D06 - STW CCTV FY17 171037 PID - 104135 Dist 1 5/11/2017

Contract Proposal Available @ www. Contracts.dot.state.oh.us/home



STATE OF OHIO DEPARTMENT OF TRANSPORTATION



LATITUDE: 39° 57' 21" LONGITUDE: 83° 03' 13"

PROJECT EARTH DISTURBED AREA:

EST. CONTRACTOR EARTH DISTURBED AREA: NOTICE OF INTENT EARTH DISTURBED AREA:

RAILROAD INVOLVEMENT:

N/A* NONE

N/A*

0.57 Ac

*TYPE OF PROJECT: SIGNALIZATION ITEMS

DESIGN DESIGNATION: N/A DESIGN EXCEPTION: NONE

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES **CALL TWO WORKING DAYS BEFORE YOU DIG**

CALL 1-800-362-2764 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE NON-MEMBERS MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE CALL: 1-800-925-0988

D06-STW-CCTV FY17

PID No.

FEDERAL PROJECT No.

104135

100% STATE

STATE JOB No.

CONSTRUCTION PROJECT No.

467852

PROJECT DESCRIPTION

INSTALL TRAFFIC SURVEILLANCE CAMERAS (CCTV) IN VARIOUS LOCATIONS ACROSS THE STATE.

2016 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OF FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH IN THESE PLANS AND ESTIMATES.

APPROVED:

DATE:

3-15-17

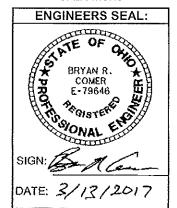
APPROVED:

OF TRANSPORTATION

DATE: 4-3-17

PLANS PREPARED BY:

ODOT, OFFICE OF TRAFFIC **OPERATIONS**



	STAND	ARD CONST	PRAWINGS		PLEMENTAL DIFICATIONS	
HL-30.11	01/20/17	ITS-10.10	07/17/15		800	01/20/17
HL-30.21	01/17/14	ITS-10.11	07/17/15		804	01/20/17
HL-30.22	01/17/14	ITS-12.10	07/17/15		809	04/15/16
HL-40.10	01/20/17	ITS-14.10	07/17/15		821	04/20/12
HL-40.20	01/20/17	ITS-14.11	07/17/15		832	01/17/14
HL-50.11	01/16/15	ITS-15.10	07/17/15		904	07/15/16
		ITS-15.11	07/17/15		921	04/20/12
TC-21.20	07/15/16	ITS-50.10	01/15/16			
		ITS-50.11	01/15/16			
MT-95.30	07/15/16	ITS-50.12	01/15/16			PECIAL
MT-95.31	01/20/17				PR	OVISIONS
MT-105.10	07/19/13					

LOCATION MAP Lake Ashtabula Lucas Fulton Williams Ottawa 3 Geauga Cuyahog 23 Erie Sandusky Trumbull Wood Defiance Henry 6 7 _M(5) Huron Paulding Seneca Van Wert Crawford Wayne 4 Stark Columbiana Hardin Carroll Marion Auglaize Holmes 22 SCALAW Mercer Morrow Knox Logan Coshocton Harrison Delaware Union Champaign Darke Bei 21 (8) 11 Madisor 9(10) Franklin Clark Noble Fairfield Perry Preble Morgan Pickaway (12) Hocking Butler Clinton (20) Warren Athens Ross Vinton Highland Meigs 16 15 Pike Jackson 19 Adams Scioto

Site #	Sheet #	ODOT District	<u>County</u>	<u>Location</u>	State Log	<u>Latitude</u>	<u>Longitude</u>
1	15	1	ALLEN	I-75 AT SR-65	122.6	40.698543	-84.090101
2	16	1	ALLEN	I-75 AT US-30	135.4	40.829421	-83.961993
3	17	2	OTTAWA	SR-2 AT SR-53 NORTH	123.6	41.505443	-82.859084
4	18	3	RICHLAND	I-71 AT US-30	177.0	40.782492	-82.412845
5	19	3	MEDINA	I-71 AT SR-18	218.8	41.135871	-81.793566
6	20	4	MAHONING	I-80 AT SR-46	223.0	41.12347	-80.768688
7	21	4	TRUMBULL	I-80 AT SR-193	229.2	41.156165	-80.664736
8	22	5	LICKING	I-70 AT SR-79	129.0	39.945516	-82.480099
9	23	5	GUERNSEY	I-70 AT SR-209	178.8	39.998956	-81.578841
10	24	5	GUERNSEY	I-70 AT I-77	179.8	39.997484	-81.561339
11	25	6	MADISON	I-70 AT US-42	79.1	39.956327	-83.37418
12	26	6	FAYETTE	I-71 AT SR-435	65.4	39.619713	-83.607434
13	27	7	MIAMI	I-75 AT SR-41	75.0	40.052005	-84.232653
14	28	7	MIAMI	I-75 AT US-36	82.1	40.151473	-84.21982
15	29	8	HAMILTON	I-275 AT 8 MILE RD	67.1	39.056943	-84.324339
16	30	8	HAMILTON	I-275 AT FIVE MILE RD	68.7	39.059483	-84.353924
17	31	9	LAWRENCE	US-52 AT SR-93	165.3	38.538617	-82.676424
18	32	9	LAWRENCE	US-52 AT SR-7	180.5	38.422935	-82.490312
19	33	10	GALLIA	US-35 AT SR-7	174.2	38.837843	-82.152004
20	34	10	WASHINGTON	I-77 AT SR-7	0.4	39.409022	-81.424967
21	35	11	BELMONT	I-70 AT SR-149	208.3	40.060178	-81.053067
22	36	11	TUSCARAWAS	I-77 AT SR-39 / US-250	80.9	40.493301	-81.479317
23	37	12	CUYAHOGA	I-77 AT SR-82	150.0	41.316107	-81.649357

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WORK AREAS

THE WORK AREAS SHOWN IN THESE PLANS ARE SPREAD OUT IN DIFFERENT AREAS OF THE STATE. THE WORK AREAS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK AREAS.

GENERAL

THE CONTRACTOR SHALL INSTALL TRAFFIC SURVEILLANCE CAMERAS AT THE LOCATIONS SPECIFIED IN THE PLANS UNLESS CHANGES ARE APPROVED BY THE PROJECT ENGINEER.

NOTIFICATION OF CONSTRUCTION AND ROAD CLOSURE OR RESTRICTION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF TWENTY ONE (21) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE CONTRACTOR SHALL ALSO NOTIFY THE PROJECT ENGINEER WHEN WORK IS COMPLETED. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT 1:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (419) 222-0438 OR EMAIL AT D01.PIO@DOT.OHIO.GOV

DISTRICT 2:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (419) 353-1468 OR EMAIL AT D02.PIO@DOT.OHIO.GOV

DISTRICT 3:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4305 OR EMAIL AT D03.PIO@DOT.STATE.OH.US DISTRICT PERMIT SECTION BY FAX AT (419) 281-5925 OR EMAIL AT LOUIS.TUMBLIN@DOT.STATE.OH.US

DISTRICT 4:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (330) 786-2226 OR EMAIL AT D04.PIO@DOT.OHIO.GOV

DISTRICT 5:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4510 OR EMAIL AT D05.PIO@DOT.STATE.OH.US
DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT
BRIAN.BOSCH@DOT.STATE.OH.US

DISTRICT 6

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY EMAIL AT D06.PIO@DOT.STATE.OH.US
DISTRICT WORK ZONE TRAFFIC MANAGER BY EMAIL AT D06.MOT@DOT.STATE.OH.US

DISTRICT 7:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY EMAIL AT D07.PIO@DOT.STATE.OH.US DISTRICT PERMIT SECTION BY PHONE AT (937) 492-1141 OR EMAIL AT RAMONA.DIEHL@DOT.STATE.OH.US

DISTRICT 8:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (513) 933-9472 OR EMAIL AT D08.PIO.FORM@DOT.STATE.OH.US DISTRICT PERMIT SECTION BY FAX AT (513) 933-9472 OR EMAIL AT TOM.MAKRIS@DOT.STATE.OH.US

DISTRICT 9

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (740) 775-4889 OR EMAIL AT D09.PIO@DOT.STATE.OH.US

DISTRICT 10:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (740) 373-7317 OR EMAIL AT D10.PIO@DOT.STATE.OH.US

DISTRICT 11:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (330) 308-6985 OR EMAIL AT D11.PIO@DOT.STATE.OH.US

DISTRICT 12:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (216) 584-2274 OR EMAIL AT D12.PUBLIC.INFORMATION@DOT.OHIO.GOV

CENTRAL OFFICE SPECIAL HAULING PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT HAULING.PERMITS@DOT.STATE.OH.US

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES.

ITEM 625: CONDUIT, 4", MULTICELL, 725.20, EPC-40 ITEM 625: CONDUIT, MULTICELL, 4", 725.20, SCHEDULE 80, JACKED OR DRILLED

DESCRIPTION

THIS CONDUIT IS INTENDED FOR THE USE IN UNDERGROUND SITUATIONS REQUIRING MORE THAN ONE SINGLE CONDUIT. THIS INCLUDES THE MAIN CONDUIT RACEWAY ALONG THE FREEWAY, CONNECTION FROM PULL BOXES TO THE ROAD SIDE CABINETS AND FOR RUNS OF CONDUIT FOR MULTIPLE PURPOSES, E.G., AT RAMP METER INSTALLATIONS, FOR LOOP LEAD-IN CABLE, SIGNALS CABLE FOR RAMP METER DISPLAYS, SIGNAL CABLE FOR RAMP METER SIGNING FLASHERS & ILLUMINATION AND POWER. THE CONTRACTOR SHALL PLUG ALL UNUSED CELLS WITH CONDUIT CAPS TO ASSURE AIR AND WATER INTEGRITY OF EACH INDIVIDUAL INNERDUCT.

MATERIALS:

THE TRAFFIC SURVEILLANCE RACEWAY SHALL CONSIST OF A FACTORY-ASSEMBLED SYSTEM OF FOUR (4) INNERDUCTS ASSEMBLED WITHIN A PROTECTIVE OUTER DUCT. THE INNERDUCTS SHALL BE NOMINAL 1.25 INCH INSIDE DIAMETER, TYPE DB PVC PER NEMA TC-8 WITH A BELL INSERTION DEPTH OF 1.75 INCHES MINIMUM. THE OUTER DUCT SHALL BE NOMINAL 4 INCH (INSIDE DIAMETER), SCHEDULE 40 PVC. CARLON TYPE SCHEDULE 40 AND 80 OR APPROVED EQUIVALENT.

THE COUPLING SHALL BE DESIGNED IN A MANNER TO PERMIT EASY FIELD ASSEMBLY. THE COUPLING SHALL BE MARKED OR KEYED IN A MANNER TO ENSURE THE INNERDUCTS ARE PROPERLY ALIGNED, ANY COLOR CODES ARE CONTINUED AND THE ADJOINING SECTION IS INSERTED TO THE PROPER DEPTH IN THE BELL. ALL KEYS AND/OR MARKINGS SHALL BE VISIBLE AFTER ASSEMBLY TO ALLOW THE INSPECTION OF EACH JOINT FOR PROPER ASSEMBLY BEFORE BURIAL. THE SEALING SYSTEM SHALL BE DESIGNED TO ASSURE AIR INTEGRITY OF EACH INDIVIDUAL INNERDUCT AND WATER INTEGRITY OF THE ENTIRE SYSTEM.

WHERE INNERDUCT(S) WITHIN A MULTI-CELL DUCT ARE TO REMAIN EMPTY, ONE 1/2-INCH NYLON ROPE SHALL BE INSTALLED IN EACH OF THE OPEN INNERDUCTS, THE ROPE WILL REMAIN TO BE USED FOR A FUTURE CABLE INSTALLATION. ALSO, EACH INNERDUCT SHALL BE PLUGGED TO MAINTAIN THE AIR AND WATER INTEGRITY. IN ADDITION, THE OUTER DUCT SHALL BE CAPPED TO MAINTAIN THE AIR AND WATER INTEGRITY OF THE ENTIRE SYSTEM.

INSTALLED IN TRENCH:

INSTALLATION WILL BE IN 30-INCH DEEP TRENCH, EXCEPT AS NOTED ON THE PLANS.

ALL JOINTS WILL BE JOINED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, IN ORDER TO PROVIDE AN AIR-TIGHT ENCLOSURE OF THE INTERIOR DUCTS AND A WATER-TIGHT ENCLOSURE OF THE OUTER DUCT. ALL MULTI-CELL CONDUIT INSTALLED OUTSIDE OF THE ROADWAY IN TRENCH SHALL BE SCHEDULE 40 UNLESS DIRECTED BY THE ODOT ENGINEER TO USE SCHEDULE 80 FOR USE IN WELL-TRAVELED VEHICULAR AREAS.

