509(B) CLASS "A" CONCRETE FOR VALLEY GUTTERS. PLAN QUANTITIES INCLUDE THE VOLUME OF CONCRETE FOR INTEGRAL CURBS ASSOCIATED WITH THE VALLEY GUTTER.

BEFORE YOU DIG 811 CALL OKIE

TYPICAL SECTIONS & DETAILS (2)
PROJECT NO. 144642 ZONE 6142
NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
			NOT TO SCALE	DESIGNED	DPP	11/2014	
				SURVEY	Isbaca Surveying		
			PROFILE SCALE:	PROJ. MGR.	JO	3/19	
			HORIZONTAL:	LEAD ENGR.		3/19	
				FIELD MGR.		4/19	
			VERTICAL:	RECOMMENDED: DESIGN MANAGER	HGS	4-19	CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/28/20
			ATLAS PAGE NO: 301				SHEET 12 OF 52 SHEETS

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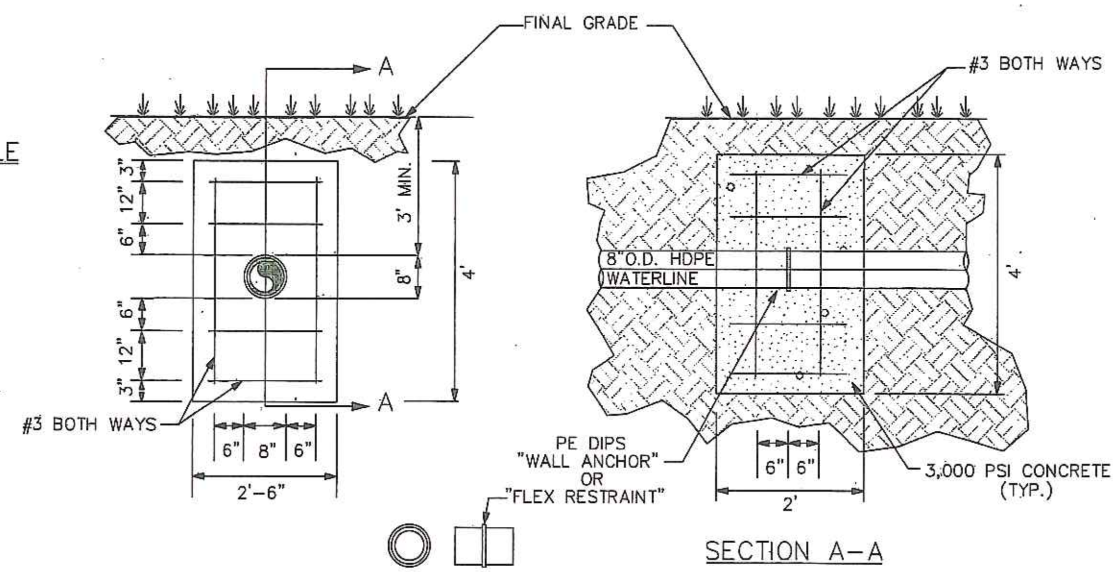
2/20/2019

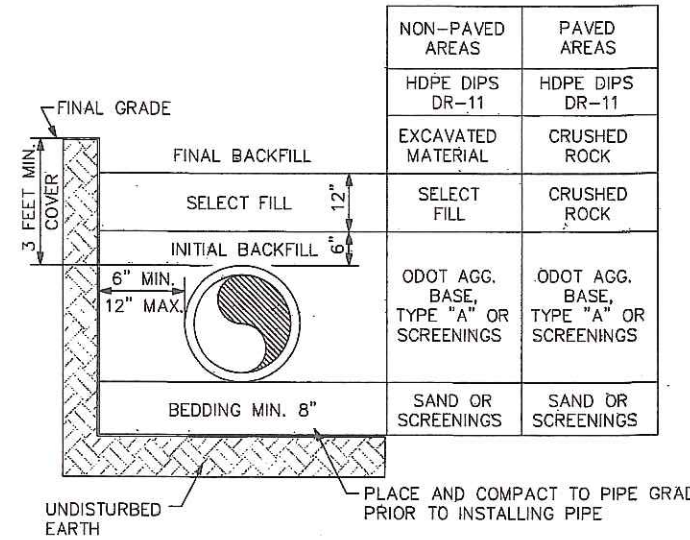
ANCHOR PLACEMENT SCHEDULE

SHEET	STATION
35	1001+00
36	1005+40
37	2001+00
38	2005+50
39	3001+00
40	3005+45
41	4001+00
42	4005+50



CONCRETE ANCHOR DETAIL FOR 8" O.D. DR11 HDPE

SCALE: N.T.S.

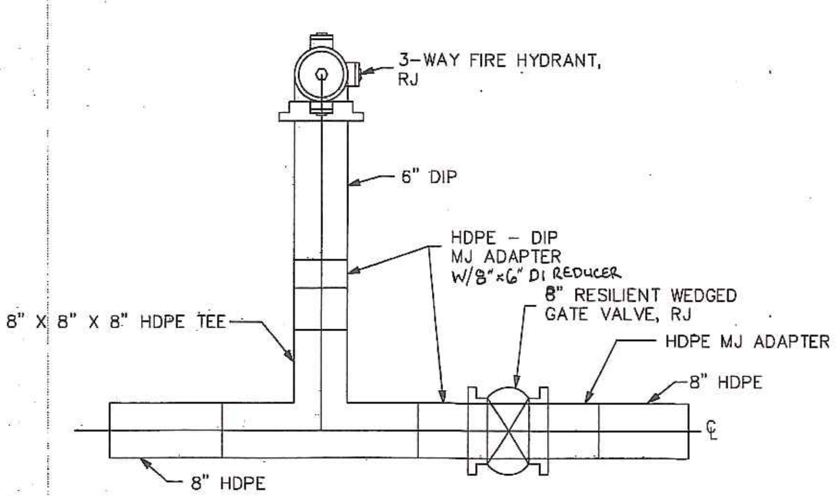


WATER PIPE BEDDING

SCALE: NONE

NOTES:
1. SELECT FILL CONSISTS OF EXCAVATED MATERIALS CONTAINING NO ROCKS LARGER THAN 1.5 INCHES.
1. CRUSHED ROCK SHALL BE ODOT TYPE "A" BASE.
2. COMPACTION REQUIREMENTS:
   A. NON- PAVED AREAS: 90% MAXIMUM STANDARD PROCTOR DENSITY FOR COHESIONLESS SOILS AND 85% FOR COHESIVE SOILS.
   B. PAVED AREAS: 95% MAXIMUM STANDARD PROCTOR DENSITY FOR COHESIONLESS SOILS.
4. FILLS OVER 10 FEET DEEP – MATERIAL IN THE AREA FROM SELECT FILL TO BEDDING SHALL BE 3/4" AGGREGATE BASE WELL GRADED.
5. FLOWABLE FILL MAY BE SUBSTITUTED FOR ALL MATERIALS IN ROAD CROSSING.
6. IN AREAS WHERE WATER INFILTRATION CANNOT BE CONTROLLED, BEDDING AND INITIAL BACKFILL SHALL BE MATERIAL CONFORMING TO ODOT SECTION 703.04(a).
7. INSTALLATION SHALL CONFORM TO AWWA M55.

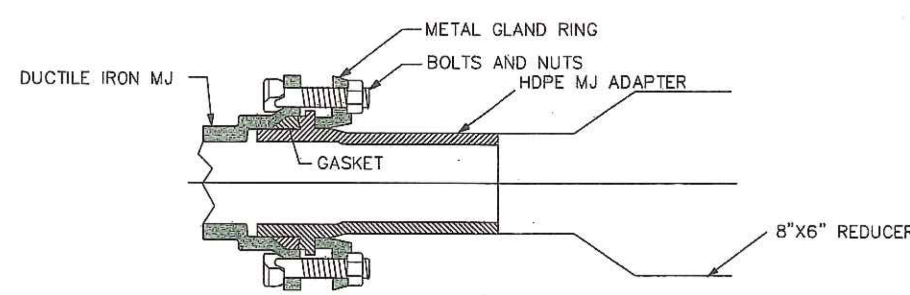
GENERAL NOTES:
1. HDPE PIPE SHALL BE DIPS-DR-11, RATED AT 160 PSI. HDPE FITTINGS SHALL BE DIPS-DR-9, RATED AT 160 PSI.
2. GATE VALVES SHALL BE INSTALLED IN ACCORDANCE WITH FIGURE 8-12 AWWA M55.



3-WAY FIRE HYDRANT INSTALLATION FOR HDPE

(TYP.)

SCALE: N.T.S.



HDPE MJ ADAPTER

SCALE: N.T.S.

BEFORE YOU DIG 811 CALL OKIE

TMUA-W 14-35

TYPICAL SECTION AND DETAILS (3)

PROJECT NO. 144642 ZONE 6142

NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
				DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.	JD	2/19	
			HORIZONTAL:	LEAD ENGR.	DJ	3/19	
				FIELD MGR.	CBV	4/19	
			VERTICAL	RECOMMENDED: HAS 4-19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO:	301			SHEET 13 OF 52 SHEETS

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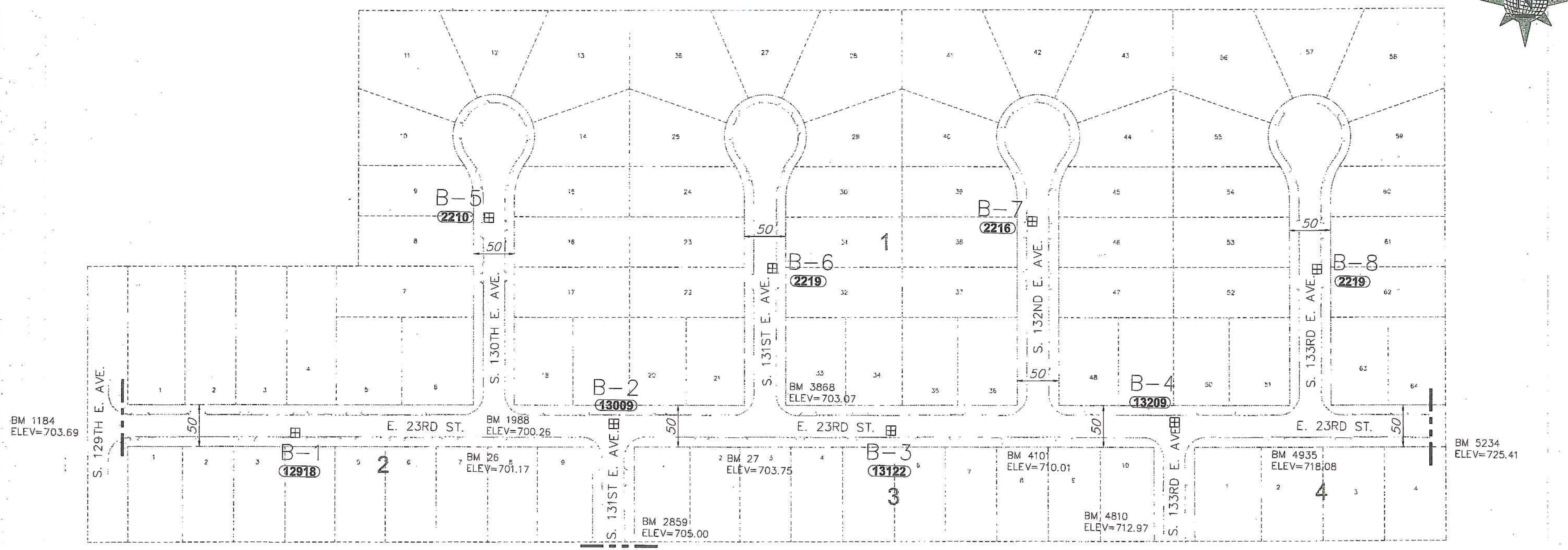
2/20/2019



BENCHMARKS						
Point #	Raw Description	Approximate Address	Station & Offset	Elevation	Northing	Easting
26	BM\ B TOP OF NORTH RINGBOLT EX. FIRE HYDRANT	13002 E. 23RD STREET	104+38.23, 22' RT	701.174	418543.6270	2608798.0830
27	BM\ D TOP OF NORTH RINGBOLT EX. FIRE HYDRANT	13108 E. 23RD STREET	107+43.21, 23' RT	703.746	418549.6780	2609102.9910
1184	BM\ A CUT X NE COR ATT PAD	S. 129th E. Ave.	+05.84, 31' RT	703.693	418523.2060	2608266.0150
1988	BM\ B 60D W/BRACE S FACE LP	13005 E. 23rd Street	104+62.26, 27' LT	700.260	418593.2040	2608821.0300
2859	BM\ C 60D W/BRACE W FACE PP	2303 S. 131st E. Ave.	300+03.64, 20' RT	704.998	418434.8580	2608972.0100
3868	BM\ D 60D W/BRACE SW FACE LP	13119 E. 23rd Street	107+90.37, 29' LT	703.074	418602.9460	2609149.0040
4101	BM\ E TOP OF NORTH RINGBOLT EX. FIRE HYDRANT	13132 E. 23rd Street	110+54.10, 21' RT	710.008	418558.5680	2609413.7550
4810	BM\ F 60D W/BRACE N FACE PP	2306 S. 133rd E. Ave.	599+96.61, 18' LT	712.971	418451.0590	2609613.6150
4935	BM\ G TOP OF NORTH RINGBOLT EX. FIRE HYDRANT	13312 E. 23rd Street	113+74.19, 22' RT	718.081	418564.4330	2609733.8070
5234	BM\ H 60D W/BRACE W FACE PP	13322 E. 23rd Street	115+94.58, 19' RT	725.410	418571.8390	2609954.0380

LEGEND

BM	BENCHMARK
⊞	BORE LOCATION
B-1	BORE NUMBER AND TYPE
(1780)	NEAREST STREET ADDRESS
	PROJECT SIGN
	PROJECT LIMITS

TYPE A BORE

Determine cross section of existing pavement including any base material and soil boring to one foot depth to determine soil classification.

The geotechnical report is available at the HCS office for review upon request.

RIGHT-OF-WAY AND BORING LOCATION MAP

PROJECT NO. 144642 ZONE 6142

NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
			1" = 60'	DESIGNED	DPP	11/2014	
				SURVEY	Isaacs Surveying		
			PROFILE SCALE:	PROJ. MGR.		2/19	
			HORIZONTAL:	LEAD ENGR.		3/19	
				FIELD MGR.	KBV	4/19	
			VERTICAL	RECOMMENDED HAS 4-19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/22/20
			ATLAS PAGE NO: 301				SHEET 14 OF 52 SHEETS

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2/20/2019

Parcel Table

Parcel	Owner Name	Owner Mailing Address	Property Address	COT Parcel #	Book/Page	Legal Description
Block 1 - Lot 1	LUNA, FRANCISCO J	12901 E 23RD ST TULSA, OK 74134	12901 E 23 ST S	45600-94-16-00180	Doc# 2008064472	LT 1 BLK 1
Block 1 - Lot 2	ARTHUR, JOHN G AND KATHY J	13900 E 88TH CT N OWASSO, OK 74055	12907 E 23 ST S	45600-94-16-00190	Doc# 2004155537	LT 2 BLK 1
Block 1 - Lot 3	BRIERLY PROPERTIES INC	8125 E SKELLY DR TULSA, OK 74129	12911 E 23 ST S	45600-94-16-00200	06050-00351	LT 3 BLK 1
Block 1 - Lot 4	SALAS, LORENA	12917 E 23RD ST TULSA, OK 74134	12917 E 23 ST S	45600-94-16-00210	Doc# 2004141089	LT 4 BLK 1
Block 1 - Lot 5	BEST, BRENDA GAIL	25521 E 67TH ST BROKEN ARROW, OK 74014	12921 E 23 ST S	45600-94-16-00220	04987-01675	LT 5 BLK 1
Block 1 - Lot 6	YORK MINERVA A	12927 E 23 ST S TULSA, OK 74134	12927 E 23 ST S	45600-94-16-00230	Doc# 2007044489	LT 6 BLK 1
Block 1 - Lot 7	LUGAR, SUSAN M AND DURAND TRUSTEES SUSAN M LUGAR TR	8819 S JOPLIN AVE TULSA, OK 74137	2220 S 130 AV E	45600-94-16-00240	05686-00352	LT 7 BLK 1
Block 1 - Lot 8	ROMO, SALVADOR MOLINA	11619 E 25TH ST TULSA, OK 74129	2216 S 130 AV E	45600-94-16-00250	Doc# 2010037262	LT 8 BLK 1
Block 1 - Lot 9	MANAHAN, RONNY LEE AND JUDY ANN	2210 S 130TH E AVE TULSA, OK 74134	2210 S 130 AV E	45600-94-16-00260	04842-02812	LT 9 BLK 1
Block 1 - Lot 10	VASQUEZ, WILFRIDO ADILIO AND MARIA MAGDALENA GONZALEZ	2206 S 130TH EAST AVE TULSA, OK 74134	2206 S 130 AV E	45600-94-16-00270	Doc# 2007039408	LT 10 BLK 1
Block 1 - Lot 11	JCL PROPERTIES INC	5880 S MINGO RD TULSA, OK 74146	2204 S 130 AV E	45600-94-16-00280	Doc# 2014033160	LT 11 BLK 1
Block 1 - Lot 12	KIMBALL, JENNICE L	2201 S 130TH E AVE TULSA, OK 74134	2201 S 130 AV E	45600-94-16-00290	05908-01615	LT 12 BLK 1
Block 1 - Lot 13	SMITH, GLENDA	2203 S 130 EAST AVE TULSA, OK 74134	2203 S 130 AV E	45600-94-16-00300	DOC# 2008128298	LT 13 BLK 1
Block 1 - Lot 14	MCCLENDON, CALVIN R AND SUSAN KAY	2205 S 130TH E AVE TULSA, OK 74134	2205 S 130 AV E	45600-94-16-00310	N/A	LT 14 BLK 1
Block 1 - Lot 15	RENFROW, DAVID AND LISA	2209 S 130TH E AVE TULSA, OK 74134	2209 S 130 AV E	45600-94-16-00320	05709-00266	LT 15 BLK 1
Block 1 - Lot 16	RIOS, MOISES	2215 S 130TH EAST AVE TULSA, OK 74134	2215 S 130 AV E	45600-94-16-00330	Doc# 2009102461	LT 16 BLK 1
Block 1 - Lot 17	HOPKINS, DAVID L AND JULIE K	2606 W ATLANTA ST BROKEN ARROW, OK 74012-1011	2219 S 130 AV E	45600-94-16-00340	N/A	LT 17 BLK 1
Block 1 - Lot 18	SCOTT, JEFFREY A & SHANNON L	10849 S GUTHRIE AVE JENKS, OK 74037	13005 E 23 ST S	45600-94-16-00350	Doc# 2009049169	LT 18 BLK 1
Block 1 - Lot 19	CARLILE, HARLAN TROY JR	PO BOX 471204 TULSA, OK 74147	13009 E 23 ST S	45600-94-16-00360	Doc# 2006096337	LT 19 BLK 1
Block 1 - Lot 20	JIMENEZ, URIEL GONZALEZ	13103 E 23RD ST TULSA, OK 74134	13103 E 23 ST S	45600-94-16-00370	Doc# 2014009691	LT 20 BLK 1
Block 1 - Lot 21	RAIBURN, GERALD W	13109 E 23 ST TULSA, OK 74134	13109 E 23 ST S	45600-94-16-00380	Doc# 2008090639	LT 21 BLK 1
Block 1 - Lot 22	DILLON, RUBY G C/O RUBY STEELE	2220 S 131ST EAST AVE TULSA, OK 74134	2220 S 131 AV E	45600-94-16-00390	N/A	LT 22 BLK 1
Block 1 - Lot 23	COX, RUSSELL D & CHRISTINA	8434 N 123RD EAST AVE OWASSO, OK 74055-2130	2216 S 131 AV E	45600-94-16-00400	Doc# 2012032965	LT 23 BLK 1
Block 1 - Lot 24	AHR HOLDINGS LLC	4604 W PITTSBURG BROKEN ARROW, OK 74012	2210 S 131 AV E	45600-94-16-00410	Doc# 2012007717	LT 24 BLK1
Block 1 - Lot 25	COTTOM FAMILY TRUST UID	2 CEDAR RIDGE ROAD BROKEN ARROW, OK 74011	2206 S 131 AV E	45600-94-16-00420	Doc# 2014040804	LT 25 BLK 1
Block 1 - Lot 26	KING, MARY E	2204 S 131ST ST TULSA, OK 74134	2204 S 131 AV E	45600-94-16-00430	06542-00936	LT 26 BLK 1
Block 1 - Lot 27	DOWDY, JUSTIN W AND ALICIA	2201 S 131ST EAST AVE TULSA, OK 74134	2201 S 131 AV E	45600-94-16-00440	Doc# 2006098065	LT 27 BLK 1
Block 1 - Lot 28	KRUSE, LORI MICHELLE	2434 S 289TH E AVE BROKEN ARROW, OK 74014-9100	2203 S 131 AV E	45600-94-16-00450	05890-00434	LT 28 BLK 1
Block 1 - Lot 29	ELLIOTT, ELIZABETTE LORAINNE	2205 S 131ST EAST AVE TULSA, OK 74134	2205 S 131 AV E	45600-94-16-00460	Doc# 2010058790	LT 29 BLK 1
Block 1 - Lot 30	MARTINEZ, BARDO	2209 S 131ST E AVE TULSA, OK 74134	2209 S 131 AV E	45600-94-16-00470	06377-02647	LT 30 BLK 1
Block 1 - Lot 31	KIRKES, RAYMOND D AND DENISE A	2215 S 131ST E AVE TULSA, OK 74134	2215 S 131 AV E	45600-94-16-00480	05427-00151	LT 31 BLK 1
Block 1 - Lot 32	MILLER, CARL WAYNE AND HELEN FAYE TRUSTEES	2219 S 131ST E AVE TULSA, OK 74134	2219 S 131 AV E	45600-94-16-00490	06373-00290	LT 32 BLK 1
Block 1 - Lot 33	BUSTOS, MARGARITA	13119 E 23RD ST S TULSA, OK 74134	13119 E 23 ST S	45600-94-16-00500	Doc# 2004074115	LT 33 BLK 1
Block 1 - Lot 34	UMPIERRE-REILLO, FRANCHESKA G	13123 E 23 ST TULSA, OK 74134	13123 E 23 ST S	45600-94-16-00510	Doc# 2010038787	LT 34 BLK 1
Block 1 - Lot 35	BNETTA LLC	2121 S YORKTOWN AVE #602 TULSA, OK 74114	13129 E 23 ST S	45600-94-16-00520	Doc# 2006050922	LT 35 BLK 1

Parcel Table

Parcel	Owner Name	Owner Mailing Address	Property Address	COT Parcel #	Book/Page	Legal Description
Block 1 - Lot 36	ESCALERA, JOSE LUIS	13133 E 23RD ST TULSA, OK 74134	13133 E 23 ST S	45600-94-16-00530	Doc# 2007077468	LT 36 BLK 1
Block 1 - Lot 37	LUGAR, SUSAN M AND DURAND TRUSTEES SUSAN M LUGAR TR	8819 S JOPLIN AVE TULSA, OK 74137	2220 S 132 AV E	45600-94-16-00540	05686-00352	LT 37 BLK 1
Block 1 - Lot 38	ROARK, RUFUS C AND ALLISON S	2216 S 132ND E AVE TULSA, OK 74134	2216 S 132 AV E	45600-94-16-00550	05502-00813	LT 38 BLK 1
Block 1 - Lot 39	PHILLIPS, MERRY M	2210 S 132ND E AVE TULSA, OK 74134	2210 S 132 AV E	45600-94-16-00560	04843-02327	LT 39 BLK 1
Block 1 - Lot 40	RODDEN, ELLA RAY AND KAREN SUE VALLIERE	2206 S 132ND E AVE TULSA, OK 74134	2206 S 132 AV E	45600-94-16-00570	04435-01431	LT 40 BLK 1
Block 1 - Lot 41	NOLASCO, MARIA LOPEZ	2204 S 132ND EAST AVE TULSA, OK 74134	2204 S 132 AV E	45600-94-16-00580	Doc# 2011060484	LT 41 BLK 1
Block 1 - Lot 42	MOORE, SEAN VINCENT	2201 S 132ND EAST AVE TULSA, OK 74134	2201 S 132 AV E	45600-94-16-00590	Doc# 2012014756	LT 42 BLK 1
Block 1 - Lot 43	TEEMAN, LINDA ARLEEN	2203 S 132ND EAST AVE TULSA, OK 74134	2203 S 132 AV E	45600-94-16-00600	06146-01690	LT 43 BLK 1
Block 1 - Lot 44	MAXEY, DAVID W & DEBBIE M	5881 S 76TH EAST AVE TULSA, OK 74145	2205 S 132 AV E	45600-94-16-00610	Doc# 2010078071	LT 44 BLK 1
Block 1 - Lot 45	JONES, JAMES MICHAEL JR	3337 E 27TH ST TULSA, OK 74114	2209 S 132 AV E	45600-94-16-00620	06571-00940	LT 45 BLK 1
Block 1 - Lot 46	WILBURN, C GENE AND PAULA L	2310 E 151ST ST S BIXBY, OK 74008	2215 S 132 AV E	45600-94-16-00630	06564-00574	LT 46 BLK1
Block 1 - Lot 47	THOMAS, ROBIN R AND MARK W	2219 S 132ND E AVE TULSA, OK 74134	2219 S 132 AV E	45600-94-16-00640	06423-02484	LT 47 BLK 1
Block 1 - Lot 48	LUNA, JULIANA S AND ANTHONY	4220 W COLLEGE ST BROKEN ARROW, OK 74012	13203 E 23 ST S	45600-94-16-00650	06947-00189	LT 48 BLK 1
Block 1 - Lot 49	BANNON, JAMES	PO BOX 141122 BROKEN ARROW, OK 74014	13209 E 23 ST S	45600-94-16-00660	Doc# 2011080851	LT 49 BLK 1
Block 1 - Lot 50	REUTTER, BROOK ALAN	9524 EAST 81ST STREET STE B PMB 1593 TULSA, OK 74133	13303 E 23 ST S	45600-94-16-00670	Doc# 2014019624	LT 50 BLK 1
Block 1 - Lot 51	STOWERS INVESTMENTS LLC	PO BOX 90 SKIATOOK, OK 74070	13309 E 23 ST S	45600-94-16-00680	Doc# 2010078819	LT 51 BLK 1
Block 1 - Lot 52	AYERS, ALAN RALPH	2220 S 133RD EAST AVE TULSA, OK 74134-1061	2220 S 133 AV E	45600-94-16-00690	05389-01700	LT 52 BLK 1
Block 1 - Lot 53	DEBERRY, SHAKIA K	2216 S 133RD E AVE TULSA, OK 74134	2216 S 133 AV E	45600-94-16-00700	Doc# 2004107067	LT 53 BLK 1
Block 1 - Lot 54	STOWERS INVESTMENTS LLC	PO BOX 90 SKIATOOK, OK 74070	2210 S 133 AV E	45600-94-16-00710	06039-01756	LT 54 BLK 1
Block 1 - Lot 55	STIGERS, IAN	9905 N 108TH EAST PL OWASSO, OK 74055	2206 S 133 AV E	45600-94-16-00720	07121-01114	LT 55 BLK 1
Block 1 - Lot 56	HUFFMAN, JAMA R	2204 S 133 EAST AVE TULSA, OK 74134	2204 S 133 AV E	45600-94-16-00730	Doc# 2009110788	LT 56 BLK 1
Block 1 - Lot 57	BALDRIDGE, VIRGINIA L	2201 S 133RD EAST AVE TULSA, OK 74134	2201 S 133 AV E	45600-94-16-00740	Doc# 2007138094	LT 57 BLK 1
Block 1 - Lot 58	MCCARVER, MARGIE A AND NORMAN R	2203 S 133RD E AVE TULSA, OK 74134	2203 S 133 AV E	45600-94-16-00750	06440-02032	LT 58 LESS BG SW COR NE 27.77 NE 97.78 TO SE COR TH SW ON S L 124.56 BG BLK 1
Block 1 - Lot 59	ELLER, JANIS D	2205 S 133RD E AVE TULSA, OK 74134	2205 S 133 AV E	45600-94-16-00760	05718-00902	LT 59 & PT LOT 58 BEG SW COR TH NE 27.77 NE 97.78 TO SE COR LT 58 TH SW ON SL 124.56 TO BG BLK 1

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OWNERSHIP PLAT
PROJECT NO. 144642
NON-ARTERIAL STREET REHABILITATION FOR MAINTENANCE ZONE 6142
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
ISAACS SURVEYING
5 WEST 42nd ST
SAND SPRINGS, OK 74063
PHONE: (918) 245-0459
FAX: (918) 245-8723
C.A. NO. 2252 EXP. 06/30/15

REVISION	BY	DATE	PLAN SCALE:	DRAWN	RDL	APPROVED
				DESIGNED		
				SURVEY	ISAACS	
			PROFILE SCALE: HORIZONTAL	PROJ. MGR.	SB 2/15	
				LEAD ENGR.	2/19	
			VERTICAL	FIELD MNGR.	2/19	
				RECOMMENDED:	4-19	CITY ENGINEER
				DESIGN MANAGER		
			FILE:	DRAWING:		DATE: 1/23/20
			ATLAS PAGE NO.:	301		SHEET 15 OF 52 SHEETS

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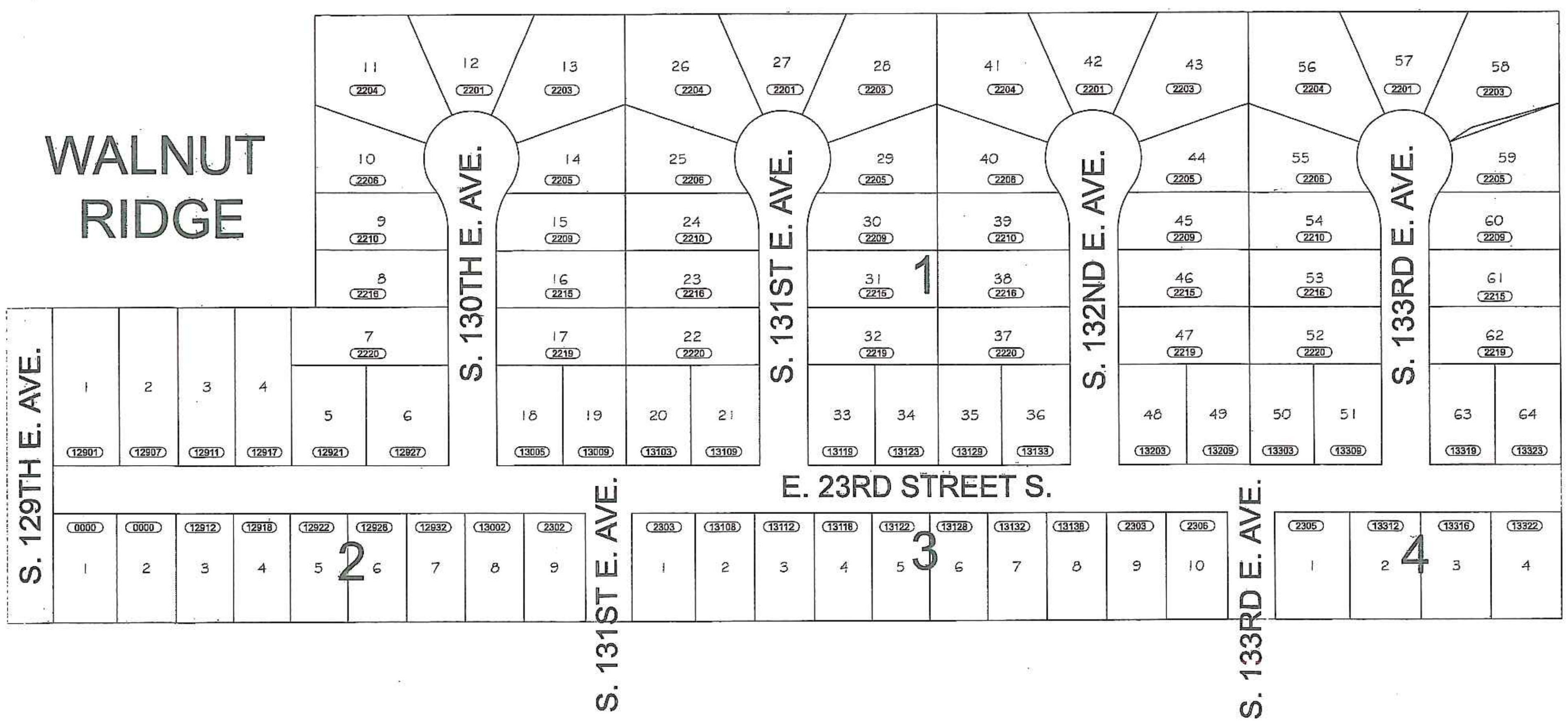
2/20/2019

