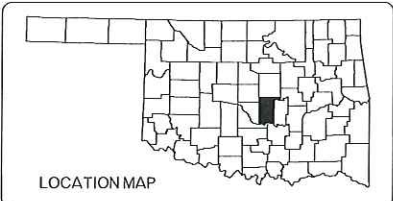


OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB/FISCAL YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	OKLA.	HSIPG-263N(037)TR	2016	1	6
DESCRIPTION		REVISIONS	DATE		
▲		ADD'D SHEET	#5/16		
▲		UPDATED PROJECT NUMBER	#5/16		



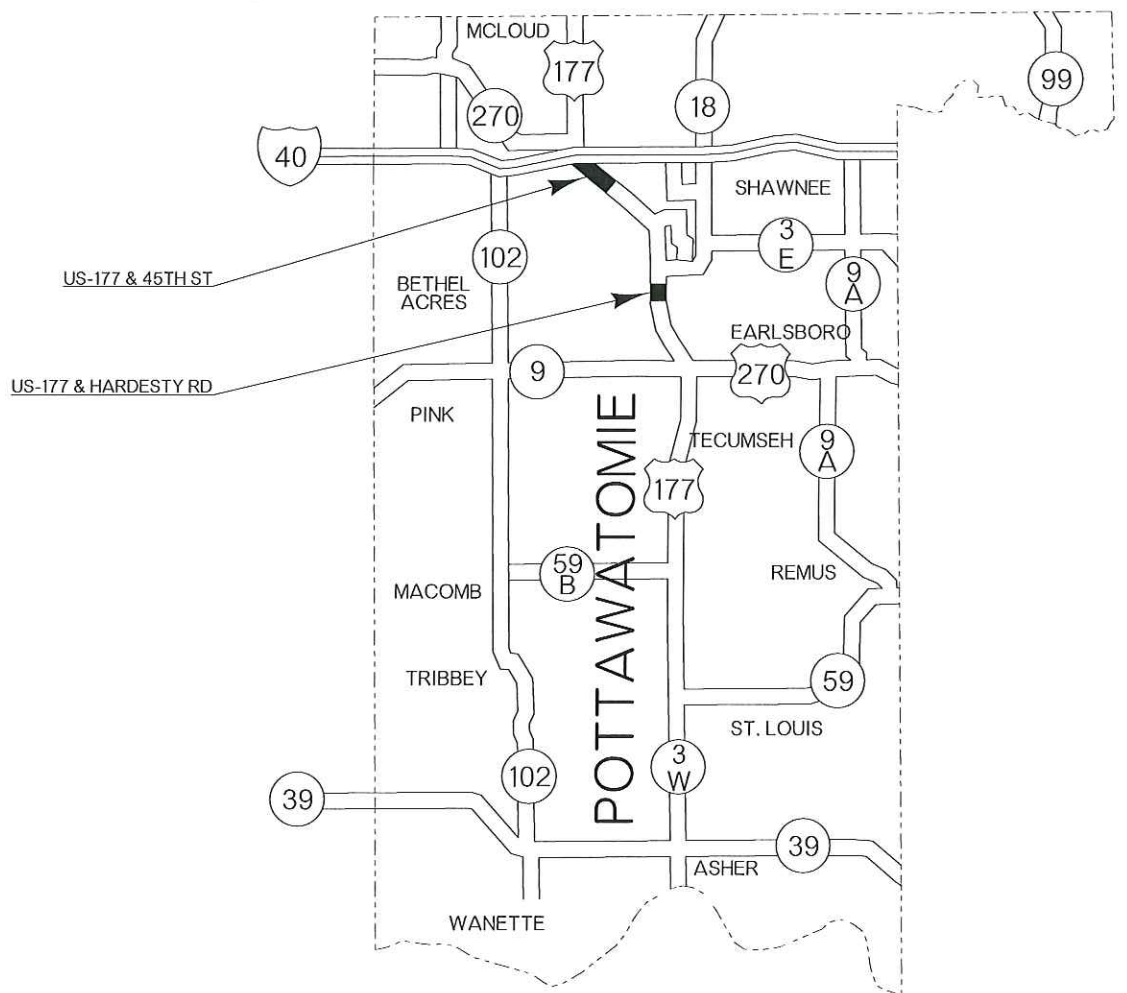
STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT NO. HSIPG-263N(037)TR ▲
DYNAMIC SIGNAL WARNING SIGNS
FOR TRAFFIC SIGNALS
POTTAWATOMIE COUNTY
CONTROL SECTION NO. 270B-63-23
STATE JOB NO. 32430(04)
US-177/270 AT 45TH STREET & AT HARDESTY ROAD

INDEX OF SHEETS

SHEET NUMBER	SHEET DESCRIPTION
0001	TITLE SHEET
AT01	SUMMARY OF PAY QUANTITIES & NOTES
T001	PLAN SHEET (US-177 & 45TH)
T002	PLAN SHEET (US-177 & HARDESTY)
T003	TRAFFIC CONTROL DETAIL
▲ T004	MEDIAN BARRIER DETAIL

TRAFFIC DESIGN
PROJECT ENGINEER: M. WARREN
SQUAD SUPERVISOR: A. ADAMS
SQUAD MEMBER: J. FOX



STANDARDS TO BE INCLUDED

- TRAFFIC**
- RWSF1-1
 - TCS1-1-01
 - TCS2-1-00
 - TCS4-1-01
 - TCS5-1-00
 - TCS6-1-02
 - TCS7-1-02
 - TCS9-1-01
 - TCS14-1-00
 - TCS15-1-00
 - TCS20-1-00