ITEM 625: CONDUIT, 4", MULTICELL, 725.20, EPC-40 ITEM 625: CONDUIT, MULTICELL, 4", 725.20, SCHEDULE 80, JACKED OR DRILLED...CONTINUED

INSTALLED UNDER ROADWAY:

INSTALLATION WILL BE AT LEAST 30 INCHES DEEP JACKED OR DRILLED UNDER PAVEMENT, EXCEPT AS NOTED ON THE PLANS.

ALL JOINTS WILL BE JOINED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, IN ORDER TO PROVIDE AN AIR-TIGHT ENCLOSURE OF THE INTERIOR DUCTS AND A WATER-TIGHT ENCLOSURE OF THE OUTER DUCT. ALL MULTI-CELL CONDUIT INSTALLED UNDER THE ROADWAY SHALL BE SCHEDULE 80.

METHOD OF MEASUREMENT:

THE CONDUIT WILL BE MEASURED BY THE AMOUNT OF CONDUIT IN FEET FURNISHED AND INSTALLED OF EACH TYPE SCHEDULE 40 OR 80 MEASURED FROM CENTER-TO-CENTER OF PULL BOXES, FOUNDATION, ETC., AND WILL INCLUDE ALL FITTINGS AND APPURTENANCES, JOINTS, BENDS, GROUNDS AND CONCRETE ENCASEMENT WHERE SPECIFIED.

THE TRENCH WILL BE MEASURED BY THE NUMBER OF FEET OF TRENCH COMPLETED AS PER C&MS 625.21.

BASIS OF PAYMENT:

THE PAYMENT FOR THESE ITEMS WILL BE MADE FOR THE ACCEPTED LINER FOOT QUANTITIES AT THE CONTRACT BID PRICE.

ITEM 625: PULL BOX, 725.08, 32", AS PER PLAN

THE CONTRACTOR SHALL FURNISH AND INSTALL A 32" ROUND PULL BOX WITH CONCRETE PAD PER STANDARD CONSTRUCTION DRAWING ITS-14.11.

ITEM 625: GROUND ROD, AS PER PLAN

THE CONTRACTOR SHALL INSTALL GROUND RODS PER STANDARD CONSTRUCTION DRAWING ITS-50.10. IN ADDITION, A GROUND ROD SHALL BE INSTALLED AT EACH ELECTRIC PULL BOX INSTALLED ON THIS PROJECT AND CONNECTED TO THE PULL BOX FRAME. AT EACH PULL BOX LOCATION, THE GROUND ROD SHALL ALSO BE TIED INTO THE DISTRIBUTION CABLE USED AS THE GROUND WIRE TO SERVICE THE CAMERA CABINET, IN ORDER TO PROVIDE A COMPLETE GROUNDING SYSTEM.

ITEM 625: LIGHTING, MISC: STEP-DOWN TRANSFORMER AND SUPPORT

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS NECESSARY FOR A POWER SERVICE PER ODOT CONSTRUCTION AND MATERIAL SPECIFICATION SECTION 625.15.

THE POWER SERVICE SHALL BE TIED INTO AN EXISTING HIGHWAY LIGHTING CONTROL CENTER, OR AS DIRECTED BY THE ENGINEER. THE SERVICE SHALL BYPASS THE PHOTOCELL OF THE HIGHWAY LIGHTING CONTROL CENTER SO THE CCTV SITE WILL HAVE POWER 24/7. A 3.0 KVA, 480 VOLT TO 120/240 VOLT TRANSFORMER SHALL BE INCIDENTAL TO THIS PAY ITEM. AN EQUIPMENT STAND SHALL ALSO BE INCLUDED AND SHALL HAVE THE TRANSFORMER AND DISCONNECT MOUNTED UPON IT. THIS ITEM SHALL BE INSTALLED PER STANDARD CONSTRUCTION DRAWING ITS-50.11, EXCEPT THE TRANSFORMER SHALL BE SIZED FOR 3.0 KVA AS DESCRIBED ABOVE. THIS ITEM SHALL ALSO INCLUDE ALL CONDUIT AND MATERIALS NECESSARY TO TIE INTO THE HIGHWAY LIGHTING CONTROL CENTER, IN ORDER TO PROVIDE A COMPLETE AND FUNCTIONAL POWER SERVICE.

THE CCTV RELATED POWER SERVICES SHALL BE MARKED WITH "ITS". SEPARATE DISCONNECT SWITCHES SHALL BE FUSIBLE, RATED FOR 60 AMPS WITH NEMA 4X ENCLOSURE, AND SHALL BE FUSED AT 30 AMPS. THIS SERVICE SHALL PROVIDE 120 VOLTS TO EACH RELATED SITE.

ITEM 632: POWER SERVICE, AS PER PLAN A

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS NECESSARY FOR A POWER SERVICE PER ODOT CONSTRUCTION AND MATERIAL SPECIFICATION SECTION 625.15.

THE POWER SERVICE SHALL BE POLE MOUNTED WITH AERIAL POWER COMPANY FEED PER ODOT STANDARD CONSTRUCTION DRAWING ITS-15.11.

THE CCTV RELATED POWER SERVICES SHALL BE MARKED WITH "ITS". DISCONNECT SWITCHES SHALL BE FUSIBLE, RATED FOR 60 AMPS WITH NEMA 4X ENCLOSURE, AND SHALL BE FUSED AT 30 AMPS. THIS SERVICE SHALL PROVIDE 120 VOLTS TO EACH RELATED SITE.

THE CONTRACTOR SHALL COORDINATE WITH POWER COMPANY AND PROVIDE APPROPRIATE INSPECTIONS AND/OR SELF INSPECTION FORMS TO POWER COMPANY IN ORDER TO ENERGIZE SERVICE. SEE "UTILITIES, NEW POWER SERVICES" NOTE FOR MORE SITE SPECIFIC DETAILS.

ITEM 632: POWER SERVICE, AS PER PLAN B

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS NECESSARY FOR A POWER SERVICE PER ODOT CONSTRUCTION AND MATERIAL SPECIFICATION SECTION 625.15.

THE EXISTING POWER SERVICE FOR THE SITE SHALL BE MAINTAINED. THIS POWER SERVICE SHALL CONSIST OF UTILIZING THE UNUSED 120V LEG IN THE DISCONNECT OF THE EXISTING 120/240V POWER SERVICE TO SUPPLY 120V TO THE CCTV ITS CABINET. THIS PAY ITEM SHALL INCLUDE THE REPLACEMENT OF THE EXISTING DISCONNECT SWITCH. THIS ITEM SHALL ALSO INCLUDE THE INSTALLATION OF A NEW DISCONNECT SWITCH USED TO DIRECTLY POWER THE CCTV. THE NEW DISCONNECT SWITCH SHALL BE INSTALLED ON SAME POLE AS EXISTING DISCONNECT SWITCH. INSTALL A NEW 30 AMP FUSE OR BREAKER AT LOCATIONS WHERE A NEW FUSE OR BREAKER MAY BE NEEDED. THIS ITEM SHALL ALSO INCLUDE ALL CONDUIT AND MATERIALS NECESSARY TO TIE INTO THE DISCONNECTS AND PROVIDE A COMPLETE AND FUNCTIONAL POWER SERVICE. THE CONTRACTOR SHALL DELIVER THE REMOVED DISCONNECT SWITCH TO THE PROJECT ENGINEER, TO THEN BE RETURNED TO THE APPROPRIATE DISTRICT SIGNAL ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE APPROPRIATE CONTACT WITH THE POWER COMPANY FOR DEENERGIZING AND ENERGIZING OF ANY POWER LINES. IF THE POWER IS TO BE TIED INTO THE SAME POWER SOURCE AS A SIGNALIZED INTERSECTION, THE CONTRACTOR SHALL PRESENT PLANS FOR APPROVAL TO THE PROJECT ENGINEER SHOWING HOW THEY PLAN TO KEEP THE SIGNALIZED INTERSECTION RUNNING AT 100% FOR THE DURATION OF TIME THAT THE POWER SERVICE IS DEENERGIZED.

THE CCTV RELATED POWER SERVICES SHALL BE MARKED WITH "ITS". SEPARATE DISCONNECT SWITCHES SHALL BE INSTALLED AND SHALL BE FUSIBLE, RATED FOR 60 AMPS WITH NEMA 4X ENCLOSURE, AND FUSED AT 30 AMPS.

ITEM 632: POWER SERVICE, AS PER PLAN C

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS NECESSARY FOR A POWER SERVICE PER ODOT CONSTRUCTION AND MATERIAL SPECIFICATION SECTION 625.15.

THE EXISTING POWER SERVICE FOR THE SITE SHALL BE MAINTAINED. THIS PAY ITEM SHALL INCLUDE THE REPLACEMENT OF EXISTING OR INSTALLATION OF NEW DISCONNECT SWITCHES USED TO DIRECTLY POWER THE CCTV. INSTALL A NEW 30 AMP BREAKER AT LOCATIONS WHERE A NEW BREAKER MAY BE NEEDED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE APPROPRIATE CONTACT WITH THE POWER COMPANY FOR DEENERGIZING AND ENERGIZING OF ANY POWER LINES. IF THE POWER IS TO BE TIED INTO THE SAME POWER SOURCE AS A SIGNALIZED INTERSECTION, THE CONTRACTOR SHALL PRESENT PLANS FOR APPROVAL TO THE PROJECT ENGINEER SHOWING HOW THEY PLAN TO KEEP THE SIGNALIZED INTERSECTION RUNNING AT 100% FOR THE DURATION OF TIME THAT THE POWER SERVICE IS DEENERGIZED.

THE CCTV RELATED POWER SERVICES SHALL BE MARKED WITH "ITS". SEPARATE DISCONNECT SWITCHES SHALL BE INSTALLED AND SHALL BE FUSIBLE, RATED FOR 60 AMPS WITH NEMA 4X ENCLOSURE, AND FUSED AT 30 AMPS.

ELECTRICAL NOTE

A MINIMUM OF 10 FEET SLACK CABLE SHALL BE COILED IN EACH ELECTRICAL PULL BOX. THE CABLE QUANTITIES ACCOUNT FOR THREE DISTRIBUTION CABLES (HOT, NEUTRAL, AND GROUND) FROM POWER SERVICE TO CCTV GROUND MOUNTED ITS CABINET. 10 FEET OF CABLE AT ALL SERVICE TERMINATIONS, 10 FEET OF CABLE FOR EACH PULL BOX, AND 15 FEET OF CABLE BETWEEN ODOT CABINETS AND NEAREST PULL BOX HAS BEEN ACCOUNTED FOR IN THE CABLE QUANTITIES.

GENERAL CCTV SITE LAYOUT

THE CONTRACTOR SHALL INSTALL THE CCTV 70 FOOT CONCRETE POLE, GROUND MOUNTED ITS CABINET, PULL BOXES, AND CONDUIT ACCORDING TO STANDARD CONSTRUCITON DRAWING ITS-10.11. THE LAYOUT MAY BE SHIFTED ACCORDING TO SITE SPECIFIC NEEDS BUT SHOULD TYPICALLY FOLLOW SCD ITS-10.11. EXAMPLE, A SITE MAY HAVE THE PULL BOXES REVERSED OR ON THE OPPOSITE SIDE OF THE WORK PAD BUT SHOULD STILL BE NEAREST THE CABINET. THE CCTV LOWERING UNIT ARM MAY ALSO BE ORIENTED SLIGHTLY DIFFERENT (AS DESCRIBED ON EACH PLAN SHEET BUT SHALL NOT BE POSSIBLE TO BE LOWERED ON TOP OF THE CABINET OR TECHNICIAN OPERATING THE LOWERING DEVICE.

ITEM 633: CABINET FOUNDATION, AS PER PLAN

THE CONTRACTOR SHALL INSTALL A CABINET FOUNDATION FOR EACH ITS GROUND MOUNTED CABINET. SEE SUPPLEMENTAL SPECIFICATION 809 FOR CONDUIT REQUIREMENTS ENTERING THE ITS GROUND MOUNTED CABINET.

ITEM 633: CONTROLLER WORK PAD, AS PER PLAN

THE CONTRACTOR SHALL INSTALL A WORKPAD AT EACH CAMERA POLE PER ODOT STANDARD CONSTRUCTION DRAWING ITS-10.11. THE CONTRACTOR SHALL GRADE THE SURROUNDING AREA SLIGHTLY IN ORDER TO INSTALL A LEVEL WORK PAD AND RESTORE SITE CONDITIONS AS APPROVED BY THE PROJECT ENGINEER.

PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR ITEM 633, CONTROLLER WORK PAD, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT THE ITEM.

ITEM 804: FIBER OPTIC CABLE, 24 FIBER

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS PER SUPPLEMENTAL SPECIFICATION 804/904. 150 FEET OF CABLE SLACK IN EACH 32" PULL BOX AND 25 FEET OF CABLE BETWEEN ODOT CABINET AND NEAREST PULL BOX HAS BEEN ACCOUNTED FOR IN THE CABLE QUANTITIES.

ITEM 804: FIBER TERMINATION PANEL, 12 FIBER, AS PER PLAN

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS PER SUPPLEMENTAL SPECIFICATION 804/904. THE CONTRACTOR SHALL INSTALL TERMINATION PANELS ON EACH END OF THE CABLE, ONE IN THE CCTV GROUND MOUNTED ITS CABINET AND ONE IN THE SIGNAL CABINET. THE CONTRACTOR SHALL FURNISH AND INSTALL THE CORRECT TYPE OF TERMINATION PANEL PER THE TYPE OF SIGNAL CABINET (CALTRANS OR NEMA), PER SS 804/904. THE CONTRACTOR SHALL BREAK OUT AND TERMINATE 12 FIBERS FROM THE BLUE BUFFER TUBE ON EACH END. THE ORANGE BUFFER TUBE SHALL NOT BE TERMINATED AND SHALL BE COILED AND STORED IN THE PANEL.

ITEM 809: CCTV IP-CAMERA SYSTEM, DOME-TYPE

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS.

ITEM 809: CCTV CONCRETE POLE WITH LOWERING UNIT, 70 FEET

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS. IN ADDITION, THE CONTRACTOR SHALL INCLUDE A 1/2" ISOLATION JOINT MATERIAL BETWEEN THE CONCRETE POLE AND CONCRETE WORK PAD.

ITEM 809: ETHERNET CABLE, OUTDOOR-RATED

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS.

ITEM 809: ITS CABINET - GROUND MOUNTED

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS.

CONSTRUCTION PRIORITY SITE

THE CONTRACTOR SHALL PRIORITIZE SITE 2, I-75 AT US-30 IN ALLEN COUNTY, TO BE THE FIRST CAMERA SITE COMPLETELY INSTALLED AND OPERATIONAL. THE CONTRACTOR SHALL MAKE EVERY EFFORT POSSILE TO GET THE CAMERA SITE COMPLETED AS SOON AS POSIBLE AND BEFORE ALL OTHER SITE CAMERAS, WHILE CONTINUING TO STAY ON SCHEDULE FOR THE ENTIRE PROJECT. THE CONTRACTOR SHALL INFORM THE PROJECT ENGINEER AS SOON AS THE SITE 2 CAMERA IS OPERATIONAL.

FIBER OPTIC CABLE MARKERS

FIBER OPTIC CABLE MARKERS SHALL BE INSTALLED AS DIRECTED BY THE ODOT ENGINEER AND AT EVERY PULLBOX CONTAINING FIBER OPTIC CABLE AND SHALL BE ONE (1) OF TWO (2) TYPES:

TYPE 1 – COTTMARK 511, FRICK FLEXPOST, or CARSONITE CURV-FLEX MARKER

TYPE 2 – COTT BIGFINK, FRICK TESTPOST, or RHINODOME TEST STATION

THE FIBER OPTIC CABLE MARKERS SHALL BE 6 FEET IN LENGTH AND SHALL BE SECURELY PLACED IN THE GROUND AT A DEPTH OF TWO (2) FEET. CARE SHALL BE TAKEN DURING INSTALLATION NOT TO DAMAGE ANY UNDERGROUND CONDUIT IN THE VICINITY. THE CONTRACTOR SHALL USE A TYPE 2 MARKER WHEN THE PATH OF THE FIBER CROSSES UNDERNEATH A ROADWAY AND WHEN CAPABLE SHALL PLACE A MARKER ON BOTH SIDES OF THE ROADWAY AT CROSSING. THE CONTRACTOR SHALL CONNECT TRACER WIRE TO TERMINAL AT TOP OF TYPE 2 MARKER. TYPE 1 MARKERS SHALL ONLY BE PLACED ON STRAIGHT FIBER RUNS BETWEEN PULL-BOXES IN THE SHOULDER AND THE CONTRACTOR SHALL BE LIMITED TO THE USE OF TYPE 1 MARKERS SO THAT A TYPE 2 MARKER SHALL BE PLACED BETWEEN ANY TWO (2) TYPE 1 MARKERS. TYPE 1 MARKERS SHALL NOT BE PLACED IN SUCCESSION DOWN A FIBER PATH. THE MARKERS SHALL BE ORANGE IN COLOR AND SHALL HAVE THE FOLLOWING INFORMATION LOCATED ON THE UPPER PORTION OF THE MARKER IN A READABLE FORMAT:

WARNING CONTACT OUPS 48 HRS BEFORE DIGGING ODOT ITS FIBER OPTIC CABLE 614-387-4113

PAYMENT FOR ALL FIBER OPTIC CABLE MARKERS SHALL BE INCLUDED IN THE BID ITEM FOR THE FIBER OPTIC CABLE PAY ITEM, ITEM 804E15010 FIBER OPTIC CABLE, 24 FIBER.

TRACER WIRE

TRACER WIRE SHALL BE PHYSICALLY SECURED DIRECTLY ABOVE THE TOP CONDUIT OF ALL INSTALLED CONDUIT RUNS USING WIRE PLASTIC ZIP TIES SPACED 10 FEET APART. TRACER WIRE SHALL BE NO SMALLER THAN #12 AWG WIRE. THE WIRE SHALL BE HDPE INSULATED, ORANGE IN COLOR, AND CONSTRUCTED OF COPPER CLAD STEEL. APPROXIMATELY 10 FT. OF SLACK OF THE TRACER WIRE SHALL BE LEFT INSIDE THE ADJACENT PULL-BOXES CONNECTING THE CONDUIT RUNS. IN SITUATIONS WHERE A TYPE 2 FIBER OPTIC CABLE MARKER IS TO BE INSTALLED IN CONJUNCTION WITH THE TRACER WIRE, THE TRACER WIRE SHALL BE RUN THROUGH THE MARKER AND CONNECTED TO TERMINALS AT THE TOP OF THE MARKER.

PAYMENT FOR ALL TRACER WIRE SHALL BE INCLUDED IN THE BID ITEM FOR THE FIBER OPTIC CABLE PAY ITEM, ITEM 804E15010 FIBER OPTIC CABLE, 24 FIBER.

SEEDING AND MULCHING

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

659, SEEDING AND MULCHING, CLASS 2: 2770 SQ. YD. 659, COMMERCIAL FERTILIZER: 0.39 TON 659, WATER: 15 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 EASMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS. QUANTITIES CARRIED TO THE GENERAL SUMMARY.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 100 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO FILE A NEW FAA FORM 7460-1, ADVISING THE FAA THAT THE AERONAUTICAL STUDY NO. (ASN) FOR THE APPROPRIATE SITE LOCATION BELOW IS BEING RESUBMITTED AND THAT AN ALTERATION TO THE ORIGINAL SUBMISSION IS REQUESTED.

ASN: 2017-AGL-1615-OE, SITE 1, I-75 AT SR-65, PERMANENT ASN: 2017-AGL-1664-OE, SITE 1, I-75 AT SR-65, TEMPORARY ASN: 2017-AGL-1621-OE, SITE 3, SR-2 AT SR-53 NORTH, PERM. ASN: 2017-AGL-1665-OE, SITE 3, SR-2 AT SR-53 NORTH, TEMP. ASN: 2017-AGL-1630-OE, SITE 4, I-71 AT US-30, PERMANENT ASN: 2017-AGL-1673-OE, SITE 4, I-71 AT US-30, TEMPORARY ASN: 2017-AGL-1623-OE, SITE 5, I-71 AT SR-18, PERMANENT ASN: 2017-AGL-1666-OE, SITE 5, I-71 AT SR-18, TEMPORARY ASN: 2017-AGL-1624-OE, SITE 9, I-70 AT SR-209, PERMANENT ASN: 2017-AGL-1667-OE, SITE 9, I-70 AT SR-209, TEMPORARY ASN: 2017-AGL-1625-OE, SITE 10, I-70 AT I-77, PERMANENT ASN: 2017-AGL-1668-OE, SITE 10, I-70 AT I-77, TEMPORARY ASN: 2017-AGL-1626-OE, SITE 17, US-52 AT SR-93, PERMANENT ASN: 2017-AGL-1669-OE, SITE 17, US-52 AT SR-93, TEMPORARY ASN: 2017-AGL-1627-OE, SITE 18, US-52 AT SR-7, PERMANENT ASN: 2017-AGL-1670-OE, SITE 18, US-52 AT SR-7, TEMPORARY ASN: 2017-AGL-1628-OE, SITE 19, US-35 AT SR-7, PERMANENT ASN: 2017-AGL-1671-OE, SITE 19, US-35 AT SR-7, TEMPORARY ASN: 2017-AGL-1629-OE, SITE 22, I-77 AT SR-39 / US-250, PERM. ASN: 2017-AGL-1672-OE, SITE 22, I-77 AT SR-39 / US-250, TEMP.

NOTIFY THE ODOT **OFFICE OF AVIATION** WHEN RESUBMITTING FAA FORM 7460-1. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT **OFFICE OF AVIATION** PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FAA APPROVAL MAY TAKE UP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

Express Processing Center The Federal Aviation Administration Southwest Regional Office Air Traffic Airspace Branch ASW-520 2601 Meacham Blvd. Fort Worth, TX 76137-4298

Ohio Department of Transportation Office of Aviation 2829 West Dublin-Granville Road Columbus, Ohio 43235 614-387-2346

WITHIN 2 DAYS AFTER INSTALLATION OF A CAMERA POLE AT EACH OF THE LOCATIONS ABOVE, THE CONTRACTOR SHALL SEND WRITTEN NOTIFICATION VIA EMAIL TO THE PROJECT ENGINEER AND BRYAN COMER WITH ODOT TRAFFIC OPERATIONS (CONTACT INFORMATION ON SHEET 8), TO INFORM THE CONSTRUCTION HAS REACHED IT'S GREATEST HEIGHT AND FAA FORM 7460-2, PART 2, IS REQUIRED TO BE SUBMITTED TO THE FAA. IF ODOT IS UNABLE TO E-FILE/SUBMIT THIS FORM, THE CONTRACTOR SHALL SUMIT FORM 7460-2 WITHIN 5 DAYS AFTER INSTALLATION OF THE CAMERA POLE.

UTILITIES

THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO THE OHIO UTILITIES PROTECTION SERVICE (OUPS), AND ANY NON-MEMBERS OF A REGISTERED PROTECTION SERVICE AT LEAST TWO WORKING DAYS BEFORE CONSTRUCTION AND IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE.

THE ODOT CONTRACTOR WILL TAKE ALL UTILITY MARKINGS INTO CONSIDERATION PRIOR TO INSTALLING ANY NEW EQUIPMENT TO AVOID ANY CONFLICTS. IT IS ODOT'S EXPECTATION THAT A MODIFICATION OF PLACEMENT OF NEW EQUIPMENT BE MADE TO ACCOMMODATE EXISTING UTILITIES SO THEY ARE NOT IMPACTED, IF POSSIBLE. IF THERE IS A CONFLICT THAT CANNOT BE AVOIDED, THE ODOT CONTRACTOR IS REQUIRED TO CONTACT THE IMPACTED UTILITY PRIOR TO INSTALLING THE EQUIPMENT AND FURTHER REVIEW OPTIONS WITH THE IMPACTED UTILITY OWNER FOR RESOLUTION.

IT IS REQUIRED OF THE ODOT CONTRACTOR TO SCHEDULE A FIELD REVIEW A MINIMUM OF 2 WEEKS PRIOR TO EQUIPMENT INSTALLATION TO INSURE ALL UTILITIES ARE CLEAR AND ALL CURRENT LOCATIONS ARE KNOWN. IF ANY UTILITY ISSUES ARISE IT IS THE RESPONSIBILITY OF THE ODOT CONTRACTOR TO WORK OUT AN ACCEPTABLE SOLUTION WITH THE UTILITY AND ODOT TO KEEP THE PROJECT MOVING FORWARD.

OHIO UTILITY PROTECTION SERVICE: 1-800-362-2764 NON-MEMBERS MUST BE CALLED DIRECTLY, INCLUDING ODOT DISTRICTS WHO CAN BE CONTACTED THROUGH THE PROJECT ENGINEER.

