

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-085898	2025	I	57

GREENWICH V2I AND ITS IMPROVEMENTS

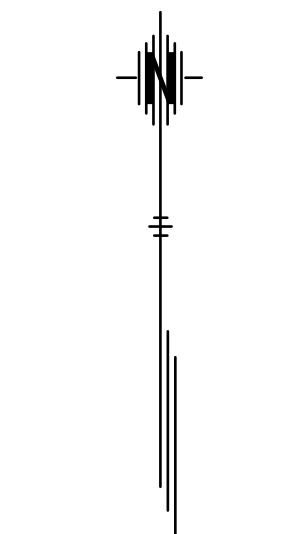
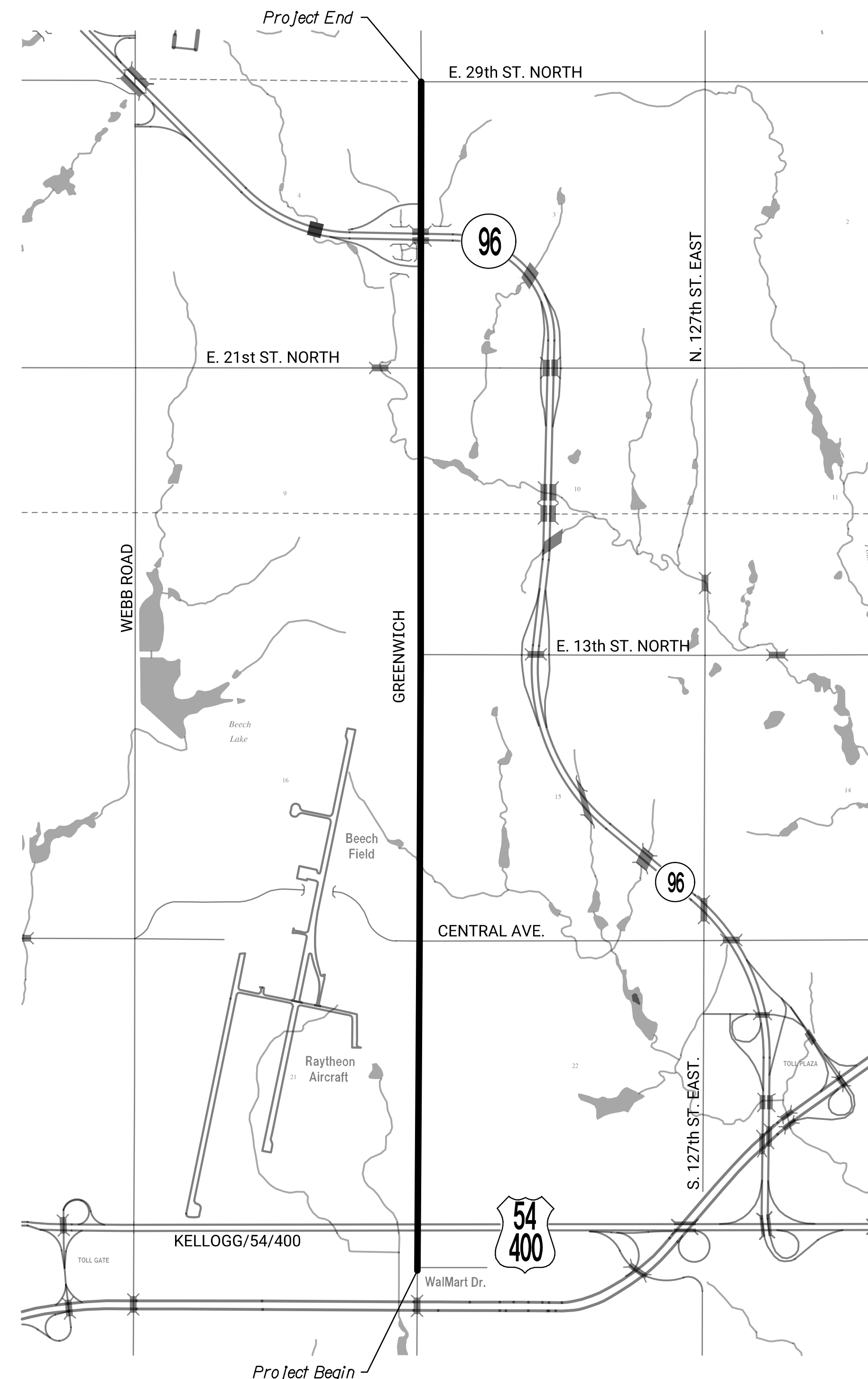
FROM WALMART DRIVE TO 29TH ST. N. CITY OF WICHITA, KANSAS

PAUL GUNZELMAN, P.E. – CITY ENGINEER
C.O.W. PROJ. NO. 472-085898
E-3071 40100523

INTELLIGENT TRANSPORTATION SYSTEM
TRAFFIC SIGNALIZATION

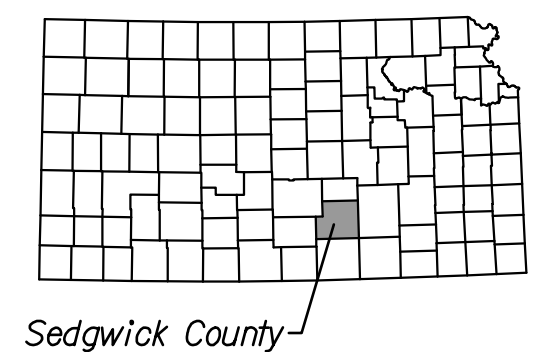
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NOT TO SCALE

TWO-WAY TRAFFIC SHALL BE CARRIED THROUGH CONSTRUCTION ON EXISTING ALIGNMENTS WITH PARTIAL LANE CLOSURES DURING CONSTRUCTION. SEE GENERAL NOTES AND TRAFFIC CONTROL DETAILS FOR MORE INFORMATION.



TRANSYSTEMS
 100 N. BROADWAY, SUITE 500
 WICHITA, KANSAS 67202
 MAIN: 316-303-3000
 FAX: 316-462-5629

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LEGEND

EXISTING DEVICES ARE SHOWN IN PLANS USING HALFTONE/GRAYSCALE

	Dynamic Message Sign, Ground Mounted (Butterfly)		L.P.	Light Pole		Fiber Optic Cable	Fiber Optic Cable, Existing
	Dynamic Message Sign, Ground Mounted (Dual Post)			Mile Marker		Gas Line	Gas, Existing
	Dynamic Message Sign, Ground Mounted (Butterfly, Dual Face)			Power Pole		Telephone Cable	Telephone, Existing
	Dynamic Message Sign, Truss Mounted			Power Supply Assembly			Guard Rail, Existing
	Dynamic Message Sign, Trailer Mounted			Power Transformer			Guard Rail, Proposed
	CCTV Camera			Power Overhead Source			Hedge, Existing
	Radar Vehicle Detector			Power Underground Source			Marsh
	Radar Vehicle Detection Area			Power Undergound Source			Power, Existing
	ITS Cabinet with Foundation		(R)	Removal			Property Line
	Pole Mounted ITS Cabinet			Sign, Existing			Railroad, Existing
	Fiber Optic Cable Splice Vault without Splice			Guy Wire			R/W, Existing
	Fiber Optic Cable Splice Vault with Splice			Telephone Pole			R/W, Existing Access Control
	Fiber Optic Cable Splice Vault without Splice, by Others (CL, KTA, Etc)			Trees, Existing			R/W, Access Control
	Fiber Optic Cable Splice Vault with Splice, by Others (CL, KTA, Etc)			Truss Sign			Township, Section or Grant Line
	Pull Box			City Limits			State/County Line
	Wireless Communication Tower/Pole			Conduit, Existing			Culverts, Existing
	New ITS Field Component			Conduit, Bored, Proposed			Drop Inlet & Storm Sewer, Existing
	Ramp Meter			Conduit, On Structure, Proposed			Easement, Permanent
	Flashing Beacon			Conduit, Trenched, Proposed			Easement, Temporary
	6'x6' Loop Detector			Construction Limits			Fence, Existing
	6'x10' Loop Detector						
	6'x30' Loop Detector						

ABBREVIATIONS

AG	Above Ground	Flex.	Flexible	PP	Power Pole
Approx.	Approximate	FO	Fiber Optic	PS	Power Supply/Assembly
Ave.	Avenue	FT	Feet	PVC	Polyvinyl Chloride
Blvd.	Boulevard	FTC	Field Traffic Controller	Rd.	Road
BOC	Back of Curb	HAR	Highway Advisory Radio	Req'd.	Required
BPU	Board of Public Utilities	HDPE	High Density Polyethylene	RMC	Rigid Metal Conduit
BWM	Bandwidth Manager	HH	Handhole (Splice Vault)	RT	Right
C	Conductor	Hwy.	Highway	Rte.	Route
CA	ITS Cabinet Assembly	IN	Inch	R/W	Right-of-Way
CAT 6	Category 6 Twisted Pair Ethernet Cable	I/O	Input/Output	SB	Southbound
CCR	Camera Control Receiver	ITS	Intelligent Transportation System	SIG	Traffic Signal
CCTV	Closed Circuit Television Camera	KDOT	Kansas Department of Transportation	SMFO	Single-mode Fiber Optic
CL	CenturyLink/Lumen	KTA	Kansas Turnpike Authority	St.	Street
Coax.	Coaxial	Ln.	Lane	Sta.	Station
Comm.	Communications	LS	Lump Sum	SV	Splice Vault
Conc.	Concrete	LT	Left	SW	Sidewalk
Ctr.	Center	Min.	Minimum	TB	Transition Box
DET	Detector	MMFO	Multimode Fiber Optic	TMC	Traffic Management Center
DIO	Digital Input/Output	MM	Mile Marker	Trfwy.	Trafficway
Dist.	Distribution	MP	Milepost	Typ.	Typical
DMS	Dynamic Message Sign	MPH	Miles per Hour	Truck	Truckline
Dr.	Drive	NB	Northbound	UIP	Use In Place
Ea.	Each	No.	Number	UP	Underground Power
EB	Eastbound	Nom.	Nominal	VDS	Vehicle Detection Station
EOP	Edge of Pavement	PB	Pull Box	WB	Westbound
EOS	Edge of Shoulder	Pkwy.	Parkway	XFMR	Transformer
EOTW	Edge of Travel Way	POP	Point of Presence		
Exist.	Existing				
FDU	Fiber Distribution Unit				
F&I	Furnish And Install				

KANSAS DEPARTMENT OF TRANSPORTATION			
LEGEND AND ABBREVIATIONS			
ITS-D01		10-27-23	
FHWA APPROVAL		APPD.	
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.

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GENERAL NOTES

1. REFERENCE IS MADE TO KDOT AND CITY OF WICHITA AND MAY BE USED INTERCHANGEABLY IN SOME CIRCUMSTANCES. IF THERE IS A DISCREPANCY BETWEEN OR AMONG THE FOLLOWING CONTRACT DOCUMENTS, THE GOVERNING RANKING OR ORDER OF PRECEDENCE IS:
 - A. INFORMATION RECEIVED AT PREBID / ADDENDUM
 - B. PLANS
 - C. PROJECT SPECIAL PROVISIONS
 - D. SPECIAL PROVISIONS
 - E. STANDARD SPECIFICATIONS