Parcel Table

Parcel	Owner Name	Owner Mailing Address	Property Address	COT Parcel #	Book/Page	Legal Description
Block 1 - Lot 60	HARMON, CHRISTY J	2209 S 133RD E AVE TULSA, OK 74134	2209 S 133 AV E	45600-94-16-00770	06168-02656	LT 60 BLK 1
Block 1 - Lot 61	GAITHER, SARA R & DOUGLAS R EMBREY	2522 S 109TH E AVE TULSA, OK 74129-5002	2215 S 133 AV E	45600-94-16-00780	Doc# 2011106335	LT 61 BLK 1
Block 1 - Lot 62	WILBURN, C GENE AND PAULA L	2310 E 151ST ST S BIXBY, OK 74008	2219 S 133 AV E	45600-94-16-00790	Doc# 2013003277	LT 62 BLK 1
Block 1 - Lot 63	PICKENS, JEFF W	13319 E 23RD ST TULSA, OK 74134	13319 E 23 ST S	45600-94-16-00800	Doc# 2007102979	LT 63 BLK 1
Block 1 - Lot 64	BOLIN, WILMA F	13323 E 23RD ST S TULSA, OK 74134	13323 E 23 ST S	45600-94-16-00810	05590-02351	LT 64 BLK 1
Block 2 - Lot 1	GIBSON, JENNIFER M	12902 E 23RD ST TULSA, OK 74134	12902 E 23 ST S	45600-94-16-00820	Doc# 2008040789	LT 1 BLK 2
Block 2 - Lot 2	MOLINA, HELIODORO	13305 E 27TH ST TULSA, OK 74134	12908 E 23 ST S	45600-94-16-00830	Doc# 2013060443	LT 2 BLK 2
Block 2 - Lot 3	LOPEZ, JUAN MANUEL AND MARIA R	12912 E 23RD ST TULSA, OK 74134	12912 E 23 ST S	45600-94-16-00840	Doc# 2005129474	LT 3 BLK 2
Block 2 - Lot 4	CARLSON, JOSEPH W AND JEAN G	12918 E 23RD ST TULSA, OK 74134	12918 E 23 ST S	45600-94-16-00850	Doc# 2005012002	LT 4 BLK 2
Block 2 - Lot 5	OLANSEN, KENNETH R AND DEBORAH K	12922 E 23RD ST TULSA, OK 74134	12922 E 23 ST S	45600-94-16-00860	N/A	LT 5 BLK 2
Block 2 - Lot 6	HACKBARTH, PHILIP GREGORY	12928 E 23 ST TULSA, OK 74134	12928 E 23 ST S	45600-94-16-00870	Doc# 2014064838	LT 6 BLK 2
Block 2 - Lot 7	DEASON, MICHAEL S	12932 E 23RD ST TULSA, OK 74134	12932 E 23 ST S	45600-94-16-00880	06437-01189	LT 7 BLK 2
Block 2 - Lot 8	HALL, RICHARD JR & ELOUISE TTEES RICHARD & ELOISE HALL FAMILY TRUST	13002 E 23RD ST TULSA, OK 74134	13002 E 23 ST S	45600-94-16-00890	Doc# 2008090533	LT 8 BLK 2
Block 2 - Lot 9	MADISON, LINDA J	2720 S 138TH E AVE TULSA, OK 74134-3049	2302 S 131 AV E	45600-94-16-00900	05913-00972	LT 9 BLK 2

Parcel Table

Parcel	Owner Name	Owner Mailing Address	Property Address	COT Parcel #	Book/Page	Legal Description
Block 3 - Lot 1	BICKETT, LAURA A	2303 S 131ST EAST AVE TULSA, OK 74134	2303 S 131 AV E	45600-94-16-00910	Doc# 2005146046	LT 1 BLK 3
Block 3 - Lot 2	BLUE MOUNTAIN PROPERTIES INC	8282 S MEMORIAL DR #102 TULSA, OK 74133	13108 E 23 ST S	45600-94-16-00920	Doc# 2009118434	LT 2 BLK 3
Block 3 - Lot 3	POE, JERRY R AND BOK SOON	13112 E 23RD ST TULSA, OK 74134-1030	13112 E 23 ST S	45600-94-16-00930	N/A	LT 3 BLK 3
Block 3 - Lot 4	BLUE MOUNTAIN PROPERTIES INC	8282 S MEMORIAL DR #102 TULSA, OK 74133	13118 E 23 ST S	45600-94-16-00940	Doc# 2009066687	LT 4 BLK 3
Block 3 - Lot 5	PEARLTA, MANUEL & IGNACIA DE JESUS PEREZ	13122 E 23RD ST TULSA, OK 74134	13122 E 23 ST S	45600-94-16-00950	Doc# 2010072409	LT 5 BLK 3
Block 3 - Lot 6	LOPEZ, JULIO L	6443 HALSTEAD MEADOWS CT HOUSTON, TX 77086	13128 E 23 ST S	45600-94-16-00960	Doc# 2006127010	LT 6 BLK 3
Block 3 - Lot 7	MATHIS, FLOYD L TRUST	2243 E 26TH ST TULSA, OK 74114	13132 E 23 ST S	45600-94-16-00970	06462-00055	LT 7 BLK 3
Block 3 - Lot 8	MOATES, WAYMETH L	13138 E 23RD ST TULSA, OK 74134	13138 E 23 ST S	45600-94-16-00980	05665-01876	LT 8 BLK 3
Block 3 - Lot 9	BREIEN, JACK E JR AND KIMBERLEE M	601 S SUPERNAW SKIATOOK, OK 74070	13202 E 23 ST S	45600-94-16-00990	Doc# 2005071543	LT 9 BLK 3
Block 3 - Lot 10	BAUMAN, CHAD	2306 S 133RD EAST AVE TULSA, OK 74134	2306 S 133 AV E	45600-94-16-01000	Doc# 2007052597	LT 10 BLK3
Block 4 - Lot 1	COX, JAMES MATTHEW	2305 S 133RD E AVE TULSA, OK 74134	2305 S 133 AV E	45600-94-16-01010	05737-01734	LT 1 BLK 4
Block 4 - Lot 2	PROVINCE PROPERTIES LLC	PO BOX 129 CATOOSA, OK 74015	13312 E 23 ST S	45600-94-16-01020	Doc# 2013000700	LT 2 BLK 4
Block 4 - Lot 3	WINECUFF, HENRY F TTEE HENRY F WINECUFF REV TRUST	10786 E 29TH PL TULSA, OK 74129	13316 E 23 ST S	45600-94-16-01030	Doc# 2010055273	LT 3 BLK 4
Block 4 - Lot 4	EBS MANAGEMENT INC	6314 E 96TH ST TULSA, OK 74137	13322 E 23 ST S	45600-94-16-01040	Doc# 2009045202	LT 4 BLK 4



LEGEND

(00000) ADDRESS

OWNERSHIP PLAT

PROJECT NO. 144642

NON-ARTERIAL STREET REHABILITATION FOR MAINTENANCE ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:

ISAACS SURVEYING

SHEET 16 OF 52 SHEETS

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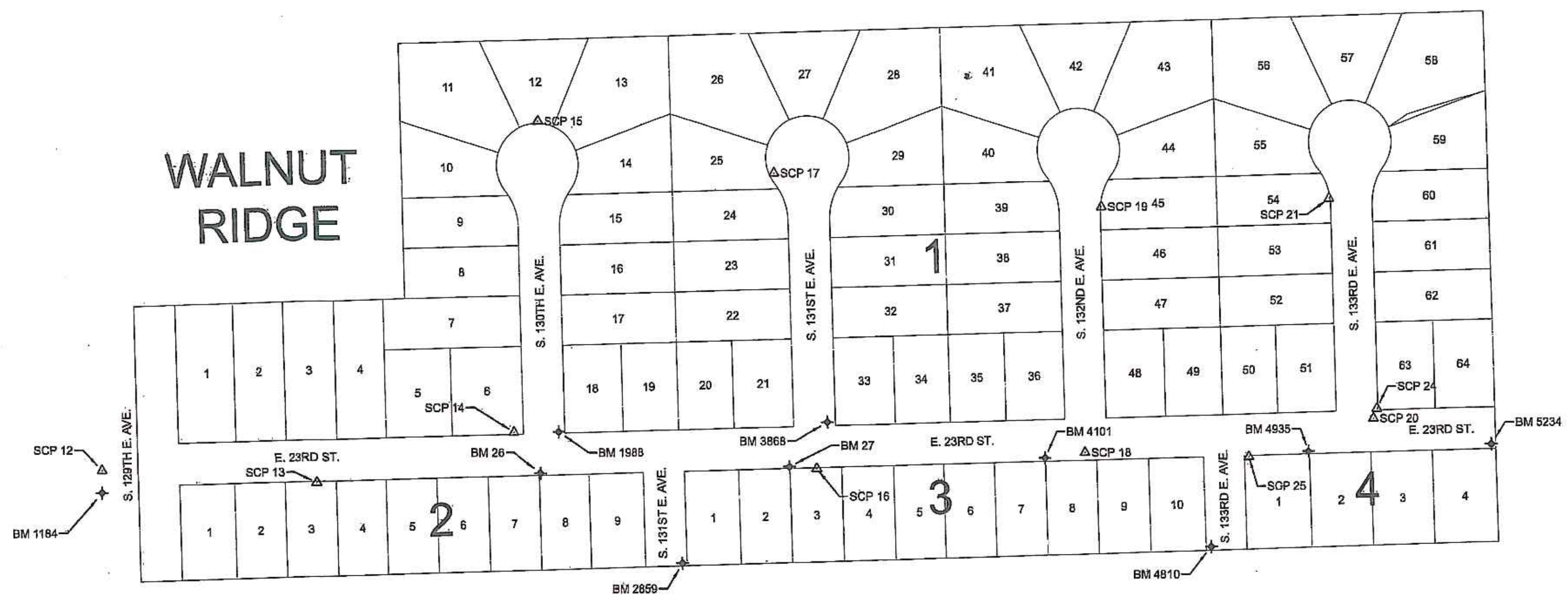

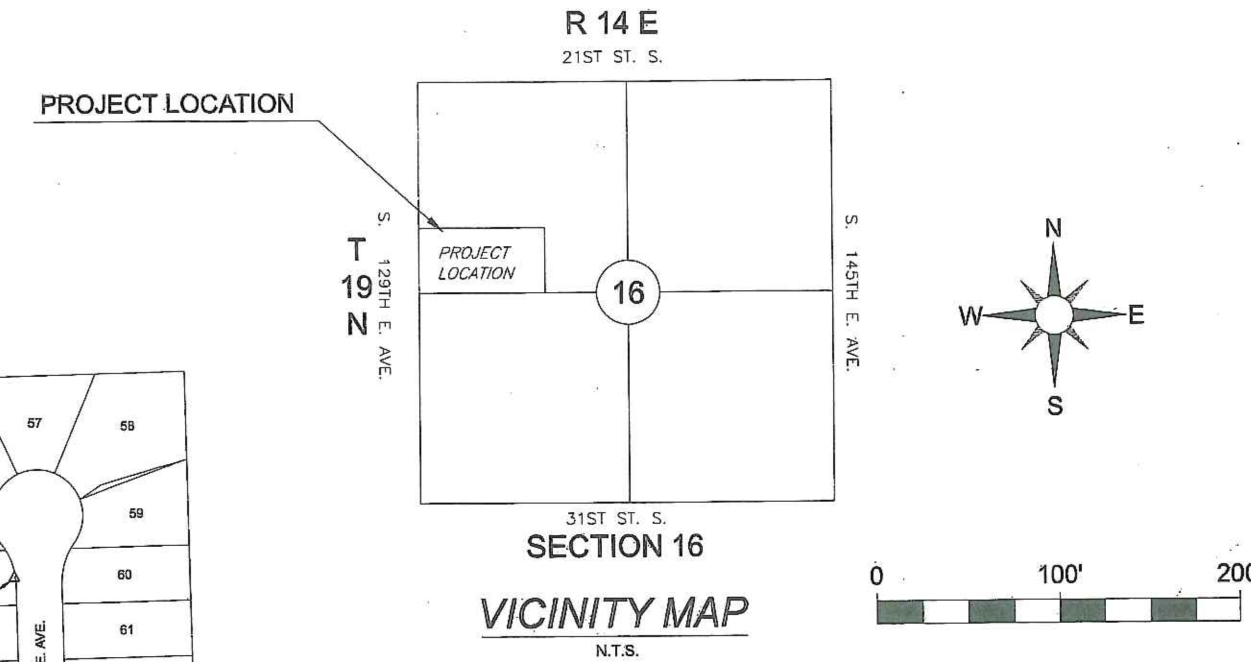

VICINITY MAP
N.T.S.

Onsite Vertical Control				
Point #	Description	Northing	Easting	Elevation
1184	BM-A – CUT X SET ON NE CORNER OF AT&T SUBSTATION CONC PAD, AT SW CORNER OF INTERSECTION OF 129TH E. AVE & 23RD ST	418523.2060	2608266.0150	703.694
1988	BM-B – 60D W/BRACE SET IN S-FACE OF LIGHTPOLE AT N.E. COR OF 23RD ST & 130TH E. AVE	418593.2040	2608821.0300	700.270
26	BM B – RELOCATED – TOP OF NORTH RINGBOLT OF FIRE HYDRANT ON SOUTH SIDE OF 23RD ST AT INTERSECTION OF 23RD ST & 130TH E. AVE	418543.6270	2608798.0830	701.174
2859	BM-C – 60D W/BRACE SET IN W-FACE OF POWER POLE ON EAST SIDE OF 131ST E. AVE, APPROX. 110' SOUTH OF 23RD ST	418434.8580	2608972.0100	705.019
3868	BM-D – 60D W/BRACE SET IN SW FACE OF LIGHTPOLE AT N.E. CORNER OF 23RD ST & 131ST E. AVE	418602.9460	2609149.0040	703.085
27	BM D – RELOCATED – TOP OF NORTH RINGBOLT OF FIRE HYDRANT ON SOUTH SIDE OF 23RD ST APPROX 40' WEST OF 131ST E. AVE	418549.6780	2609102.9910	703.746
4101	BM-E – NORTH RINGBOLT OF FIRE HYDRANT ON SOUTH SIDE OF 23RD ST AT INTERSECTION OF 23RD ST & 132ND E. AVE	418558.5680	2609418.7550	710.012
4810	BM-F – 60D W/BRACE SET IN N-FACE OF POWER POLE ON WEST SIDE OF 133RD E. AVE, APPROX. 100' SOUTH OF 23RD ST	418451.0590	2609613.6150	712.973
4935	BM-G – NORTHWEST RINGBOLT OF FIRE HYDRANT ON SOUTH SIDE OF 23RD ST AT INTERSECTION OF 23RD ST & 133RD E. AVE	418564.4330	2609733.8070	718.074
5234	BM-H – 60D W/BRACE SET IN WEST FACE OF POWER POLE AT EAST END OF 23RD ST, APPROX. 150' EAST OF 133RD E. AVE	418571.8390	2609954.0380	725.414

Onsite Horizontal Control				
Point #	Description	Northing	Easting	Elevation
12	3/8IN IPC ISAACS SET	418549.8940	2608266.0620	702.056
13	3/8IN IPC ISAACS SET	418533.7460	2608526.9670	698.830
14	3/8IN IPC ISAACS SET	418592.9400	2608766.5050	699.366
15	3/8IN IPC ISAACS SET	418964.9630	2608798.8640	700.779
16	3/8IN IPC ISAACS SET	418547.2330	2609136.0210	703.071
17	3/8IN IPC ISAACS SET	418901.4030	2609086.1580	702.934
18	3/8IN IPC ISAACS SET	418564.8270	2609462.4910	709.240
19	3/8IN IPC ISAACS SET	418858.6140	2609484.1500	708.350
20	3/8IN IPC ISAACS SET	418603.1900	2609812.7560	718.690
21	3/8IN IPC ISAACS SET	418866.6500	2609760.9420	721.290
22	60d NAIL SET	418492.0240	2608967.0840	702.279
24	3/8IN IPC ISAACS SET	418614.6890	2609816.9990	719.307
25	3/8IN IPC ISAACS SET	418558.1620	2609660.5430	713.419
4181	CHISELED "X" SET	418565.4490	2609645.7120	712.245

Offsite Horizontal Control				
Point #	Description	Northing	Easting	Elevation
10	3/8IN IPC ISAACS SET	415730.3080	2605832.6120	681.341
11	3/8IN IPC ISAACS SET	417280.0030	2608280.0780	711.247

Offsite Horizontal and Vertical Control				
Point #	Description	Northing	Easting	Elevation
1	ADS T218 OFFSET – 5/8IN REBAR-2IN ALUMINUM CAP-FLUSH-STAMPED T218 OFFSET, SET N.W. OF THE INTERSECTION OF 31ST ST, AND HWY. 169 SOUTHBOUND OFF-RAMP.	414399.4430	2600036.3800	650.264
5	ADS 5 – 3IN BRASS CAP- APPARENT SECTION CORNER 9,10,16,15, T.19.N, R.14.E. AT CENTER OF INTERSECTION 21ST ST, AND 145TH E. AVE.	419859.8080	2613551.8790	767.578

ALL SURVEY CONTROL POINTS ARE 3/8 IN. IRON PINS WITH PLASTIC CAPS STAMPED 'ISAACS CONTROL'

HORIZONTAL CONTROL
A. HORIZONTAL CONTROL FOR THIS SURVEY IS OKLAHOMA STATE PLANE COORDINATE SYSTEM. NAD83 ZONE 3501 (NORTH ZONE).
B. ACCURACY – 3RD ORDER

VERTICAL CONTROL:
A. LEVEL DATUM IS NAVD88
B. ACCURACY – 3RD ORDER

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SURVEY DATA SHEET
PROJECT NO. 144642
NON-ARTERIAL STREET REHABILITATION FOR MAINTENANCE ZONE 6142
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT
PLANS AND ESTIMATES PREPARED BY:

REVISION	BY	DATE	PLAN SCALE:	DRAWN	RDL		APPROVED
				DESIGNED			
				SURVEY	ISAACS		
			PROFILE SCALE: HORIZONTAL	PROJ. MGR.	JD	2/15	
				LEAD ENGR.	DJ	3/19	
				FIELD MNGR.	CBV	4/19	
			VERTICAL	RECOMMENDED	HAS	4-19	
				DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO.:	301			SHEET 17 OF 52 SHEETS

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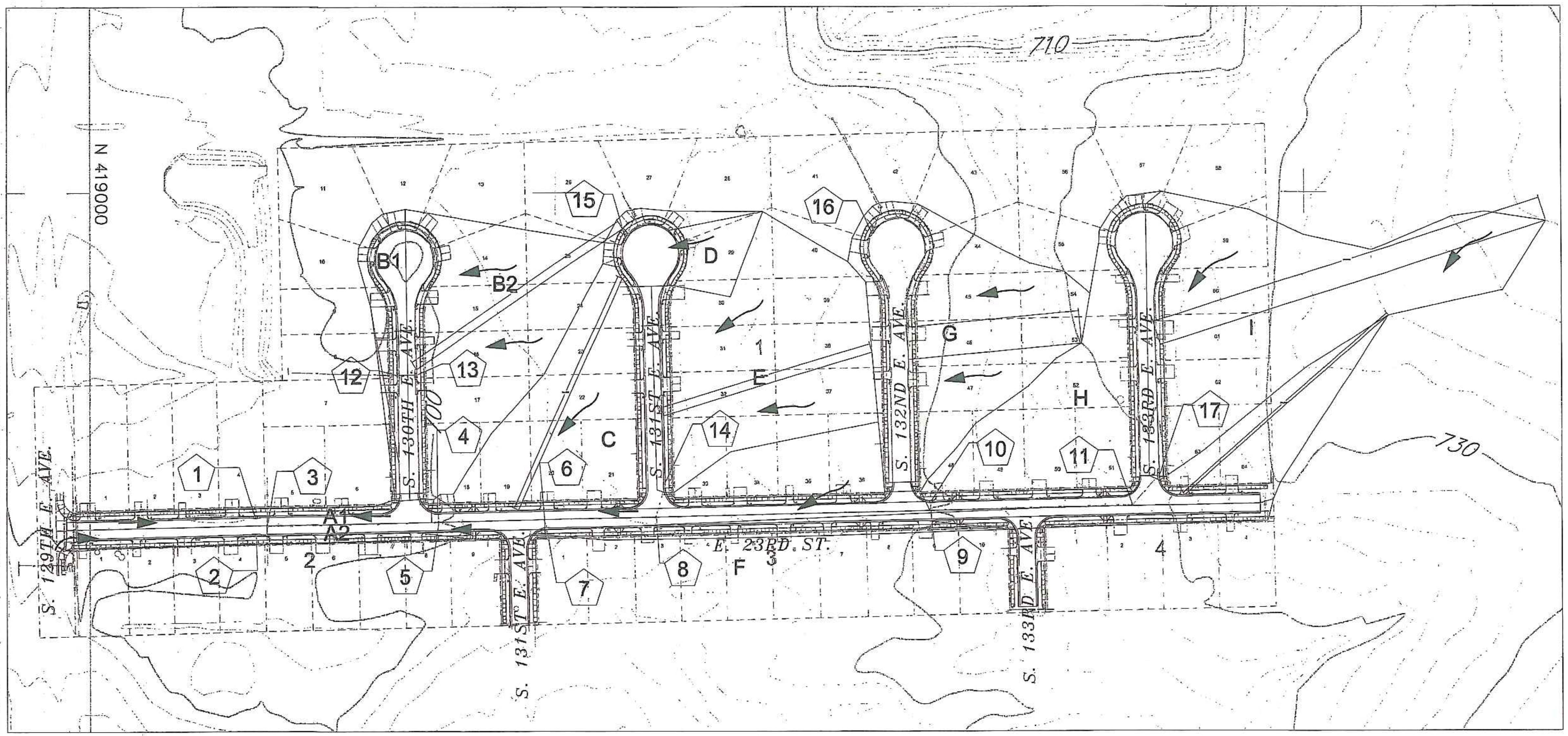

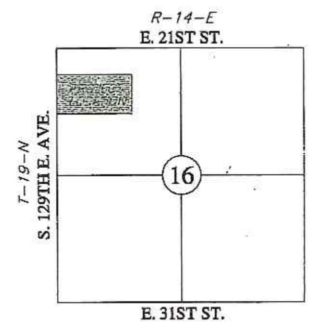

VICINITY MAP
TULSA COUNTY

- STRUCTURE NUMBER
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION
- FEMA A-ZONE BOUNDARY
- REGULATORY FLOOD PLAIN BOUNDARY

DRAINAGE AND INLET SUMMARY

DRAINAGE AREA	INLET NAME	TOTAL AREA	C VALUE	REACH GRASS	SLOPE GRASS	VELOCITY GRASS	REACH PAVING	SLOPE PAVING	VELOCITY PAVING	Tc	I100	Q100	STREET GRADE	SUM Q AT INLETS	DEPTH AT INLET	CLOGGING FACTOR	Q INTERCEPTED	Q BYPASS	BYPASS TO INLET	INLET DESIGN	INLET NAME
		ACRE		FT	%	FT/SEC	FT	%	FT/SEC	MIN	IN\HR	CFS	%	CFS	FT		CFS	CFS			
A1	1	2.68	0.44	862	3.02	1.7	960	4.74	4.4	11.9	7.8	9.2	4.74	9.2	0.39	1.00	9.0	0.2	NA	2(2A)	1
A2	2	0.32	0.48	142	2.82	1.7	526	3.10	3.6	3.9	9.4	1.5	3.10	1.5	0.08	1.00	1.2	0.3	NA	2(2A)	2
B1	12	3.05	0.44	866	1.63	1.3	969	0.90	1.4	22.6	6.4	8.6	0.90	8.8	0.86	0.70	8.8	0.0	9	2(STD)	12
B2	13	0.93	0.48	153	3.00	1.7	1110	0.50	1.4	14.4	7.4	3.3	0.50	3.6	0.18	1.00	3.6	0.0	4	2(STD)	13
C1	6	5.40	0.44	1554	2.83	1.7	192	2.54	3.2	16.4	7.2	17.0	2.54	17.0	1.07	0.70	17.0	0.0	16	2(STD)	6
C2	7	0.15	0.52	92	2.17	1.5	186	2.54	3.2	2.0	9.9	0.8	2.54	0.8	0.20	0.70	0.8	0.0	-	2(STD)	7
D1	16	1.41	0.48	414	3.86	1.9	457	4.31	4.2	5.4	9.1	6.1	4.31	6.1	0.29	0.70	6.1	0.0	-	2(STD)	16
D2	17	0.88	0.48	308	2.76	1.7	456	4.31	4.2	4.9	9.2	3.9	4.31	3.9	0.18	1.00	3.9	0.0	-	2(STD)	17
E1	15	1.51	0.44	582	2.23	1.5	268	3.97	4.1	7.6	8.6	5.7	3.97	5.7	0.33	0.70	5.7	0.0	-	2(STD)	15
E2	13	0.20	0.52	72	2.77	1.7	164	3.97	4.1	1.4	10.0	1.1	3.97	1.1	0.06	0.70	1.1	0.0	-	2(STD)	13

* Please note the scope of this project did not include the replacement of the storm water trunk lines only the inlets and feed lines were sized and replaced as needed.

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2/20/2019

DRAINAGE MAP

PROJECT NO. 144642 ZONE 6142

NON-ARTERIAL STREET
MAINTENANCE
FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE					
			PLAN SCALE:	DRAWN	CGD	12/2014	APPROVED:
			NTS	DESIGNED	DPP	12/2014	
				SURVEY			
			PROFILE SCALE:	PROJ. MGR.	JBCG	2/11 3/19	
			HORIZONTAL:	LEAD ENGR.	BODP	3/19	
				FIELD MGR.	KBM	4/19	
			VERTICAL	RECOMMENDED: HLS 4-19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO:	301			SHEET 18 OF 52 SHEETS

STORM WATER MANAGEMENT PLAN

SITE DESCRIPTION

PROJECT LIMITS: E. 23RD STREET FROM S. 129TH E. AVE TO DEAD END E. 38TH STREET TO E. 41ST STREET, ALSO GARY COURT DRIVE FROM E. 31ST STREET TO DEAD END.

PROJECT DESCRIPTION: REMOVAL AND RECONSTRUCTION OF 0.30 MILES OF 2 LANE ASPHALT ROADWAY WITH CURB AND GUTTER, MILL AND OVERLAY OF 0.30 MILES OF 2 LANE ASPHALT ROADWAY WITH CURB AND GUTTER, AND INSTALL 2350 LINEAL FEET OF 6 INCH WATER LINE.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES: TEMPORARY SILT FENCES SHOULD BE INSTALLED PRIOR TO THE START OF GRADING WORK, TEMPORARY FIBER LOG (STRAW WATTLE) SHOULD BE INSTALLED AS GRADING WORK ALLOWS AND AROUND ALL DRAINAGE INLETS.

TOTAL AREA TO BE DISTURBED: 2.30 ac.

OFFSITE AREA TO BE DISTURBED: 0.0 ac.

MAXIMUM AREA TO BE DISTURBED AT ONE TIME: 0.67 ac.

WEIGHTED RUNOFF COEFFICIENT: 0.44

LATITUDE AND LONGITUDE OF CENTER OF PROJECT: LAT. 36.1302 and LONG. -95.8300

NAME OF RECEIVING WATERS: TUPELO CREEK

SENSITIVE WATERS OR WATERSHEDS: YES___ NO_X_

303(D) IMPAIRED WATERS: YES___ NO_X_

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

___ TEMPORARY SEEDING
_X_ PERMANENT SODDING, SPRIGGING OR SEEDING
___ VEGETATIVE MULCHING
___ SOIL RETENTION BLANKET
_X_ PRESERVATION OF EXISTING VEGETATION

STRUCTURAL PRACTICES:

___ TEMPORARY BRUSH SEDIMENT BARRIERS
_X_ TEMPORARY SILT FENCE
___ TEMPORARY SILT DIKES
_X_ TEMPORARY FIBER LOG
___ 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
_X_ INLET SEDIMENT FILTER
___ STABILIZED CONSTRUCTION EXIT

OFFSITE VEHICLE TRACKING:

___ HAUL ROADS DAMPENED FOR DUST CONTROL
_X_ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
_X_ EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

THE CONTRACTOR SHALL ALWAYS 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 (as recorded by a non-freezing rain gauge to be located on site). potentially erodable 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 manufacturers recommendation, State and Federal regulations to ensure correct handling, disposal, spill prevention and cleanup measures. Examples include but are not limited to: paints, acids, clearing solvents, chemical additives, concrete curing compounds and contaminated soils.

GENERAL NOTES:

A Stormwater Pollution Prevention Plan (SP3) is required to comply with the Oklahoma Pollution Discharge Elimination Systems (OPDES) regulations. This plan is developed 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 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 sire 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 and Handling of Materials
107.01	Laws, Rules, and Regulations To Be Observed
107.15	Storm Water Management
220.01-05	Temporary Erosion, Sedimentation and Storm Water Pollution Prevention and Control

In addition:
"ODEQ General Permit (OKR10) for Storm Water Discharge From Construction Activities with in the State of Oklahoma. ODEQ, Water Quality Division, September 13, 2017.