CONVENTIONAL SYMBOLS

- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP
- SECTION LINES
- QUARTER SECTION LINES
- FENCES
- GROUND LINE
- EXISTING ROADS
- BASE LINE
- GRADE LINES
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- OIL WELL
- DRAINAGE STRUCTURES - IN PLACE
- DRAINAGE STRUCTURES - NEW
- RIGHT-OF-WAY LINES - EXISTING
- RIGHT-OF-WAY LINES - NEW
- CONTROLLED ACCESS
- RIGHT-OF-WAY FENCE

2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION GOVERN, APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, JANUARY 4, 2010.

PREPARED BY:
OKLAHOMA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DIVISION

Matt Warren
DATE: 08-16-16

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DATE APPROVED: _____

BY: _____

CHIEF ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

DATE APPROVED: _____

BY: _____

DIVISION ADMINISTRATOR

PROJECT NO. HSIPG-263N(037)TR

COUNTY POTTAWATOMIE HIGHWAY US-270/US-77 SHEET NO. 0001

TRAFFIC GENERAL CONSTRUCTION NOTES

THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD 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.

ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL MEET ODOT'S, "QUALITY STANDARDS FOR TEMPORARY TRAFFIC CONTROL DEVICES".

POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE. EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.

ALL SIGNS SHALL BE REMOVED FROM THE POSTS IN A SALVAGEABLE MANNER FOR REUSE. CARE SHALL BE TAKEN DURING REMOVAL AND TRANSPORTING TO ALLEVIATE DAMAGE OF MATERIALS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED DURING REMOVAL OF SIGNS, AND SIGN POSTS.

AFTER REMOVAL OF ANY SIGN FOOTINGS, THE HOLES SHALL BE FILLED WITH SOIL AND TAMPED AND SHAPED IN A MANNER APPROVED BY THE RESIDENT ENGINEER.

FOR NEW OR EXISTING GROUND MOUNTED SIGNS, MAXIMUM STUB POST PROJECTION ABOVE FOOTINGS/GROUND LINE SHALL BE 1 3/4" + 1/4". MAXIMUM FOOTING PROJECTION ABOVE GROUND LINE SHALL BE NO MORE THAN 2". SHOULD ADDITIONAL SOIL BE REQUIRED, THE RESIDENT ENGINEER WILL DESIGNATE AN AREA TO OBTAIN ADDITIONAL SOIL. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

SYMBOLS AND LEGENDS ARE DIAGRAMMATIC ONLY AND LOCATIONS SHALL BE ADJUSTED FOR EXISTING FIELD CONDITIONS, BUT NO MAJOR ALTERATIONS OR RELOCATIONS WILL BE MADE WITHOUT FIRST CONSULTING WITH THE CHIEF TRAFFIC ENGINEER DIVISION AT (405) 521-2861.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE O.D.O.T. STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

ALL BROKEN CONCRETE, WASTE MATERIAL, AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT WILL BE MADE FOR THE DISPOSAL OF THIS MATERIAL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLECT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC... PRIOR TO DIGGING NEAR THE UTILITIES, THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDERGROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES:
THE "OKIE" NOTIFICATION CENTER 811 OR 1-800-522-6543 OR WWW.CALOKIE.COM OR THE LOCAL COUNTY CLERKS OFFICE.

THE ITEMS THAT ARE TO BE REMOVED AND/OR RESET SHALL BE HANDLED WITH CARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OCCURRING DURING THESE OPERATIONS.

THE CONTRACTOR SHALL PROVIDE A PERSON TO BE ON 24 HOUR CALL AS NEEDED AS DETERMINED BY THE ENGINEER. THIS PERSON SHALL HOLD A CURRENT CERTIFICATION FROM THE AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA) OR THE OKLAHOMA TRAFFIC ENGINEERING ASSOCIATION (OTEA) AS A TRAFFIC CONTROL TECHNICIAN OR TRAFFIC CONTROL SUPERVISOR.

ALL REGULATORY SIGNS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE III SHEETING.

ALL WARNING SIGNS SHALL HAVE FLUORESCENT YELLOW SHEETING. THE FLUORESCENT YELLOW SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) REQUIREMENTS FOR TYPE VIII SHEETING.

THE MANUFACTURER SHALL FURNISH A TYPE 'A' CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.

TRAFFIC CONSTRUCTION PAY QUANTITY NOTES

(TC-25) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS REQUIRED FOR COMPLETION OF THE PROJECT.

(TC-84) ALL SIGNS AND BARRICADES, WHICH ARE SHOWN WITH TYPE "A" LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS. (NOTE FOR CONSULTANT OR DESIGNER: THIS NOTE SHALL BE USED WHEN TRAFFIC CONTROL IS A LUMP SUM PAY ITEM.)

(TS-34) 60 CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THE SIGN DAYS PAY ITEMS. THE AMOUNT OF CALENDAR DAYS USED TO COMPUTE THE SIGN DAY PAY ITEMS IS AN ESTIMATED QUANTITY ONLY, BASED ON THE CURRENT O.D.O.T. STANDARDS AND SUGGESTED CONSTRUCTION SEQUENCE FOR THIS PROJECT. THESE ESTIMATED SIGN DAY QUANTITIES MAY CHANGE AS THE PROJECTS CONSTRUCTION TRAFFIC CONTROL IS MODIFIED DURING CONSTRUCTION.