LISTED BELOW ARE THE ODOT DISTRICT UTILITY COORDINATORS AND OTHER ODOT DISTRICT UTILITY OWNERS. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE DISTRICT UTILITY COORDINATOR IF CONTACT INFORMATION IS NEEDED FOR ANY UTILITY COMPANIES WITH THE WORK AREA.

DISTRICT 1 UTILITY COORDINATOR
ATTN: DUANE HACKWORTH
PH: 419-999-6843
1885 N MCCULLOUGH ST
LIMA, OH 45801
DUANE.HACKWORTH@DOT.OHIO.GOV

DISTRICT 1 ATTN: ERIC R. PFENNING, P.E., P.S. PH: 419-999-6893 1885 N MCCULLOUGH ST LIMA, OH 45801 ERIC.PFENNING@DOT.OHIO.GOV

DISTRICT 2 UTILITY COORDINATOR
ATTN: CHRIS HIBBETT
PH: 419-373-4438
317 EAST POE RD
BOWLING GREEN, OH 43402
CHRISTOPHER.HIBBETT@DOT.OHIO.GOV

DISTRICT 2 ATTN: DYLAN FOUKES, P.E., PTOE PH: 419-373-4303 317 EAST POE RD BOWLING GREEN, OH 43402 DYLAN.FOUKES@DOT.OHIO.GOV

DISTRICT 3 UTILITY COORDINATOR ATTN: JOHN SCHAFRATH PH: 419-207-7115 906 CLARK AVE ASHLAND, OH 44805 JOHN.SCHAFRATH@DOT.OHIO.GOV DISTRICT 3
ATTN: KEVIN CAPIZZI
PH: 419-207-7189
906 CLARK AVENUE
ASHLAND, OH 44805
KEVIN.CAPIZZI@DOT.OHIO.GOV

DISTRICT 4 UTILITY COORDINATOR
ATTN: MATT STEELE
PH: 330-786-4832
2088 SOUTH ARLINGTON RD
AKRON, OH 44306
MATTHEW.STEELE@DOT.OHIO.GOV

DISTRICT 4
ATTN: KEN GREENE, P.E.
PH: 330-786-3145
2088 SOUTH ARLINGTON RD
AKRON, OH 44306
KEN.GREENE@DOT.OHIO.GOV

DISTRICT 5 UTILITY COORDINATOR ATTN: ED SCHMELZER PH: 740-323-5126 9600 JACKSONTOWN RD JACKSONTOWN, OH 43030 ED.SCHMELZER@DOT.OHIO.GOV

DISTRICT 5 ATTN: BRIAN BOSCH, P.E. 9600 JACKSONTOWN RD JACKSONTOWN, OH 43030 PH: 740-323-5182 BRIAN.BOSCH@DOT.OHIO.GOV

DISTRICT 6 UTILITY COORDINATOR ATTN: EDIE ADAMS PH: 740-833-8172 400 E WILLIAM ST DELAWARE, OH 43015 EDIE.ADAMS@DOT.OHIO.GOV

DISTRICT 6 ATTN: DAVID CARLIN, P.E. PH: 740-833-8267 400 E WILLIAM ST DELAWARE, OH 43015 DAVID.CARLIN@DOT.OHIO.GOV

DISTRICT 7 UTILITY COORDINATOR ATTN: RUSSELL BERTKE PH: 937-497-6745 1001 SAINT MARYS AVE SIDNEY, OH 45365 RUSSELL.BERTKE@DOT.OHIO.GOV

DISTRICT 7 ATTN: JUSTIN YOH, P.E. PH: 937-497-6897 1001 SAINT MARYS AVE SIDNEY, OH 45365 JUSTIN.YOH@DOT.OHIO.GOV

DISTRICT 8 UTILITY COORDINATOR ATTN: SUZANNE ENDERS PH: 513-933-6186 505 S STATE ROUTE 741 LEBANON, OH 45036 SUZANNE.ENDERS@DOT.OHIO.GOV

UTILITIES CONTINUED

DISTRICT 8
ATTN: MARC GRAKE, P.E.
PH: 513-933-6607
505 S STATE ROUTE 741
LEBANON, OH 45036
MARC.GRAKE@DOT.OHIO.GOV

DISTRICT 9 UTILITY COORDINATOR ATTN: STEVE PENNINGTON PH: 740-774-9075 650 EASTERN AVE CHILLICOTHE, OH 45601 STEVEN.PENNINGTON@DOT.OHIO.GOV

DISTRICT 9 ATTN: ERIC M. BEERY, P.E. 650 EASTERN AVE CHILLICOTHE, OH 45601 PH: (740) 774-9045 ERIC.BEERY@DOT.OHIO.GOV

DISTRICT 10 UTILITY COORDINATOR ATTN: JENNIFER HASLEY PH: 740-568-3977 338 MUSKINGUM DR MARIETTA, OH 45750 JENNIFER.HASLEY@DOT.OHIO.GOV

DISTRICT 10
ATTN: DOUG THIEMAN
338 MUSKINGUM DR
MARIETTA, OH 45750
PH: 740-568-3985
DOUG.THIEMAN@DOT.OHIO.GOV

DISTRICT 11 UTILITY COORDINATOR ATTN: ERIC GOLDER PH: 330-308-3936 2201 REISSER AVE NEW PHILADELPHIA, OH 44663 ERIC.GOLDER@DOT.OHIO.GOV

DISTRICT 11 ATTN: CHRISTOPHER VARCOLLA, P.E. 2201 REISER AVE SE NEW PHILADELPHIA, OH 44663 PH: 330-308-3994 CHRIS.VARCOLLA@DOT.OHIO.GOV

DISTRICT 12 UTILITY COORDINATOR ATTN: JOHN THREAT PH: 216-584-2106 5500 TRANSPORTATION BLVD GARFIELD HEIGHTS, OH 44125 JOHN.THREAT@DOT.OHIO.GOV

DISTRICT 12 ATTN: TONY TOTH, P.E. 5500 TRANSPORTATION BLVD GARFIELD HEIGHTS PH: 216-584-2220 ANTHONY.TOTH@DOT.OHIO.GOV

CENTRAL OFFICE UTILITIES MANAGER ATTN: WENDI SNYDER PH: 614-728-8062 1980 W BROAD ST COLUMBUS, OH 43223 614-728-8062 WENDI.SNYDER@DOT.OHIO.GOV

UTILITIES, NEW POWER SERVICES

TO CONNECT POWER FOR SITES REQUIRING A NEW POWER SERVICE, THE CONTRACTOR SHALL CONTACT THE FOLLOWING ELECTRIC COMPANIES AT LEAST 30 DAYS PRIOR TO WORK NEEDING TO BE PERFORMED.

SITE 4. I-71 AT US-30

OHIO EDISON CUSTOMER SERVICE: 1-888-544-4877 ATTN: RICHARD HAAS SERVICE ADDRESS: 2700 CRIDER RD MANSFIELD, OH 44903 ORDER #: 000742599540 ACCOUNT #: 110121847740

SITE 7, I-80 AT SR-193

OHIO EDISON CUSTOMER SERVICE: 1-888-544-4877 SERVICE ADDRESS: 4099 BELMONT AVE GIRARD, OH 44420 ORDER #: 000742591840 ACCOUNT #: 110121842824

SITE 15, I-275 AT 8 MILE RD

DUKE ENERGY
CUSTOMER SERVICE BUSINESS LINE: 1-877-700-3853
ATTN: JOSH DAVIDSON
PH: 513-287-5630
SERVICE ADDRESS: 701 8 MILE RD
CINCINNATI, OH 45255
WORK ORDER #: 20428453

SITE 18: US-52 AT SR-7

AMERICAN ELECTRIC POWER
CUSTOMER SERVICE LINE: 740-377-3252
ATTN: JOE MEYERS
SERVICE ADDRESS: 9649 COUNTY RD 1
SOUTH POINT, OH 45680
WORK REQEST #: 072208007

BILLING ADDRESS

ALL NEW POWER SERVICES ARE SETUP WITH A BILLING ADDRESS OF THE BELOW.

ODOT ITS PROGRAM - MS 2110 1980 W. BROAD ST. COLUMBUS, OH 43223

ODOT CENTRAL OFFICE CONTACT INFORMATION

ODOT ITS LAB 1606 W. BROAD ST. COLUMBUS, OH 43223 MAIN LINE: (614) 387-4113 CEN.ITS.LAB@DOT.OHIO.GOV

JAMIE FINK
OFFICE OF TRAFFIC OPERATIONS
1606 W. BROAD ST.
COLUMBUS, OH 43223
(614) 644-6588
JAMIE.FINK@DOT.OHIO.GOV

BRYAN COMER, P.E.
OFFICE OF TRAFFIC OPERATIONS
1606 W. BROAD ST.
COLUMBUS, OH 43223
(614) 387-1253
BRYAN.COMER@DOT.OHIO.GOV

OFFICE OF ENVIRONMENTAL SERVICES 1980 W. BROAD ST., MAIL STOP 4170 COLUMBUS, OH 43223 614-466-7100

ITEM 614 - MAINTAINING TRAFFIC

ALL LANES OF TRAFFIC IN EACH DIRECTION WILL BE MAINTAINED AT ALL TIMES, EXCEPT AS NOTED BELOW:

LANE CLOSURES FOR THE CONTRACTOR TO COMPLETE HIS/HER WORK WILL ONLY BE IMPLEMENTED AT THE TIMES LISTED ON THE OHIO DEPARTMENT OF TRANSPORTATION'S WEB SITE, "PERMITTED LANE CLOSURE TIMES" SECTION, LOCATED AT THE ADDRESS SHOWN BELOW:

http://plcm.dot.state.oh.us/

THE PERMITTED CLOSURE TIMES LISTED ON THE WEBSITE,14 CALENDAR DAYS PRIOR TO THE BID LETTING DATE WILL BE IN EFFECT FOR THIS PROJECT.

WHEN NECESSARY, LANE CLOSURES WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE STANDARD DRAWINGS. IT IS THE INTENT TO RESTRICT LANE CLOSURES TO THE MINIMUM AMOUNT OF TIME NECESSARY TO PERFORM THE WORK AS DESCRIBED IN THE PLANS. THE CONTRACTOR WILL NOT COMMENCE ANY LANE CLOSURE BEFORE THE HOURS AS SPECIFIED OR COMMENCE ANY CLOSURE AT A TIME WHICH WILL NOT ALLOW COMPLETION OF THE WORK PRIOR TO THE HOURS SPECIFIED.

THERE SHALL BE NO LANE CLOSURES ON HOLIDAYS OR HOLIDAY WEEKENDS. THE FOLLOWING ARE CONSIDERED HOLIDAYS:

EASTER, MEMORIAL DAY, FOURTH OF JULY, LABOR DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK TIMES ALL LANES MUST BE OPEN TO TRAFFIC SUNDAY 12:00N FRIDAY THROUGH 12:00N TUESDAY MONDAY 12:00N FRIDAY THROUGH 12:00N TUESDAY TUESDAY 12:00N MONDAY THROUGH 12:00N WEDNESDAY WEDNESDAY 12:00N TUESDAY THROUGH 12:00N THURSDAY THURSDAY 12:00N WEDNESDAY THROUGH 12:00N FRIDAY FRIDAY 12:00N THURSDAY THROUGH 12:00N MONDAY SATURDAY 12:00N FRIDAY THROUGH 12:00N MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$75 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

OVERNIGHT CLOSURES MUST MEET SPECIFICATIONS AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.

LENGTH AND DURATION OF LANES CLOSURE AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELLING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITH A REASONABLE TIME FRAM, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY THE ENGINEER. THE ENGINEER SHALL APPROVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR CONDITION AND LOCATION BEFORE THE CONTRACTOR WILL BE PERMITTED TO BEGIN WORK.