STORMWATER MANAGEMENT PLAN
PROJ NO 144642 MZ 6142
NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	01/2014	APPROVED:
			NTS	DESIGNED	DPP	01/2014	
				SURVEY			
			PROFILE SCALE:	PROJ. MGR.	[illegible]	2/15 3/19	
			HORIZONTAL:	LEAD ENGR.	BSDC	3/19	
				FIELD MGR.	CBV	4/19	
			VERTICAL	RECOMMENDED: HAS 4-19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO: 301				SHEET 19 OF 52 SHEETS

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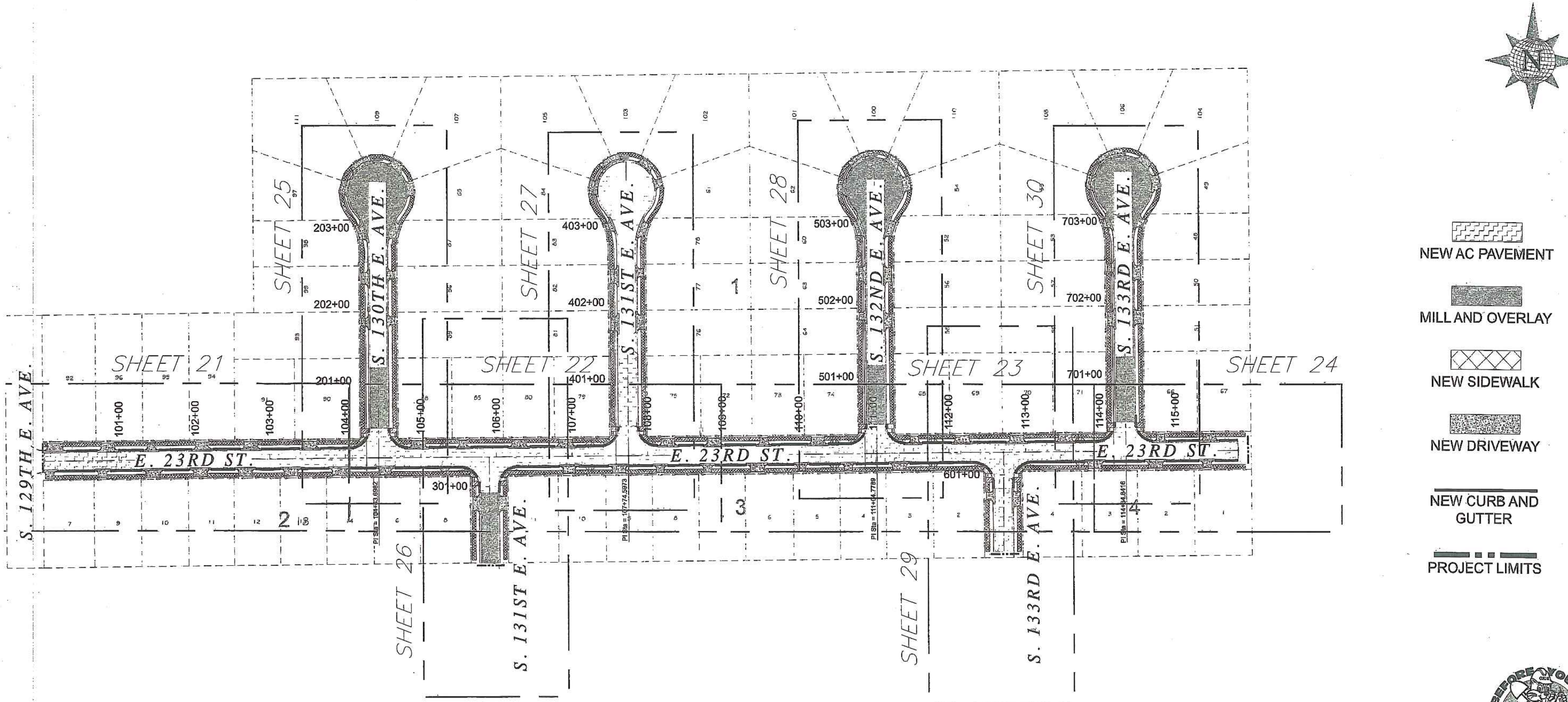
2/20/2019



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2/20/2019

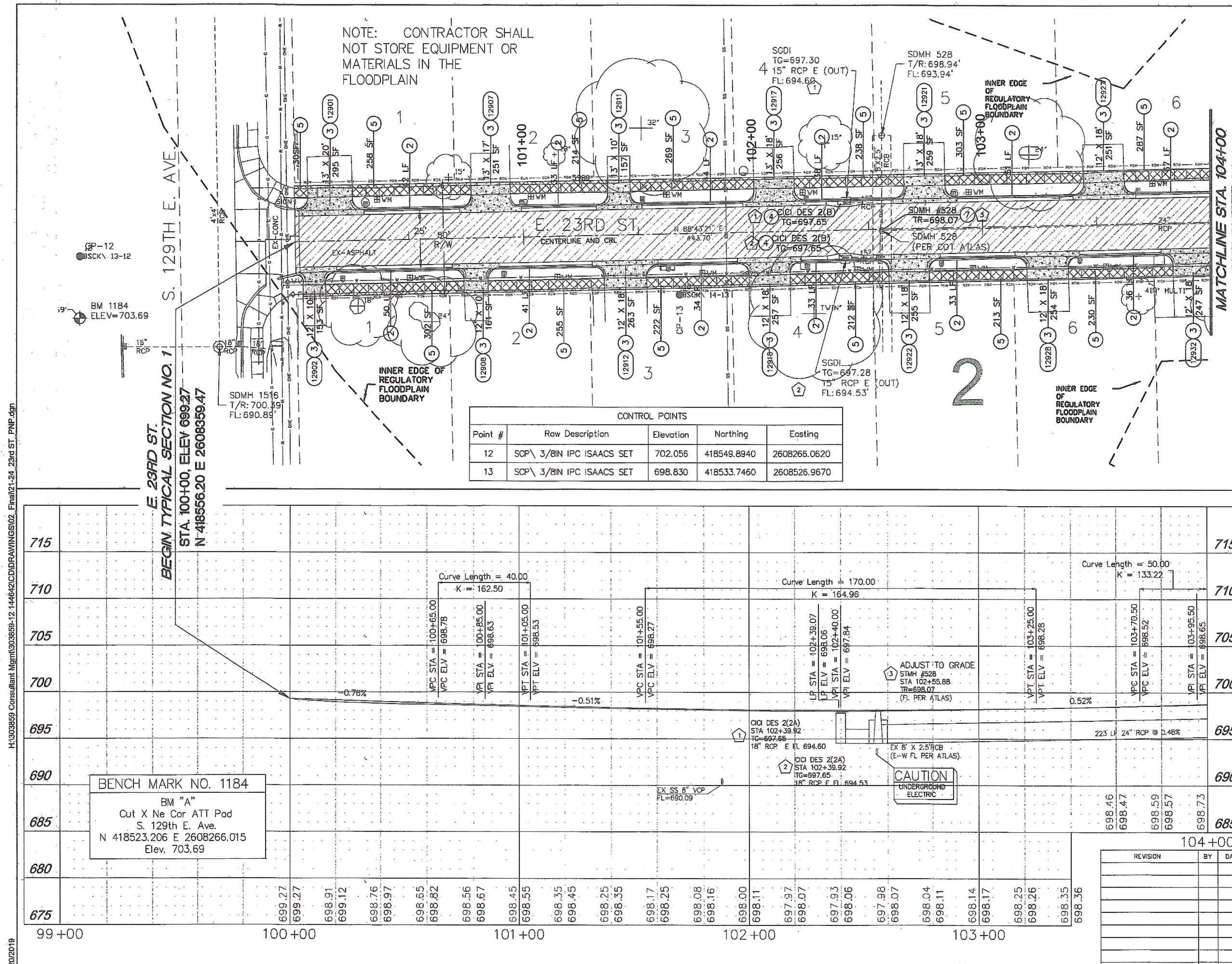
ROADWAY KEY MAP

PROJECT NO. 144642 ZONE 6142

NON-ARTERIAL STREET MAINTENANCE
FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	12/2014	APPROVED:
			NTS	DESIGNED	DPP	12/2014	
				SURVEY			
			PROFILE SCALE:	PROJ. MGR.	JD	2/19	
			HORIZONTAL:	LEAD ENGR.	D	5/19	
				FIELD MGR.	CBV	4/19	
			VERTICAL	RECOMMENDED: HAS 4-19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 6/23/20
			ATLAS PAGE NO:	301			SHEET 20 OF 52 SHEETS



CONTROL POINTS				
Point #	Row Description	Elevation	Northing	Easting
12	SCP\ 3/8IN IPC ISAACS SET	702.056	418549.8940	2608266.0620
13	SCP\ 3/8IN IPC ISAACS SET	698.830	418533.7460	2608526.9670

BENCH MARK NO. 1184

BM "A"
Cut X Ne Cor ATT Pad
S. 129th E. Ave.
N 418523.206 E 2608266.015
Elev. 703.69

LEGEND:

1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

(XX) STORMWATER STRUCTURE NO.

(1234) NEAREST STREET ADDRESS

PROJECT LIMITS

- FULL DEPTH RECONSTRUCTION
- TYPE I AC PATCH
- 4" PCC SIDEWALK
- MILL AND OVERLAY
- DRIVEWAY REPLACEMENT

0 10 20 30
1"=20'

BEFORE YOU DIG 811 CALL OKIE

ROADWAY PLAN AND PROFILE
PROJECT NO. 144642 MZ 6142
E. 23RD ST. (1)
STA 100+00 TO STA 104+00
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	Isaacs Surveying	
PROFILE SCALE:	PROJ. MGR.	JG	2/15
HORIZONTAL: 1" = 20'	LEAD ENGR.	(B)	3/19
	FIELD MGR.	BPW	4/19
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HAS	4-19

APPROVED: CITY ENGINEER
DATE: 1/23/20
FILE: DRAWING:
ATLAS PAGE NO: 301
SHEET 21 OF 52 SHEETS

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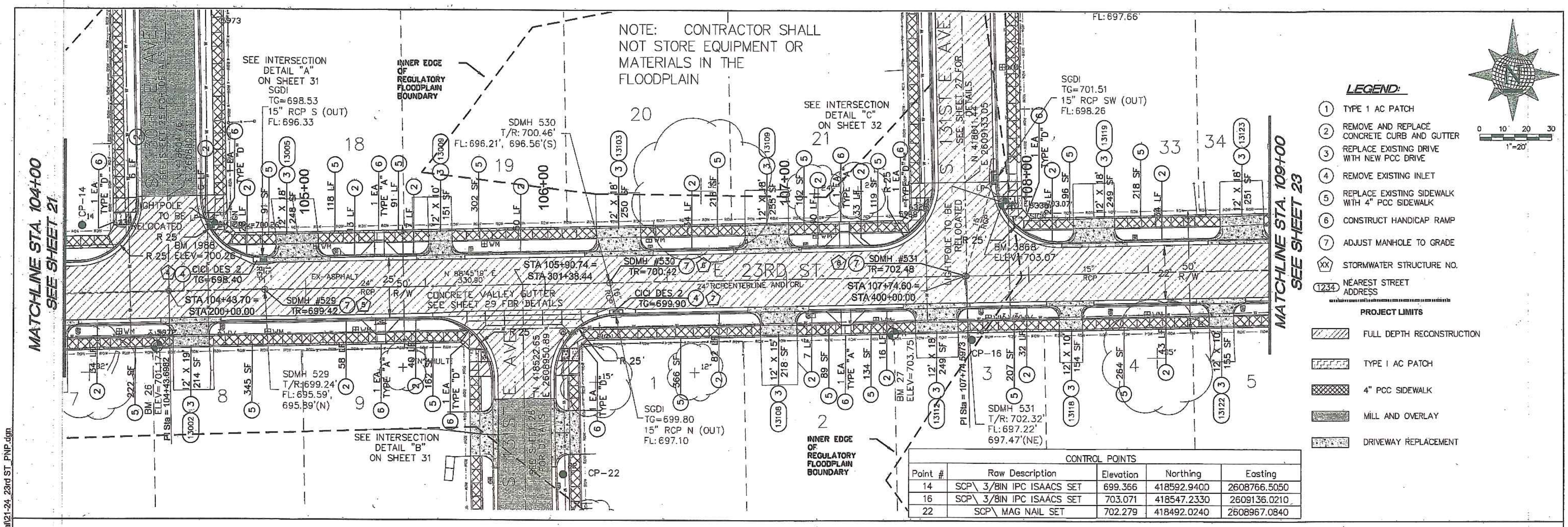
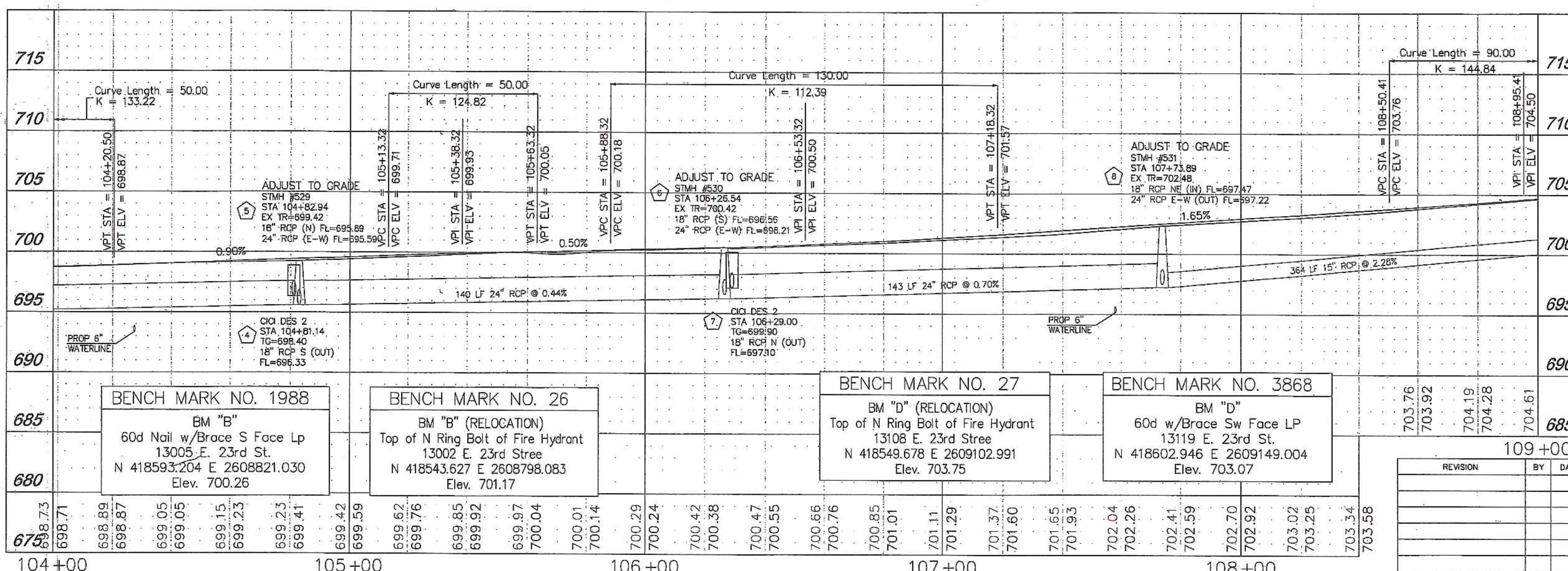


CONTROL POINTS				
Point #	Raw Description	Elevation	Northing	Easting
14	SCP\ 3/8IN IPC ISAACS SET	699.366	418592.9400	2608766.5050
16	SCP\ 3/8IN IPC ISAACS SET	703.071	418547.2330	2609136.0210
22	SCP\ MAG NAIL SET	702.279	418492.0240	2608967.0840



BENCH MARK NO. 1988
BM "B"
60d Nail w/Brace S Face Lp
13005 E. 23rd St.
N 418593.204 E 2608821.030
Elev. 700.26

BENCH MARK NO. 26
BM "B" (RELOCATION)
Top of N Ring Bolt of Fire Hydrant
13002 E. 23rd Stree
N 418543.627 E 2608798.083
Elev. 701.17

BENCH MARK NO. 27
BM "D" (RELOCATION)
Top of N Ring Bolt of Fire Hydrant
13108 E. 23rd Stree
N 418549.678 E 2609102.991
Elev. 703.75

BENCH MARK NO. 3868
BM "D"
60d w/Brace Sw Face LP
13119 E. 23rd St.
N 418602.946 E 2609149.004
Elev. 703.07

ROADWAY PLAN AND PROFILE
PROJECT NO. 144642 ZONE 6142
E. 23RD ST. (2)
STA 104+00 TO STA 109+00

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014	APPROVED:
	DESIGNED	DPP	11/2014	
	SURVEY	ISAACS SURVEYING		
PROFILE SCALE:	PROJ. MGR.	JB	2/19	
HORIZONTAL: 1" = 20'	LEAD ENGR.	D	3/19	
	FIELD MGR.	CBV	4/19	
VERTICAL 1" = 5'	RECOMMENDED: HAS 4-19 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: 1/23/20
ATLAS PAGE NO: 301				SHEET 22 OF 52 SHEETS

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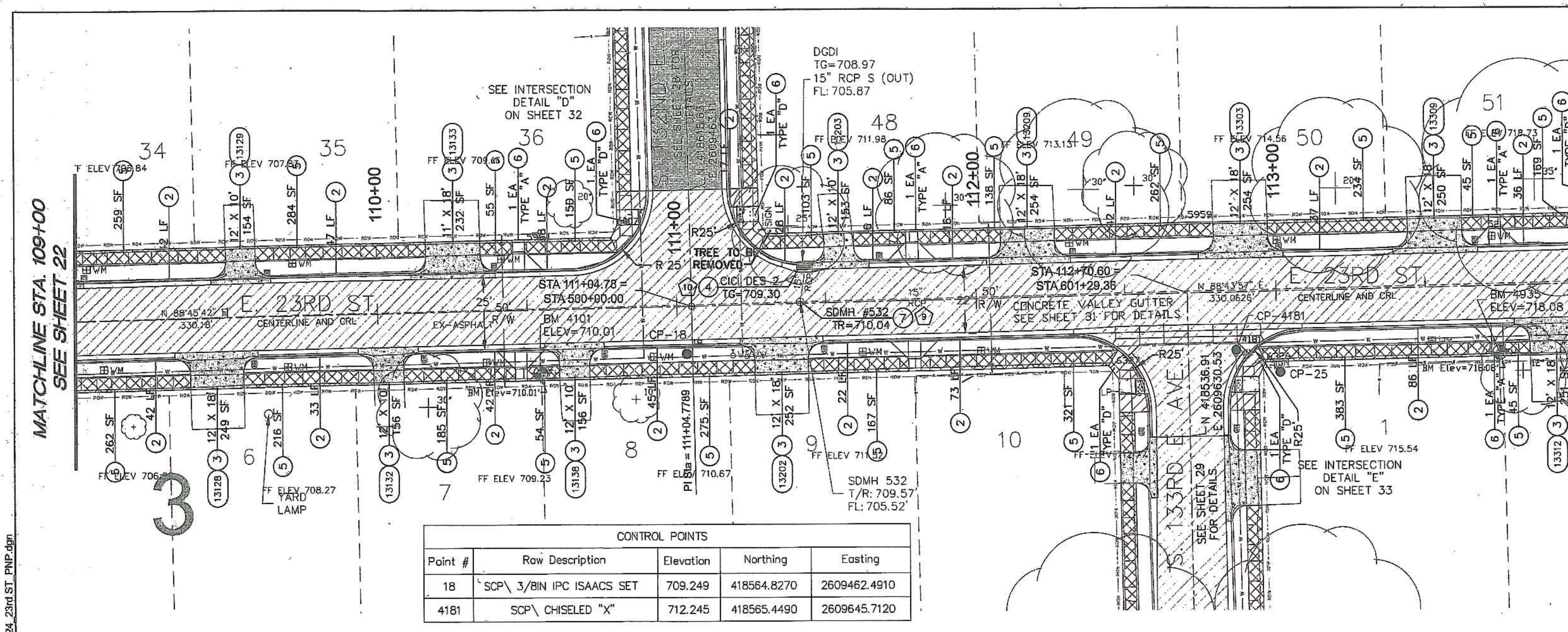


CONTROL POINTS

Point #	Row Description	Elevation	Northing	Easting
18	SCP\ 3/8IN IPC ISAACS SET	709.249	418564.8270	2609462.4910
4181	SCP\ CHISELED "X"	712.245	418565.4490	2609645.7120

LEGEND:

1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

(XX) STORMWATER STRUCTURE NO.

(1234) NEAREST STREET ADDRESS

PROJECT LIMITS

FULL DEPTH RECONSTRUCTION

TYPE I AC PATCH

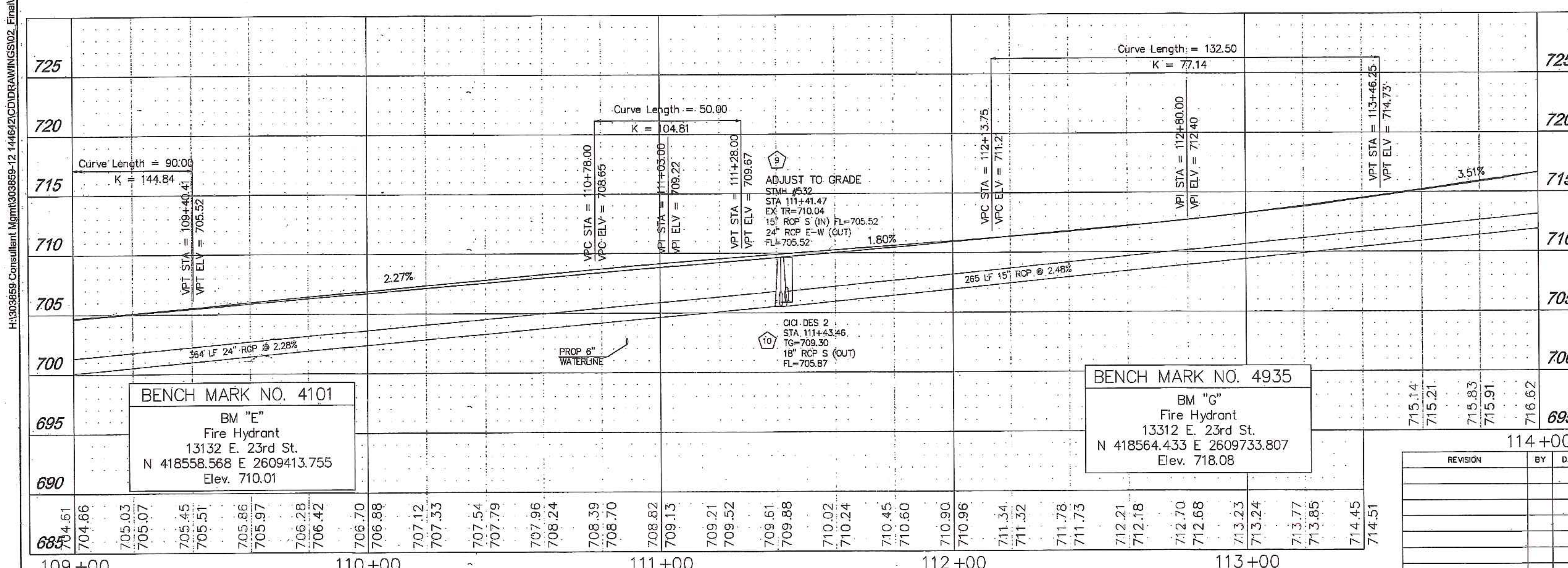
4" PCC SIDEWALK

MILL AND OVERLAY

DRIVEWAY REPLACEMENT

0 10 20 30

1"=20'



BENCH MARK NO. 4101

BM "E"
Fire Hydrant
13132 E. 23rd St.
N 418558.568 E 2609413.755
Elev. 710.01

BENCH MARK NO. 4935

BM "G"
Fire Hydrant
13312 E. 23rd St.
N 418564.433 E 2609733.807
Elev. 718.08

BEFORE YOU DIG 811 CALL OKIE

ROADWAY PLAN AND PROFILE

PROJECT NO. 144642 ZONE 6142

E. 23RD ST. (3)
STA 109+00 TO STA 114+00

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014	APPROVED:
	DESIGNED	DPP	11/2014	
	SURVEY	ISAACS SURVEYING		
PROFILE SCALE:	PROJ. MGR.	JB	2/19	
HORIZONTAL: 1" = 20'	LEAD ENGR.		3/19	
	FIELD MGR.		4/19	
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HBS	4-19	CITY ENGINEER
FILE:	DRAWING:			DATE: 1/23/20
ATLAS PAGE NO: 301				SHEET 23 OF 52 SHEETS

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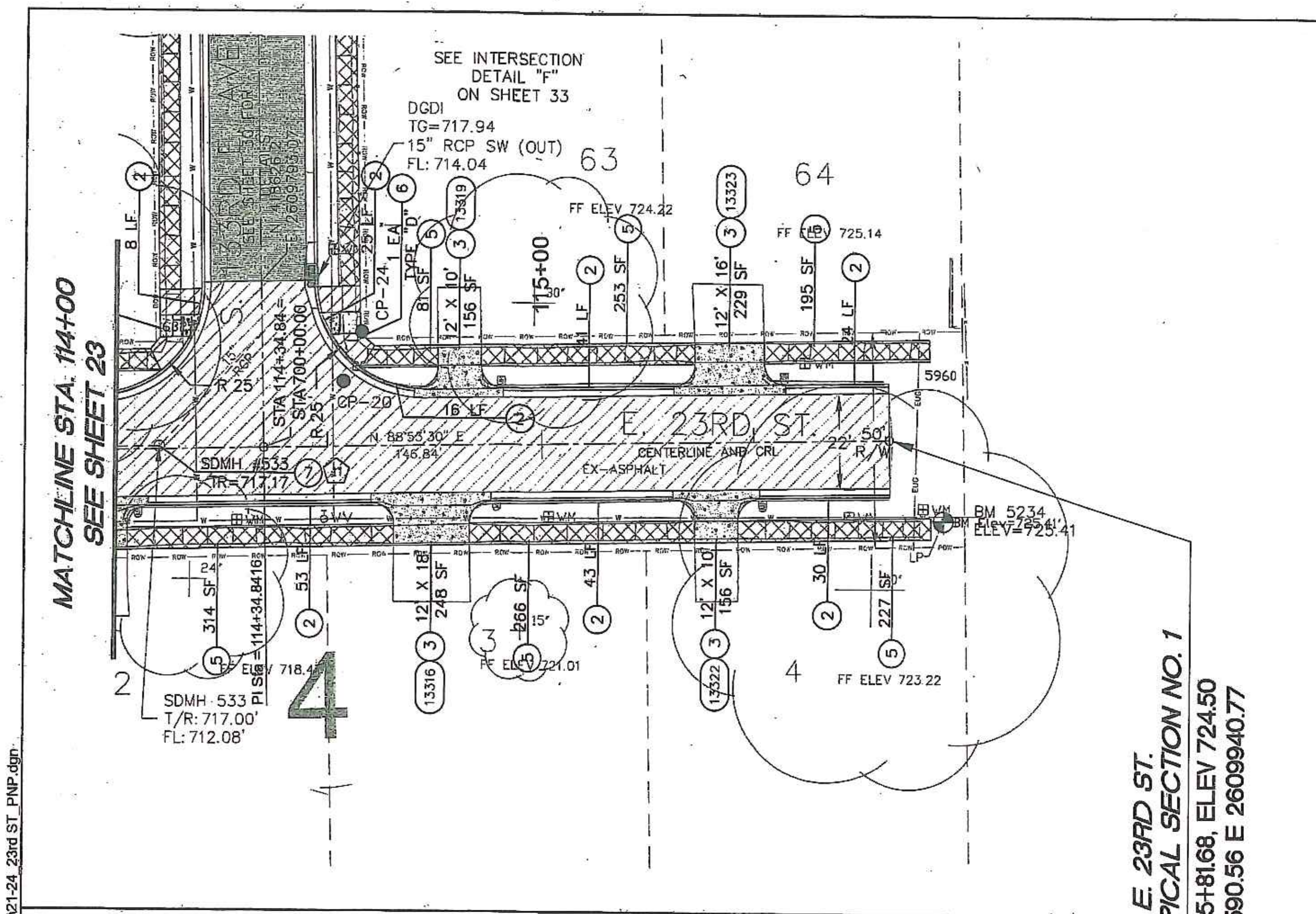


LEGEND:

1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

XX STORMWATER STRUCTURE NO.

1234 NEAREST STREET ADDRESS

PROJECT LIMITS

FULL DEPTH RECONSTRUCTION

TYPE I AC PATCH

4" PCC SIDEWALK

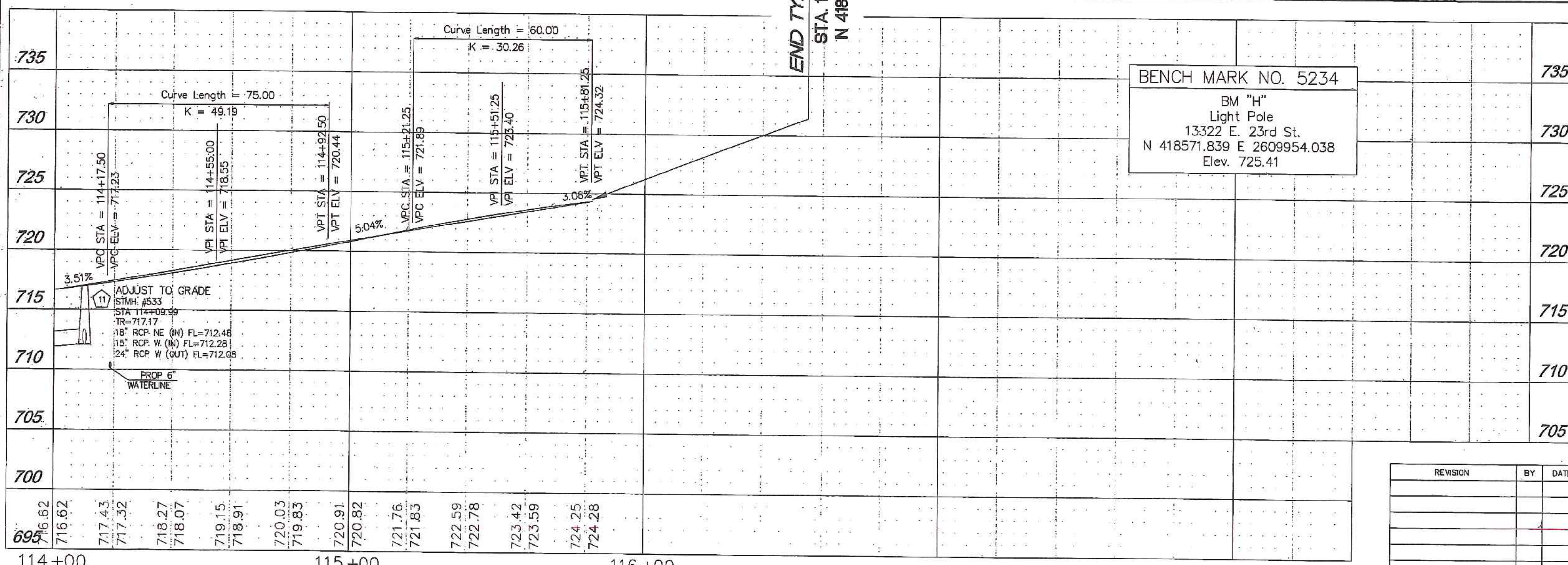
MILL AND OVERLAY

DRIVEWAY REPLACEMENT

0 10 20 30
1"=20'

CONTROL POINTS

Point #	Raw Description	Elevation	Northing	Easting
20	SCP\ 3/8IN IPC ISAACS SET	718.690	418603.1900	2609812.7560



BENCH MARK NO. 5234

BM "H"
Light Pole
13322 E. 23rd St.
N 418571.839 E 2609954.038
Elev. 725.41

BEFORE YOU DIG CALL OKIE 811

ROADWAY PLAN AND PROFILE

PROJECT NO. 144642 ZONE 6142

E. 23RD ST. (4)
STA 114+00 TO STA 115+81.68

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE:	PROJ. MGR.		2/19
HORIZONTAL: 1" = 20'	LEAD ENGR.		3/19
	FIELD MGR.		4/19
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HAS	4-19
FILE:	DRAWING:		
ATLAS PAGE NO: 301			

APPROVED:

CITY ENGINEER

DATE: 1/23/20

SHEET 24 OF 52 SHEETS

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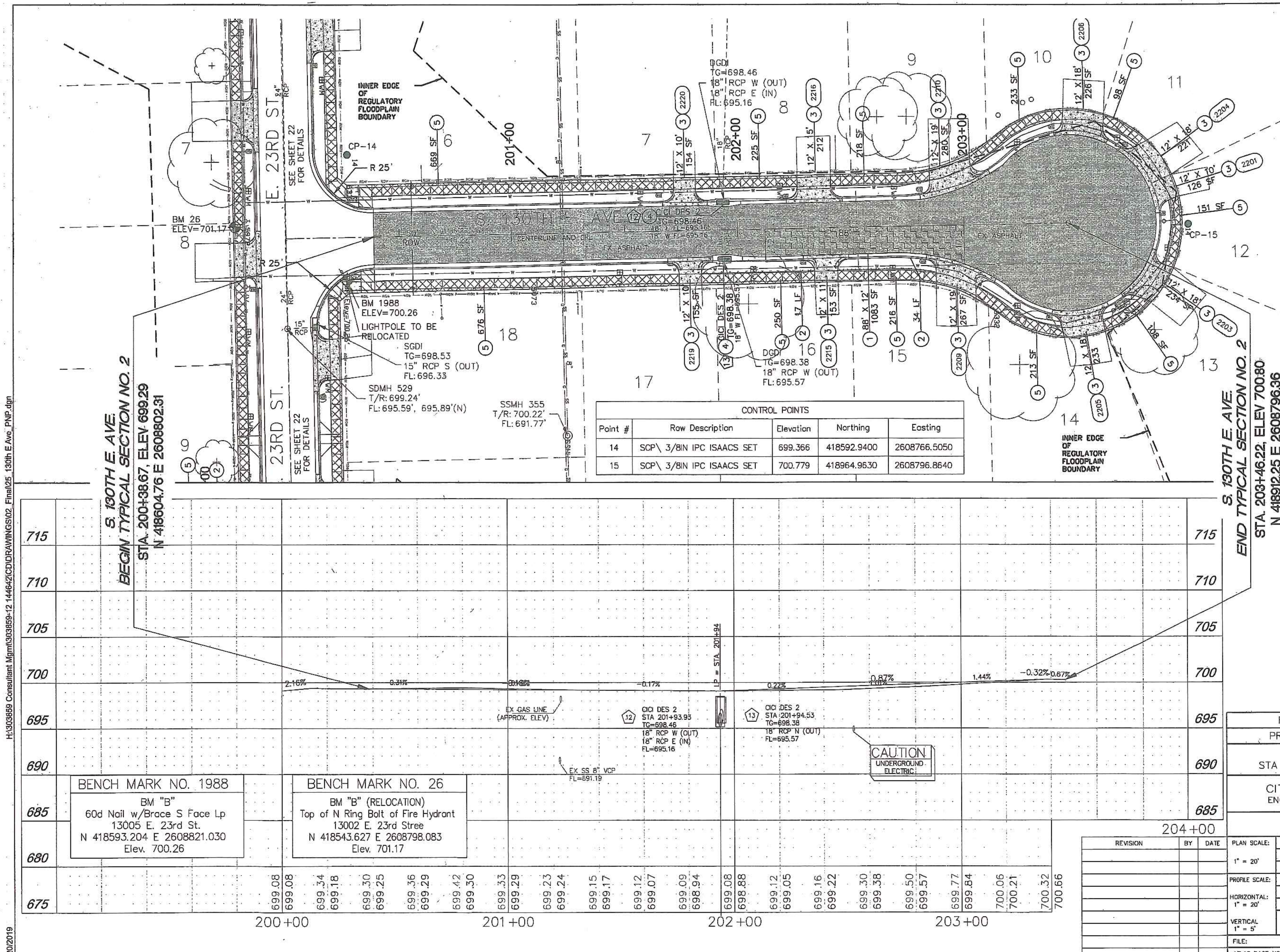


CONTROL POINTS				
Point #	Row Description	Elevation	Northing	Easting
14	SCP\ 3/8IN IPC ISAACS SET	699.366	418592.9400	2608766.5050
15	SCP\ 3/8IN IPC ISAACS SET	700.779	418964.9630	2608796.8640

BENCH MARK NO. 1988

BM "B"
60d Nail w/Brace S Face Lp
13005 E. 23rd St.
N 418593.204 E 2608821.030
Elev. 700.26

BENCH MARK NO. 26

BM "B" (RELOCATION)
Top of N Ring Bolt of Fire Hydrant
13002 E. 23rd Stree
N 418543.627 E 2608798.083
Elev. 701.17

0 10 20 30
1"=20'

LEGEND:

1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

(XX) STORMWATER STRUCTURE NO.

