# SURVEY DATUM

HORIZONTAL CONTROL: OKLAHOMA STATE PLANE COORDINATE SYSTEM NAD 83 (2011)

THE FOLLOWING OKLAHOMA

DEPARTMENT OF TRANSPORTATION

**STANDARDS** 

SOLID SLAB SODDING

TYPICAL SIGN INSTALLATION

**VERTICAL CONTROL: NAVD 1988 SCALE FACTOR: 0.99991998** 

# Symbol Legend

- Electric Meter - Gas Meter
- Gas Valve - Irrigation Control Valve
- Water Meter
- Water Valve
  - Water Valve Vault Blowoff Hydrant Assembly
  - Fire Hydrant
- Storm Sewer Manhole - Sanitary Sewer Manhole
- Communication Manhole
- Cleanout - Power Pole
  - Guy Anchor Light Pole
  - Traffic Signal Pole - Telephone Pedestal
- Mailbox Bench Mark - Boring
- Survey Control Point
- Property Pin
- Deciduous Tree

- Deciduous Tree

- Coniferous Tree
- Bush

Reinforced Concrete Pipe

- CP - Concrete Pipe Existing Electric

-C<sup>u</sup> - Telephone Underground - G<sub>x</sub> - Existing Natural Gas Line 

- Existing Stormwater Line ----- s s, ----- - Sanitary Sewer Line

R/W——- Right-Of-Way (ROW) - Existing Utility Line Easement

- Survey Basement Line (S.B.L.) - Flood Plain Boundary

#### UTILITY COORDINATION UTILITY/DEPARTMENT NUMBER OKLAHOMA ONE-CALL SYSTEM, INC. 1-800-522-6543 **ENGINEERING SERVICES** WATER DESIGN 918-596-9580 918-596-9564 WASTEWATER DESIGN TRANSPORTATION DESIGN 918-596-9636 918-596-9741 TRAFFIC ENGINEERING DESIGN 918-596-9749 COT TRAFFIC ENGINEER 918-596-9498 STORMWATER DESIGN 918-596-9560 CITY OF TULSA-WATER AND SEWER 918-596-9766 CITY OF TULSA-TRAFFIC OPERATIONS 918-596-9649 UTILITY COORDINATOR: CHRIS KOVAC 918-831-8387 tim.helbig@onegas.com OKLAHOMA NATURAL GAS - TIM HELBIG 918-527-7309 wg4679@att.com AT&T DISTRIBUTION - WAYE GROOM AT&T TRANSMISSION - KEVIN WINGARD 580-931-7688 kwingard@sdt-l.com 918-250-6257 | Idhicks@aep.com AEP/PSO - LONNY HICKS COX COMMUNICATIONS - JASON HOLT 918-830-7238 jason.holt@cox.com MCI/VERIZON 918-590-2160

# CONSTRUCTION PLANS ARTERIAL STREET REHABILITATION 129TH E AVE - APACHE ST TO PINE ST

PROJECT NO. 2036A0055Z

ACCOUNT NO. 2036A0055Z.Streets.ArtRhb.4282.42823122-541106

PUBLIC WORKS DEPARTMENT CITY OF TULSA, OKLAHOMA

THE FOLLOWING CITY OF TULSA STANDARDS

102 PROJECT SIGN 608A STREET NAME SIGNS

608B TRAFFIC SIGNS CHANNELIZING DEVICES 625 REMOVAL OF TRAFFIC SIGNS

713 PAVEMENT REMOVAL AND REPLACEMENT



# PROJECT LOCATION



**GOVERNING SPECIFICATIONS:** CURRENT CITY OF TULSA STANDARD CONSTRUCTION SPECIFICATIONS AND STANDARD DETAILS GOVERN. ALL OTHER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AS APPROVED

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

IN ACCORDANCE WITH ODOT SECTION 105.14 THE COT IS ANTICIPATING THAT THE SUCCESSFUL CONTRACTOR WILL UTILIZE THE APPROPRIATE MEANS AND METHODS TO ACCOMPLISH THE WORK DESCRIBED IN THE PLANS WITHOUT CAUSING COLLATERAL DAMAGE TO THE EXISTING INFRASTRUCTURE. THE PLANS ARE SET UP WITH THE EXPECTATION OF PERFORMING PATCHING AND CONCRETE WORK PRIOR TO MILLING OPERATIONS TO MINIMIZE CONSTRUCTION TRAFFIC LOADINGS TO REDUCED CAPACITY STREET SECTIONS. FURTHER, THE ANTICIPATED CONSTRUCTION PHASING WILL MINIMIZE THE TIMES BETWEEN MILLING AND NEW ASPHALT PLACEMENTS. LEAVING OPEN MILLED SECTIONS WILL BE AT THE CONTRACTOR'S RISK IN THE EVENT THAT LOCAL OR CONSTRUCTION TRAFFIC CAUSES DAMAGE TO PREVIOUSLY UNDAMAGED AREAS. CURRENT COT CONSTRUCTION BUDGETS DO NOT ALLOW FOR GROWTH OF THE PROJECTS.

**DESIGN INFORMATION** 

PROJECT LENGTHL 5,280 FT\_

PROJECT IS BASED ON G SURVEY

# INDEX TO DRAWINGS

**COVER SHEET** PAY ITEMS AND NOTES (RDWY)

CONSTRUCTION NOTES TYPICAL SECTIONS

17.-22. TRAFFIC STRIPING AND SIGNS

CONSTRUCTION TRAFFIC CONTROL SIGNS

# APPROVED BY

CITY OF TULSA PUBLIC WORKS DEPARTMENT **ENGINEERING SERVICES DIVISION** 

SCALE IN FEET

8/8/2025

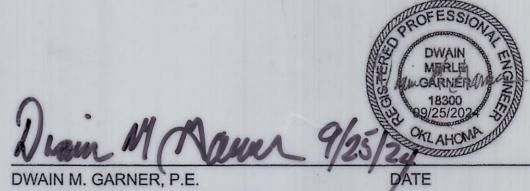
ADVERTISE DATE

# PREPARED BY



Holloway, Updike and Bellen, Inc. Muskogee - Broken Arrow, Oklahoma 905-A SOUTH 9TH STREET, BROKEN ARROW, OK. 74012 918-251-0717, FAX 918-251-0754

ENGINEERS (C.A. No. 219, EXP. 6-30-25)



OKLAHOMA REG. P.E. NO. 18300

SHEET 1 OF 25 SHEETS

tem No.	Spec Number	Item Description	Pay Item Notes	Bid Unit	Quantity
1	104	Railroad Flagger	SP-2	DAY	30
2	202(A)	Unclassified Excavation	E-3,E-4,E-7	CY	83
3	205(A)	Type A Salvage Topsoil		CY	257
4	220	Swppp Documentation and Management	E-6,E-7,E-8	LSUM	1
5	230(A)	Solid Slab Sod (Like Kind)	E-7,E-10,E-11	SY	1834
6	303(A)	Aggregate Base (Type A)	S-1,S-2	CY	83
7	310(B)	Subgrade Method B		SY	249
8	325	Separator Fabric	S-3	SY	249
9	409(A)	Fabric Reinforcement (Glas Paved 50)	S-4	SY	11818
10	411(C)	2" Superpave, Type S4 (PG 70-28 OK) (Overlay)	S-6,S-7,S-8	TON	1324
11	411(E)	1" Superpave, Type S6 (PG 70-28 OK) (Level Course)	S-5,S-6,S-7,S-8,G-1,SP-1	TON	662
12	417	Cold Milling Pavement	S-9	SY	6406
13	619(B)	Remove Structures and Obstructions	R-1,R-2,R-3,R-4,R-5,R-6	LSUM	1
14	640	Mobilization	G-2	EA	1
15	64%	Contractor Construction Staking Level II	G-3,G-4	EA	1
16	855(A)	Traffic Stripe (Thermoplastic) (4" Solid Yellow)	T-3	LF	9618
17	855(A)	Traffic Stripe (Thermoplastic) (4" Solid White)	T-3	LF	9670
18	855(A)	Traffic Stripe (Thermoplastic) (24" Solid White)	T-3	LF	55
19	880 (A)	Arrow Display (TYPE A)	T-4	SD	240
20	880(B)	Construction Sign (0 S.F TO 6.25 SF)	T-2,T-4,T-5,T-7	SD	2520
21	880(B)	Construction Sign (6.25 SF to 15.99 SF)	T-2,T-4,T-5,T-7	SD	9960
22	880(B)	Construction Sign (16.00 SF TO 32.00 SF)	T-2,T-4,T-5,T-7	SD	450
23	880(C)	Type III Barricade	T-2,T-4,T-5,T-7	SD	1200
24	880(E)	Warning Lights (Type A)	T-4,T-5,T-7	SD	2400
25	880(E)	Warning Lights (Type C)	T-4,T-5,T-7	SD	12,960
26	880(F)	Drums	T-2,T-4,T-5,T-7	SD	7350
27	880(G)	Tube Channelizer	T-2,T-4,T-5,T-7	SD	2/000
28	880(1)	Flagger	T-6	FD	40
29	882(A)	Port. Changeable Message Sign	T-4	SD	240
30	COT 202(B)	Quick Set Flowable Fill	G-1	CY	9
31	COT 334	Construction As Built		LSUM	1
32	COT 335	Contractor Quality Control		LSUM	1
33	COT 608(A)	Ground Signs (Post-Mounted Traffic Signs)	T-2	SF	128
34	COT 608(C)	1 1/2" Square Tube Post (St Name)		LF	4
35	COT 608(D)	1 3/4" Square Tube Post (Main Post)		LF	233
36	COT 608(E)	2" Square Tube Post (Footing)		LF	72
37	COT 625	Removal of Traffic Items	T-1	EA	1
38	SPECIAL	Project Sign (City of Tulsa Std. No. 102)	T-4,T-7	EA	2
39	SPECIAL	Type I AC Patch	G-1,S-21	CY	38
40	SPECIAL	Type I P&C Patch	G-1,S-21	CY	28
41	SPECIAL	Railroad Allowance	SP-2	EA	15000
42	SPECIAL	Owner Allowance		EA	25000
43	SPECIAL	Urban Right -of-Way-Restoration	G-5,G-6,G-7,G-8,G-9,G-10		1

# MISCELLANEOUS PAY ITEM NOTES

ANY WORK COMPONENT WITHOUT A SPECIFIC PAY ITEM OR COST ASOCIATED WITH IT SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

# TRAFFIC SIGNS GENERAL NOTES:

WORK SHALL CONSIST OF FURNISHING MATERIALS AND INSTALLING TRAFFIC SIGNS IN ACCORDANCE WITH THE CITY OF TULSA 608 SPECIFICATIONS AND IN REASONABLE CLOSE CONFORMITY WITH THE LOCATION AND DIMENSIONS SHOWN ON THE STANDARDS, PLANS, OR AS ESTABLISHED BY THE ENGINEER.

SIGNS SHALL BE DESIGNED IN ACCORDANCE WITH THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH REVISIONS AND THE 2004 FHWA STANDARD HIGHWAY SIGNS (2012 SUPPLEMENT TO THE 2009 MUTCD).

STREET NAME SIGN PROOF SHALL BE SUBMITTED TO THE TRAFFIC ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FRABRICATION. NO INSTALLATION SHALL BE ALLOWED UNTIL APPROVAL BY TRAFFIC ENGINEER.

# PAY ITEM NOTES

**ENGINEERING SERVICES - TRANSPORTATION DESIGN** 

EARTHWORK / EROSION CONTROL / SITE PREPARATION (E1 - E11)

PAY ITEM NOTES (VERSION: 11/14/2018)

- E-3: 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.
- E-4: UNCLASSIFIED EXCAVATION INCLUDES REMOVAL OF AGGREGATE BASE AND MODIFIED SUBGRADE UNDER EXISTING PAVEMENT TO BE
- E-5: NOT USED E-6: THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL AND MAINTENANCE OF THE STORM WATER DRAINAGE FROM THE CONSTRUCTIO SITE. STORM WATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED. ALL COS ASSOCIATED WITH STORM WATER MANAGEMENT, AS WELL AS REMOVAL OF ALL SILT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, STORM SEWER PIPES AND APPURTENANCES WITHIN THE PROJECT LIMITS AT END OF PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS
- E-7: EROSION PROTECTION SHALL BE PLACED AS FOLLOWS: A) AROUND INLETS TO PREVENT INFLOW OF ERODED MATERIAL INTO STORM SEWER SYSTEM; B) IN LOCATIONS THROUGHOUT PROJECT SITE, AS DETERMINED BY THE ENGINEER, TO PREVENT WASH OF ERODED MATERIAL ONTO
- ADJACENT PROPERTY; C) FOR ENTIRE DURATION OF PROJECT, WITH MAINTENANCE AND REPLACEMENTS, AS DIRECTED BY THE ENGINEER; D) WITH PERIODIC REMOVAL OF SEDIMENT IN ACCORDANCE WITH STORMWATER MANAGEMENT PLAN.
- ALL COST FOR ITEMS A-D ABOVE SHALL BE INCLUDED IN UNIT PRICE BID FOR THIS ITEM. **E-8:** PRICE BID SHALL INCLUDE MAINTENANCE, SEDIMENT REMOVAL, DISPOSAL, AND REMOVAL OF FILTERS AT PROJECT COMPLETION.
- E-10:ESTIMATED QUANTITY IS BASED ON SODDING OF ALL DISTURBED AREAS OUTSIDE THE FINAL PAVING LIMITS AND WITHIN THE FINAL GRADING LIMITS AS INDICATED BY THE TOP-OF-CUT/TOE-OF-SLOPE LINE ON THE PLANS (EXCLUDING SURFACES OF STRUCTURES, FIXTURES AND APPURTENANCES). SOD SHALL BE OF LIKE-KIND TO EXISTING SOD. PRICE BID INCLUDES PLACEMENT AND COMPACTION OF SUITABLE BACKFILL. ANY EXISTING GRASSED AREAS BEYOND THE ABOVE STATED LIMITS THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION
- OPERATIONS SHALL BE RESODDED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S SOLE EXPENSE. E-11: 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.

#### SURFACING / STRUCTURES (S1 - S21)

- S-1: 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.
- S-2: INCLUDES COMPACTION OF AGGREGATE TO 98% AASHTO T180 MODIFIED PROCTOR. 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. S-4: 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. S-5: 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.
- ESTIMATED AT 112 LBS PER SQ YD PER 1 INCH THICK. ODOT PAY FACTOR FOR AVERAGE LOT DENSITY SHALL NOT BE USED FOR THIS PROJECT. FAILURE TO REACH AVERAGE LOT DENSITY OF 92%-97% WILL
- S-8: A HIGHER GRADE OF ASPHALT BINDER THAN IS INDICATED ON THE PLANS MAY BE USED, BUT AT NO ADDITIONAL COST TO THE CITY.

BINDER GRADE	MESALs	ADT <sup>1</sup>	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.

S-9: 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.

- S-12: NOT USED S-13: NOT USED
- S-14: NOT USED
- S-15: NOT USED S-16: NOT USED.
- S-17: NOT USED
- S-18: NOT USED.
- S-19: NOT USED.
- S-20: NOT USED. S-21: THIS PAY ITEM INCLUDES THE FOLLOWING:
  - SAW CUTTING
  - REMOVAL OF THE EXISTING CONCRETE AND/OR ASPHALTIC CONCRETE ROADWAY (CY) TYPE S3 ASPHALTIC CONCRETE OR PC CONCRETE COMPLETE AND IN PLACE PER DETAIL SEALING OF EDGES AND TACK COAT

# DOES NOT INCLUDE THE FOLLOWING:

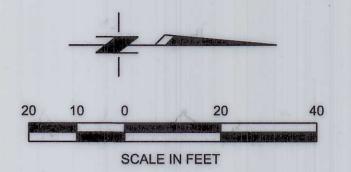
- UNCLASSIFIED EXCAVATION
- SUBGRADE METHOD B (SY) SEPARATOR FABRIC (SY)
- AGGREGATE BASE (TYPE A)
- ASPHALT CONCRETE LEVELING OR SURFACE COURSE

# GENERAL (G1 - G10)

- G-1: LOCATIONS TO BE DETERMINED IN THE FIELD AND WORK TO BE PERFORMED AT THE DIRECTION OF THE FIELD ENGINEER. QUANTITY IS ESTIMATED AND MAY BE OMITTED IN ITS ENTIRETY.
- G-2: MAXIMUM OVERALL DOLLAR AMOUNT AND SCHEDULE OF PAYMENTS SHALL BE IN ACCORDANCE SECTION 641 OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION.
- EXCLUDES MOBILIZATION FOR WATERLINE WORK. G-3: CONSTRUCTION STAKING SHALL INCLUDE SURVEYING AND THE FURNISHING, PLACING, AND MAINTAINING OF THE CONSTRUCTION LAYOUT STAKES
- NECESSARY FOR THE PROPER COMPLETION AND INSPECTION OF THE ENTIRE PROJECT. G-4: 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. G-5: 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.
- G-6: 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. NO NEW CURB OUTLETS SHALL BE CONSTRUCTED WITHOUT APPROVAL OF THE ENGINEER
- G-7: AN INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST SHALL OVERSEE ALL PLANTINGS AND/OR REMOVAL OF TREES. CONTACT CITY ARBORIST TO ACCEPT FINAL PLANTINGS. CONTACT #: 918-596-2548
- G-8: TREE GRATES ARE NOT ACCEPTABLE PER CITY ARBORIST. CONCRETE PAVERS ARE TO BE USED AS NECESSARY AROUND TREES. G-9: 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.
- G-10: PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION.

### PAY ITEM NOTES

DRAINAGE (D1 - D15) NOT USED.



#### REMOVAL / ADJUSTMENT (R1 - R6)

- R-1: WASTE MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE IN A MANNER APPROVED BY THE ENGINEER.
- R-2: ALL SAW CUTTING AND REMOVAL SHALL BE INCLUDED IN THE COST OF THE ITEM TO BE ADJUSTED, REMOVED, REPAIRED,
- R-3: PAY ITEM INCLUDES REMOVAL OF ALL STRUCTURES AND OBSTRUCTIONS WITHIN PROJECT LIMITS NOT SPECIFIED BY OTHER ITEMS OF WORK.
- R-4: INCLUDES SAWING NOT INCLUDED IN OTHER ITEMS OF WORK.
- R-5: ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION. R-6: SHALL INCLUDE ALL COSTS ASSOCIATED WITH PLUGGING/ PATCHING HOLES IN EXISTING STRUCTURES TO REMAIN.

