

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

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CITY OF DAYTON
DEPARTMENT OF WATER, CONST. INSP.
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ROBERT STANLEY, CE

CITY OF WEST CARROLLTON
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WEST CARROLLTON, OH 45449
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MONTGOMERY COUNTY
PAUL GRUNER
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COLUMBIA GAS OF OHIO
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ETHAN POPE
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221 EAST FOURTH ST.
BUILDING 121-900
CINCINNATI, OH 45201
MIKE WILLIAMS, ENG.
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DUKE ENERGY ELECTRIC (DISTRIBUTION)
(Ifka, CINCINNATI GAS & ELECT.)
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GARRY HEBBLER

DUKE ENERGY ELECTRIC (TRANSMISSION)
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DUKE ENERGY GAS
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UTILITIES (CONTINUED)

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ODOT ITS LAB
ODOT OFFICE OF TRAFFIC OPERATIONS
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ODOT DISTRICT 7
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JONATHAN.KOESTER@DOT.OHIO.GOV

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

UTILITIES (CONTINUED)

LOCATION OF EXISTING UTILITIES ARE BASED ON RECORD PLANS. THE CONTRACTOR SHALL FIELD VERIFY THAT THE PROPOSED LOCATION IS CLEAR FROM OVERHEAD AND UNDERGROUND UTILITY CONFLICTS. IN ADDITION TO CONTACTING OUPS FOR UTILITY FIELD MARKINGS, THE CONTRACTOR SHALL ALSO CONTACT ODOT DISTRICT 7, THE CITY OF DAYTON, THE CITY OF MIAMISBURG, THE CITY OF MORAINE, THE CITY OF NORTHRIDGE, THE CITY OF WEST CARROLLTON AND MONTGOMERY COUNTY TO REQUEST FIELD MARKING OF ANY PUBLIC UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR IDENTIFYING UTILITY CONFLICTS, AND NOTIFYING THE ENGINEER OF ANY POTENTIAL CONFLICTS. THE SIGN LOCATION AND/OR UNDERGROUND CONDUIT SHALL BE ADJUSTED BY THE ENGINEER AS NECESSARY.

EXPOSING EXISTING UTILITIES BEFORE DIGGING

THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE PROXIMITY OF EXISTING AND/OR RELOCATED UTILITY FACILITIES. ALL UTILITIES NEAR SUBSURFACE WORK SHALL BE EXPOSED PRIOR TO DIGGING. CONTRACTOR MUST NOTIFY UTILITY OWNERS (CONTACT INFORMATION ON THIS SHEET) 7 DAYS PRIOR TO DIGGING OVER OR AROUND UNDERGROUND FACILITIES TO GIVE THE OWNER THE OPPORTUNITY TO BE ON-SITE DURING EXPOSING/ CONSTRUCTION.

IF, WHILE EXPOSING, CONFLICTS ARE FOUND TO BE PRESENT BETWEEN PROPOSED WORK AND EXISITNG UTILITIES THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER AND THE UTILITY OWNER.

COSTS TO EXPOSE EXISTING UTILITIES SHALL BE INCLUDED IN THE ITEMS OF WORK AFFECTED. THE CONTRACTOR IS REMINDED TO KEEP THEIR OUPS TICKET UPDATED ACCORDING TO INDUSTRY PRACTICES.

EXISTING PLANS

EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 7 OFFICE IN SIDNEY OHIO.

- MOT-00075-11.80 (1999) MOT-00035-10.20 (2011)
MOT-00075-14.70 (2007) MOT-00725-13.68 (2004)
MOT-00075-9.29 (2004) MOT-00048-13.53 (2006)
MOT-00075-0.00 (2010) DAR-00705-9.02 (2011)
MOT-00075-13.12 (2007) MOT-00725-13.82 (2009)
MOT-00075-0.00 (2004) MIA-00075-10.85 (2008)
MOT-00075-3.77 (2004) MOT-00741-1.52 (2010)
MOT-00075-11.07 (2009) SHE-00075-18.49 (2012)
MOT-00075-0.00 (2008) LOG-00033-15.68 (2013)
MOT-00075-12.00 (2012) AUG-00033-2.79 (2013)
MOT-00075-10.41 (2008) CHP-00068-0.00 (2015)
MOT-00075-5.21 (2009) MOT-00070-0.00 (2017)
MOT-00075-11.88 (2008) D07-4-0.00 (2018)
MOT-00075-0.00 (2012) D07-75-2.34 (2020)
MOT-00075-10.44 (2015) FAY-00035-0.00 (2013)
MOT-00075-20.30 (2016) D08-75-0.00 (2018)
MOT-00075-0.00 (2019) D08-75-0.00 (2019)
MOT-00075-14.95 (2017) MOT-104979-AsFiledPlans
MOT-00075-7.53 (2019) D07-4-11.56 (2019)
MOT-ITS SYSTEM, PID 77249, SPN 110361

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

Table with 2 columns: Item Description, Quantity. Includes items like 659, TOPSOIL (634 CU. YD.), 659, SEEDING AND MULCHING (5710 SQ. YD.), 659, REPAIR SEEDING AND MULCHING (286 SQ. YD.), 659, INTER-SEEDING (286 SQ. YD.), 659, COMMERCIAL FERTILIZER (1.28 TON), 659, LIME (1.18 ACRES), 659, WATER (32 M. GAL.).

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.



ITEM 809 WRONG WAY DETECTION SYSTEM (ALTERNATE 1)

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A COMPLETE WRONG WAY DETECTION SYSTEM. THE SYSTEM SHALL DETECT THE PRESENCE OF VEHICLES TRAVELING IN THE WRONG DIRECTION ON AN EXIT RAMP. WHEN A VEHICLE TRAVELING IN THE WRONG DIRECTION IS DETECTED, WHITE LED WARNING LIGHTS IN THE SIGN SYSTEM SHALL BE ACTIVATED, A CAMERA SHALL RECORD THE EVENT AND AFTER A SECOND DETECTOR CONFIRMS THAT THE VEHICLE CONTINUED TO TRAVEL IN THE WRONG DIRECTION, ELECTRONIC NOTIFICATION SHALL BE SENT.

ALL ELEMENTS OF THE WRONG WAY SYSTEM SHALL BE PROVIDED AS A COMPLETE SYSTEM BY A SINGLE VENDOR/MANUFACTURE.

ALL ELEMENTS OF THE WRONG WAY DETECTION SYSTEM SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM OF WORK UNLESS SEPARATELY ITEMIZED. THE FOLLOWING LIST REPRESENTS AN OUTLINE OF COMPONENTS TO BE INCLUDED WITH THE SYSTEM. ITEMS NOT SPECIFICALLY LISTED BELOW, BUT REQUIRED TO PROVIDE FOR A FULLY FUNCTIONING WRONG WAY DETECTION SYSTEM SHALL ALSO BE INCLUDED:

- RADAR VEHICLE DUAL DIRECTION DETECTOR UNITS.
 - NUMBER OF UNITS FURNISHED PER SITE SHALL BE AS REQUIRED TO MEET THE FUNCTIONALITY REQUIREMENTS OF THE SYSTEM AND DETECT ALL WRONG WAY VEHICLES.
 - DETECTION HARDWARE SHALL BE POWERED BY 120VAC.
 - ULTRA-LOW POWERED RADAR UNITS WITH PROGRAMMABLE OUTPUTS.
 - SHALL BE CAPABLE OF DETECTING INCOMING OR OUTGOING TARGETS TRAVELING BETWEEN 5 AND 100 MPH.
 - SHALL BE SEALED FROM WATER INTRUSION.
 - SHALL INCLUDE SELF-TESTING, STATUS LED LIGHTS AND SELF-PROTECTION FROM REVERSE POLARITY.
 - SHALL UTILIZE RS232 SERIAL COMMUNICATION FOR PROGRAMMING.
- (2)-CONFORMATION CAMERA.
 - WIDE ANGLE HDTV 1080P OUTDOOR RATED WITH CROSS-LINK ANALYSIS.
 - SHALL HAVE PROGRAMMABLE EVENT BASED LOGIC THAT INTEGRATES WITH THE WRONG WAY LOGIC CONTROLLER.
 - IP66 RATED, NEMA 4X
 - PROVIDE FOR A MINIMUM OF ONE INPUT AND ONE OUTPUT.
 - PROVIDE FOR ADJUSTABLE IMAGE SETTINGS.
 - USE A 1/4" PROGRESSIVE SCAN RGB CMO
- (1)-AN ILLUMINATOR SHALL BE FURNISHED AND INSTALLED WHERE AMBIENT LIGHTING CONDITIONS DON'T PROVIDE SUFFICIENT LIGHT LEVELS TO OPERATE CAMERAS IN COLOR MODE.
- (1)-CELLULAR MODEM
 - WITH 5 YEARS OF MONITORING SERVICE. THE SYSTEM SHALL INCLUDE SYSTEM MONITORING, NOTIFICATIONS, AND UPDATES VIA A CELLULAR SERVICE, HOSTED/PROVIDED BY THE MANUFACTURE FOR A PERIOD OF 5 YEARS FOLLOWING THE ORIGINAL PROJECT COMPLETION DATE
 - 4G LTE CELLULAR GATEWAY WITH INTEGRAL FIVE PORT 10/100 ETHERNET SWITCH WITH EXTERNAL OMNI-DIRECTION ANTENNA.
 - INCLUDE INTEGRAL RS232 PORT.
 - SHALL BE CAPABLE OF OVER THE AIR FIRMWARE UPDATES AND REMOTE MANAGEMENT.
 - SHALL BE CAPABLE OF IPSEC VPN
- (4)-WIRELESS RADIO COMMUNICATION UNITS. RADIO CONTROL SHALL OPERATE ON A 900 MHZ FREQUENCY HOPPING SPREAD SPECTRUM NETWORK, WI-FI OR

ITEM 809 WRONG WAY DETECTION SYSTEM (ALTERNATE 1), (CONT.)

APPROVED EQUAL. RADIOS SHALL INTEGRATE COMMUNICATION OF SIGN CONTROL CIRCUIT TO ACTIVATE SIGNS. THE RADIO SHALL BE SYNCHRONIZED SO ALL OF THE REMOTE INDICATIONS WILL TURN ON WITHIN 120 MSEC OF EACH OTHER AND REMAIN SYNCHRONIZED THROUGH-OUT THE DURATION OF THE FLASHING CYCLE.

- LOOP DETECTOR MONITORING CARD
 - NUMBER OF CARDS FURNISHED SHALL BE SUFFICIENT TO ACCOMMODATE THE PROPOSED LOOP DETECTION NEEDS.
 - SHALL WORK WITH STANDARD NEMA/170/2070 CARD RACKS.
 - SHALL UTILIZE TIA232 SERIAL COMMUNICATION FOR PROGRAMMING.
 - SHALL INCLUDE SELF-TESTING AND LED STATUS LIGHTS.
 - PROVIDE FOR A MINIMUM OF 4 FREQUENCY SETTINGS.
- (1) - WRONG WAY LOGIC CONTROLLER WITH INTEGRATED TEST FUNCTIONS.
 - SHALL ANALYZE INPUTS FROM MULTIPLE SENSORS AND CAMERAS.
 - PROVIDE FOR PROGRAMMABLE OUTPUTS.
 - SHALL CONTAIN DRIVE RELAYS
 - SHALL INCLUDE LED STATUS LIGHTS AND ON-SITE TESTING.
 - PROVIDE FOR MICRO USB INTERFACE
- (1) - PROGRAMMABLE SIGN CONTROLLER
 - PROVIDE FOR A MINIMUM OF TWO INPUTS AND OUTPUTS
 - PROGRAMMABLE INCLUDING FLASH PATTERN, DURATION AND LED INTENSITY.
 - INTEGRATE WITH WIRELESS RADIOS.
 - INCLUDE REAL TIME CLOCK WITH ON-BOARD BATTERY.
 - PROVIDE FOR DATA LOGGING.
 - PROVIDE FOR RS232 SERIAL INTERFACE
- POLE MOUNTED CONTROL CABINET(S), WITH CONTROL EQUIPMENT.
- (2) - WRONG WAY SIGNS R5-1A (48"X36"), 120V AC/SOLAR POWERED, WHITE LED, PERIMETER BLINKING.
- (4) - WRONG WAY SIGNS R5-1A (42"X30"), SIGN FLAT SHEET.
- (2) - DO NOT ENTER SIGNS R5-1 (48"X48"), 120VAC/SOLAR POWERED, WHITE LED, PERIMETER BLINKING.
- SOLAR PANELS MOUNTED TO AN ALUMINUM PLATE AND BRACKET AT AN ANGLE OF 45 DEGREES- 60 DEGREES TO PROVIDE MAXIMUM OUTPUT.
- BATTERIES FOR LED SIGNS WITH WRITTEN TWO YEAR FULL REPLACEMENT WARRANTY.
- THE SYSTEM SHALL OPERATE UNDER THE FOLLOWING CONDITIONS:
 - SHALL COMPLY WITH PART 15 OF FCC.
 - SHALL OPERATE FROM -4 DEGREES F TO 122 DEGREES F.
 - PROGRAMMABLE FROM A WINDOWS BASED PC
- (8)-HOURS OF ONSITE TRAINING.
- THE SYSTEM SHALL INCLUDE AN API TO CONNECT ALL THE DATA/ALERTS/CAMERA IMAGES/VIDEO INTO THE ODOT ATMS SOFTWARE WHICH IS PROVIDED BY IRI AND IS KNOWN AS OHGO IN-SIGHT.
- THE API SHALL MEET THE REQUIREMENTS OF THE "ATMS WRONG WAY DRIVER ALERT API" DOCUMENT PROVIDED WITH THESE PLANS. ALL WORK NEEDED TO DEVELOP AND PROVIDE A FULLY FUNCTIONAL API (LABORS, MATERIALS, ETC.) SHALL BE INCIDENTAL TO THIS ITEM.

ITEM 809 WRONG WAY DETECTION SYSTEM (ALTERNATE 1), (CONT.)

ALL LED PERIMETER EDGE LIGHT BLINKING SIGNS SHALL BE WIRELESSLY CONTROLLED AND SYNCHRONIZED VIA THE USE OF WIRELESS RADIOS. EACH SIGN SHALL BE A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.). EACH SIGN SHALL BE SUPPLIED WITH ALL REQUIRED HARDWARE TO INSTALL ASSEMBLY. ALL EXPOSED HARDWARE SHALL BE ANTI-VANDAL. ASSURE ALL SIGNS MEETS THE REQUIREMENTS OF C&MS 630. THE CONTROL CIRCUIT SHALL BE SEALED WATERTIGHT TO ELIMINATE DIRT CONTAMINATION AND ALLOW FOR SAFE HANDLING IN ALL WEATHER CONDITIONS.

SEE SOLAR POWERED LED SIGN REQUIREMENTS AND ELECTRICAL REQUIREMENTS FOR SOLAR-POWERED DEVICES FOR ADDITIONAL REQUIREMENTS.

WARRANTY
WARRANTY SHALL BE FIVE YEARS FROM THE DATE OF FINAL ACCEPTANCE.

MEASUREMENT
THE DEPARTMENT WILL MEASURE THIS ITEM COMPLETE IN PLACE, INCLUDING ALL MATERIALS, TESTING, LABOR AND SOFTWARE FOR A FULLY FUNCTIONAL SYSTEM.

PAYMENT
PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH FOR ITEM 809 WRONG WAY DETECTION SYSTEM AND INCLUDE ALL MATERIALS AND LABOR TO FURNISH AND INSTALL A COMPLETE SYSTEM AT ONE EXIT RAMP. ALL ELEMENTS OF THE SYSTEM SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM OF WORK UNLESS SEPARATELY ITEMIZED.

ITEM 809 WRONG WAY DETECTION SYSTEM, (TAPCO)-(ALTERNATE 2)

THIS ITEM SHALL BE AN ALTERNATE BID TO PROVIDE A WRONG WAY DETECTION SYSTEM MANUFACTURED/PROVIDED BY TAPCO, TRAFFIC AND PARKING CONTROL CO., INC. THE SAME NOTES AND REQUIREMENTS APPLY FROM ITEM 809, WRONG WAY DETECTION SYSTEM, (ALTERNATE 1).

ITEM 809 WRONG WAY DETECTION SYSTEM,(TRAFFICALM)-(ALTERNATE 3)

THIS ITEM SHALL BE AN ALTERNATE BID TO PROVIDE A WRONG WAY DETECTION SYSTEM MANUFACTURED/PROVIDED BY TRAFFICALM, SYSTEMS. THE SAME NOTES AND REQUIREMENTS APPLY FROM ITEM 809, WRONG WAY DETECTION SYSTEM, (ALTERNATE 1).

WRONG WAY DETECTION SYSTEM NOTES

THESE SPECIFICATIONS, TOGETHER WITH THE ACCOMPANYING PLANS ARE INTENDED TO DESCRIBE THE TYPE, SIZE AND LOCATION OF THE PRODUCTS AND MATERIALS TO BE PROVIDED AND INSTALLED UNDER THE VARIOUS BID ITEMS RELATED TO THE WRONG WAY DETECTION SYSTEM. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL DEVICES AND RELATED MATERIALS IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS, AS WELL AS:

- OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD)
- 2019 OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS
- STANDARD CONSTRUCTION DRAWINGS ISSUED BY THE OHIO DEPARTMENT OF TRANSPORTATION

THESE SPECIFICATIONS SET FORTH THE MINIMUM REQUIREMENTS OF THE WRONG WAY DETECTION SYSTEM AND THE ITEMS REFERRED HEREIN.

ITEM 630 SIGNING MISC: SERVICE ROUTING VIA EXISTING STRUCTURES

THIS ITEM SHALL CONSIST OF PROVIDING ELECTRICAL SERVICE TO WRONG WAY SIGNS VIA 2"CONDUIT (725.051) INSTALLED ONTO EXISTING ROADWAY STRUCTURES SUCH AS OVERHEAD SIGN GANTRIES AND RETAINING WALLS. THE INSTALLATION SHALL INCLUDE CONDUITS, CONDUIT GROUNDING, JUNCTION BOXES, MOUNTINGS, FITTINGS, AND ALL INCIDENTALS NECESSARY TO COMPLETE, READY FOR USE, THE SERVICE AS DETAILED ON THE PLANS.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE UNDER C&MS ITEM 630 SIGNING MISC.: SIGNING MISC.: SERVICE ROUTING VIA EXISTING STRUCTURES FOR EACH SERVICE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

THIS PAY ITEM IS TO BE USED AT LOCATION 12, 13, 14 AND 18.

ITEM 632 PEDESTAL, MISC.: PEDESTAL, 15', TRANSFORMER BASE

THE PEDESTAL SHALL BE PER ITEM 632 AND THE DETAILS SHOWN ON SHEET 33.

PAYMENT SHALL BE PER ITEM 632.

ITEM 632 PEDESTAL FOUNDATION, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 625, WHEN THE FOUNDATION IS LOCATED IN A PAVED AREA, THE PAYMENT FOR PEDESTAL FOUNDATION SHALL INCLUDE ALL SAWING, EXCAVATION, REMOVAL OF PAVEMENT, DISPOSAL OF SURPLUS MATERIALS AND RESTORATION AND REPAVING TO RESTORE SURROUNDING PAVEMENT TO ORIGINAL CONDITIONS.

THIS PAY ITEM WILL BE USED FOR LOCATIONS 13 AND 14.