(1234) NEAREST STREET ADDRESS

PROJECT LIMITS

- FULL DEPTH RECONSTRUCTION
- TYPE I AC PATCH
- 4" PCC SIDEWALK
- MILL AND OVERLAY
- DRIVEWAY REPLACEMENT

BEFORE YOU DIG 811 CALL OKIE

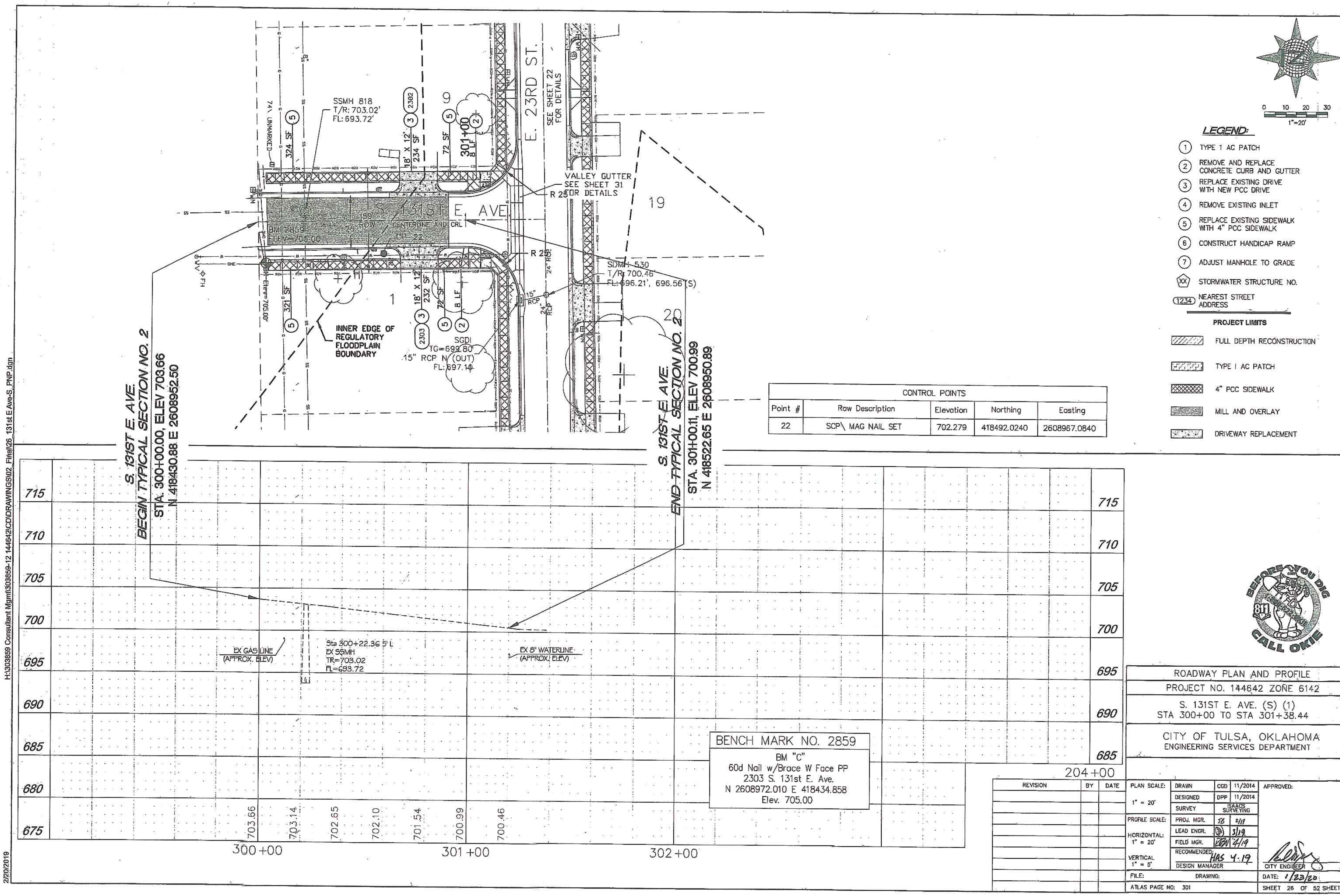
ROADWAY PLAN AND PROFILE
PROJECT NO. 144642 ZONE 6142
S. 130TH E. AVE. (1)
STA 200+00 TO STA 203+46.22

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CCD	11/2014	APPROVED:
	DESIGNED	DPP	11/2014	
	SURVEY	ISAACS SURVEYING		
PROFILE SCALE:	PROJ. MGR.	JB	2/18	
HORIZONTAL: 1" = 20'	LEAD ENGR.		3/19	
	FIELD MGR.		2/19	
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HAS	4-19	CITY ENGINEER
FILE:	DRAWING:			DATE: 1/22/20
ATLAS PAGE NO: 301				SHEET 25 OF 52 SHEETS

2/20/2019



LEGEND:

1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

(XX) STORMWATER STRUCTURE NO.

(1234) NEAREST STREET ADDRESS

PROJECT LIMITS

- FULL DEPTH RECONSTRUCTION
- TYPE I AC PATCH
- 4" PCC SIDEWALK
- MILL AND OVERLAY
- DRIVEWAY REPLACEMENT

CONTROL POINTS				
Point #	Row Description	Elevation	Northing	Easting
22	SCP\ MAG NAIL SET	702.279	418492.0240	2608967.0840

BENCH MARK NO. 2859

BM "C"
60d Nail w/Brace W Face PP
2303 S. 131st E. Ave.
N 2608972.010 E 418434.858
Elev. 705.00

ROADWAY PLAN AND PROFILE
PROJECT NO. 144642 ZONE 6142

S. 131ST E. AVE. (S) (1)
STA 300+00 TO STA 301+38.44

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014	APPROVED:
	DESIGNED	DPP	11/2014	
	SURVEY	ISAACS SURVEYING		
PROFILE SCALE: HORIZONTAL: 1" = 20' VERTICAL 1" = 5'	PROJ. MGR.	TS	3/19	
	LEAD ENGR.		3/19	
	FIELD MGR.		2/19	
	RECOMMENDED: DESIGN MANAGER	HAS 4-19		CITY ENGINEER
FILE:	DRAWING:			DATE: 1/23/20
ATLAS PAGE NO: 301				SHEET 26 OF 52 SHEETS

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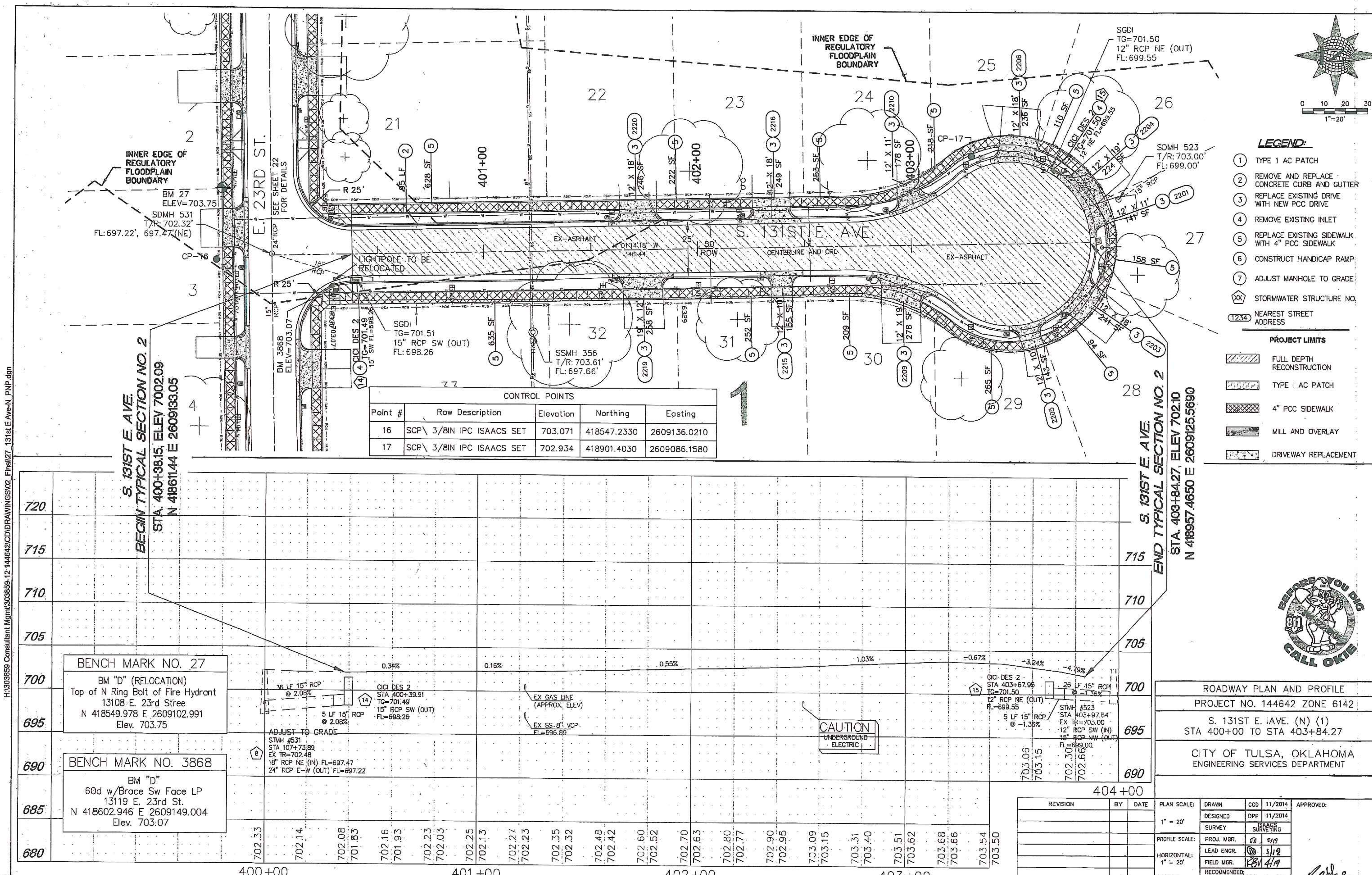

LEGEND:

1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

(XX) STORMWATER STRUCTURE NO.

(1234) NEAREST STREET ADDRESS

PROJECT LIMITS

- FULL DEPTH RECONSTRUCTION
- TYPE I AC PATCH
- 4" PCC SIDEWALK
- MILL AND OVERLAY
- DRIVEWAY REPLACEMENT

CONTROL POINTS

Point #	Raw Description	Elevation	Northing	Easting
16	SCP\ 3/8IN IPC ISAACS SET	703.071	418547.2330	2609136.0210
17	SCP\ 3/8IN IPC ISAACS SET	702.934	418901.4030	2609086.1580

BENCH MARK NO. 27

BM "D" (RELOCATION)
Top of N Ring Bolt of Fire Hydrant
13108 E. 23rd Stree
N 418549.978 E 2609102.991
Elev. 703.75

BENCH MARK NO. 3868

BM "D"
60d w/Brace Sw Face LP
13119 E. 23rd St.
N 418602.946 E 2609149.004
Elev. 703.07

ROADWAY PLAN AND PROFILE
PROJECT NO. 144642 ZONE 6142
S. 131ST E. AVE. (N) (1)
STA 400+00 TO STA 403+84.27

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE:	PROJ. MGR.		2/19
HORIZONTAL: 1" = 20'	LEAD ENGR.		3/19
	FIELD MGR.		4/19
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HAS	4-19
FILE:	DRAWING:		
ATLAS PAGE NO: 301			

APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 27 OF 52 SHEETS

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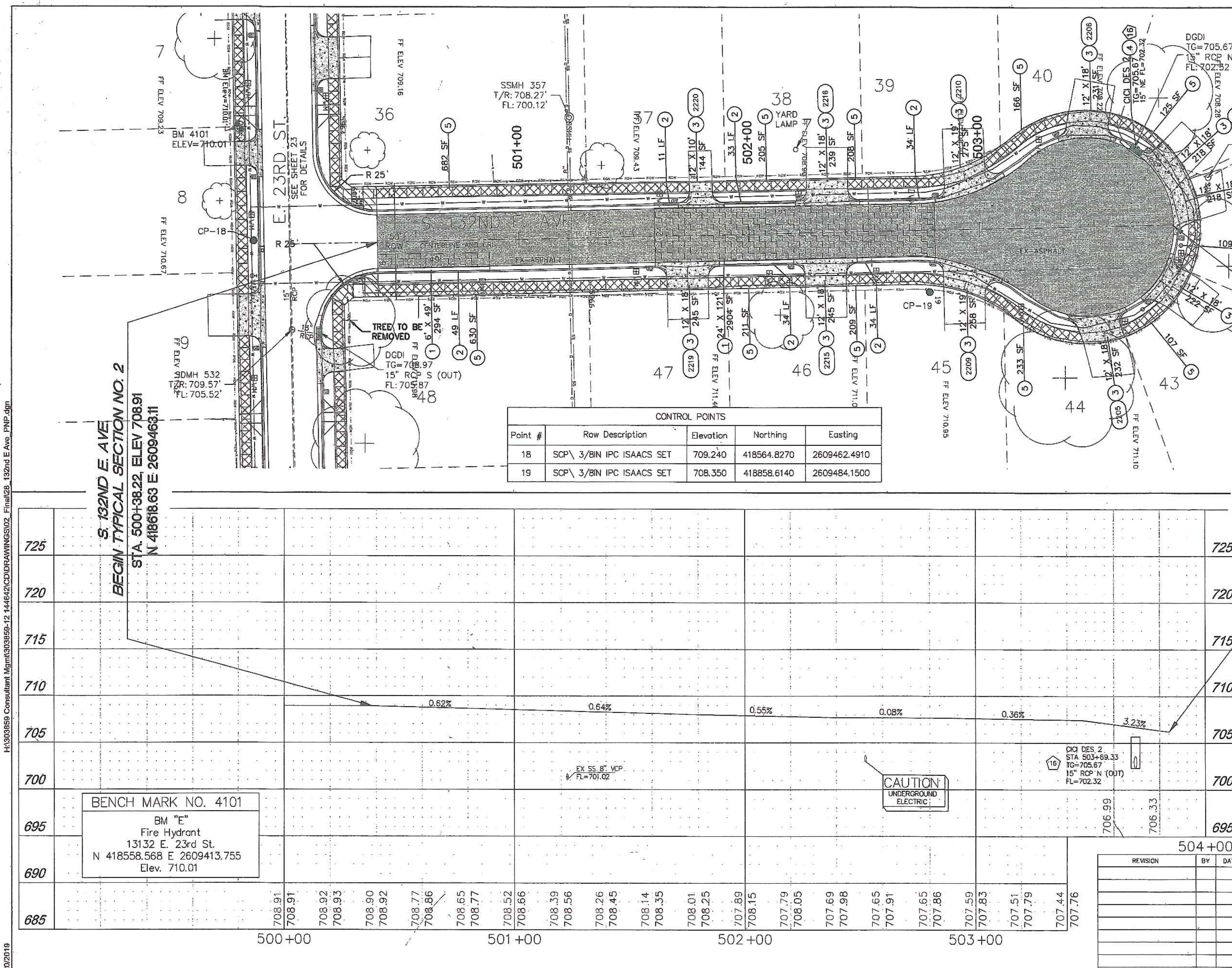

CONTROL POINTS				
Point #	Row Description	Elevation	Northing	Easting
18	SCP\ 3/8IN IPC ISAACS SET	709.240	418564.8270	2609462.4910
19	SCP\ 3/8IN IPC ISAACS SET	708.350	418858.6140	2609484.1500

BENCH MARK NO. 4101

BM "E"
Fire Hydrant
13132 E. 23rd St.
N 418558.568 E 2609413.755
Elev. 710.01

0 10 20 30
1"=20'

LEGEND:

1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

(XX) STORMWATER STRUCTURE NO.
(1234) NEAREST STREET ADDRESS

PROJECT LIMITS

- FULL DEPTH RECONSTRUCTION
- TYPE I AC PATCH
- 4" PCC SIDEWALK
- MILL AND OVERLAY
- DRIVEWAY REPLACEMENT

BEFORE YOU DIG CALL OKIE 811

ROADWAY PLAN AND PROFILE
PROJECT NO. 144642 ZONE 6142
S. 132ND E. AVE. (1)
STA 500+00 TO STA 503+84.17
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE:	PROJ. MGR.	SB	4/19
HORIZONTAL: 1" = 20'	LEAD ENGR.		3/19
	FIELD MGR.		4/19
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HRS	4-19
FILE:	DRAWING:		
ATLAS PAGE NO: 301			

APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 28 OF 52 SHEETS

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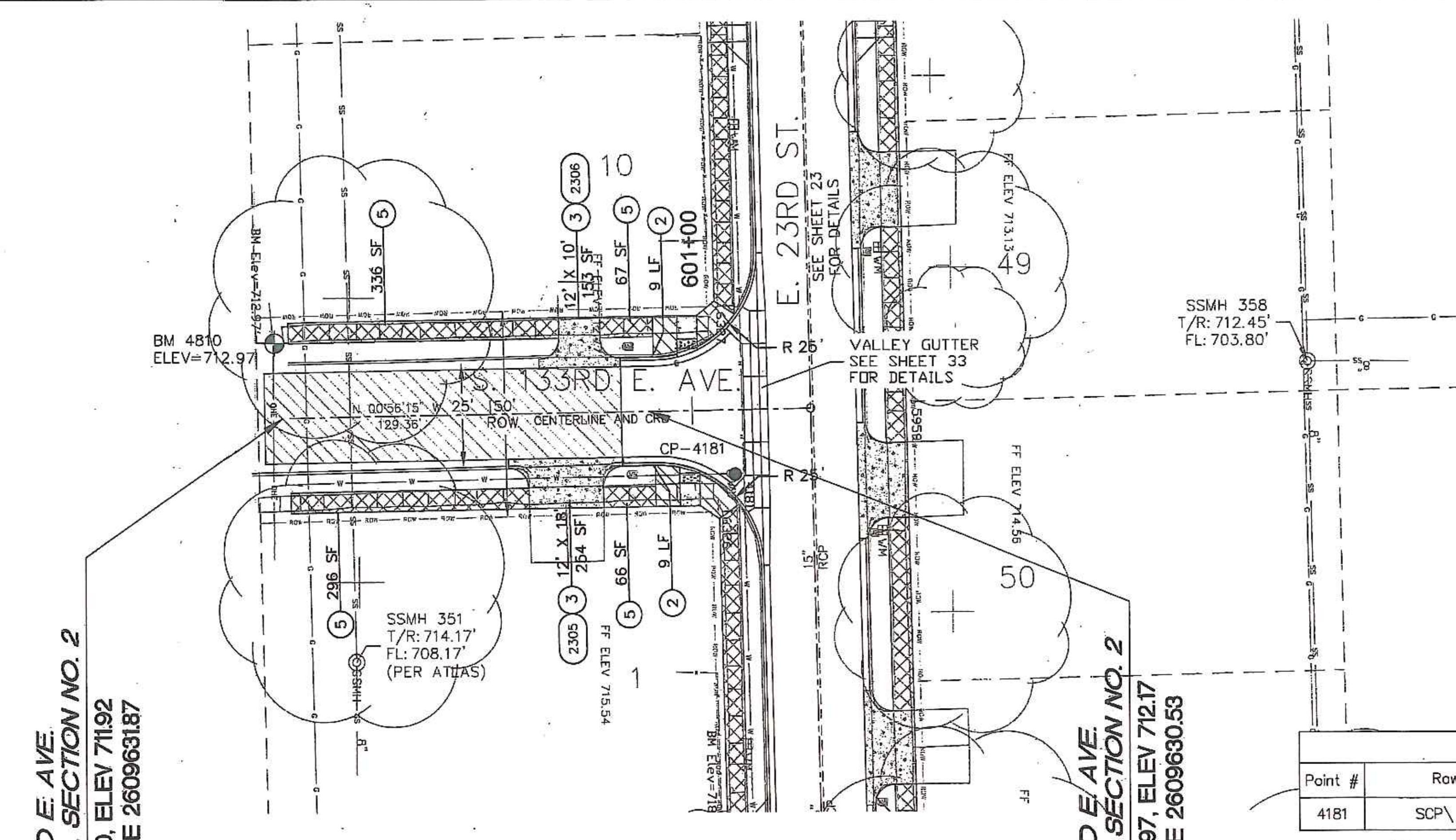
2/20/2019



CONTROL POINTS				
Point #	Raw Description	Elevation	Northing	Easting
4181	SCP\ CHISELED "X"	712.245	418565.4490	2609645.7120

0 10 20 30
1"=20'

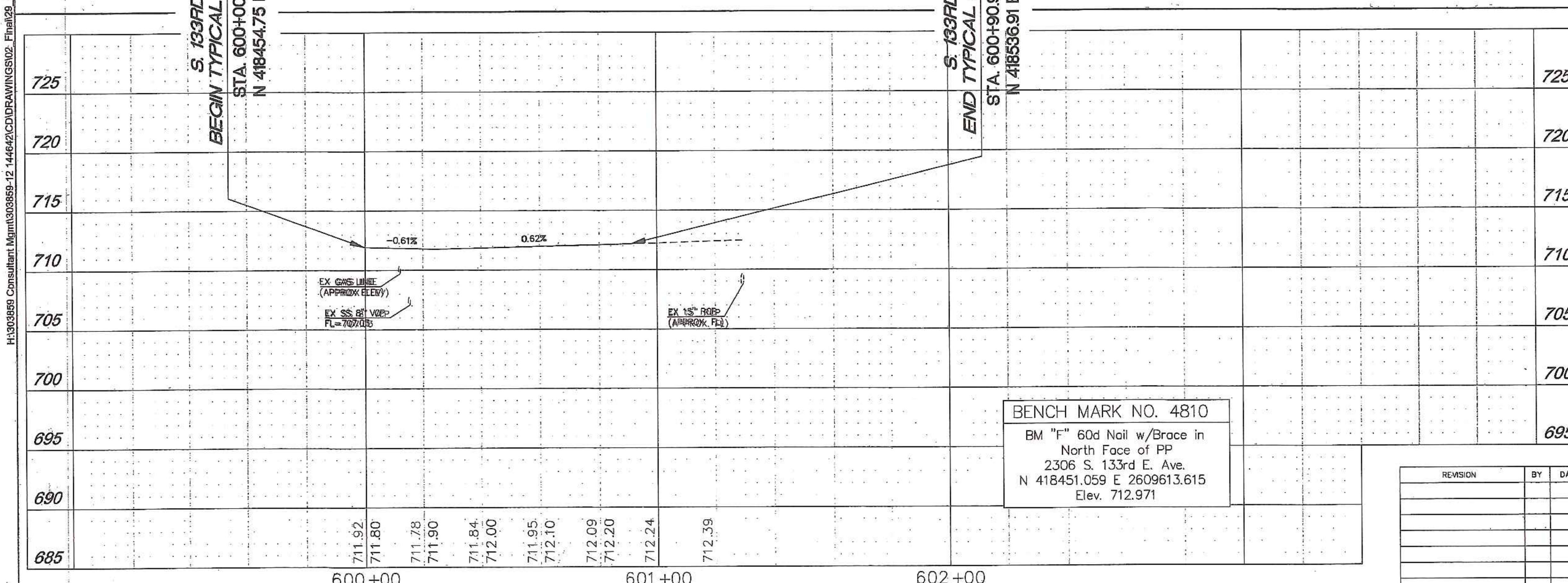
LEGEND:

1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

XX STORMWATER STRUCTURE NO.
1234 NEAREST STREET ADDRESS

PROJECT LIMITS

- FULL DEPTH RECONSTRUCTION
- TYPE I AC PATCH
- 4" PCC SIDEWALK
- MILL AND OVERLAY
- DRIVEWAY REPLACEMENT



BENCH MARK NO. 4810

BM "F" 60d Nail w/Brace in North Face of PP
2306 S. 133rd E. Ave.
N 418451.059 E 2609613.615
Elev. 712.971

BEFORE YOU DIG CALL OKIE 811

ROADWAY PLAN AND PROFILE
PROJECT NO. 144642 ZONE 6142
S. 133RD E. AVE. (1)
STA 60000+00 TO STA 601+29.36

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE: HORIZONTAL: 1" = 20' VERTICAL 1" = 5'	PROJ. MGR.	JD	3/19
	LEAD ENGR.		3/19
	FIELD MGR.	PBN	4/19
	RECOMMENDED: DESIGN MANAGER	HAS	4-19
FILE:	DRAWING:		
ATLAS PAGE NO: 301			

APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 29 OF 52 SHEETS

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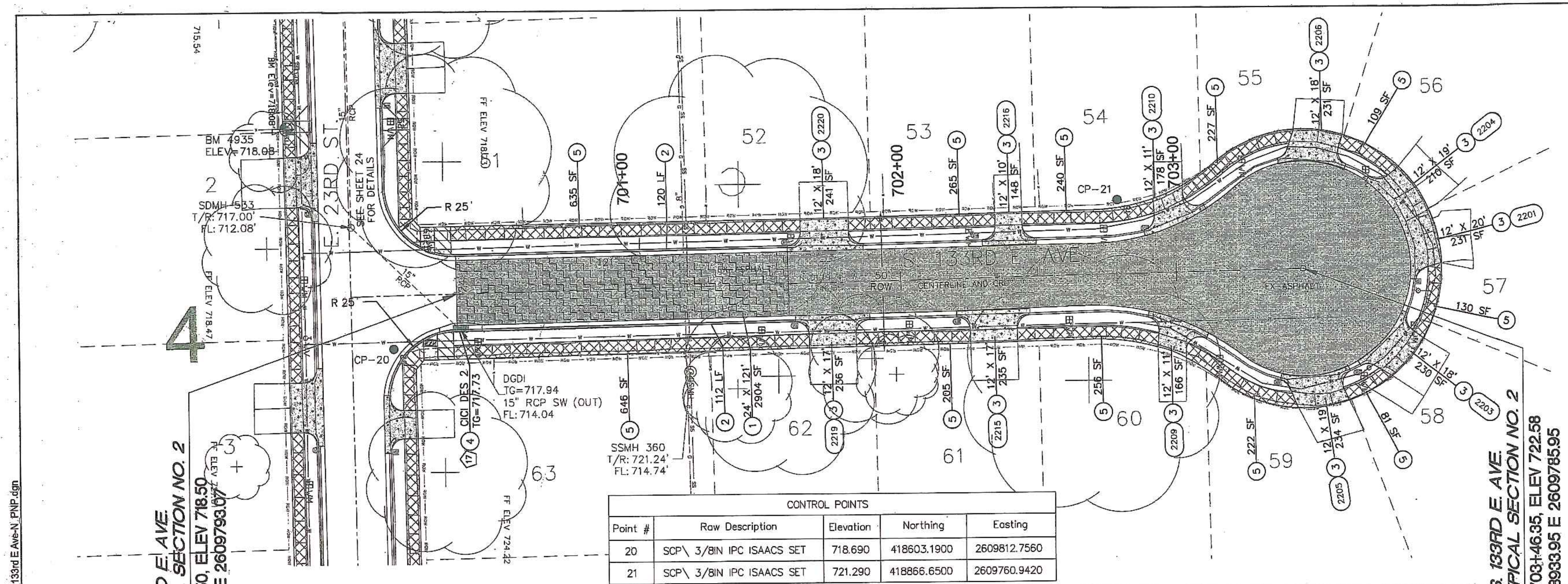
2/20/2019



CONTROL POINTS				
Point #	Raw Description	Elevation	Northing	Easting
20	SCP\ 3/8IN IPC ISAACS SET	718.690	418603.1900	2609812.7560
21	SCP\ 3/8IN IPC ISAACS SET	721.290	418866.6500	2609760.9420

0 10 20 30
1"=20'

LEGEND:

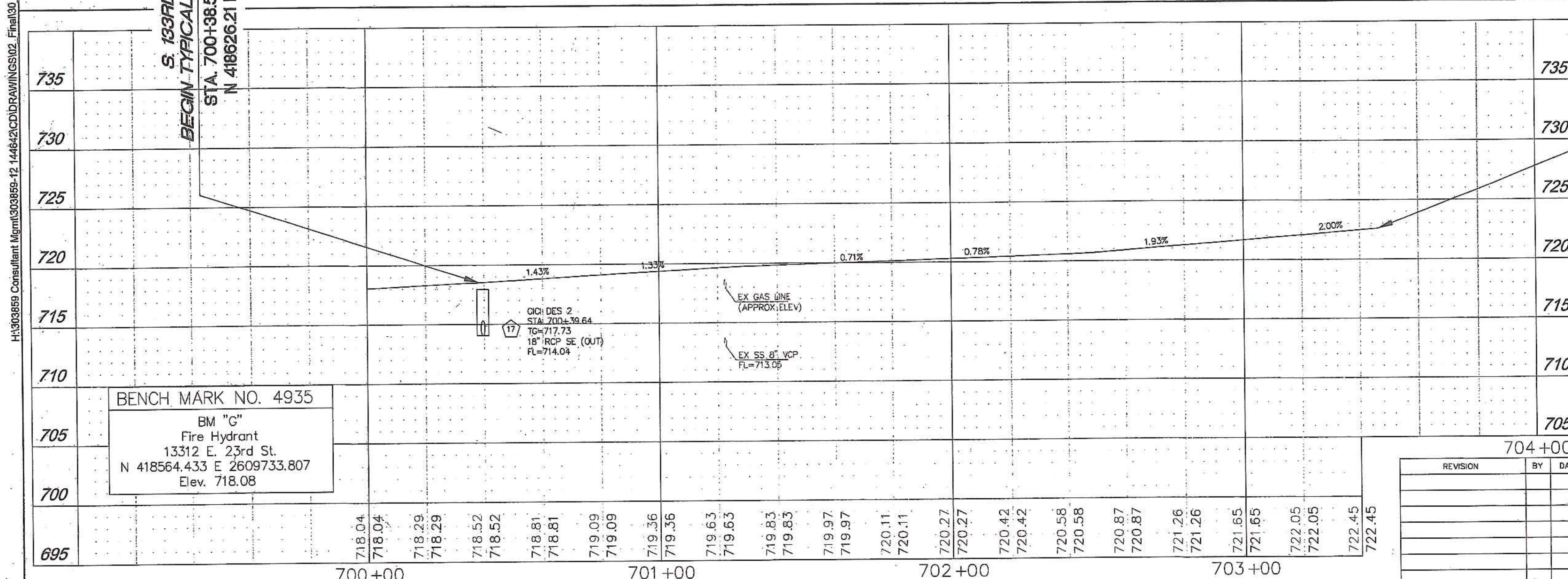
1. TYPE 1 AC PATCH
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
3. REPLACE EXISTING DRIVE WITH NEW PCC DRIVE
4. REMOVE EXISTING INLET
5. REPLACE EXISTING SIDEWALK WITH 4" PCC SIDEWALK
6. CONSTRUCT HANDICAP RAMP
7. ADJUST MANHOLE TO GRADE

XX — STORMWATER STRUCTURE NO.