#### TRAFFIC (T1 - T7)

- T-1: ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPECIFICATION 625 REMOVAL OF TRAFFIC ITEMS T-2: 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.
- T-3: ALL PLASTIC PAVEMENT MARKINGS SHALL BE: EXTRUDED-APPLIED THERMOPLASTICS (USE ON ASPHALT PAVEMENT AND CONCRETE PAVEMENT). THERMOPLASTIC PAVEMENT MARKINGS SHALL ONLY BE APPLIED WHEN THE SURFACE TEMPERATURE EXCEEDS 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.
- T-4: PAYMENT SHALL BE MADE ON A SIGN-DAY BASIS ONLY FOR TRAFFIC CONTROL DEVICES THAT ARE PROPERLY INSTALLED AND IN GOOD WORKING ORDER. COSTS FOR DELIVERY, INSTALLATION, RELOCATION, MAINTENANCE REMOVAL AND REPLACEMENT, AS NEEDED AT THE DISCRETION OF THE ENGINEER, INCLUDED IN UNIT PRICE BID.
- T-5: 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.
- T-6: THE PAY ITEM FOR FLAGGER SHALL BE PAID FOR ON A FLAG DAY (F.D.) BASIS. ONE F.D. IS ONE COMPLETE WORKDAY PERFORMED BY THE CONTRACTOR AS SET FORTH IN THE CONTRACT DOCUMENTS AND SPECIFICATIONS. T-7: PRICE BID FOR THIS ITEM INCLUDES INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF PROJECT SIGN.

### SPECIAL PAY ITEM NOTES:

- SP-1: SUPERPAVE TYPE S6 LEVELING COURSE SHALL BE USED AT THE DISCRETION OF THE FIELD ENGINEER PRIOR TO PLACING FABRIC REINFORCEMENT AND MAY BE OMITTED IN ITS ENTIRETY.
- SP-2: RAILROAD (RR) COMPANY REQUIREMENTS THE RAILROAD COMPANY MAY, AS A CONDITION FOR WORKING ON OR OVER RR RIGHT-OF WAY, IMPOSSED BOTH VERTICAL AND HORIZONTAL CLEARANCE REQUIREMENTS. THE RR COMPANY'S SPECIFIC CLEARANCE REQUIREMENTS WILL BE CONTAINED IN THE RIGHT OF ENTRY AGREEMENT BETWEEN THE CONTRACTOR AND THE RR COMPANY. A RR ALLOWANCE FOR RIGHT OF ENTRY AGREEMENT IS INCLUDED IN PAY ITEM SPECIAL RAILROAD ALLOWANCE.

RAILROAD (RR) FLAGGING: REIMBURSEMENT SHALL BE TO THE RR COMPANY DIRECTLY FOR THE COST OF ALL RR FLAGGING REQUIRED AND PROVIDED BY THE RR COMPANY FOR WORK ON RR PROPERTY. COST FOR RR FLAGGING SHALL BE INCLUDED IN UNIT PRICE 104 RAILROAD FLAGGER. IT SHALL INCLUDE RR FLAGGING AND TRAFFIC TRAFFIC CONTROL REQUIRED WITHIN THE RR. IT NCLUDES MAINTENACE AND REPLACEMENT OF TRAFFIC ITEMS SUCH AS SIGNS, TEMPORARY MAKINGS, CHANNELIZING DEVICES, LIGHTS AND OTHER RELEVANT PAY ITEMS FOR WORK INSIDE RR RIGHT OF WAY.

PUBLIC WORKS DEPARTMENT WILL NOT PAY THE CONTRACTOR'S FINAL ESTIMATE UNTIL THE CONTRACTOR PROVIDES SATISFACTORY EVIDENCE IN THE FORM OF A NOTARIZED CERTIFICATE BY THE RR COMPANY THAT THE CONTRACTOR REIMBURSED THE RR COMPANY FOR SUCH SERVICES.





ROADWAY PAY ITEMS **QUANTITIES AND NOTES** PROJECT NO. 2036A0055Z

129TH ST - APACHE ST TO PINE ST CITY OF TULSA, OKLAHOMA

ENGINEERING SERVICES DEPARTMENT PLANS AND ESTIMATES PREPARED BY:

HOLLOWAY, UPDIKE & BELLEN, Inc. 2001 N WILLOW AVE., BROKEN ARROW, OKLAHOMA 74012 (918)251-0717, FAX (918)251-0754

PLAN SCALE:	DRAWN	DMG	3/23	APPROVED
NA	DESIGNED	DMG	3/23	
	SURVEY	CGA	3/23	
PROFILE SCALE	PROJ. MNGR.	PF	6161	
HORIZONTAL:	LEAD ENGR.	(0)	4/25.	
NA	FIELD MNGR.	Znu	11/24	

REVISION BY DATE FILE: 22-53-001-39\DESIGN\SHTS\G-Quantities&Notes ATLAS PAGE NO. 228, 293, 229, 294 SHEET 2 OF 25 SHEET

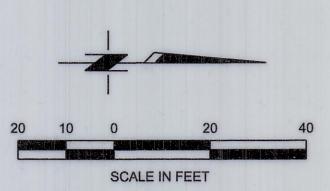
## **GENERAL ROADWAY CONSTRUCTION NOTES (9-12-2016)**

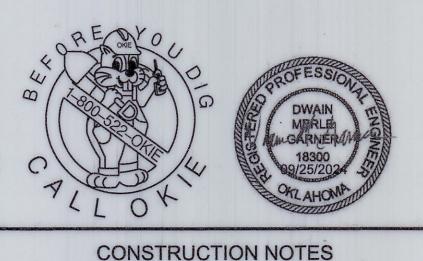
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2019 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE CURRENT CITY OF TULSA ENGINEERING SERVICES DEPARTMENT'S STANDARD SPECIFICATIONS AND STANDARD DETAILS AND STANDARD DRAWINGS AND CITY OF TULSA SPECIAL PROVISIONS, AS PROVIDED BY PROVIDED BY PROVISIONS, AS PROVIDED BY PROVIDE
- 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
- PAY ITEMS SHALL BE AS SPECIFIED ON THE CITY OF TULSA OR ON THE ODOT STANDARD DRAWINGS EXCEPT AS MODIFIED BY THE CONTRACT.
- 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.
- THE LOCATIONS OF THE UTILITIES ARE SHOWN ACCORDING TO ALL AVAILABLE INFORMATION. THE CONTRACTOR SHALL NOTIFY EACH UTILITY OWNER PRIOR TO COMMENCEMENT OF WORK TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS. THE FOLLOWING IS A LIST OF UTILITY OWNERS; AT&T, PUBLIC SERVICE COMPANY OF OKLAHOMA (AEP), OKLAHOMA NATURAL GAS (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.
- 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-
- 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
- THE CONTRACTOR SHALL PRESERVE THE INTEGRITY OF THE SANITARY SEWER STRUCTURES AND ALL OTHER UTILITY STRUCTURES WITHIN THE PROJECT
- 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.
- 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.
- 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.
- 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.
- 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
- 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.
- 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.
- 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.
- 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
- 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.
- 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
- 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.
- 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.
- POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE. EXACT LENGTHS SHALL BE DETERMINED BY A FIELD SURVEY CONDUCTED BY THE
- 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.
- 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.
- 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 WITHOUT 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 FLOODPLAIN.

# GENERAL CONSTRUCTION NOTES - TRAFFIC SIGNS

- ALL TRAFFIC SIGNS WORK SHALL CONSIST OF FURNISHING MATERIALS AND INSTALLING TRAFFIC SIGNS IN ACCORDANCE WITH THE CITY OF TULSA 608 SPECIFICATIONS AND IN REASONABLE CLOSE CONFORMITY WITH THE LOCATION AND DIMENSIONS SHOWN ON THE STANDARDS, PLANS, OR AS ESTABLISHED BY THE ENGINEER.
- SIGNS SHALL BE DESIGNED IN ACCORDANCE WITH THE 2019 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH REVISIONS AND THE 2004 FHWA STANDARD HIGHWAY SIGNS (2012 SUPPLEMENT
- STREET NAME SIGN PROOF SHALL BE SUBMITTED TO THE TRAFFIC ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FRABRICATION. NO INSTALLATION SHALL BE ALLOWED UNTIL APPROVAL BY TRAFFIC ENGINEER.





PROJECT NO. 2036A0055Z

129TH ST - APACHE ST TO PINE ST

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY: HOLLOWAY, UPDIKE & BELLEN, Inc.

SHEET 3 OF 25 SHEETS

2001 N WILLOW AVE., BROKEN ARROW, OKLAHOMA 7401 (918)251-0717, FAX (918)251-0754 ENGINEERS APPROVED:

PLAN SCALE:	DRAWN	DMG	3/23
NA	DESIGNED	DMG	3/23
	SURVEY	CGA	3/23
PROFILE SCALE	PROJ. MNGR.	RP	1924
HORIZONTAL:	LEAD ENGR.	(1)	4/25
NA	FIELD MNGR.	the	11/24
	THE PERSON NAMED IN COLUMN TO SERVICE AND ADDRESS OF THE PERSON NAMED IN COLUMN TO SE	The federal and the second second	A STATE OF THE PARTY OF THE PAR

REVISION BY DATE FILE: 22-53-001-39\DESIGN\SHTS\G-Quantities&Notes

ATLAS PAGE NO. 228, 293, 229, 294

Station	Off	set	No. of Signs	Sign Designation	Size (IN)	Sheet Alum. Signs 608(A)	1-1/2" Square Tube Post	1-3/4" Square Tube Post	2" Square Tube Post 608(E)	Remarks
	LT	RT				(SF)	608(C) (LF)	608(D) (LF)	(LF)	
10+00 to 15+00		X	1	R2-1	24" x 18"	3		10	3.0	
	X	X	2	OM-3L	12" x 36"	6		22	6.0	
15+00 to 20+00	X	X	2	OM-3R	12" x 36"	6		22	6.0	
13+00 10 20+00	X		1	W3-1	30" x 30"	6.25		9.5	3.0	
	X		1	R14-1a	24" x 30"	5		9.5	3.0	No Engine Brake
		X	1	N David Patrick Av	48" x 4"	3	1.0	-	7-	Street Sign on Top of R1-1
20+00 to 25+00		X	1	E Reading Pl 12900	48" x 9"	3	1.0	-	-	Street Sign on Top of R1-1
		X	1	R1-1	30" x 30"	6.25	- 1	9.5	3.0	
25+00 to 30+00	X	X	2	OM-3L	12" x 36"	6		22	6.0	
23+00 10 30+00	X	X	2	OM-3R	12" x 36"	6		22	6.0	
30+00 to 35+00			0	-		-	•	-		
35+00 to 40+00			0			-		-		
		X	1	W10-1	36" Dia.	7.07		11	3.0	
40+00 to 45+00		X	1	W10-5	36" x 36"	9		11	3.0	W10-5 On Top Of W10-5p
		X	1	W10-5p	30" x 24"	5		2	-	Low Ground Clearance (Plaque)
	X		1	R15-1	48" X 9"	3	- ,	9.5	3.0	Contractor to coordinate with railroad for desired
45+00 to 50+00		X	1	R15-1	48" X 9"	3		9.5	3.0	replacement location, size, etc.
45+00 10 50+00	X		1	W10-5	36" x 36"	9		11	3.0	W10-5 On Top Of W10-5p
	X		1	W10-5p	30" x 24"	5	-	2	-	Low Ground Clearance (Plaque)
50+00 to 55+00			1	W10-1	36" Dia.	7.07		11	3.0	
55+00 to 60+00	X		1	R2-1	24" x 18"	3		10	3.0	
33+00 10 80+00		X	1	W3-1	30" x 30"	6.25		9.5	3.0	
	X		1	R1-1	30" x 30"	6.25		9.5	3.0	
	X		1	R1-3P	18" x 6"	0.75		0.5	3.0	All Way (Plaque) Below R1-1 Sign
60+00 to 63+00	X		1	N David Patrick Av	48" x 9"	3	1.0	-	- 4.	Street Sign on Top of R1-1
00+00 10 03+00	X		1	E Apache St	30" x ¶"	12	1.0	-	271 - 1	Street Sign on Top of R1-1
		X	1	R1-1	30" x 30"	6.25		9.5	3.0	
		X	1	R1-3P	18" x 6"	0.75		0.5	3.0	
					Total	127.14	4	233	72	

					SUMMARY OF SUR	FACING			
From Station	To Station	Salvage Top Soil 205 (A) (CY)	Solid Slab Sod 230 (A) (SY)	Fabric Reinforcement Overlay 409(A) (SY)	2" Superpave Type S4 (PG 64-22 OK) Overlay 411(C) (TON)	1" Superpave Type S6 (PG 64-22 OK) Leveling Course 411(E) (TON)	Cold Milling Pavement 412 (SY)	AC Patch Type I (Non Arterial) SPECIAL (CY)	PCC Patch Type (Arterial) SPECIAL (CY)
10+00	15+00	23.33	166.67	271.20	30.37	15.19	189.30	0.00	0.00
15+00	20+00	23.33	166.67	1260.54	141.18	70.59	666.43	0.00	0.00
20+00	25+00	23.33	166.67	1285.39	143.96	71.98	666.71	0.00	0.00
25+00	30+00	23.33	166.67	1279.47	143.30	71.65	666.79	0.00	0.00
30+00	35+00	23.33	166.67	1292.75	144.79	72.39	666.73	0.00	0.00
35+00	40+00	23.33	166.67	1310.84	146.81	73.41	666.69	0.00	0.00
40+00	45+00	23.33	166.67	1274.58	142.75	71.38	666.86	13.00	0.00
45+00	50+00	23.33	166.67	1285.58	143.98	71.99	744.01	137.00	0.00
50+00	55+00	23.33	166.67	1302.55	145.89	72.94	666.72	0.00	0.00
55+00	60+00	23.33	166.67	507.33	56.82	28.41	365.70	0.00	0.00
60+00	62+80	23.33	166.67	747.47	83.72	41.86	439.19	0.00	99.00
		256.67	1,833.33	11,817.70	1,323.58	661.79	6,405.13	150.00	99.00

						SUMM	ARY OF AC PATCHE	S		1000				
Sta	tion	Unclassified Excavation	Aggregate Base	Subrade Method B	Separator Fabric	Type I AC Patch Arterial	Type I AC Patch Arterial	Patch	Unclassified Excavation	Aggregate Base	Subgrade Method B	AC Patch	10% Agg	Quick Set Flowable Fill
From Station	To Station	202(A) (CY)	303 (A) (CY)	310(B) (SY)	325 (SY)	SPECIAL (SY)	SPECIAL (CY)	Depth (LF)	Depth (LF)	Depth (LF)	Depth (LF)	Depth (LF)	in Patches	Special (CY)
40+00	45+00	4	4	13.00	13.00	13.00	3.23	0.75	1	1	0.667	0.00	0.43	0.44
45+00	50+00	46	46	137.00	137.00	137.00	34.02	0.75	1	1	0.667	0.00	4.57	4.57
TOT	ALS	50.00	50.00	150.00	150.00	150.00	37.25	N.					5.00	5.01

				- 4 (		SUMMA	RY OF PCC PATCH	ES	JP			- A		
Sta	tion	Unclassified Excavation	Aggregate Base	Subrade Method B	Separator Fabric	Type I PPC Patch Arterial	Type I PCC Patch Arterial	Patch	Unclassified Excavation	Aggregate Base	Subgrade Method B	AC Patch	10%	Quick Set Flowable Fill
From Station	To Station	202(A) (CY)	303 (A) (CY)	310(B) (SY)	325 (SY)	SPECIAL (SY)	SPECIAL (CY)	Depth (LF)	Depth (LF)	Depth (LF)	Depth (LF)	Depth (LF)	Agg in Patches	Special
60+00	62+80	33	33	99.00	99.00	99.00	27.49	0.83	1	1	0.667	0.00	3.30	3.30
TOT	ALS	33.00	33.00	99.00	99.00	99.00	27.49	444			12		3.30	3.30

						SI	JMMARY	OF STR	EET NAI	HE LENG	TH							
Character	N		D	а	V	i	d		P	а	t	r	i .	С	k		A	V
Left Space			1	0.16	0.08	0.36	0.24			0.16	0.04	0.36	0.36	0.24	0.36		1.	0.08
Width	2.241	4	2.241	1.921	2.361	0.56	2.041	4	2.241	1.921	1.441	1.321	0.56	2.001	2.161	4	2.561	2.361
Right Space			0.36	0.32	0.08	0.36			0.36	0.32	0.04	0.08	0.36	0.12			0.12	
	TOTAL	LENGT	H: 44.8	93 inch	es Rou	nd up to	48 inc	ches										
Character	E		R	е	a	d	i	13	g		P	1		1	2	9	0	0
Left Space				0.24	0.16	0.24	0.36	0.36	0.24			0.36			0.24	0.24	0.36	0.36
Width	2.041	4	2.241	2.041	1,921	2.041	0.56	2.041	2.041	4	2.241	0.56	4	0.84	2.241	2.241	2.361	2.361
Right Space			0.24	0.16	0.32	0.36	0.36	0.32			0.36			0.44	0.24	0.24	0.36	
	TOTAL	LENGT	H: 46.3	32 inch	es Roui	nd up to	48 inc	ches										
Character	E		Α	р	a	С	h	е		S	t							
Left Space				0.36	0.16	0.24	0.36	0.24			0.04							
Width	2.041	4	2.561	2.041	1.921	2.001	2.041	2.041	4	2.241	1.441							
Right Space		A BOOK IN THE DO	0.12	0.24	0.32	0.12	0.32			0.24								
	TOTAL	LENGT	H: 29.0	89 inch	es Rou	nd up to	30 inc	ches										

			SUMMARYOFS	TRIPING	
From Sta	To Sta.	Unit	Traffic Stripe (Thermoplastic) (4" Solid Yellow) (609)	Traffic Stripe (Thermoplastic) (4" Solid White) (609)	Traffic Stripe (Thermoplastic) (24" Solid White) (609)
10+00	15+00	LF	204	204	0
15+00	20+00	LF	1000	1000	0
20+00	25+00	LF*	900	950	0
25+00	30+00	LF	1000	1000	0
30+00	35+00	LF	1000	1000	0
35+00	40+00	LF	1000	1000	0
40+00	45+00	LF*	950	950	22
45+00	50+00	LF	1000	1000	0
50+00	55+00	LF*	950	950	22
55+00	60+00	LF	1000	1000	0
60+00	62+80	LF	614	616	11
		Total	9618.00	9670.00	55.00

* NOTE: Genera	Ily Strines	are broke	n at Intersection	ons and Ra	Imad crossings
NOIL. Ochicia	ny cuipes	and bronce	if at microcom	JIIJ GIIG I LG	nous orosomigo