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

USE OF WEIGHTED CHANNELIZERS

THE WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THIS SECTION. THE WEIGHTED CHANNELIZERS SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A HANDLE OR LIFTING DEVICE, WHICH EXTENDS ABOVE THE 42 INCH MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZERS SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETRO REFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETRO REFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZERS SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS. WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE TANGENT AREA. THE TANGENT AREA IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS. MAXIMUM SPACING OF THE WEIGHTED CHANNELIZERS SHALL BE 40 FEET.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZERD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

PAYMENT SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINT-ENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE _50_ HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE)
INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF
AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM
614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR

GENERAL SUMMARY

	S	HEET I	NUMBE	R	PARTICIPATION ALT.			ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
6	9	10	12	13		01/NFP/OT	(X)	11 ⊏1	EXT.	TOTAL	UNII	DESCRIPTION	SHEET NO.
												ROADWAY	
						LUMP		201	11000	LUMP		CLEARING AND GRUBBING	
										_			
												EROSION CONTROL	
2770						2770		659	00510	2770	SQ YD	SEEDING AND MULCHING, CLASS 2	6
0.39						0.390		659	20000	0.39		COMMERCIAL FERTILIZER	6
15						15		659	35000	15	M GAL	WATER	6
						10000		832	30000	10000	EACH	EROSION CONTROL	
												TRAFFIC SURVEILLANCE	
			8441			8441		625	22900	8441	FT	NO. 1/0 AWG 2400 VOLT DISTRIBUTION CABLE	
			8685			8685		625	22990	8685	FT	NO. 6 AWG 600 VOLT DISTRIBUTION CABLE	
			8103			8103		625	23000	8103	FT	NO. 4 AWG 600 VOLT DISTRIBUTION CABLE	
			7185			7185		625	23100	7185	FT	NO. 2 AWG 600 VOLT DISTRIBUTION CABLE	
			8370			8370		625	25408	8370	FT	CONDUIT, 2", 725.051	
			1025			1025		625	25740	1025	FT	CONDUIT, MULTICELL, 4", 725.20, SCHEDULE 80, JACKED OR DRILLED	3
			6010			6010		625	25750	6010	FT	CONDUIT, 4", MULTICELL, 725.20 , EPC-40	3
			1075			1075		625	25908	1075	FT	CONDUIT, JACKED OR DRILLED, 2", 725.052, SCHEDULE 80	
			8400			8400		625	29010	8400	FT	TRENCH, 30" DEEP	
			54			54		625	30700	54	EACH	PULL BOX, 725.08, 18"	
			52			52		625	30711	52	EACH	PULL BOX, 725.08, 32", AS PER PLAN	4
			77			77		625	32001	77	EACH	GROUND ROD, AS PER PLAN	4
				8400		8400		625	36000	8400	FT	PLASTIC CAUTION TAPE	
				1		1		625	98000	1	EACH	LIGHTING, MISC.: STEP-DOWN TRANSFORMER AND SUPPORT	4
				4		4		632	70001	4	EACH	POWER SERVICE, AS PER PLAN A	4
				17		17		632	70001	17	EACH	POWER SERVICE, AS PER PLAN B	4
				1		1		632	70001	1		POWER SERVICE, AS PER PLAN C	5
				23		23		633	67101	23		CABINET FOUNDATION, AS PER PLAN	5
				23		23		633	67201	23		CONTROLLER WORK PAD, AS PER PLAN	5
				12592		12592		804	15010	12592	FT	FIBER OPTIC CABLE, 24 FIBER	5
				20		20		804	34013	20		FIBER TERMINATION PANEL, 12 FIBER, AS PER PLAN	5
				23		23		809	60000	23		CCTV IP-CAMERA SYSTEM, DOME-TYPE	5
				23		23		809	61000	23		CCTV CONCRETE POLE WITH LOWERING UNIT, 70 FEET	5
				1530		1530		809	64550	1530		ETHERNET CABLE, OUTDOOR-RATED	5
				23		23		809	65000	23	EACH	ITS CABINET - GROUND MOUNTED	5
												MAINTENANCE OF TRAFFIC	
		50				50		614	11110	50	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	10
	LUMP					LUMP		614	11000	LUMP		MAINTAINING TRAFFIC	
						LUMP		623	10000	LUMP		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
						LUMP		624	10000	LUMP		MOBILIZATION	
<u> </u>			<u>I</u>		L]							

SUB-SUMMARY

			625	625	625	625	625	625	625	625	625	625	625	625
SITE NO.	SHEET NO.	LOCATION	NO. 1/0 AWG 2400 VOLT DISTRIBUTION CABLE	NO. 6 AWG 600 VOLT DISTRIBUTION CABLE	NO. 4 AWG 600 VOLT DISTRIBUTION CABLE	NO. 2 AWG 600 VOLT DISTRIBUTION CABLE	CONDUIT, 2", 725.051	CONDUIT, MULTICELL, 4", 725.20, SCHEDULE 80, JACKED OR DRILLED	CONDUIT, 4", MULTICELL, 725.20 , EPC-40	CONDUIT, JACKED OR DRILLED, 2", 725.052, SCHEDULE 80	TRENCH, 30" DEEP	PULL BOX, 725.08, 18"	PULL BOX, 725.08, 32", AS PER PLAN	GROUND ROD, AS PER PLAN
			FT	FT	FT	FT	FT	FT	FT	FT	FT	EA	EA	EA
1	15	I-75 AT SR-65		795			60	60	60	60	60	2	2	3
2	16	I-75 AT US-30		390			85				85	2	1	3
3		SR-2 AT SR-53 NORTH	1226				820	280	820	280	820	8	8	9
4	18	I-71 AT US-30		915			260				260	2	1	3
5	19	I-71 AT SR-18		675			75		75		75	1	1	2
6	20	I-80 AT SR-46		645			170		170		170	1	1	2
7	21	I-80 AT SR-193		135			10				10	1	1	2
8	22	I-70 AT SR-79	3405				955	95	605	95	985	6	5	7
9	23	I-70 AT SR-209				2235	390	270	390	275	390	2	3	3
10	24	I-70 AT I-77				2715	850		850		850	2	2	3
11	25	I-70 AT US-42		1200			330		330		330	1	3	2
12	26	I-71 AT SR-435			1470		430		430		430	1	3	2
13	27	I-75 at SR-41			1740		500	20	500	20	500	2	2	3
14	28	I-75 AT US-36		990			280		280		280	1	1	2
15	29	I-275 AT 8 MILE RD		1080			300				300	3	1	4
16	30	I-275 AT FIVE MILE RD		300			50		50		50	1	1	2
17	31	US-52 AT SR-93			1605		295	135	295	135	295	5	5	6
18	32	US-52 AT SR-7	3810				1155			45	1155	4	1	5
19	33	US-35 at SR-7				2235	470	165	470	165	470	4	4	5
20	34	I-77 AT SR-7			1710		510		510		510	2	2	3
21	35	I-70 AT SR-149		930			125				125	1	1	2
22	36	I-77 AT SR-39 / US-250			1578		90		15		90	1	1	2
23	37	I-77 AT SR-82		630			160		160		160	1	2	2
	<u> </u> T∩	TALS CARRIED TO GENERAL SUMMARY	8441	8685	8103	7185	8370	1025	6010	1075	8400	54	52	77
	10	THE CHIMED TO GENERAL SUPPRIMITARY	0-1-1	0000	0100	7 100	0070	1020	0010	1070	0-700	J-1	52	''

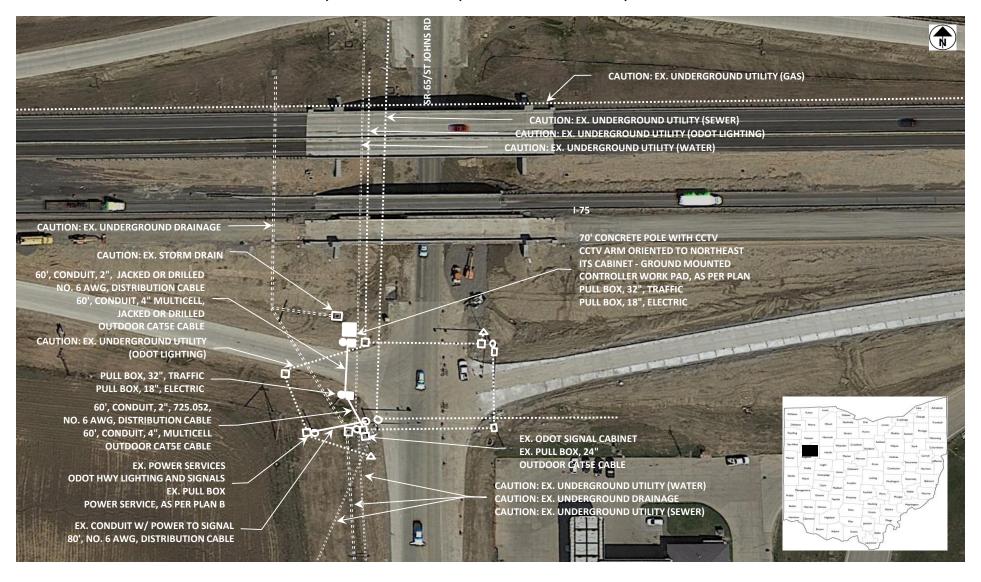
SUB-SUMMARY

			625	625	632	632	632	633	633	804	804	809	809	809	809
SITE NO.	SHEET NO.	LOCATION	PLASTIC CAUTION TAPE	LIGHTING, MISC.: STEP- DOWN TRANSFORMER AND SUPPORT	POWER SERVICE, AS PER PLAN A	POWER SERVICE, AS PER PLAN B	POWER SERVICE, AS PER PLAN C	CABINET FOUNDATION	CONTROLLER WORK PAD	FIBER OPTIC CABLE, 24 FIBER	FIBER TERMINATION PANEL, 12 FIBER, AS PER PLAN	CCTV IP-CAMERA SYSTEM, DOME-TYPE	CCTV CONCRETE POLE WITH LOWERING UNIT, 70 FEET	ETHERNET CABLE, OUTDOOR-RATED	ITS CABINET - GROUND MOUNTED
	45	I-75 AT SR-65	FT	EA	EA	EA	EA	EA	EA	FT	EA	EA	EA	FT	EA
1		I-75 AT US-30	60	4		1	1	1	1			1	1	300	1
2	16	SR-2 AT SR-53 NORTH	85	1		4		1	1	0547		1	1		1
3	17	I-71 AT US-30	820		4	1		1	1	2517	2	1			1
5	18 19	I-71 AT US-30	260 75		1	1		1	1			1	1	150	1
5	19	IFT AT SIX-10	75			1	-	1	1		-	1	1	150	l l
6	20	I-80 AT SR-46	170			1		1	1			1	1	300	1
7	21	I-80 AT SR-193	10		1	'		1	1			1	1	300	1
8	22	I-70 AT SR-79	985		'	1		1	1	1520	2	1	1		1
9	23	I-70 AT SR-209	390			1		1	1	1160	2	1	1		1
10	24	I-70 AT I-77	850			1		1	1	1350	2	1	1		1
10	24	FIVAL FIT	030			'		'	'	1330		!	!		ļ
11	25	I-70 AT US-42	330			1		1	1	830	2	1	1		1
12	26	I-71 AT SR-435	430			1		1	1	930	2	1	1		1
13	27	I-75 at SR-41	500				1	1	1	870	2	1	1		1
14	28	I-75 AT US-36	280			1	'	1	1	070		1	1	330	1
15	29	I-275 AT 8 MILE RD	300		1	'		1	1			1	1	330	1
10	23	TETOTA O MILE IND	300		'			'	'			'	'		'
16	30	I-275 AT FIVE MILE RD	50			1		1	1			1	1	150	1
17	31	US-52 AT SR-93	295			1		1	1	1255	2	1	1	100	1
18	32	US-52 AT SR-7	1155		1			1	1	.200	_	1	1		1
19	33	US-35 at SR-7	470			1		1	1	1310	2	1	1		1
20	34	I-77 AT SR-7	510			1		1	1	850	2	1	1		1
21	35	I-70 AT SR-149	125			1		1	1			1	1		1
22	36	I-77 AT SR-39 / US-250	90			1		1	1			1	1		1
23	37	I-77 AT SR-82	160			1		1	1			1	1	300	1
	то	TALS CARRIED TO GENERAL SUMMARY	8400	1	4	17	1	23	23	12592	20	23	23	1530	23