ITEM 625 TRENCH, 30" DEEP AS PER PLAN

THIS ITEM CONSISTS OF ALL PARTS, MATERIALS, AND LABOR TO PREPARE A 30" DEEP TRENCH IN A SLOPED AREA. PER CMS 102.05 THE CONTRACTOR SHALL VISIT, INVESTIGATE, AND INSPECT THE SITE IN ORDER TO ESTABLISH A SATISFIED UNDERSTANDING OF ALL CHARACTER, QUALITY, QUANTITIES, AND CONDITIONS TO BE ENCOUNTERED IN PERFORMING THE WORK. NOTIFY PROJECT ENGINEER 1 WEEK PRIOR TO BACKFILL.

THIS PAY ITEM IS USED AT LOCATIONS 1 AND 17.

ITEM 625 PULL BOX MISC.: PULL BOX, 725.06, SIZE 1.5

IN ADDITION TO THE REQUIREMENTS OF ITEM 625, AND SCD HL-30.11, WHEN THE PULL BOX IS LOCATED IN A PAVED AREA, THE PAYMENT FOR PULL BOX SHALL INCLUDE ALL SAWING, EXCAVATION, REMOVAL OF PAVEMENT, DISPOSAL OF SURPLUS MATERIALS AND RESTORATION AND REPAVING TO RESTORE SURROUNDING PAVEMENT TO ITS ORIGINAL CONDITIONS.

THIS PAY ITEM IS USED AT LOCATION 2.

SOLAR POWERED LED SIGN REQUIREMENTS

THIS SPECIFICATION DESCRIBES THE MINIMUM ACCEPTABLE DESIGN AND PERFORMANCE REQUIREMENTS FOR LED ENHANCED [SIGNAL AHEAD (W3-3), STOP AHEAD (W3-1), STOP (R1-1)] SIGN. THE SIGN SHALL BE SELF-POWERED BY SOLAR PANELS AND BATTERIES WITH NO EXTERNAL ELECTRICAL POWER INSTALLATION. THE LED ENHANCED SIGN SHALL BE MUTCD COMPLIANT.

THE FOLLOWING CRITERIA SHALL BE MET:

1. THE NEW UNIT SHALL ATTACH SECURELY TO THE PROPOSED SIGN SUPPORT USING A TAMPER RESISTANT FASTENING SYSTEM. SPECIAL TOOLS NEEDED FOR THE TAMPER RESISTANT FASTENING SYSTEM SHALL BE SUPPLIED WITH EACH SIGN.
2. EACH SIGN UNIT SHALL BE IDENTIFIED WITH THE MANUFACTURER'S NAME, DATE OF MANUFACTURE, AND SERIAL NUMBER ON THE BACK SIDE.
3. THE SIGN UNIT SHALL BE VISIBLE AT A MINIMUM OF 1/4 MI. DURING ALL CONDITIONS.
4. THE SIGN UNIT SHALL INCORPORATE CIRCUITRY AND A PHOTOCELL TO ENSURE THAT IS HAS BRIGHTNESS ADJUSTMENT DURING DAY, DUSK, AND AT NIGHT.
5. THE LENS OF THE LED UNIT SHALL BE CAPABLE OF WITHSTANDING ULTRAVIOLET LIGHT (DIRECT SUNLIGHT) EXPOSURE FOR A MINIMUM TIME PERIOD OF FIVE YEARS WITHOUT EXHIBITING EVIDENCE OF DETERIORATION.
6. THE LENSES SHALL WITHSTAND A 3 FOOT DROP TEST ONTO A HARD SURFACE AND SHALL BE A MINIMUM OF 1/4 INCH THICK AND FREE OF BUBBLES AND IMPERFECTIONS. THE LENSES SHALL BE SMOOTH ON THE OUTSIDE, WITH NO EXTERNAL FACETS TO PREVENT DIRT AND DEBRIS BUILD-UP.
7. IF LENSES ARE TINTED, THEY SHALL MATCH THE WAVELENGTH (CHROMATICITY) OF THE LED.
8. THE INDIVIDUAL LED LIGHT SOURCES SHALL BE WIRED SO THAT A CATASTROPHIC FAILURE OF ONE LED LIGHT SOURCE WILL NOT RESULT IN THE LOSS OF MORE THAN ONE LED LIGHT SOURCE IN THE SIGN UNIT.
9. LED UNITS AND ASSOCIATED ON-BOARD CIRCUITRY SHALL CONFORM TO THE REQUIREMENTS IN FEDERAL COMMUNICATIONS COMMISSION (FCC) TITLE 47, SUB PART B, SECTION 15 REGULATIONS CONCERNING THE EMISSION OF ELECTRONIC NOISE.
10. LED'S SHALL BE RATED FOR USE IN THE AMBIENT OPERATING TEMPERATURE RANGE OF -40 DEGREES F TO +166 DEGREES F. (= -40 DEGREES C TO +74 DEGREES C)
11. THE LED'S WIRING SHALL BE SEALED WATERTIGHT TO ELIMINATE DIRT CONTAMINATION AND ALLOW FOR SAFE HANDLING IN ALL WEATHER CONDITIONS. THE LED'S SHALL BE SEALED AGAINST DUST AND MOISTURE INTRUSION AS PER THE REQUIREMENTS OF NEMA STANDARD 250-1991 FOR TYPE 4 ENCLOSURES AND TO PROTECT ALL INTERNAL LED AND ELECTRICAL COMPONENTS.
12. THE SIGN LED'S SHALL DISPLAY A MINIMUM OF 500,000 MCD FOR DAYTIME VISIBILITY.

EQUIPMENT REQUIRED TO FURNISH THE SIGN WITH SOLAR POWERED LED'S AND MOUNT THE SOLAR UNIT TO THE SIGN SUPPORT AS PER THE LED ENHANCED SIGN DETAIL.

SOLAR POWERED LED SIGN REQUIREMENTS (CONTINUED)

SOLAR REQUIREMENTS -
SEE "GENERAL ELECTRICAL REQUIREMENTS FOR SOLAR-POWERED DEVICES".

REQUIRED DOCUMENTATION -
EACH SIGN UNIT SHALL BE PROVIDED WITH THE FOLLOWING DOCUMENTATION EITHER IN HARD COPY OR AS A PDF.

1. ONE SCHEMATIC DIAGRAM SHALL BE PROVIDED FOR THE SIGN UNIT ALONG WITH ANY NECESSARY INSTALLATION INSTRUCTIONS.
2. THE LED MANUFACTURERS NAME, BRAND, AND MODEL NUMBER.

WARRANTY -
1. THE LED ENHANCED SIGNAL AHEAD SIGN UNIT SHALL BE REPAIRED OR REPLACED BY THE MANUFACTURER IF IT EXHIBITS A FAILURE DUE TO WORKMANSHIP OR MATERIAL DEFECTS WITHIN 2 YEARS OF FIELD OPERATION.

2. THE MANUFACTURER SHALL PROVIDE A WRITTEN WARRANTY AGAINST DEFECTS IN MATERIALS, WORKMANSHIP, AND LUMINOUS INTENSITY FOR THE LED ENHANCED SIGN UNIT FOR A PERIOD OF 2 YEARS AFTER INSTALLATION. A REPLACEMENT LED ENHANCED SIGN UNIT SHALL BE PROVIDED WITHIN 10 DAYS AFTER RECEIPT OF FAILED UNIT AT NO COST, EXCEPT THE COST OF SHIPPING THE FAILED UNIT.

ITEM 809 ITS DEVICE, MISC.: HIGH-SPEED ETHERNET RADIO, INSTALL ONLY

THE CONTRACTOR SHALL INSTALL WIRELESS RADIOS, PROVIDED BY ODOT, AT LOCATIONS SPECIFIED IN THE PLANS. THE RADIOS SHALL BE INSTALLED PER SCD ITS-12.50 ON EXISTING TRAFFIC SIGNAL SUPPORTS AND ITS-11.10 ON EXISTING CAMERA POLES. FOR RADIOS INSTALLED ON WRONG WAY SIGN SUPPORTS, INSTALL AS HIGH AS POSSIBLE ON A 10 FOOT RISER INSTALLED SIMILAR TO TRAFFIC SIGNALS PER SCD ITS-12.50. THE RADIOS SHALL BE ORIENTED TO POINT TOWARD EACH OTHER ON EACH SIDE WHERE RADIO PAIRS ARE TO LINK TOGETHER WIRELESSLY.

THE CONTRACTOR SHALL CONNECT THE RADIOS TO THE EXISTING TRAFFIC CABINET WITH OUTDOOR ETHERNET CABLE (SEPARATE PAY ITEM) AND RJ-45 CONNECTORS WHICH SHALL BE TERMINATED IN ACCORDANCE WITH TIA-EIA 568-B AND SUPPLEMENTAL SPECIFICATION 809. THE CONTRACTOR SHALL COORDINATE THE INSTALLS WITH ODOT. CENTRAL OFFICE TRAFFIC OPERATIONS ITS LAB (CEN.ITS.LAB@DOT.OHIO.GOV). THE CONTRACTOR SHALL CONNECT THE ETHERNET CABLE INTO A NETWORK SWITCH/ROUTER AS INSTRUCTED BY ODOT AND WORK OVER THE PHONE TO MAKE SURE THE DEVICE IS FUNCTIONING CORRECTLY.



ITEM 809 ITS DEVICE, MISC.: CCTV IP-CAMERA SYSTEM, FIXED VIEW

THE CONTRACTOR SHALL PROVIDE AND INSTALL A FIXED VIEW CAMERA CAPABLE OF WRONG WAY ANALYTIC'S PER SUPPLEMENTAL SPECIFICATIONS 809 AND 909. THE CAMERA SHALL HAVE A VARIFOCAAL LENS WITH ADJUSTMENT BETWEEN 4 MM AND 13 MM. THE CAMERA SHALL BE INSTALLED AS SHOWN ON THE PLANS AND ORIENTED AND FOCUSED TO VIEW THE EXIT RAMP AS MUCH AS POSSIBLE. THE CAMERA SHALL BE INSTALLED AS HIGH ON THE SUPPORT AS POSSIBLE. THE CAMERA SHALL BE ABLE TO BE TRAINED BY ODOT VIA MACHINE LEARNING APPLICATIONS WITH LOCAL STORAGE TO LOOK BACK AT ALERT ACTIVATIONS AND CLASSIFY ANY DETECTIONS AS POSITIVE OR NEGATIVE. THE CAMERA SHALL BE PROVIDED WITH A HIGH ENDURANCE SD CARD TO BE INSTALLED FOR LOCAL STORAGE UP TO AT LEAST 72 HOURS. THE CONTRACTOR SHALL CONNECT THE CAMERAS TO THE EXISTING TRAFFIC CABINET WITH OUTDOOR ETHERNET CABLE (SEPARATE PAY ITEM) AND RJ-45 CONNECTORS WHICH SHALL BE TERMINATED IN ACCORDANCE WITH TIA-EIA 568-B.

THE CONTRACTOR SHALL DELIVER THE NEW CAMERAS TO THE ODOT ITS LAB FOR INITIAL CONFIGURATION AND LABELING OF THE LOCATION WHERE THEY SHALL BE INSTALLED. THE CONTRACTOR SHALL ALLOW 1 MONTH FOR ODOT TO CONFIGURE THE CAMERAS AND RETURN TO THE CONTRACTOR. UPON INSTALLATION, THE CONTRACTOR SHALL INSTALL THE CAMERA AND CONNECT THE ETHERNET CABLE INTO THE ODOT NETWORK SWITCH PORT, AS INFORMED BY ODOT ITS. THE CONTRACTOR SHALL CALL THE ODOT ITS LAB TO VERIFY THE CAMERA CONNECTION AND VIEWS WHILE ON SITE INSTALLING THE CAMERA. THE CONTRACTOR SHALL ADJUST THE CAMERA ORIENTATION OR LENSES AS NEEDED FOR OPTIMAL VIEWS.

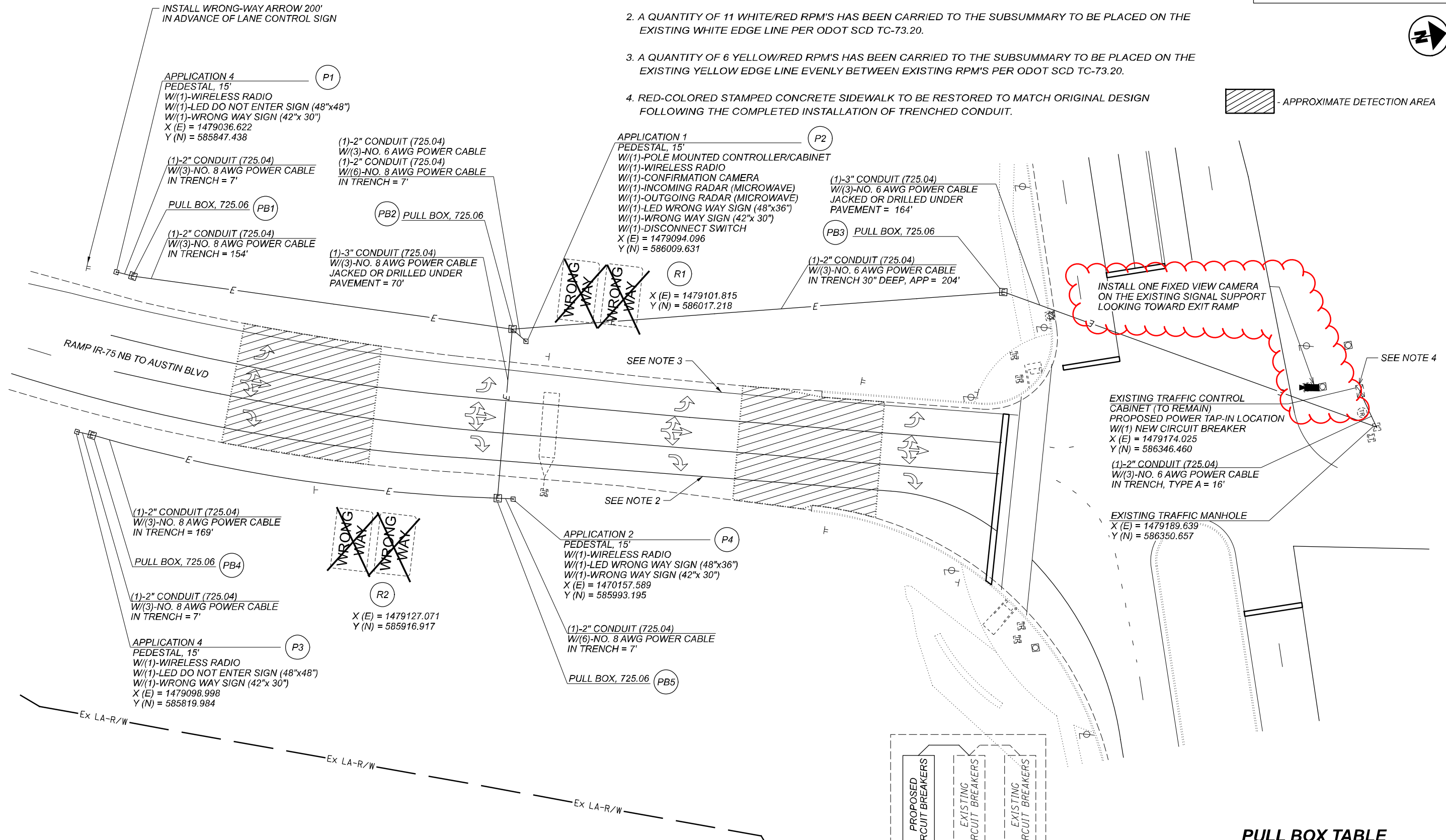


SHEET NUM.										PART.	ALT	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	5	10	11	12	13	14			01/IMS/OT	(X)		EXT	TOTAL			
EROSION CONTROL																	
634										634		659	00300	634	CY	TOPSOIL	
5,710										5,710		659	10000	5,710	SY	SEEDING AND MULCHING	
286										286		659	14000	286	SY	REPAIR SEEDING AND MULCHING	
286										286		659	15000	286	SY	INTER-SEEDING	
1.28										1.28		659	20000	1.28	TON	COMMERCIAL FERTILIZER	
1.18										1.18		659	31000	1.18	ACRE	LIME	
32										32		659	35000	32	MGAL	WATER	
										1		832	30000	1	EACH	EROSION CONTROL	
TRAFFIC CONTROL																	
			86	120	81	90	38			415		621	00100	415	EACH	RPM, YELLOW / RED	
			32	28	30	26	14			130		630	79500	130	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
			16	12	12	13	4			57		630	84900	57	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
			16	12	12	16				56		630	86002	56	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
					1	2	1			4		630	97700	4	EACH	SIGNING, MISC.: SERVICE ROUTING VIA EXISTING STRUCTURES	6
					2					2		630	97700	2	EACH	SIGNING, MISC.: SIGN SUPPORT FOUNDATION	5
			4	4	4	3	4			19		644	01360	19	EACH	WRONG WAY ARROW	
			1	3	11					15		646	20320	15	EACH	WRONG WAY ARROW	
TRAFFIC SIGNALS																	
							3			3		625	00470	3	EACH	CONNECTION, UNFUSED BOLTED	
			2,185	2,000	2,241	1,125	1,388			8,934		625	25100	8,934	FT	CONDUIT, 2", 725.04	
					94	921				1,015		625	25408	1,015	FT	CONDUIT, 2", 725.051	
						190				190		625	25500	190	FT	CONDUIT, 3", 725.04	
			436	308	266	146	43			1,199		625	25902	1,199	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
			1,928	1,964	2,213	1,180	810			8,095		625	29000	8,095	FT	TRENCH	
			204				193			397		625	29011	397	FT	TRENCH, 30" DEEP, AS PER PLAN	6
			15	16	18	8	6			63		625	30500	63	EACH	PULL BOX, 725.06, SIZE 1.5	
			4	3	2	3				12		625	30520	12	EACH	PULL BOX, 725.06, SIZE 7	
						1				1		625	30530	1	EACH	PULL BOX, 725.06, SIZE 18	
			1							1		625	31600	1	EACH	PULL BOX, MISC.: PULL BOX, 725.06, SIZE 1.5	6
			16	17	16	13	4			66		625	32000	66	EACH	GROUND ROD	
			2,167	1,964	2,213	1,194	1,003			8,541		625	36010	8,541	FT	UNDERGROUND WARNING/MARKING TAPE	
						12				12		632	26500	12	EACH	DETECTOR LOOP	
			510	563		390				1,463		632	29900	1,463	FT	MESSANGER WIRE, 7 STRAND, 1/4" DIAMETER WITH ACCESSORIES	
			16	14	13	8	5			56		632	64020	56	EACH	PEDESTAL FOUNDATION	
						5				5		632	64021	5	EACH	PEDESTAL FOUNDATION, AS PER PLAN	6
						1,374				1,374		632	65200	1,374	FT	LOOP DETECTOR LEAD-IN CABLE	
			6,483	5,442	5,982	6,189	2,831			26,727		632	67300	26,727	FT	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG	
			4,121	5,066	3,699	4,299	2,103			19,288		632	68300	19,288	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
			4	4	4	4	2			18		632	70001	18	EACH	POWER SERVICE, AS PER PLAN	5
			1	4	1	4				10		632	70400	10	EACH	CONDUIT RISER, 2" DIAMETER	
				4	1					5		632	89300	5	EACH	WOOD POLE	
			16	14	16	12	5			62		632	90010	62	EACH	PEDESTAL, MISC.: PEDESTAL, 15" TRANSFORMER BASE	6
			375	1,760	800	1,440	660			5,035		809	64550	5,035	FT	ETHERNET CABLE, OUTDOOR-RATED	
			4	4	4	5	3			20		809	65990	20	EACH	ITS DEVICE, MISC.: CCTV IP-CAMERA SYSTEM, FIXED VIEW	8
				8	4	4	2			18		809	65990	18	EACH	ITS DEVICE, MISC.: ITS DEVICE, MISC. HIGH-SPEED ETHERNET RADIO, INSTALL ONLY	8
TRAFFIC SIGNALS ALTERNATES																	
			4	4	4	4	2			18	X	809	69130	18	EACH	WRONG WAY DETECTION SYSTEM (ALTERNATE 1)	6
			4	4	4	4	2			18	X	809	69130	18	EACH	WRONG WAY DETECTION SYSTEM (TAPCO), (ALTERNATE 2)	6
			4	4	4	4	2			18	X	809	69130	18	EACH	WRONG WAY DETECTION SYSTEM (TRAFFICALM), (ALTERNATE 3)	6
MAINTENANCE OF TRAFFIC																	
										280		614	11110	280	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
INCIDENTALS																	
	LS									LS		614	11000	LS		MAINTAINING TRAFFIC	
										LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LS		624	10000	LS		MOBILIZATION	

DESIGN AGENCY

 CLIENT

 DESIGNER
 DAD
 REVIEWER
 DLW 01/05/22
 PROJECT ID
 113782
 SHEET TOTAL
 P.09 38

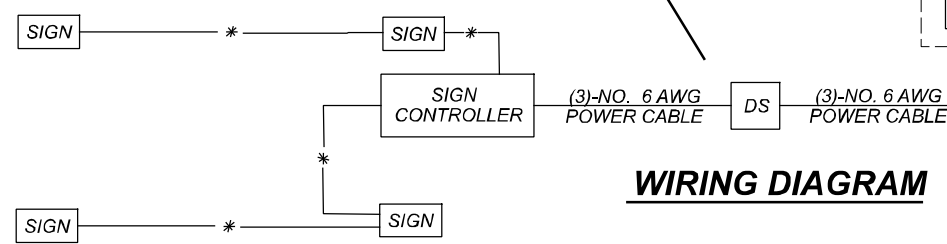
- NOTES:
 1. REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 2. A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 3. A QUANTITY OF 6 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.
 4. RED-COLORED STAMPED CONCRETE SIDEWALK TO BE RESTORED TO MATCH ORIGINAL DESIGN FOLLOWING THE COMPLETED INSTALLATION OF TRENCHED CONDUIT.