From Station	To Station	Depth (IN)	Area (SY)	Factor (IN/SY)	Weight (TON)
10+00	15+00	1.	271.2	0.056	15.2
16+00	20+00	1	1260.54	0.056	70.6
20+00	25+00	1	1285.39	0.056	72.0
25+00	30+00	1	1279.47	0.056	71.7
30+00	35+00	1	1292.75	0.056	72.4
35+00	40+00	1	1310.84	0.056	73.4
40+00	45+00	1	1274.58	0.056	71.4
45+00	50+00	1	1285.58	0.056	72.0
50+00	55+00	1	1302.55	0.056	72.9
55+00	60+00	1	507.33	0.056	28.4
60+00	62+80	1	747.47	0.056	41.9
				TOTAL=	661.8

From Station	To Station	Depth (IN)	Area (SY)	Factor (IN/SY)	Weight (TON)
10+00	15+00	2	271.2	0.056	30.4
16+00	20+00	2	1260.5	0.056	141.2
20+00	25+00	2	1285.4	0.056	144.0
25+00	30+00	2	1279.5	0.056	143.3
30+00	35+00	2	1292.8	0.056	144.8
35+00	40+00	2	1310.8	0.056	146.8
40+00	45+00	2	1274.6	0.056	142.8
45+00	50+00	2	1285.6	0.056	144.0
50+00	55+00	2	1302.6	0.056	145.9
55+00	60+00	2	507.33	0.056	56.8
60+00	62+80	2	747.47	0.056	83.7
	3			TOTAL=	1323.6

SUMMARY OF EDGE MILLING							
From Station	To Station	Area (SY)					
10+00	15+00	189.30					
15+00	20+00	666.43					
20+00	25+00	666.71					
25+00	30+00	666.79					
30+00	35+00	666.73					
35+00	40+00	666.69					
40+00	45+00	666.86					
45+00	50+00	744.01					
50+00	55+00	666.72					
55+00	60+00	365.70					
60+00	62+80	439.19					
	Total	6405.13					

-	_			OF TRAFFI	The second secon		VTROL	_		-
PHASE	880(A) ARROW DISPLAY (TYPE A)	880(B) CONST. SIGN 0 TO 6.25 SF	880(B) CONST. SIGN 6.26 SF TO 15.99 SF	880(B)CONST. SIGN 16.00 SF TO 32.99 SF	880(C) TYPE III BARRICADE	880(E) WARNING LIGHTS (TYPE A)	880(E) WARNING LIGHTS (TYPE C)	880(F) DRUMS	880(G) TUBE CHANNELIZER	882(A) PORT. CHANGEABLE MESSAGE SIGN
	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD
PHASE I	120	1260	9190	290	600	1200	6980	3675	10500	120
PHASE II	1,20	1200	9980	290	600	1200	6480		10500	120
PHASEIII	(83	(5)		12.	= 0	.30		63	15-13	29
PHASETY			Lyw .	3.)	100		3.3	100	1.0	111
TOTAL	290	2520)	9960	480	1200	2990	12,960	7-390	21900	2%



SUMMARY OF QUANTITIES

PROJECT NO. 2036A0055Z

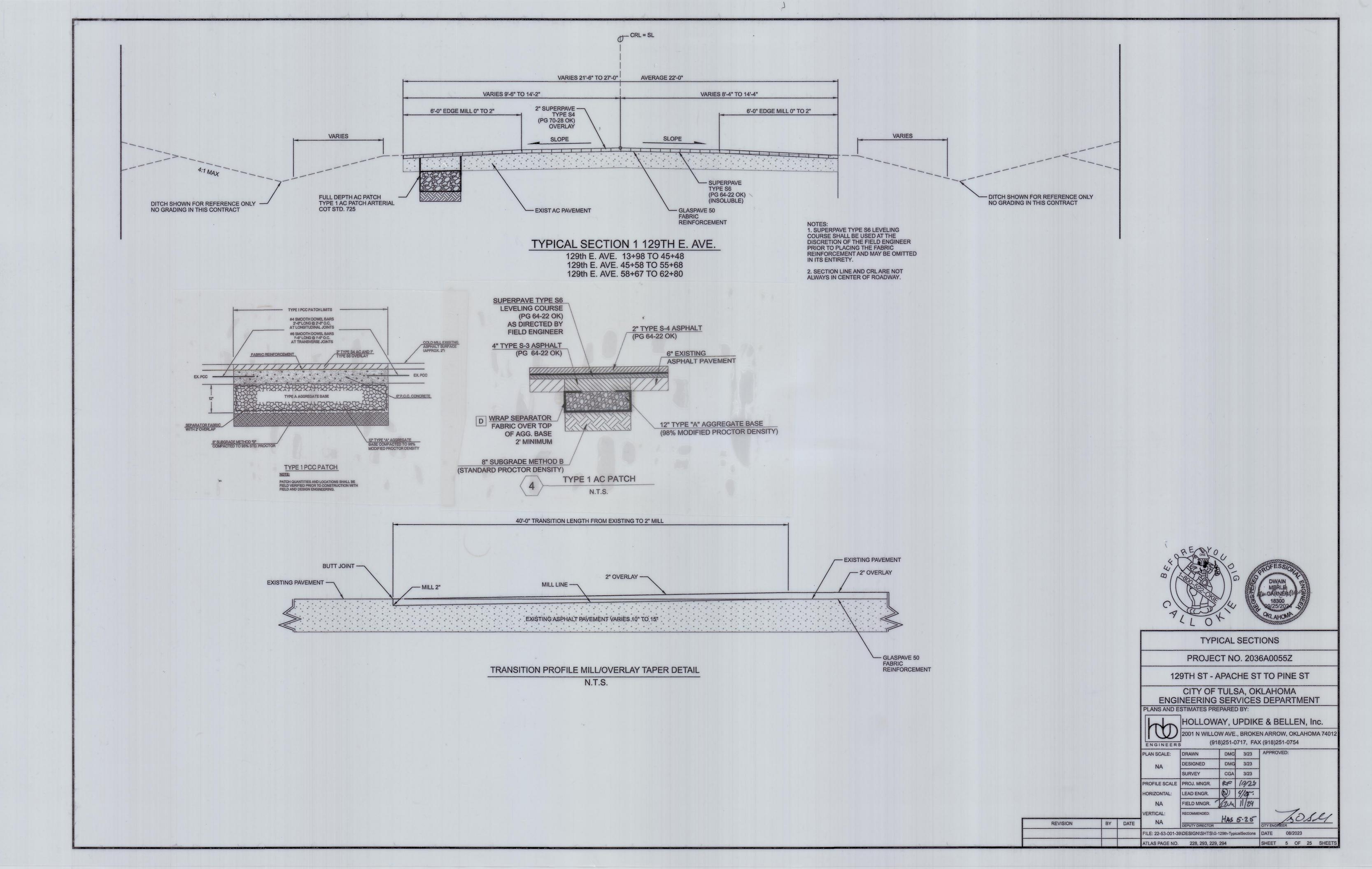
129TH ST - APACHE ST TO PINE ST

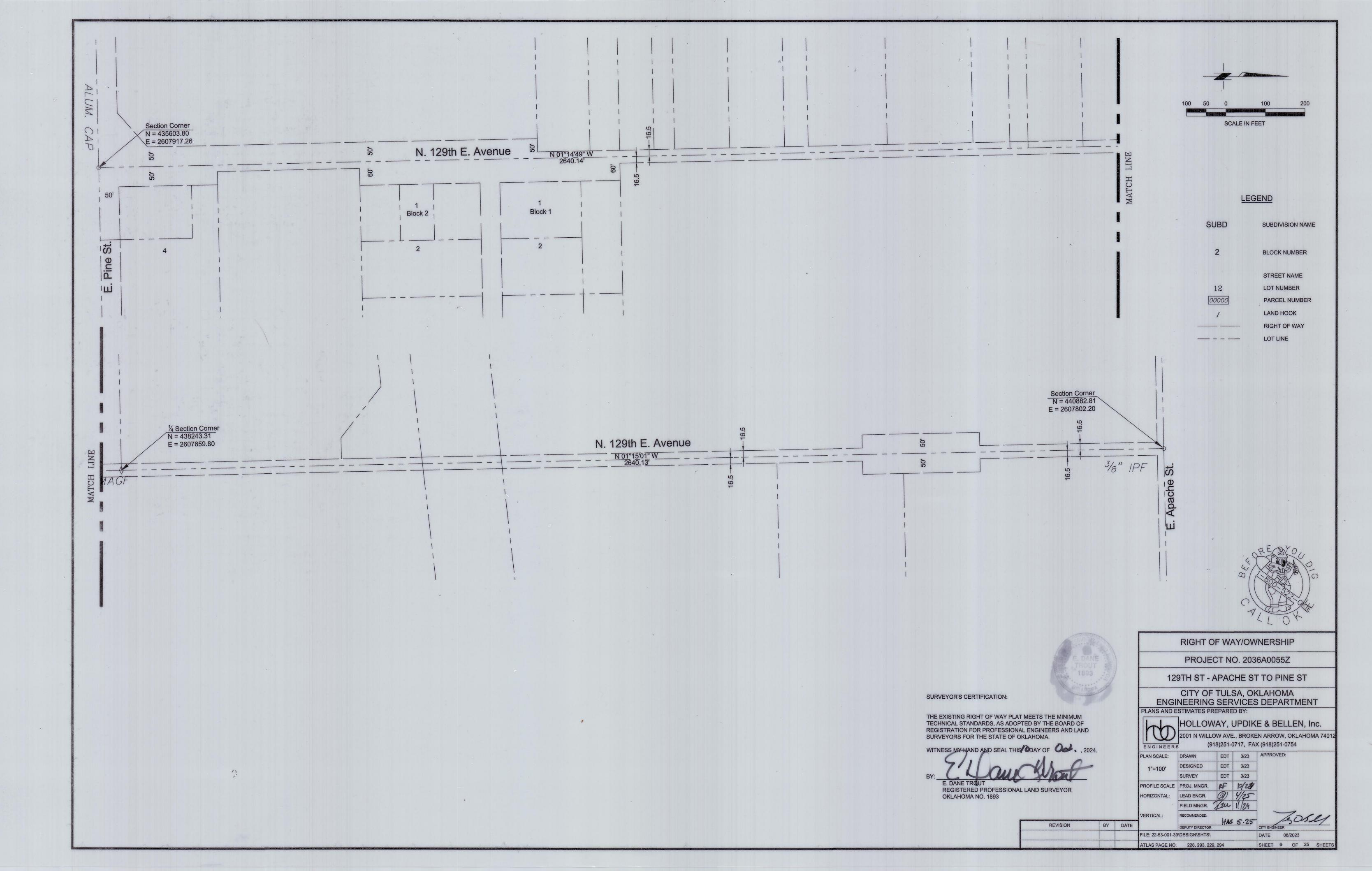
CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT PLANS AND ESTIMATES PREPARED BY:

HOLLOWAY, UPDIKE & BELLEN, Inc.
2001 N WILLOW AVE., BROKEN ARROW, OKLAHOMA 740 (918)251-0717, FAX (918)251-0754

PLAN SCALE:	DRAWN	DMG	3/23
NA	DESIGNED	DMG	3/23
	SURVEY	CGA	3/23
PROFILE SCALE	PROJ. MNGR.	RC	6/24
HORIZONTAL:	LEAD ENGR.	(3)	4/25
NA	FIELD MNGR.	Zou	11/24

		production and a second	-	RECOMMENDED:		1	(1)	1	ep
REVISION	BY	DATE	NA	DEPUTY DIRECTOR	CITY ENGI	NEER	) 0	77	
			FILE: 22-53-001-39\	DESIGN\SHTS\G-Summaryof Quantities	DATE	08	8/2023		
			ATLAS PAGE NO.	228, 293, 229, 294	SHEET	4	OF	25	SHEETS





		PROPERTY OWNER	SHIP TABLE	
PARCEL NUMBER	DEED	OWNER NAME	SITE ADDRESS	MAILING ADDRESSES
00100	2000026211	Puckett, Ken W.	12915 E. Pine St. N.	538 S. 75th E. Ave. Tulsa, OK 74112
00110	2006147753	Charlie's Trailer Sales and Service, Inc.	1735 N. David Patrick Ave. E.	12996 E. Reading Place Tulsa, OK 74116
00130	2014042746	Charlie's Trailer Sales and Service, Inc.	1747 N. David Patrick Ave. E.	P.O. Box 691682 Tulsa, OK 74169
00250	2005021747	Bonnie J Frew, Fredirick A Frew, & Geni Leigh Smith	1721 N David Patrick Ave. E.	1711 N. David Patrick Ave. Tulsa, OK 74116
00260	2006119765	Basil Leon Frailey, Alicia Neasby, Janice Ward	1711 N. David Patrick Ave. E.	1711 N. 129th E. Ave. Tulsa , OK 74116
00270	2018082445	Giovanni Flores Silva & Damaris Del Carmen Montano Rivas	1701 N. David Patrick Ave. E.	10121 E. 26th St. Tulsa , OK 74129
08110	2015086275	Jaime & Ruby Jasso	2421 N. David Patrick Ave. E.	4404 W. College Court Tulsa, OK 74116
08390	No Data Listed with County	Louise Smittle	No Data Listed with County	230 N. 129th E. Ave. Tulsa, OK 74116
08490	No Data Listed with County	Blanche Cravens c/o Eddie Smittle	2030 N. David Patrick Ave. E.	2030 N. 129th E. Ave. Tulsa, OK 74116
08610	2014035423	City of Tulsa	2100 N. 145th E. Ave.	175 E. 2nd St. Ste. 260 Tulsa , OK74103
08690	2000288686	James T. Macaw Jr. & Terri L. Pollard	2006 N. David Patrick Ave. E.	2006 N. 129th E. Ave. Tulsa , OK 74116
08790	2021103598	George R. Bohannon Jr. & Terry Bohannon	1806 N. David Patrick Ave. E.	1810 N. 129th E. Ave. Tulsa , OK 74116
08890	2000288686	James T. Macaw & Terry L. Pollard	2006 N. David Patrick Ave. E.	2006 N. 129th E. Ave. Tulsa , OK 74116
08990	2016030408	Alma M. Mejia	1928 N. David Patrick Ave. E.	18901 E. 49th Place Tulsa , OK 74134
09190	2011070771	JKM Properties, LLC	1902 N. David Patrick Ave. E.	13515 E. 0th Place Tulsa , OK 74134
09390	2017037466	Woods Properties, LLC	1728 N. David Patrick Ave. E.	2417 W. Toledo Court Tulsa, OK 74012
09490	2021006168	Timothy Campbell	1820 N. David Patrick Ave. E.	1820 N. 129th E. Ave. Tulsa , OK 74012
11590	2021103598	George R. Bohannon Jr. & Terry Bohannon	1810 N. David Patrick Ave. E.	1810 N. 129th E. Ave. Tulsa , OK 74116
11690	2000288695	Chris Rivers	1814 N. David Patrick Ave. E.	1814 N. 129th E. Ave. Tulsa , OK 74116
11790	2000288698	Bonnie Jean & Fred A. Frew	1722 N. David Patrick Ave. E.	1722 N. David Patrick Ave. E Tulsa, OK 74116
11900	2009128192	Eagle Redi-Mix Concrete, LLC	2112 N. David Patrick Ave. E.	2720 N. Hemlock Court Ste. B Broken Arrow, OK 74012
19275	2010025394	2108 N. 129th E. Ave., LLC	2108 N. 129th Ave. E.	2108 N. 129th E. Ave. TULSA , OK 74113
28000	1990960209	Koch Properties, Inc.	No Data Listed with County	P.O. Box 2256 Wichita, KS 67201
32800	2011070771	KJM Properties, LLC	No Data Listed with County	13515 E. 40th Place Tulsa, OK 74134
32850	No Data Listed with County	Schwarz Brothers Properties, LLC	1818 N. 127th Ave. E.	102 W. Ashland Ave. McAlester, OK 74501
43010	2012098521	Forbes Family Trust, James Ray and Patricia Ann Forbes, Trustees	1503 N. David Patrick Ave. E.	8302 E. 435 Road Claremore, OK 74017
43110	1021098423	Richison Enterprises LP	1619 N. David Patrick Ave. E.	P.O. Box 1503 Jenks , OK 74037
50920	2000288680	Thirty Sixth Street North Corp. c/o Cook	2523 N. David Patrick Ave. E.	7832 S. Granite Ave. Tulsa , OK 74116
52920	2000288681	Thirty Sixth Street North Corp. c/o Cook	2317 N. David Patrick Ave. E.	7832 S. Granite Ave. Tulsa , OK 74116



SHEET 7 OF 25 SHEETS



SURVEYOR'S CERTIFICATION:

THE EXISTING RIGHT OF WAY PLAT MEETS THE MINIMUM TECHNICAL STANDARDS, AS ADOPTED BY THE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS FOR THE STATE OF OKLAHOMA.