IF THERE IS A DISCREPANCY BETWEEN THE ITS SPECIFICATIONS AND TRAFFIC SIGNAL SPECIFICATIONS, THE GOVERNING SPECIFICATION WILL FOLLOW THE SPECIFIC WORK/DEVICE BEING PERFORMED (ITS VERSUS TRAFFIC SIGNAL OPERATION). THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY RELATED TO THE WORK BEING PERFORMED.
2. ALL WORK WILL BE CONFINED WITHIN THE EXISTING ROADWAY RIGHT-OF-WAY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND KEEP INSTALLATION OF ALL EQUIPMENT AND DEVICES WITHIN THE EXISTING ROADWAY RIGHT-OF-WAY.
3. CONTRACTOR SHALL MAINTAIN 2 FT CONDUIT CLEARANCE FROM ALL LANDSCAPED FEATURES AND IRRIGATION SYSTEMS EXISTING WITHIN THE RIGHT-OF-WAY. ANY LANDSCAPING OR IRRIGATION SYSTEMS DISTURBED DURING CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ORIGINAL CONDITION. NO ADDITIONAL PAYMENT WILL BE MADE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL DISTURBED WORK AREAS. RESTORATION INCLUDES SEEDING, FERTILIZING, MULCHING, AND THE REMOVAL OF ALL UNUSED MATERIAL AND DEBRIS FROM THE WORK AREA ACCORDING TO THE KDOT STANDARD SPECIFICATIONS AND AS REQUIRED BY THE ENGINEER. ALL GRADING WORK SHALL SLOPE AWAY FROM FOUNDATIONS TO PREVENT PONDING. ADEQUATE TEMPORARY PROTECTION AGAINST EROSION SHALL BE PROVIDED ACCORDING TO THE KDOT UTILITY ACCOMMODATION POLICY. THIS ITEM OF WORK IS INCIDENTAL TO THE SITE BID ITEM.
5. SEEDING MIX SHALL BE TALL FESCUE (ENDOPHYTE FREE) PURE LIVE SEED (PLS), 220 LBS/ACRE. SEEDING SHALL BE COMPLETED IN ACCORDANCE WITH KDOT STANDARD SPECIFICATIONS FOR COOL GRASS MIX DESIGN. SEEDING SHALL BE CONSIDERED SUBSIDIARY TO THE CONSTRUCTION PER LUMP SUM SITE. IT IS ANTICIPATED THAT THE TOTAL DISTURBED AREA WILL BE LESS THAN 1 ACRE BUT IS BASED ON THE CONSTRUCTION METHODS OF THE CONTRACTOR AND MAY CHANGE AT NO ADDITIONAL COST TO KDOT.
6. THE CONTRACTOR SHALL DETERMINE ANY CONFLICTS WITH EXISTING UTILITIES INCLUDING KDOT LIGHTING AND FIBER IN THE FIELD PRIOR TO INITIATION OF CONSTRUCTION PER SITE. THE CONTRACTOR SHALL CONTACT THE ENGINEER UPON DETERMINATION OF ANY UTILITY CONFLICTS. THE CONTRACTOR SHALL ADHERE TO KDOT'S UTILITY ACCOMMODATION POLICY UNLESS OTHERWISE NOTED.
7. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CALL DIG SAFE AT 811 OR 1-800-344-7233 (1-800-DIG SAFE) TO REQUEST THE UTILITIES BE MARKED IN THAT AREA. THE CONTRACTOR SHALL CALL THE KDOT FIELD ENGINEER TO REQUEST THAT KDOT LIGHTING AND ITS (FIBER, OTHER) BE MARKED IN THAT AREA. THE CONTRACTOR SHALL ALSO CONTACT ANY AND ALL UTILITIES AND LOCAL GOVERNMENT AGENCIES NOT PARTICIPATING IN LOCATION SERVICES.
8. SURVEY AND STAKE LOCATIONS WHERE POLES, FOUNDATIONS, CABINETS, POWER SERVICES, PULL BOXES, AND SPLICE VAULTS ARE TO BE INSTALLED. APPROVED STAKED LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ANY EXCAVATION.
9. PLACEMENT OF ALL EQUIPMENT, CABINETS, TRANSFORMERS, SPLICE BOXES AND PULL BOXES MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION AND BEFORE SURVEYORS LEAVE EACH SITE. ORIENTATION OF ALL CABINETS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. ANY RESTAKING NECESSITATED BY ADJUSTMENT IS CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL PAYMENT WILL BE MADE.
10. CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES EITHER PARALLEL OR PERPENDICULAR TO THE RIGHT-OF-WAY TO THE EXTENT POSSIBLE. THE CONTRACTOR SHALL DETERMINE FINAL ROUTING BASED ON ACTUAL FIELD CONDITIONS PRIOR TO CONSTRUCTION AT EACH SITE, INCLUDING UTILITY LOCATOR SERVICE MARKINGS, TO PREVENT CONFLICTS WITH EXISTING UTILITIES. CONTRACTOR TO ROUTE TRUNKLINE CONDUIT ADJACENT TO RIGHT-OF-WAY LINE AND BRANCH LINE PERPENDICULAR TO RIGHT-OF-WAY LINE.
11. THE CONTRACTOR SHALL FIELD REVIEW CONDUIT ON STRUCTURE FOR NECESSARY ROUTING, MOUNTING HARDWARE (INCLUDING BRIDGE HANGERS, FITTINGS, EXPANSION JOINTS AND JUNCTION BOXES) FOR ALL EXTERNALLY MOUNTED CONDUITS PRIOR TO SUBMITTAL OF BID TO DETERMINE THE TYPES AND EXTENT OF INCIDENTAL ITEMS TO BE INCLUDED IN THE UNIT PRICE OF CONDUIT.
12. BRIDGE ATTACHMENTS ON KDOT STRUCTURES REQUIRE A SEPARATE PERMIT FROM KDOT THAT SHALL BE OBTAINED BY THE CONTRACTOR PER KDOT'S UTILITY ACCOMMODATION POLICY.
13. ALL TRAFFIC CONTROL PLANS AND LANE CLOSURES SHALL BE PRE-APPROVED BY THE ENGINEER.
14. PROPOSED ITS EQUIPMENT LOCATIONS ARE APPROXIMATE AND MAY BE MODIFIED TO AVOID CONFLICTS WITH UNDERGROUND UTILITIES OR OTHER OBSTRUCTIONS. DMS, CCTV CAMERA, DETECTOR AND WIRELESS EQUIPMENT LOCATIONS ARE LOCATION SENSITIVE. THE CONTRACTOR AND ENGINEER SHALL RECEIVE APPROVAL FROM THE KDOT ITS ENGINEER PRIOR TO REVISING THE PLAN LOCATION OR ORIENTATION OF ANY ITS EQUIPMENT.
15. KDOT OR CITY OF WICHITA WILL FURNISH HARDWARE AS DESCRIBED IN THE PLANS, SPECIFICATIONS, AND ON THE SUMMARY OF QUANTITIES. CONTRACTOR SHALL CAREFULLY REVIEW PLANS AND SPECIFICATIONS FOR DETAILS ON KDOT/CITY OF WICHITA FURNISHED ITEMS.
16. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER A LOCATION TO STORE KDOT/WICHITA FURNISHED EQUIPMENT AND INCIDENTAL ITEMS. CONTRACTOR SHALL PROVIDE THE MEANS TO UNLOAD AND LOAD KDOT/WICHITA FURNISHED EQUIPMENT, SIGNS, CABINETS, AND INCIDENTAL ITEMS AT THE ARRANGED STORAGE LOCATION. THIS ITEM OF WORK IS INCIDENTAL TO THE SITE BID ITEM.
17. ALL ITS EQUIPMENT CALLED OUT BY PLANS AND SPECIFICATIONS AS "INSTALL" OR KDOT FURNISHED, INCLUDING DMS, CCTV ASSEMBLIES, DETECTORS, AND COMMUNICATIONS EQUIPMENT, SHALL INCLUDE ALL LOADING AND TRANSPORTATION FROM A DESIGNATED KDOT FACILITY, INSTALLATION, AND TESTING IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR SHALL COORDINATE WITH ENGINEER AND MANUFACTURER FOR A STORAGE LOCATION AT A DESIGNATED FACILITY.
18. INSTALLATION, TESTING, AND INTEGRATION OF ALL ITS DEVICES, INCLUDING KDOT FURNISHED ITEMS, SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
19. CONTRACTOR SHALL NOTIFY ANY/ALL APPLICABLE UTILITY COMPANIES LOCATED WITHIN EXISTING DUCT BANKS AT LEAST TWO WEEKS AND AGAIN AT 72 HOURS PRIOR TO PERFORMING ANY WORK IN DUCT BANKS WITH SHARED UTILITIES. THE UTILITY COMPANY MAY REQUIRE A REPRESENTATIVE TO BE ON SITE.
20. WESTAR SHALL BE NOTIFIED AT LEAST TWO (2) WEEKS AND AGAIN AT 72 HOURS PRIOR TO PERFORMING ANY WORK IN OR AROUND THE EXISTING WESTAR DUCT BANK ALONG MAIN STREET BETWEEN CITY HALL AND DOUGLAS. A WESTAR REPRESENTATIVE MUST BE PRESENT FOR ALL WORK WITHIN THIS SPECIFIC EXISTING WESTAR DUCT BANK. ANY ASSOCIATED COSTS SHALL BE PAID FOR BY THE CONTRACTOR AND SUBSIDIARY TO OTHER ITEMS OF THE CONTRACT.
21. CONTRACTOR SHALL NOTIFY CENTURYLINK AND/OR KTA WHEN APPLICABLE TWO WEEKS AND AGAIN AT 72 HOURS PRIOR TO PERFORMING ANY WORK WITHIN 5 FT OF A CENTURYLINK OR KTA BACKBONE FIBER. A CENTURYLINK, KTA WHEN APPLICABLE, AND KDOT INSPECTOR MUST BE PRESENT FOR WORK WITHIN 5 FT OF FIBER OPTIC FACILITIES.
22. AT NO TIME SHALL THE CONTRACTOR ACCESS A CENTURYLINK AND/OR KTA PULLBOX OR SPLICE VAULT FOR ANY REASON WITHOUT A CENTURYLINK AND/OR KTA INSPECTOR PRESENT.
23. ALL WORK WITHIN 10 FT OF CENTURYLINK AND/OR KTA FIBER BACKBONE SHALL BE CARRIED OUT WITH HAND TOOLS ONLY. NO MECHANIZED EQUIPMENT SHALL BE ALLOWED IN THE ACCESS OF THE KDOT CONDUIT FROM THE CENTURYLINK AND / OR KTA CONDUIT ARRAY. HYDRO EXCAVATION IS ALLOWED.
24. CONTRACTOR TO MAINTAIN AT LEAST 20 FT OF CLEARANCE FROM ALL EXISTING GAS FACILITIES AND 5 FT OF CLEARANCE FROM LUMEN AND / OR KTA FIBER. EXCEPTION ALLOWED WHEN PERFORMING WORK WITH LUMEN WHILE KDOT AND LUMEN INSPECTOR PRESENT.
25. WHEN WITHIN 5 FT OF KDOT OR CITY LIGHTING FACILITIES, CONDUIT SHALL BE HAND DUG.
26. HIGH VOLTAGE POWER LINES MAY BE WITHIN THE PROJECT LIMITS. ALL WORK IS TO BE PERFORMED IN CONFORMANCE WITH ALL STATE, LOCAL, FEDERAL, UTILITY, AND CONTRACT REQUIREMENTS. KDOT OR CITY OF WICHITA HAS NO CONTROL OVER THE MEANS, METHODS, CHOICE OF EQUIPMENT, SEQUENCING OF WORK, AND SAFETY PRACTICES USED WHEN WORKING IN, ON, OR AROUND HIGH VOLTAGE LINES OR OTHER UTILITY STRUCTURES AS THESE ITEMS ARE THE RESPONSIBILITY OF THE PARTIES CONTROLLING THE PHYSICAL PERFORMANCE OF THE WORK.
27. ALL GROUNDING SYSTEMS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND MANUFACTURER SPECIFICATIONS. FOLLOW APPLICABLE NEC REQUIREMENTS FOR INSTALLATION OF ALL PROJECT MATERIALS. THE CONTRACTOR SHALL PROPERLY GROUND ALL EQUIPMENT, CABINET, AND GROUND RODS PER APPLICABLE STANDARDS OR AS DIRECTED BY ENGINEER.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING AND PAYING FOR THE ELECTRICAL SERVICE IN CITY'S NAME WHEN IN CITY'S AREA AT THE LOCATIONS SHOWN ON THE PLANS. CONTRACTOR SHALL MAKE PAYMENT OF ALL POWER COMPANY FEES UNTIL KDOT OR CITY OF WICHITA ASSUMES OWNERSHIP. UTILITY COMPANY, CONTACT NAME, AND PHONE NUMBER FOR EACH SITE ARE LISTED ON THE ELECTRICAL SERVICE LOCATION SUMMARY SHEET.
29. WARNING TAPE IS REQUIRED IN ALL TRENCHES CONTAINING CONDUIT. MULTIPLE CONDUITS IN PARALLEL SHALL SHARE THE SAME TRENCH.
30. CONTRACTOR TO INSPECT AND REPAIR EXISTING CONDUIT. SEE CONDUIT SPECIFICATIONS FOR ADDITIONAL DETAILS. REPAIRS WILL BE PAID FOR UNDER ITS UNIT COST ITEM "CONDUIT REPAIR".
31. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY EXISTING CONDUIT AND REPLACE ANY EXISTING CONDUCTORS OR OTHER FACILITIES DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL DOCUMENT (VIDEO, IMAGES) EXISTING INFRASTRUCTURE PRIOR TO COMMENCING WORK. ALL EXISTING IMPROVEMENTS REMOVED OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND BY THE CONTRACTOR, WITH NO ADDITIONAL PAYMENT.
32. THE CONTRACTOR SHALL PROVIDE CITY OF WICHITA AN ELECTRONIC LIST OF GPS READINGS (EXCEL FORMAT), GPS-CODED PHOTOGRAPH COPIES, AND AS-BUILT KMZ FILE FOR ALL INSTALLED DEVICES, PULL BOXES, SPLICE VAULTS, CABINETS, POWER METERS, TRANSFORMERS, AND WIRELESS TOWERS. THE ACCURACY OF THE GPS READINGS SHALL BE WITHIN 3 FT. OBTAIN GPS AND THREE TIE-POINT MEASUREMENTS FOR EACH BURIED ELECTRICAL PULL BOX PRIOR TO PLACING BACKFILL MATERIAL.
33. CONTRACTOR SHALL EQUIP THE TRENCHING/PLOWING EQUIPMENT WITH GPS TRACKING TECHNOLOGY OR PROPOSE ALTERNATE METHOD OF HARD LOCATING GPS POINTS. GPS READINGS SHALL BE TAKEN AT EVERY SPLICE VAULT AND AT A MINIMUM AT EVERY 100 FEET ALONG THE TRENCH LINE. WHEN BORING, VENDOR SHALL TAKE MANUAL GPS POINTS EVERY 20 FEET AND IMPORT THESE POINTS INTO THE GIS TOOL. VERTICAL BORE HEIGHT FROM EXISTING GROUND SHALL ALSO BE INCLUDED. CONTRACTOR SHALL FORM A LINE FROM BORING POINTS TO TRENCHING POINTS TO PROVIDE AN AS-BUILT LOCATION MAP AND PROFILE CHART. THE ACCURACY OF THE GPS READINGS SHALL BE WITHIN 3 FEET (1 METER). CONTRACTOR SHALL PROVIDE TO THE OWNER THE AS-BUILT KMZ FILE, AS-BUILT ELECTRONIC LIST OF ALL GPS READINGS, AND AS-BUILT PROFILE CHART.
34. ALL MATERIALS SHALL MEET THE BUY AMERICA ACT REQUIREMENTS OUTLINED IN SECTION 106 OF KDOT'S STANDARD SPECIFICATIONS.
35. THE CONTRACTOR WILL BE REQUIRED TO WORK IN CONJUNCTION AND COORDINATE WITH OTHER WORKING CONTRACTORS IN CERTAIN AREAS OF THE CONSTRUCTION LIMITS. THIS WORK IS CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL PAYMENT WILL BE MADE.
36. LOCATING, TRACING, AND POTHOLING FOR EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. POTHOLING SHALL BE COMPLETED BY HYDRO EXCAVATION AND BE RESTORED WITH SIMILAR MATERIAL AND CONSTRUCTION METHODS. NO ADDITIONAL PAYMENT WILL BE MADE FOR LOCATING OR POTHOLING EXISTING UTILITIES, INCLUDING PAVEMENT RESTORATION. ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY FOR LOCATING EXISTING UTILITIES SHALL NOT BE PAID FOR DIRECTLY BUT IS SUBSIDIARY TO OTHER ITEMS OF THE CONTRACT.
37. THE CONTRACTOR SHALL PROOF EXISTING CONDUITS AND VERIFY CONDUIT WILL ACCOMMODATE NEW FIBER PRIOR TO INSTALLATION. THIS WORK IS INCIDENTAL TO OTHER ITEMS OF THE CONTRACT. SEE ITS EQUIPMENT SPECIFICATION 5.0 FOR ADDITIONAL INFORMATION.
38. MOST EXISTING CONDUIT ROUTES CONTAIN A CITY OF WICHITA 6-PAIR TRAFFIC SIGNAL CABLE THAT SHALL BE REMOVED. THIS EXISTING CABLE MAY BE USED TO LOCATE EXISTING CONDUIT PATHS AND FOR INSTALLATION OF NEW FIBER. REMOVAL OF EXISTING CABLE IS INCIDENTAL TO NEW FIBER. CONTRACTOR SHALL VERIFY WITH CITY STAFF PRIOR TO REMOVAL OF CABLE.
39. IP SCHEMA WILL BE PROVIDED BY THE CITY OF WICHITA AND KDOT DURING CONSTRUCTION.
40. THE INFORMATION SHOW IN THESE PLANS IS BASED ON THE BEST INFORMATION AVAILABLE BUT MAY DIFFER FROM FIELD CONDITIONS. EXISTING COMMUNICATION DUCT PLANS, INTERSECTION WIRING DIAGRAMS AND BUILDING CONNECTIONS IS AVAILABLE FOR REVIEW FROM THE CITY OF WICHITA.
41. IT IS THE PRIME CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL SHOP DRAWINGS, TESTING RESULTS, AND ALL OTHER REQUIRED SUBMITTALS PRIOR TO SUBMITTING FOR ENGINEER'S APPROVAL. THE ENGINEER WILL NOT REVIEW ANY SUBMITTED DOCUMENTATION OR BEGIN ANY TESTING PERIODS UNTIL THIS WORK IS COMPLETE.
42. ALL TRAFFIC SIGNAL CONTROLLERS, RADIOS, CABINETS, AND OTHER APPURTENANT EQUIPMENT SHOWN TO BE REMOVED, SHALL BE REMOVED IN SALVAGEABLE CONDITION AND TRANSPORTED TO THE APPROPRIATE LOCATION AS SHOWN BELOW. CONTACT ENTITY RESPONSIBLE FOR SIGNALS PRIOR TO BEGINNING WORK ON SITE. CONTACT INFORMATION FOR REMOVAL AND COORDINATION IS SHOWN BELOW:

CITY OF WICHITA EQUIPMENT:
 CITY OF WICHITA CENTRAL MAINTENANCE
 ATTN: KEVIN SHORE
 PHONE: 316-268-4033
 1801 S MCLEAN BLVD
 WICHITA KS, 67213

Plotted : 12-FEB-2025 16:17

Drawn By : sspatil
File : ITS-D02.dgn

KANSAS DEPARTMENT OF TRANSPORTATION				
ITS GENERAL NOTES				
ITS-D02				
11-27-23				
FHWA APPROVAL		APPD		
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DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK.	



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 FOR FIBER SCHEMATIC & SPLICING DETAILS, SEE SHEETS 25-28

CONSULTANTS:

**GREENWICH ROAD
 ITS & SIGNAL IMPROVEMENTS
 WALMART DRIVE TO 29TH ST. NORTH**

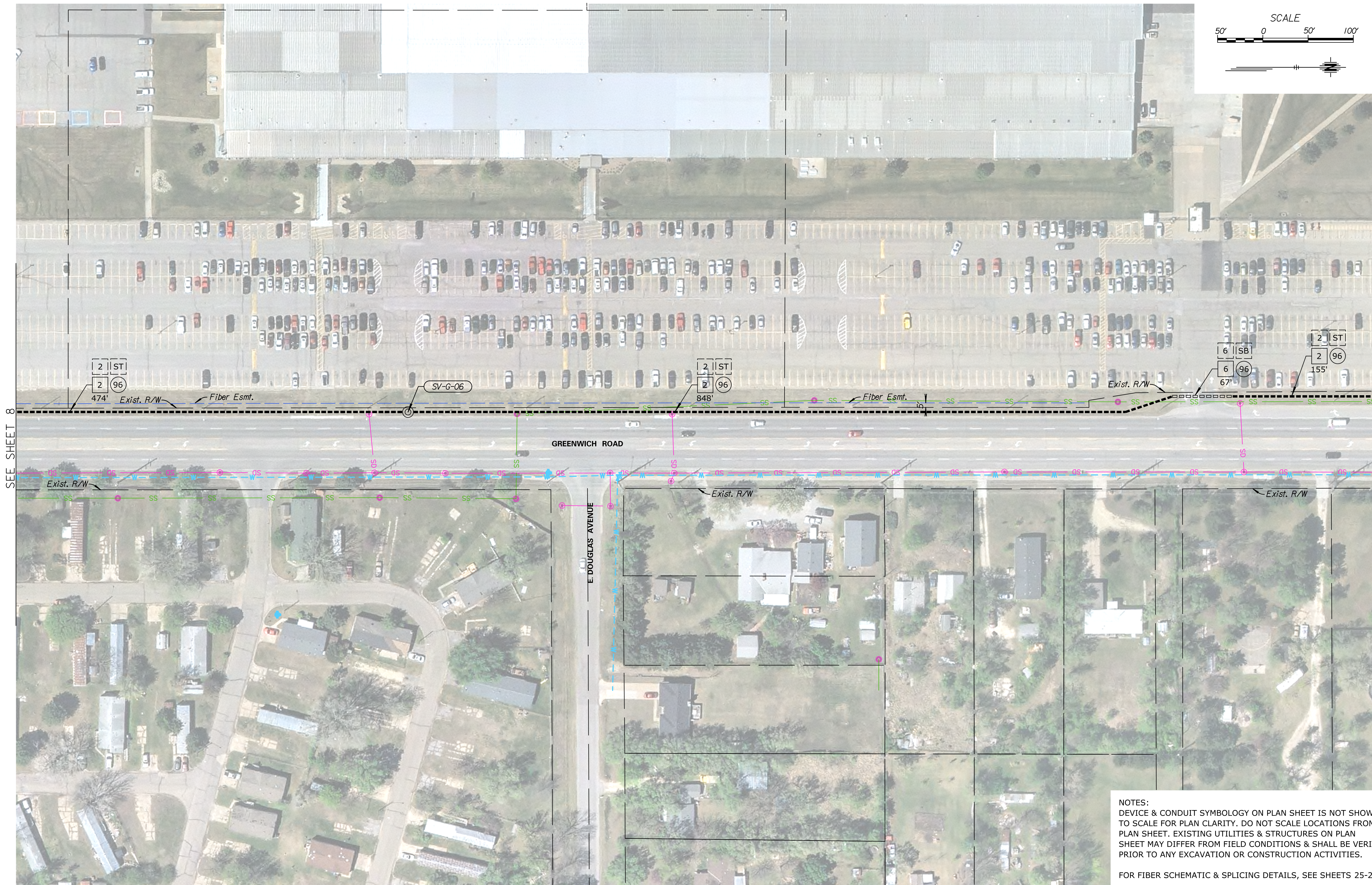


REVISIONS:	MARK	DATE	DESCRIPTION

PROJ NO: 472-085898
 SCALE: 1"=50'
 DATE: 2025-02-12
 DESIGNED BY: AEW
 DRAWN BY: AEW
 CHECKED BY: SSP

SHEET TITLE:
**GREENWICH ROAD
 FIBER OPTIC
 TRAFFIC SIGNAL
 IMPROVEMENTS**

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TRANSYSTEMS
 100 N BROADWAY
 SUITE 500
 WICHITA, KANSAS 67202
 PHONE: 316-303-3000
 FAX: 316-462-5629

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**GREENWICH ROAD
 ITS & SIGNAL IMPROVEMENTS
 WALMART DRIVE TO 29TH ST. NORTH**



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 DRAWN BY: AEW
 CHECKED BY: SSP

SHEET TITLE:
**GREENWICH ROAD
 FIBER OPTIC
 TRAFFIC SIGNAL
 IMPROVEMENTS**

SHEET NO.
9
 SHEET 9 OF 57



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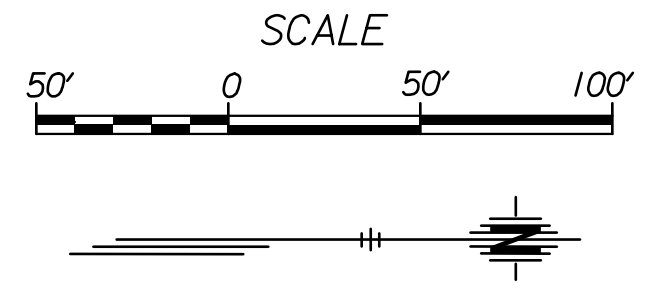
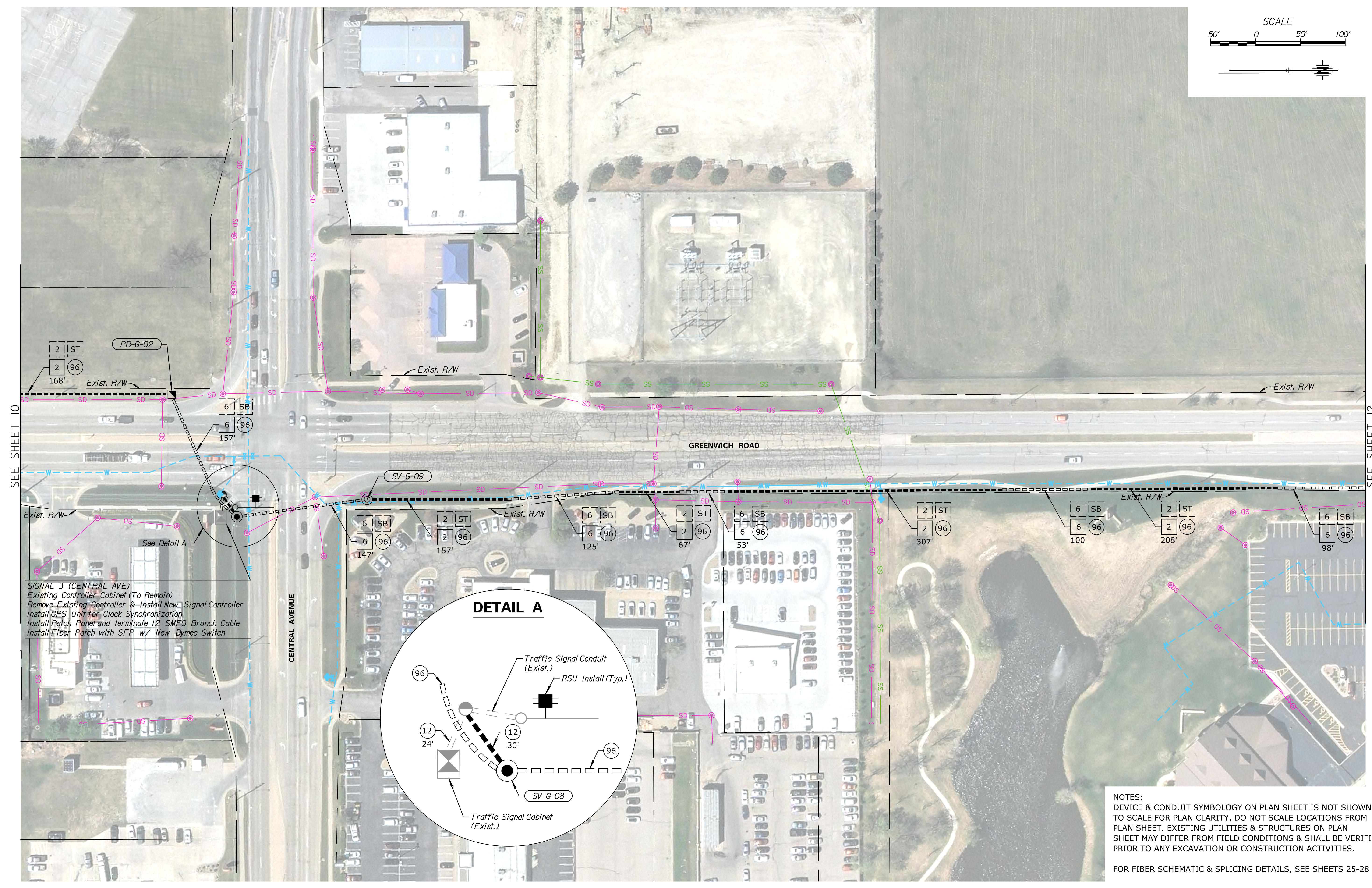
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 DRAWN BY: AEW
 CHECKED BY: SSP