- APPROXIMATE DETECTION AREA



WIRING DIAGRAM LEGEND

* - (3)-NO. 8 AWG
 DS - DISCONNECT SWITCH



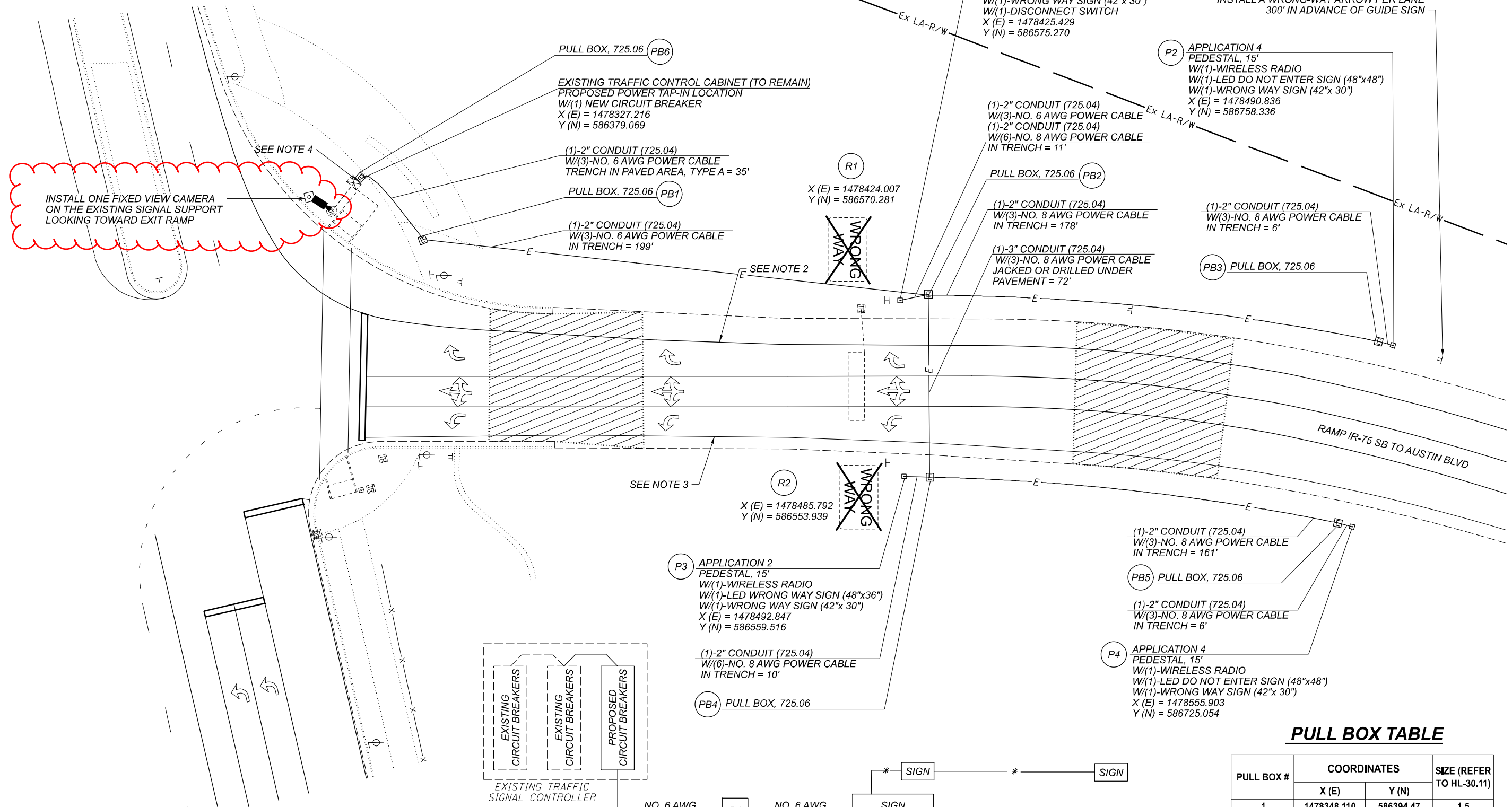
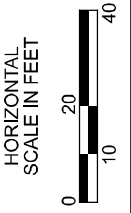
PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1479039.500	585853.857	1.5
2	1479088.111	586005.025	7
3	1479108.052	586208.322	1.5
4	1479101.408	585825.792	1.5
5	1479156.029	585986.900	1.5

- NOTES:
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.
 - RED-COLORED STAMPED CONCRETE SIDEWALK TO BE RESTORED TO MATCH ORIGINAL DESIGN FOLLOWING THE COMPLETED INSTALLATION OF PULL BOX #6.
 - THERE IS AN EXISTING FIBER OPTIC CABLE LOCATED BETWEEN THE RW LINE AND EDGE OF PAVEMENT. THE CONTRACTOR SHALL NOTIFY OUPS TO LOCATE ALL THE UTILITIES IN THE AREA BEFORE DIGGING.

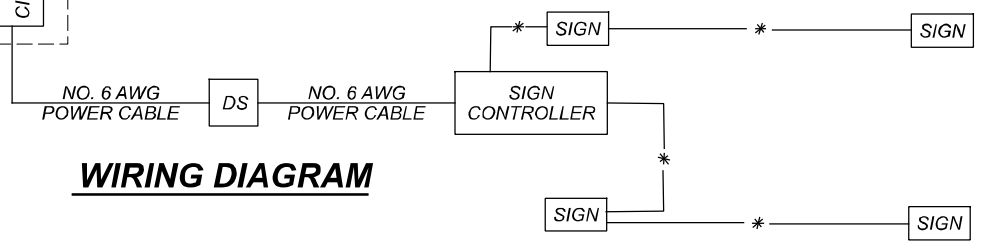
 - APPROXIMATE DETECTION AREA

LOCATION 02



* - (3)-NO. 8 AWG
 DS - DISCONNECT SWITCH

WIRING DIAGRAM



PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1478348.110	586394.47	1.5
2	1478425.995	586586.636	7
3	1478487.920	586753.273	1.5
4	1478495.661	586719.965	1.5
5	1478553.067	586719.965	1.5
6	1478326.123	586382.335	1.5

- NOTES:**
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 16 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 WHITE/RED RPM HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINES PER ODOT SCD TC-73.20.
 - A QUANTITY OF 2 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINE PER ODOT SCD TC-73.20.
 - THE CONTRACTOR SHALL PLACE THE CONDUIT OVER THE EXISTING WATER LINE NO MORE THAN A DEPTH OF 3.5'.

P1
 APPLICATION 4
 PEDESTAL, 15'
 W/(1)-WIRELESS RADIO
 W/(1)-LED DO NOT ENTER SIGN (48"x48")
 W/(1)-WRONG WAY SIGN (42"x 30")
 X (E) = 1481177.495
 Y (N) = 601237.440

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 IN TRENCH = 6'

PULL BOX, 725.06 (PB1)

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 IN TRENCH = 168'

R1
 X (E) = 1481241.331
 Y (N) = 601261.471

(1)-3" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 JACKED OR DRILLED UNDER
 PAVEMENT = 66'

P2
 APPLICATION 1
 PEDESTAL, 15'
 W/(1)-POLE MOUNTED CONTROLLER/CABINET
 W/(1)-WIRELESS RADIO
 W/(1)-CONFIRMATION CAMERA
 W/(1)-INCOMING RADAR (MICROWAVE)
 W/(1)-OUTGOING RADAR (MICROWAVE)
 W/(1)-LED WRONG WAY SIGN (48"x36")
 W/(1)-WRONG WAY SIGN (42"x 30")
 W/(1)-DISCONNECT SWITCH
 X (E) = 1481201.770
 Y (N) = 601415.741

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 6 AWG POWER CABLE
 IN TRENCH = 23'

PULL BOX, 725.06 (PB5)

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 6 AWG POWER CABLE
 IN TRENCH = 215'

SEE NOTE 4

SEE NOTE 2

RAMP IR-75 NB TO MIAMISBURG
 CENTERVILLE ROAD (SR 725)

R2
 X (E) = 148183.162
 Y (N) = 601267.233

(1)-2" CONDUIT (725.04)
 W/(6)-NO. 8 AWG POWER CABLE
 IN TRENCH = 7'

PULL BOX, 725.06 (PB4)

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 IN TRENCH = 174'

PULL BOX, 725.06 (PB3)

P4
 APPLICATION 2
 PEDESTAL, 15'
 W/(1)-WIRELESS RADIO
 W/(1)-LED WRONG WAY SIGN (48"x36")
 W/(1)-WRONG WAY SIGN (42"x 30")
 X (E) = 1481267.947
 Y (N) = 601405.783

SEE NOTE 5

SEE NOTE 3

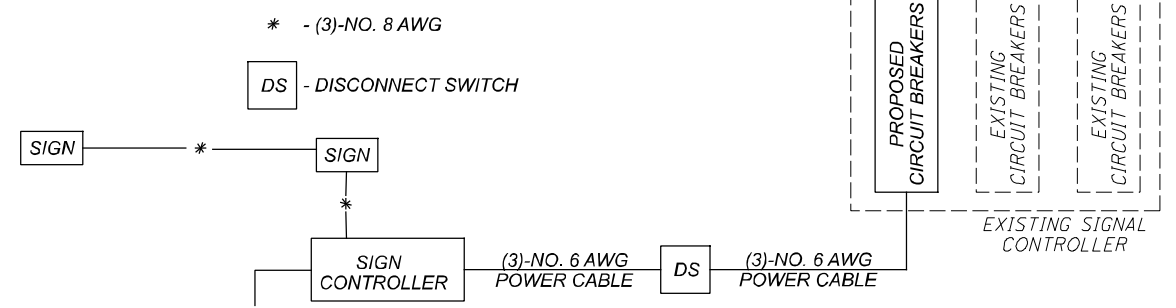
(1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 IN TRENCH = 6'

P3
 APPLICATION 4
 PEDESTAL, 15'
 W/(1)-WIRELESS RADIO
 W/(1)-LED DO NOT ENTER SIGN (48"x48")
 W/(1)-WRONG WAY SIGN (42"x 30")
 X (E) = 1481238.627
 Y (N) = 601227.698

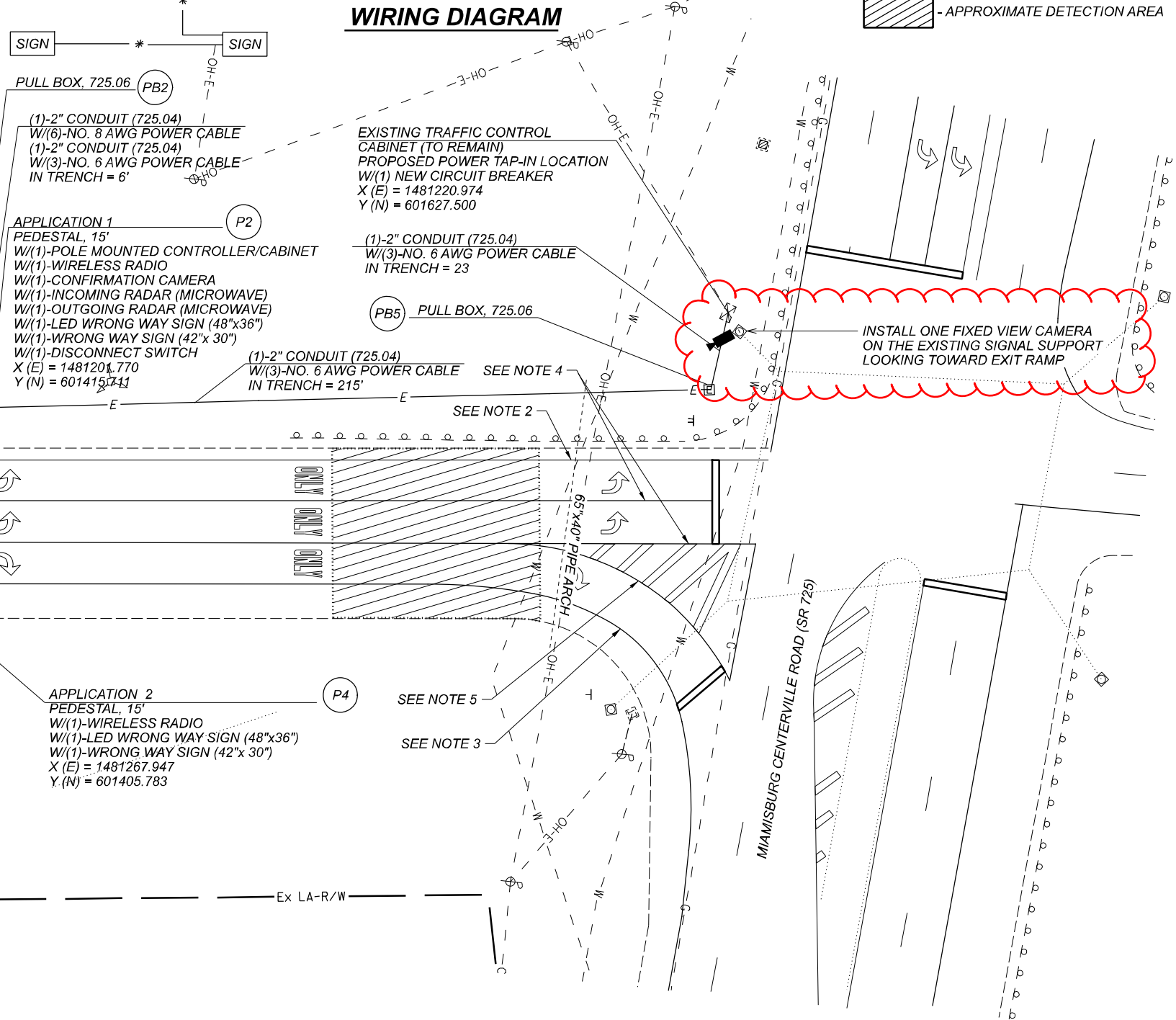
PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1481176.792	601243.182	1.5
2	1481198.184	601411.223	7
3	1481232.609	601228.566	1.5
4	1481263.411	601399.921	1.5
5	1481242.189	601618.192	1.5

WIRING DIAGRAM LEGEND



WIRING DIAGRAM



LOCATION 03



TRAFFIC CONTROL PLAN - LOCATION 03
 IR-75 NB AT MIAMISBURG CENTERVILLE ROAD

DESIGN AGENCY
Mead & Hunt
 CLIENT



DESIGNER
 DAD
 REVIEWER
 DLW 01/05/22
 PROJECT ID
 113782
 SHEET TOTAL
 P.17 38

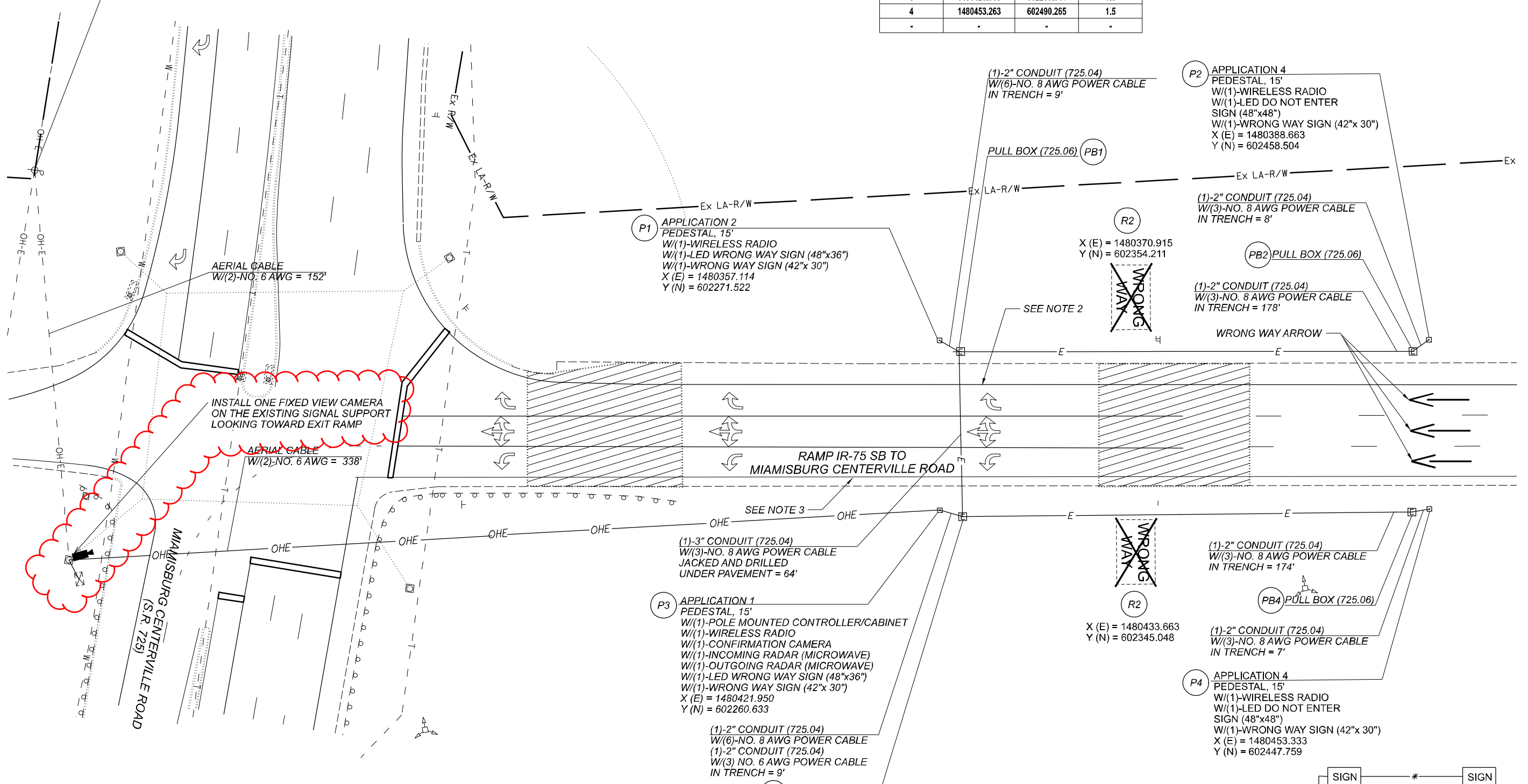
PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1480362.604	602278.301	7
2	1480392.048	602451.637	1.5
3	1480425.908	602268.844	1.5
4	1480453.263	602490.265	1.5
-	-	-	-

