

ITEM 625 - CONDUIT, JACKED OR DRILLED, 725.04, 3", AS PER PLAN

CONDUIT IS JACKED OR DRILLED UNDER PAVEMENT TO MINIMIZE DISRUPTION TO TRAFFIC AND THE PAVEMENT ITSELF. THIS INSTALLATION WILL CROSS UNDERGROUND UTILITIES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL ACCURATELY IDENTIFY THE PROPOSED LOCATION AND ROUTING OF THE CONDUIT TO BE JACKED OR DRILLED AS SHOWN IN THE PLANS.

THE CONTRACTOR SHALL IDENTIFY ALL CROSSINGS BASED ON THE FIELD MARKING OF UNDERGROUND UTILITY LOCATION AND PLANS. THE CONTRACTOR SHALL PERFORM A TEST HOLE AT EACH CROSSING TO VERIFY LOCATION AND DEPTH OF EXISTING UNDERGROUND UTILITY PRIOR TO JACKED OR DRILLED INSTALLATION OF CONDUIT.

WHEN CROSSING UNDERGROUND UTILITIES, THE CONTRACTOR MUST MAINTAIN A MINIMUM OF 12 INCH VERTICAL CLEARANCE WHEN JACKING OR DRILLING CONDUIT. WHEN 12 INCH CLEARANCE CANNOT BE MAINTAINED, THE CONDUIT MAY BE INSTALLED IN A TRENCH WITHIN THE VICINITY OF THE EXISTING UTILITY AS SHOWN IN ODOT TRAFFIC STANDARD CONSTRUCTION DRAWING HL-30.22 AND ITS-14-10.

THE COST FOR RESTORATION OF IMPACTED SIDEWALK AND OTHER PAVED SURFACES SHALL BE INCIDENTAL TO THE COST OF CONDUIT, 3", JACKED OR DRILLED, AS PER PLAN.

THE COST FOR TRENCH AND INSTALLATION OF CONDUIT IN THESE AREAS SHALL BE INCIDENTAL TO THE COST OF CONDUIT, 3", JACKED OR DRILLED, AS PER PLAN. THE CONTRACTOR WILL BE COMPENSATED FOR EACH TEST HOLE EXCAVATION ACCORDING TO THE BID PRICE FOR ITEM 632 TEST HOLE PERFORMED, CONDUIT, AS PER PLAN.

IN LIEU OF BORING, CONTRACTOR IS PERMITTED TO OPEN TRENCH, INSTALL CONDUIT AND RESTORE PAVEMENT TO EXISTING CONDITION AND SURFACE TYPE (CONCRETE, ASPHALT, PAVER, ETC.) AS APPROVED BY THE ENGINEER. WORK TO BE PERFORMED AT THE UNIT PRICE PER FOOT FOR CONDUIT, JACK AND BORED AND SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE WORK, INCLUDING TRENCHING, BACKFILL, PAVEMENT RESTORATION AND ANY MAINTENANCE OF TRAFFIC PROVISIONS REQUIRED, IN ACCORDANCE WITH ODOT.

ITEM 632 - TEST HOLE PERFORMED, CONDUIT, AS PER PLAN

IT IS ANTICIPATED THAT THE CONTRACTOR WILL ENCOUNTER UNDERGROUND UTILITIES WHILE INSTALLING JACKED OR DRILLED CONDUIT.

IF, AFTER ACCURATELY IDENTIFYING THE PROPOSED LOCATION OF THE CONDUIT, AS SHOWN IN THE PLANS AND AFTER MODIFYING THAT LOCATION, IF NECESSARY, BASED ON THE FIELD MARKING OF UNDERGROUND UTILITY LOCATION, THE CONTRACTOR DISCOVERS A UTILITY CONFLICT DURING THE JACKED OR DRILLED OPERATION, THE CONTRACTOR WILL BE COMPENSATED FOR EACH PARTIAL EXCAVATION ACCORDING TO THE BID PRICE.

BEFORE THE CONTRACTOR BEGINS THE EXCAVATION AT THE MODIFIED LOCATION, THE CONTRACTOR SHALL VERIFY THAT THERE WILL BE NO OVERHEAD UTILITY CONFLICTS RESULTING FROM THE NEW CONDUIT LOCATION. NEW CONDUIT LOCATIONS ARE TO BE APPROVED BY THE ENGINEER.