(TS-34) INCLUDED IN THIS PAY ITEM IS THE REMOVAL OF ANY EXISTING SIGNS TO BE REPLACED BY NEW ASSEMBLIES AND THE REMOVAL OF ANY EXISTING SIGNS THAT WILL BE IN CONFLICT WITH THE NEW ROADWAY OR NEW SIGNAGE.

SPECIAL NOTES

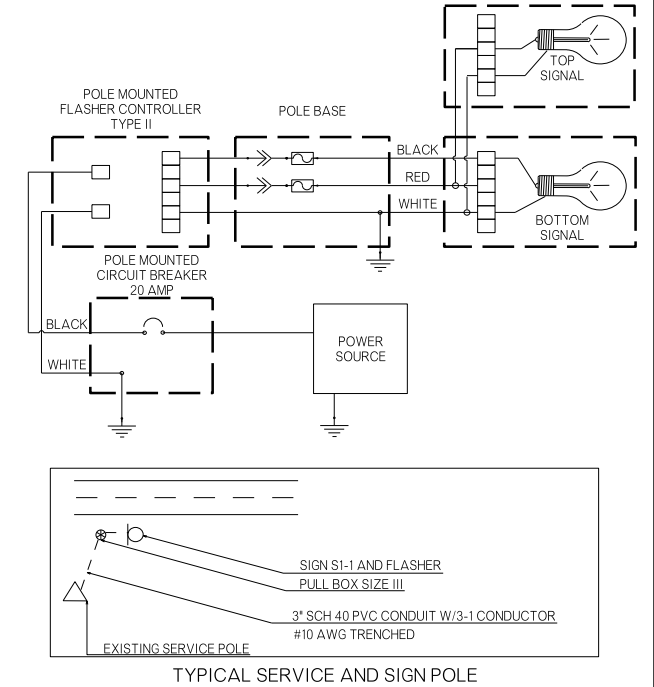
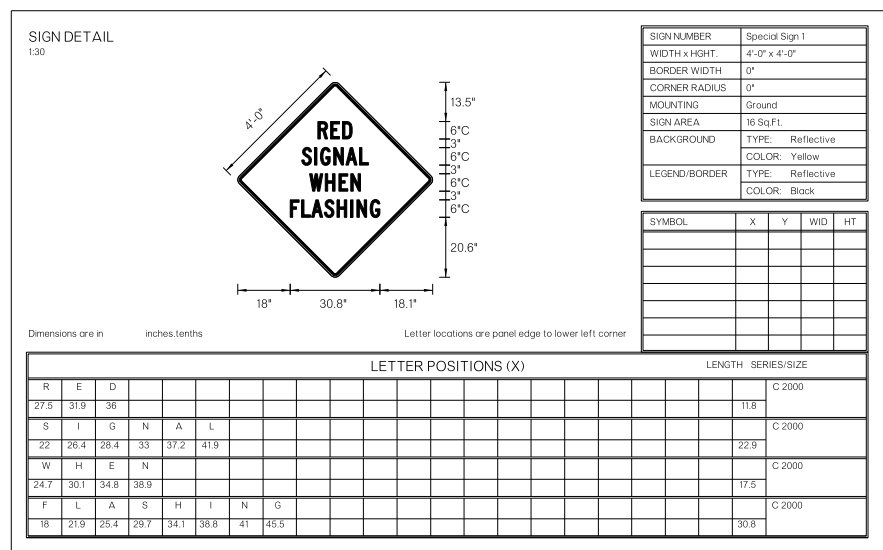
- (SP-1) PRICE BID FOR THIS ITEM SHALL INCLUDE ALL COST FOR THE SOLID STATE FLASHER CONTROLLERS (TYPE II) AND ALL HARDWARE ASSOCIATED WITH PROPERLY INSTALLING THE CONTROLLERS IN ACCORDANCE WITH STANDARD RWSF1-1-(LATEST REVISION).
- (SP-2) THIS PROJECT SHALL INCLUDE SIXTEEN (16) YELLOW 1 WAY 1 SECTION ADJUSTABLE LED SIGNAL HEADS, TYPE S-22, THE LED TRAFFIC MODULES, LENSES AND ALL ASSOCIATED MATERIAL AND EQUIPMENT SHALL CONFORM TO I.T.E. VEHICLE TRAFFIC CONTROL SIGNAL HEAD (V T C S H) STANDARDS IN EFFECT AT THE TIME THAT THE ORDER IS PLACED. LED HEADS SHALL BE CAPABLE OF OPERATING WITHOUT A REFLECTOR.
- (SP-3) PRICE BID FOR THIS ITEM SHALL INCLUDE ALL COST FOR THE SQUARE PEDESTAL CAST ALUMINUM BASE AND COLLAR AND ALL HARDWARE ASSOCIATED WITH PROPERLY INSTALLING THIS SIGN IN ACCORDANCE WITH STANDARD RWSF1-1-(LATEST REVISION).
- (SP-4) INCLUDED WITH THIS PAY ITEM SHALL BE THE STRUCTURAL CONCRETE AND REINFORCING STEEL FOR THE ASSEMBLY FOOTING AS WELL AS THE 4" GALVANIZED STEEL PIPE.
- (SP-5) ALL TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DIRECTED BY THE ENGINEER. THE PRICE BID SHALL INCLUDE THE REMOVAL OF ALL FOOTINGS BELOW GROUND LEVEL OR AS DIRECTED BY THE ENGINEER. FOOTINGS TO BECOME THE PROPERTY OF THE CONTRACTOR.
- (SP-6) ALL SIGNS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DIRECTED BY THE ENGINEER. THE PRICE BID SHALL INCLUDE THE REMOVAL OF ALL FOOTINGS BELOW GROUND LEVEL OR AS DIRECTED BY THE ENGINEER. FOOTINGS TO BECOME THE PROPERTY OF THE CONTRACTOR.
- (SP-7) CONTRACTOR SHALL REPLACE EXISTING CONTROLLER ON HARDESTY TO MATCH THE ECONOLITE ASC/3-2100 ON 45TH ST. OR APPROVED EQUIVALENT UNLESS THE CONTROLLER HAS ALREADY BEEN REPLACED.
- (SP-8) BOTH ODOT & THE CITY OF SHAWNEE SHALL BE PRESENT WHEN THE SIGNAL TIMING IS PROGRAMMED. CONTACT ODOT DESIGN ENGINEER TO COORDINATE.
- (SP-9) ALL SIGNS ARE TO BE CONNECTED TO AND DYNAMICALLY CONTROLLED BY THE EXISTING TRAFFIC SIGNAL CONTROLLERS AT THE SAME INTERSECTIONS, SO AS TO BE ACTIVATED BEFORE THE AMBER INDICATION AND END WITH THE END OF THE RED INDICATION FOR THAT APPROACH. THE DETERMINATION OF THE AMOUNT OF LEAD TIME IS TO BE APPROVED BY THE ENGINEER.
- (SP-10) THIS PAY ITEM TO BE USED AS REQUIRED BY THE ENGINEER.
- (SP-11) ALL SIGNS SHALL BE OFFSET SEVEN(7) FEET FROM THE EDGE OF PAVEMENT.
- (SP-12) THE TWO SIGNS FOR HARDESTY RD THAT ARE TO BE ATTACHED TO THE MEDIAN BARRIER WALL SHALL BE ATTACHED ACCORDING TO THE BASE PLATE DESIGN ON SHEET T004. BASE PLATE & ANCHOR BOLTS ARE INCLUDED IN THE PAY ITEM FOR THE REGULATORY OR WARNING SIGN ASSEMBLY.
- (SP-13) THE CONDUIT SHALL EXTEND INTO THE SIGN PIPE TWO(2) INCHES PAST THE TOP OF THE BASE PLATE. ALL JOINTS IN THE CONDUIT MUST BE WATERPROOF SEALED. THE CONDUIT SHALL BE SECURELY ATTACHED TO THE MEDIAN BARRIER.