LOCATION 04



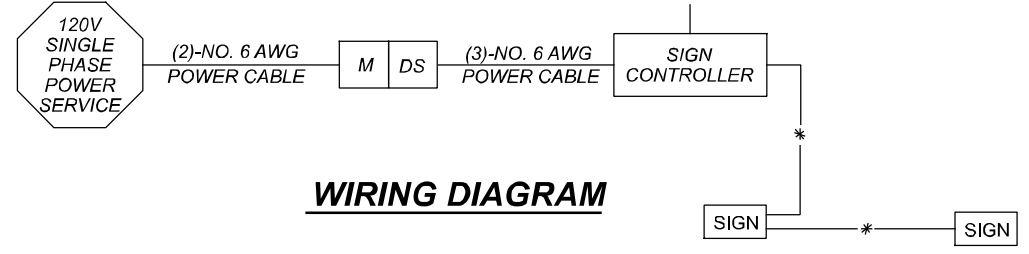
EXISTING POWER POLE (TO REMAIN)
 PROPOSED POWER TAP-IN LOCATION
 W/(1)- METER AND DISCONNECT SWITCH
 X (E) = 14802333.186
 Y (N) = 601937.133



INSTALL ONE FIXED VIEW CAMERA ON THE EXISTING SIGNAL SUPPORT LOOKING TOWARD EXIT RAMP

WIRING DIAGRAM LEGEND

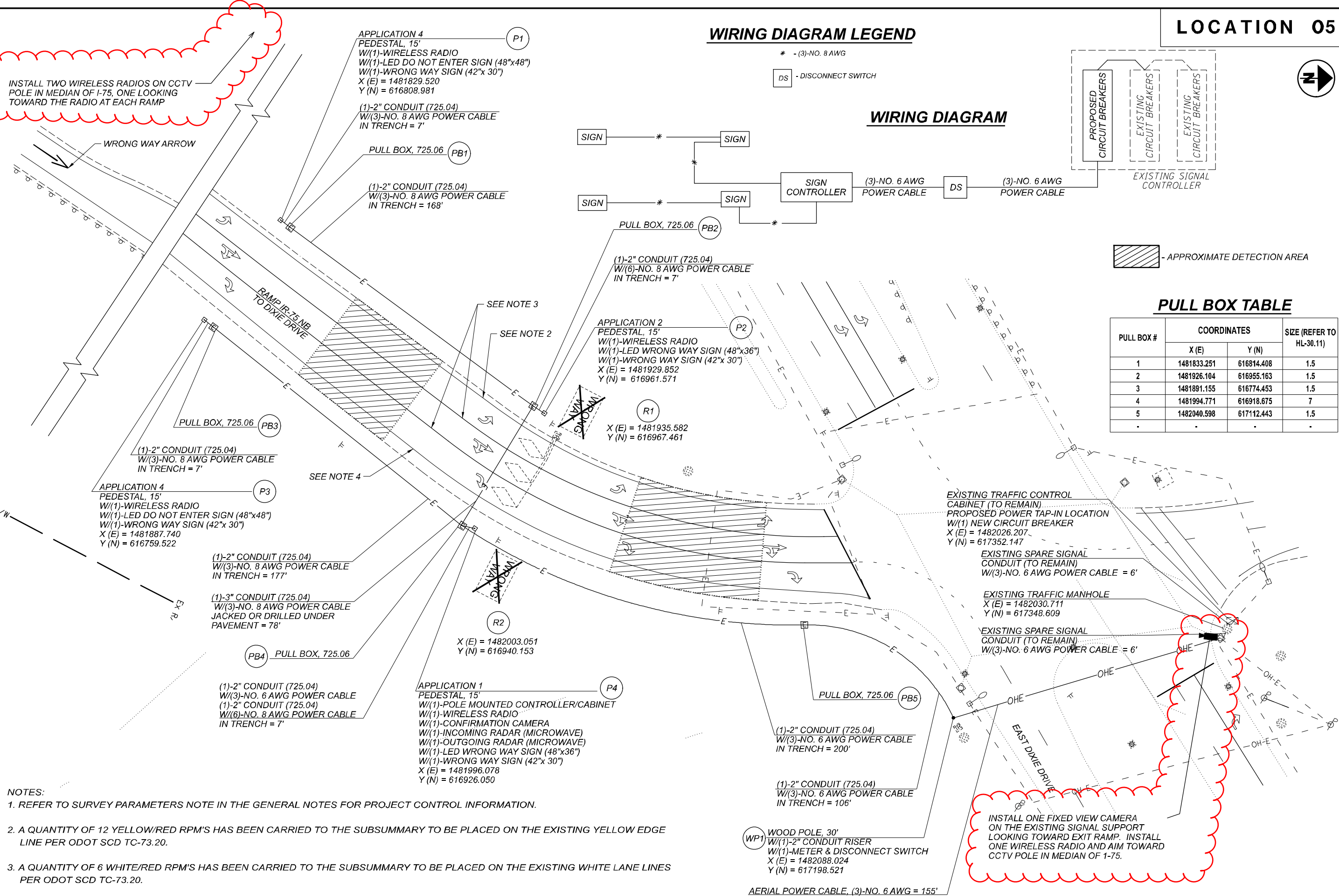
- * - (3)-NO. 8 AWG
- M - METER
- DS - DISCONNECT SWITCH



WIRING DIAGRAM

- NOTES:
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.

- APPROXIMATE DETECTION AREA

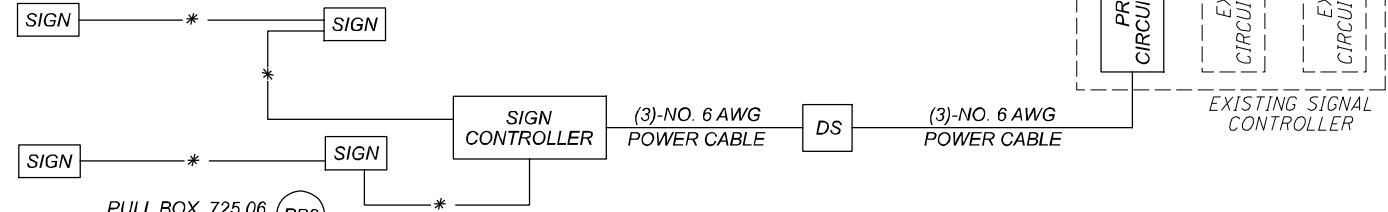


- NOTES:**
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 12 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINES PER ODOT SCD TC-73.20.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.

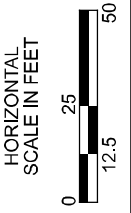
WIRING DIAGRAM LEGEND

* - (3)-NO. 8 AWG
 DS - DISCONNECT SWITCH

WIRING DIAGRAM



LOCATION 05



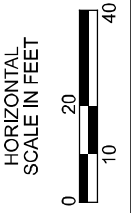
- APPROXIMATE DETECTION AREA

PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1481833.251	616814.408	1.5
2	1481926.104	616955.163	1.5
3	1481891.155	616774.453	1.5
4	1481994.771	616918.675	7
5	1482040.598	617112.443	1.5
.	.	.	.

TRAFFIC CONTROL PLAN - LOCATION 05
 IR-75 NB AT DIXIE DRIVE

DESIGN AGENCY
Mead & Hunt
 CLIENT
 DESIGNER
 DAD
 REVIEWER
 DLW 01/05/22
 PROJECT ID
 113782
 SHEET TOTAL
 P.19 38

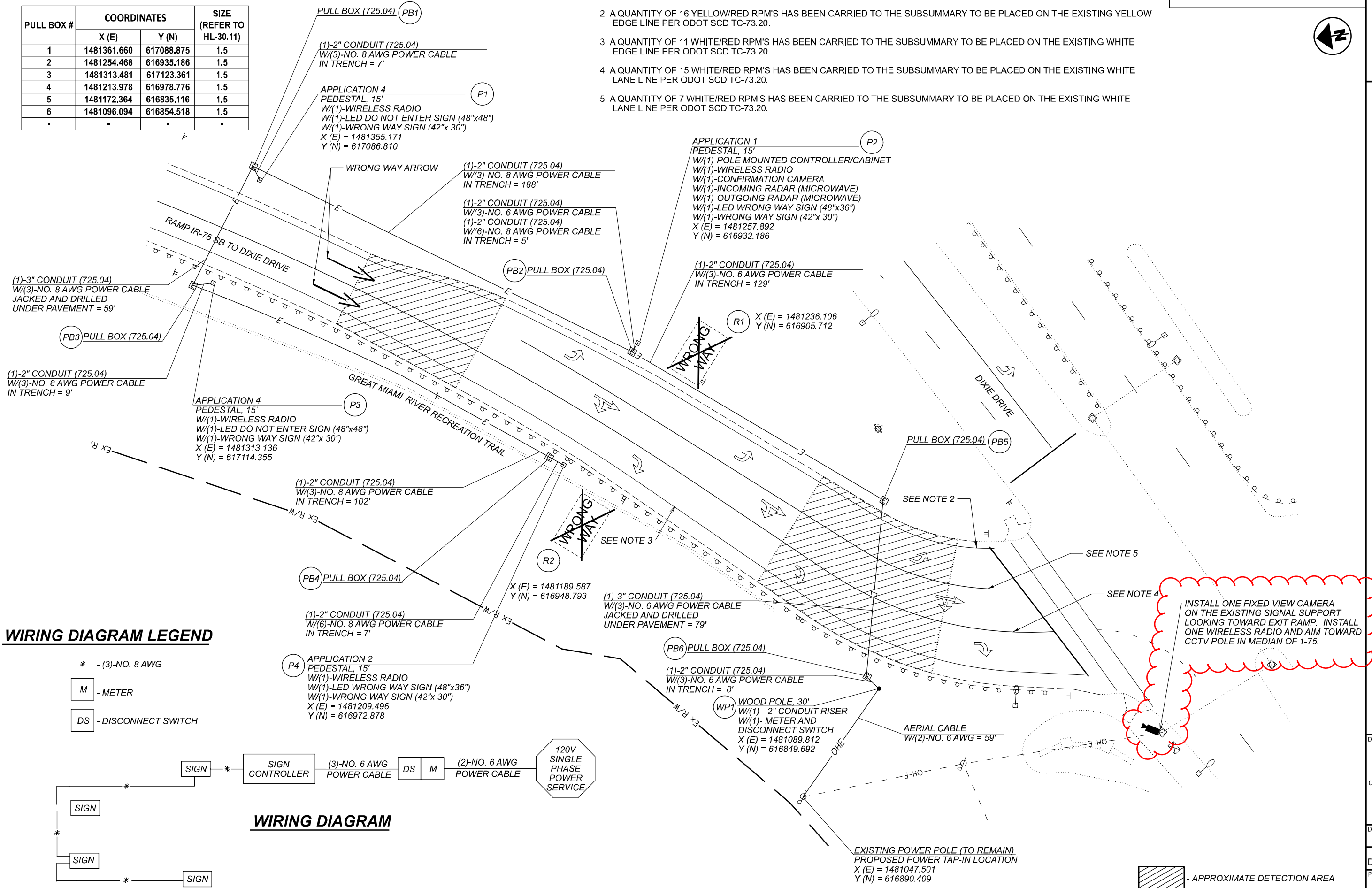


PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1481361.660	617088.875	1.5
2	1481254.468	616935.186	1.5
3	1481313.481	617123.361	1.5
4	1481213.978	616978.776	1.5
5	1481172.364	616835.116	1.5
6	1481096.094	616854.518	1.5

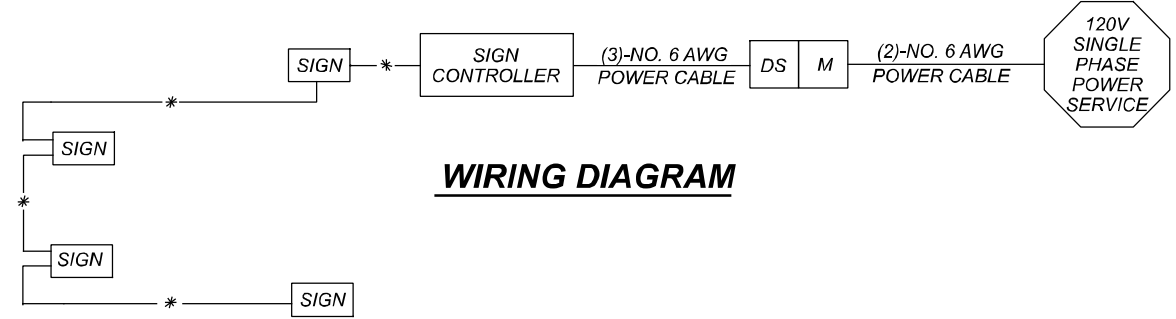
NOTES:

1. REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
2. A QUANTITY OF 16 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE PER ODOT SCD TC-73.20.
3. A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
4. A QUANTITY OF 15 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINE PER ODOT SCD TC-73.20.
5. A QUANTITY OF 7 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINE PER ODOT SCD TC-73.20.



WIRING DIAGRAM LEGEND

- * - (3)-NO. 8 AWG
- M - METER
- DS - DISCONNECT SWITCH



WIRING DIAGRAM

TRAFFIC CONTROL PLAN - LOCATION 06
IR-75 SB AT DIXIE DRIVE

DESIGN AGENCY
Mead & Hunt
CLIENT

DESIGNER
DAD

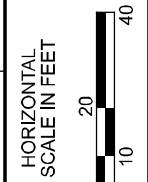
REVIEWER
DLW 01/05/22

PROJECT ID
113782

SHEET TOTAL
P.20 38

MOT-75-VAR

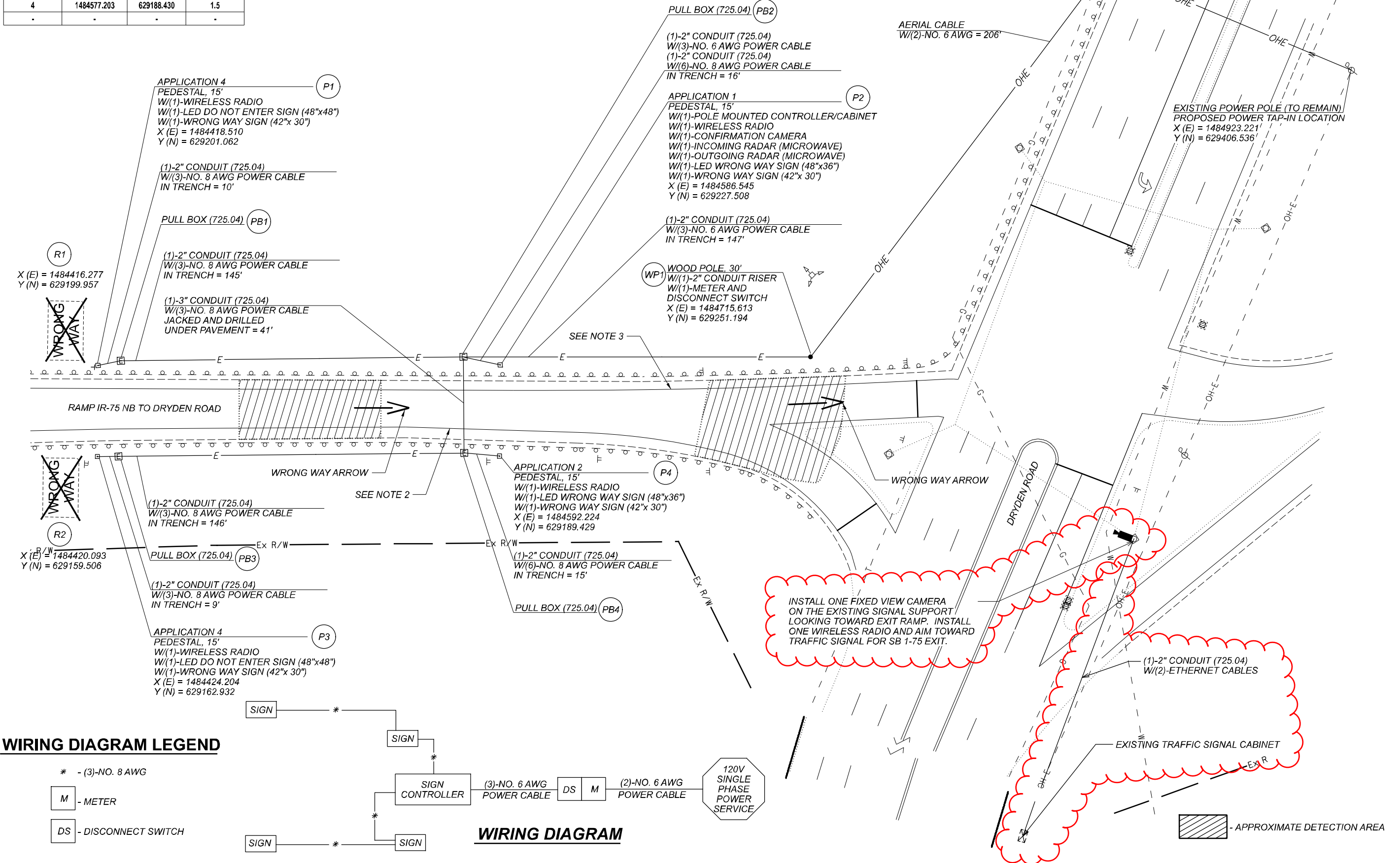
MODEL: TP6 PAPER SIZE: 17x11 (in.) DATE: 4/25/2022 TIME: 10:48 AM USER: i670dhw X:\402500\200536\01\13782_VAR-STW_Safety_Design_2020-10\13782_MOT-75-VAR\400-Engineering\Traffic\Sheets\113782_TP006.dgn



PULL BOX TABLE

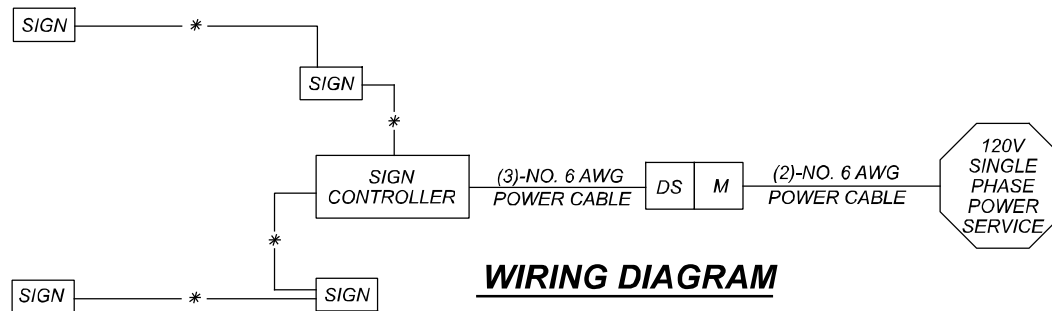
PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1484427.589	629204.513	1.5
2	1484570.592	629228.469	7
3	1484432.979	629164.427	1.5
4	1484577.203	629188.430	1.5
-	-	-	-

- NOTES:
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 16 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A GAS DISTRIBUTION LINE HAS BEEN SHOWN IN THE PLANS BUT WAS NOT LOCATED IN THE FIELD. THE CONTRACTOR SHALL CONTACT THE UTILITIES TO LOCATE THE LINES IN THE FIELD BEFORE DIGGING.