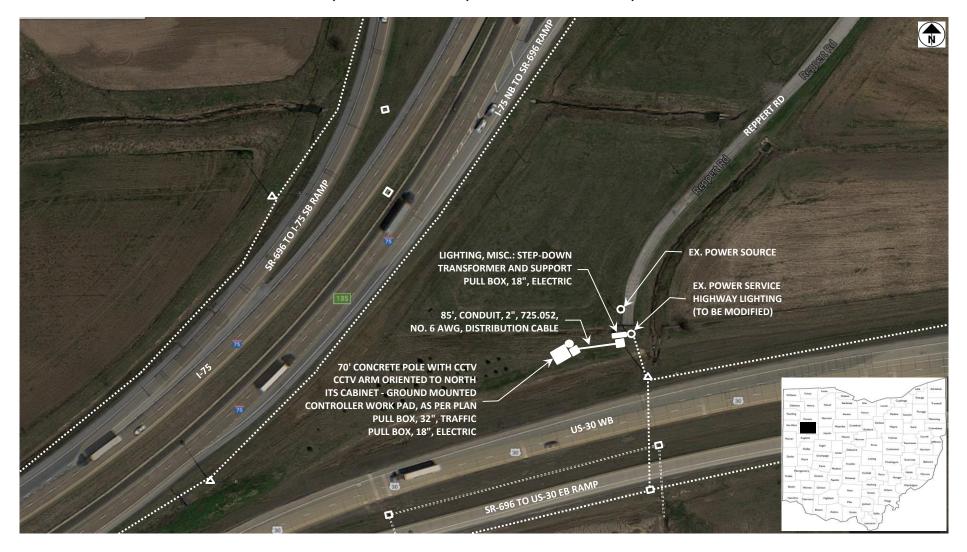
LEGEND



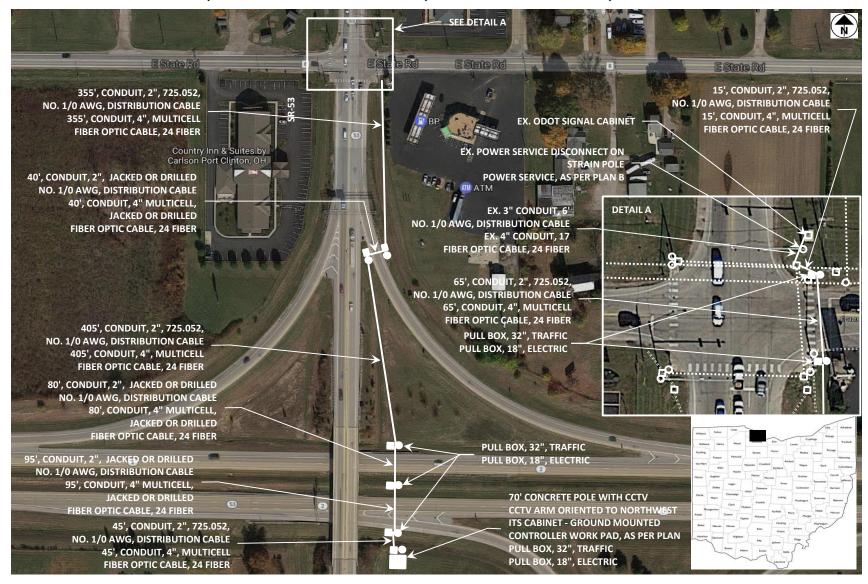
SITE 1, I-75 AT SR-65, ALLEN COUNTY, MM 122.6



SITE 2, I-75 AT US-30, ALLEN COUNTY, MM 135.4



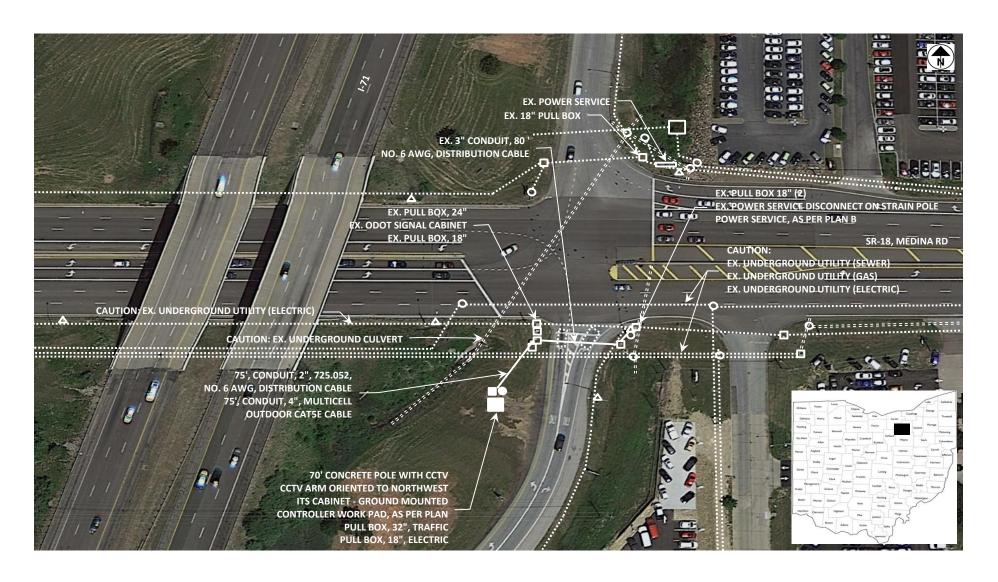
SITE 3, SR-2 AT SR-53 NORTH, OTTAWA COUNTY, MM 123.6



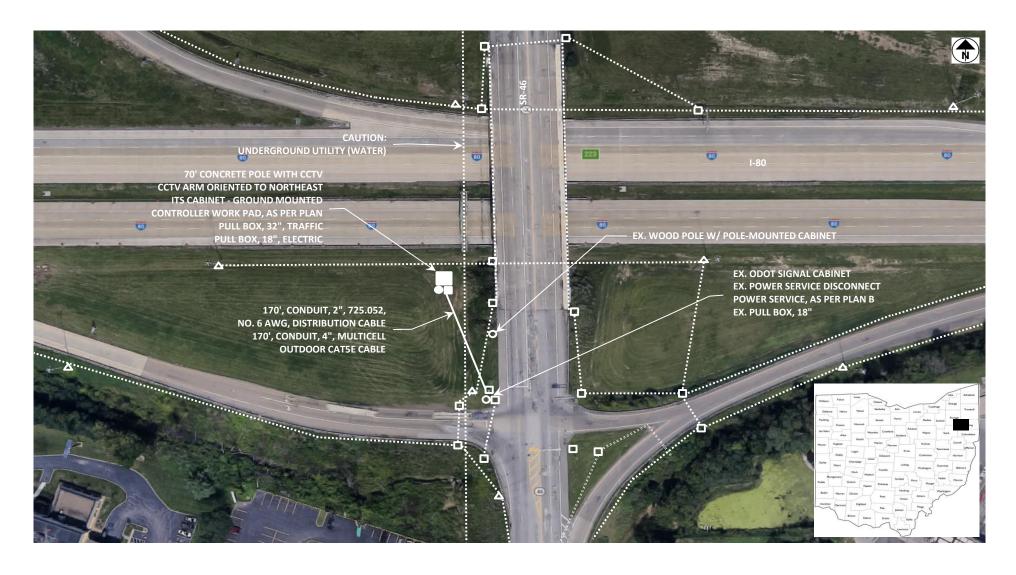
SITE 4, I-71 AT US-30, RICHLAND COUNTY, MM 177.0



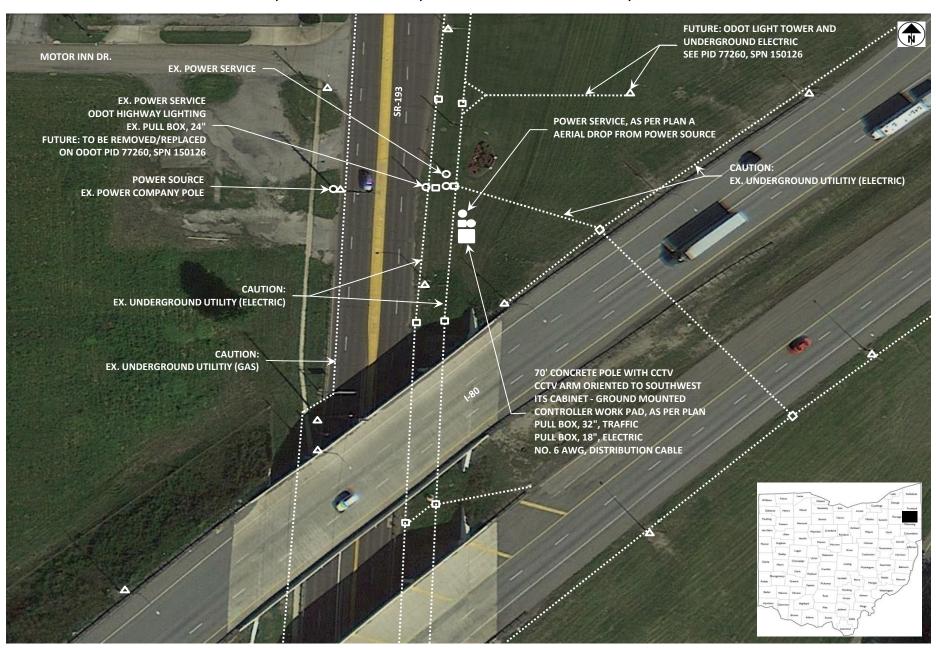
SITE 5, I-71 AT SR-18, MEDINA COUNTY, MM 177.0



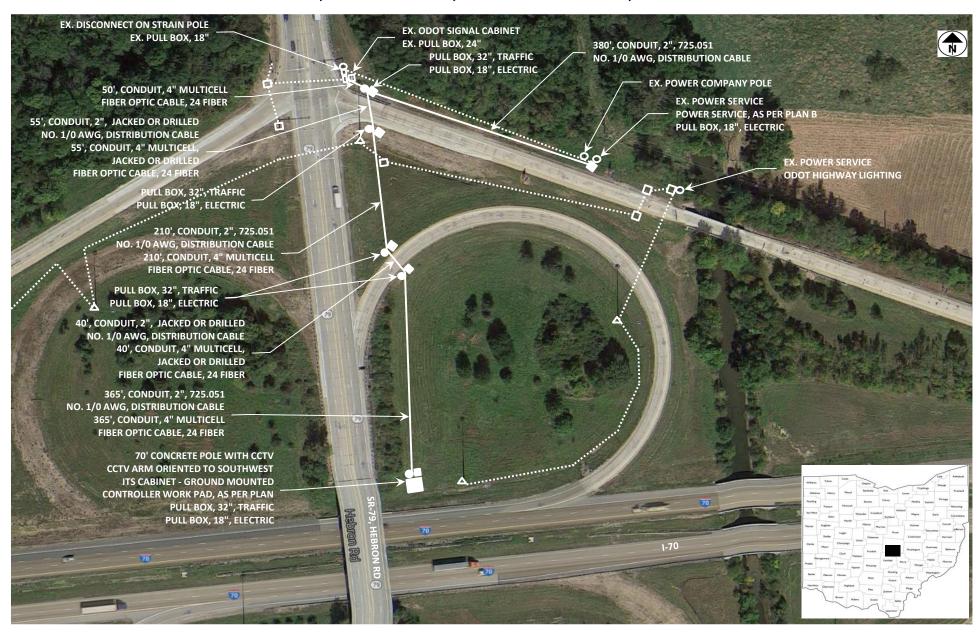
SITE 6, I-80 AT SR-46, MAHONING COUNTY, MM 223.0



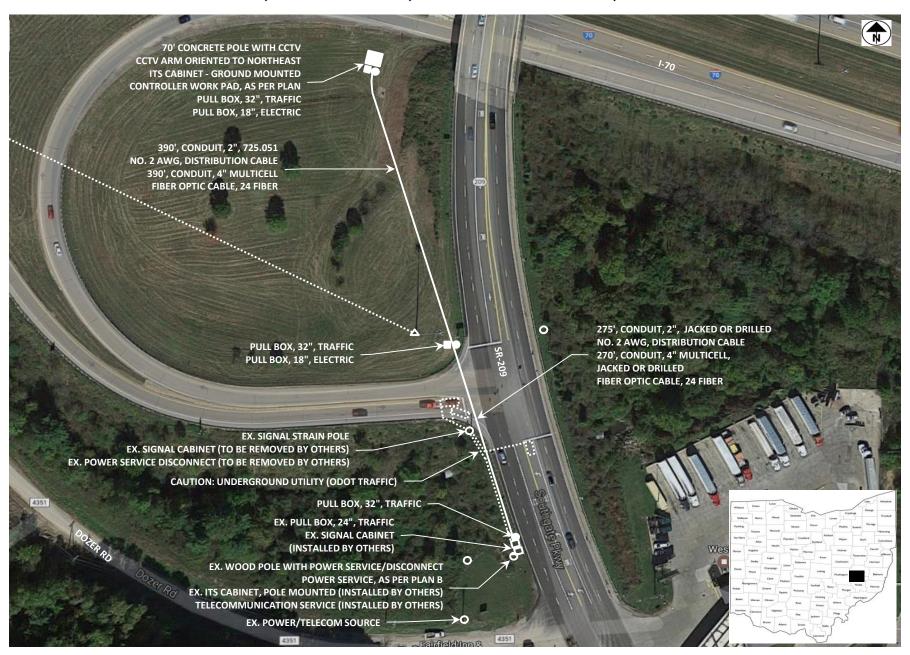
SITE 7, I-80 AT SR-193, TRUMBULL COUNTY, MM 229.2