THE WORK WILL INCLUDE BACKFILLING, COMPACTING, AND RESTORATION OF THE EXCAVATION TO THE SITE'S ORIGINAL CONDITION.

EXCAVATIONS SHALL NOT BE LEFT OPEN OVERNIGHT.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 632 TEST HOLE PERFORMED, CONDUIT, AS PER PLAN
44 EACH

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT PRICE BID PER EACH ITEM 632 TEST HOLE PERFORMED, CONDUIT, AS PER PLAN TO BE USED AT THE DIRECTION OF THE ENGINEER.

ITEM 632 - TEST HOLE PERFORMED, WORK PADS AND FOUNDATIONS, AS PER PLAN

IT IS ANTICIPATED THAT THE CONTRACTOR WILL ENCOUNTER UNDERGROUND UTILITIES WHILE EXCAVATING FOR ITS WORK PADS, OR POLE FOUNDATIONS FOR ITS CAMERAS.

IF, AFTER ACCURATELY IDENTIFYING THE PROPOSED LOCATION OF THE WORK, AS SHOWN IN THE PLANS AND AFTER MODIFYING THAT LOCATION, IF NECESSARY, BASED ON THE FIELD MARKING OF UNDERGROUND UTILITY LOCATION, THE CONTRACTOR DISCOVERS A UTILITY CONFLICT DURING THE EXCAVATION OPERATION, THE CONTRACTOR WILL BE COMPENSATED FOR EACH PARTIAL FOUNDATION EXCAVATION ACCORDING TO THE BID PRICE.

BEFORE THE CONTRACTOR BEGINS THE EXCAVATION AT THE MODIFIED LOCATION, THE CONTRACTOR SHALL VERIFY THAT THERE WILL BE NO OVERHEAD UTILITY CONFLICTS RESULTING FROM THE NEW WORK LOCATION. NEW WORK LOCATIONS ARE TO BE APPROVED BY THE ENGINEER.

THE WORK WILL INCLUDE BACKFILLING, COMPACTING, AND RESTORATION OF THE EXCAVATION TO THE SITE'S ORIGINAL CONDITION.

EXCAVATIONS SHALL NOT BE LEFT OPEN OVERNIGHT.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 632 TEST HOLE PERFORMED, WORK PADS AND FOUNDATIONS, AS PER PLAN
42 EACH

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT PRICE BID PER EACH ITEM 632 TEST HOLE PERFORMED, WORK PADS AND FOUNDATIONS TO BE USED AT THE DIRECTION OF THE ENGINEER.

ITEM 809 - ITS CABINET, GROUND MOUNTED, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF SS 809/SS 909, THIS ITEM SHALL INCLUDE THE INSTALLATION OF A CONTROLLER WORK PAD FOR PROPOSED ITS DEVICES. REFERENCE SCD ITS-10.11.

CONSTRUCT WORK PAD PER DIMENSIONS FOUND IN THE FOLLOWING TABLE. FOR WORK PADS INCLUDING A CCTV POLE AND FOUNDATION, CONSTRUCT THE WORK PAD SEPARATELY FROM THE POLE/FOUNDATION.

ITEM 809 - ITS CABINET, GROUND MOUNTED, AS PER PLAN (CONT.)

THE FOLLOWING TABLE IDENTIFIES PROPOSED WORK PAD DIMENSIONS AND CCTV POLE TYPE (AS APPLICABLE):

LOC. #	WIDTH (W) (FT)	LENGTH (L) (FT)	POLE TYPE (WITHIN WORK PAD)
1	10	13	NO CCTV POLE
2	13	17	TC-81.11 DES. 8
3	13	17	TC-81.11 DES. 8
4	13	17	70 FT CCTV POLE
5	10	13	NO CCTV POLE
6	10	13	NO CCTV POLE
7	10	13	NO CCTV POLE
8	13	21	70 FT CCTV POLE
9	10	13	NO CCTV POLE
10	9	10	NO CCTV POLE
11	10	13	NO CCTV POLE
12			
13	10	13	NO CCTV POLE
14 (1)	10	13	NO CCTV POLE
14 (2)	10	20	ENCOMPASS EX. CCTV
15	13	17	TC-81.11 DES. 8
16			
17			
18			
19	6	18	NO CCTV POLE
20	10	13	NO CCTV POLE
21			
22	10	13	NO CCTV POLE
23			
24	10	13	NO CCTV POLE
25	10	13	NO CCTV POLE
26	10	13	NO CCTV POLE
27	10	13	NO CCTV POLE
28	13	17	TC-81.11 DES. 8
29	10	13	NO CCTV POLE
30	10	13	NO CCTV POLE
31	10	13	NO CCTV POLE

PAYMENT FOR EACH COMPLETE, INSTALLED, AND ACCEPTED WORK PAD SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 633, CONTROLLER WORK PAD, AS PER PLAN.