WIRING DIAGRAM LEGEND

- * - (3)-NO. 8 AWG
- M - METER
- DS - DISCONNECT SWITCH



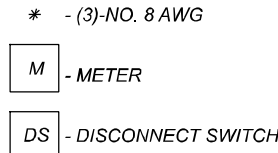
WIRING DIAGRAM

MOT-75-VAR MODEL: Plan 7 PAPER SIZE: 11x17 (in.) DATE: 4/25/2022 TIME: 10:41:49 AM USER: i670dhw X:\402500\200536\01\13782_VAR-STW_Safety_Design_2020-10\13782_MOT-75-VAR-400-Engineering\Traffic\Sheets\13782_TP007.dgn

PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1484672.486	630102.710	1.5
2	1484781.791	630111.279	1.5
3	1484885.845	630088.562	7
4	1484981.398	630074.393	1.5
.	.	.	.
.	.	.	.

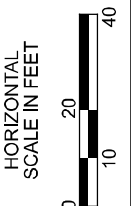
WIRING DIAGRAM LEGEND



WIRING DIAGRAM



LOCATION 08

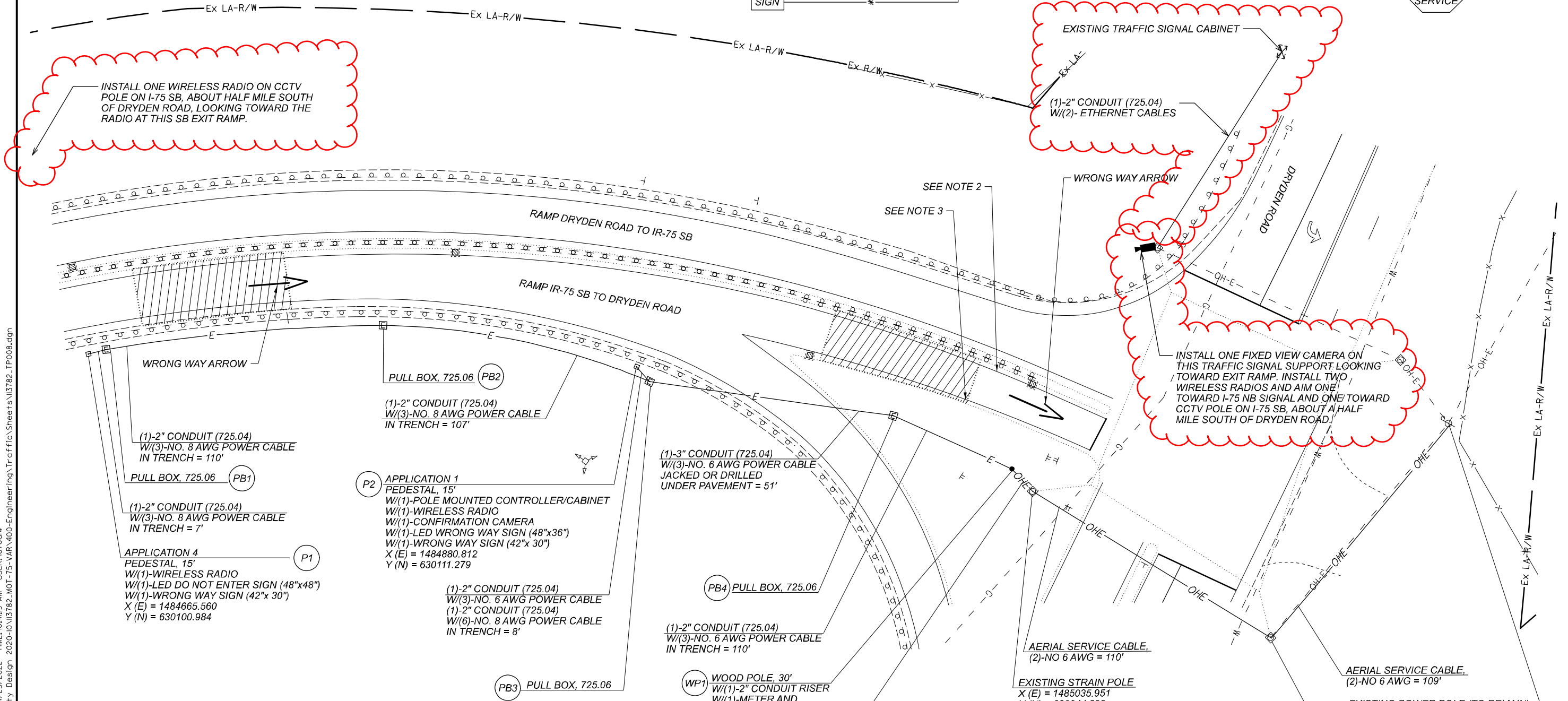


INSTALL ONE WIRELESS RADIO ON CCTV POLE ON I-75 SB, ABOUT HALF MILE SOUTH OF DRYDEN ROAD, LOOKING TOWARD THE RADIO AT THIS SB EXIT RAMP.

EXISTING TRAFFIC SIGNAL CABINET

(1)-2" CONDUIT (725.04)
W/(2)- ETHERNET CABLES

INSTALL ONE FIXED VIEW CAMERA ON THIS TRAFFIC SIGNAL SUPPORT LOOKING TOWARD EXIT RAMP. INSTALL TWO WIRELESS RADIOS AND AIM ONE TOWARD I-75 NB SIGNAL AND ONE TOWARD CCTV POLE ON I-75 SB, ABOUT A HALF MILE SOUTH OF DRYDEN ROAD.



- NOTES:**
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 16 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 4 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A GAS DISTRIBUTION LINE HAS BEEN SHOWN IN THE PLANS BUT WAS NOT LOCATED IN THE FIELD. THE CONTRACTOR SHALL CONTACT THE UTILITIES TO LOCATE THE LINES IN THE FIELD BEFORE DIGGING.
 - THE CONDUIT THAT RUNS BETWEEN PB1 TO PB3 SHOULD BE LOCATED A MINIMUM OF 12' FROM THE EDGE OF THE PAVEMENT.

**TRAFFIC CONTROL PLAN - LOCATION 08
IR-75 SB AT DRYDEN ROAD**

DESIGN AGENCY
Mead & Hunt

CLIENT

DESIGNER
DAD

REVIEWER
DLW 01/05/22

PROJECT ID
113782

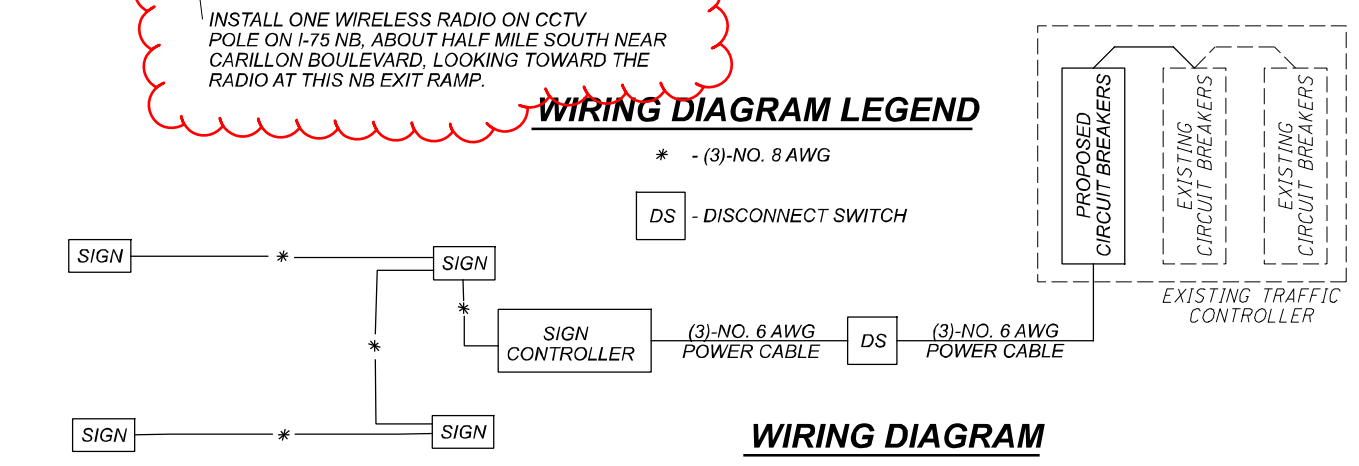
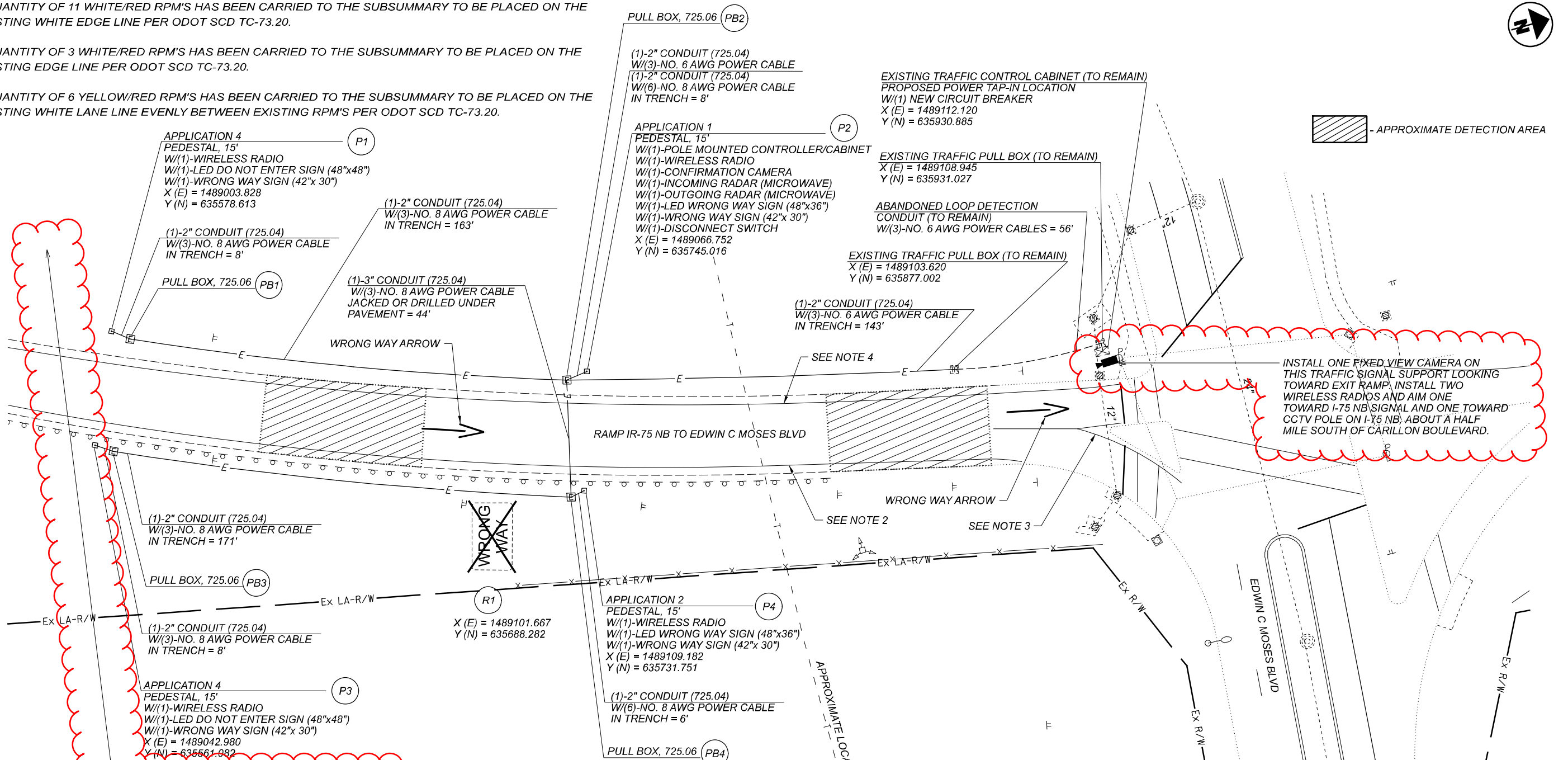
SHEET TOTAL
P.22 38

MOT-75-VAR

MODEL: Plan 8 PAPER SIZE: 11x17 (in.) DATE: 4/25/2022 TIME: 10:41:49 AM USER: i670diw X:\202500\200536\01\113782_VAR-STW_Safety_Design_2020-10\113782_MOT-75-VAR\400-Engineering\Traffic\Sheets\113782_IP008.dgn

- NOTES:**
1. REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 2. A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 3. A QUANTITY OF 3 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING EDGE LINE PER ODOT SCD TC-73.20.
 4. A QUANTITY OF 6 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.

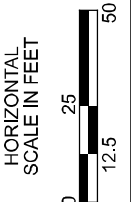
LOCATION 09



INSTALL ONE FIXED VIEW CAMERA ON THIS TRAFFIC SIGNAL SUPPORT LOOKING TOWARD EXIT RAMP. INSTALL TWO WIRELESS RADIOS AND AIM ONE TOWARD I-75 NB SIGNAL AND ONE TOWARD CCTV POLE ON I-75 NB, ABOUT A HALF MILE SOUTH OF CARILLON BOULEVARD.

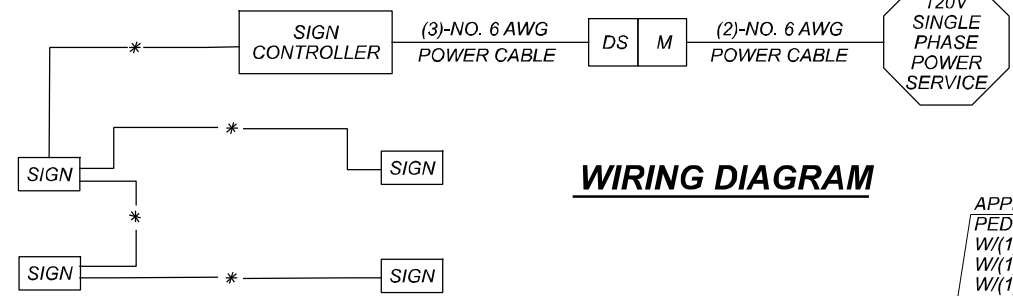
INSTALL ONE WIRELESS RADIO ON CCTV POLE ON I-75 NB, ABOUT HALF MILE SOUTH NEAR CARILLON BOULEVARD, LOOKING TOWARD THE RADIO AT THIS NB EXIT RAMP.

TRAFFIC CONTROL PLAN - LOCATION 09
 IR-75 NB AT EDWIN C MOSES BLVD



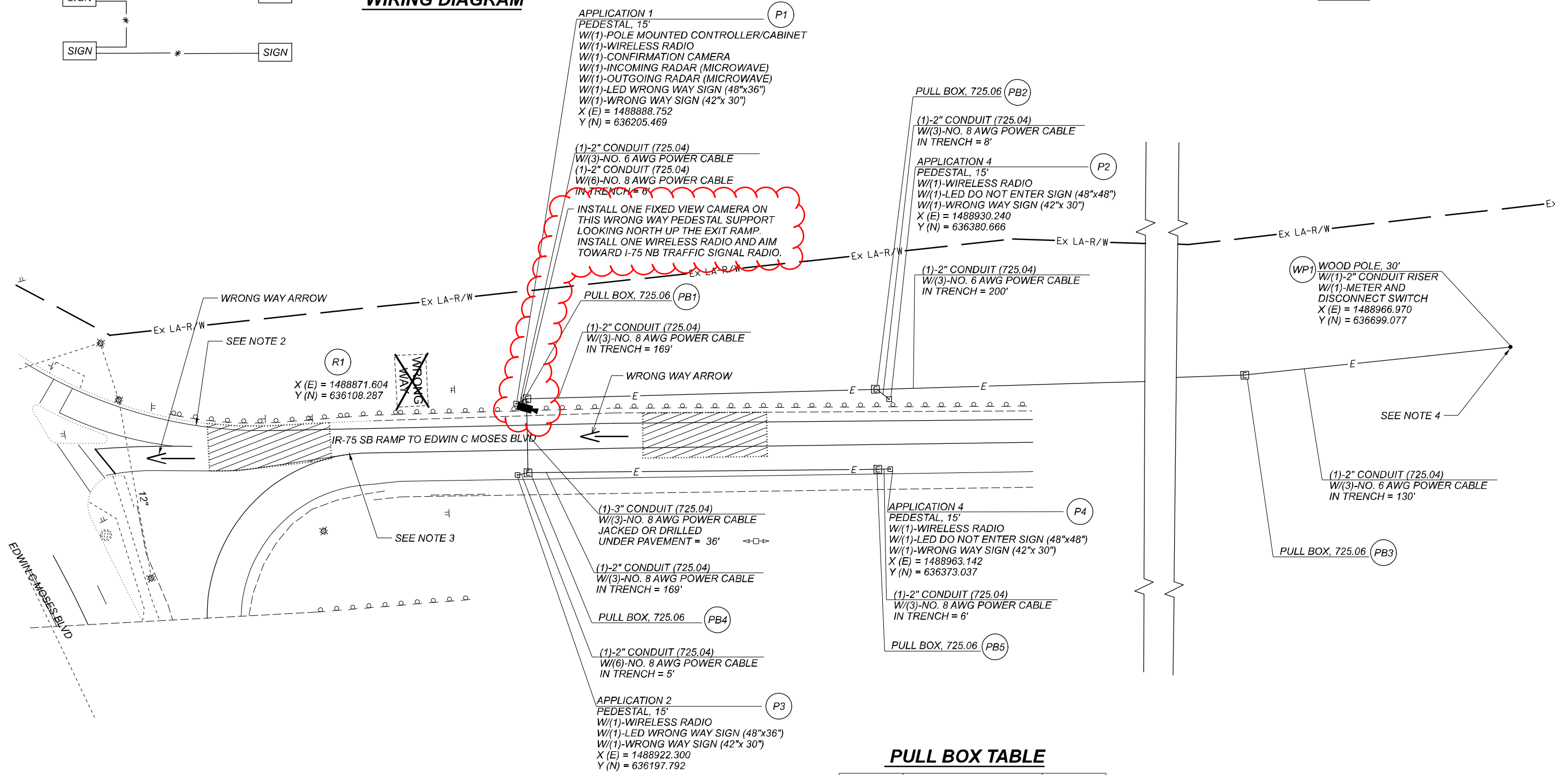
WIRING DIAGRAM LEGEND

- * - (3)-NO. 8 AWG
- M - METER
- DS - DISCONNECT SWITCH



WIRING DIAGRAM

- APPROXIMATE DETECTION AREA



- NOTES:
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 16 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE PER ODOT SCD TC-73.20.
 - AES OHIO ELECTRIC UTILITY TO RUN AERIAL DROP FROM OUTSIDE R/W TO PROPOSED WOOD POLE.