1234 — NEAREST STREET ADDRESS

PROJECT LIMITS

- FULL DEPTH RECONSTRUCTION
- TYPE I AC PATCH
- 4" PCC SIDEWALK
- MILL AND OVERLAY
- DRIVEWAY REPLACEMENT



BENCH MARK NO. 4935

BM "G"
Fire Hydrant
13312 E. 23rd St.
N 418564.433 E 2609733.807
Elev. 718.08

BEFORE YOU DIG CALL OKIE 811

ROADWAY PLAN AND PROFILE
PROJECT NO. 144642 ZONE 6142
S. 133RD E. AVE. (1)
STA 700+00 TO STA 703+46.35

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE: HORIZONTAL: 1" = 20' VERTICAL 1" = 5'	PROJ. MGR.	JB	2/15
	LEAD ENGR.		3/19
	FIELD MGR.	ZBN	4/19
	RECOMMENDED: HMS 4-19 DESIGN MANAGER		
FILE:	DRAWING:		
ATLAS PAGE NO: 301			

APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 30 OF 52 SHEETS

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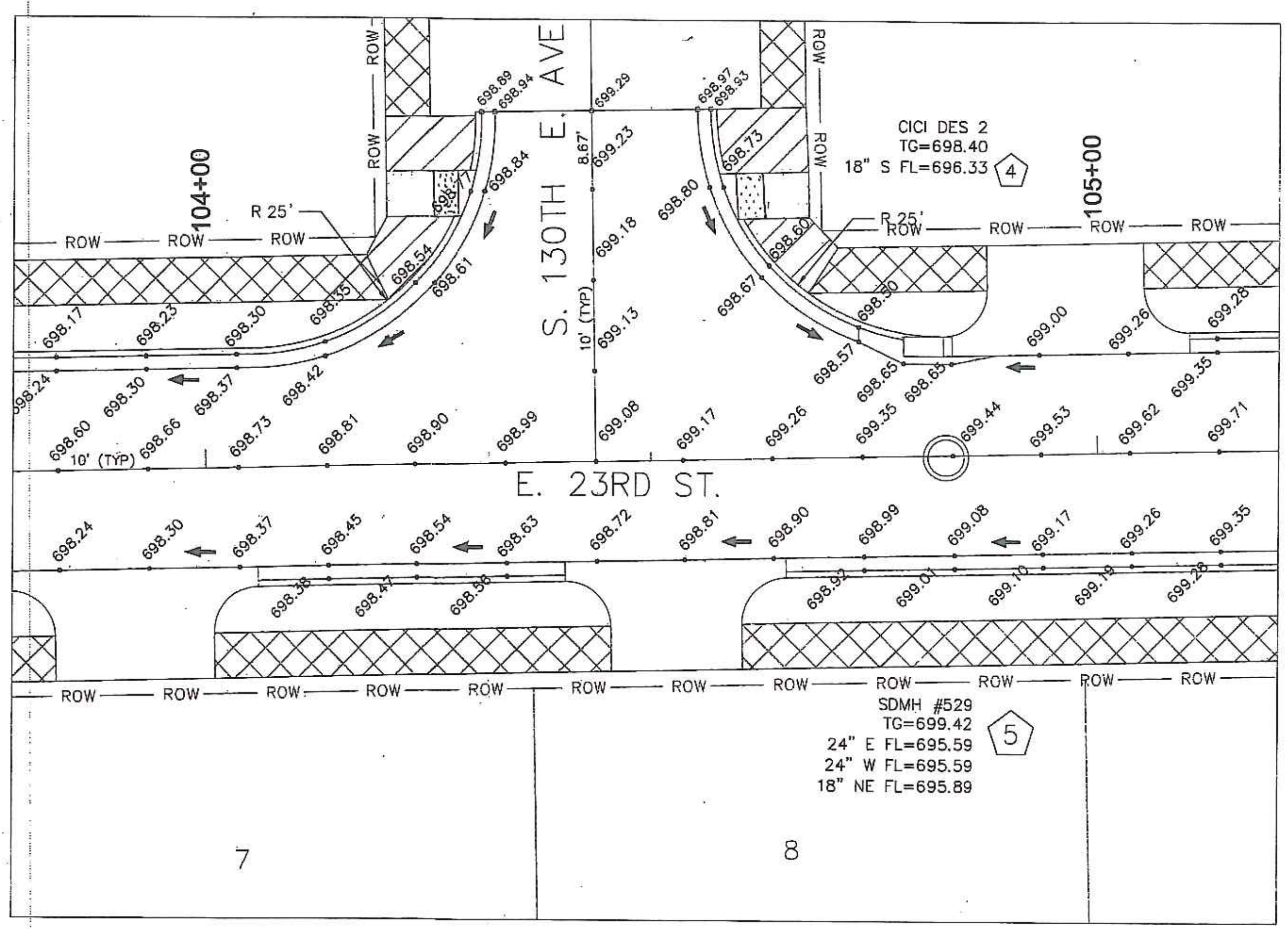
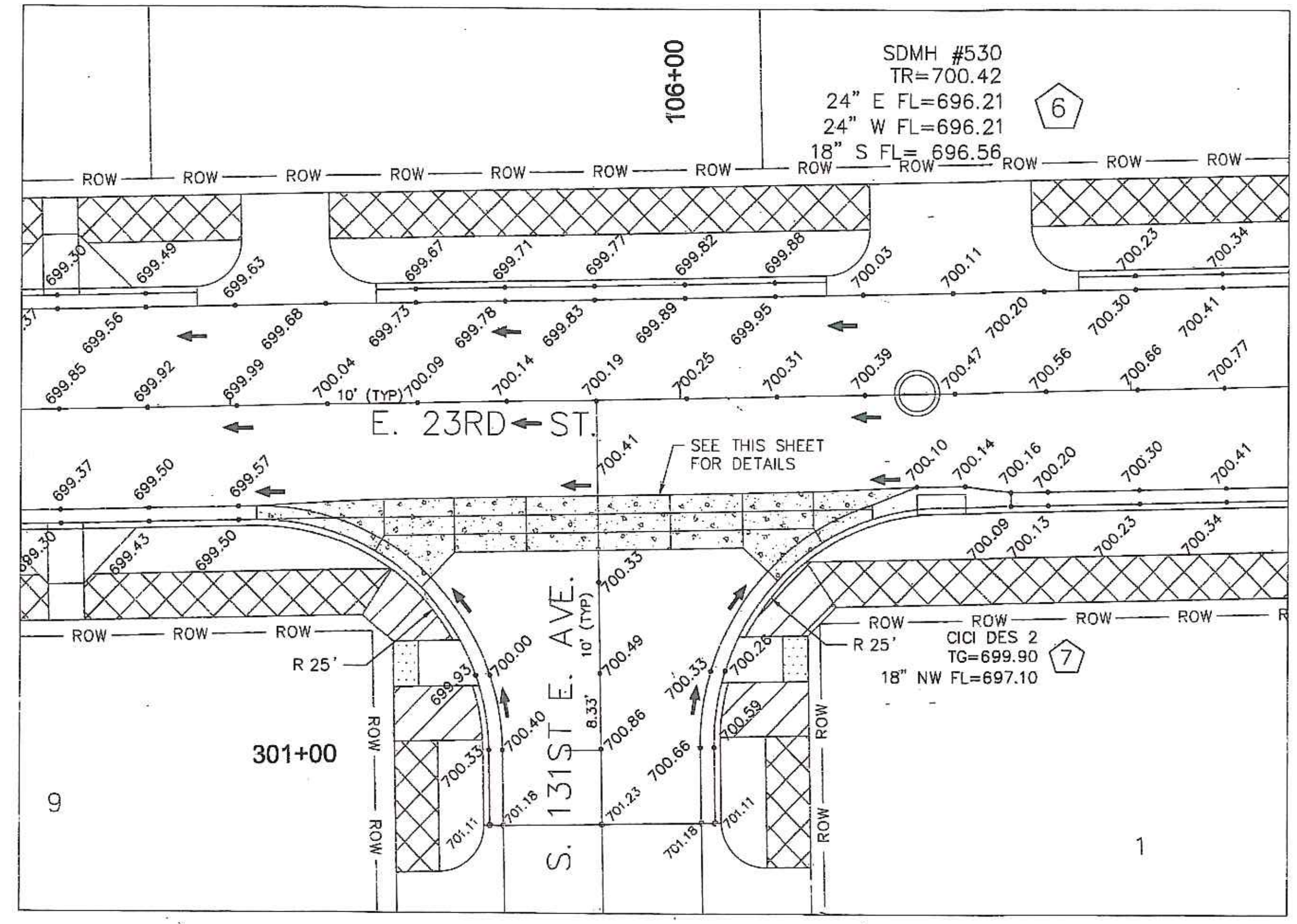
2/20/2019



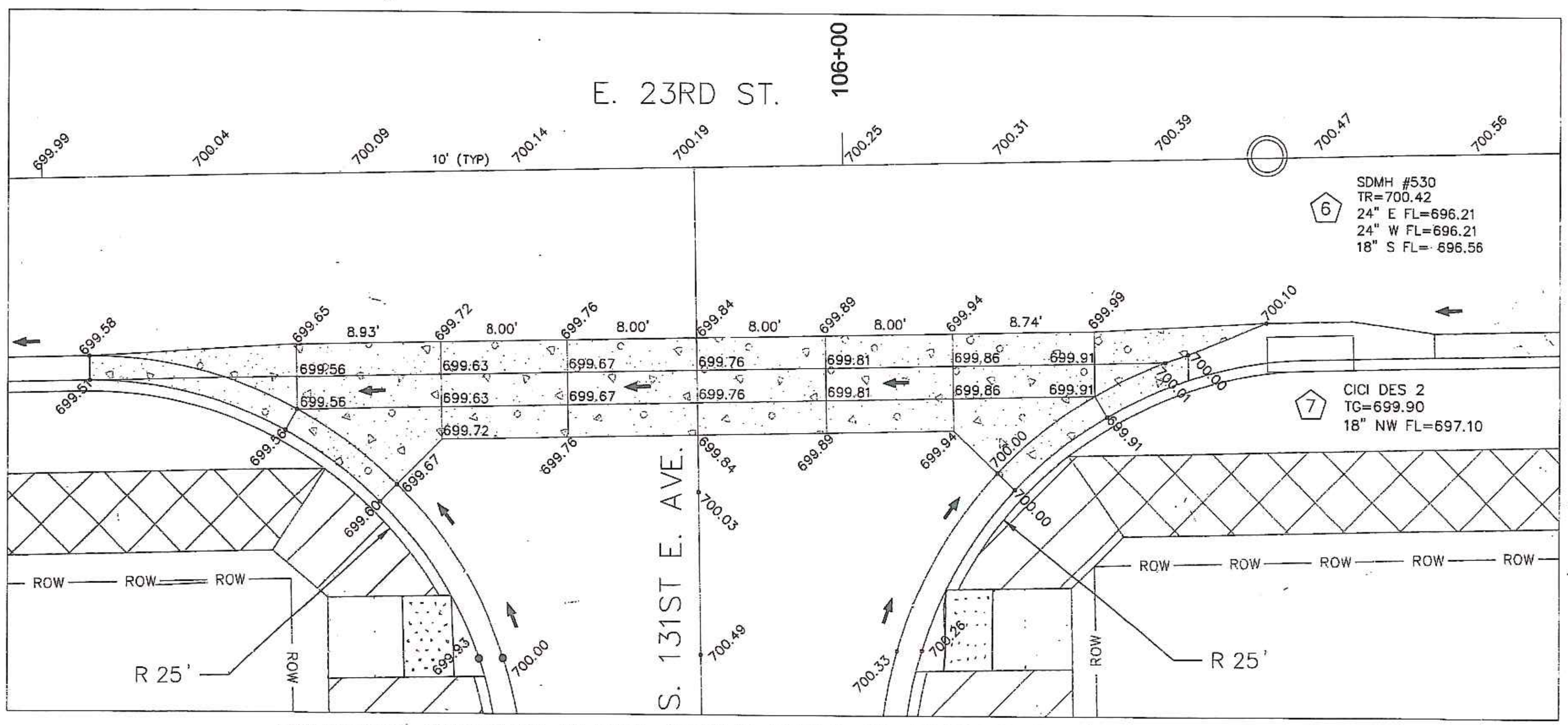
INTERSECTION "A" – E. 23RD STREET & S. 130TH E. AVE.

SCALE: 1" = 10'



INTERSECTION "B" – E. 23RD STREET & S. 131ST E. AVE.

SCALE: 1" = 10'



PROPOSED CONCRETE VALLEY GUTTER DETAIL (S. 131ST E. AVE.)

SCALE: 1" = 5'

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2/20/2019

INTERSECTION DETAILS (1)

PROJECT NO. 144642 ZONE 6142

NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
				DESIGNED	DPP	11/2014	
				SURVEY	ISAACS SURVEYING		
			PROFILE SCALE:	PROJ. MGR.	JB	5/19	
			HORIZONTAL:	LEAD ENGR.		3/19	
				FIELD MGR.		4/19	
			VERTICAL	RECOMMENDED: DESIGN MANAGER	HAS	4-19	CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO: 301				SHEET 31 OF 52 SHEETS

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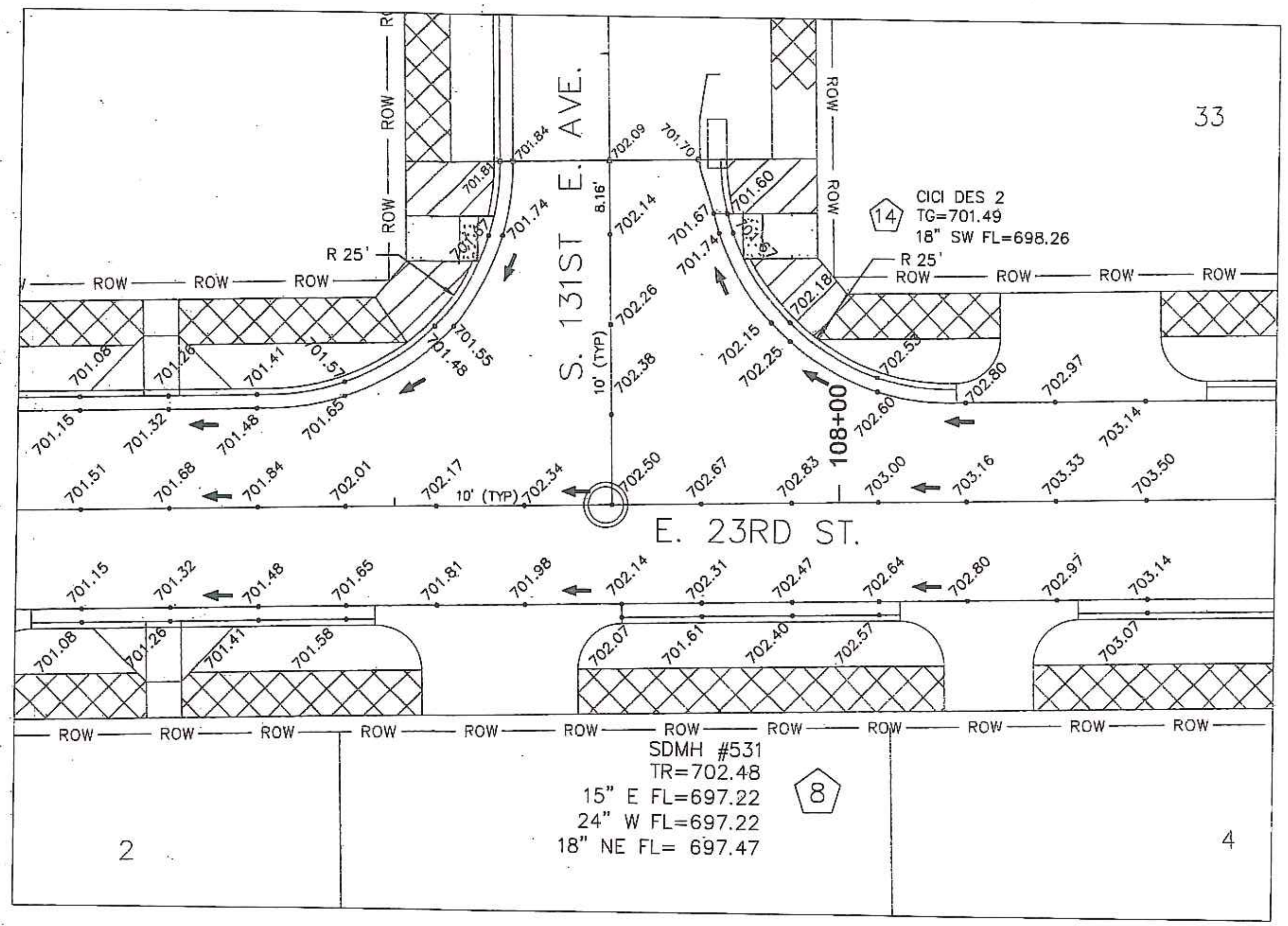
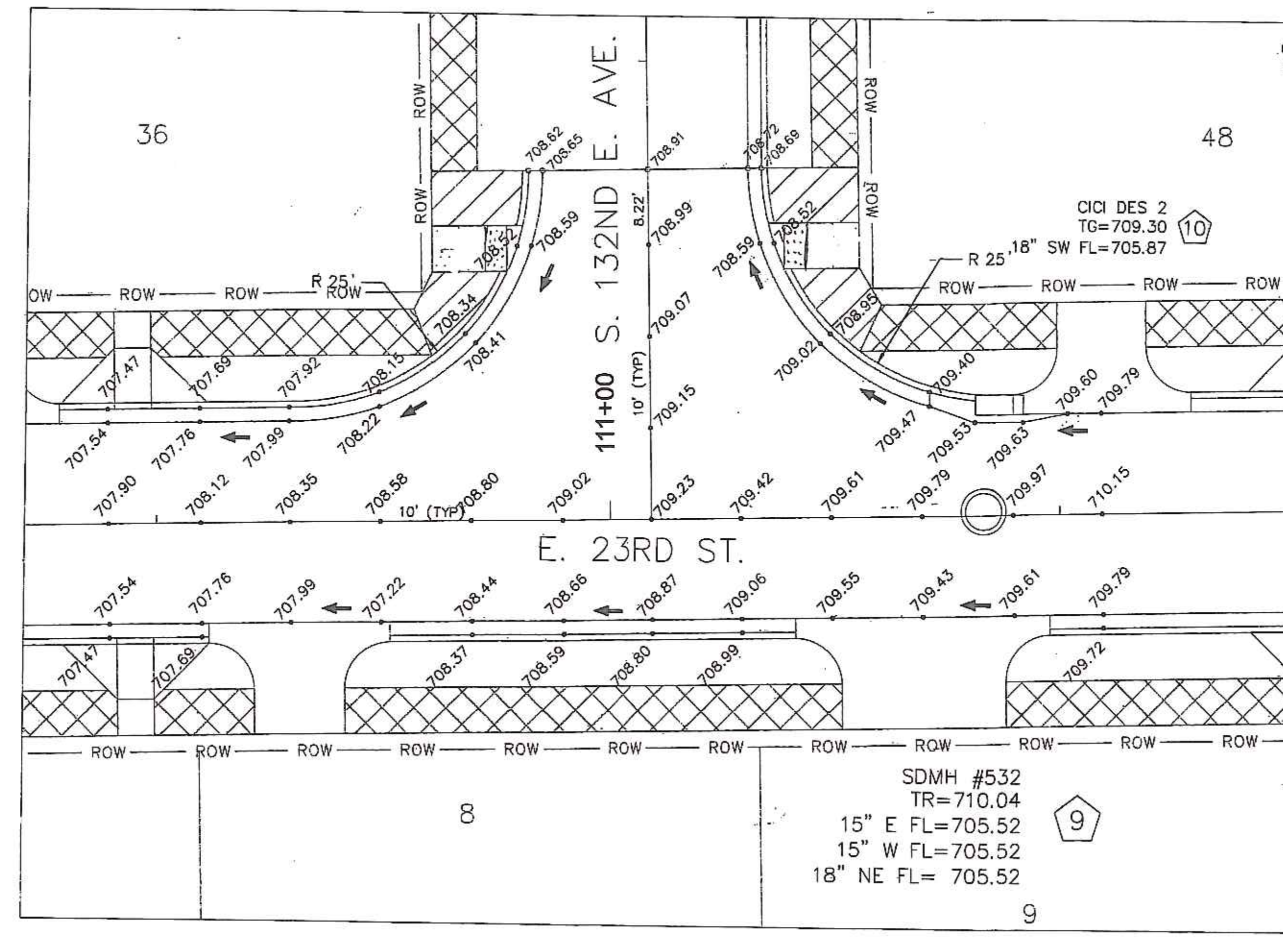
2/20/2019

0 5 10 20
1"=10'



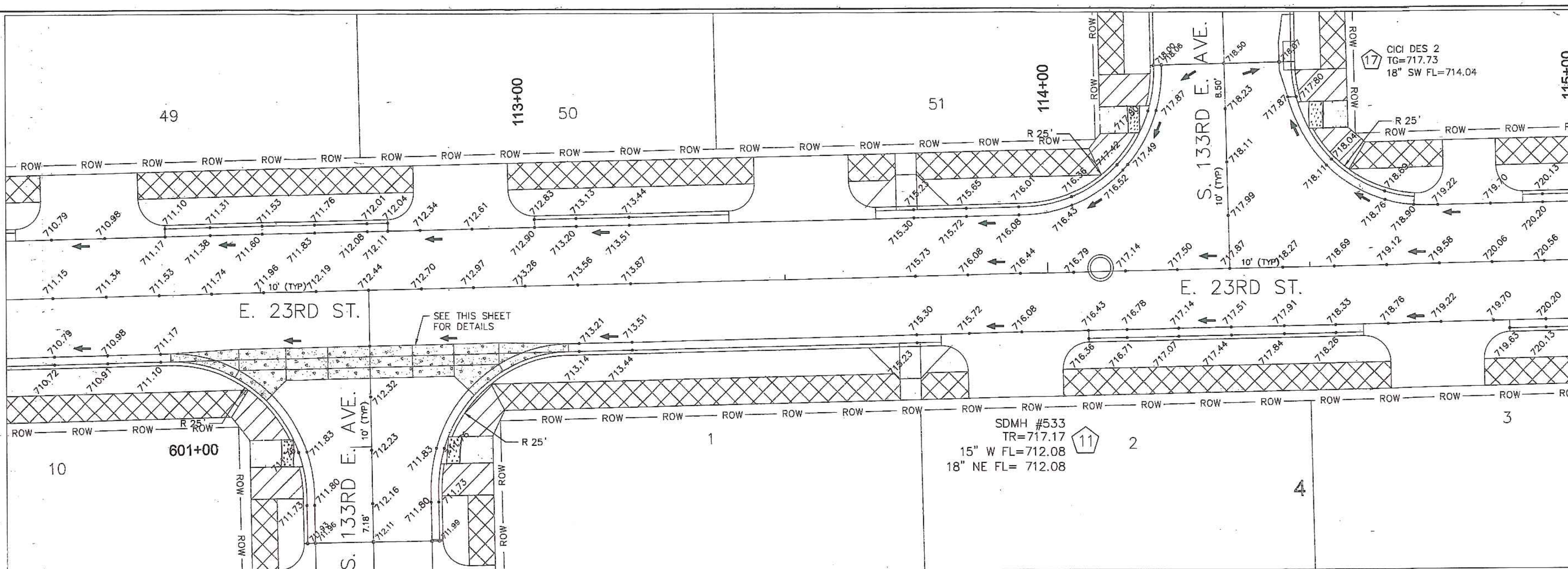
INTERSECTION "C" - E. 23RD STREET & S. 131ST E. AVE.
SCALE: 1" = 10'



INTERSECTION "D" - E. 23RD STREET & S. 132ND E. AVE.
SCALE: 1" = 10'

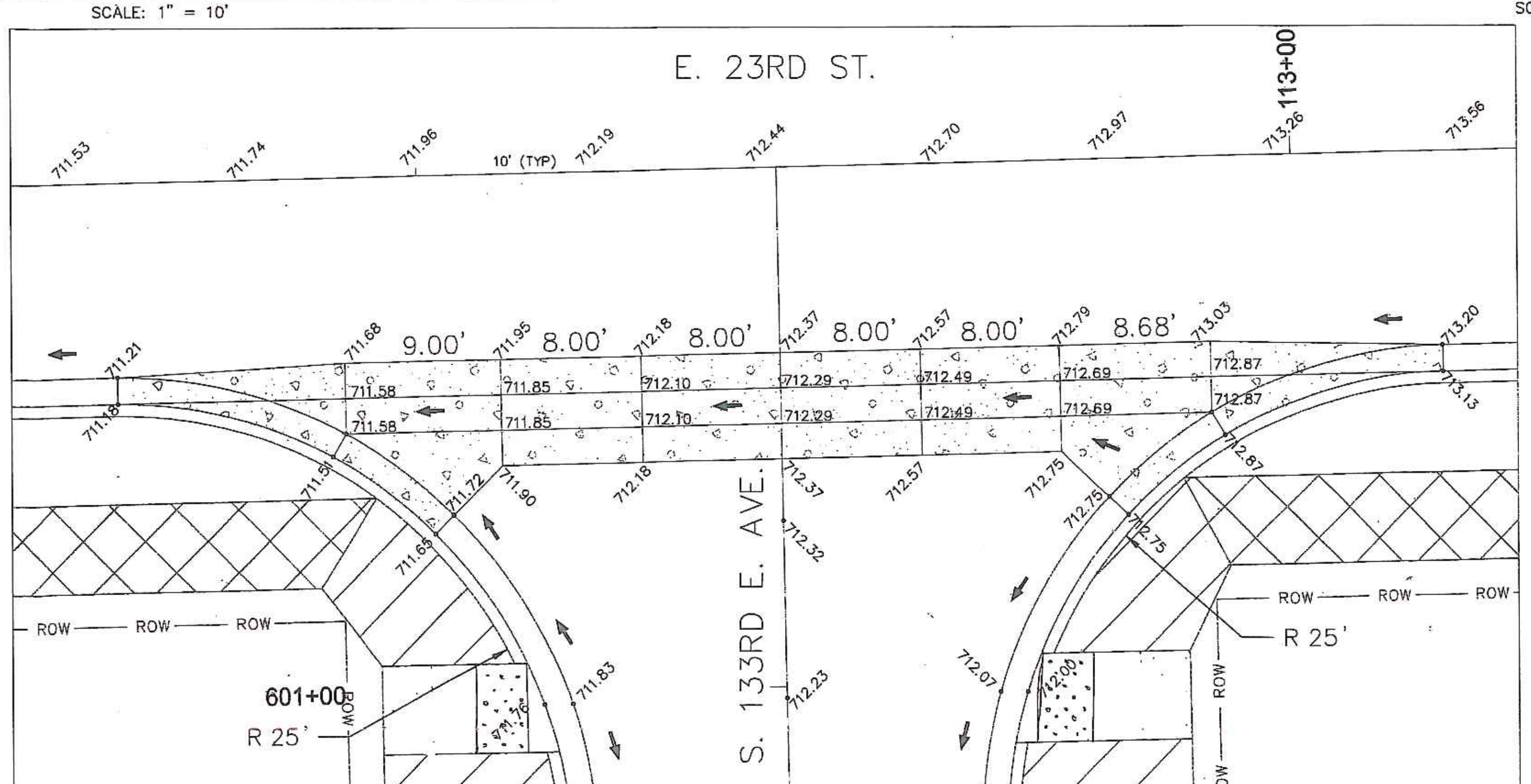
INTERSECTION DETAILS (2)
PROJECT NO. 144642 ZONE 6142
NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142
CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
				DESIGNED	DPP	11/2014	
				SURVEY	ISAACS SURVEYING		
			PROFILE SCALE:	PROJ. MGR.		3/19	
			HORIZONTAL:	LEAD ENGR.		3/19	
				FIELD MGR.		4/19	
			VERTICAL	RECOMMENDED: DESIGN MANAGER	HAS	4-19	CITY ENGINEER
			FILE:	DRAWING:			DATE: 3/23/20
			ATLAS PAGE NO: 301				SHEET 32 OF 52 SHEETS



INTERSECTION "E" – E. 23RD STREET & S. 133RD E. AVE.
SCALE: 1" = 10'

INTERSECTION "F" – E. 23RD STREET & S. 133RD E. AVE.
SCALE: 1" = 10'



PROPOSED CONCRETE VALLEY GUTTER DETAIL (S. 133RD E. AVE.)
SCALE: 1" = 5'

BEFORE YOU DIG 811 CALL OKIE

INTERSECTION DETAILS (3)

PROJECT NO. 144642 ZONE 6142

NON-ARTERIAL STREET MAINTENANCE FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE

PLAN SCALE:	DRAWN	CGD	11/2014	APPROVED:
	DESIGNED	DPP	11/2014	
	SURVEY	ISAACS SURVEYING		
PROFILE SCALE:	PROJ. MGR.		2/18	
HORIZONTAL:	LEAD ENGR.		3/19	
	FIELD MGR.		4/19	
VERTICAL:	RECOMMENDED: DESIGN MANAGER	HMS 4-19		CITY ENGINEER
FILE:	DRAWING:			DATE: 1/23/20
ATLAS PAGE NO: 301				SHEET 33 OF 52 SHEETS

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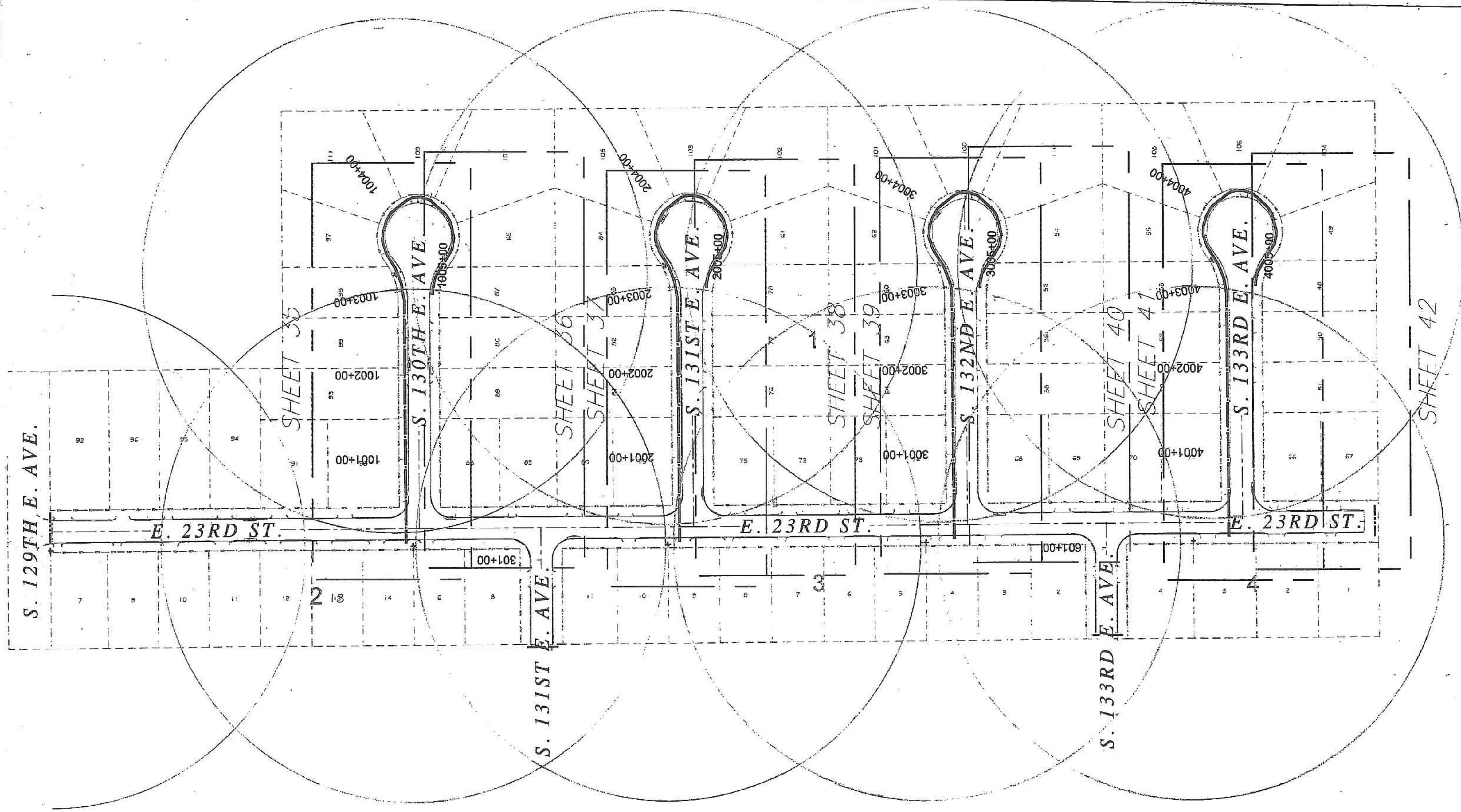
2/20/2019