WITNESS MY HAND AND SEAL THIS OF

E. DANE TROUT
REGISTERED PROFESSIONAL LAND SURVEYOR
OKLAHOMA NO. 1893

RIGHT OF WAY/OWNERSHIP

PROJECT NO. 2036A0055Z

129TH ST - APACHE ST TO PINE ST

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:

HOLLOWAY, UPDIKE & BELLEN, Inc.
2001 N WILLOW AVE., BROKEN ARROW, OKLAHOMA 74
(918)251-0717, FAX (918)251-0754

PLAN SCALE: DRAWN EDT 3/23 APPROV
DESIGNED EDT 3/23
SURVEY EDT 3/23

SURVEY EDT 3/23

PROFILE SCALE PROJ. MNGR. PF 19/23/
HORIZONTAL: LEAD ENGR. D) 4/25

FIELD MNGR. Zzw. 11/24

REVISION BY DATE

VERTICAL:

RECOMMENDED:

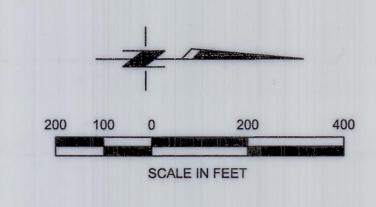
DEPUTY DIRECTOR

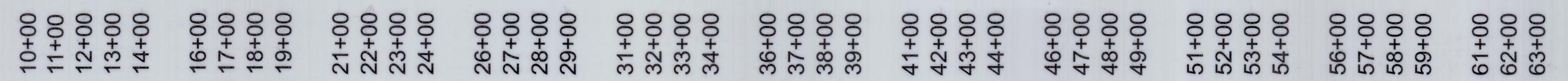
CITY ENGINEER

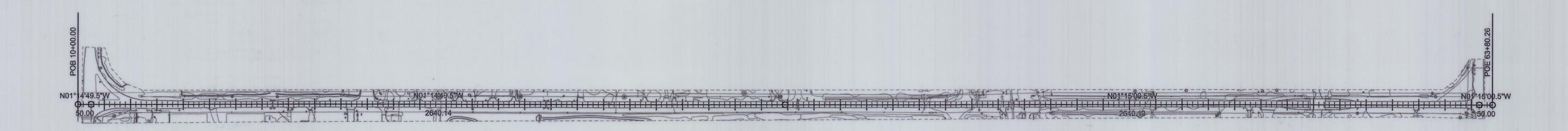
DATE

08/2

ATLAS PAGE NO. 228, 293, 229, 294







THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER. THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN T		CONTR	OL DATA	13		4.43	
Station Name: 8	Monumente	ol JULY, 1992		Adjusted Horizontal Con	ntrol Data		
Monument Type: 5/8' REBAR	-1 1/2' ALUMINUM CAP-SET I	N CONCRETE	Order: FIRST	Survey Method	GPS DX TRAV	OTHER -	
City: TULSA	County TULSA	State DK	Combined Scale Factor: 0. 999911092				
Surveyor: E. SEATON		AERIAL DATA SERVICE	NADB3(1993) Grid Bata	Coordinates (U. S. Survey Feet)	Plane Azimuth Angle (Convergence)		
Project Name: TULSA COUNTY			State: DKI A.	N 435757, 791	Convergence	,	
	ions To Prominent & Refer		Zone: NORTH	N 435/57. 791 E 2613308. 859	001*17*22.0	81*	
Reference Point	Direction	Distance (feet)	Code: 3501	E 2013300, 037			
SOD NAIL IN POLE	EAST	82. 75'	NAD 83 Grid Data	Coordinates	Plane Azimut		
TO CENTERLINE	SOUTH	26. 90'	State:	(U. S. Survey Feet)	(Converge	ence)	
NORTH STOP SIGN POST	V. S. V.	64, 00'	Zone	Le .			
Azimuth Mark	Grid Azimuth	Distance	Code:	E			
			Metric Conversi	Ion Factor: 3. 2806	3333333		
Station Recovery: Go	ood	Date: AUGUST, 2010	Geodetic	Position NAD83 (1993)	[X]	ELEV(FEET)	
			Data Lat	itude 36° 10′ 37. 71894°	North	NAVD 1988	
			Lor	ngitude 95°48′54.02678°	West	717. 764	
Description of Points: 5/8' REBAR-1 1/2' ALUMINU	A CAD FLUOU OFT IN COMPOST	C_CTAMDED FOR CCT	Field Sketch				
N. E. UF THE INTERSECTION I	OF PINE ST, AND 145TH E. A	VE.		64.00' TO NORTH	82. 75' TO NAIL IN WE FACE OF PE	TZ	

		CONTR	DL DATA		
Station Name: 25	Monument	ted JULY, 1992		Adjusted Horizontal Cor	itrol Data
Monument Type: 5/8' REBAR-1	1/2" ALUMINUM CAP-SET	IN CONCRETE	Order: FIRST	Survey Method:	GPS (X) TRAV ( ) OTHER (
City: TULSA	County TULSA	State: DK		Factor: 0. 999915999	
Surveyor: E. SEATON	Prepared b	y AERIAL DATA SERVICE	NAD83(1993) Grid Data	Coordinates	Plane Azimuth Angle (Convergence)
Project Name: TULSA COUNTY			State OKLA	(U. S. Survey Feet)	( convergence/
	ons To Prominent & Refe	rence Marks	Zone: NORTH	N 440688, 515 E 2602472, 097	001°16′04.876′
Reference Point	Direction	Distance (feet)	Code: 3501	E 26024/2. 09/	007 10 011 070
SOD NAIL IN GUARDRAIL POST	N. E.	45. 90'	NAD 83	Coordinates	Plane Azimuth Angle
SOD NAIL IN CORNER POST	E. N. E.	52. 60'	Grid Data	(U. S. Survey Feet)	(Convergence)
SOD NAIL IN POST	S. E.	57. 33'	State: Zone:	N	
Azimuth Mark	Grid Azimuth	Distance	Code	E	
			Metric Conversi	Ion Factor: 3. 2808	3333333
Station Recovery Go	id .	Boter AUGUST, 2010	Geodetic Lat	Position NAD83 (1993)	(X)   ELEV(FEET)
Description of Points: 5/8' REBAR-1 1/2' ALUMINUM S. W. OF THE INTERSECTION OF	CAP-FLUSH-SET IN CONCRE APACHE ST, AND GARNETI	TE-STAMPED '25', SET	Field Sketch:		*
	10' BELOV GROUND			45. 90' TO 60D NAIL IN S. E.	
0.				FACE OF SOUTHERMOST GUARD RAIL POST	
O.  Firm Name: AERIAL DATA S	ONICE INC		— — HWY. 169 — — —	FACE OF SOUTHERMOST	APACHE ST.  52. 60' TO 60D NAIL S. W. FACE DF CORNER

Description of Points:  5/8' REBAR-1 1/2' ALUMINUM CAP-FLUSH-SET IN CONCRETE-STAMPED '9', SET  S. E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  0. 10' BELOW GROUND  CETCO BUILDING  47. 50' TO CENTER  E. APACHE  E. APACHE				CUNTR	OL DATA					
City TULSA  County TULSA  Surveyor: E. SEATON  Prepared by: AERIAL DATA SERVICE  Project Name: TULSA COUNTY  Distances & Directions To Prominent & Reference Marks  Reference Point  Direction  Distance (feet)  LAGGED FINCE POST  Azinuth Mark  Grid Azinuth  Distance  AZON: NERTH  Code: 3501  NAD 83  Grid Data  Coordinates  Grid Data  Coordinates  Coordinates  Coordinates  Convergence)  NAD 83  Grid Data  Convergence)  NAD 83  Grid Data  Convergence)  State: Na  Convergence)  State: DA  Convergence  State: DA  Convergence  Na  Co	Station Name: 9		Monumented:	JULY, 1992			Adjusted Ho	orizontal Con	ntrol Data	
City: TULSA   County: TULSA   State DK   Surveyor: E. SEATON   Prepared by: AERIAL DATA SERVICE   Project Name: TULSA COUNTY    Distances & Directions To Prominent & Reference Marks   Reference Point   Direction   Distance (feet)   LAGGED FENCE POST   N. E.   8.25'   MAD 83   Coordinates   Convergence   CONVE	Monument Type: 5/8' REBAR-	-1 1/2' ALUMINU	M CAP-SET IN CONCRE	ETE	Order: FIR	TZ	Sur	vey Method:	GPS DXD TRAV [	DITHER C
Project Name: TULSA COUNTY  Distances & Directions To Prominent & Reference Marks  Reference Point  Direction  Distance (feet)  Reference Point  Direction  Distance (feet)  N. E.  8. 25'  NAD 83  Grid Data  Coordinates  Grid Data  CU.S. Survey Feet)  Convergence)  1. A66FD FENCE POST  N. E.  8. 25'  NAD 83  Grid Data  CU.S. Survey Feet)  Code: 3501  Coordinates  Grid Data  CU.S. Survey Feet)  Convergence)  Plane Azimuth An  Convergence)  Code:  CENTERLINE OF MANHOLE  Azimuth Mark  Grid Azimuth  Distance  Code:  Code:  Retric Conversion Factor:  3. 280833333333  Station Recovery:  Good  Date: AUGUST, 2010  Geodetic Data  Description of Points:  S.E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  Q. 10' BELDY GROUND  CETCO  BUILDING  47. 50' TO CENTERLING  E. APACHE  CETCO  BUILDING  At 440902.419  Code: 3501  R. 460902.419  Code: 3501  R. 40902.419  Code: 3501  Code: 3501  R. 40902.419  Code: 3501  Code: 3501  Code: 3501  Code: 3501  Code: 3501  Code: 10  C					-					
Bistances & Directions To Prominent & Reference Marks Reference Point Birection Bistance (feet)  N. E. B. 25' SOU MAIL IN POLE S. W. G6. 50' Azimuth Mark Grid Azimuth Distance  State: DCLA Zone: NRTH Code: 3501  NAD 83 Grid Data (U. S. Survey Feet)  Convergence)  State: DCLA Zone: NRTH Code: 3501  N. E. B. 25' NAD 83 Grid Data (U. S. Survey Feet)  Plane Azimuth A (Convergence)  State: DCLA Zone: NRTH Code: 3501  NAD 83 Grid Data (U. S. Survey Feet)  Plane Azimuth A (Convergence)  State: DCLA Zone: NRTH Code: 3501  NAD 83 Grid Data (U. S. Survey Feet)  Plane Azimuth A (Convergence)  State: DCLA Zone: NRTH Code: 3501  NAD 83 Grid Data (U. S. Survey Feet)  Plane Azimuth A (Convergence)  State: DCLA Zone: NRTH Code: 3501  NAD 83 Grid Data (U. S. Survey Feet)  Plane Azimuth A (Convergence)  State: DCLA Convergence)  State: DCLA Zone: NRTH Code: 3501  NAD 83 Grid Data (U. S. Survey Feet)  Plane Azimuth A (Convergence)  State: DCLA Zone: NRTH Code: 3501  NAD 83 Grid Data (U. S. Survey Feet)  Plane Azimuth A (Convergence)  State: DCLA Zone: NRTH Code: 3501  Pastinin NaD 83 (U. S. Survey Feet)  Plane Azimuth A (Convergence)  State: DCLA Convergence)  Plane Azimuth A (Convergence)  State: DCLA Convergence)  State: DCLA Convergence  Pastinin NaD 83 (1993)  DXI ELEI Data Latitude 36'11'28.61527' North NAD Latitude 36'11'28.61527' North			repared by AERIA	L DATA SERVICE					Plane Azimuth	Angle
Distances & Directions To Prominent & Reference Marks  Reference Point Direction Distance (feet)  CLAGGED FENCE POINT  N. E. 8. 25' CADD MAIL IN POLE S. V. 66. 50' Azinuth Mark Grid Azinuth Distance  CENTERLINE OF MANHOLE N. V. 47. 50' Azinuth Mark Grid Azinuth Distance  Station Recovery Good Date: AUGUST, 2010  Station Recovery Good Date: AUGUST, 2010  Description of Points: 5'8' REBAR-1 1/2' ALUMINUM CAP-FLUSH-SET IN CONCRETE-STAMPED '9', SET  S. E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  O. 10' BELOW GROUND  To renter the Reference Marks  Zone: NORTH Code: 3501  E 2613163.370  COordinates (U. S. Survey Feet)  Coordinates (U. S. Survey Feet)  Recovery Feet)  Coordinates (U. S. Survey Feet)  Recovery Feet)  Coordinates (U. S. Survey Feet)  Recovery Feet)  Station  Recovery Good  Date: AUGUST, 2010  Geodetic Data  Latitude 36'11'28.61527' North NAV Longitude 95'48'54.38887' Nest 691  Field Sketch:  CETCO BUILDING  A7. 50' TO CENTER OF MANHOLE  E. APACHE  A7. 50' TO CENTER OF MANHOLE  E. APACHE  A7. 50' TO CENTER OF MANHOLE  A7. 50' TO CENTER OF MANHOLE  A7. 50' TO CENTER OF MANHOLE  E. APACHE	Project Name: TULSA COUNTY					TQ.			Convergence	(6)
Reference Point Direction Distance (feet)  Code: 3501 E 2613163, 370  SOLUTION OF FAIR POINT N. E. 8. 25'  NAD 83  Grid Data (U.S. Survey Feet)  Plane Azimuth An (Convergence)  ENTERLINE OF MANHOLE N. W. 47. 50' Azimuth Mark Grid Azimuth Distance  Code:  Netric Conversion Factor: 3. 28083333333  Station Recovery: Good Date: AUGUST, 2010  Bescription of Points:  SY REBAR-1 1/2' ALUMINUM CAP-FLUSH-SET IN CONCRETE-STAMPED '9', SET S. E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  O. 10' BELOV GROUND  E. APACHE  Code: 3501 E 2613163, 370  NAD 83  Coordinates (U.S. Survey Feet)  Plane Azimuth An (Convergence)  Plane Azimuth An (Convergence)  Plane Azimuth An (Convergence)  Plane Azimuth An (Convergence)  Nad 83  Code: N. W. S. Survey Feet)  Retric Conversion Factor: 3. 28083333333  E. Code: N. W. S. Survey Feet)  Plane Azimuth An (Convergence)  Nad 83  Code: N. W. S. Survey Feet)  Retric Conversion Factor: 3. 28083333333  E. Code: N. W. S. Survey Feet)  Retric Conversion Factor: 3. 280833333333  Station Recovery: Good Date: AUGUST, 2010  Geodetic Data  Code: E. Apache: E. Apache: August	Distances & Direct	tions To Promine	ent & Reference Mar	ks					001*17*21	967*
SOD NAIL IN POLE S. V. 66.50'  CENTERLINE OF MANHOLE AZIMUTH Mark Grid Azimuth Distance Code:  Metric Conversion Factor:  3. 28083333333  Station Recovery: Good  Date: AUGUST, 2010  Geodetic Data  Description of Points: 5/8' REBAR-1 1/2' ALUNINUM CAP-FLUSH-SET IN CONCRETE-STAMPED '9', SET S. E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  0. 10' BELOV GROUND  CETCO BUILDING  Field Sketch:  CETCO BUILDING  AZ. Survey Feet)  (Convergence)  State: Code: E  Metric Conversion Factor: 3. 28083333333  ELE  Code:  Latitude 36'11' 28. 61527' North NAY Longitude 95' 48' 54. 38887' West 691  Field Sketch:  CETCO BUILDING  E. APACHE  A77. 50' TO CENTER  OF MANHOLE	Reference Point	Direc	tion Dis	tance (feet)			E 2613163. 3	70	001 17 61.	001
State: Azimuth Mark Grid Azimuth Distance  Metric Conversion Factor: 3. 28083333333  Station Recovery: Good  Date: AUGUST, 2010  Bescription of Points: 5/8' KEBAR-1 1/2" ALUMINIM CAP-FLUSH-SET IN CONCRETE-STAMPED "9", SET S.E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  0. 10' BELOW GROUND  CETCO BUILDING  State: Zone: Code:  E  Metric Conversion Factor: 3. 280833333333   State: Code:  E  Beacheric Conversion NADB3 (1993)  IXI ELER Latitude 36'11' 28. 61527' North NAY Longitude 95' 48' 54. 38887' Nest 691  Field Sketch:  CETCO BUILDING  E  APACHE  47. 50' TO CENTER OF MANHOLE	LAGGED FENCE POST	N. E.		8. 25'	NAD 83		Coordi	nates		
Azinuth Mark  Grid Azinuth  Distance  Code:  Metric Conversion Factor:  3. 28083333333  Station Recovery: Good  Date: AUGUST, 2010  Geodetic Data  Description of Points:  5/8' REBAR-1 1/2' ALUMINUM CAP-FLUSH-SET IN CONCRETE-STAMPED '9', SET  S.E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  0. 10' BELOV GROUND  CETCO BUILDING  E. APACHE  A7. 50' TO CENTER  47. 50' TO CENTER  E. APACHE	SOD NAIL IN POLE	S. W.		66. 50'		ta		vey Feet)	(Conver	gence)
Azinuth Mark  Grid Azinuth  Distance  Code:  Metric Conversion Factor:  3. 280833333333  Station Recovery: Good  Date: AUGUST, 2010  Geodetic Data  Position NADG3 (1993)  ELET Latitude 36*11*28.61527* North NAV Longitude 95*48'54.38887*  West 691  Pield Sketch:  Field Sketch:  CETCO BUILDING  A7. 50' TO CENTER DIF MAHHOLE  E. APACHE  E. APACHE	CENTERLINE OF MANHOLE	N.V.		47. 50'			N			
Station Recovery Good Date AUGUST, 2010  Geodetic Data Latitude 36*11*28.61527* North NAV Longitude 95*48*54.38887* West 691  Description of Paints Ster REBAR-1 1/2" ALUMINUM CAP-FLUSH-SET IN CONCRETE-STAMPED *9*, SET S.E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  O. 10" BELOW GROUND  CETCO BUILDING  47. 50" TO CENTER OF MAHHOLE  E. APACHE	Azimuth Hark	Grid Azim	yth	Distance			E			
Description of Points: 5/8' REBAR-1 1/2' ALUMINUM CAP-FLUSH-SET IN CONCRETE-STAMPED '9', SET S.E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  0. 10' BELOV GROUND  CETCO BUILDING  47, 50' TO CENTER  E. APACHE  E. APACHE					Metric Con	version	Factor	3, 2808	83333333	
Description of Points: 5/8' REBAR-1 1/2' ALUMINUM CAP-FLUSH-SET IN CONCRETE-STAMPED '9', SET S. E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  0. 10' BELOW GROUND  CETCO BUILDING  47, 50' TO CENTER  E. APACHE  E. APACHE	Station Recovery Go	od	Date	AUGUST. 2010			Position N	AD83 (1993)	DXI)	ELEKFEE
Description of Points:  5/8' REBAR-1 1/2' ALUMINUM CAP-FLUSH-SET IN CONCRETE-STAMPED '9', SET  S. E. OF THE INTERSECTION OF APACHE ST, AND 145TH E. AVE.  O. 10' BELOW GROUND  CETCO BUILDING  E. APACHE  Longitude 95'48'54.38887'  West 691  Field Sketch:  CETCO BUILDING  47. 50' TO CENTER OF MAHHOLE										
Q. 10' BELOV GROUND  CETCO BUILDING  E. APACHE  47. 50' TO CENTER OF MAHHOLE						Latit		61527*	North	NAVD 19
Q. 10' BELOV GROUND  CETCO BUILDING  E. APACHE  47. 50' TO CENTER OF MAHHOLE							ude 36°11′28	Land State of the		
Q. 10' BELOV GROUND  CETCO BUILDING  E. APACHE  47. 50' TO CENTER OF MAHHOLE	Decretation of Points:				Bata	Longi	ude 36°11′28	Land State of the		
CETCO BUILDING  E. APACHE  A7. 50' TO CENTER OF MAHHOLE	Description of Points: 5/8' REBAR-1 1/2' ALUMINU	M CAP-FLUSH-SET	IN CONCRETE-STAMPE		Bata	Longi	ude 36*11'28 tude 95*48'54	Land State of the		
E. APACHE  E. APACHE  47, 50' TO CENTER OF MAHHOLE	Description of Points: 5/8' KEBAR-1 1/2' ALUMINU S.E. OF THE INTERSECTION I	M CAP-FLUSH-SET OF APACHE ST, A	IN CONCRETE-STAMPE ND 145TH E. AVE.		Bata	Longi	ude 36*11'28 tude 95*48'54	Land State of the		
E. APACHE  47. 50' TO CENTER OF MAHHOLE	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Bata	Longi	ude 36*11'28 tude 95*48'54	Land State of the		
E. APACHE  47. 50' TO CENTER OF MAHHOLE	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Field Sket	Longi	ude 36*11'28 tude 95*48'54	Land State of the		
E. APACHE	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Field Sket	Longi	ude 36*11'28 tude 95*48'54	Land State of the		
E. APACHE	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Field Sket	Longi	ude 36*11'28 tude 95*48'54	Land State of the		
	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Field Sket	Longi	ude 36*11'28 tude 95*48'54	Land State of the	* * 47. 50' TD C	691. 216
	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Field Sket	Longi	ude 36*11'28 tude 95*48'54	Land State of the	* * 47. 50' TD C	691. 216
	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Pield Skets  CETCO BUILDI	Longi ch:	ude 36*11'28 tude 95*48'54	Land State of the	* * 47. 50' TD C	691. 216
	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Pield Skets  CETCO BUILDI	Longi ch:	ude 36*11'28 tude 95*48'54	Land State of the	* * 47. 50' TD C	691. 216
8. 25' TO FLAGGED	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Pield Skets  CETCO BUILDI	Longi ch:	ude 36*11'28 tude 95*48'54	Land State of the	* * 47. 50' TD C	691. 216
The state of the s	S. C. UI INC INICASECITURE	ur henonic 31, n	IN CONCRETE-STAMPE ND 145TH E. AVE.		Pield Skets  CETCO BUILDI	Longi ch:	ude 36*11'28 tude 95*48'54	Land State of the	X 47, 50' TO C OF MAHHOLE	
Firm Name: AERIAL DATA SERVICE, INC. 8301 E. 51ST, SUITE 100	0.10	BELOV GROUND	IN CONCRETE-STAMPE ND 145TH E. AVE.		Pield Skets  CETCO BUILDI	Longi ch:	ude 36*11'28 tude 95*48'54	Land State of the	X 47.50' TO CO DF MAHHOLE	691. 216
TULSA, DKLAHDMA 74145 66. 50' TD 60D ↓ /	O. 10  Firm Name: AERIAL DATA	BELOV GROUND SERVICE, INC.	IN CONCRETE-STAMPE ND 145TH E. AVE.		Pield Skets  CETCO BUILDI	Longi ch:	ude 36*11'28 tude 95*48'54	Land State of the	X 47, 50' TO C OF MAHHOLE	691. 216
NAIL IN NORTH FACE OF POLE	Firm Name: AERIAL DATA 8301 E. 515T	SERVICE, INC.	IN CONCRETE-STAMPE ND 145TH E. AVE.		CETCO BUILD	Longi ch:	A HTG 14 AVE	Land State of the	X 47, 50' TO C OF MAHHOLE X	691. 216'