PULL BOX TABLE

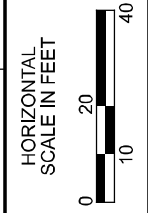
PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1488887.739	636210.997	1.5
2	1488923.926	636375.148	1.5
3	1488966.970	636571.272	1.5
4	1488922.300	636202.919	1.5
5	1488961.728	636366.903	1.5

DESIGN AGENCY

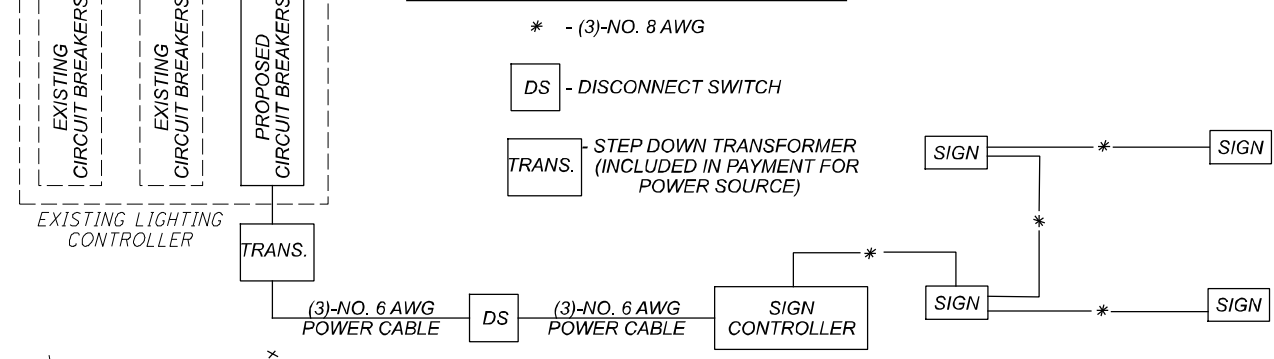
 CLIENT

 DESIGNER
 DAD
 REVIEWER
 DLW 01/05/22
 PROJECT ID
 113782
 SHEET TOTAL
 P.24 38

LOCATION 11

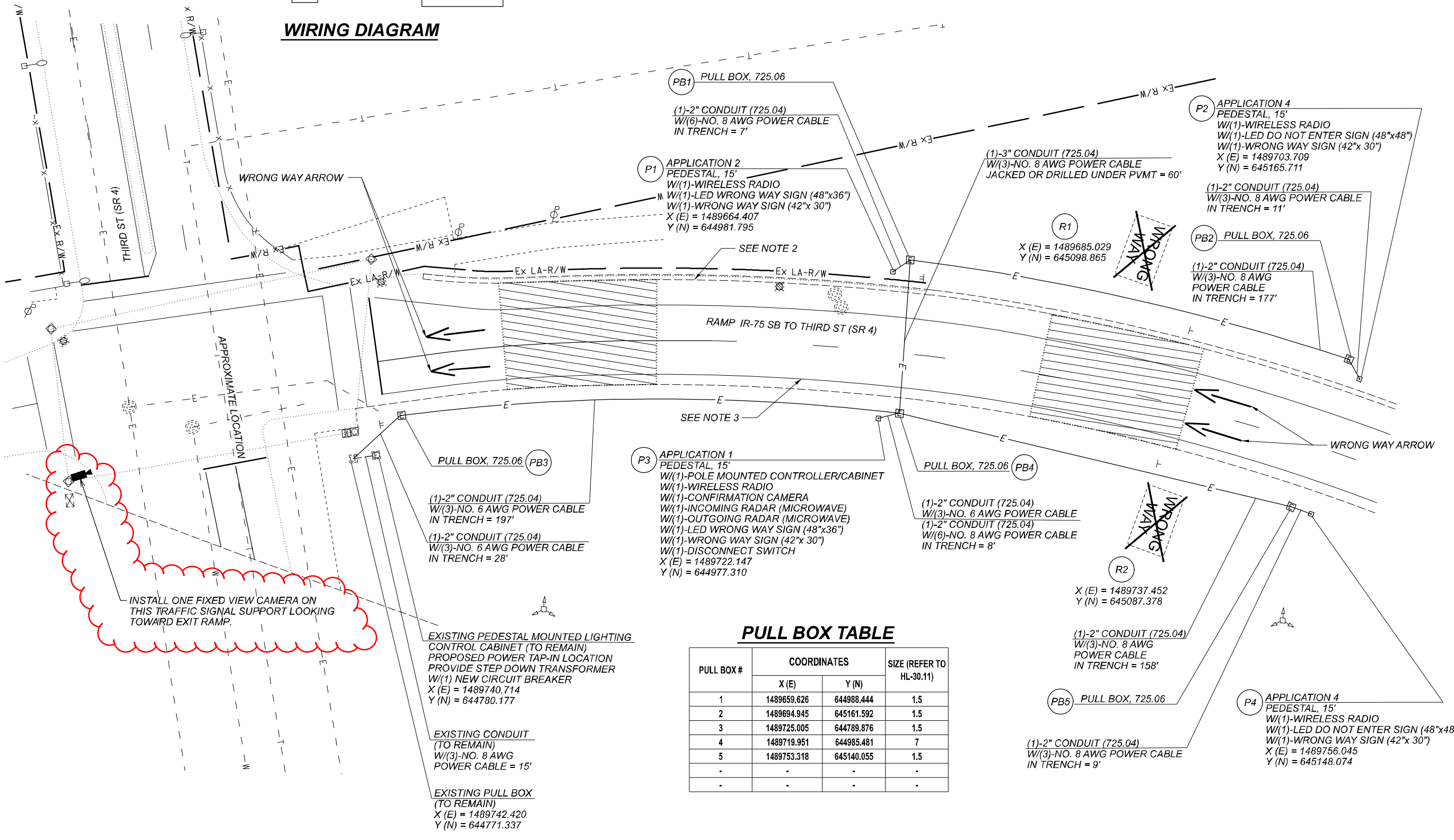


WIRING DIAGRAM LEGEND



- NOTES:
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF WHITE/RED 11 RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.
 - QUANTITIES FOR ITEM 630 SIGNING, MISC.: SIGN SUPPORT FOUNDATION ARE PROVIDED IN THE SUBSUMMARY FOR THE FOUNDATIONS ALONG THE EAST SIDE DUE TO THE EXISTING LIGHTING IN THE AREA AND THE POTENTIAL UTILITY CONFLICT.

WIRING DIAGRAM



PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1489659.626	644988.444	1.5
2	1489694.945	645161.592	1.5
3	1489725.005	644789.876	1.5
4	1489719.951	644985.481	7
5	1489753.318	645140.055	1.5
-	-	-	-
-	-	-	-

**TRAFFIC CONTROL PLAN - LOCATION 11
 IR-75 SB AT THIRD STREET**

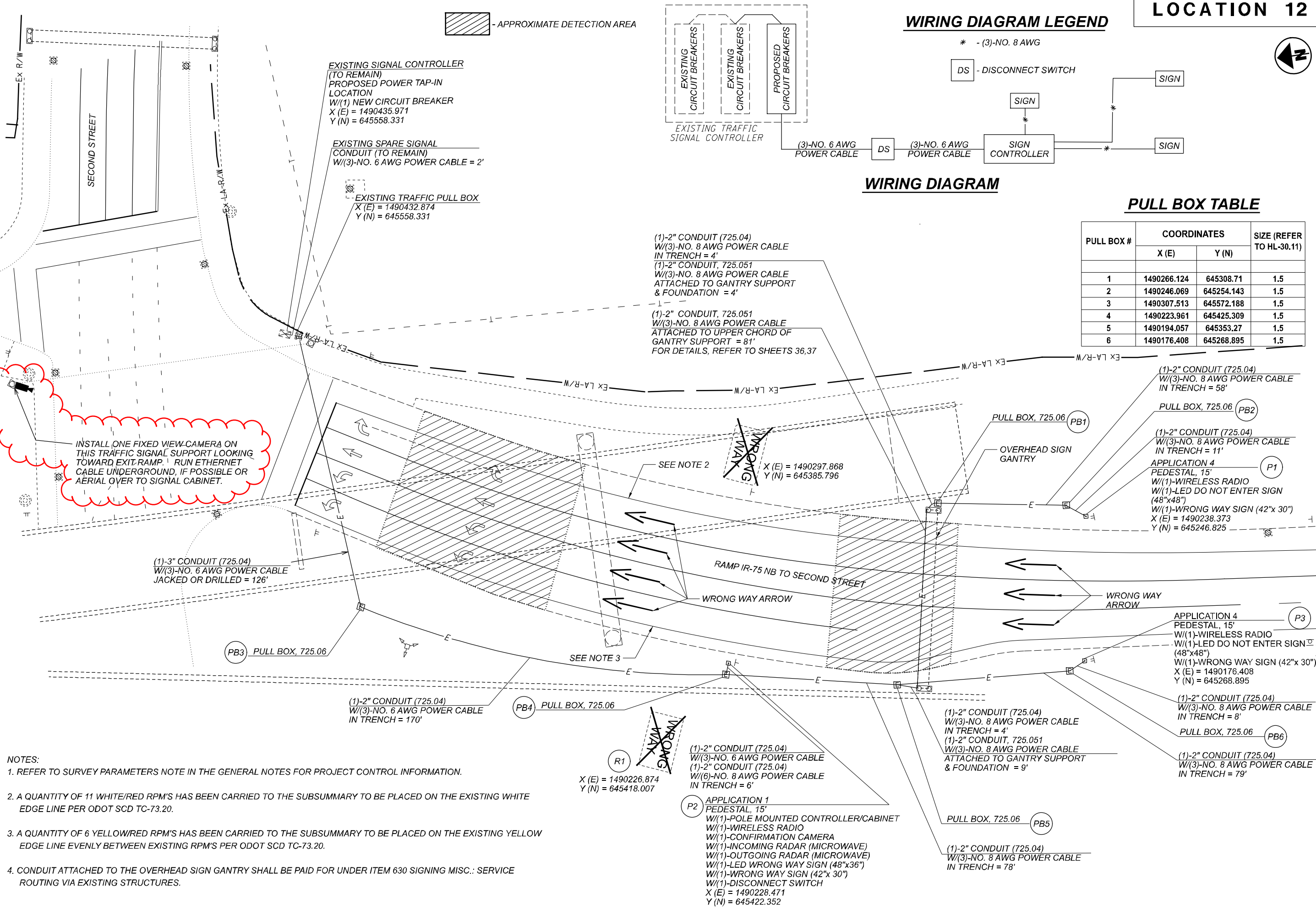
DESIGN AGENCY
Mead & Hunt
 CLIENT

DESIGNER
DAD

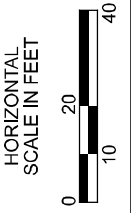
REVIEWER
 DLW 01/05/22

PROJECT ID
 113782

SHEET TOTAL
 P.25 38



LOCATION 12



TRAFFIC CONTROL PLAN - LOCATION 12
IR-75 NB AT SECOND STREET

- NOTES:
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.
 - CONDUIT ATTACHED TO THE OVERHEAD SIGN GANTRY SHALL BE PAID FOR UNDER ITEM 630 SIGNING MISC.: SERVICE ROUTING VIA EXISTING STRUCTURES.

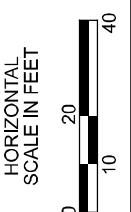
DESIGN AGENCY
Mead & Hunt
CLIENT

DESIGNER
DAD

REVIEWER
DLW 01/05/22

PROJECT ID
113782

SHEET TOTAL
P.26 38



- NOTES:
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 11 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20
 - ALL CONDUIT AND JUNCTION BOXES ATTACHED TO THE OVERPASS RETAINING WALL SHALL BE PAID FOR UNDER ITEM 630 SIGNING MISC., SERVICE ROUTING VIA EXISTING STRUCTURES.
 - A GAS DISTRIBUTION LINE HAS BEEN SHOWN IN THE PLANS BUT WAS NOT LOCATED IN THE FIELD. THE CONTRACTOR SHALL CONTACT THE UTILITIES TO LOCATE THE LINES IN THE FIELD BEFORE DIGGING.

- APPROXIMATE DETECTION AREA

(1)-2" CONDUIT (725.04)
W/(3)-NO. 6 AWG POWER CABLE
(1)-2" CONDUIT (725.04)
W/(6)-NO. 8 AWG POWER CABLE
IN TRENCH, TYPE A = 2'
(1)-2" CONDUIT, 725.051
W/(6)-NO. 8 AWG POWER CABLE
(1)-2" CONDUIT, 725.051
W/(3)-NO. 6 AWG POWER CABLE
ATTACHED TO WALL FACE
FOR DETAILS, REFER TO SHEET 38

APPLICATION 1
15' PEDESTAL POLE (P2)
W/(1)-POLE MOUNTED CONTROLLER/CABINET
W/(1)-WIRELESS RADIO
W/(1)-CONFIRMATION CAMERA
W/(1)-INCOMING RADAR (MICROWAVE)
W/(1)-OUTGOING RADAR (MICROWAVE)
W/(1)-LED WRONG WAY SIGN (48"x36")
W/(1)-WRONG WAY SIGN (42"x 30")
W/(1)-DISCONNECT SWITCH
X (E) = 1491901.026
Y (N) = 649076.057

(1)-2" CONDUIT (725.051)
W/(3)-NO. 6 AWG POWER CABLE
ATTACHED TO WALL LEDGE = 193'

(1)-2" CONDUIT (725.04)
W/(3)-NO. 8 AWG POWER CABLE
IN TRENCH, TYPE A = 2'
(1)-2" CONDUIT, 725.051
W/(3)-NO. 8 AWG POWER CABLE
ATTACHED TO WALL FACE
FOR DETAILS, REFER TO SHEET 38

APPLICATION 4 (P1)
PEDESTAL, 15'
W/(1)-WIRELESS RADIO
W/(1)-LED DO NOT ENTER SIGN (48"x48")
W/(1)-WRONG WAY SIGN (42"x 30")
X (E) = 1491706.140
Y (N) = 648960.330

(1)-2" CONDUIT (725.051)
W/(3)-NO. 8 AWG POWER CABLE
ATTACHED TO WALL LEDGE = 228'

(R1)
X (E) = 1491894.870
Y (N) = 649073.065

(R2)
X (E) = 1491990.464
Y (N) = 649061.340

INSTALL ONE FIXED VIEW CAMERA ON THIS TRAFFIC SIGNAL SUPPORT LOOKING TOWARD EXIT RAMP. RUN ETHERNET CABLE UNDERGROUND IF POSSIBLE OR AERIAL OVER TO SIGNAL CABINET.

AERIAL CABLE
W/(3)-NO. 6 AWG = 4'
EXISTING SIGNAL STRAIN POLE (TO REMAIN)
X (E) = 1492080.395
Y (N) = 649146.321

AERIAL CABLE
W/(3)-NO. 6 AWG = 90'

EXISTING SIGNAL CONDUIT
W/ SIGNAL CABLES (TO REMAIN)
W/(3)-NO. 8 AWG POWER CABLES = 2'

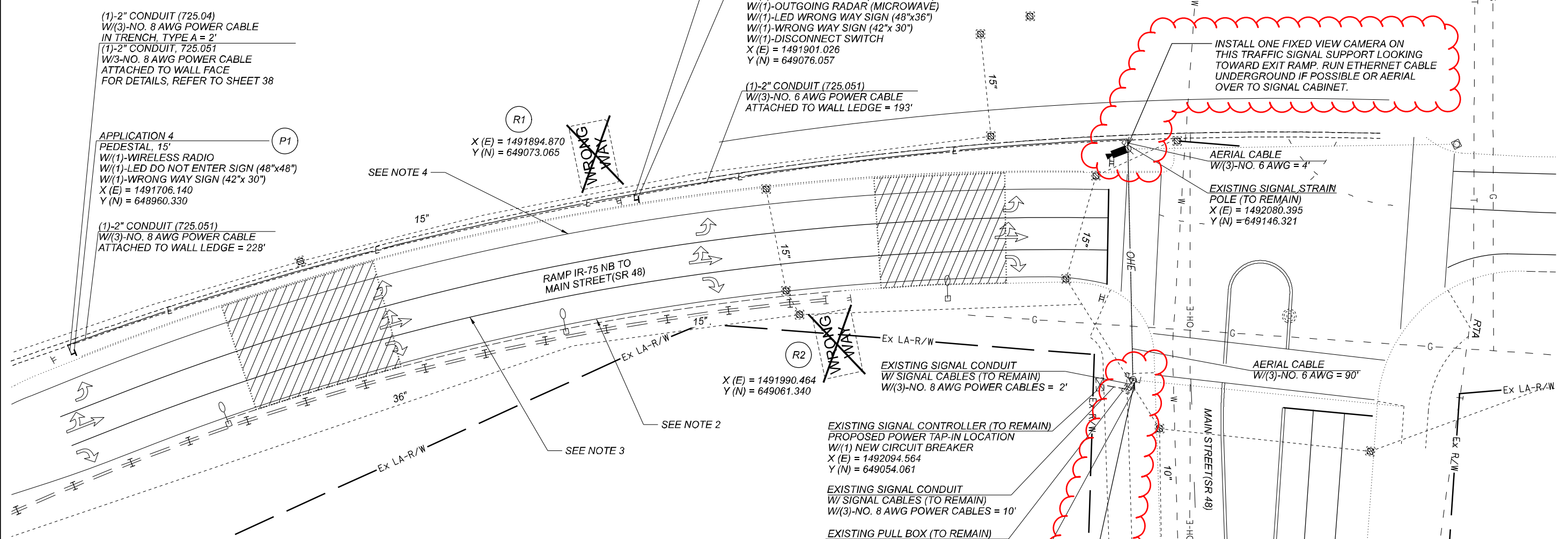
EXISTING SIGNAL CONTROLLER (TO REMAIN)
PROPOSED POWER TAP-IN LOCATION
W/(1) NEW CIRCUIT BREAKER
X (E) = 1492094.564
Y (N) = 649054.061

EXISTING SIGNAL CONDUIT
W/ SIGNAL CABLES (TO REMAIN)
W/(3)-NO. 8 AWG POWER CABLES = 10'

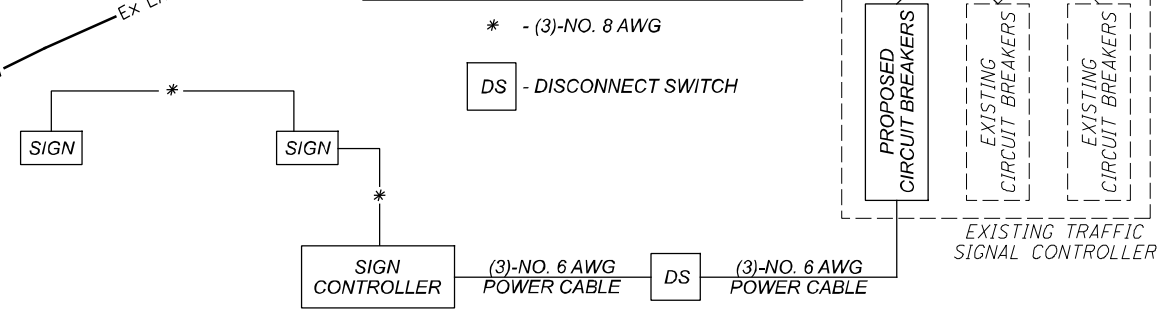
EXISTING PULL BOX (TO REMAIN)
X (E) = 1492105.207
Y (N) = 649056.288