W

PROPOSED WATERLINE

BEFORE YOU DIG CALL OKIE 811

TMUA-W 14-35

WATERLINE KEY MAP

PROJECT NO. 144642 ZONE 6142

NON-ARTERIAL STREET MAINTENANCE
FOR ZONE 6142

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE	PLAN SCALE:	DRAWN	CGD	12/2014	APPROVED:
			NTS	DESIGNED	DPP	12/2014	
				SURVEY			
			PROFILE SCALE:	PROJ. MGR.	JDH JB	2/19	
			HORIZONTAL:	LEAD ENGR.	[illegible]	3/19	
				FIELD MGR.	FBV	4/19	
			VERTICAL	RECOMMENDED: HAS 4-19 DESIGN MANAGER			CITY ENGINEER
			FILE:	DRAWING:			DATE: 1/23/20
			ATLAS PAGE NO:	301			SHEET 34 OF 52 SHEETS

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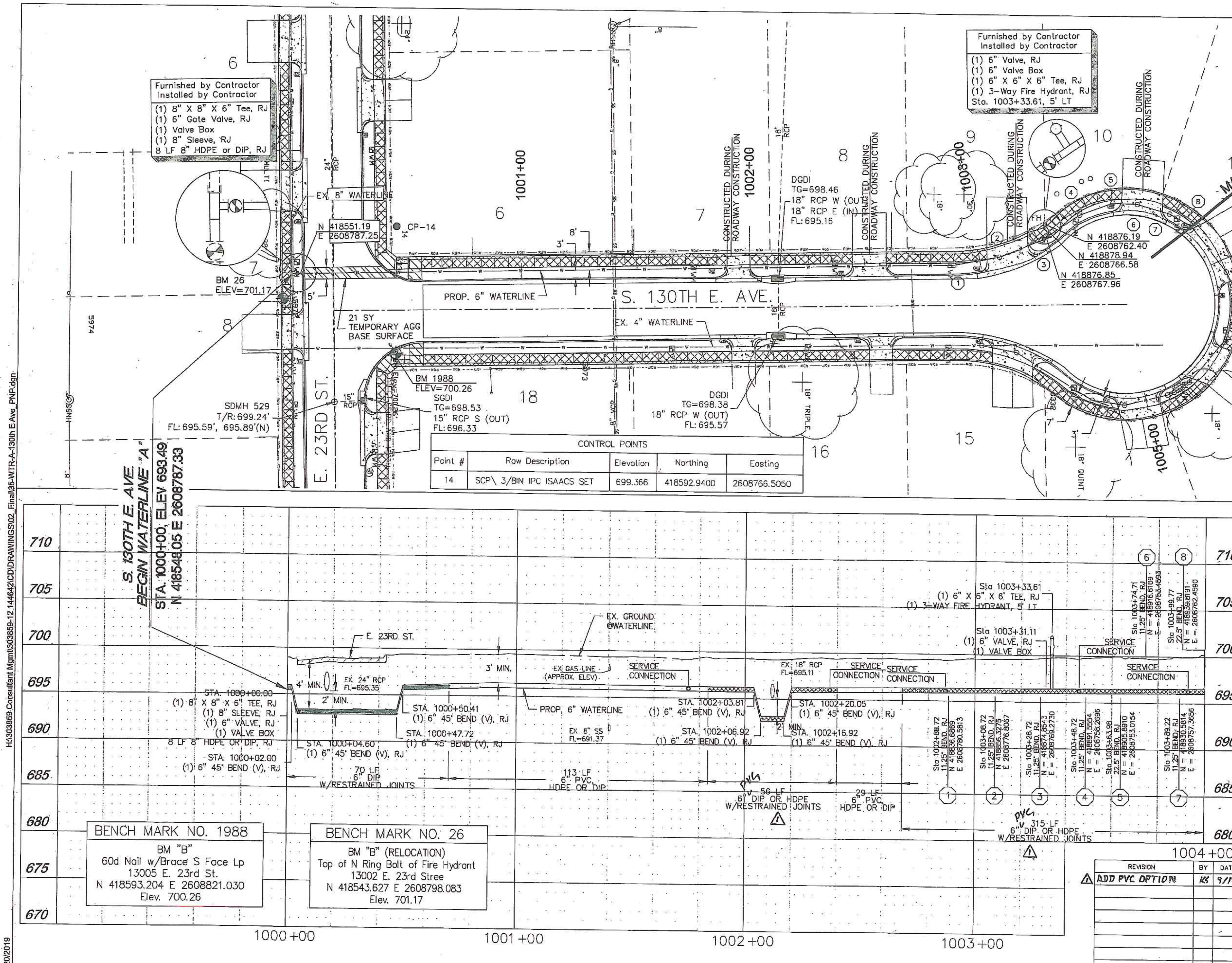
2/20/2019



CONTROL POINTS				
Point #	Raw Description	Elevation	Northing	Easting
14	SCP\ 3/8IN IPC ISAACS SET	699.366	418592.9400	2608766.5050

BENCH MARK NO. 1988

BM "B"
60d Nail w/Brace S Face Lp
13005 E. 23rd St.
N 418593.204 E 2608821.030
Elev. 700.26

BENCH MARK NO. 26

BM "B" (RELOCATION)
Top of N Ring Bolt of Fire Hydrant
13002 E. 23rd Stree
N 418543.627 E 2608798.083
Elev. 701.17

PLAN LEGEND:

PCC Driveway to be replaced during Pavement Rehabilitaion

(NO) FITTING NO.

(XXXX) NEAREST STREET ADDRESS

PROJECT LIMITS

SERVICE CONNECTIONS

ZERO (0) LONG SERVICE CONNECTION THIS SHEET
FIVE (5) SHORT SERVICE CONNECTIONS THIS SHEET

PROFILE LEGEND:

(NO) STATION
FITTING TYPE
NORTHING AND EASTING

DIP OR HDPE W/RESTAINED JOINTS

PVC, HDPE OR DIP

DIP ONLY W/RESTAINED JOINTS

BEFORE YOU DIG CALL OKIE 811

TMUA-W 14-35

WATERLINE PLAN AND PROFILE

PROJECT NO. 144642

WATERLINE "A" S. 130TH E. AVE. (1)
STA. 1000+00.00 TO STA. 1004+00.00

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE
ADD PVC OPTION	KS	9/19

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE:	PROJ. MGR.		
HORIZONTAL: 1" = 20'	LEAD ENGR.		10/19
	FIELD MGR.		4/19
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HAS	4-19
FILE:	DRAWING:		
ATLAS PAGE NO:	301		

APPROVED:

CITY ENGINEER

DATE: 1/23/20

SHEET 35 OF 52 SHEETS

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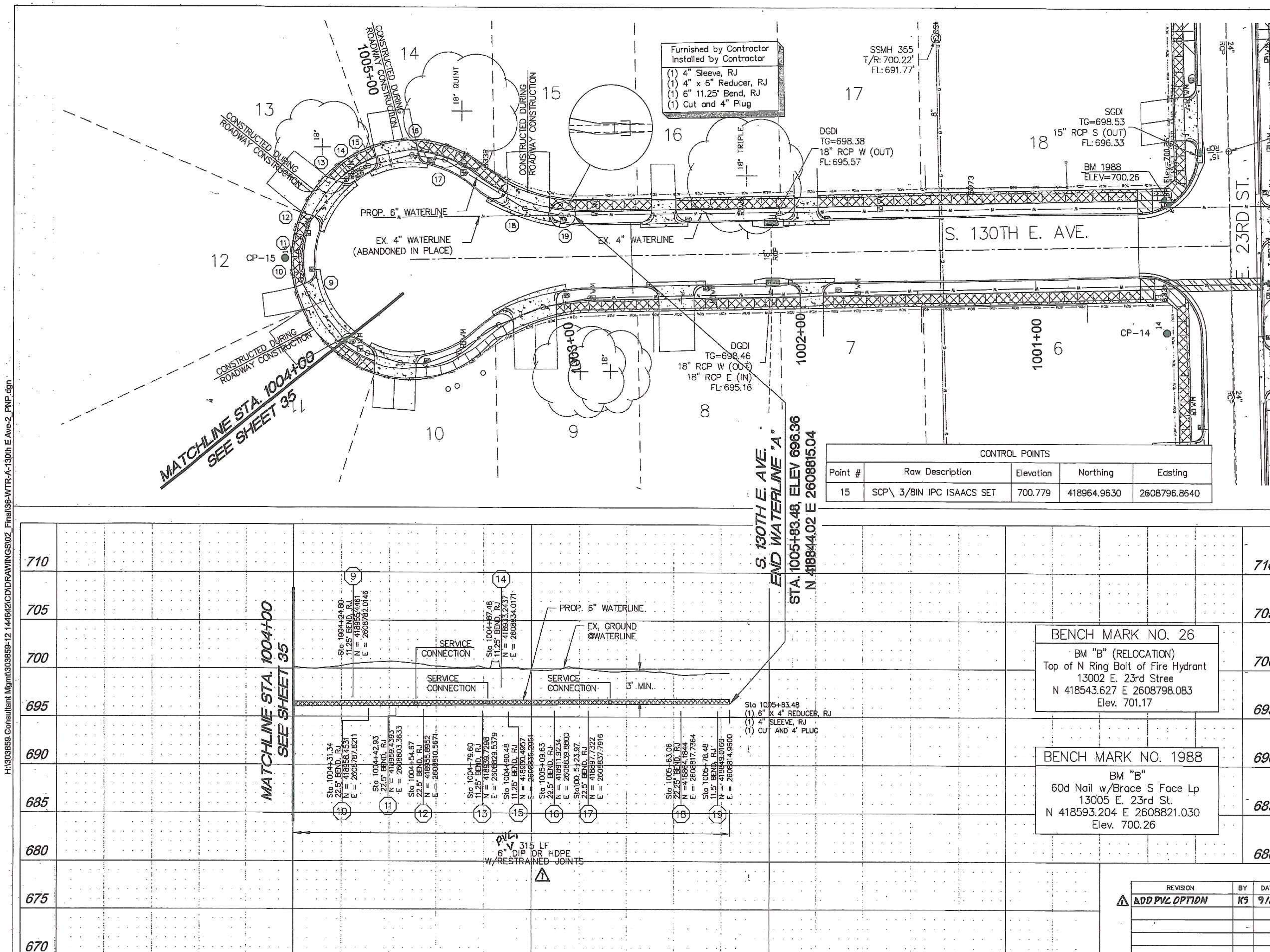
2/20/2019



CONTROL POINTS				
Point #	Raw Description	Elevation	Northing	Easting
15	SCP\ 3/8IN IPC ISAACS SET	700.779	418964.9630	2608796.8640

BENCH MARK NO. 26

BM "B" (RELOCATION)
Top of N Ring Bolt of Fire Hydrant
13002 E. 23rd Stree
N 418543.627 E 2608798.083
Elev. 701.17

BENCH MARK NO. 1988

BM "B"
60d Nail w/Brace S Face Lp
13005 E. 23rd St.
N 418593.204 E 2608821.030
Elev. 700.26

0 10 20 30
1"=20'

PLAN LEGEND:

Replace existing drive with new PCC drive

(NO) FITTING NO.

(XXXX) NEAREST STREET ADDRESS

PROJECT LIMITS

SERVICE CONNECTIONS

ZERO (0) LONG SERVICE CONNECTION THIS SHEET
TWO (2) SHORT SERVICE CONNECTIONS THIS SHEET

PROFILE LEGEND:

(NO) STATION
FITTING TYPE
PVC, NORTHING AND EASTING

DIP OR HDPE W/RESTAINED JOINTS

PVC, HDPE OR DIP

DIP ONLY W/RESTRAINED JOINTS

BEFORE YOU DIG 811 CALL OKIE

TMUA-W 14-35

WATERLINE PLAN AND PROFILE

PROJECT NO. 144642

WATERLINE "A" S. 130TH E. AVE. (2)
STA. 1004+00.00 TO STA. 1005+10.35

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE
ADD PVC OPTION	KS	9/19

PLAN SCALE: 1" = 20'	DRAWN	CDD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE:	PROJ. MGR.		2/18
HORIZONTAL: 1" = 20'	LEAD ENGR.		10/19
	FIELD MGR.		4/19
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER		4.19
FILE:	DRAWING:		
ATLAS PAGE NO: 301			

APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 36 OF 52 SHEETS

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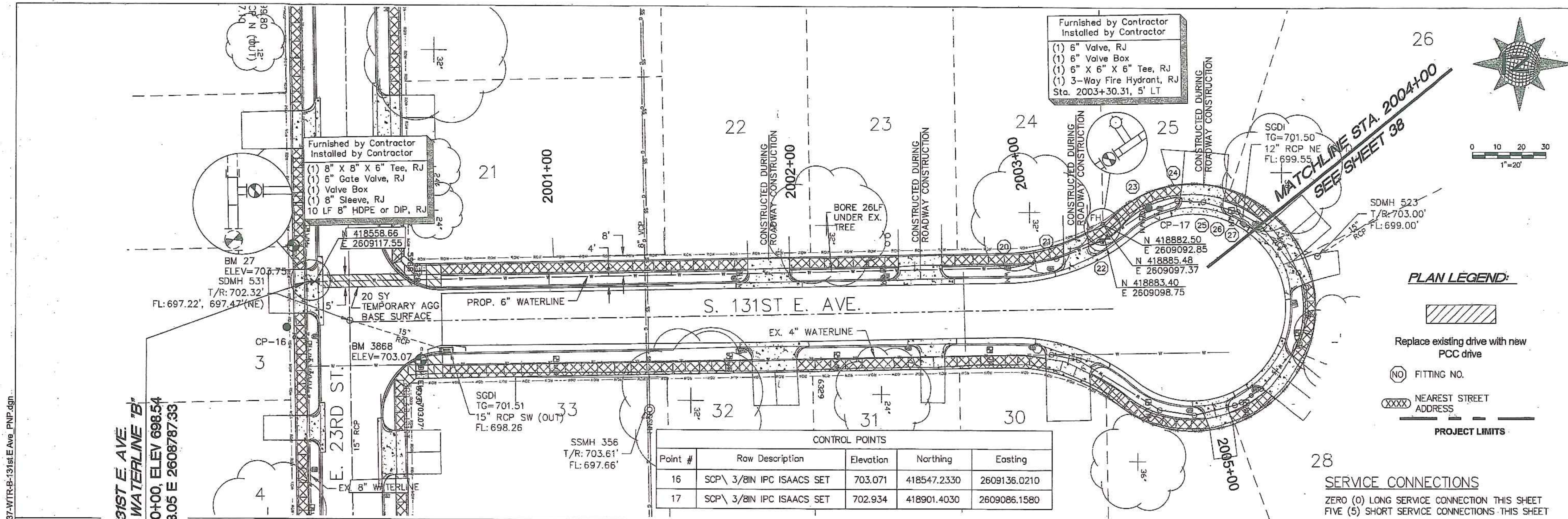
2/20/2019



CONTROL POINTS				
Point #	Row Description	Elevation	Northing	Easting
16	SCP\ 3/8IN IPC ISAACS SET	703.071	418547.2330	2609136.0210
17	SCP\ 3/8IN IPC ISAACS SET	702.934	418901.4030	2609086.1580

PLAN LEGEND:

Replace existing drive with new PCC drive

(NO) FITTING NO.

(XXXX) NEAREST STREET ADDRESS

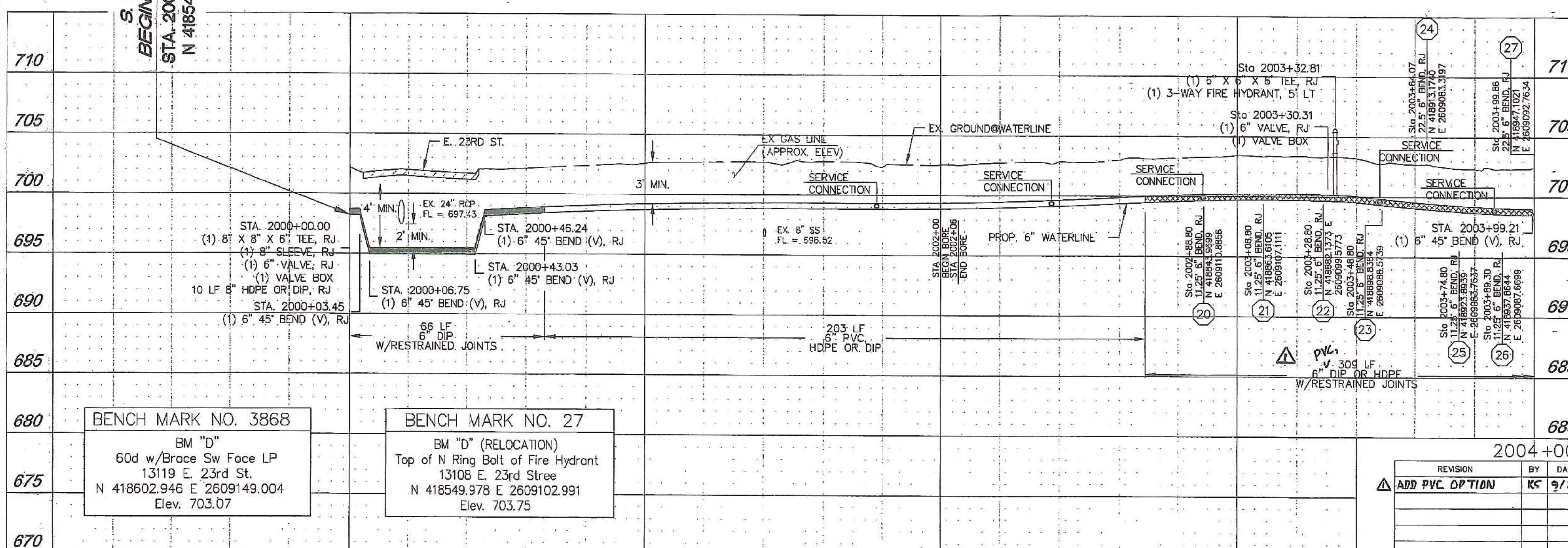
PROJECT LIMITS

0 10 20 30

1"=20'

SERVICE CONNECTIONS

ZERO (0) LONG SERVICE CONNECTION THIS SHEET
FIVE (5) SHORT SERVICE CONNECTIONS THIS SHEET



BENCH MARK NO. 3868
BM "D"
60d w/Brace Sw Face LP
13119 E. 23rd St.
N 418602.946 E 2609149.004
Elev. 703.07

BENCH MARK NO. 27
BM "D" (RELOCATION)
Top of N Ring Bolt of Fire Hydrant
13108 E. 23rd Stree
N 418549.978 E 2609102.991
Elev. 703.75

PROFILE LEGEND:

(NO) STATION
FITTING TYPE
NORTHING AND EASTING

DIP OR HDPE W/RESTAINED JOINTS

PVC, HDPE OR DIP

DIP ONLY W/RESTAINED JOINTS

BEFORE YOU DIG CALL OKIE 811

TMUA-W 14-35

WATERLINE PLAN AND PROFILE

PROJECT NO. 144642

WATERLINE "B" S. 131ST E. AVE. (1)
STA. 2000+00.00 TO STA. 2004+00.00

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE
ADD PVC OPTION	KS	9/19

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE:	PROJ. MGR.		2/19
HORIZONTAL: 1" = 20'	LEAD ENGR.		10/19
	FIELD MGR.		4/19
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER		11-19
FILE:	DRAWING:		
ATLAS PAGE NO: XX AND XX			

APPROVED: CITY ENGINEER

DATE: 1/23/20

SHEET 37 OF 52 SHEETS

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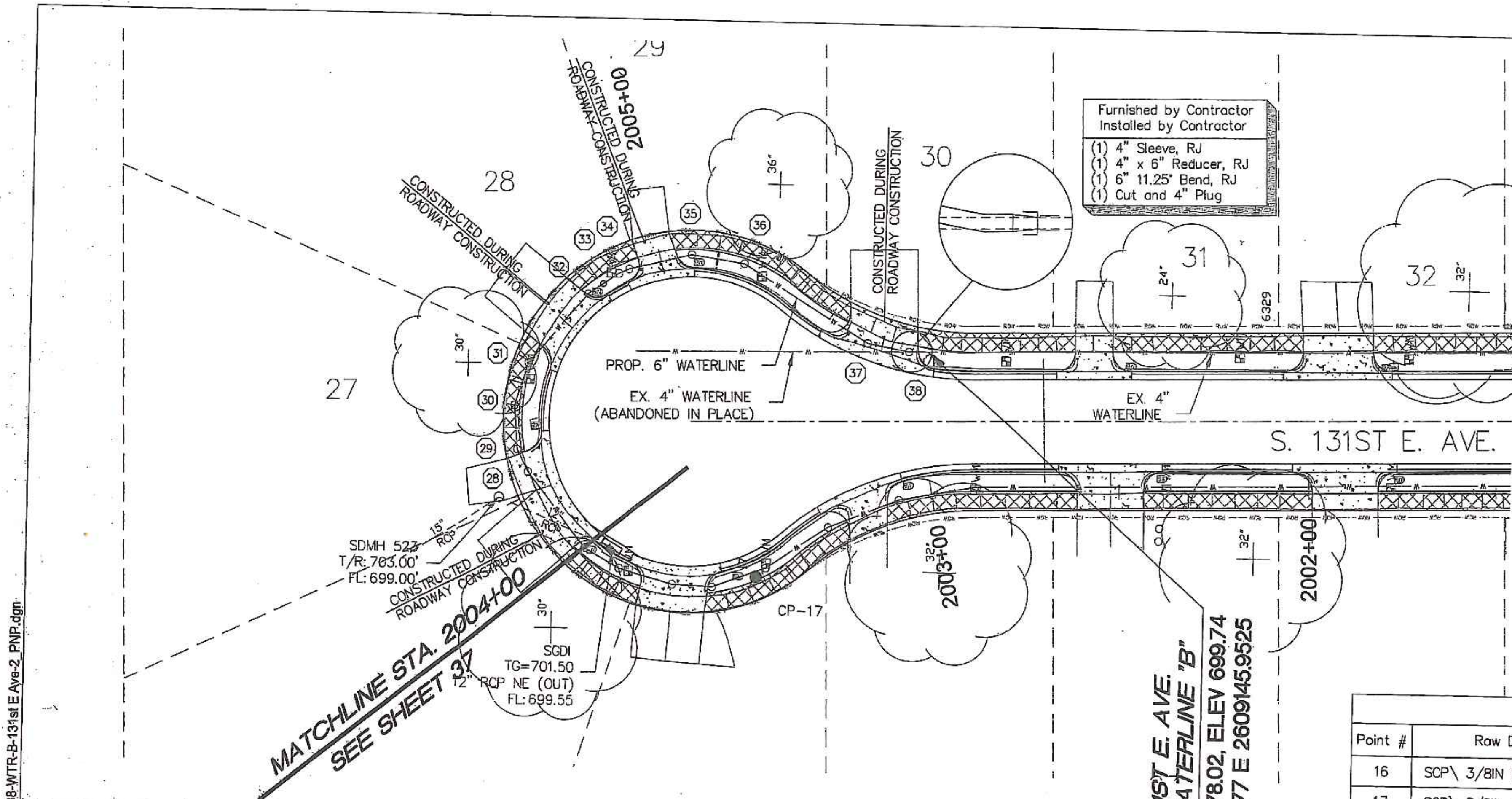
2/20/2019



CONTROL POINTS				
Point #	Row Description	Elevation	Northing	Easting
16	SCP\ 3/8IN IPC ISAACS SET	703.071	418547.2330	2609136.0210
17	SCP\ 3/8IN IPC ISAACS SET	702.934	418901.4030	2609086.1580

PLAN LEGEND:

Replace existing drive with new PCC drive

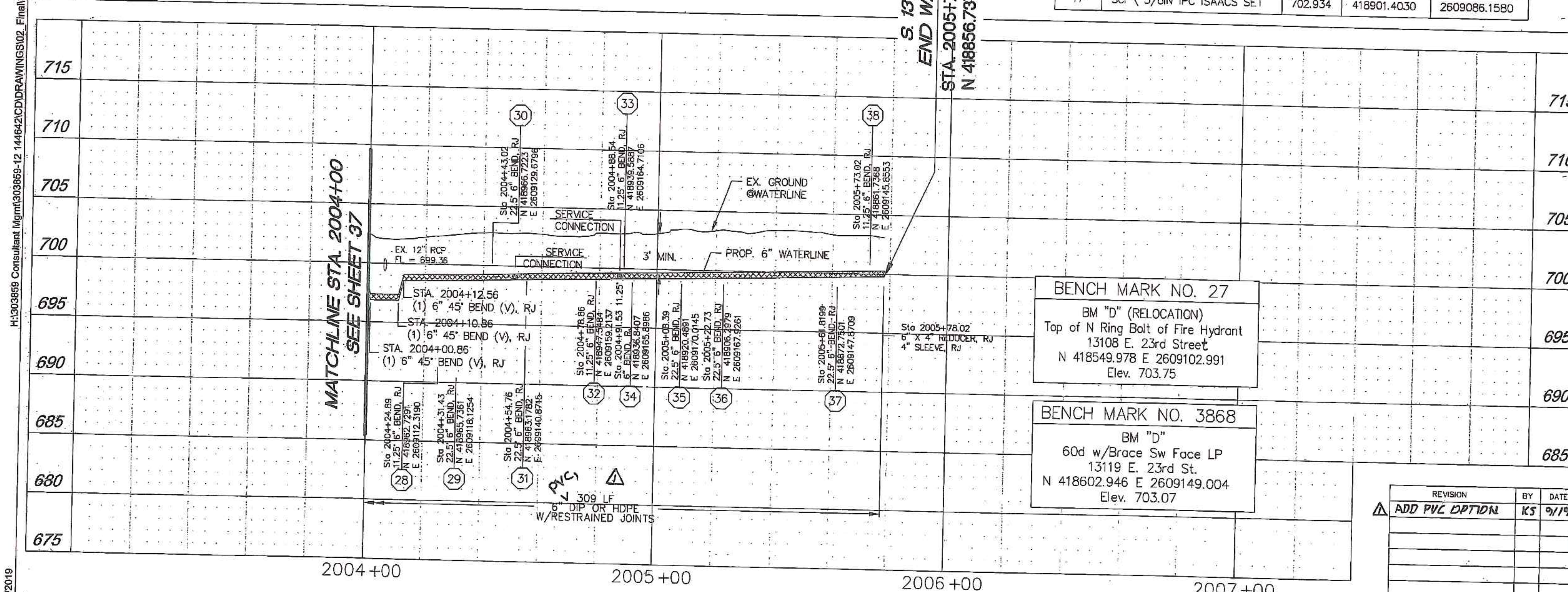
(NO) FITTING NO.