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**GREENWICH ROAD
 FIBER OPTIC
 TRAFFIC SIGNAL
 IMPROVEMENTS**

SHEET NO.
10
 SHEET 10 OF 57

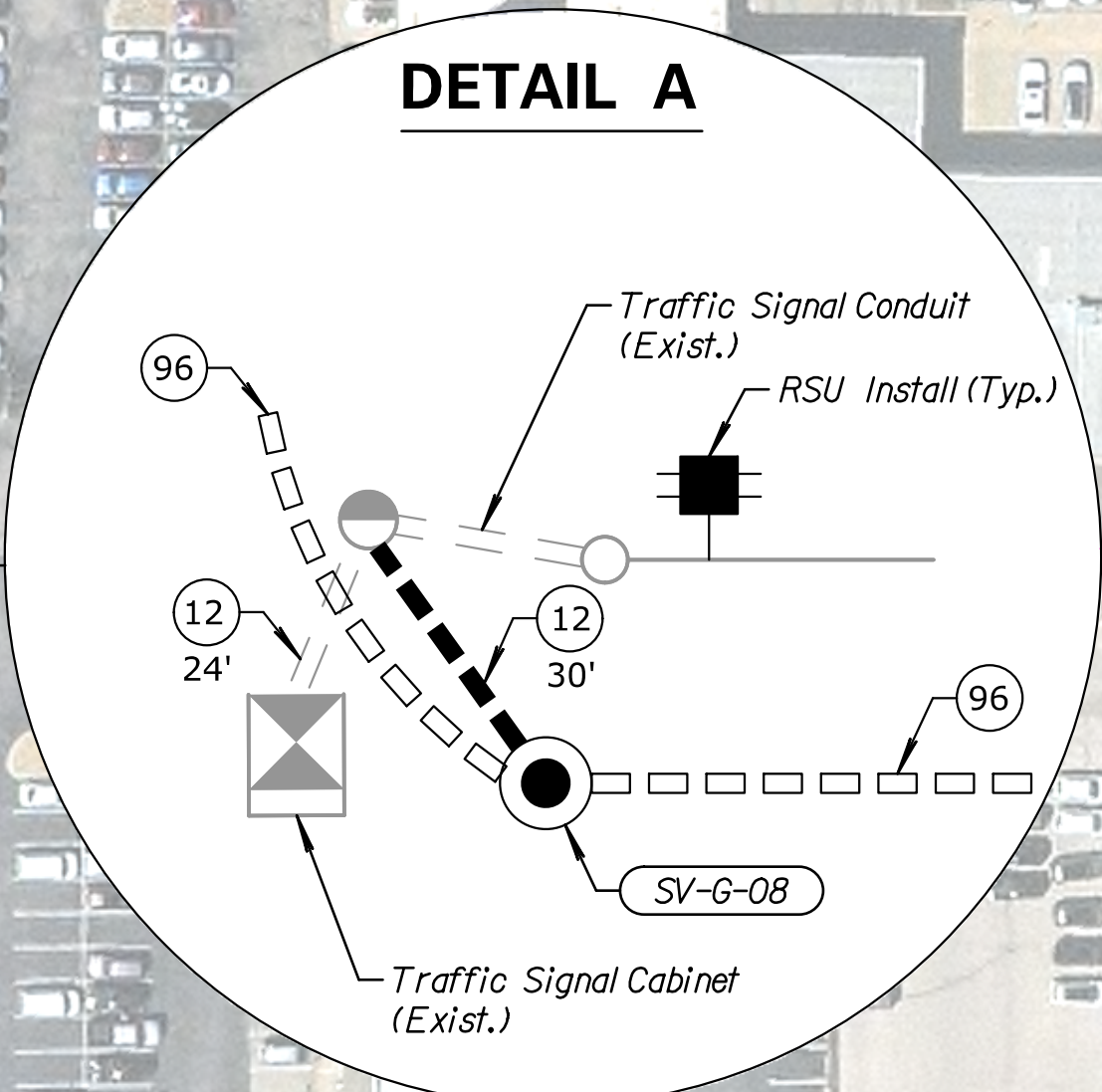
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SEE SHEET 10

SEE SHEET 12

SIGNAL 3 (CENTRAL AVE)
 Existing Controller Cabinet (To Remain)
 Remove Existing Controller & Install New Signal Controller
 Install GPS Unit for Clock Synchronization
 Install Patch Panel and terminate 12 SMFO Branch Cable
 Install Fiber Patch with SFP w/ New Dymec Switch



NOTES:
 DEVICE & CONDUIT SYMBOLY ON PLAN SHEET IS NOT SHOWN TO SCALE FOR PLAN CLARITY. DO NOT SCALE LOCATIONS FROM PLAN SHEET. EXISTING UTILITIES & STRUCTURES ON PLAN SHEET MAY DIFFER FROM FIELD CONDITIONS & SHALL BE VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.
 FOR FIBER SCHEMATIC & SPLICING DETAILS, SEE SHEETS 25-28

CONSULTANTS:

GREENWICH ROAD
 ITS & SIGNAL IMPROVEMENTS
 WALMART DRIVE TO 29TH ST. NORTH



REVISIONS:	MARK	DATE	DESCRIPTION

PROJ NO: 472-085898
 SCALE: 1"=50'
 DATE: 2025-02-12
 DESIGNED BY: AEW
 DRAWN BY: AEW
 CHECKED BY: SSP

SHEET TITLE:
**GREENWICH ROAD
 FIBER OPTIC
 TRAFFIC SIGNAL
 IMPROVEMENTS**

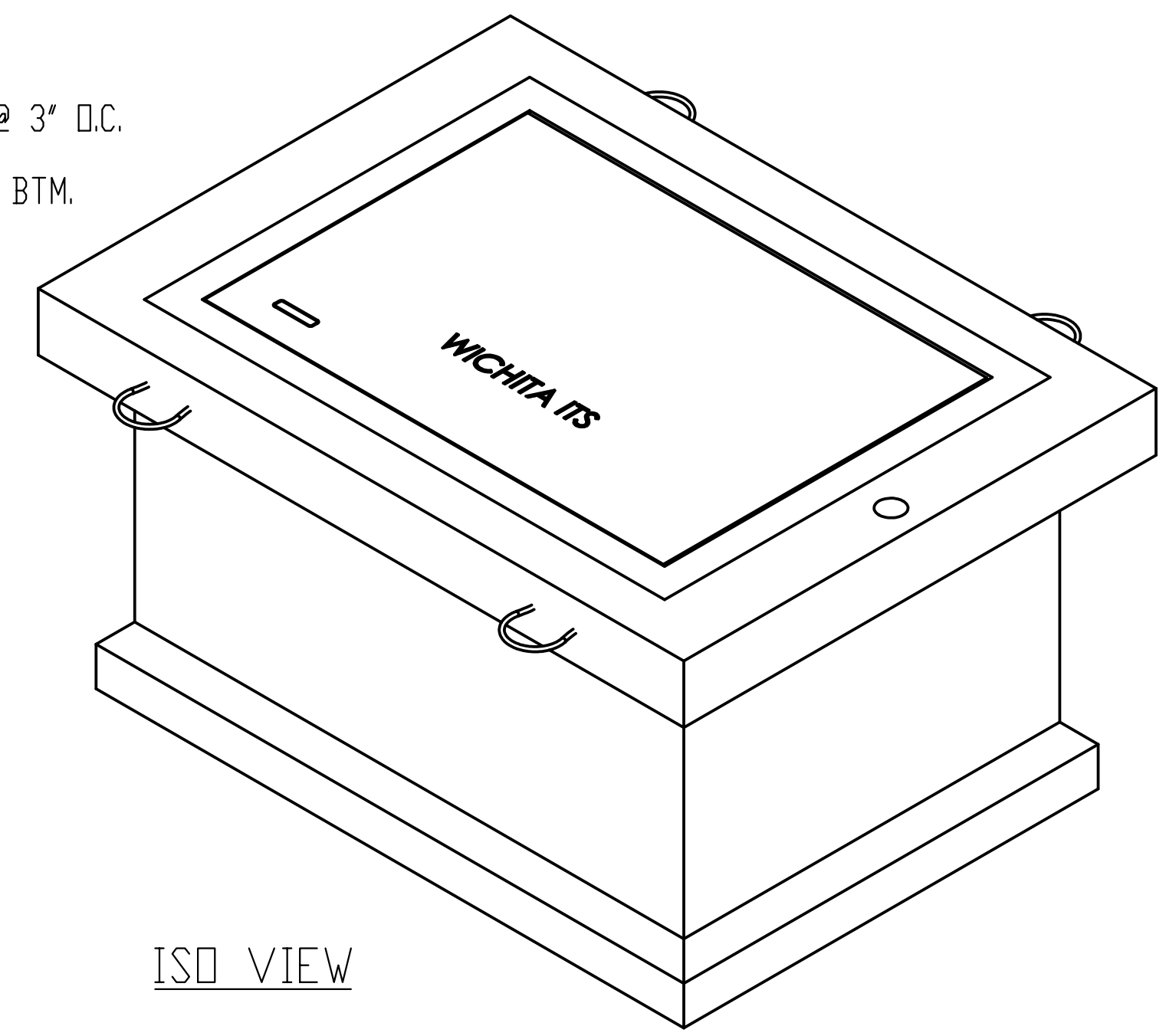
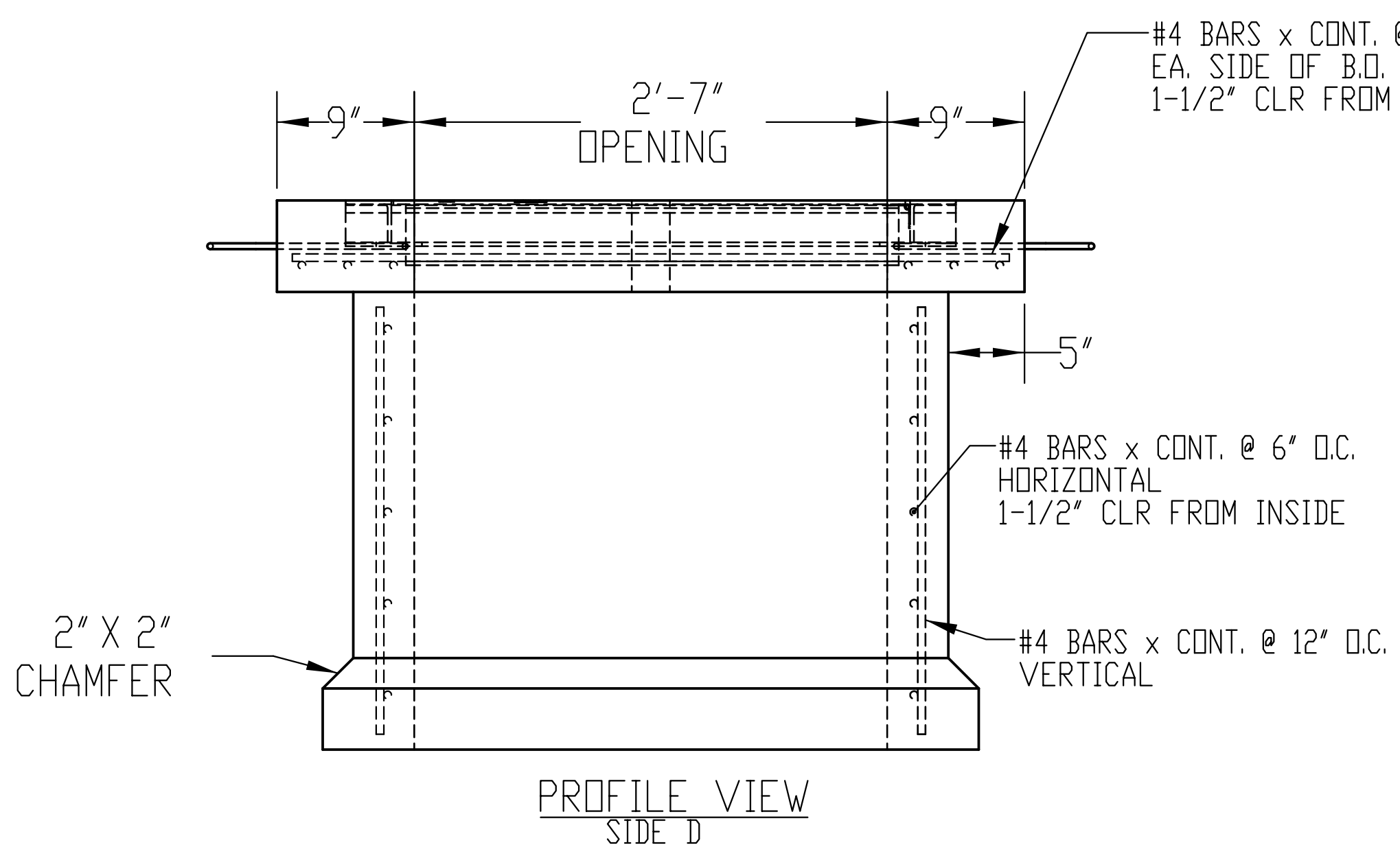
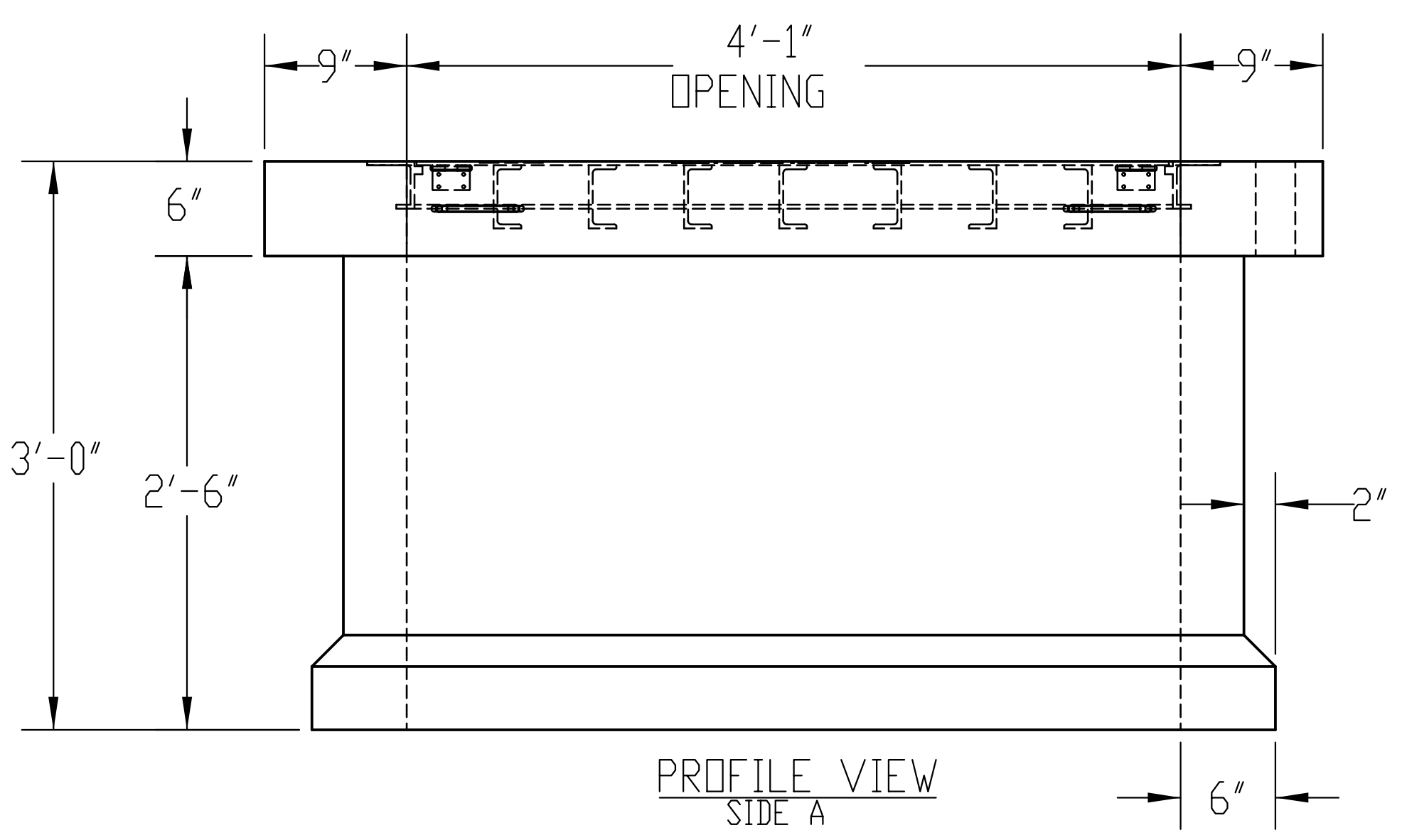
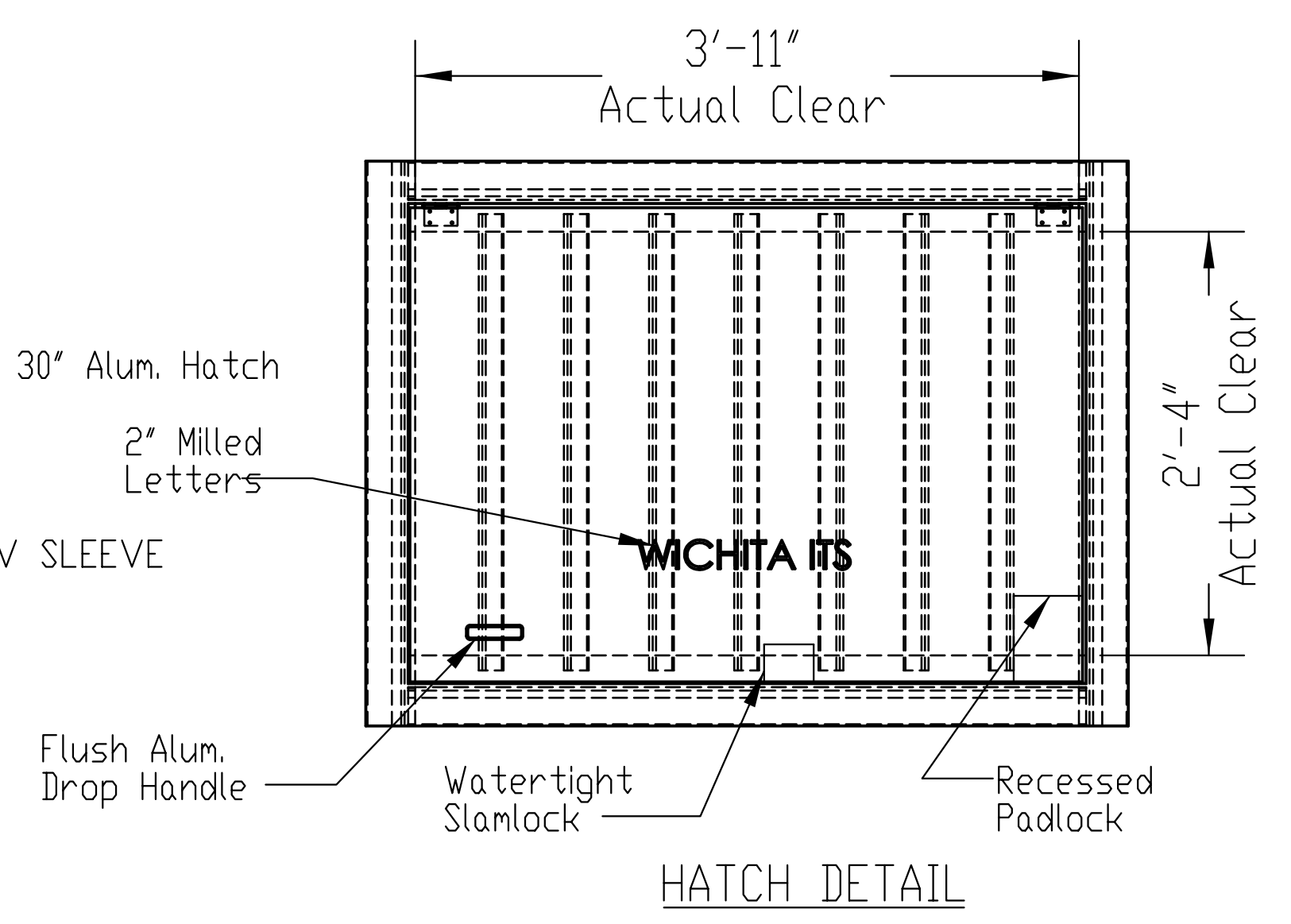
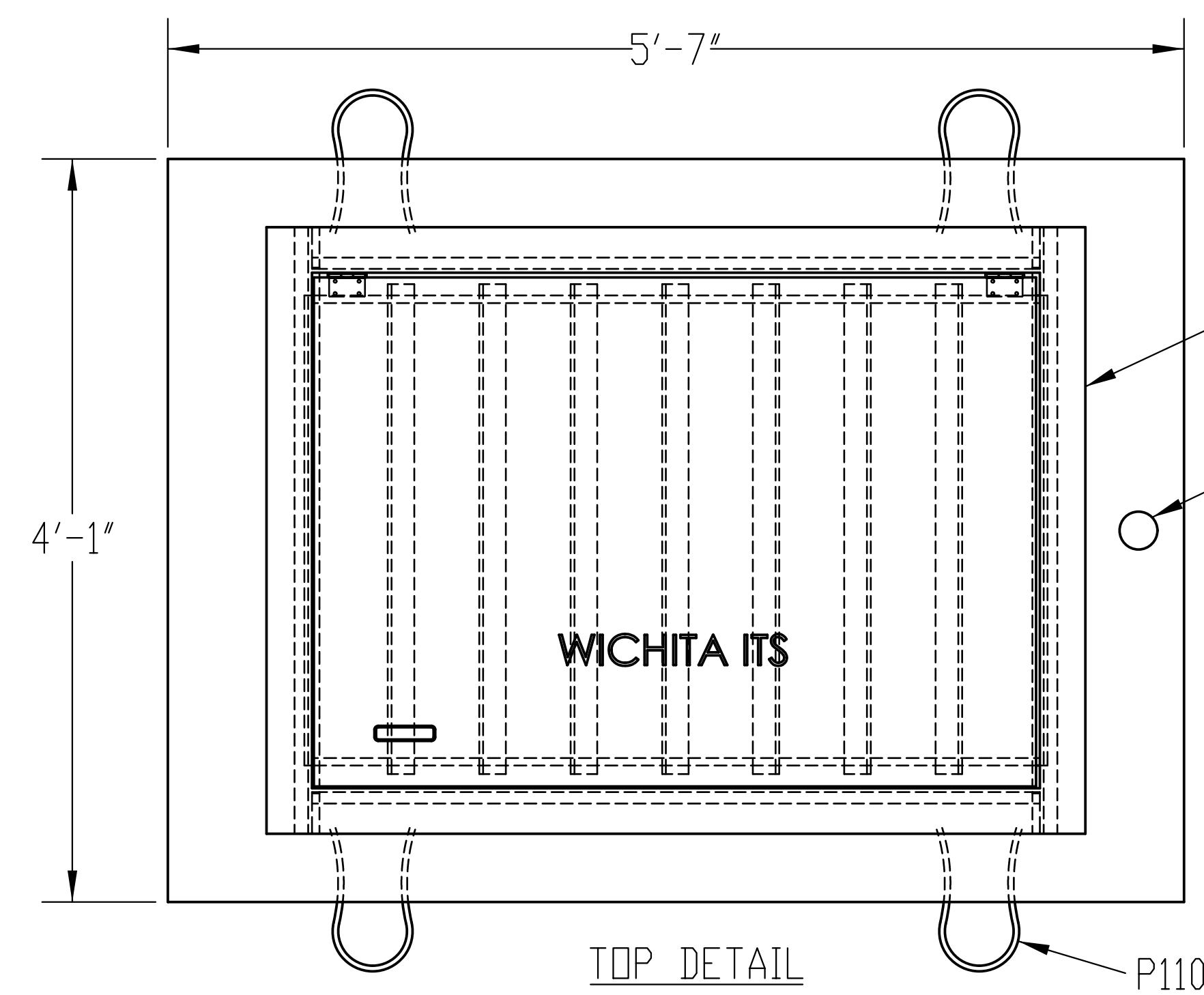
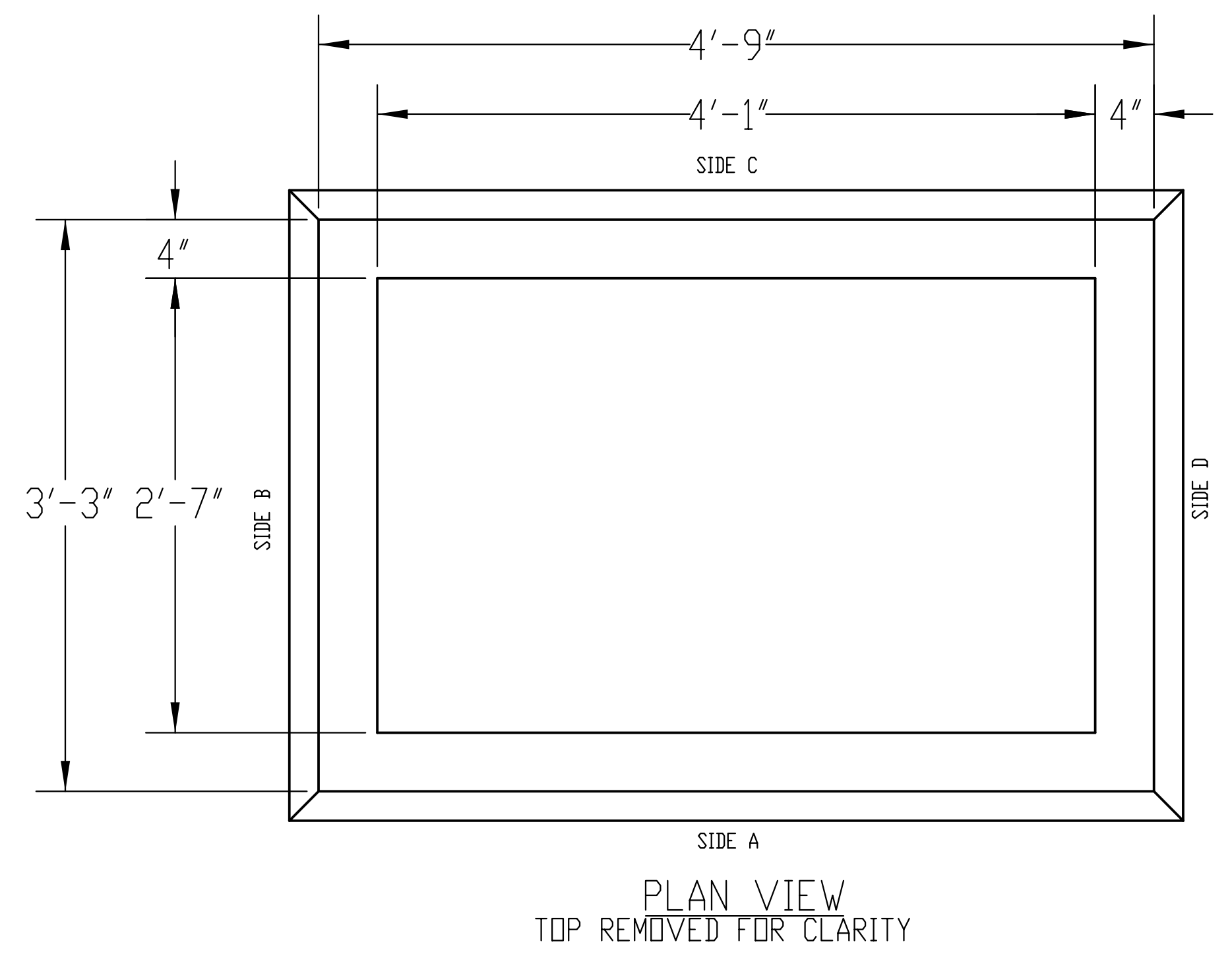
SHEET NO.
11
 SHEET 11 OF 57