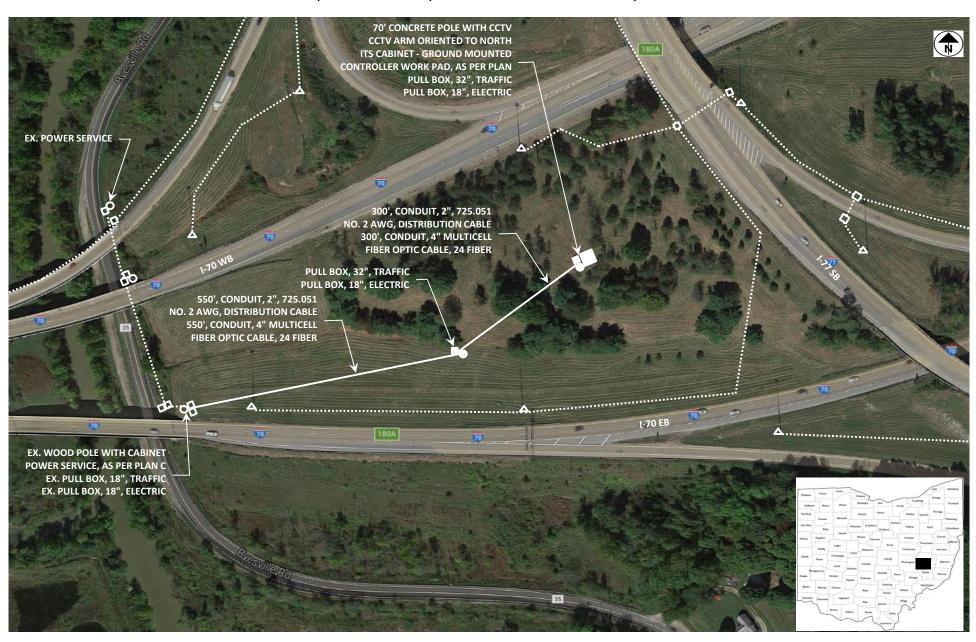
SITE 8, I-70 AT SR-79, LICKING COUNTY, MM 129.0



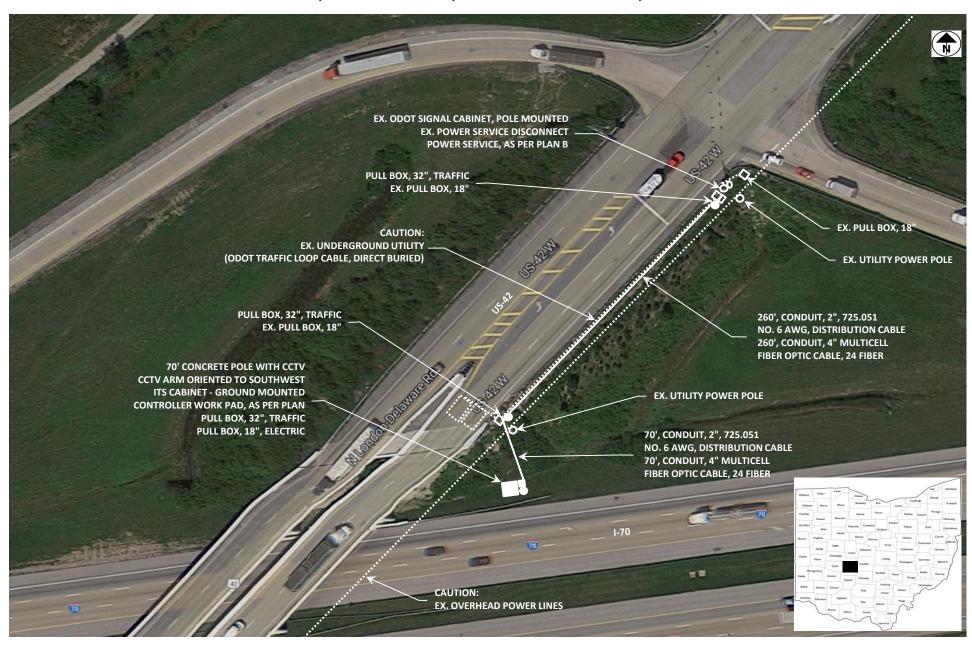
SITE 9, I-70 AT SR-209, GUERNSEY COUNTY, MM 178.8



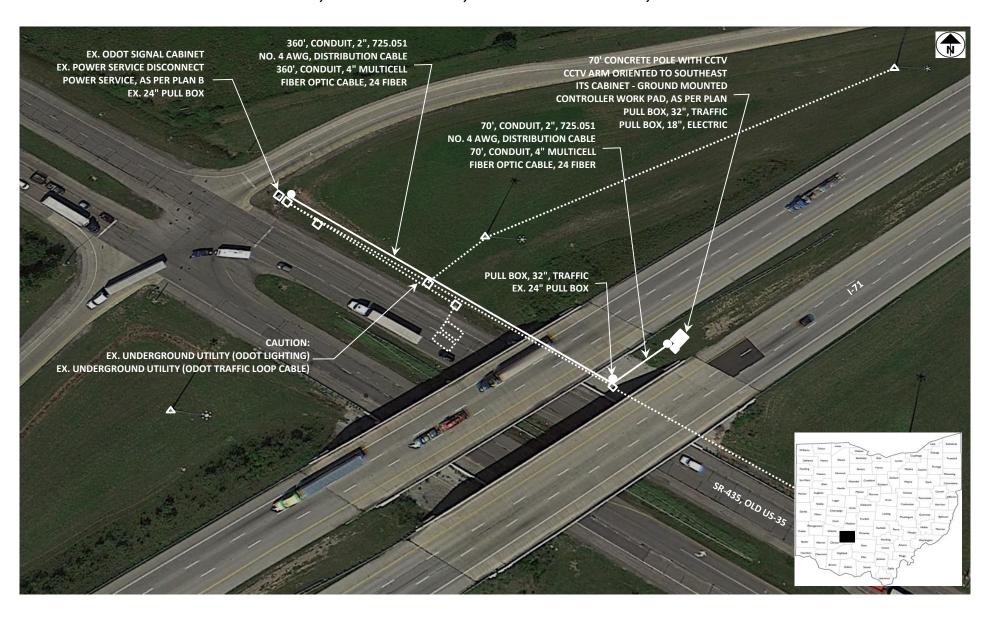
SITE 10, I-70 AT I-77, GUERNSEY COUNTY, MM 179.8



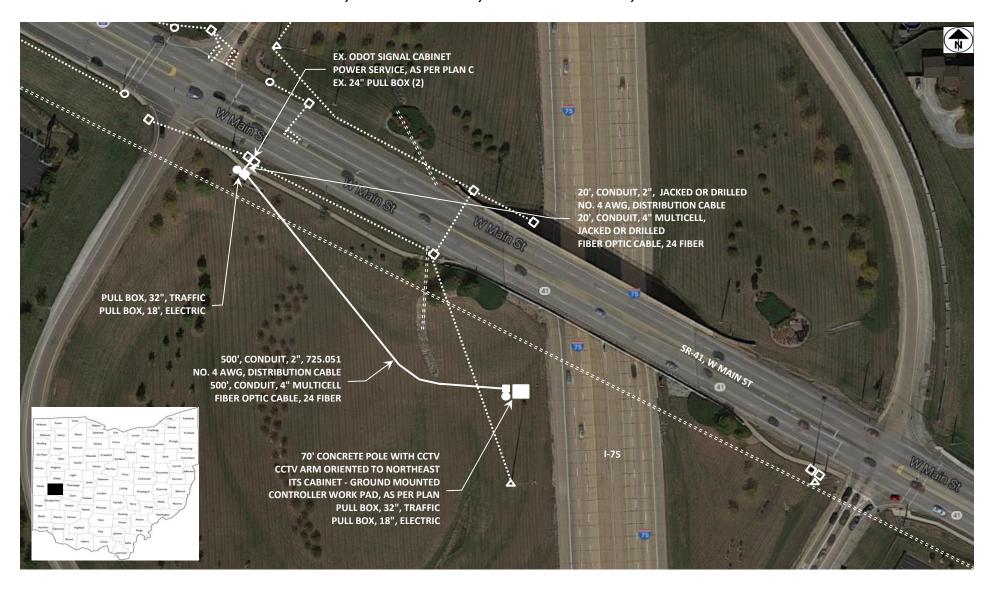
SITE 11, I-70 AT US-42, MADISON COUNTY, MM 79.1



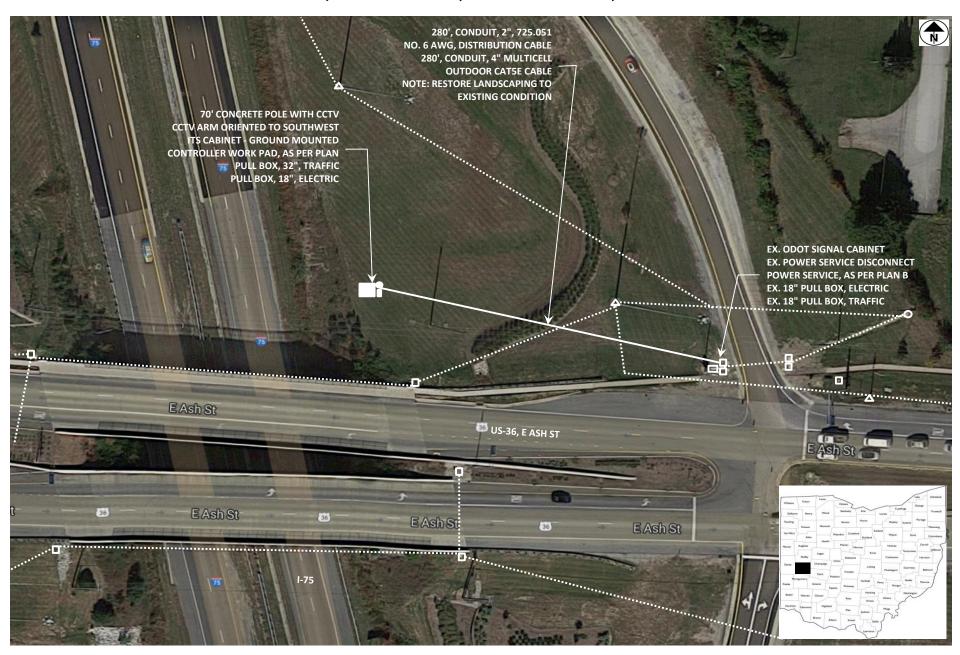
SITE 12, I-71 AT SR-435, FAYETTE COUNTY, MM 65.4



SITE 13, I-75 AT SR-41, MIAMI COUNTY, MM 75.0



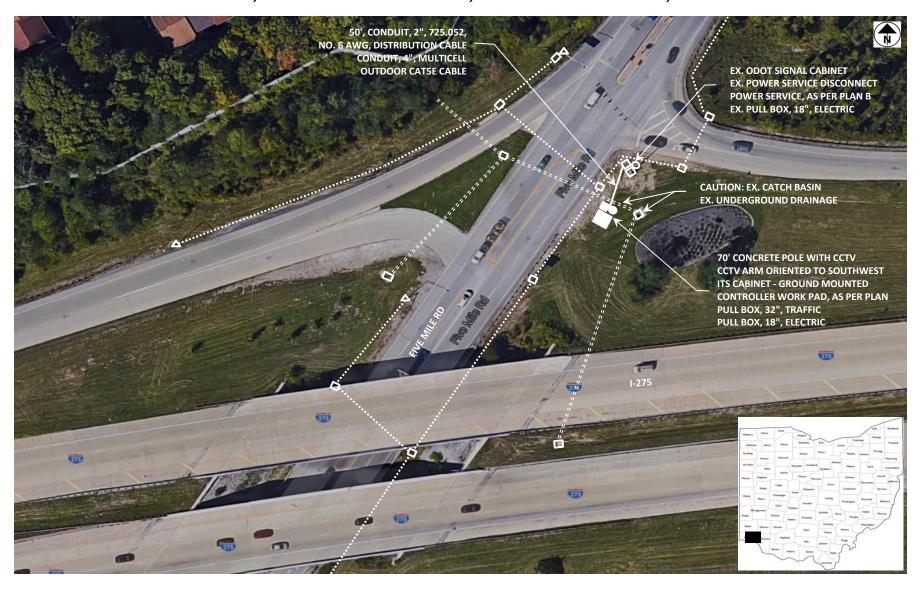
SITE 14, I-75 AT US-36, MIAMI COUNTY, MM 82.1