(XXXX) NEAREST STREET ADDRESS

PROJECT LIMITS

SERVICE CONNECTIONS

ZERO (0) LONG SERVICE CONNECTION THIS SHEET
TWO (3) SHORT SERVICE CONNECTIONS THIS SHEET



PROFILE LEGEND:

(NO) STATION
FITTING TYPE
NORTHING AND EASTING

DIP OR HDPE W/RESTAINED JOINTS

PVC, HDPE OR DIP

DIP ONLY W/RESTAINED JOINTS

BENCH MARK NO. 27

BM "D" (RELOCATION)
Top of N Ring Bolt of Fire Hydrant
13108 E. 23rd Street
N 418549.978 E 2609102.991
Elev. 703.75

BENCH MARK NO. 3868

BM "D"
60d w/Brace Sw Face LP
13119 E. 23rd St.
N 418602.946 E 2609149.004
Elev. 703.07

BEFORE YOU DIG 811 CALL OKIE

TMUA-W 14-35
WATERLINE PLAN AND PROFILE
PROJECT NO. 144642

WATERLINE "B" S. 131ST E. AVE. (2)
STA. 2004+00.00 TO STA. 2005+14.98

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE
ADD PVC OPTION	KS	9/19

PLAN SCALE: 1" = 20'	DRAWN	CGD 11/2014
	DESIGNED	DPP 11/2014
	SURVEY	ISAACS SURVEYING
PROFILE SCALE:	PROJ. MGR.	5/19
HORIZONTAL: 1" = 20'	LEAD ENGR.	10/19
VERTICAL: 1" = 5'	FIELD MGR.	4/19
	RECOMMENDED: DESIGN MANAGER	HAS 4-19
FILE:	DRAWING:	
ATLAS PAGE NO: XX AND XX		

APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 38 OF 52 SHEETS

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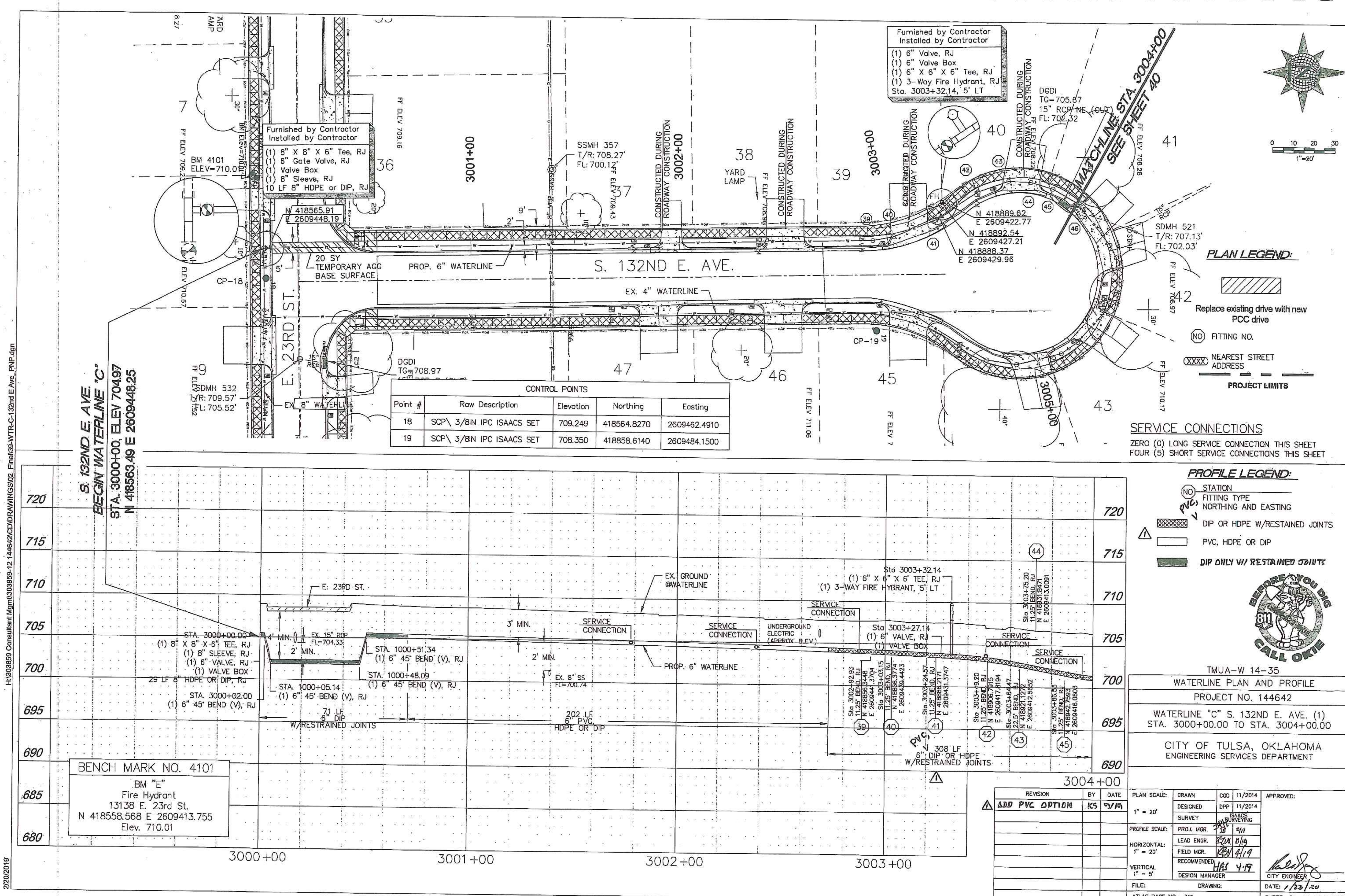
2/20/2019



BENCH MARK NO. 4101

BM "E"
Fire Hydrant
13138 E. 23rd St.
N 418558.568 E 2609413.755
Elev. 710.01

CONTROL POINTS

Point #	Raw Description	Elevation	Northing	Easting
18	SCP\ 3/8IN IPC ISAACS SET	709.249	418564.8270	2609462.4910
19	SCP\ 3/8IN IPC ISAACS SET	708.350	418858.6140	2609484.1500

TMUA-W 14-35

WATERLINE PLAN AND PROFILE

PROJECT NO. 144642

WATERLINE "C" S. 132ND E. AVE. (1)
STA. 3000+00.00 TO STA. 3004+00.00

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE
ADD PVC OPTION	KS	9/19

PLAN SCALE: 1" = 20'
PROFILE SCALE: HORIZONTAL: 1" = 20' VERTICAL: 1" = 5'

DRAWN	CGD	11/2014
DESIGNED	DPP	11/2014
SURVEY	ISAACS SURVEYING	
PROJ. MGR.		9/19
LEAD ENGR.		10/19
FIELD MGR.	KBV	9/19
RECOMMENDED: DESIGN MANAGER	HAS	9-19

APPROVED: CITY ENGINEER

DATE: 1/23/20

FILE: DRAWING:

ATLAS PAGE NO: 301

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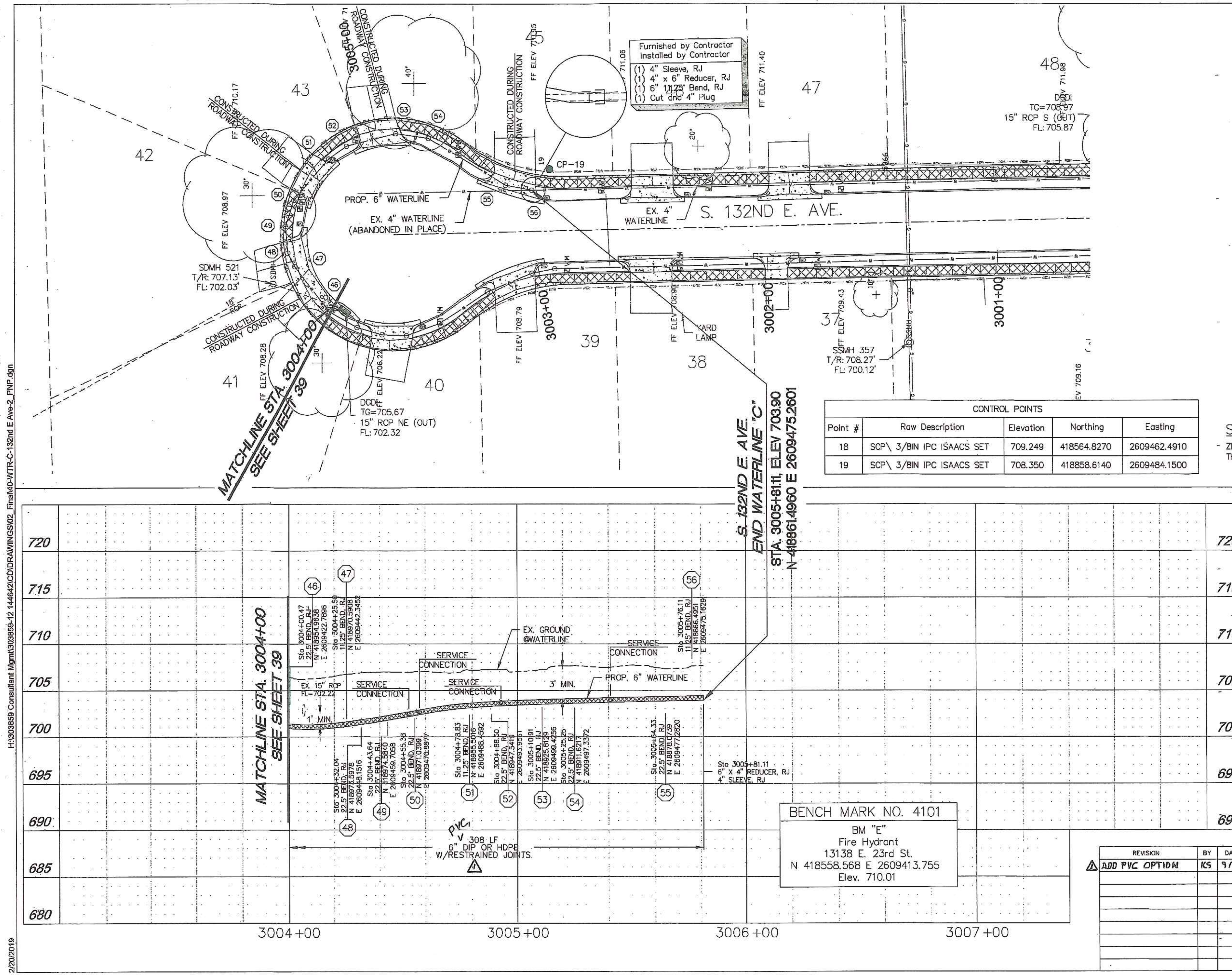
2/20/2019



CONTROL POINTS				
Point #	Raw Description	Elevation	Northing	Easting
18	SCP\ 3/8IN IPC ISAACS SET	709.249	418564.8270	2609462.4910
19	SCP\ 3/8IN IPC ISAACS SET	708.350	418858.6140	2609484.1500

PLAN LEGEND:

Replace existing drive with new PCC drive

(NO) FITTING NO.

(XXXX) NEAREST STREET ADDRESS

PROJECT LIMITS

SERVICE CONNECTIONS

- ZERO (0) LONG SERVICE CONNECTION THIS SHEET
- THREE (4) SHORT SERVICE CONNECTIONS THIS SHEET

PROFILE LEGEND:

(NO) STATION
FITTING TYPE
NORTHING AND EASTING

PVC

DIP OR HDPE W/RESTANED JOINTS

PVC, HDPE OR DIP

DIP ONLY W/RESTAINED JOINTS

BEFORE YOU DIG CALL OKIE 811

BENCH MARK NO. 4101

BM "E"
Fire Hydrant
13138 E. 23rd St.
N 418558.568 E 2609413.755
Elev. 710.01

TMUA-W 14-35

WATERLINE PLAN AND PROFILE

PROJECT NO. 144642

WATERLINE "C" S. 132ND E. AVE. (2)
STA. 3004+00.00 TO STA. 33005+14.94

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE
ADD PVC OPTION	KS	9/19

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE:	PROJ. MGR.		2/18
HORIZONTAL: 1" = 20'	LEAD ENGR.		10/19
	FIELD MGR.		4/19
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER	HAS	4-19
FILE:	DRAWING:		
ATLAS PAGE NO: 301			

APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 40 OF 52 SHEETS

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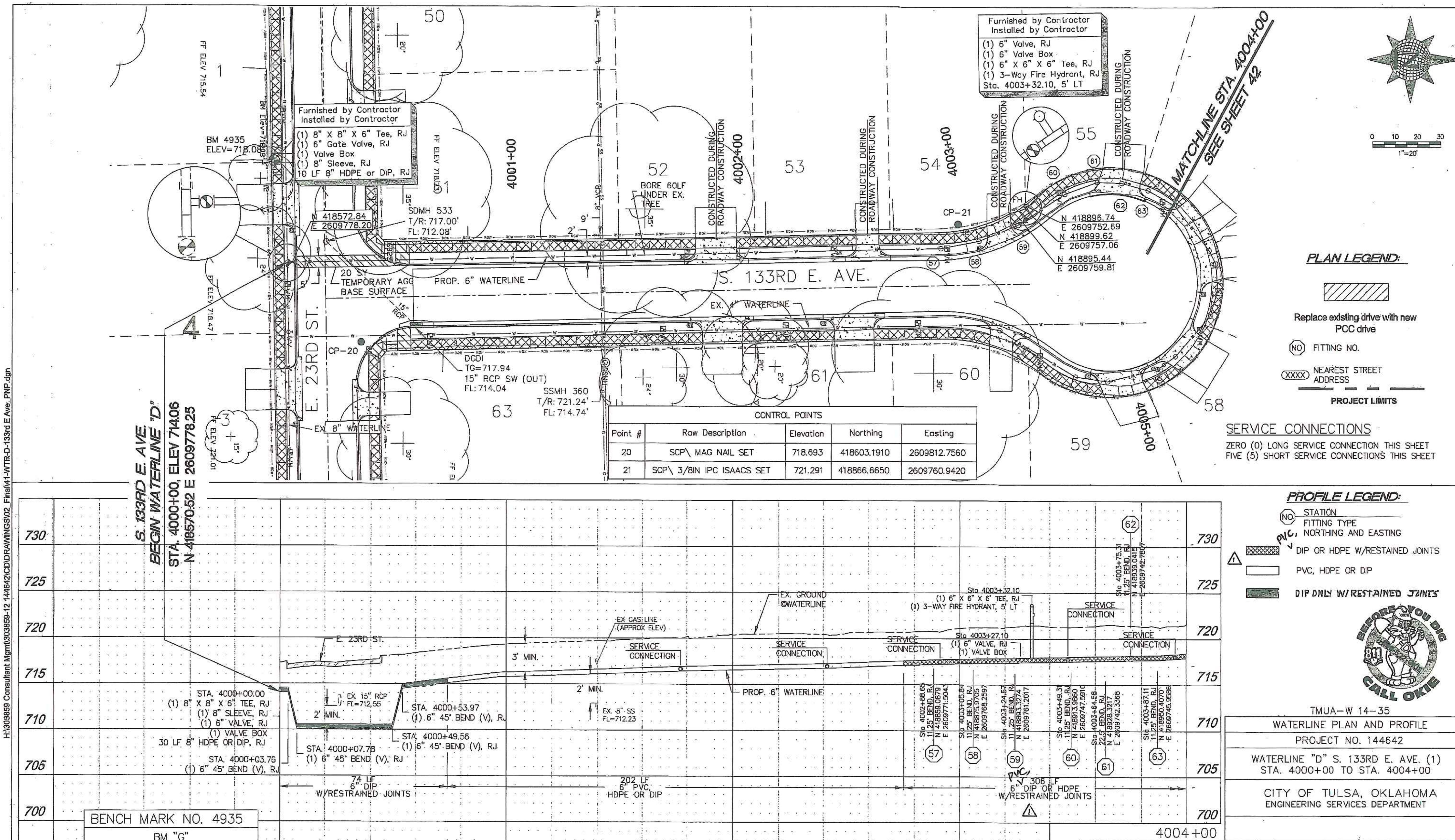
2/20/2019



Point #	Raw Description	Elevation	Northing	Easting
20	SCP\ MAG NAIL SET	718.693	418603.1910	2609812.7560
21	SCP\ 3/8IN IPC ISAACS SET	721.291	418866.6650	2609760.9420

BENCH MARK NO. 4935
BM "G"
Fire Hydrant
13312 E. 23rd St.
N 418564.433 E 2609733.807
Elev. 718.08

TMUA-W 14-35
WATERLINE PLAN AND PROFILE
PROJECT NO. 144642
WATERLINE "D" S. 133RD E. AVE. (1)
STA. 4000+00 TO STA. 4004+00
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

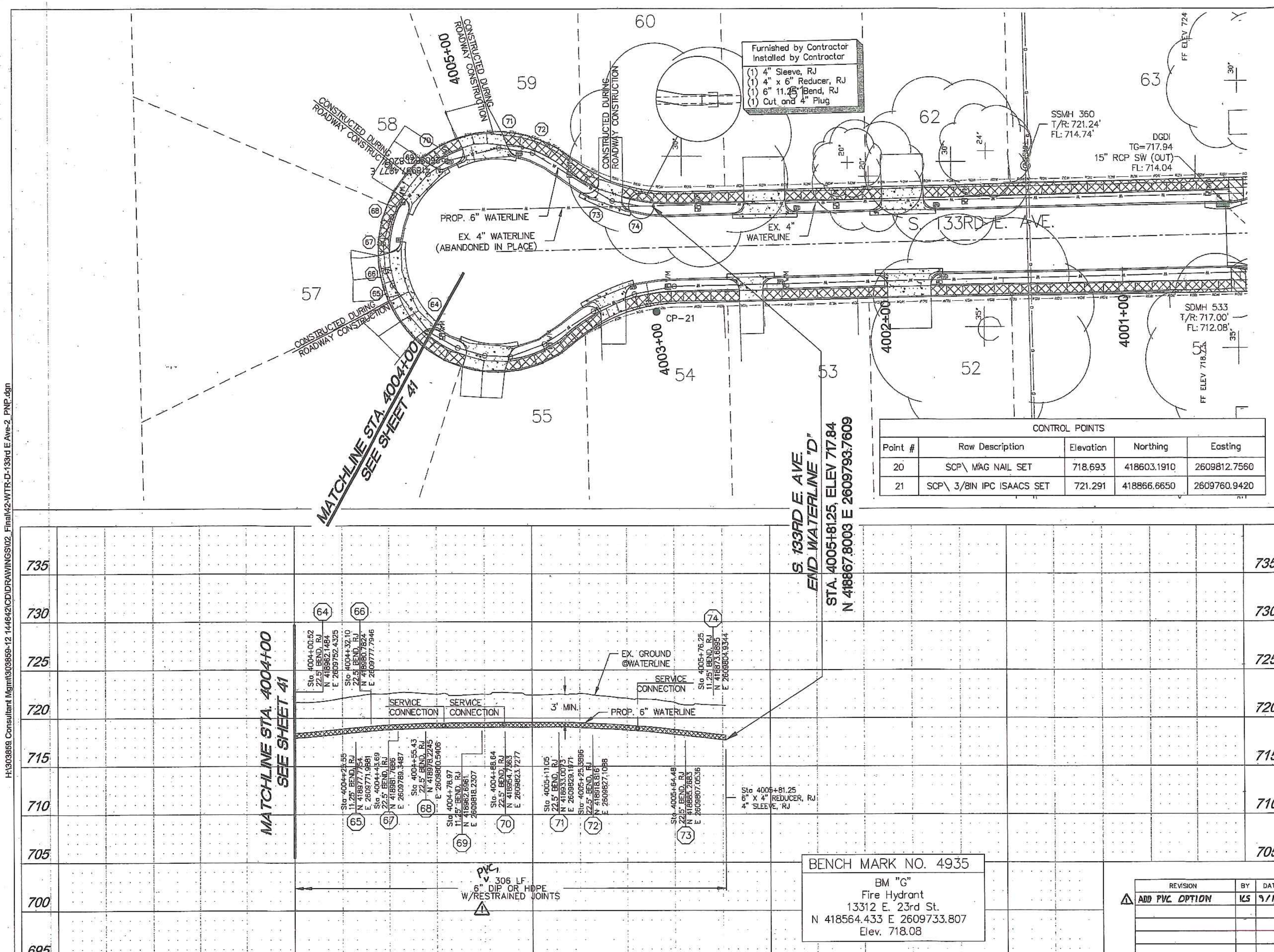
REVISION	BY	DATE
ADD PVC OPTION	KS	9/19

PLAN SCALE: 1" = 20'
PROFILE SCALE: HORIZONTAL: 1" = 20' VERTICAL 1" = 5'

DRAWN	CCD	11/2014
DESIGNED	DPP	11/2014
SURVEY	ISAACS SURVEYING	
PROJ. MGR.		8/18
LEAD ENGR.		10/19
FIELD MGR.		4/19
RECOMMENDED: DESIGN MANAGER	HAS	4-19

APPROVED: CITY ENGINEER
DATE: 1/23/20
FILE: DRAWING:
ATLAS PAGE NO: 301
SHEET 41 OF 52 SHEETS

H:\303859 Consultant Mgmt\303859-12 144642\CD\DRAWINGS\02_Final\41-WTR-D-133rd E Ave_PNP.dgn
2/20/2019



CONTROL POINTS				
Point #	Raw Description	Elevation	Northing	Easting
20	SCP\ MAG NAIL SET	718.693	418603.1910	2609812.7560
21	SCP\ 3/8IN IPC ISAACS SET	721.291	418866.6650	2609760.9420

BENCH MARK NO. 4935
BM "G"
Fire Hydrant
13312 E. 23rd St.
N 418564.433 E 2609733.807
Elev. 718.08

0 10 20 30
1"=20'

PLAN LEGEND:

Replace existing drive with new PCC drive

(NO) FITTING NO.

(XXXX) NEAREST STREET ADDRESS

PROJECT LIMITS

SERVICE CONNECTIONS

ZERO (0) LONG SERVICE CONNECTION THIS SHEET
TWO (3) SHORT SERVICE CONNECTIONS THIS SHEET

PROFILE LEGEND:

(NO) STATION
FITTING TYPE
NORTHING AND EASTING

PVC, DIP OR HDPE W/RESTAINED JOINTS

PVC, HDPE OR DIP

DIP ONLY W/RESTRAINED JOINTS

BEFORE YOU DIG CALL OKIE 811

TMUA-W 14-35

WATERLINE PLAN AND PROFILE

PROJECT NO. 144642

WATERLINE "D" S. 133RD E. AVE. (2)
STA. 4004+00 TO STA. 4005+15.08

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

REVISION	BY	DATE
ADD PVC OPTION	KS	9/19

PLAN SCALE: 1" = 20'	DRAWN	CGD	11/2014
	DESIGNED	DPP	11/2014
	SURVEY	ISAACS SURVEYING	
PROFILE SCALE:	PROJ. MGR.	JB	2/18
HORIZONTAL: 1" = 20'	LEAD ENGR.	ZWM	10/19
	FIELD MGR.	PBN	4/19
VERTICAL 1" = 5'	RECOMMENDED: HAS 4.19 DESIGN MANAGER		
FILE:	DRAWING:		
ATLAS PAGE NO: 301			

APPROVED:
CITY ENGINEER
DATE: 1/23/20
SHEET 42 OF 52 SHEETS

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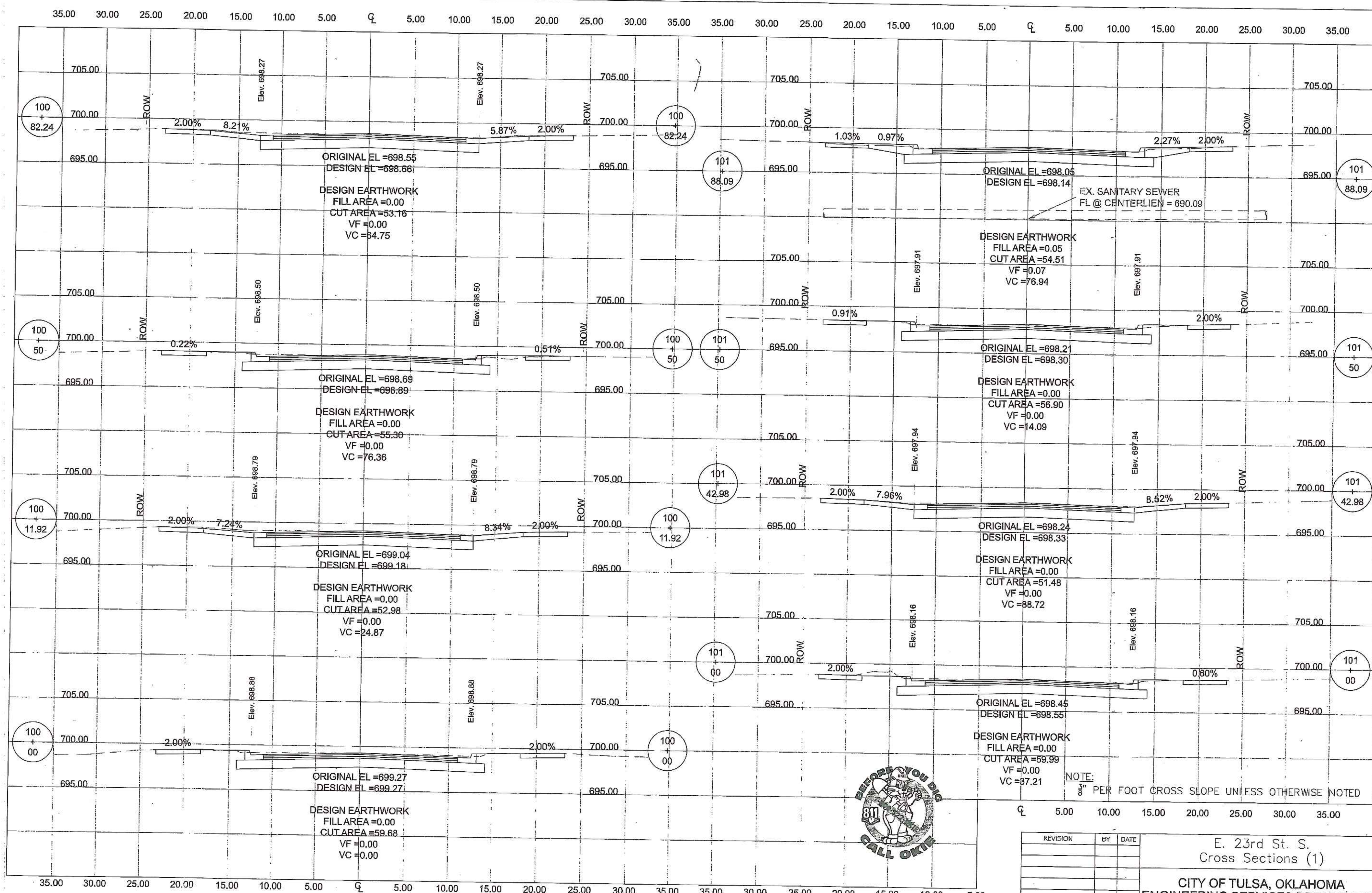
2/20/2019



REVISION	BY	DATE

E. 23rd St. S.
Cross Sections (1)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE HORIZONTAL 1" =5' VERTICAL 1" =5' DATE:

SHEET 43 of 52

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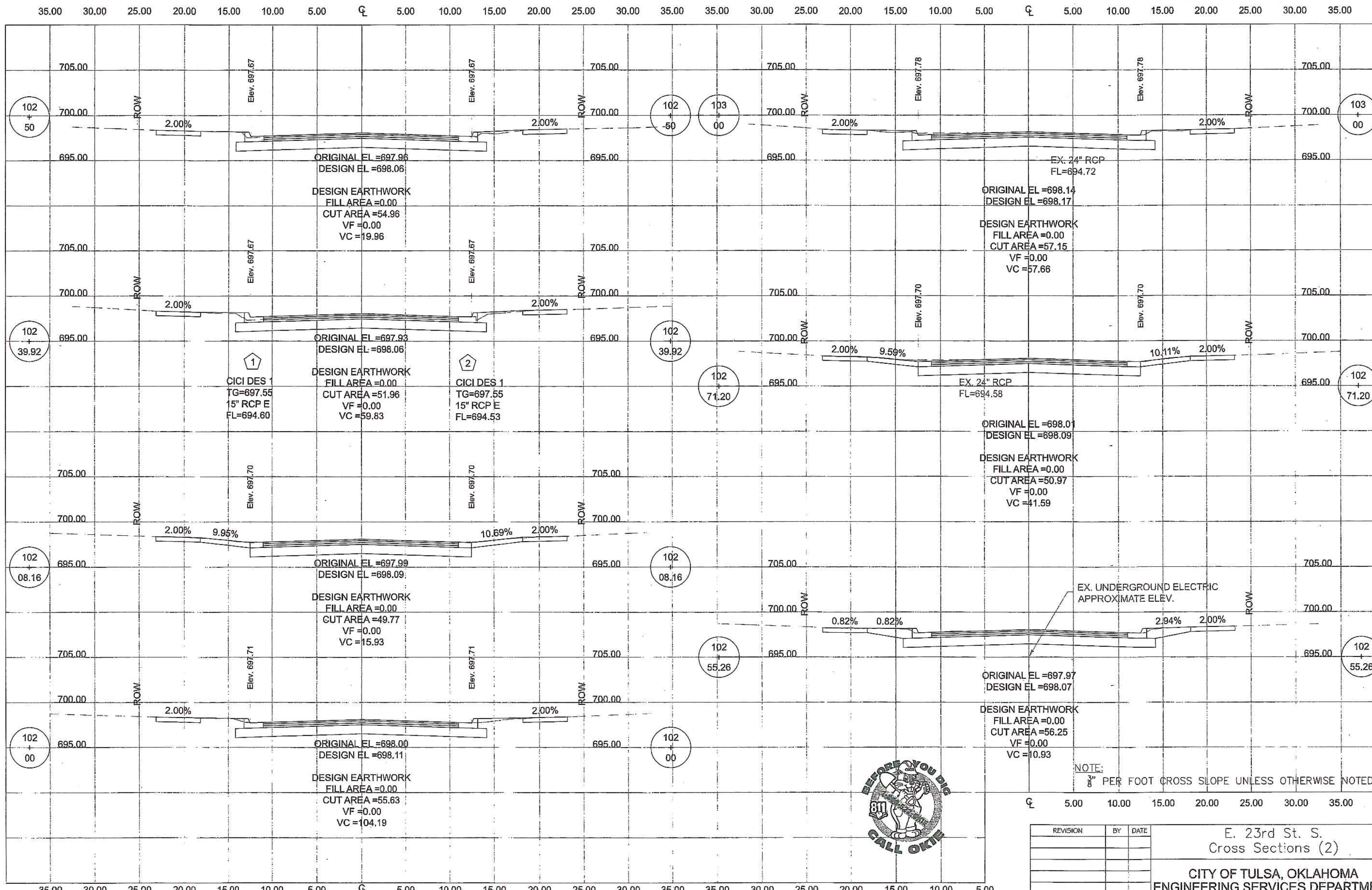
1/9/2019



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1/9/2019

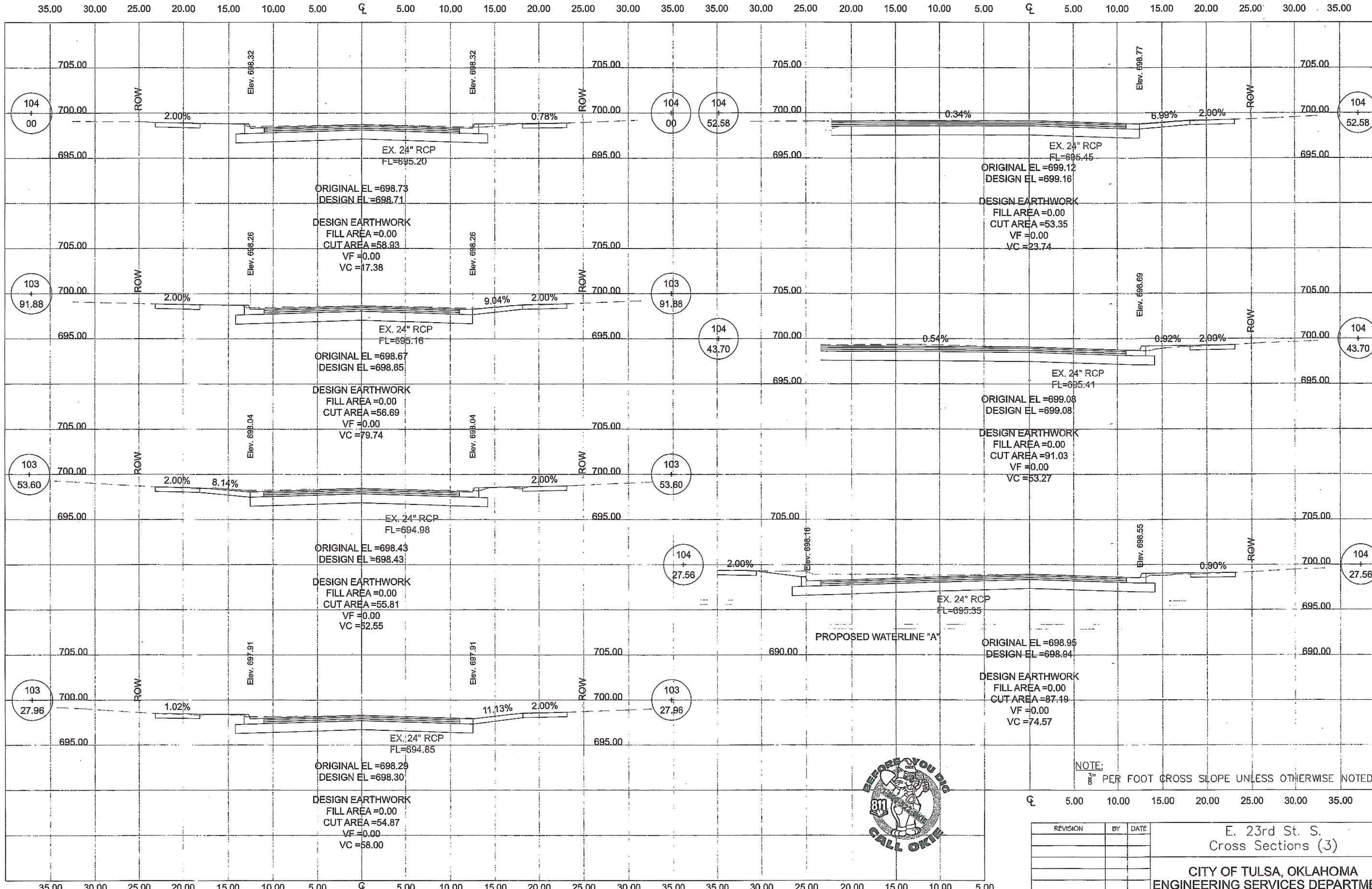
REVISION	BY	DATE

E. 23rd St. S.
Cross Sections (2)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE: HORIZONTAL 1"=5' VERTICAL 1"=5'

SHEET 44 of 52



REVISION	BY	DATE

E. 23rd St. S.
Cross Sections (3)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE: HORIZONTAL 1" =5' VERTICAL 1" =5'
DATE:
SHEET: 45 of 52