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	UPDATED JPN NUMBER, UPDATE PAY QUANTITIES & NOTES	8/5/16

PAY QUANTITY SCHEDULE				
0300 TRAFFIC CONTROL				
PAY ITEM	CODE NO.	DESCRIPTION	UNIT	QUANTITY
880(J)	8905	CONSTRUCTION TRAFFIC CONTROL (TC-25.84)	LSUM	1.00

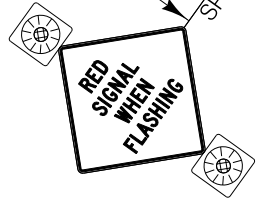
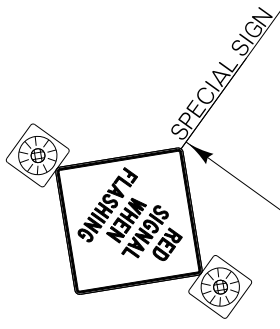
PAY QUANTITY SCHEDULE				
0301 TRAFFIC SIGNAL & SIGNING				
PAY ITEM	CODE NO.	DESCRIPTION	UNIT	QUANTITY
802(B)	8336	1 1/2" PVC SCH. 40 PLASTIC CONDUIT BORED (SP-13)	LF	700.00
802(B)	8338	1 1/2" PVC SCH. 40 PLASTIC CONDUIT TRENCHED (SP-13)	LF	2,380.00
803(A)	8067	PULL BOX (SIZE III)	EA	34.00
805(D)	8756	(PL)REMOVE & RESET EXISTING SIGNS (SP-10)	EA	3.00
825(A)	8559	SIGNAL SYSTEM CONTROLLER UPGRADE (SP-7,8,9)	EA	1.00
827	8623	SOLID STATE FLASHER CONTROLLER (TYPE II) (SP-1)	EA	8.00
831	8301	1 WAY 1SEC. ADJ. SIG. HD. S-22 (SP-2)	EA	16.00
834(A)	8207	5/C TRAFFIC SIGNAL ELECTRICAL CABLE	LF	3,080.00
836	8425	REGULATORY OR WARNING SIGN ASSEMBLY (SP-3,4,5,6,7,12)	EA	8.00
850(A)	8110	SHEET ALUMINUM SIGNS (SP-6,11)(TS-34)	SF	128.00

PAY QUANTITY SCHEDULE				
0640 CONSTRUCTION				
PAY ITEM	CODE NO.	DESCRIPTION	UNIT	QUANTITY
641	1552	MOBILIZATION	LSUM	1.00