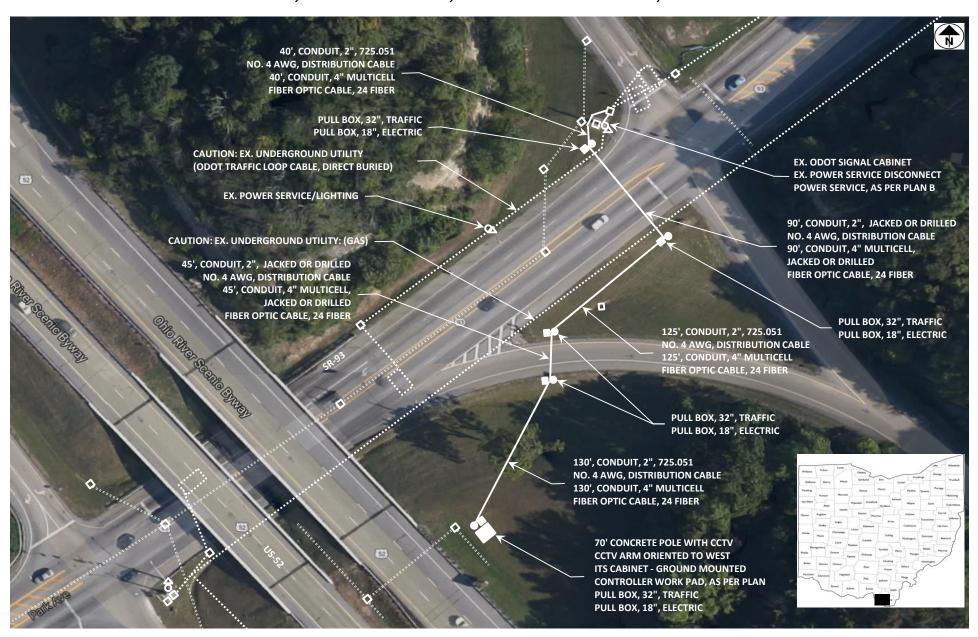
SITE 15, I-275 AT 8 MILE RD, HAMILTON COUNTY, MM 67.1



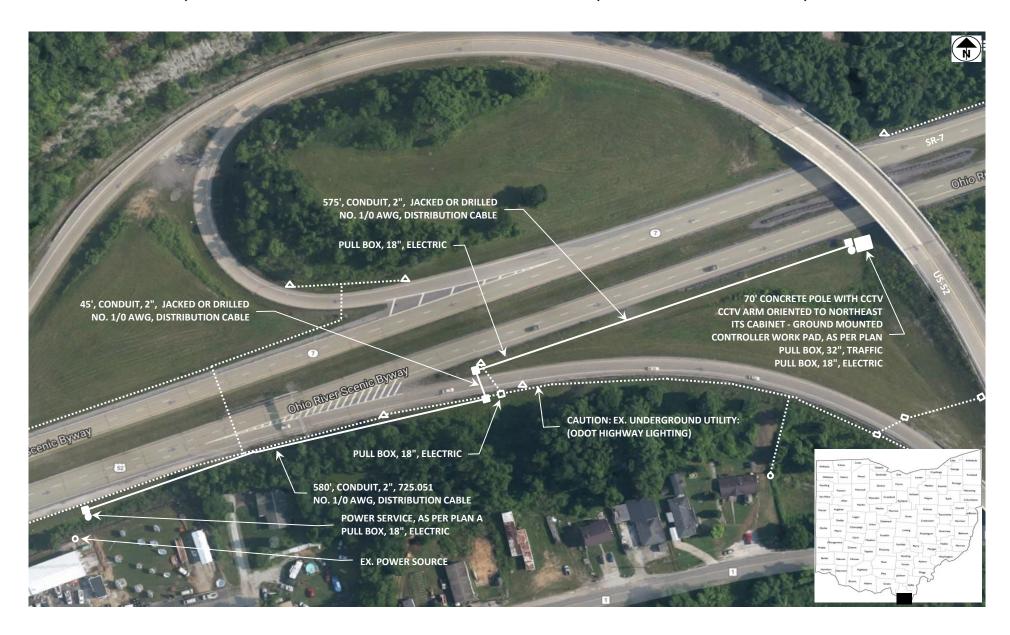
SITE 16, I-275 AT FIVE MILE RD, HAMILTON COUNTY, MM 68.7



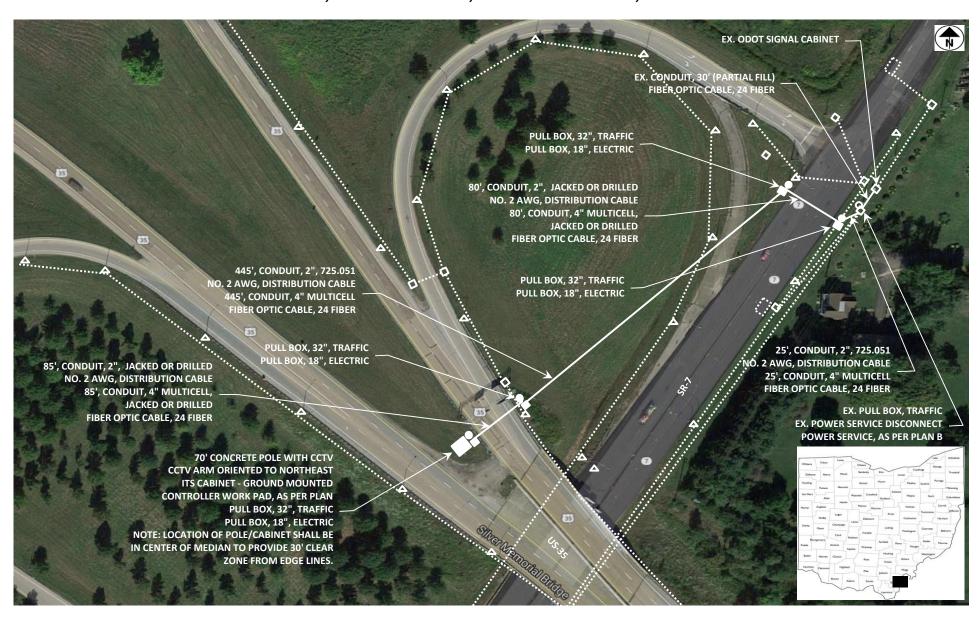
SITE 17, US-52 AT SR-93, LAWRENCE COUNTY, MM 165.3



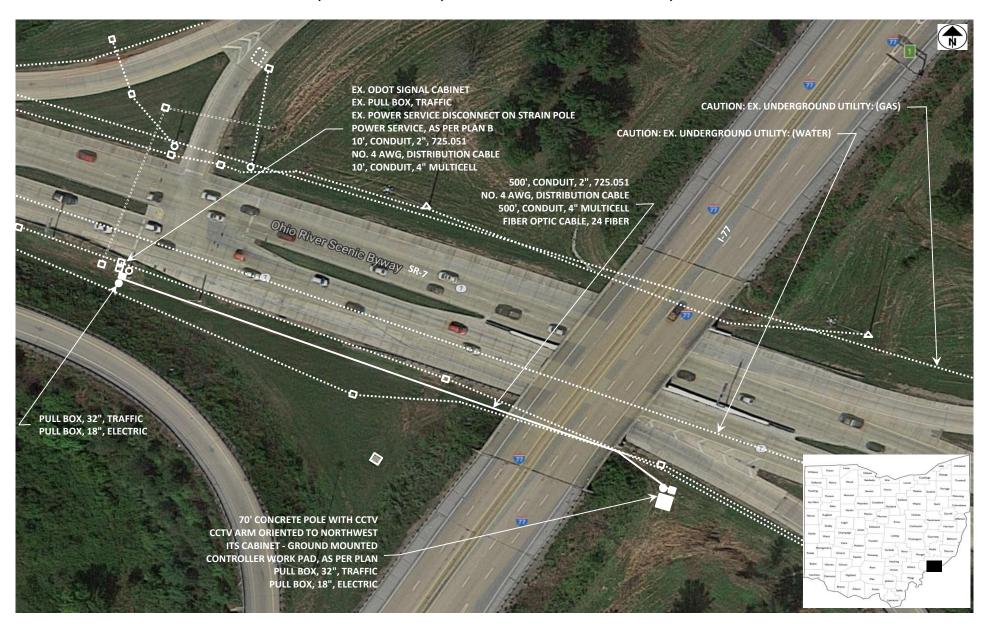
SITE 18, US-52 AT SR-7/EAST HUNTINGTON BRIDGE, LAWRENCE COUNTY, MM 180.5



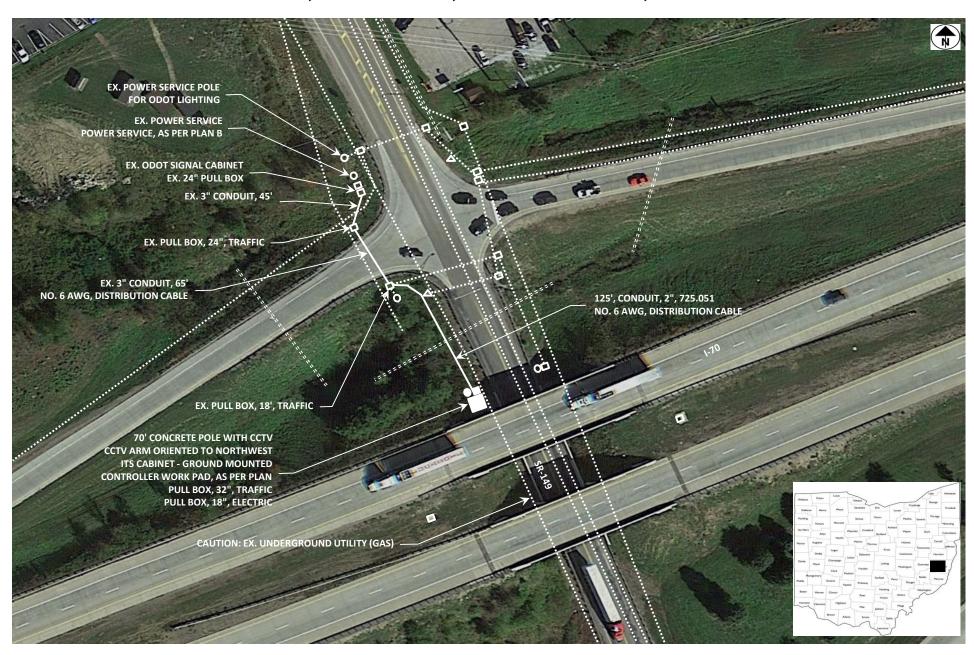
SITE 19, US-35 AT SR-7, GALLIA COUNTY, MM 174.2



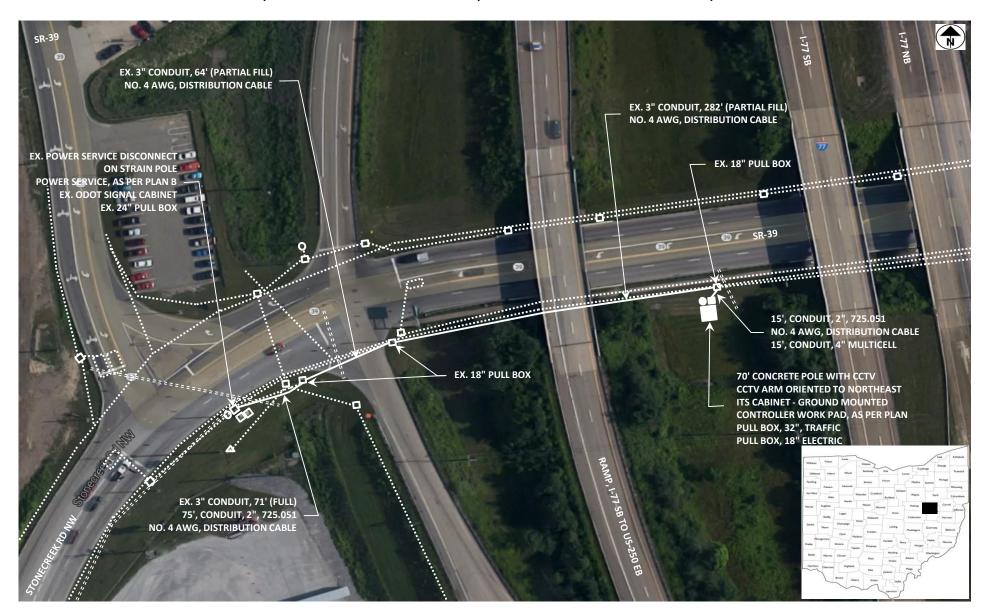
SITE 20, I-77 AT SR-7, WASHINGTON COUNTY, MM 0.4



SITE 21, I-70 AT SR-149, BELMONT COUNTY, MM 208.3



SITE 22, I-77 AT SR-39 / US-250, TUSCARAWAS COUNTY, MM 80.9



SITE 23, I-77 AT SR-82, CUYAHOGA COUNTY, MM 150.0