		CUNTRE	DATA						
Station Name: JJ	Monument	ed: DETOBER, 2011		Combin	ned Scale	Factor:	0. 99991998		
Monument Type: 2' BRASS CAP-SI			HORIZONTAL ORDER: 3rd Survey Met						
City: TULSA	County: TULSA	State: DK	VERTICAL D	RDER: 2nd C2	Survey	Method:			ELING
Surveyor: J. HARRELL Project Name: CITY OF TULSA H.		AERIAL DATA SERVICE	NAD83	(1993) Grid Date	2		Coordinate (U.S. Survey		
Distances & Directions	To Prominent & Refer	ence Marks	State	TIVI AHT	MA				
Reference Point	Direction	Distance (feet)	- State: DKLAHDMA N 438479 Zone: NDRTH E 2602343		120		N 438479.	662	
RAILROAD CL	NORTH	8.6'			3. 480				
METAL BILBUARD SIGN POST	SOUTHWEST	78. 2'							
CL DF GARNETT	WEST	248. 4'	Plane A	zimuth Angle (Co	onvergenc			1.16.0	4'
or or Green	101	C10/1	Metric Con	version Factor		3, 2808	3333333		
THE STATION IS LOCATED ABO OF TULSA, 6.0 MI (9.7 KM) SOUTH-SOUTHEAST OF MINGO. TO REACH THE STATION FROM AND PINE ST. GO NORTHEAST THE RIGHT. STATION MARKER IS A BRASS 2.62 M (8.6 FT) NORTH OF T	THE INTERSECTION OF FOR 0. 99 KM (0. 62 M	HIGHWAY 169 (I) TO STATION ON  I. IT IS LOCATED RAILROAD, 23.94 M	Field Sket	Long1 tude 95°:	169/	/69/	78. 2' TO CL METAL BILLB SIGN POST	est OF A	629, 21

ENGINEERING TOPOGRAPHIC SURVEY NOT TO BE USED FOR RIGHT OF WAYS OR BOUNDARIES FOR RIGHTS OF WAYS. SEE SHEETS 6 AND 7.

CONTROL TAKEN FROM THE MONUMENTS SHOWN





ENGINEERING SURVEY DATA

PROJECT NO. 2036A0055Z

129TH ST - APACHE ST TO PINE ST

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT PLANS AND ESTIMATES PREPARED BY:

HOLLOWAY, UPDIKE & BELLEN, Inc.
2001 N WILLOW AVE., BROKEN ARROW, OKLAHOMA 74
(918)251-0717 FAX (918)251-0754

PLAN SCALE:	DRAWN	DMG	3/23	AF
1"=200'	DESIGNED	DMG	3/23	
	SURVEY	CGA	3/23	
PROFILE SCALE	PROJ. MNGR.	RF	10/24	
HORIZONTAL:	LEAD ENGR.	(2)	4/25.	
	FIFT DAMAGE	1/01	1 /20.	1

			HORIZONTAL:	LEAD ENGR.	(2) 4/25.	
			NA	FIELD MNGR.	[1/29 11/29	
The same of the sa	-		VERTICAL:	RECOMMENDED:	Line 5.26	-
REVISION	BY	DATE	NA	DEPUTY DIRECTOR	JTAS 3-26	CITY

REVISION BY DATE NA DEPUTY DIRECTOR CITY ENGINEER

FILE: 22-53-001-39\DESIGN\SHTS\G-129th-SurveyData DATE 08/2023

ATLAS PAGE NO. 228, 293, 229, 294 SHEET 8 OF 2

# STORMWATER MANAGEMENT PLAN

# SITE DESCRIPTION PROJECT LIMITS: ARTERIAL STREET MAINTENANCE 129TH E. AVE APACHE ST. TO PINE ST PROJECT DESCRIPTION: ROADWAY MILL & OVERLAY WITH AC/PCC PATCHES REHABILITATION SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES: (1) INSTALL TRAFFIC CONTROL MEASURES, ADVANCE TRAFFIC SIGNAGE FOR WORK ZONE (2) INSTALL TEMPORARY EROSION CONTROL MEASURES AS NEEDED (3) BEGIN MILLING CONSTRUCTION OPERATIONS (4) BEGIN PATCHING OPERATIONS ON WORK ZONE ADJUST AS NEEDED FOR SUBGRADE CONDITIONS (5) INSPECT TEMPORARY EROSION COTROL MEASURES IF NEEDED FOR RAIN FORCAST ADJUST IF NECESSARY (6) BEGIN OVERLAY ROAD (7) BEGIN PATCHING OPERATIONS ADJUST AS NEEDED FOR SUBGRADE CONDITIONS AT MAINTENANCE ZONE (7) OVERLAY ROADS FOR MAINTENANCE ZONE (8) INSTALL PERMANENT EROSION CONTROL MEASURES AS NEEDED (9) REPEAT STEPS 3-8 FOR SEQUENCE OF CONSTRUCTION OPERATIONS AS NEEDED (10) INSTALL MARKINGS AND PERMANENT TRAFFIC CONTROL SIGNS (11) PERFORM FINAL INSPECTION AND COMPLETE SITE FINAL INSPECTION CHECKLIST (12) CLEAN SITE AND REMOVE ALL TEMPORARY TRAFFIC CONTROL ITEMS AT ALL THREE MZ SOIL TYPE: LEAN CLAY W/ SAND STONE/TRACE SAND STONE/ SHALE TOTAL AREA OF THE 2.67 ACRES CONSTRUCTION SITE: 0.72 ACRES ESTIMATED AREA TO BE DISTURBED: OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE) TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 0.72 ACRES TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 0.72 ACRES POST-CONSTRUCTION RUNOFF 0.75 COEFFICIENT OF THE SITE: 36°11'4.04" N LATITUDE & LONGITUDE 95°49'59.82"W OF CENTER OF PROJECT: PROJECT WILL DISCHARGE TO: 129TH E. AVE FROM APACHE ST. TO PINE ST. DISCHARGE INTO QUARRY CREEK NAME OF RECEIVING WATERS: NO X SENSITIVE WATERS OR WATERSHEDS: NO X 303(d) IMPAIRED WATERS: IF YES, LIST IMPAIRMENT: NO X LOCATED IN A TMDL: LAKE THUNDERBIRD TMDL: MS4 ENTITY IF YES, LOCATION: NOTE: THIS PROJECT INVOLVES MINIMAL WORK OUTSIDE PAVEMENT AREAS CONTRACTOR SHALL ENSURE THAT EXISTING VEGETATION IS KEPT AND PRESERVED MATERIALS USED IN PAVING OPERATIONS SHALL NOT ENTER THE NEARBY CREEK. COST FOR RESTORATION AND/OR REPAIRS TO DISTURBED AREAS SHALL BE AT CONTRACTOR'S SOLE EXPENSE.

# EROSION AND SEDIMENT CONTROLS

OIL S	TABILIZATION PRACTICES:
	TEMPORARY SEEDING
	PERMANENT SODDING, SPRIGGING OR SEEDING
	VEGETATIVE MULCHING
	SOIL RETENTION BLANKET
	X PRESERVATION OF EXISTING VEGETATION
OR O	TEMPORARY EROSION CONTROL METHODS MUST BE USED ON TURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, DIRECTED BY THE ENGINEER.
TRUC	CTURAL PRACTICES:
	STABILIZED CONSTRUCTION EXIT
	X TEMPORARY SILT FENCE
	X TEMPORARY SILT DIKES
	X TEMPORARY FIBER LOG
	DIVERSION, INTERCEPTOR OR PERIMETER DIKES
	DIVERSION, INTERCEPTOR OR PERIMETER SWALES
	ROCK FILTER DAMS
	TEMPORARY SLOPE DRAIN
	PAVED DITCH W/ DITCH LINER PROTECTION
	TEMPORARY DIVERSION CHANNELS
	TEMPORARY SEDIMENT BASINS
	TEMPORARY SEDIMENT TRAPS
	TEMPORARY SEDIMENT FILTERS
	TEMPORARY SEDIMENT REMOVAL
	RIP RAP
	INLET SEDIMENT FILTER
	TEMPORARY BRUSH SEDIMENT BARRIERS
	X SANDBAG BERMS
	TEMPORARY STREAM CROSSINGS
FFSI	TE VEHICLE TRACKING:
	HAUL ROADS DAMPENED FOR DUST CONTROL
	LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
	X EXCESS DIRT ON ROAD REMOVED DAILY
NOTE	S:
	UNDER THE GENERAL SWPPP, CONTRACTOR SHALL ENSURE
	NECESSARY EROSION CONTROLS MEASURES ARE TAKEN
	PRIOR TO STORM EVENTS AND INSPECT 24 HRS AFTER A
	MAJOR STORM. REMOVE ACCUMULATED EXCESS SOILS
	WHEN IT REACHES 6" OR MORE.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE **FOLLOWING:** 

## MAINTENANCE AND INSPECTION:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON-FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGEWAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

#### WASTE MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY-PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL. STATE AND LOCAL AGENCIES.

#### HAZARDOUS MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIALS IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS CHEMICAL ADDITIVES. CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

#### **GENERAL NOTES:**

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

## THE FOLLOWING SECTIONS OF THE 2019 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

103.05 BONDING REQUIREMENTS

104.10 FINAL CLEANING UP

104.12 CONTRACTOR'S RESPONSIBILITY FOR WORK

104.13 ENVIRONMENTAL PROTECTION

106.08 STORAGE AND HANDLING OF MATERIAL

107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED

107.20 STORM WATER MANAGEMENT

220 MANAGEMENT OF EROSION, SEDIMENTATION AND STORM WATER POLLUTION PREVENTION AND CONTROL

# 221 TEMPORARY SEDIMENT CONTROL

# IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA." ODEQ, WATER QUALITY DIVISION, OCTOBER 18, 2022.





STORMWATER MANAGEMENT PLAN

PROJECT NO. 2036A0055Z

129TH ST - APACHE ST TO PINE ST

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT PLANS AND ESTIMATES PREPARED BY:

HOLLOWAY, UPDIKE & BELLEN, Inc. 001 N WILLOW AVE., BROKEN ARROW, OKLAHOMA 74012 (918)251-0717, FAX (918)251-0754

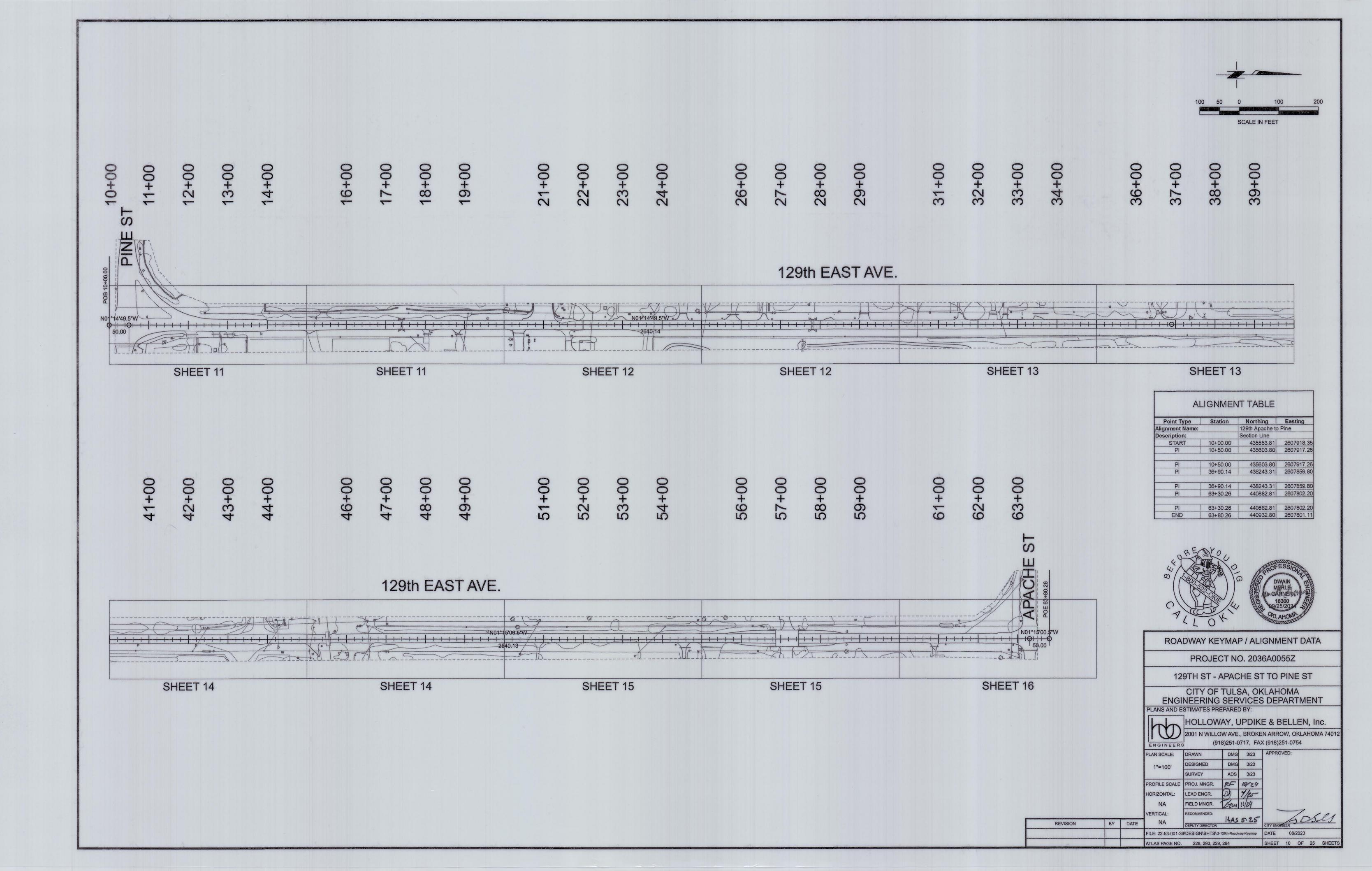
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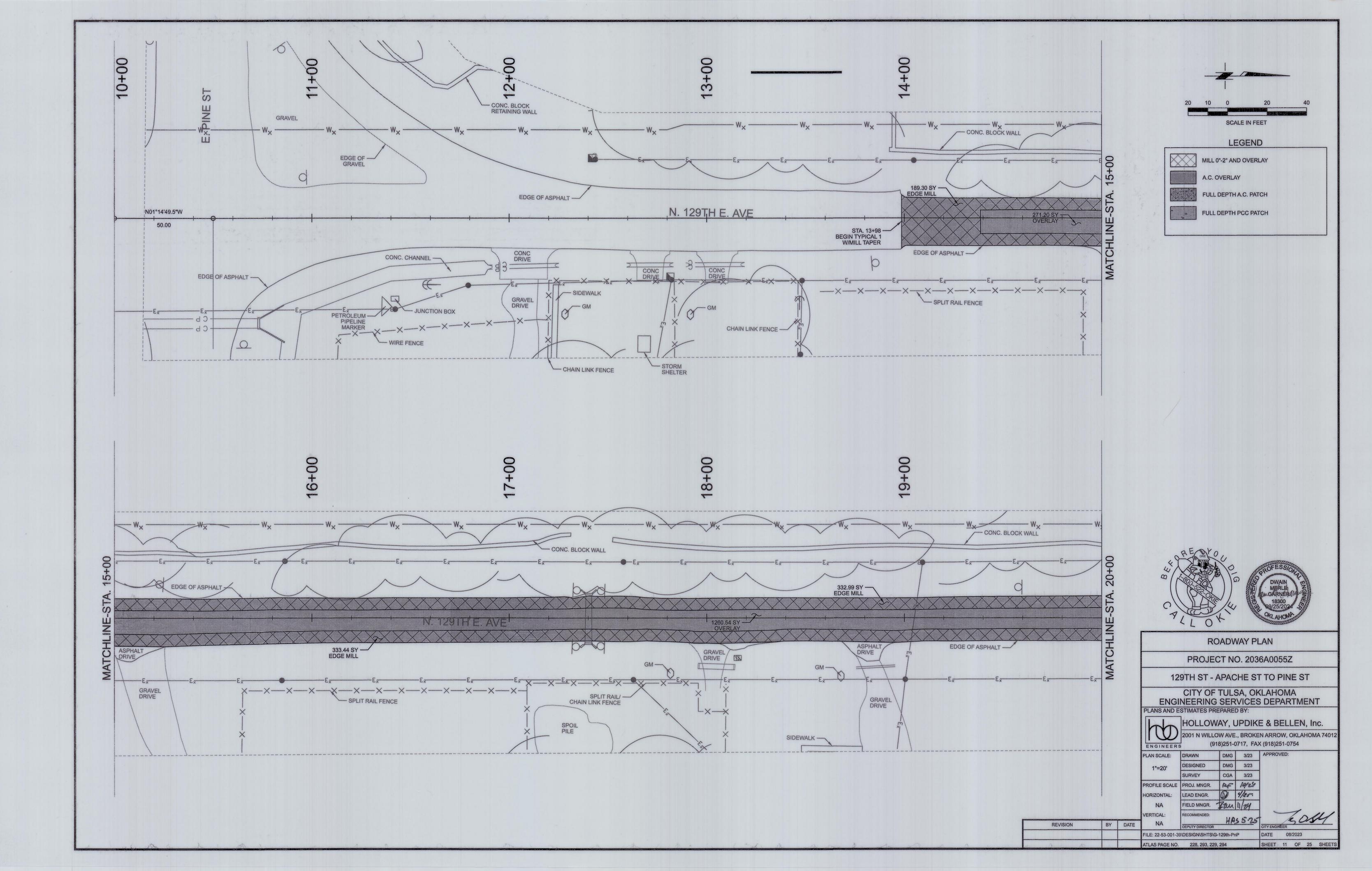
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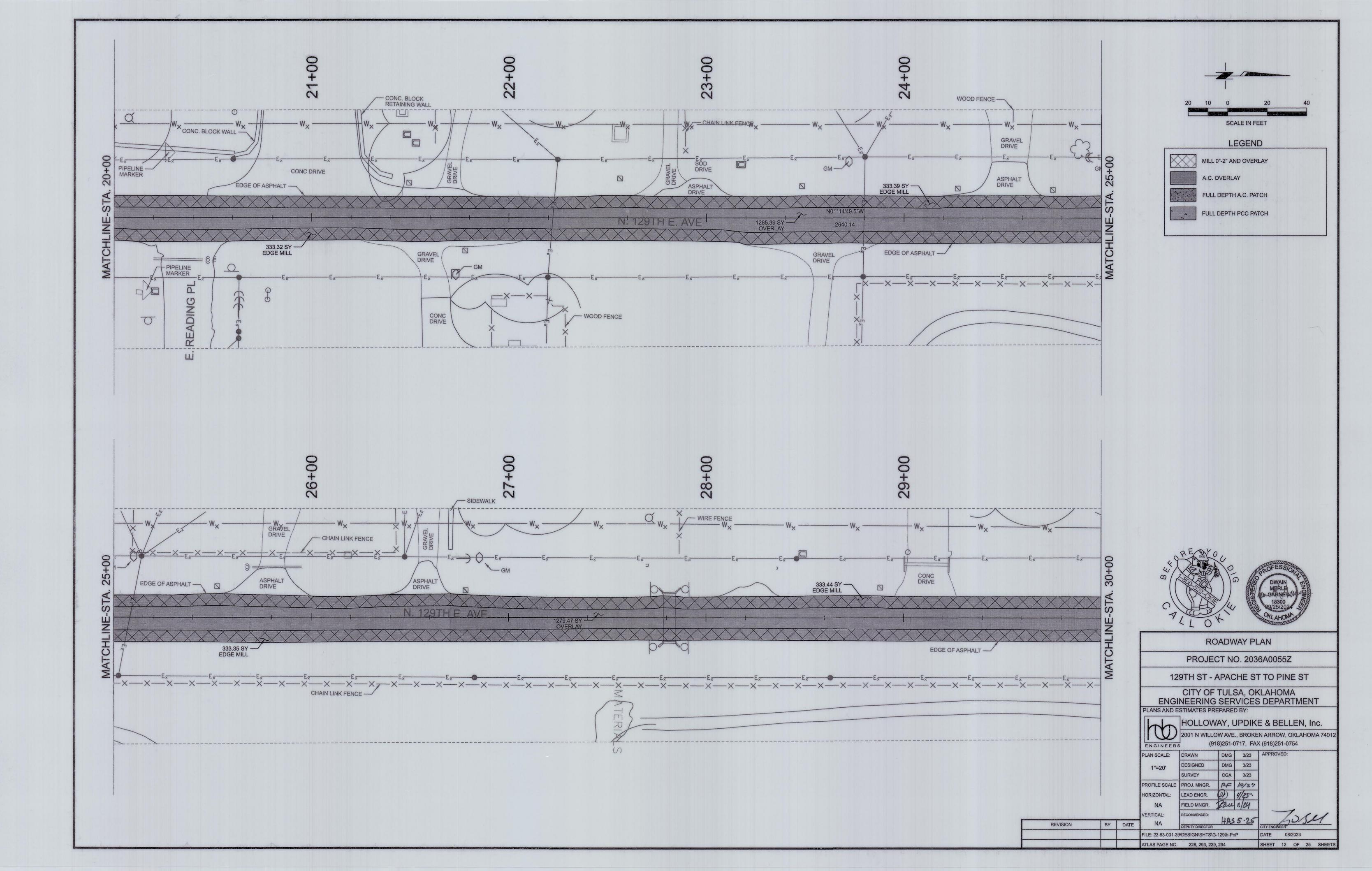
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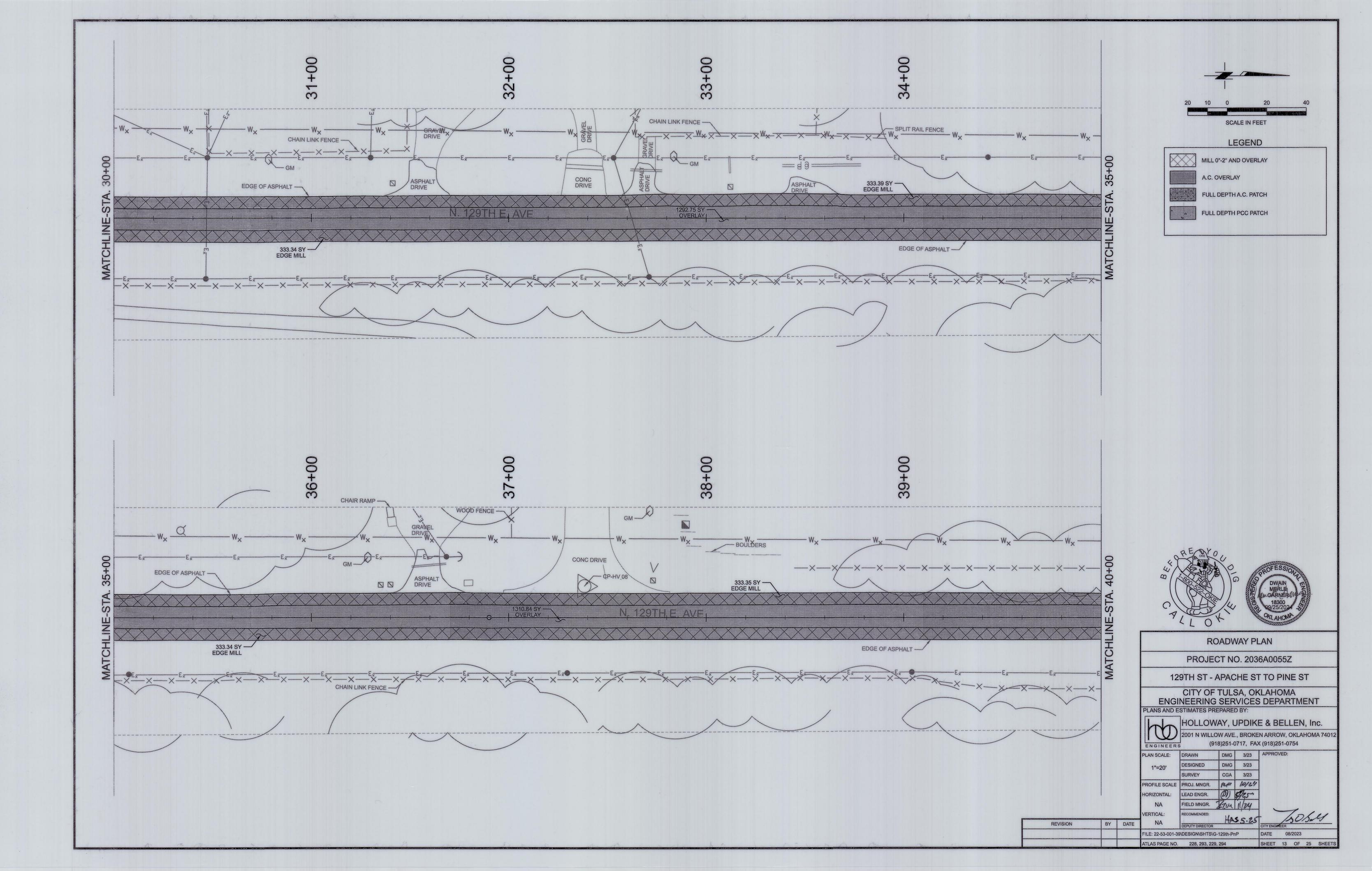
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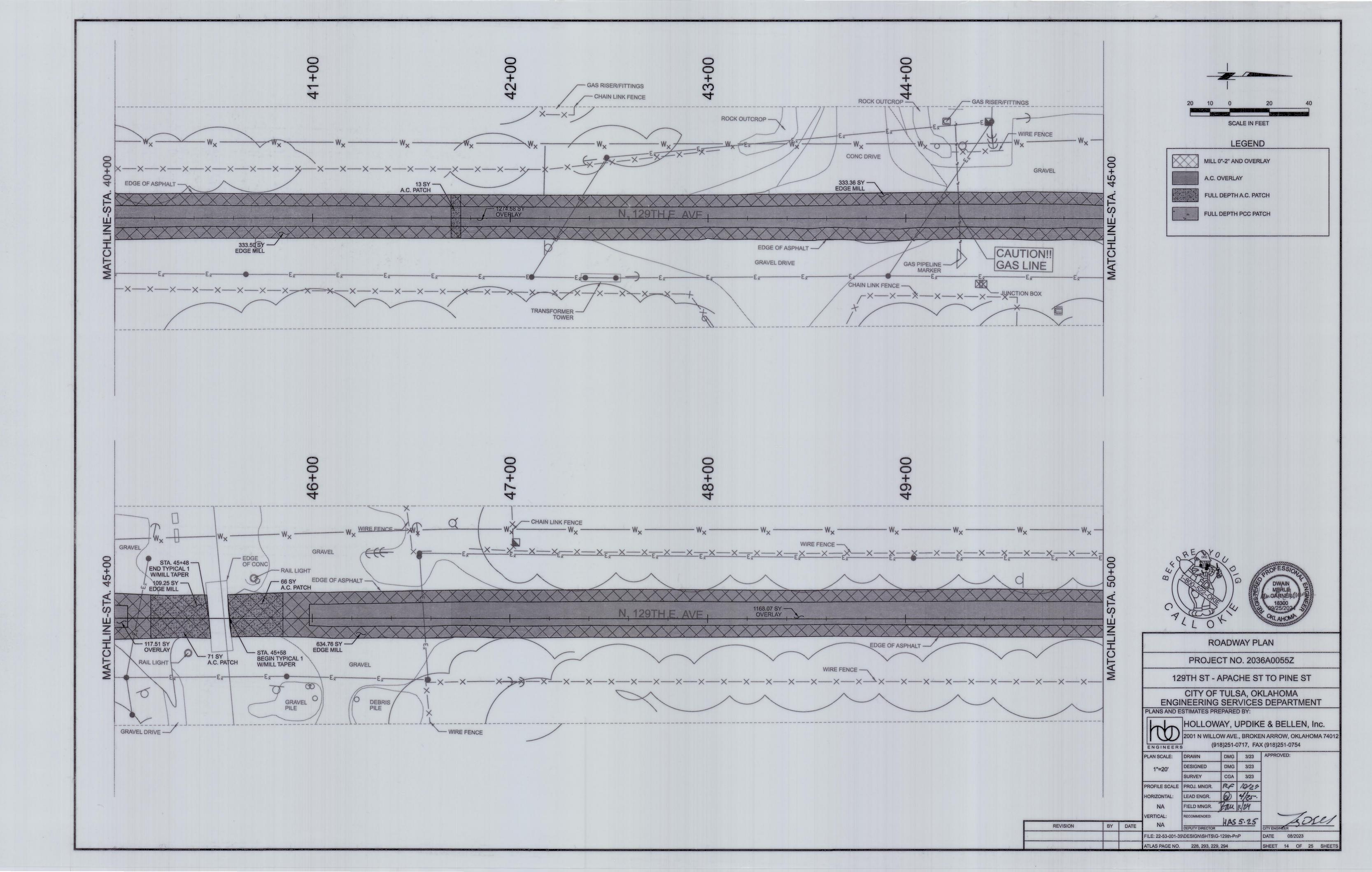
SHEET 9 OF 25 SHEET