SUMMARY OF PAY QUANTITIES & NOTES		
Drawn	JF	6/14
Design	JF	6/14
Checked	AA	6/14
TRAFFIC ENGINEERING		
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION	
DIVISION 3	JOB/PECE NO. 32430(04)	SHEET NO. AT01

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	UPDATED JP NUMBER & LENGTH	8/5/16



NOTE TO SCALE

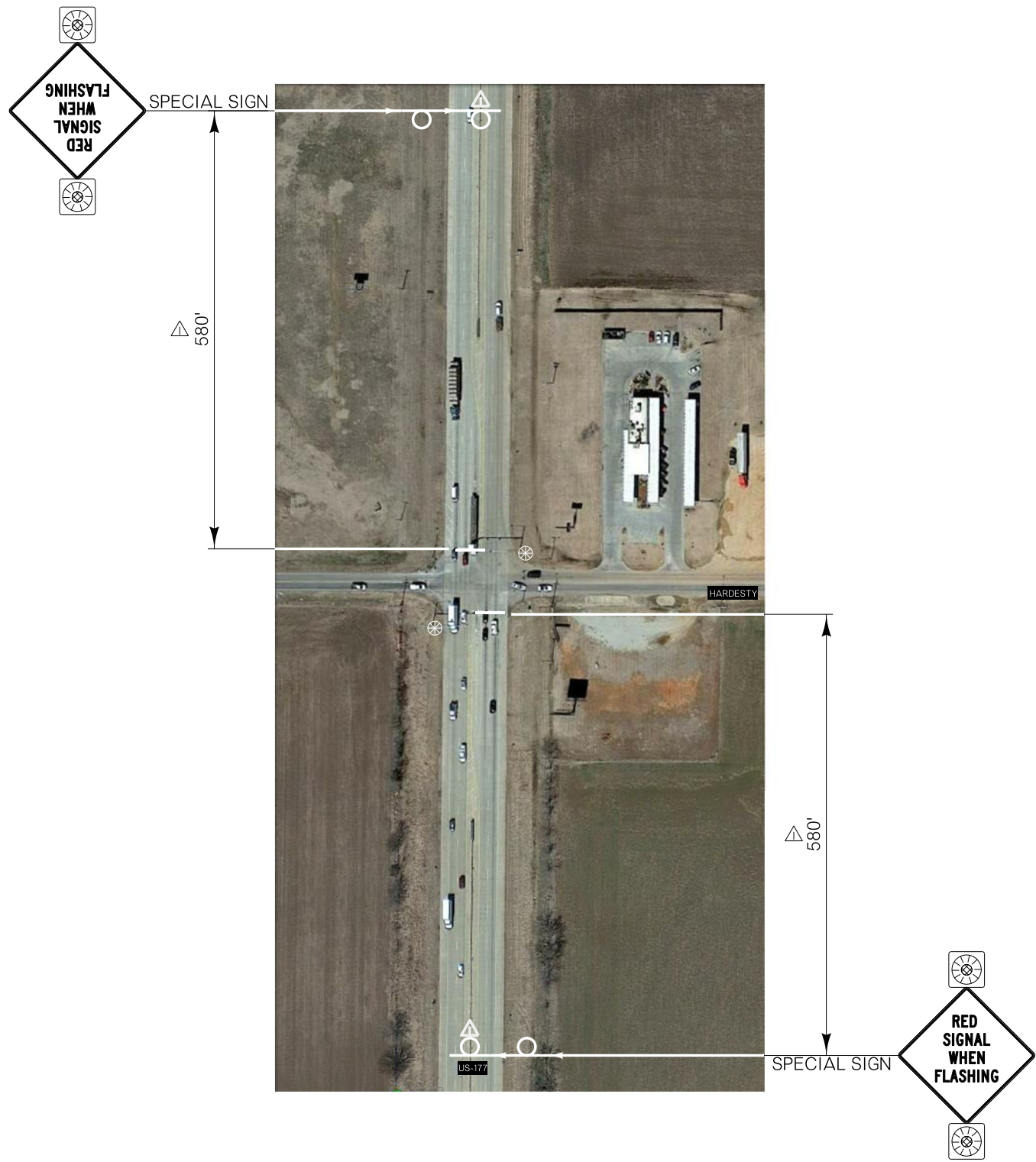
KEY:

○	SIGNAL
⊗	SIGNAL

SIGNAL PLAN (US-177 & 45TH)			Drawn	JF	6/14
			Design	JF	6/14
			Checked	AA	6/14
			TRAFFIC ENGINEERING		

STATE OF OKLAHOMA	DIVISION 3	DEPARTMENT OF TRANSPORTATION	JOB PIECE NO. 32430(04)	SHEET NO. T001
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REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	UPDATED JP NUMBER	8/5/16
2	UPDATED SIGNS & LENGTH	