CONSULTANTS:

GREENWICH ROAD
ITS & SIGNAL IMPROVEMENTS
WALMART DRIVE TO 29TH ST. NORTH



REVISIONS:	MARK	DATE	DESCRIPTION

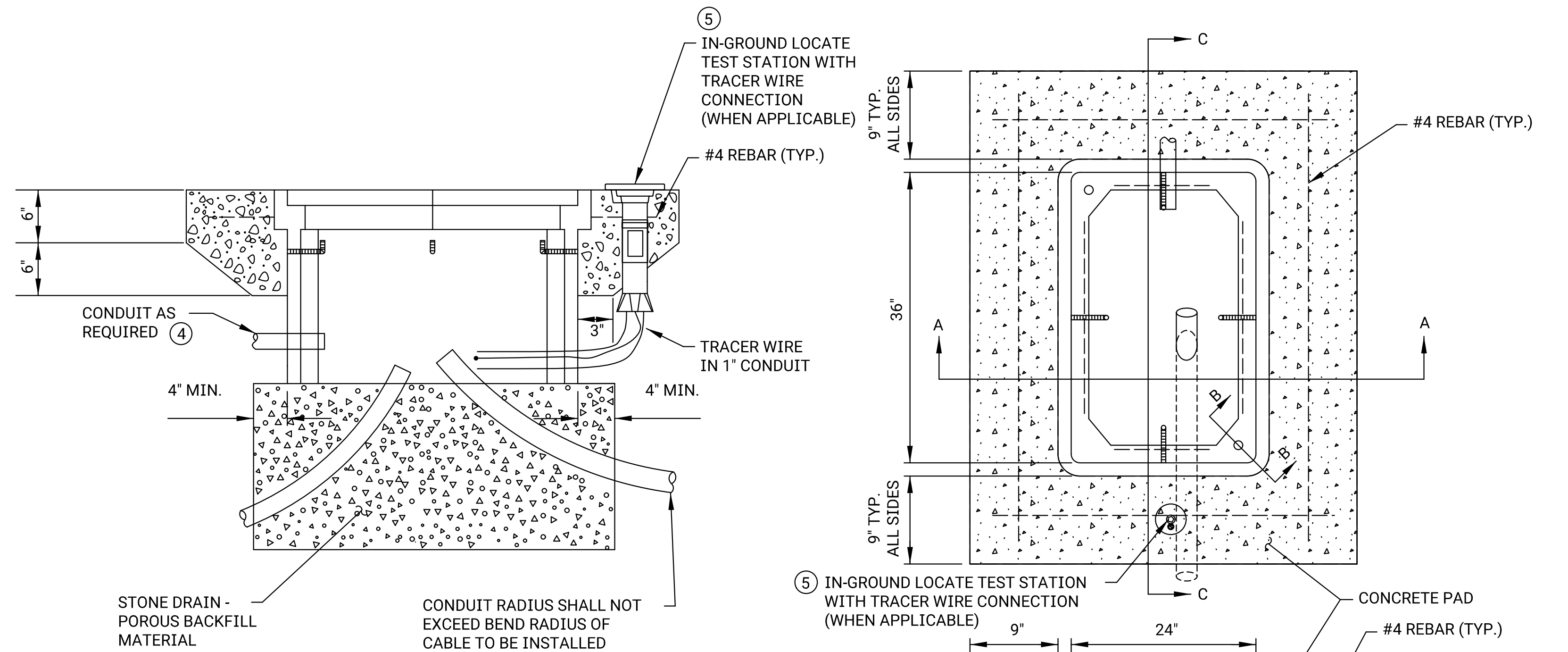


PART NUMBER	Weight	QTY.
WICHITA SV Walls	1983	1
WICHITA SV Top	1006	1

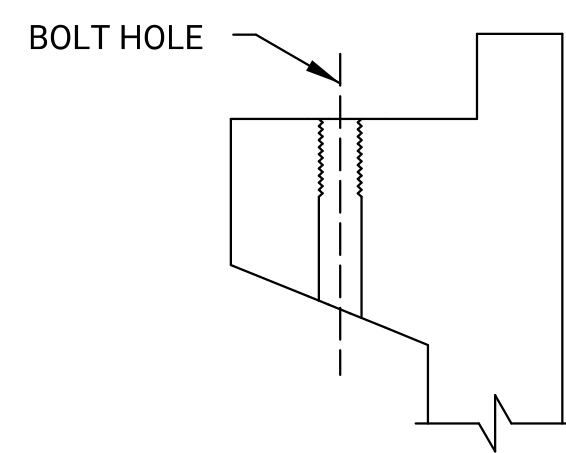
<p>Design Information: ACI318</p> <p>Live Load = 32 Kips Axle (HS 20) 16 Kips Wheel</p> <p>Impact Factor = 1.0 To 1.3</p> <p>Load Factors: DL = 1.2 LL = 1.6</p> <p>Tire Footprint = 10' x 20'</p> <p>Ka = 0.36</p> <p>Lateral Soil Pressure = 90pcf</p> <p>γ_{Soil} = 120 pcf</p> <p>γ_c = 150 pcf</p>	<p>DESIGN INFORMATION: -F_c = 5,000 PSI</p> <p>-F_y = 60,000 PSI</p> <p>SIZE: B</p> <p>WEIGHT: 2989</p>	<p>PROJ NO: 472-085898</p> <p>SCALE: NOT TO SCALE</p> <p>DATE: 2025-02-12</p> <p>DESIGNED BY: SSP</p> <p>DRAWN BY: SSP</p> <p>CHECKED BY: SGE</p> <p>SHEET TITLE:</p> <p>CITY OF WICHITA 48" SPLICE VAULT DETAIL</p> <p>SHEET NO. 29</p> <p>SHEET 29 OF 57</p>
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spsall 2025-02-12 4:20:02 PM c:\transystems\new_bocalltransystems\pwr\spall\1350703\C-DET\M01-501.dgn

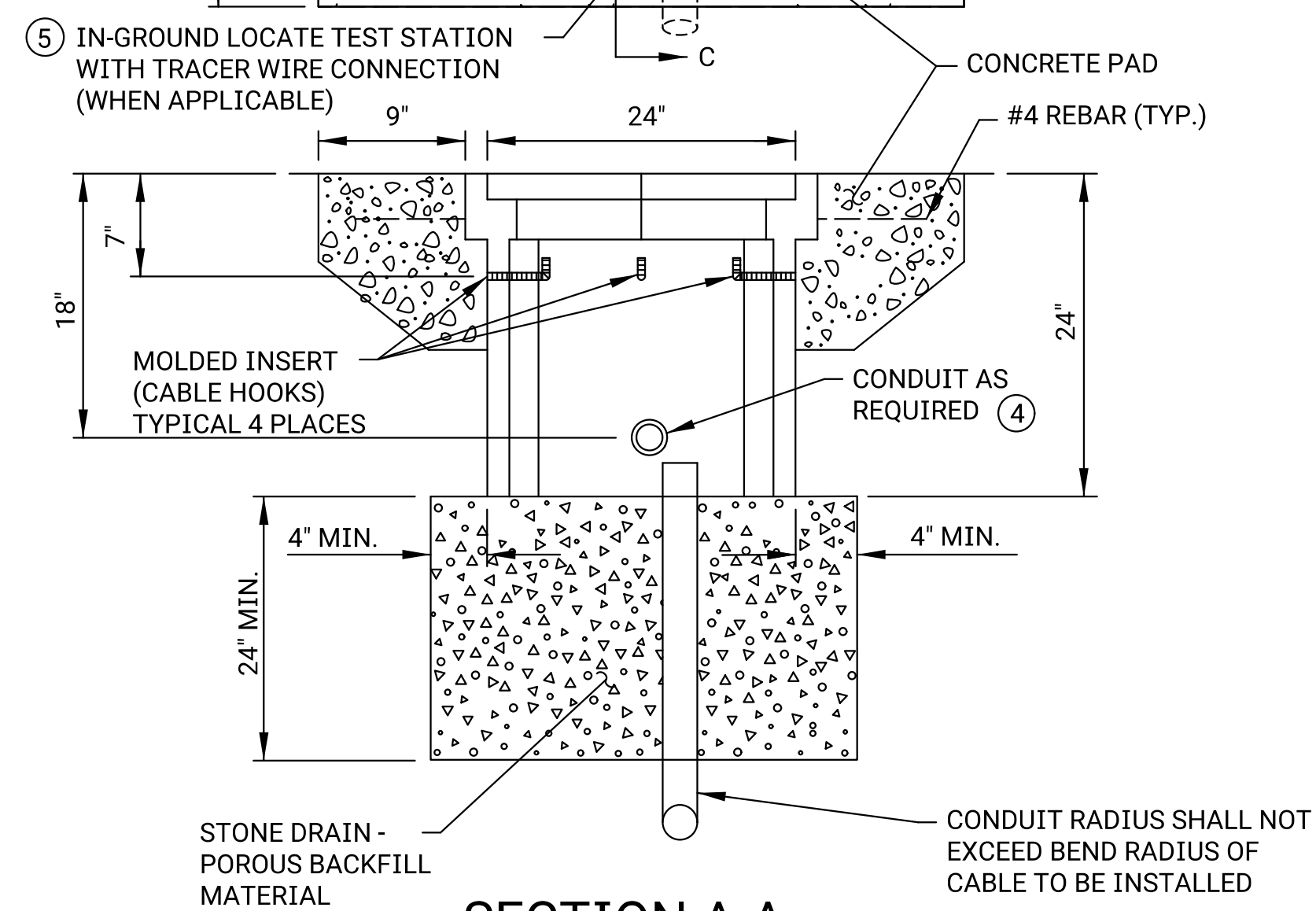
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-085898	2025	34	57