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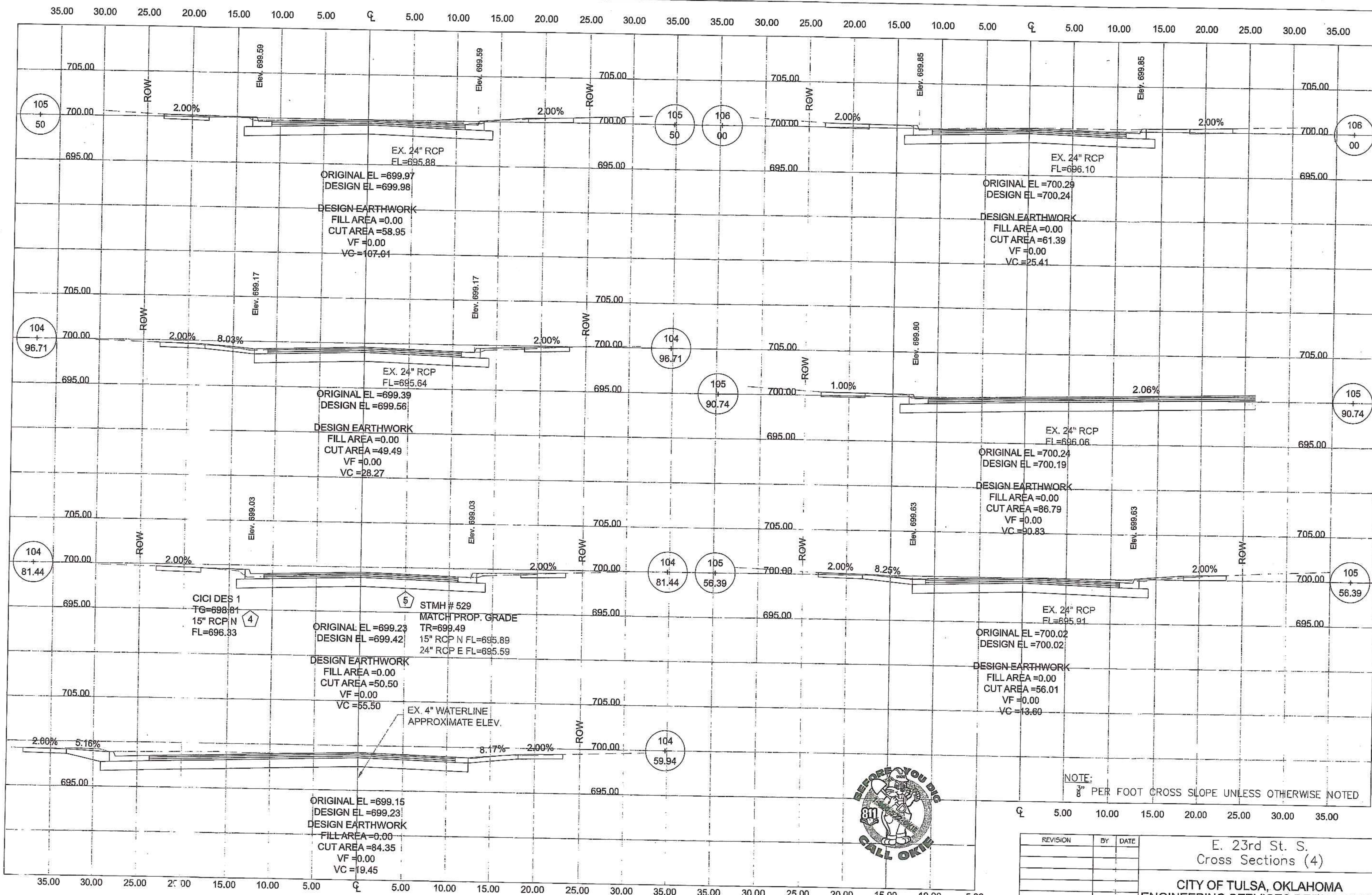
1/9/2019



REVISION	BY	DATE

E. 23rd St. S.
Cross Sections (4)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE HORIZONTAL 1" =5' VERTICAL 1" =5' DATE:

SHEET 46 of 52

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1/9/2019

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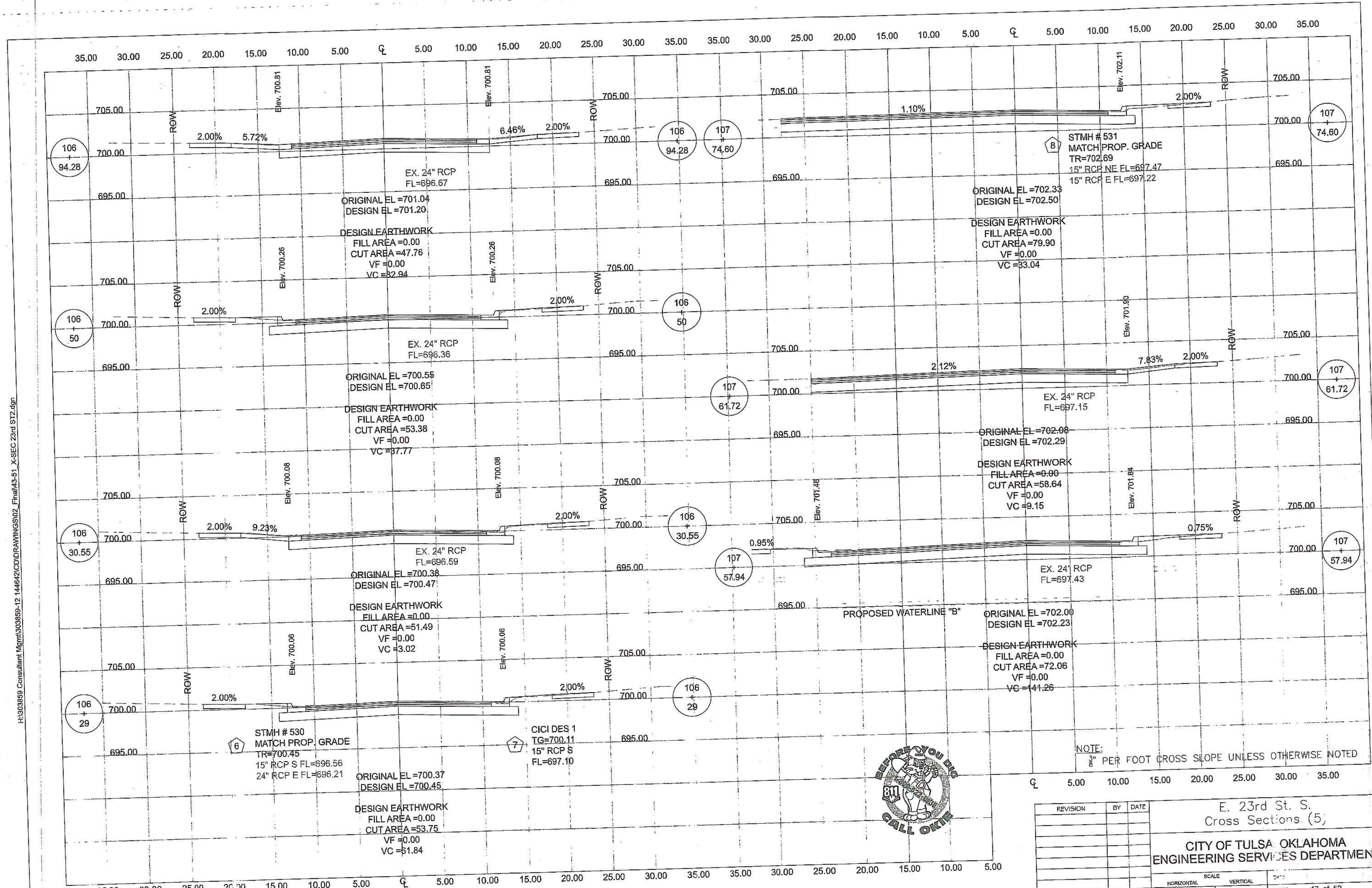
1/9/2019



NOTE:
$\frac{3}{8}$" PER FOOT CROSS SLOPE UNLESS OTHERWISE NOTED

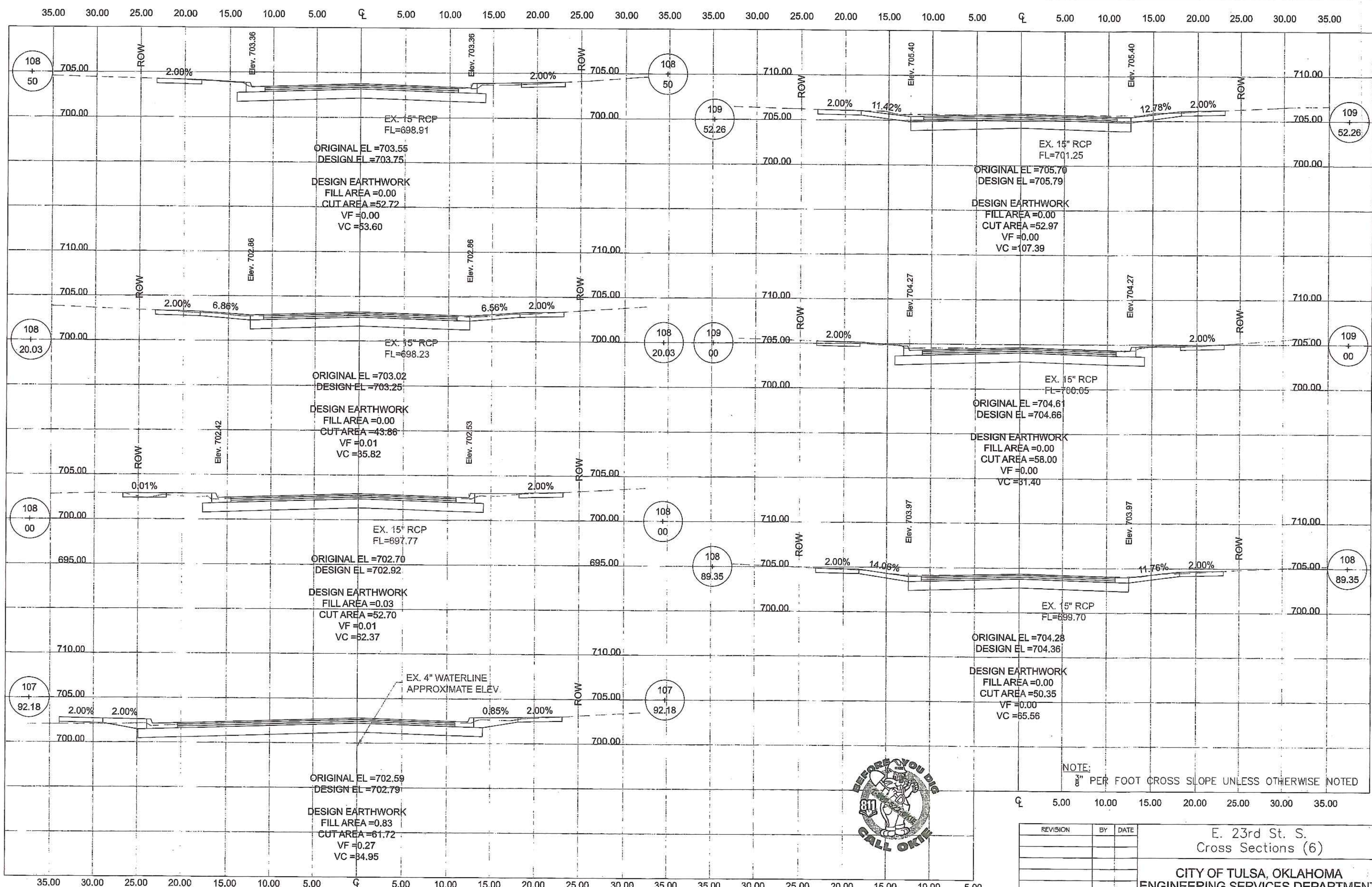
REVISION	BY	DATE

E. 23rd St. S.
Cross Sections (5)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE: HORIZONTAL 1" =5' VERTICAL 1" =5'

SHEET 47 of 52



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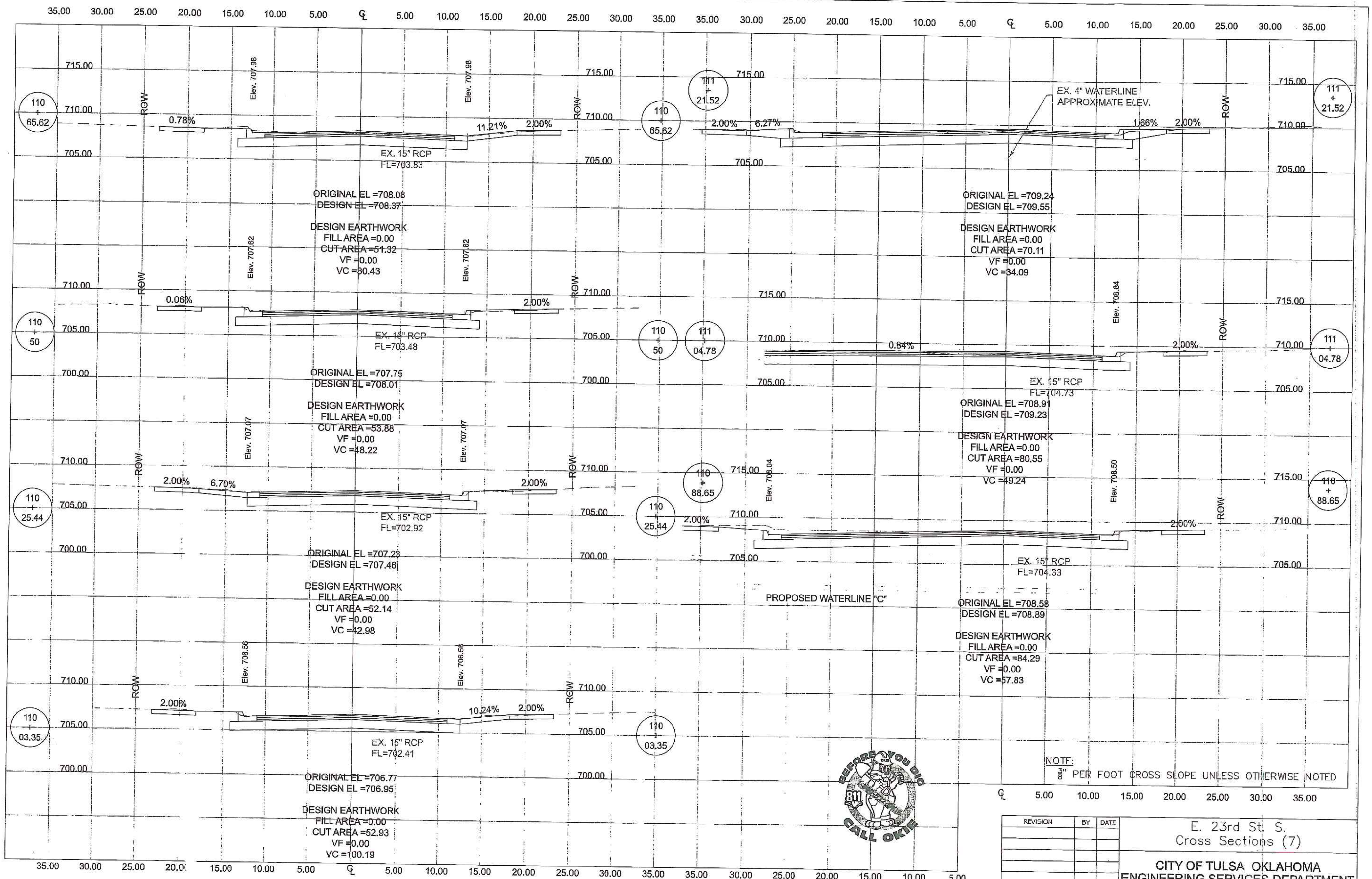
1/9/2019

REVISION	BY	DATE

E. 23rd St. S.
Cross Sections (6)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE: HORIZONTAL 1" =5' VERTICAL 1" =5'
DATE:
SHEET: 48 of 52



E. 23rd St. S.
Cross Sections (7)

CITY OF TULSA OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

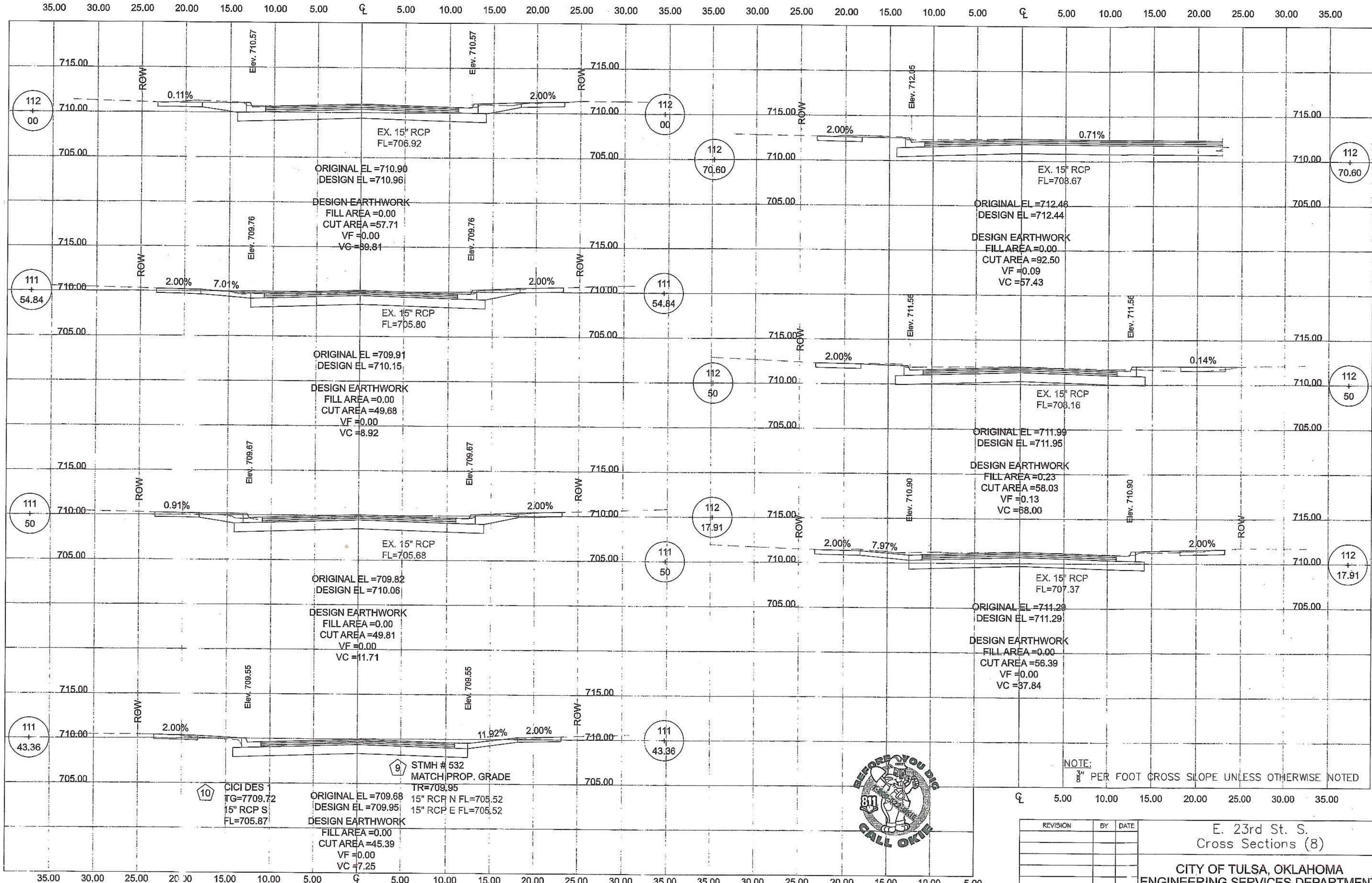
REVISION	BY	DATE

SCALE: HORIZONTAL 1"=5' VERTICAL 1"=5'

SHEET 49 of 52

H:\303859 Consultant Mgmt\303859-12 144642\CD\DRAWINGS\02_Final\43-51_X-SEC 23rd ST2.dgn

1/9/2019



REVISION	BY	DATE

E. 23rd St. S.
Cross Sections (8)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE: HORIZONTAL 1"=5' VERTICAL 1"=5'
DATE
SHEET 50 of 52

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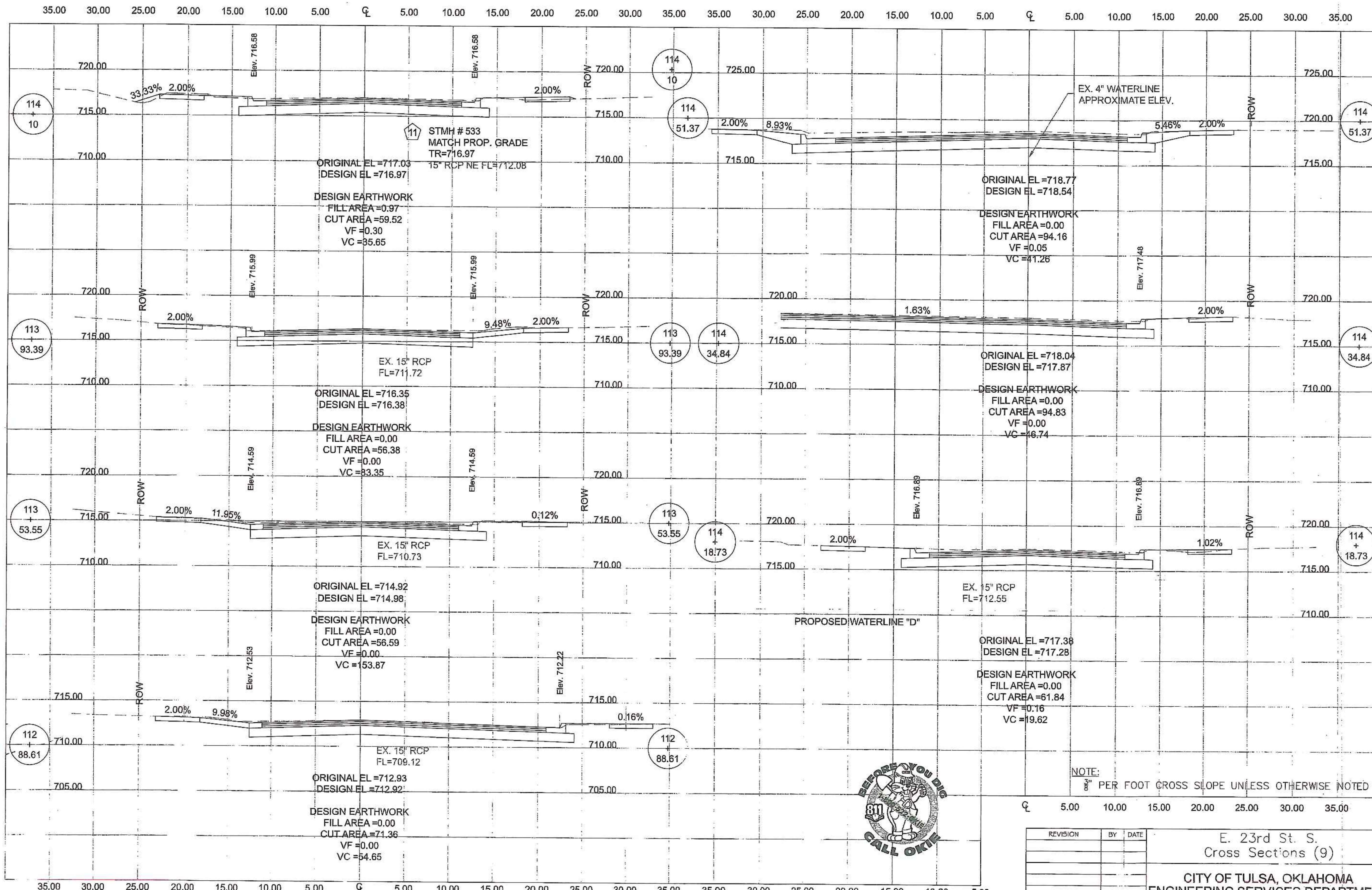
1/9/2019

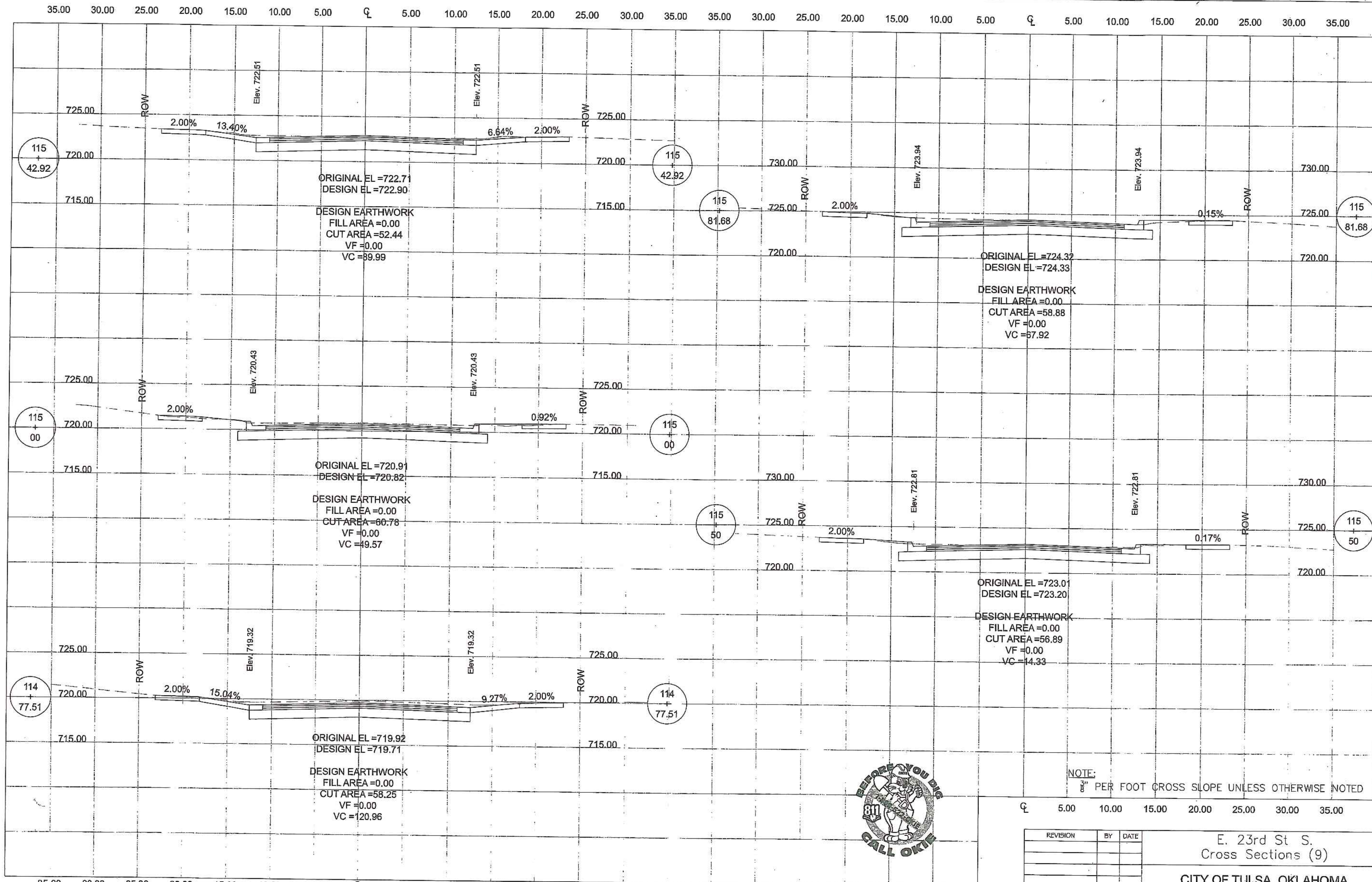


REVISION	BY	DATE

E. 23rd St. S.
Cross Sections (9)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE HORIZONTAL	SCALE VERTICAL	DATE:
1"=5'	1"=5'	SHEET: 51 of 52



NOTE:
" PER FOOT CROSS SLOPE UNLESS OTHERWISE NOTED

REVISION	BY	DATE

E. 23rd St S.
Cross Sections (9)

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

SCALE HORIZONTAL	SCALE VERTICAL	DATE
1" =5'	1" =5'	SHEET 52 of 52

H:\303859 Consultant Mgmt\303859-12 144642\CD\DRAWINGS\02_Final\43-51_X-SEC 23rd ST2.dgn

1/9/2019

ENGINEER'S ESTIMATE - PROJECT 144642 TMUA-W 14-35

SUMMARY OF PAVING & DRAINAGE QUANTITIES						
ITEM	SPEC. NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT PRICE	EXTENSION
1	201(A)	CLEARING AND GRUBBING	ACRE	0.5	$5,000.00	$2,500.00
2	202(A)	UNCLASSIFIED EXCAVATION	CY	3241	$14.00	$45,374.00
3	221(C)	TEMPORARY SILT FENCE	LF	300	$3.00	$900.00
4	221(K)	TEMPORARY FIBER LOG	LF	17	$2.00	$34.00
5	230(A)	SOLID SLAB SODDING	SY	2698	$4.00	$10,792.00
6	303(A)	AGGREGATE BASE TYPE A	CY	3032	$36.00	$109,152.00
7	310(B)	SUBGRADE METHOD B	SY	10371	$1.00	$10,371.00
8	325	SEPARATOR FABRIC	SY	12963	$1.00	$12,963.00
9	409	FABRIC REINFORCEMENT	SY	4118	$5.00	$20,590.00
10	411(B)	SUPERPAVE, TYPE S3 (PG 64-22)	TON	1731	$65.00	$112,515.00
11	411(C)	SUPERPAVE, TYPE S4 (PG 64-22) INSOLUBLE	TON	1106	$75.00	$82,950.00
12	411(D)	SUPERPAVE, TYPE S5 (PG 64-22)	TON	207	$80.00	$16,560.00
13	412	COLD MILL PAVEMENT	SY	3698	$5.00	$18,490.00
14	509(B)	CLASS A CONCRETE	CY	18	$360.00	$6,480.00
15	609(B)	COMBINED CURB AND GUTTER (6" BARRIER)	LF	2547	$18.00	$45,846.00
16	610(A)	4" CONCRETE SIDEWALK	SY	2760	$45.00	$124,200.00
17	610(B)	6" CONCRETE DRIVEWAY (H.E.S.)	SY	2067	$55.00	$113,685.00
18	610(I)	TACTILE WARNING DEVICE	SF	176	$30.00	$5,280.00
19	611(G)	INLET DESIGN NO. 2, COMPLETE IN PLACE	EA	9	$2,100.00	$18,900.00
20	611(G)	INLET DESIGN NO. 2(2A), COMPLETE IN PLACE	EA	2	$2,500.00	$5,000.00
21	612(A)	MANHOLE ADJUSTED TO GRADE (PUBLIC)	EA	6	$800.00	$4,800.00
22	612(E)	VALVE BOXES ADJUSTED TO GRADE	EA	2	$125.00	$250.00
23	613(A)	RCP, 18 INCH ROUND, COMPLETE IN PLACE	LF	55	$75.00	$4,125.00
24	619(B)	REMOVAL OF EXISTING DRIVEWAYS	SY	2067	$5.00	$10,335.00
25	619(B)	REMOVAL OF EXISTING PAVEMENT	SY	6181	$5.00	$30,905.00
26	619(B)	REMOVAL OF EXISTING CURB AND GUTTER	LF	2547	$3.00	$7,641.00
27	619(B)	REMOVAL OF EXISTING SIDEWALK	SY	2760	$5.00	$13,800.00
28	641	MOBILIZATION	EA	1	$20,000.00	$20,000.00
29	642	CONSTRUCTION STAKING	EA	1	$10,000.00	$10,000.00
30	850(A)	SHEET ALUMINUM SIGN	SF	53	$20.00	$1,060.00
31	851(B)	1 1/2" SQUARE TUBE	LF	14	$12.00	$168.00
32	851(C)	1 3/4" SQUARE TUBE	LF	70	$13.00	$910.00
33	851(D)	2 " SQUARE TUBE	LF	15	$14.00	$210.00
34	880(B)	SIGNS 0.00 TO 6.25 SF	SD	1920	$0.50	
35	880(B)	SIGNS 6.26 TO 15.99 SF	SD	1920	$1.00	$1,920.00
36	880(B)	SIGNS 16.00 AND UP	SD	1920	$1.25	$2,400.00
37	880(C)	BARRICADES (TYPE III)	SD	3600	$1.00	$3,600.00
38	880(E)	TYPE "A" WARNING LIGHT	SD	7200	$0.20	$1,440.00
39	880(E)	TYPE "C" WARNING LIGHT	SD	3600	$0.10	$360.00
40	880(F)	DRUMS	SD	1920	$0.50	$960.00
41	880(G)	TUBE CHANNELIZERS	SD	500	$0.50	$250.00
42	880(I)	FLAGGER	FD	100	$30.00	$3,000.00
43	SPECIAL	PROJECT SIGN (CITY OF TULSA)	EA	1	$750.00	$750.00
44	SPECIAL	TYPE I AC PATCH	CY	122	$225.00	$27,450.00
45	SPECIAL	CURB RAMP TYPE "A"	EA	10	$1,000.00	$10,000.00
46	SPECIAL	CURB RAMP TYPE "D"	EA	12	$1,500.00	$18,000.00
47	SPECIAL	URBAN RIGHT-OF-WAY RESTORATION	EA	1	$10,000.00	$10,000.00
48	COT 202	QUICK SET FLOWABLE FILL	CY	82	$125.00	$10,250.00
49	SPECIAL	OWNER ALLOWANCE	ALLOW	1	$10,000.00	$10,000.00

SUBTOTAL PAVING & DRAINAGE BASE BID $967,166.00