NOTE TO SCALE

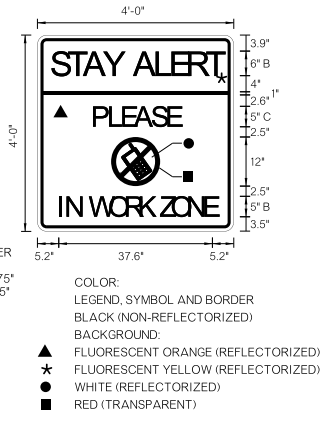
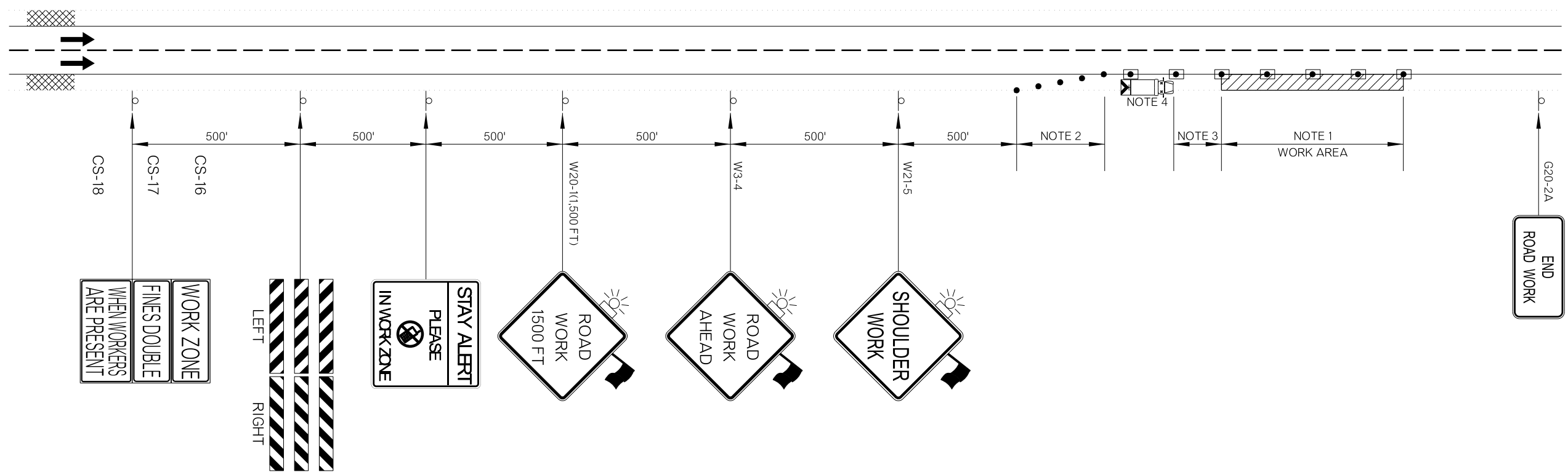
KEY:

⊖	SIGN
⊗	SIGNAL

SIGNAL PLAN (US-177 & HARDESTY)			Drawn	JF	6/14
			Design	JF	6/14
			Checked	AA	6/14
			TRAFFIC ENGINEERING		

STATE OF OKLAHOMA	DIVISION 3	DEPARTMENT OF TRANSPORTATION	JOB PIECE NO. 32430(04)	SHEET NO. T002
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REVISIONS		
REV. NO.	DESCRIPTION	DATE
△	UPDATED JP NUMBER	8/5/16



NOTE 1
 MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES (FEET) SHALL BE TWICE THE POSTED SPEED LIMIT (M.P.H.) WITH THE FOLLOWING EXCEPTIONS. SPACING SHALL NOT EXCEED 50 FEET FOR CONES OR TUBE CHANNELIZERS. SPACING SHALL NOT EXCEED 75 FEET FOR CHANNELIZER CONES, SPACING SHALL NOT EXCEED 100 FEET FOR TYPE II BARRICADES, VERTICAL PANELS OR DRUMS.

NOTE 2
 A MINIMUM OF FIVE (5) CHANNELIZING DEVICES SHALL BE PLACED THRU THIS AREA.

NOTE 3
 A LONGITUDINAL BUFFER AREA, TO ALLOW WORKERS TIME TO EVACUATE THE WORK AREA, SHOULD BE PROVIDED. FOR GUIDELINES ON SETTING THE LENGTH OF THIS BUFFER, SEE STANDARD DRAWING TCS2-1-(LATEST REVISION). ACTUAL LENGTH SHALL BE DETERMINED BY FIELD CONDITIONS AND THE JUDGEMENT OF THE ENGINEER.

NOTE 4
 THE SHADOW VEHICLE SHOWN AT THE BEGINNING OF THE WORK AREA SHALL BE IN PLACE WHENEVER WORKERS ARE IN THE WORK AREA. THIS VEHICLE SHALL BE REMOVED FROM THE ROADWAY WHENEVER WORKERS ARE NOT IN THE WORK AREA. THIS VEHICLE SHALL BE EQUIPPED WITH AN ACTUATED FLASHING OR REVOLVING YELLOW LIGHT.

FOR ADDITIONAL INFORMATION ABOUT TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES, SEE STANDARD DRAWING TCS2-1-(LATEST REVISION).