EXISTING SIGNAL STRAIN POLE (TO REMAIN)
X (E) = 1492106.168
Y (N) = 649060.438

INSTALL ONE WIRELESS RADIO AND AIM ONE TOWARD CCTV ON I-75 SB EXIT RAMP



WIRING DIAGRAM LEGEND



WIRING DIAGRAM

MOT-75-VAR

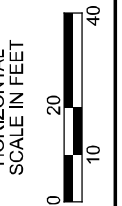
MODEL: I13782_TP03 PAPER SIZE: 17x11(in.) DATE: 4/25/2022 TIME: 10:41:25 AM USER: i670didi
X:\402500\200536\01\12347_VAR-STW_Safety_Design_2020-10\13782_MOT-75-VAR-400-Engineering\Traffic\Sheets\13782_TP03.dgn

TRAFFIC CONTROL PLAN - LOCATION 13
IR-75 NB AT SR 48 (MAIN STREET)

DESIGN AGENCY	Mead & Hunt
CLIENT	
DESIGNER	DAD
REVIEWER	DLW 01/05/22
PROJECT ID	113782
SHEET	P.27
TOTAL	38

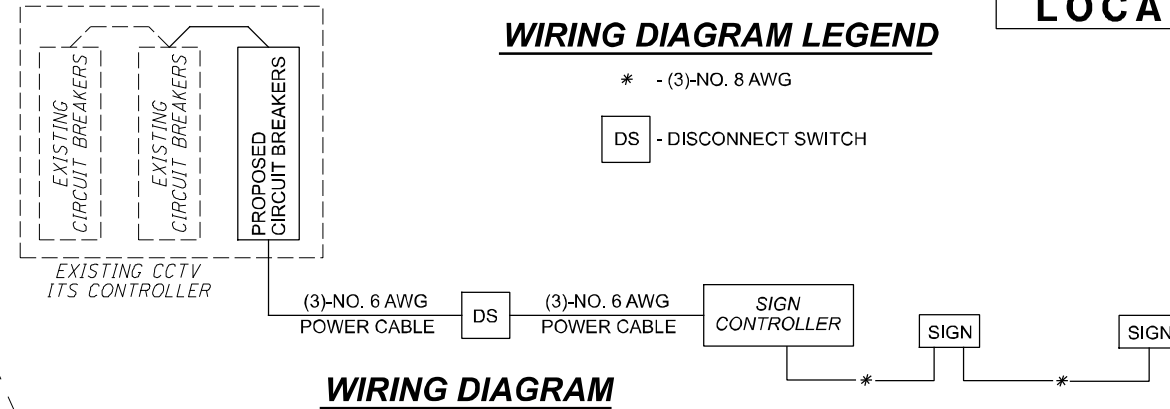
- NOTES:
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 6 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.
 - ALL CONDUIT AND JUNCTION BOXES ATTACHED TO THE LEDGE OF THE WALL STRUCTURE SHALL BE PAID FOR UNDER ITEM 630 SIGNING MISC., SERVICE ROUTING VIA EXISTING STRUCTURES.
 - A GAS DISTRIBUTION LINE HAS BEEN SHOWN IN THE PLANS BUT WAS NOT LOCATED IN THE FIELD. THE CONTRACTOR SHALL CONTACT THE UTILITIES TO LOCATE THE LINES IN THE FIELD BEFORE DIGGING.

LOCATION 14



WIRING DIAGRAM LEGEND

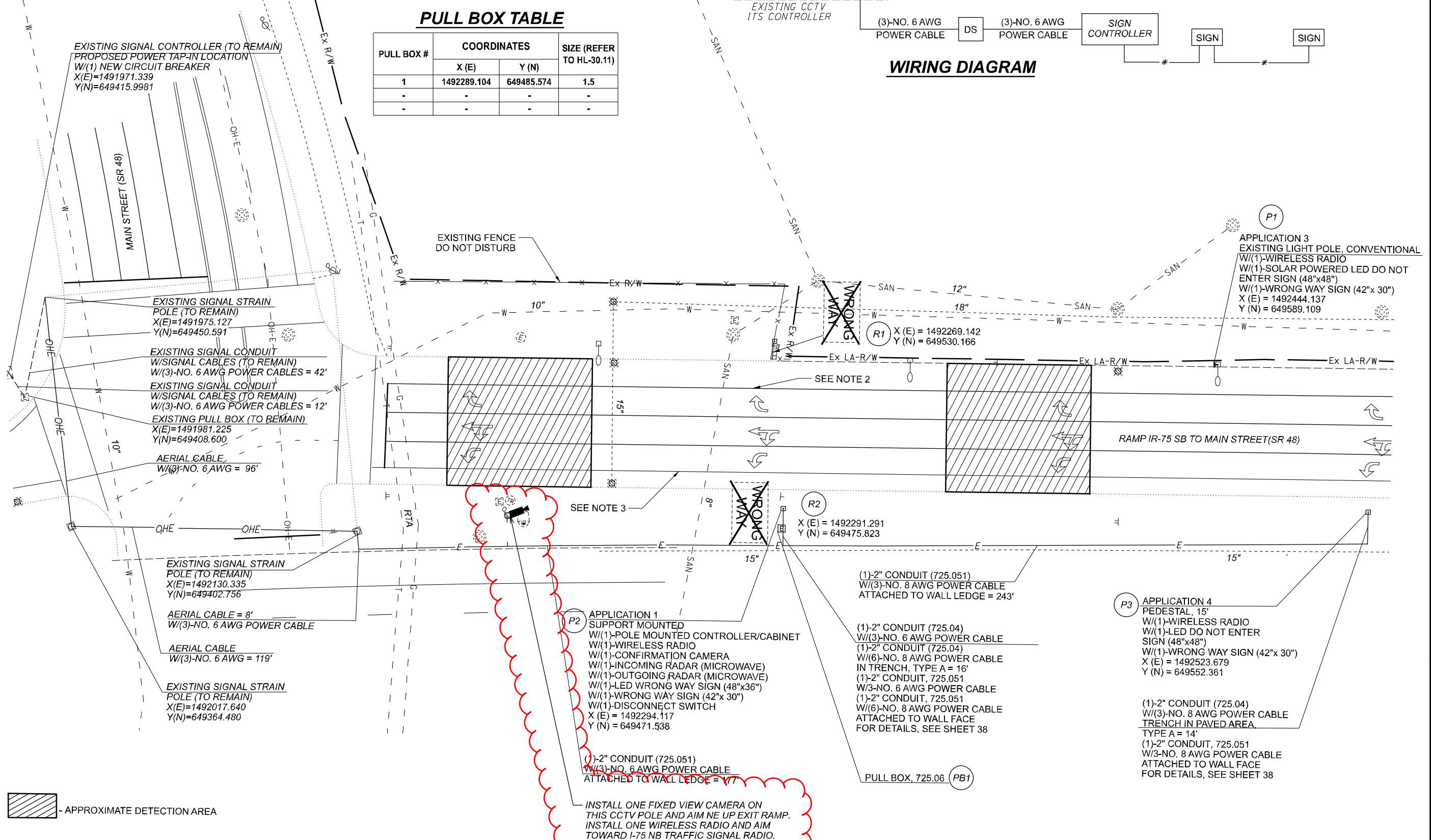
- * - (3)-NO. 8 AWG
- DS - DISCONNECT SWITCH



PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1492289.104	649485.574	1.5
-	-	-	-
-	-	-	-

WIRING DIAGRAM



PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1492289.104	649485.574	1.5
-	-	-	-
-	-	-	-

EXISTING SIGNAL CONTROLLER (TO REMAIN)
PROPOSED POWER TAP-IN LOCATION
W/(1) NEW CIRCUIT BREAKER
X(E)=1491971.339
Y(N)=649415.9981

EXISTING SIGNAL STRAIN POLE (TO REMAIN)
X(E)=1491975.127
Y(N)=649450.591

EXISTING SIGNAL CONDUIT W/SIGNAL CABLES (TO REMAIN)
W/(3)-NO. 6 AWG POWER CABLES = 42'

EXISTING SIGNAL CONDUIT W/SIGNAL CABLES (TO REMAIN)
W/(3)-NO. 6 AWG POWER CABLES = 12'

EXISTING PULL BOX (TO REMAIN)
X(E)=1491981.225
Y(N)=649408.600

AERIAL CABLE
W/(3)-NO. 6 AWG = 96'

EXISTING SIGNAL STRAIN POLE (TO REMAIN)
X(E)=1492130.335
Y(N)=649402.756

AERIAL CABLE = 8'
W/(3)-NO. 6 AWG POWER CABLE

AERIAL CABLE
W/(3)-NO. 6 AWG = 119'

EXISTING SIGNAL STRAIN POLE (TO REMAIN)
X(E)=1492017.640
Y(N)=649364.480

P2 APPLICATION 1
SUPPORT MOUNTED
W/(1)-POLE MOUNTED CONTROLLER/CABINET
W/(1)-WIRELESS RADIO
W/(1)-CONFIRMATION CAMERA
W/(1)-INCOMING RADAR (MICROWAVE)
W/(1)-OUTGOING RADAR (MICROWAVE)
W/(1)-LED WRONG WAY SIGN (48"x36")
W/(1)-WRONG WAY SIGN (42"x30")
W/(1)-DISCONNECT SWITCH
X (E) = 1492294.117
Y (N) = 649471.538

(1)-2" CONDUIT (725.051)
W/(3)-NO. 6 AWG POWER CABLE
ATTACHED TO WALL LEDGE = 17'

INSTALL ONE FIXED VIEW CAMERA ON THIS CCTV POLE AND AIM NE UP EXIT RAMP. INSTALL ONE WIRELESS RADIO AND AIM TOWARD I-75 NB TRAFFIC SIGNAL RADIO.

(1)-2" CONDUIT (725.051)
W/(3)-NO. 8 AWG POWER CABLE
ATTACHED TO WALL LEDGE = 243'

(1)-2" CONDUIT (725.04)
W/(3)-NO. 6 AWG POWER CABLE
(1)-2" CONDUIT (725.04)
W/(6)-NO. 8 AWG POWER CABLE IN TRENCH, TYPE A = 16'
(1)-2" CONDUIT, 725.051
W/3-NO. 6 AWG POWER CABLE
(1)-2" CONDUIT, 725.051
W/(6)-NO. 8 AWG POWER CABLE ATTACHED TO WALL FACE FOR DETAILS, SEE SHEET 38

PULL BOX, 725.06 (PB1)

P3 APPLICATION 4
PEDESTAL, 15'
W/(1)-WIRELESS RADIO
W/(1)-LED DO NOT ENTER SIGN (48"x48")
W/(1)-WRONG WAY SIGN (42"x30")
X (E) = 1492523.679
Y (N) = 649552.361

(1)-2" CONDUIT (725.04)
W/(3)-NO. 8 AWG POWER CABLE
TRENCH IN PAVED AREA, TYPE A = 14'
(1)-2" CONDUIT, 725.051
W/3-NO. 8 AWG POWER CABLE ATTACHED TO WALL FACE FOR DETAILS, SEE SHEET 38

P1 APPLICATION 3
EXISTING LIGHT POLE, CONVENTIONAL
W/(1)-WIRELESS RADIO
W/(1)-SOLAR POWERED LED DO NOT ENTER SIGN (48"x48")
W/(1)-WRONG WAY SIGN (42"x30")
X (E) = 1492444.137
Y (N) = 649589.109

- APPROXIMATE DETECTION AREA

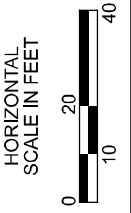
**TRAFFIC CONTROL PLAN - LOCATION 14
IR 75 SB AT SR 48 (MAIN STREET)**

DESIGN AGENCY	Mead & Hunt
CLIENT	
DESIGNER	DAD
REVIEWER	DLVW 01/05/22
PROJECT ID	113782
SHEET TOTAL	P.28 38

MOT-75-VAR

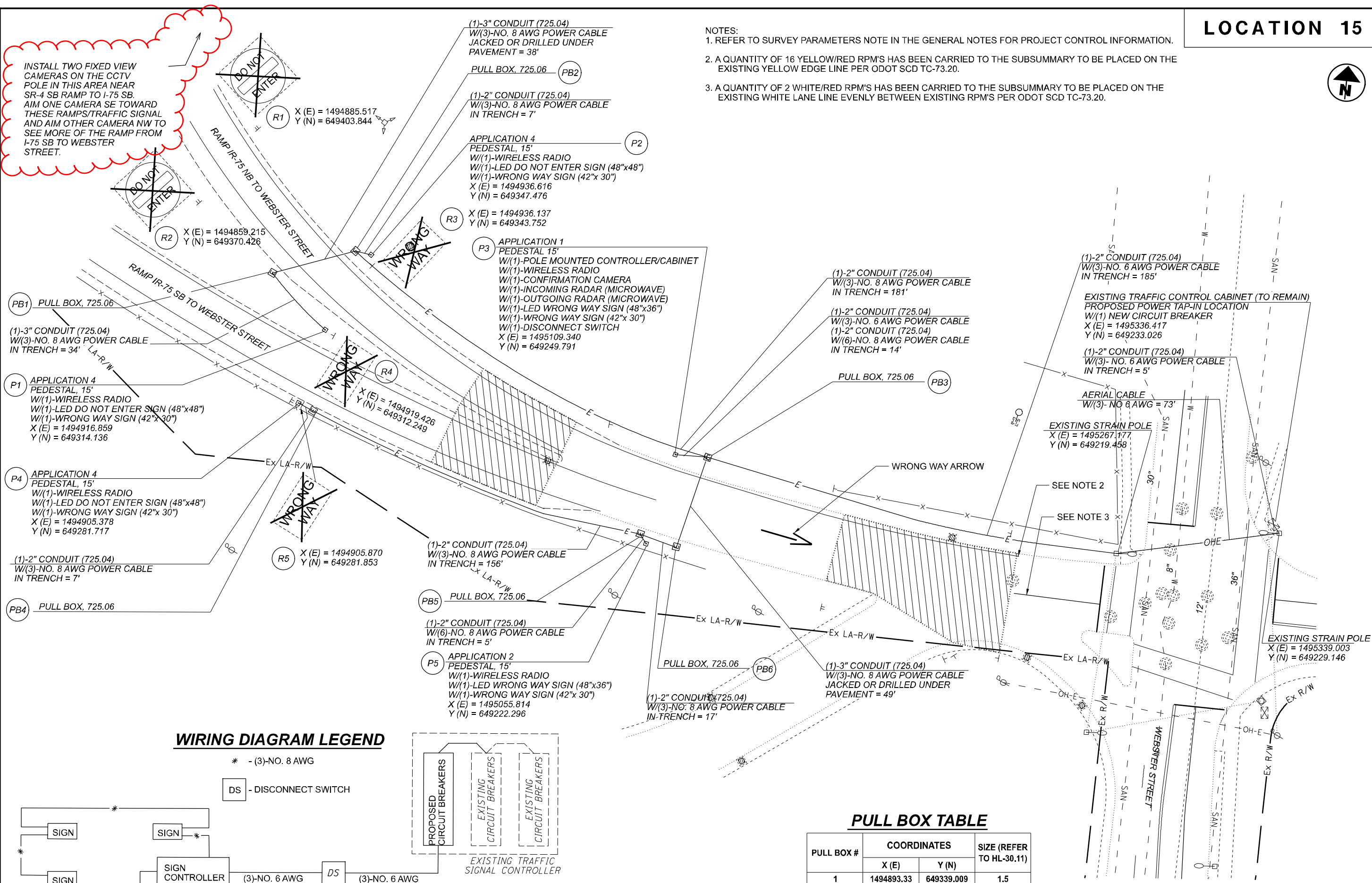
MODEL: I3782_TP04 PAPER SIZE: 17x11 (in.) DATE: 4/25/2022 TIME: 10:41:26 AM USER: 6170dlw X:\4012500\200536\01\12347_VAR-STW_Safety_Design_2020-10\113782.MOT-75-VAR-100-Engineer\Tr-offic_Sheets\113782_TP04.dgn

LOCATION 15



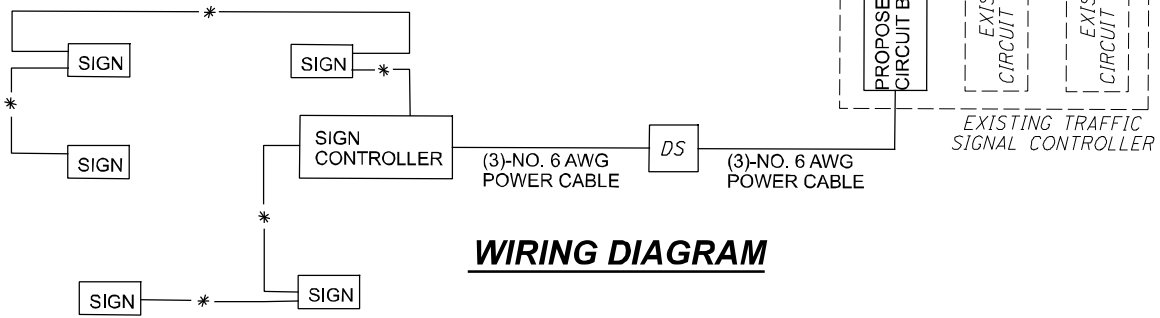
**TRAFFIC CONTROL PLAN - LOCATION 15
 IR-75 NB & SB AT WEBSTER STREET**

- NOTES:**
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 16 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 2 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.