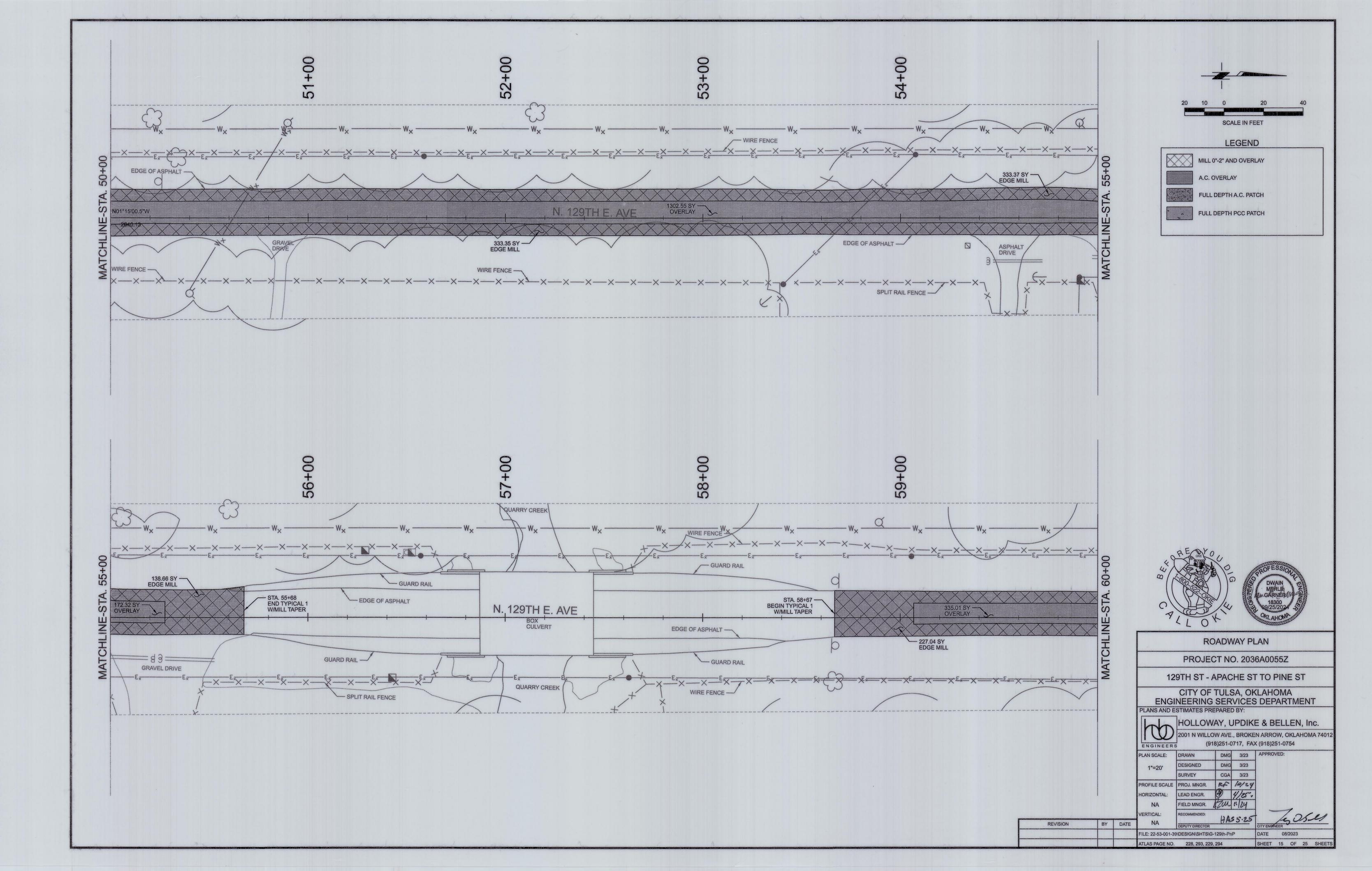


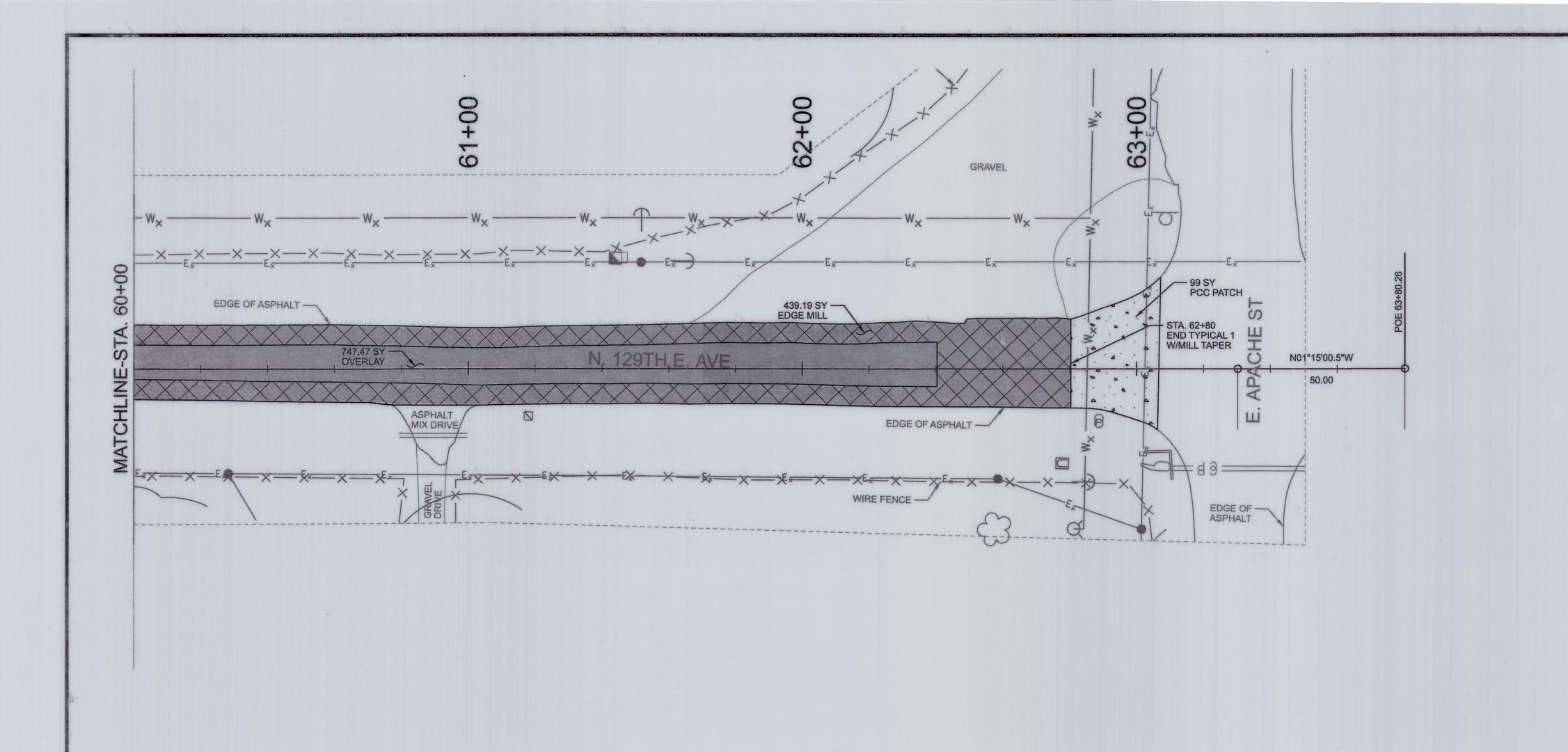


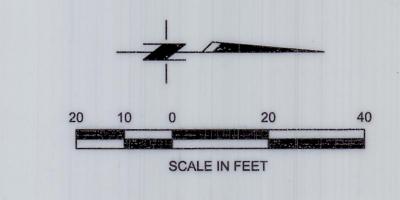












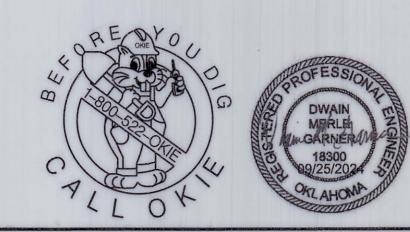
LEGEND

A.C. OVERLAY

MILL 0"-2" AND OVERLAY

FULL DEPTH A.C. PATCH

FULL DEPTH PCC PATCH



ROADWAY PLAN

PROJECT NO. 2036A0055Z

129TH ST - APACHE ST TO PINE ST

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT PLANS AND ESTIMATES PREPARED BY:

HOLLOWAY, UPDIKE & BELLEN, Inc.

(918)251-0717, FAX (918)251-0754

PLAN SCALE:

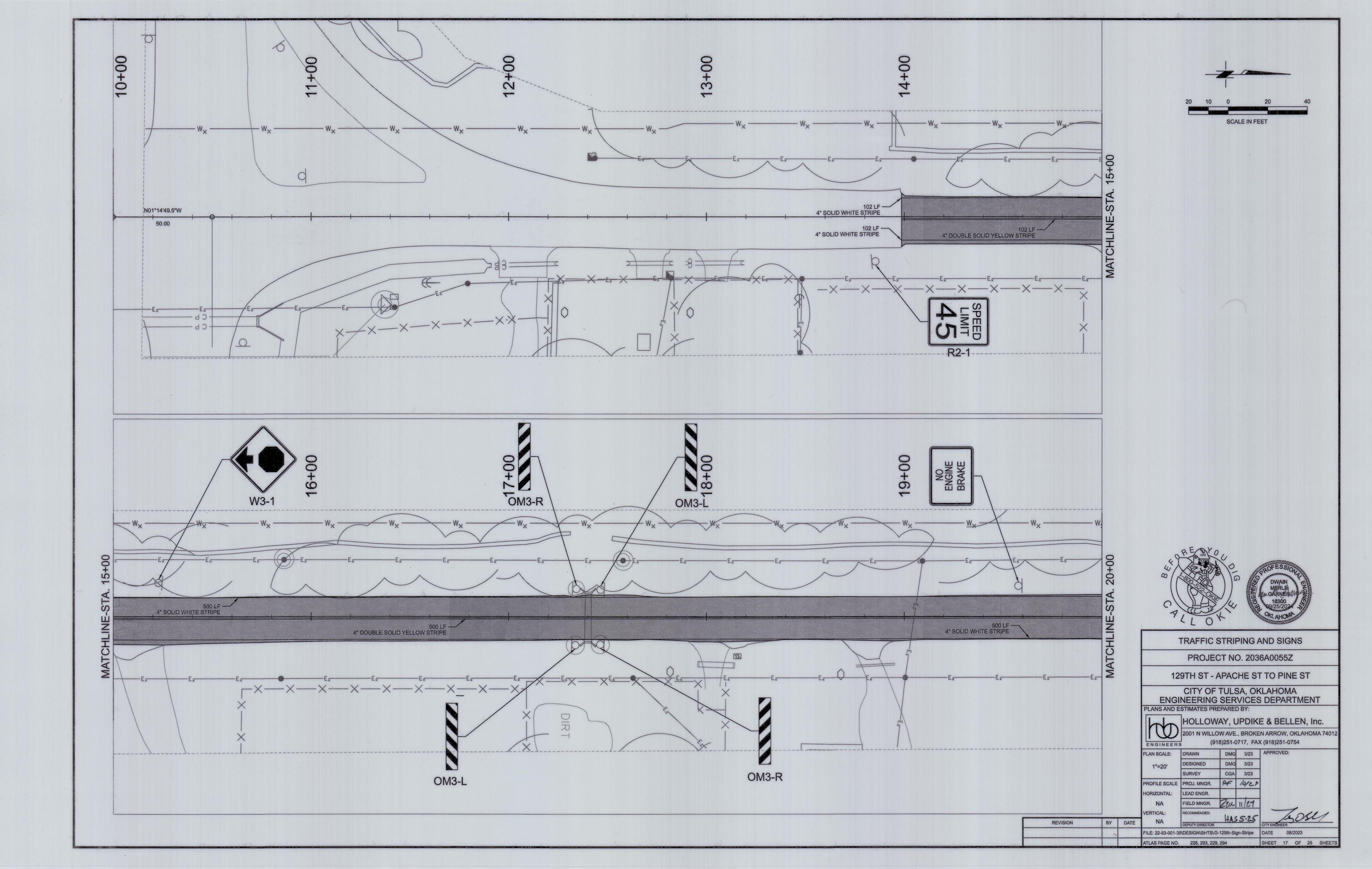
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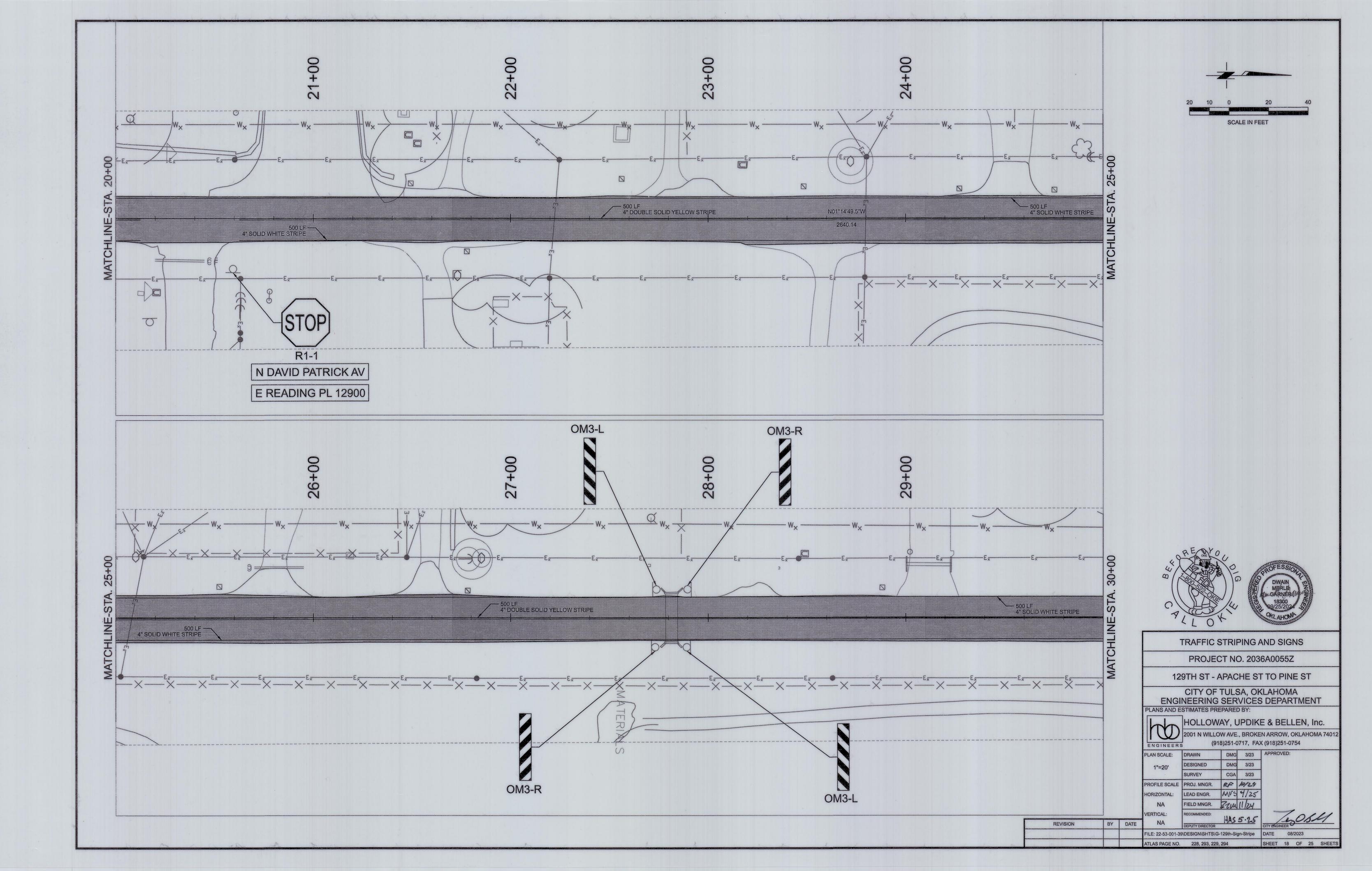
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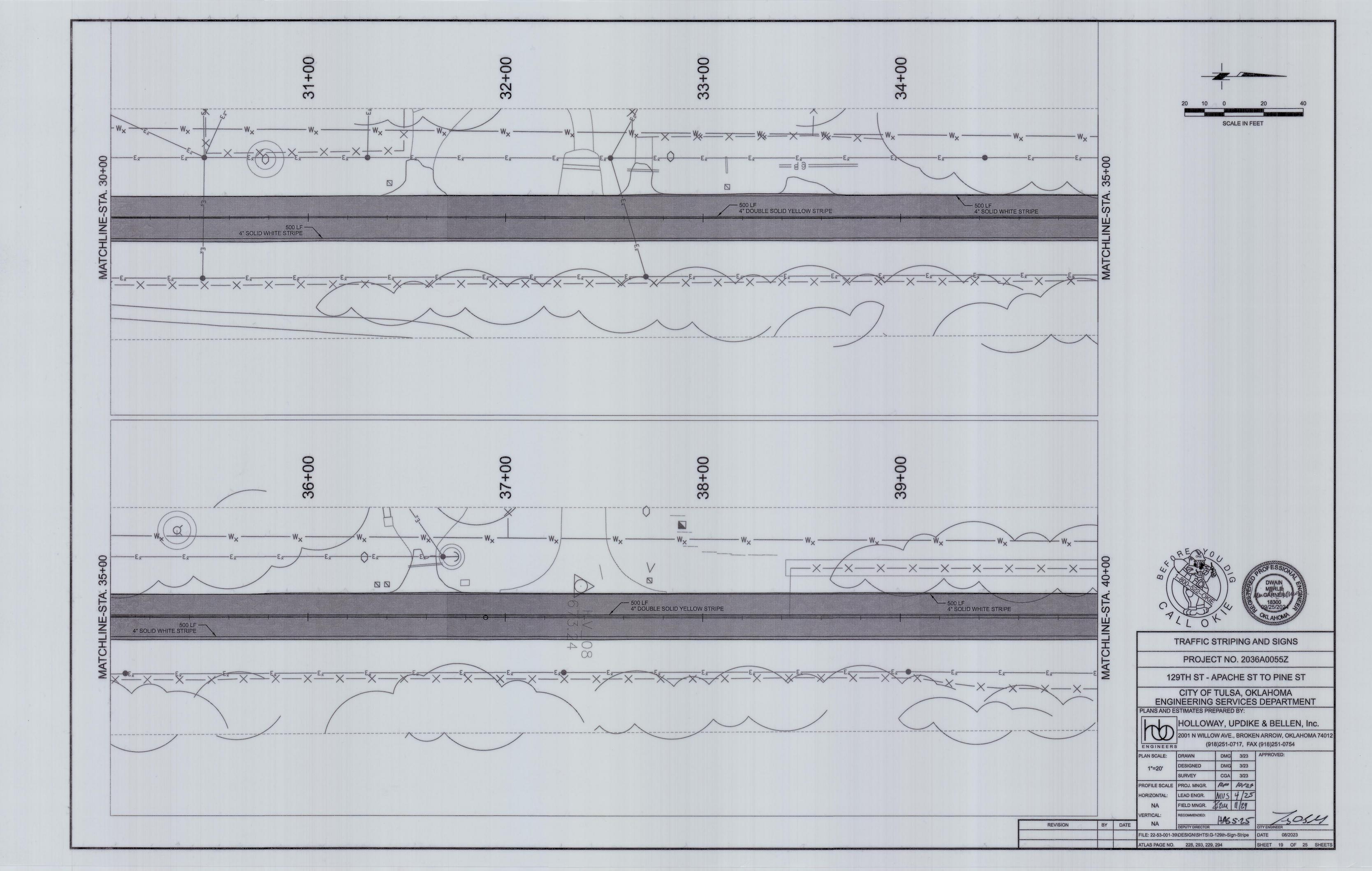
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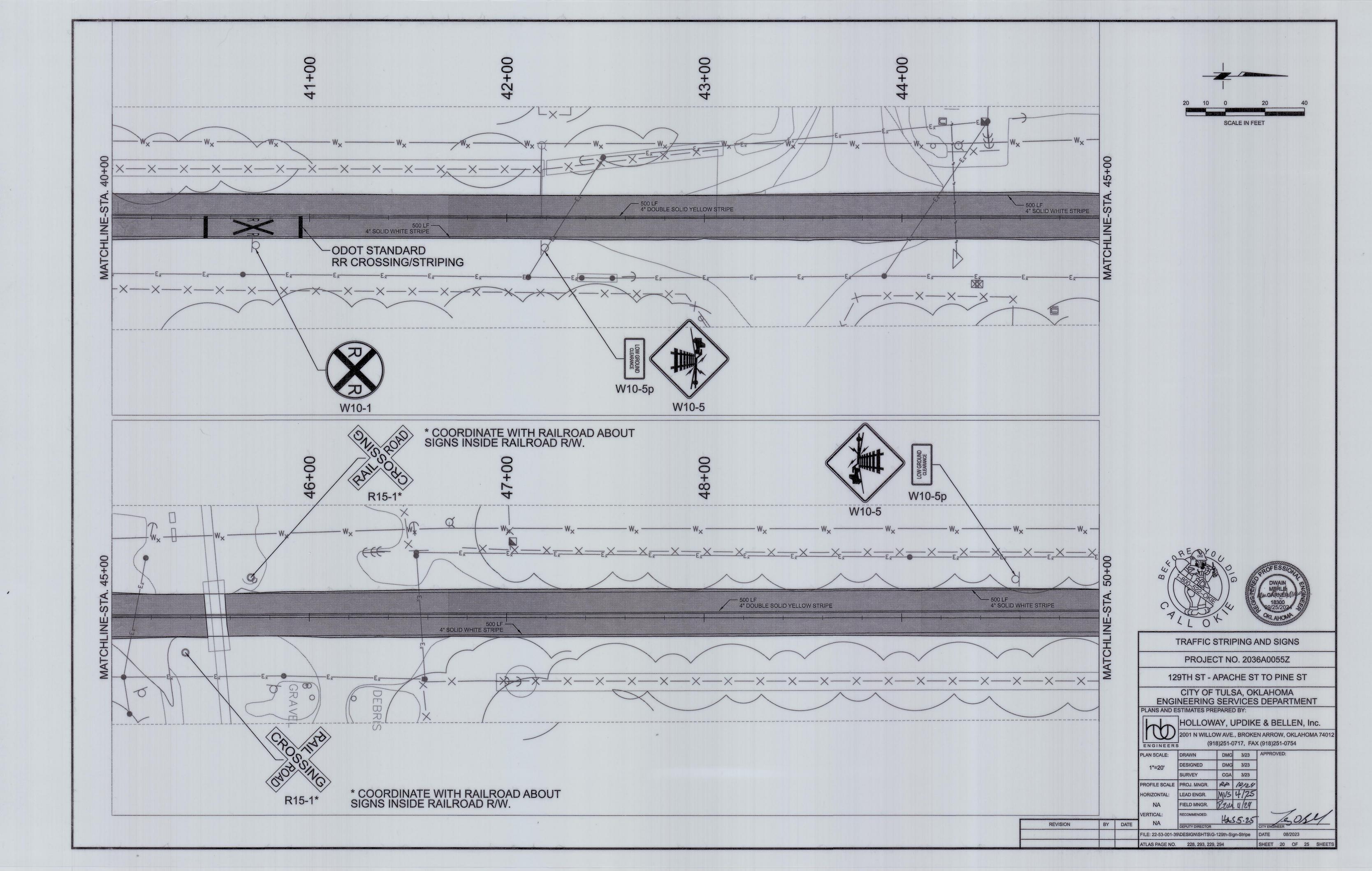
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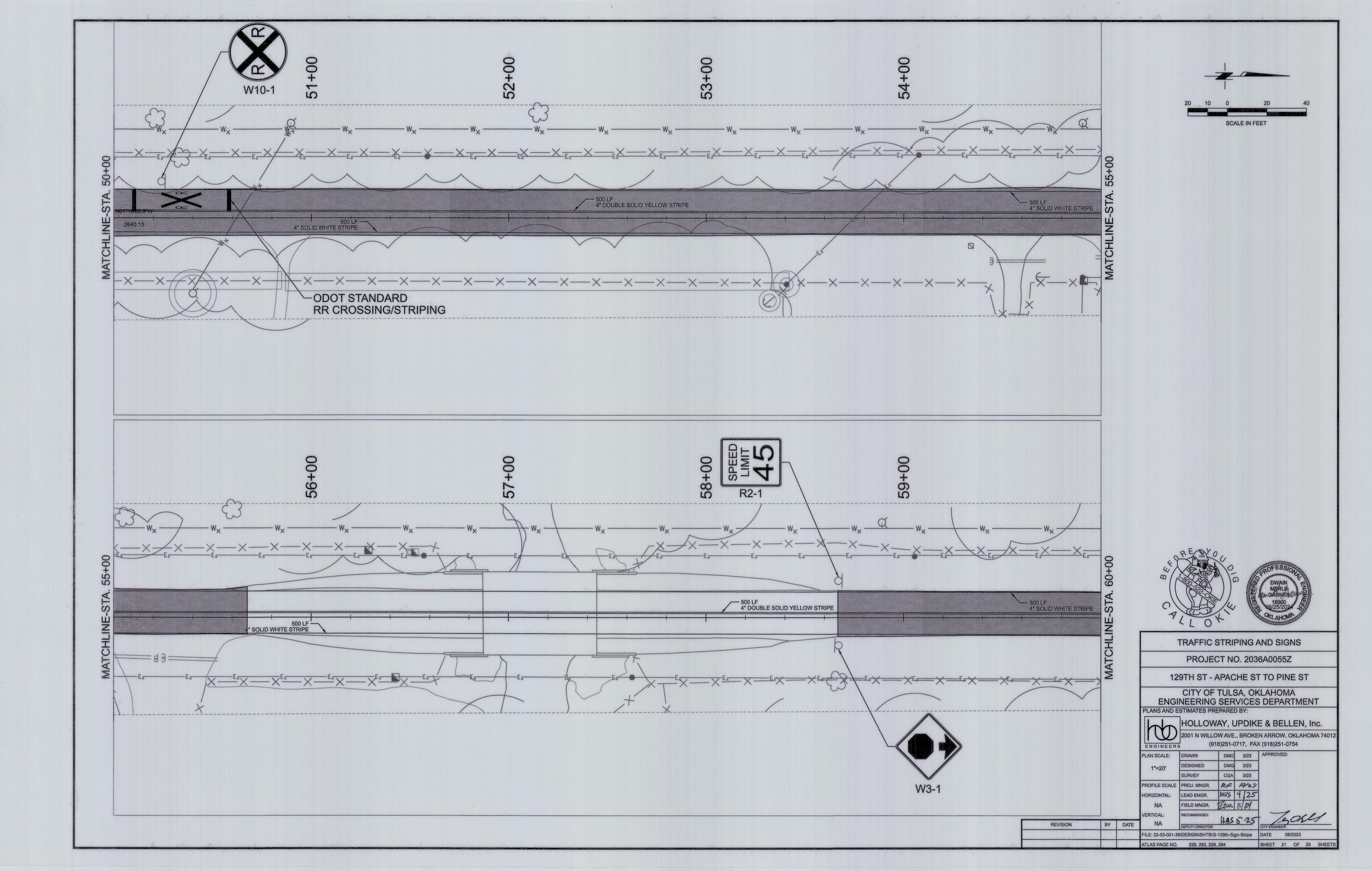
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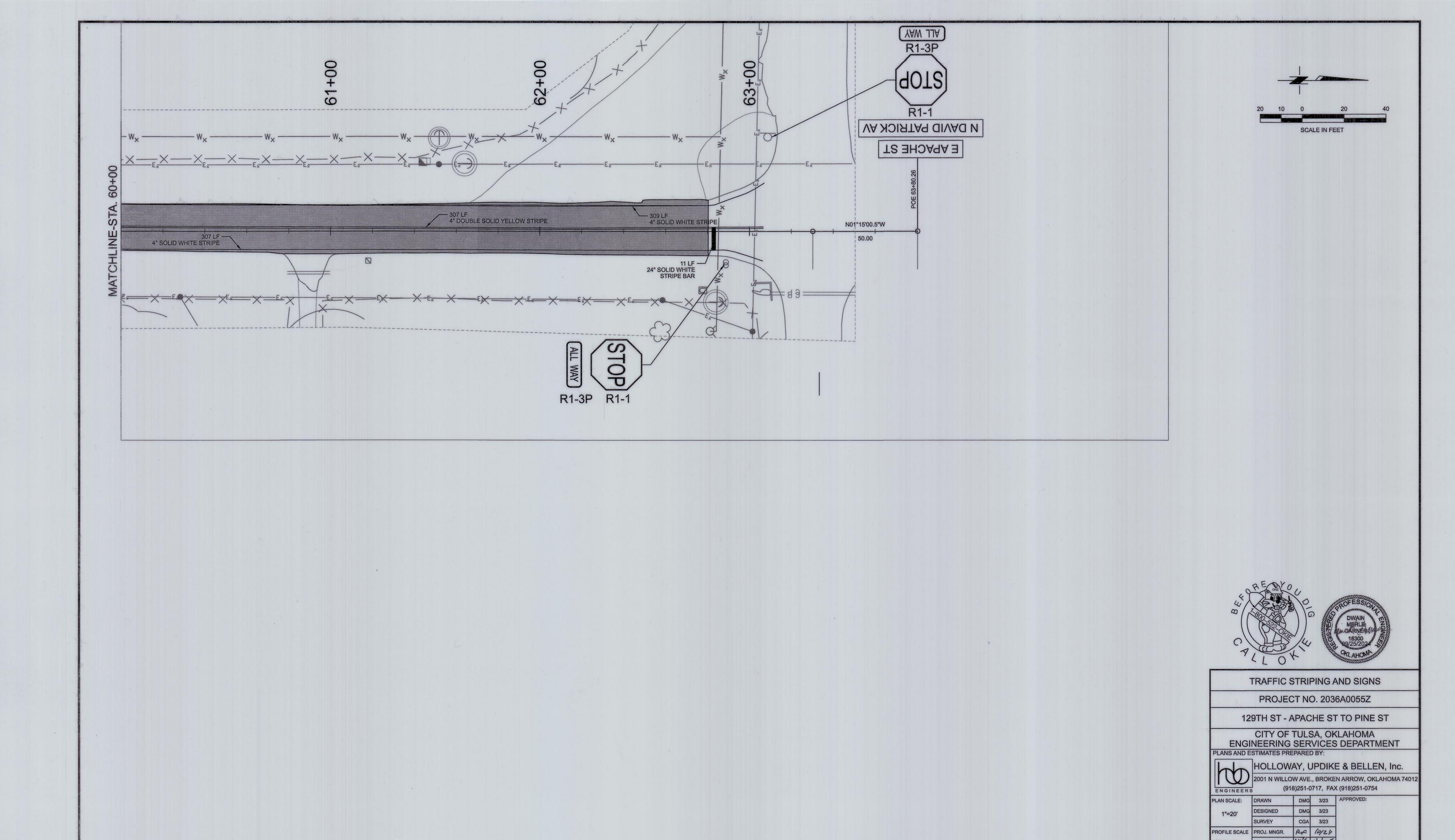