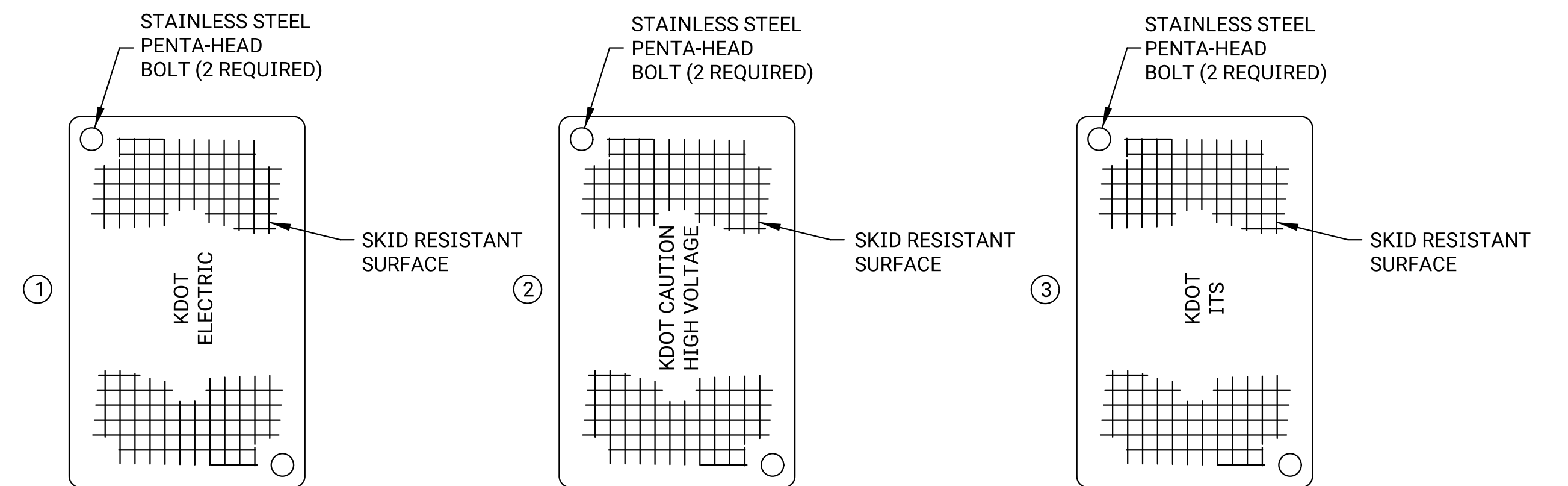
SECTION C-C



SECTION B-B
TYPICAL BOLT CLEANOUT



SECTION A-A



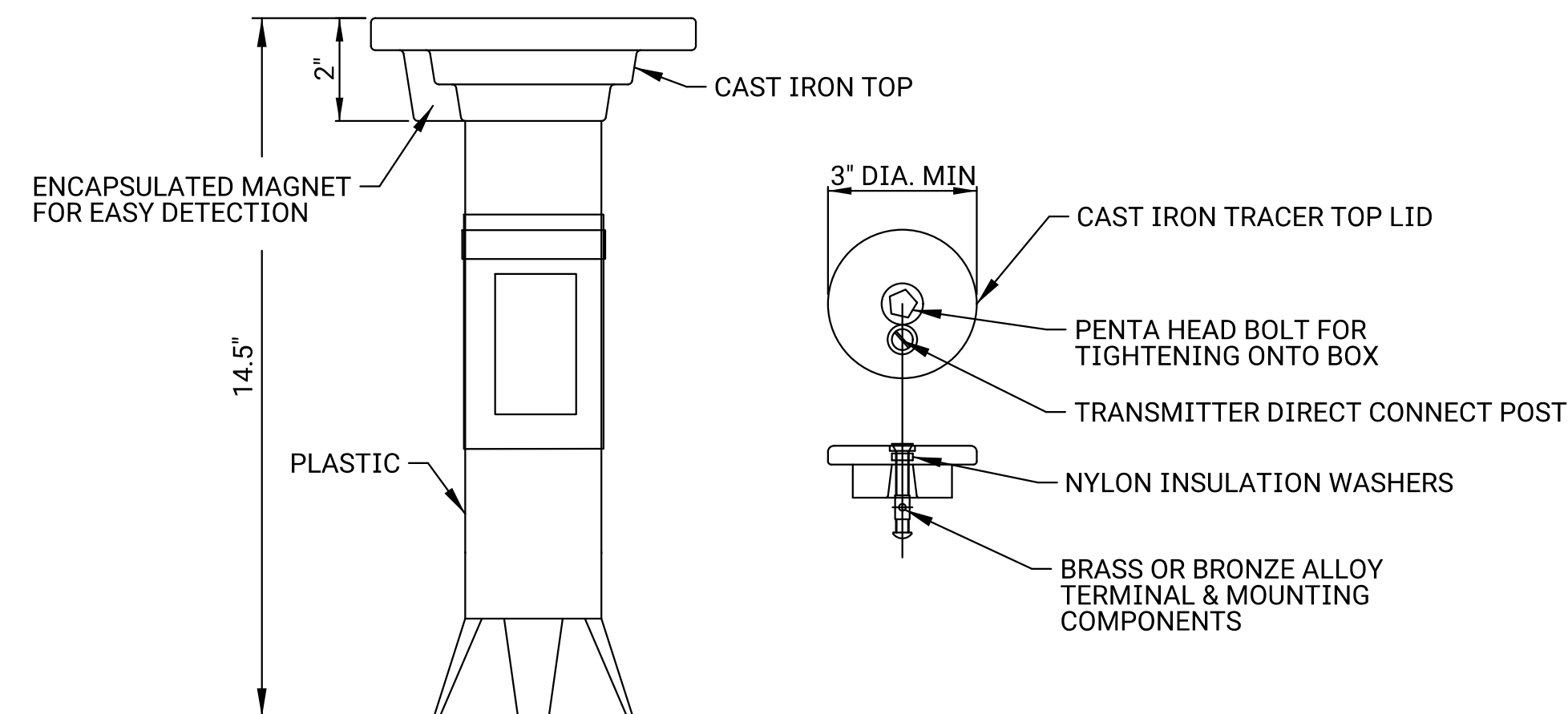
PREFORMED PULL BOX COVER

GENERAL NOTES:

- All dimensions shown are in inches unless otherwise noted.
- Preformed box walls may be either flared or vertical.
- At the Engineer's discretion, bury electrical pull boxes six inches below grade. Concrete pad is not required when electrical pull box is buried.
- If an extension is used with a preformed box, the lip of the extension may be interior or exterior. The extension shall be compatible and from the same manufacturer.
- Conduit shall enter the pull box from the side of the box or from the bottom. If using side entry conduit, ensure bend radius of cable is not exceeded when pulling cable.
- Side entry conduit shall only be used for RMC, bridge conduit transition, or short splice vault / pull box connections.
- Pull box and cover shall be rated for a minimum loading of tier 22 per ANSI/SCTE 77, current edition.
- Stone drain material shall conform to the standard specifications and shall be clean aggregate.
- Provide KDOT with one stainless steel penta-head socket and pull box lifting hook for every 20 pull boxes installed. A minimum of one stainless steel penta-head socket and one pull box lifting hook must be provided for each project.
- Substitute "KC SCOUT" for "KDOT" when installations are in KC Scout area.
- Conduit must enter pull box on the same side as its approach run.
- All communications and power pull boxes and splice vaults shall be equipped with locate testing stations. Separate stations shall be provided for power and communications conduit. Separate stations will be required for each power or communications run (E.G. entry and exit straight through would require one test station). Multiple runs will require multiple test stations. Selectable ground (and grounding per manufacturer recommendation) is required at each location where there is a splice vault, both sides of a bored conduit deeper than 4', when a run changes direction greater than forty-five degrees or at the end of a fiber run (or start of a branch run). If an existing splice vault that the contractor is connecting to is not equipped with a test station, new test stations will be required to be installed on the existing and new lines.

NOTES:

- Pull boxes with 120/240V conductors shall have 5" x 11" cast-in, stamped concrete labels with "KDOT/ELECTRIC". Text shall be 2 in high and centered. Maintain adequate letter width and spacing.
- Pull boxes with 480V conductors shall have 5" x 11" cast-in, stamped concrete labels with "KDOT CAUTION/HIGH VOLTAGE". Text shall be 2 in high and centered. Maintain adequate letter width and spacing.
- Pull boxes with loop lead-in cables, detector cables, communication cables, or DMS cables shall have 5" x 11" cast-in, stamped concrete labels with "KDOT/ITS". Text shall be 2 in high and centered. Maintain adequate letter width and spacing.
- All metal conduits shall be electrically bonded by a ground bushing and No. 4 bare copper wire.
- All KDOT ITS Communication Pull Boxes must include an in-ground locate test station(s). Locate stations are required for each direction of conduit leaving the pull box. Test stations must be located on the same side as conduits is exiting pull box. Match test station color to the color of the related conduit. Test stations are incidental to pull boxes.

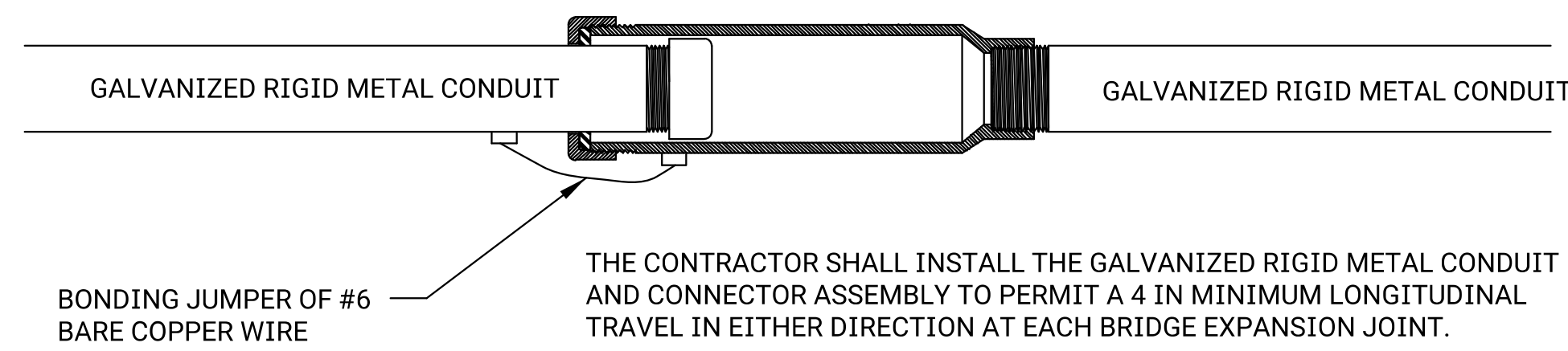


IN-GROUND LOCATE TEST STATION DETAIL
FOR COMMUNICATION PULL BOXES ONLY

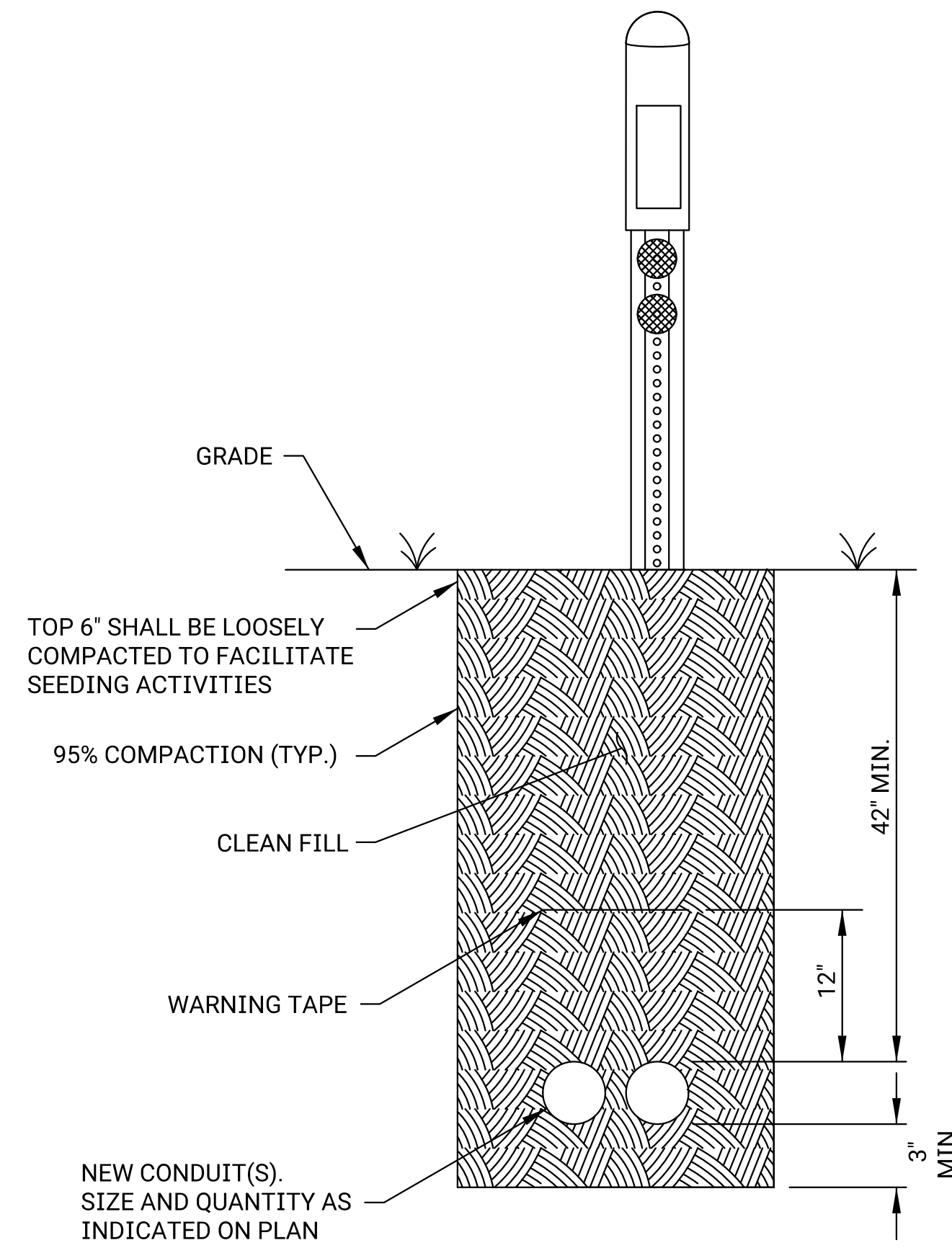
- TRACER WIRE SINGLE TERMINAL SHALL BE SOLID BRASS OR BRONZE ALLOY & ACCESSIBLE FROM THE TOP OF LID WITHOUT REQUIRING LID REMOVAL.
- TRACER LID SHALL BE ORANGE FOR COMMUNICATIONS AND RED FOR POWER AND INCLUDE A CAST-IRON FLANGE FOR LOW TRAFFIC.

KANSAS DEPARTMENT OF TRANSPORTATION				
ITS PULL BOX DETAILS				
NO.	DATE	REVISIONS	BY	APPD
ITS-D07 11-27-23				
FHWA APPROVAL		APPD.		
DESIGNED	DETAILED	QUANTITIES	TRACED	
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.	