WIRING DIAGRAM LEGEND

- * - (3)-NO. 8 AWG
- DS - DISCONNECT SWITCH



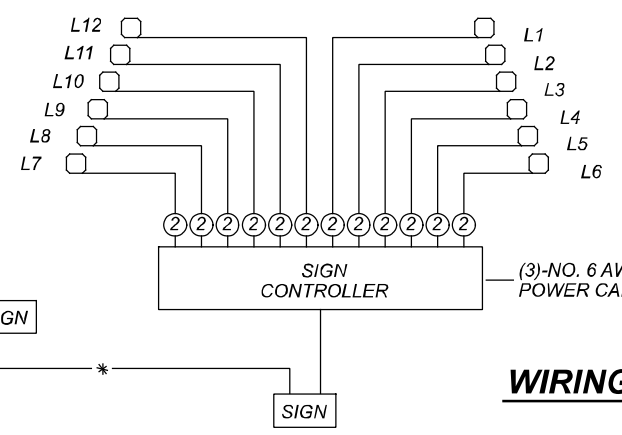
PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1494893.33	649339.009	1.5
2	1494929.86	649349.062	1.5
3	1495086.11	649259.946	7
4	1494911.88	649278.416	1.5
5	1495057.03	649225.472	1.5
6	1495073.05	649219.881	1.5

- APPROXIMATE DETECTION AREA

WIRING DIAGRAM LEGEND

* - (3)-NO. 8 AWG
 DS - DISCONNECT SWITCH

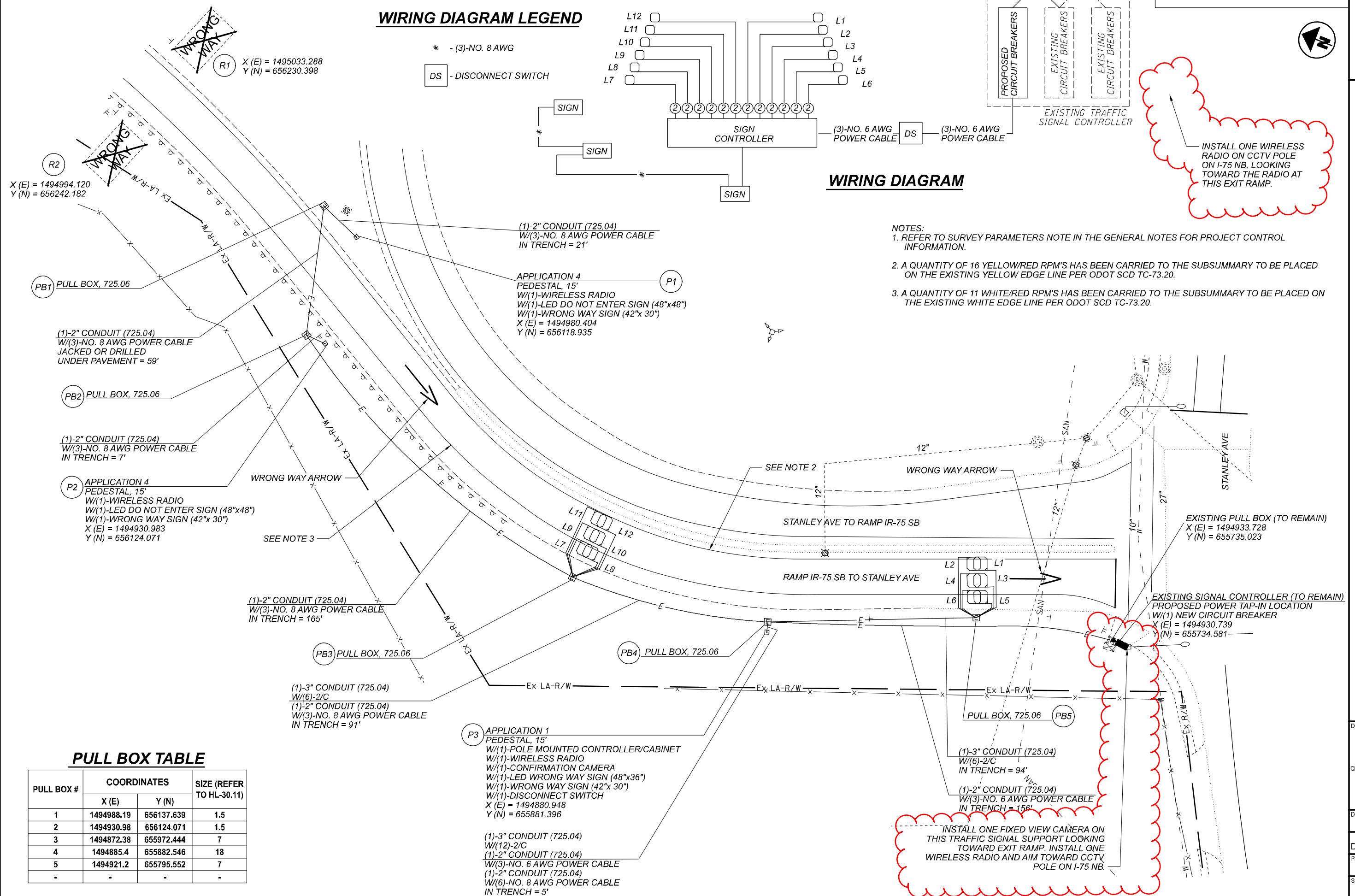


WIRING DIAGRAM

- NOTES:
 1. REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 2. A QUANTITY OF 16 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING YELLOW EDGE LINE PER ODOT SCD TC-73.20.
 3. A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.

INSTALL ONE WIRELESS RADIO ON CCTV POLE ON I-75 NB, LOOKING TOWARD THE RADIO AT THIS EXIT RAMP.

INSTALL ONE FIXED VIEW CAMERA ON THIS TRAFFIC SIGNAL SUPPORT LOOKING TOWARD EXIT RAMP. INSTALL ONE WIRELESS RADIO AND AIM TOWARD CCTV POLE ON I-75 NB.



PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1494988.19	656137.639	1.5
2	1494930.98	656124.071	1.5
3	1494872.38	655972.444	7
4	1494885.4	655882.546	18
5	1494921.2	655795.552	7
-	-	-	-

P3 APPLICATION 1
 PEDESTAL, 15'
 W/(1)-POLE MOUNTED CONTROLLER/CABINET
 W/(1)-WIRELESS RADIO
 W/(1)-CONFIRMATION CAMERA
 W/(1)-LED WRONG WAY SIGN (48"x36")
 W/(1)-WRONG WAY SIGN (42"x 30")
 W/(1)-DISCONNECT SWITCH
 X (E) = 1494880.948
 Y (N) = 655881.396

(1)-3" CONDUIT (725.04)
 W/(2)-2/C
 (1)-2" CONDUIT (725.04)
 W/(3)-NO. 6 AWG POWER CABLE
 (1)-2" CONDUIT (725.04)
 W/(6)-NO. 8 AWG POWER CABLE
 IN TRENCH = 5'

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 IN TRENCH = 165'

(1)-3" CONDUIT (725.04)
 W/(6)-2/C
 (1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 IN TRENCH = 91'

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 JACKED OR DRILLED
 UNDER PAVEMENT = 59'

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 IN TRENCH = 21'

APPLICATION 4
 PEDESTAL, 15'
 W/(1)-WIRELESS RADIO
 W/(1)-LED DO NOT ENTER SIGN (48"x48")
 W/(1)-WRONG WAY SIGN (42"x 30")
 X (E) = 1494980.404
 Y (N) = 656118.935

(1)-2" CONDUIT (725.04)
 W/(3)-NO. 8 AWG POWER CABLE
 IN TRENCH = 7'

P2 APPLICATION 4
 PEDESTAL, 15'
 W/(1)-WIRELESS RADIO
 W/(1)-LED DO NOT ENTER SIGN (48"x48")
 W/(1)-WRONG WAY SIGN (42"x 30")
 X (E) = 1494930.983
 Y (N) = 656124.071

EXISTING PULL BOX (TO REMAIN)
 X (E) = 1494933.728
 Y (N) = 655735.023

EXISTING SIGNAL CONTROLLER (TO REMAIN)
 PROPOSED POWER TAP-IN LOCATION
 W/(1) NEW CIRCUIT BREAKER
 X (E) = 1494930.739
 Y (N) = 655734.581

NOTES:

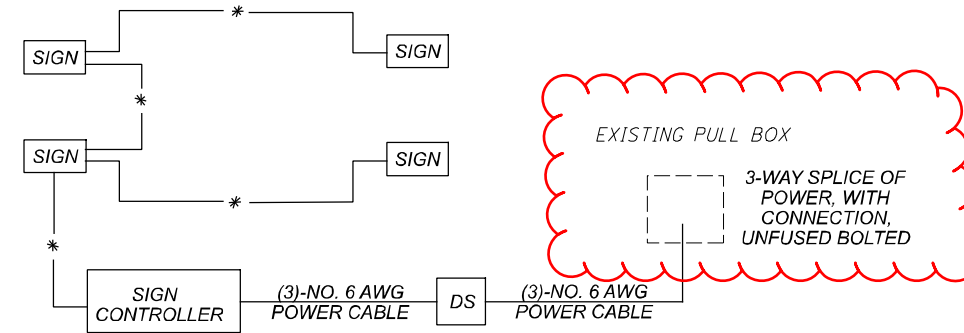
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
- A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
- A QUANTITY OF 2 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
- A QUANTITY OF 1 YELLOW/RED RPM HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.
- A QUANTITY OF 6 YELLOW/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE YELLOW EDGE LINE EVENLY BETWEEN EXISTING RPM'S PER ODOT SCD TC-73.20.

LOCATION 17



PULL BOX TABLE

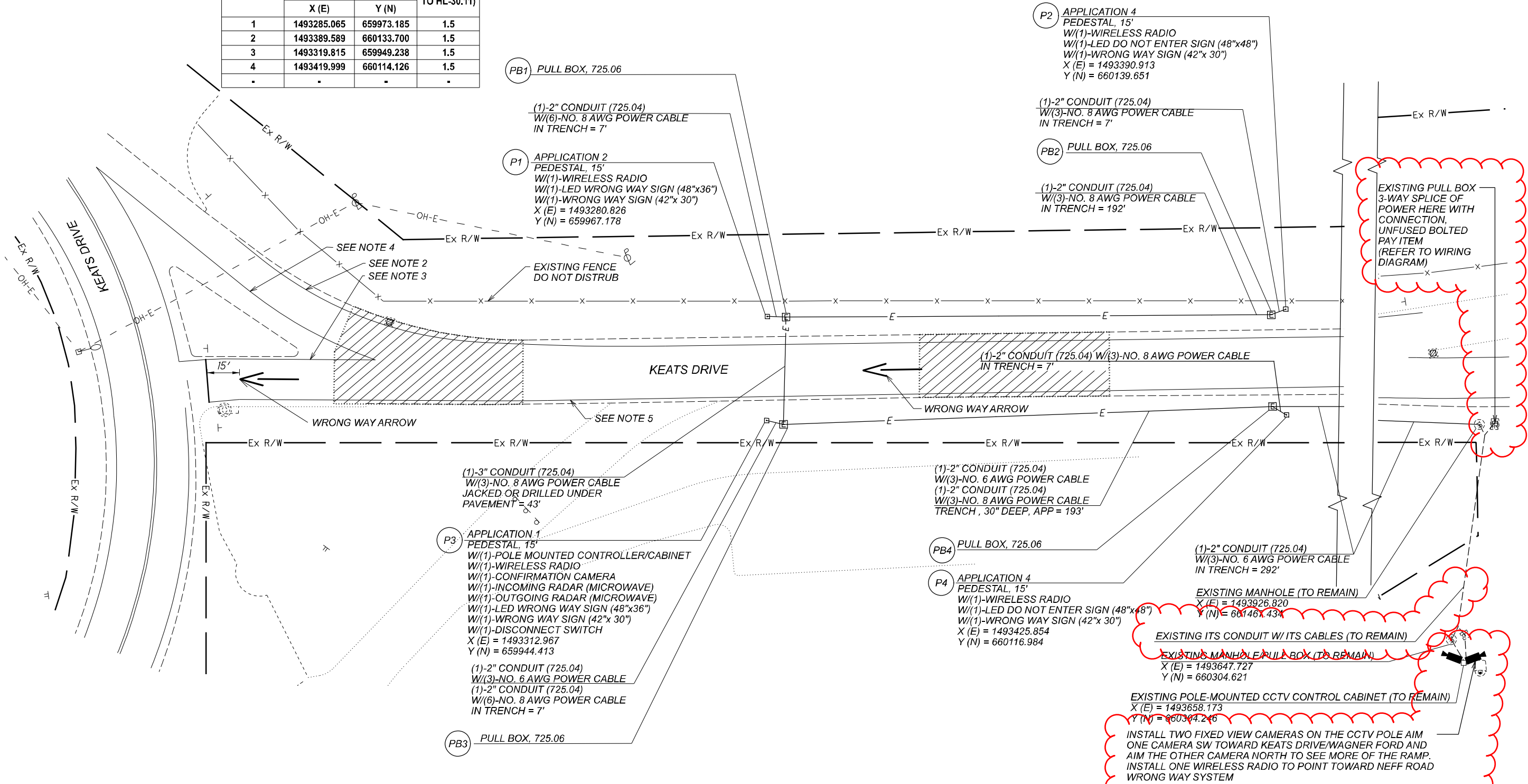
PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1493285.065	659973.185	1.5
2	1493389.589	660133.700	1.5
3	1493319.815	659949.238	1.5
4	1493419.999	660114.126	1.5
.	.	.	.



WIRING DIAGRAM LEGEND

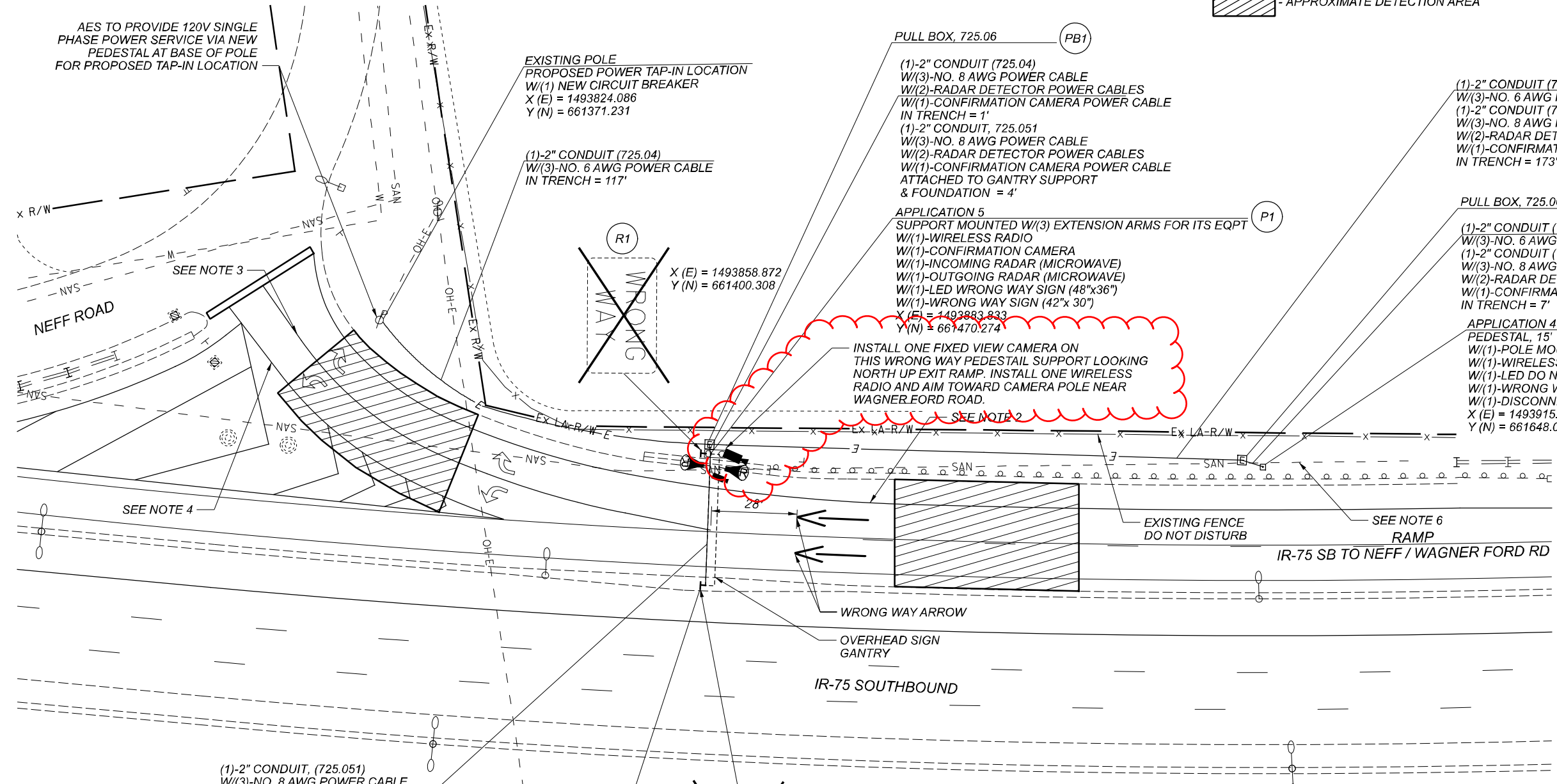
- * - (3)-NO. 8 AWG
- DS - DISCONNECT SWITCH
- [Hatched Box] - APPROXIMATE DETECTION AREA

WIRING DIAGRAM





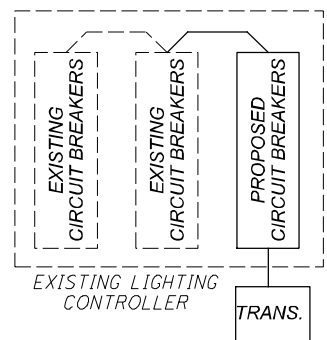
- APPROXIMATE DETECTION AREA



TRAFFIC CONTROL PLAN - LOCATION 18
IR-75 SB AT NEFF ROAD

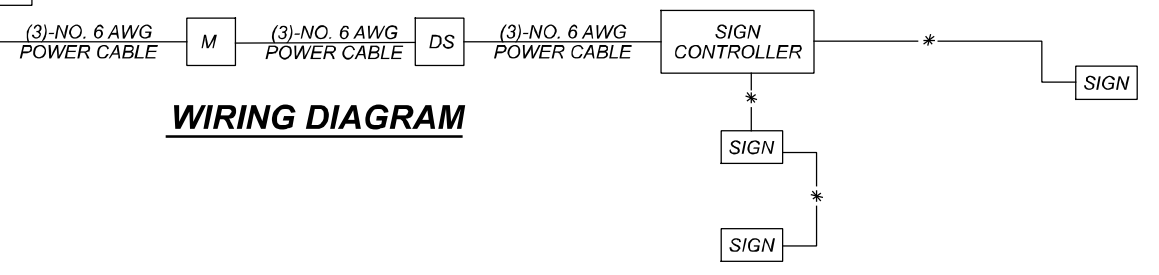
MOT-75-VAR
MODEL: TPO08 [SHEET] PAPER/DATE: 17x11(in.) DATE: 4/25/2022 TIME: 10:41:34 AM USER: 1670dlw
X:\02500\200536\01\2347_VAR-STW_Safety_Design_2020-10\13782_MOT-75-VAR\400-Engineering\Traffic\Sheets\13782_TPO08.dgn

- NOTES:**
- REFER TO SURVEY PARAMETERS NOTE IN THE GENERAL NOTES FOR PROJECT CONTROL INFORMATION.
 - A QUANTITY OF 11 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 4 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE LANE LINE PER ODOT SCD TC-73.20.
 - A QUANTITY OF 3 WHITE/RED RPM'S HAS BEEN CARRIED TO THE SUBSUMMARY TO BE PLACED ON THE EXISTING WHITE EDGE LINE PER ODOT SCD TC-73.20
 - ALL NEW CONDUIT ATTACHED TO THE OVERHEAD SIGN GANTRY SHALL BE PAID FOR UNDER ITEM 630 SIGNING MISC.; SERVICE ROUTING VIA EXISTING STRUCTURES.
 - CONTRACTOR SHALL ENSURE TRENCHING ACTIVITY KEEPS ABOVE 3.5' TO AVOID CONFLICT WITH EXISTING 24" SANITARY PIPE.



WIRING DIAGRAM LEGEND

- * - (3)-NO. 8 AWG
- DS - DISCONNECT SWITCH
- TRANS. - STEP DOWN TRANSFORMER (INCLUDED IN PAYMENT FOR POWER SOURCE)



WIRING DIAGRAM

PULL BOX TABLE

PULL BOX #	COORDINATES		SIZE (REFER TO HL-30.11)
	X (E)	Y (N)	
1	1493880.896	661470.984	1.5
2	1493912.756	661641.609	1.5
-	-	-	-
-	-	-	-

DESIGN AGENCY
Mead & Hunt
CLIENT

DESIGNER
DAD

REVIEWER
DLW 01/05/22

PROJECT ID
113782

SHEET TOTAL
P.32 38