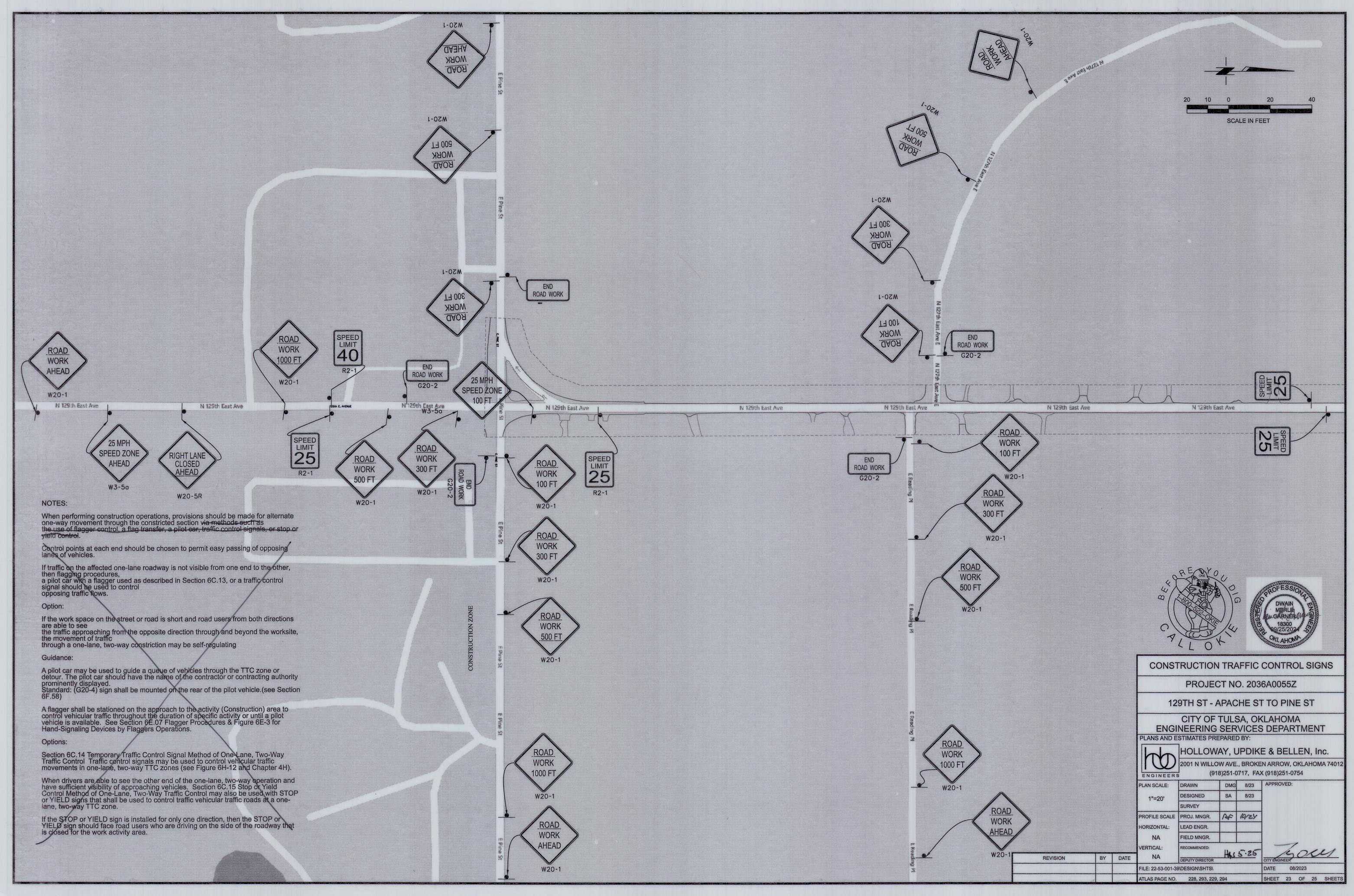




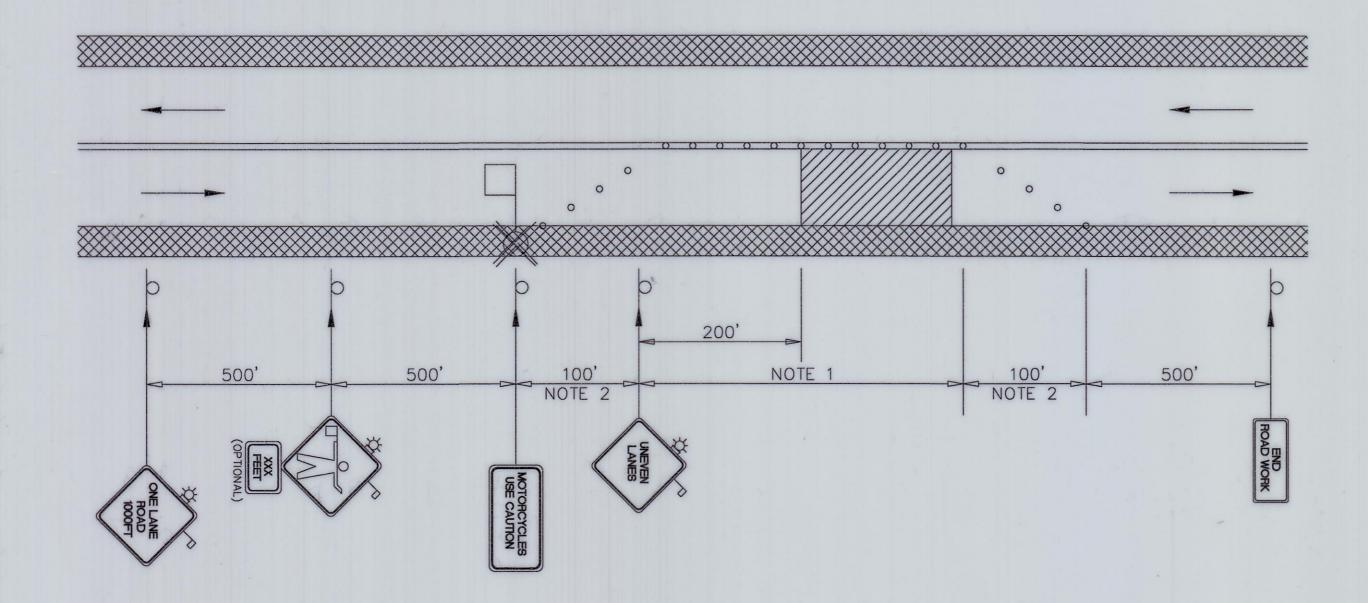




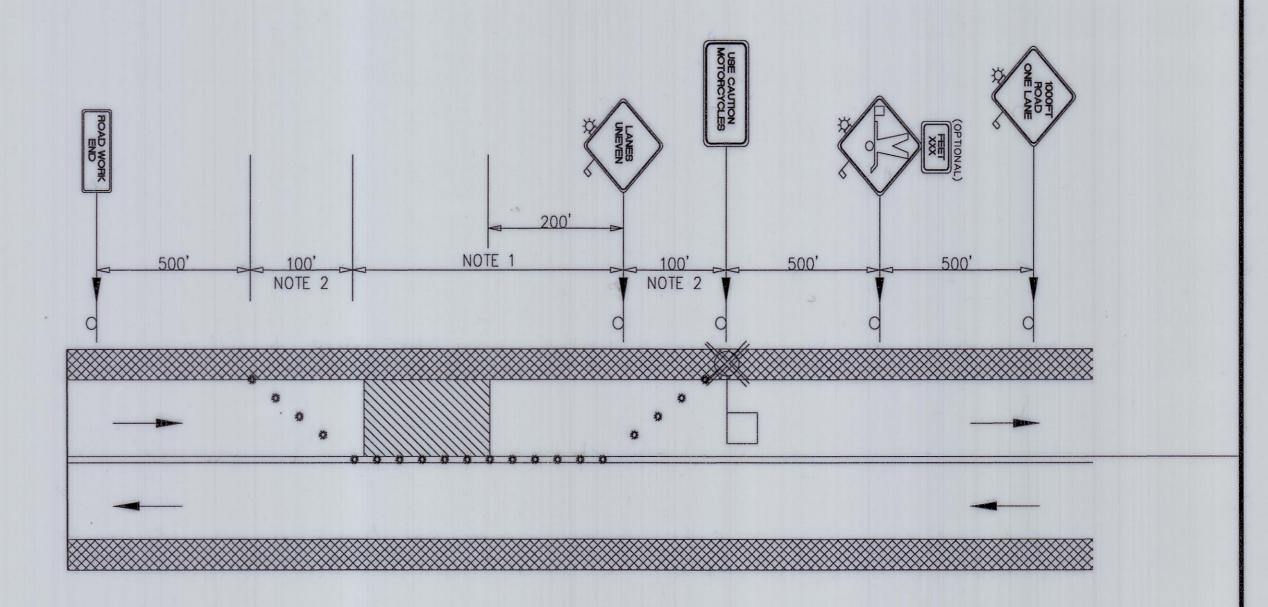








TYPICAL SIGNING FOR COLD MILL, PATCHING & OVERLAY OPERATION NORTHBOUND TRAFFIC



# TYPICAL SIGNING FOR COLD MILL, PATCHING & OVERLAY OPERATION SOUTHBOUND TRAFFIC

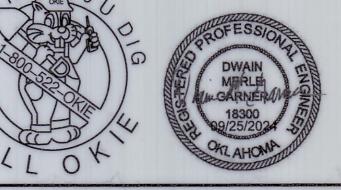
KEY:

O CHANNELIZING CONE

WORK AREA

FLAGGER





CONSTRUCTION TRAFFIC CONTROL DETAIL PROJECT NO. 2036A0055Z

129TH ST - APACHE ST TO PINE ST

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT PLANS AND ESTIMATES PREPARED BY:

HOLLOWAY, UPDIKE & BELLEN, Inc. (918)251-0717, FAX (918)251-0754 ENGINEERS

DMG 8/23 APPROVED: PLAN SCALE: DMG 8/23 SURVEY

PROFILE SCALE PROJ. MNGR. R 1923 HORIZONTAL: LEAD ENGR. FIELD MNGR.

VERTICAL: BY DATE REVISION FILE: 22-53-001-39\DESIGN\SHTS\ ATLAS PAGE NO. 228, 293, 229, 294 SHEET 25 OF 25 SHEETS

NOTE 1 MAXIMUM SPACING OF CHANNELIZING DEVICES SHALL BE AS FOLLOWS:

(A) FIRST 250 FEET OF WORK AREA. (1) 25 FEET FOR CONES AND TUBE CHANNELIZERS. (2) 50 FEET FOR TYPE II BARRICADES, VERTICAL PANELS OR DRUMS.

(B) REMAINDER OF WORK AREA. (1) 50 FEET FOR CONES AND TUBE CHANNELIZERS. (2) 100 FEET FOR TYPE II BARRICADES, VERTICAL PANELS AND DRUMS.

A MINIMUM OF FIVE (5) CHANNELIZING DEVICES SHALL BE PLACED THRU THIS AREA.

THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT CONTACT AT ALL TIMES AND SHALL BE POSITIONED TO PROTECT THE WORKERS.

WHEN NO WORK IS BEING PREFORMED AND TWO LANE TRAFFIC IS OPERATING, FLAGGERS WILL NOT BE REQUIRED. WHENEVER FLAGGERS ARE NOT PRESENT, THE "FLAGGER" SIGNS SHALL BE REMOVED OR COVERED.

SIGNING SHOWN IS FOR ONE APPROACH ONLY.