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-085898	2025	35	57

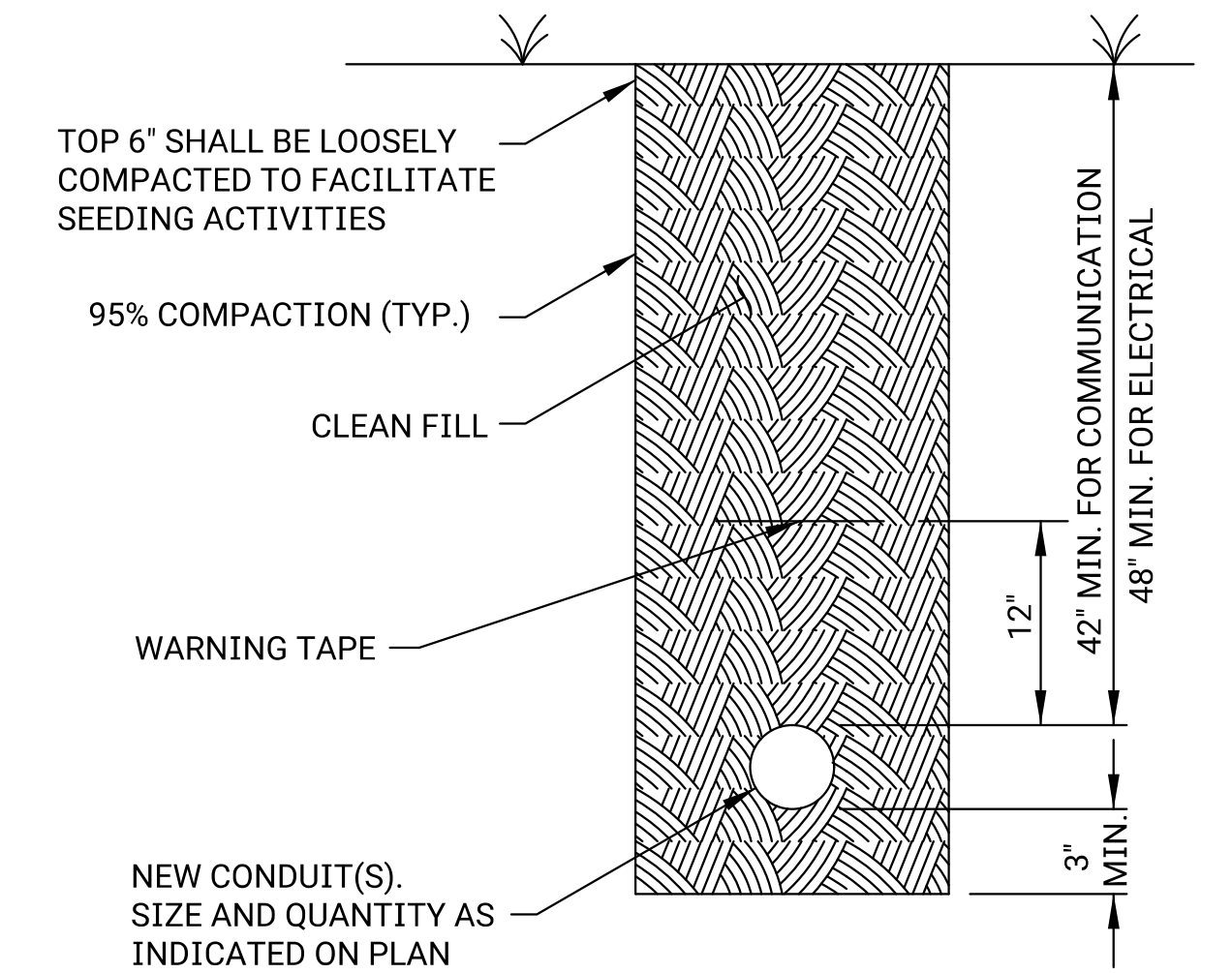


EXPANSION FITTING

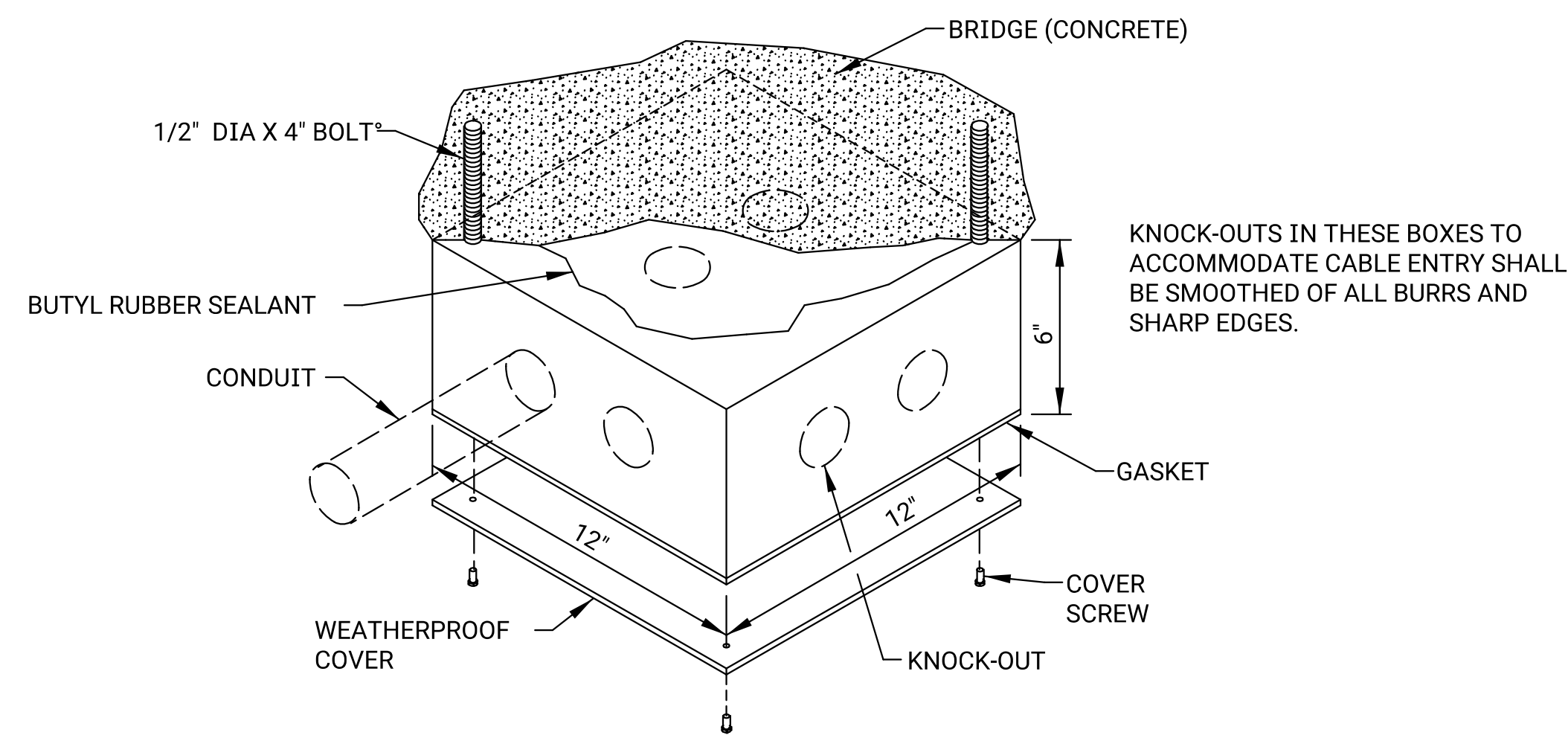


FIBER OPTIC TRENCH DETAIL

- FIBER OPTIC CONDUIT MARKERS TO BE PLACED AT:
- BEGINNING AND END OF BACKBONE/BRANCH CONDUIT RUNS OVER 100 FT
 - EVERY 500 FT FOR BACKBONE/BRANCH CONDUIT RUNS ADJACENT TO R/W
 - BEGINNING AND END OF CONDUIT RUNS ON STRUCTURE
 - AT SPLICE VAULTS (IF NOT A TERMINATION POINT ALREADY)
 - ADD 1 REFLECTIVE DISK TO MARKER IF A SPLICE VAULT WITH SLACK COIL
 - ADD 2 REFLECTIVE DISKS TO MARKER IF A SPLICE VAULT WITH SLACK COIL AND A SPLICE ENCLOSURE
 - REFLECTIVE DISK SHALL BE A ROUND, AMBER, 3" DIAMETER REFLECTOR WITH CENTER MOUNT.

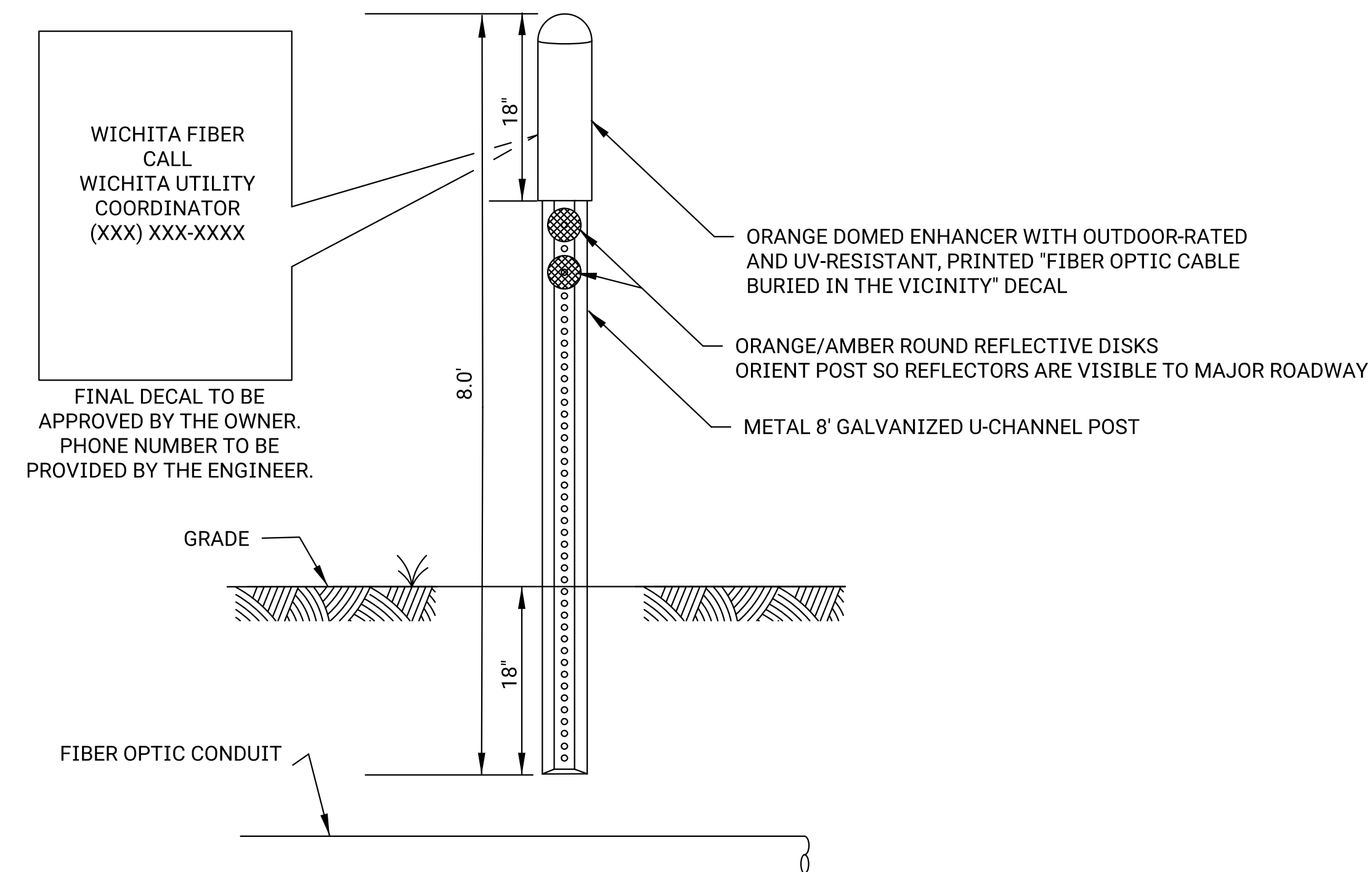


TRENCH DETAIL (NON FIBER)



THE JUNCTION BOX IS TO BE ATTACHED TO THE BRIDGE. THE CONTRACTOR SHALL DRILL TWO HOLES IN THE BOTTOM OF THE BOX AND BOLT THE JUNCTION BOX TO THE BRIDGE AT THE INSERTS PROVIDED. BOLTS SHALL BE 1/2 IN DIA. BY 4 IN LONG AND SHALL CONFORM TO ASTM F3125. A WASHER SHALL BE INSTALLED BETWEEN THE BOLT HEAD AND BOTTOM OF THE BOX.

ABOVE GROUND JUNCTION BOX



FIBER OPTIC CONDUIT ABOVE GROUND DELINEATOR DETAIL

GENERAL NOTES:

All utility crossings under roadway should have a minimum of 5 ft of cover below crown grade or 3 ft cover below ditch grade.
Refer to the KDOT Utility Accommodation Policy for bridge attachment details.

Plotted : 12-FEB-2025 16:20

Drawn By : sspatil
File : ITS-D10.dgn

KANSAS DEPARTMENT OF TRANSPORTATION				
NO.	DATE	REVISIONS	BY	APPD
CONDUIT STRUCTURAL ATTACHMENT AND TRENCH DETAILS				
ITS-D10			07-10-23	
DESIGNED	APPD.	QUANTITIES	TRACED	
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.	