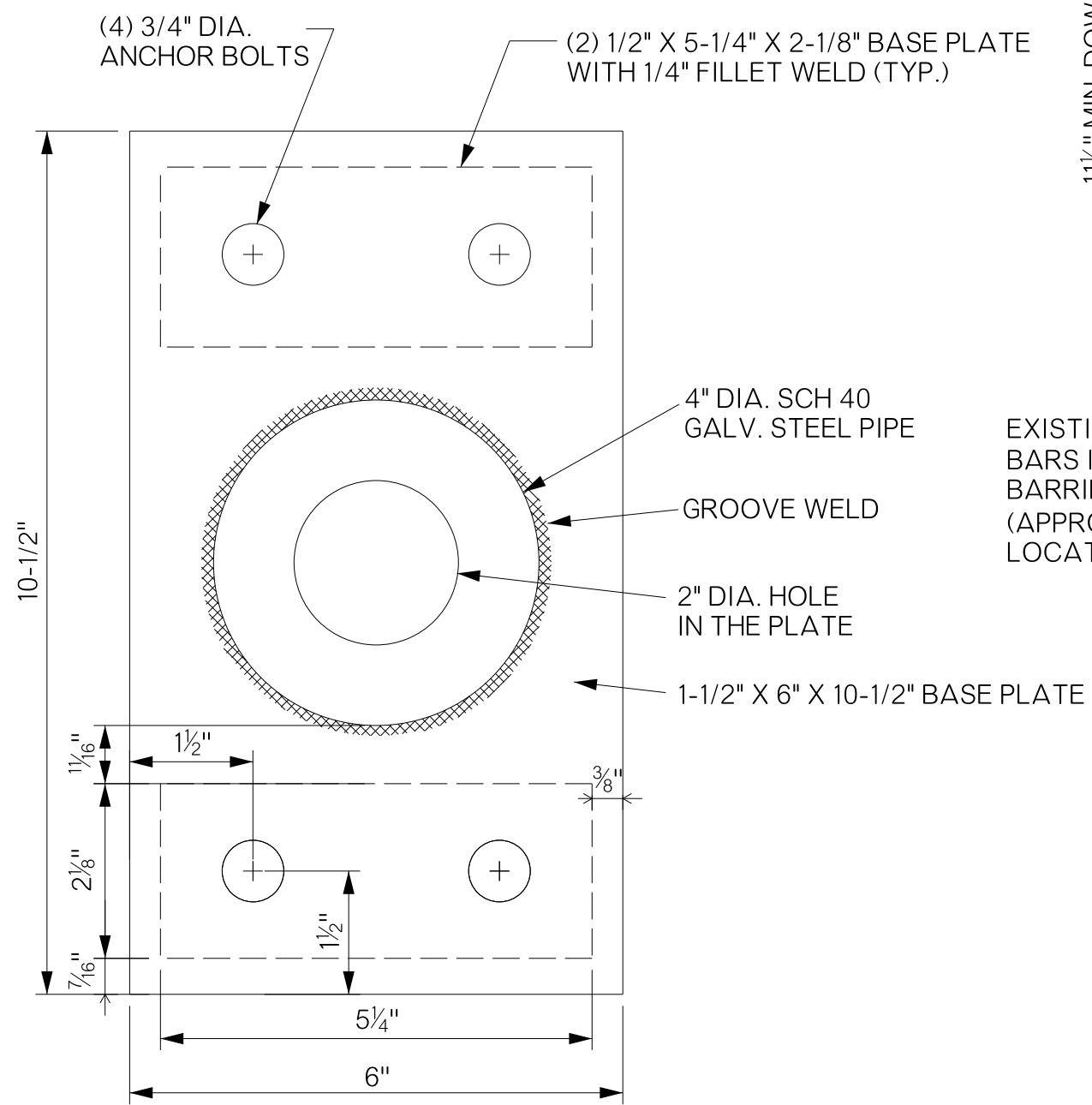
NOTE TO SCALE

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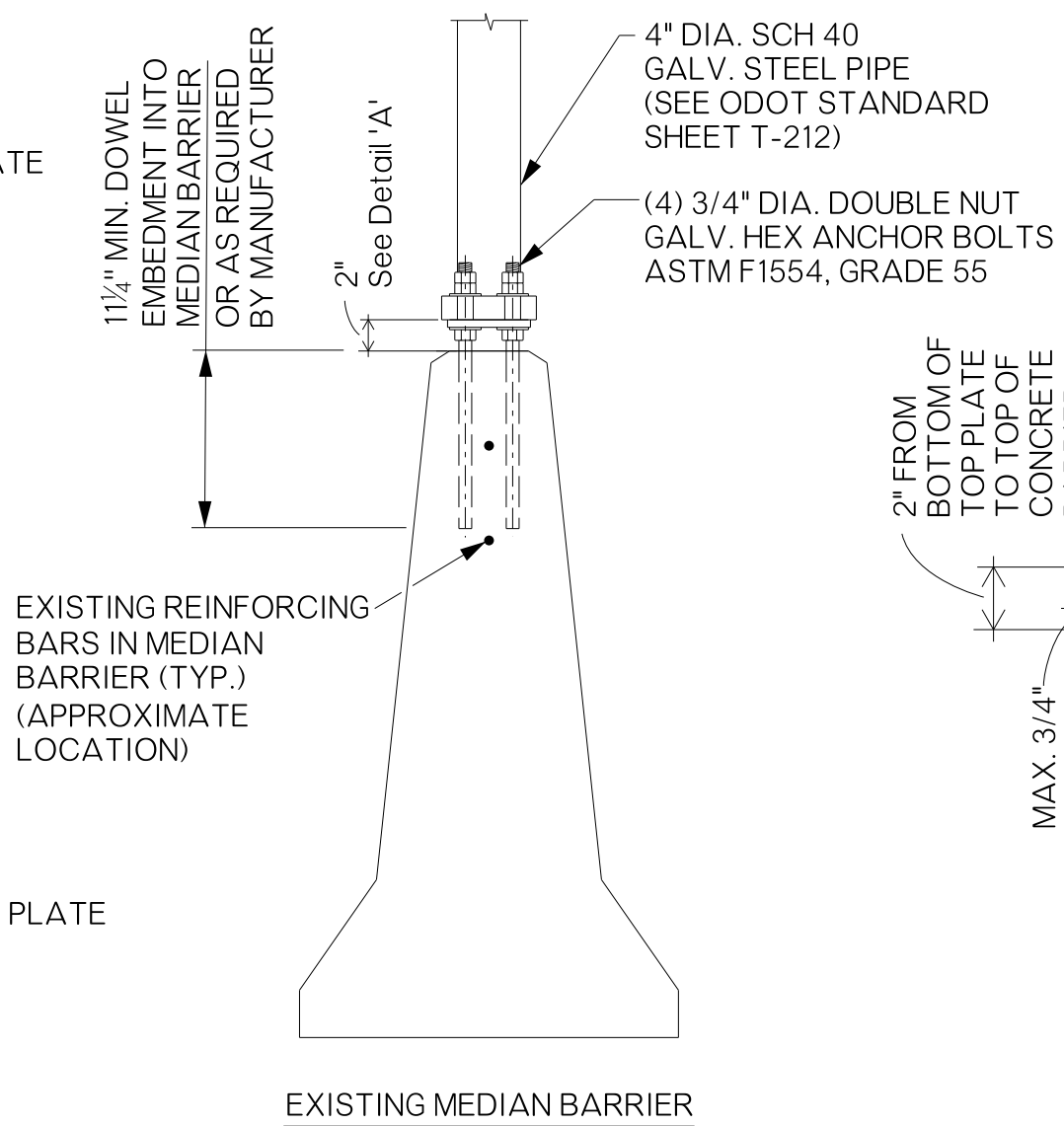
	SIGN
	WORK AREA
	SHADOW VEHICLE
	TRUCK MOUNTED ATTENUATOR
	DRUM
	CHANNELIZING CONE

TRAFFIC CONTROL DETAIL	Drawn	JF	6/14
	Design	JF	6/14
	Checked	AA	6/14
	TRAFFIC ENGINEERING		

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADDED SHEET	8/5/16



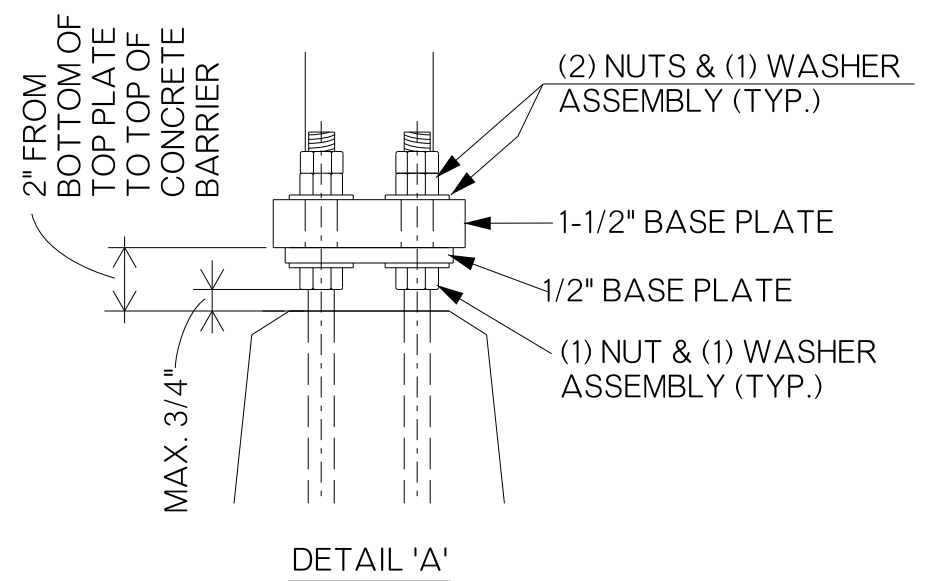
BASE PLATE DETAIL



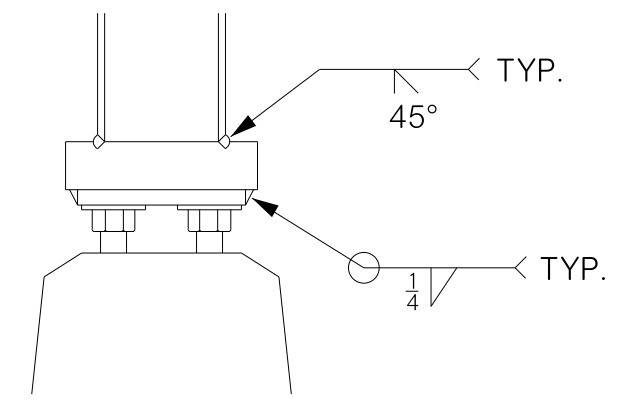
EXISTING MEDIAN BARRIER

WELDING NOTES

1. WELDING IN COMPLIANCE WITH AWS D1.1
2. ALL WELDING TO BE PERFORMED BEFORE GALVANIZING.



DETAIL 'A'



DETAIL 'B'

HARDESTY RD. AND US-177
SHAWNEE, OK

AUG 15, 2016

BASE PLATE DESIGN	Drawn	JF	8/16
	Design	JF	8/16
	Checked	AA	8/16
	TRAFFIC ENGINEERING		