**1342-8 ITEM 809E24500: CONDUIT, 4", MULTICELL, HDPE WITH 4 - 1" INNERDUCTS
ITEM 809E24000: CONDUIT, MULTICELL, JACKED OR DRILLED, 4" AS PER PLAN**

DESCRIPTION

THIS CONDUIT IS INTENDED FOR THE USE IN UNDERGROUND OR ENCASED 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 (4) INNERDUCTS ASSEMBLED WITHIN A PROTECTIVE OUTER DUCT HIGH DENSITY POLYETHYLENE OR APPROVED EQUIVALENT. THE INNERDUCTS SHALL BE A MINIMUM 1 INCH INSIDE DIAMETER. THE OUTER DUCT SHALL BE NOMINAL 4 INCH INSIDE DIAMETER AND A MAXIMUM OUTSIDE DIAMETER OF 4.8 INCH.

**1342-8 ITEM 809E24500: CONDUIT, 4", MULTICELL, HDPE WITH 4 - 1" INNERDUCTS (CON'T)
ITEM 809E24000: CONDUIT, MULTICELL, JACKED OR DRILLED, 4" (CON'T)**

THE HDPE CONDUIT SHALL BE COILABLE ON REELS. WHERE INNERDUCT(S) WITHIN A MULTI-CELL DUCT ARE TO REMAIN EMPTY, ONE FLAT WOVEN POLYESTER TAPE WITH 2500 LB PULLING STRENGTH AND FOOTAGE MARKS 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.

INSTALLATION IN TRENCH

INSTALLATION WILL BE IN 30" DEEP TRENCH, DRILLED OR PLOWED TO A MINIMUM OF 30" DEEP, ENCASED INSIDE CONCRETE BARRIER WALL OR AS NOTED ON THE PLANS.

THE HDPE CONDUIT SHALL BE INSTALLED IN CONTINUOUS LENGTHS WITHOUT JOINTS OR COUPLINGS BETWEEN PULL BOXES OR JUNCTION BOXES.

WHEN ENTERING A PULL BOX, CONDUIT SHALL BE BROUGHT IN 3 INCHES MINIMUM AND A MAXIMUM OF 6 INCHES FROM THE EDGE OF THE PULL BOX AND KNOCKOUT.

JACKED OR DRILLED INSTALLATION

THIS INSTALLATION WILL CROSS UNDERGROUND UTILITIES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL ACCURATELY IDENTIFY THE PROPOSED LOCATION AND ROUTING OF THE CONDUIT TO BE JACKED OR DRILLED AS SHOWN IN THE PLANS.

FOR JACKED OR DRILLED INSTALLATION, THE CONTRACTOR SHALL IDENTIFY ALL CROSSINGS BASED ON THE FIELD MARKING OF UNDERGROUND UTILITY LOCATION AND PLANS. THE CONTRACTOR SHALL PERFORM A TEST HOLE AT EACH CROSSING TO VERIFY LOCATION AND DEPTH OF EXISTING UNDERGROUND UTILITY PRIOR TO JACKED OR DRILLED INSTALLATION.

WHEN CROSSING UNDERGROUND UTILITIES, THE CONTRACTOR MUST MAINTAIN A MINIMUM OF 12 INCH VERTICAL CLEARANCE WHEN JACKING OR DRILLING CONDUIT. WHEN 12 INCH CLEARANCE CANNOT BE MAINTAINED, THE CONDUIT MAY BE INSTALLED IN A TRENCH WITHIN THE VICINITY OF THE EXISTING UTILITY AS SHOWN IN ODOT TRAFFIC STANDARD CONSTRUCTION DRAWING HL-30.22 AND ITS-14-10.

THE COST FOR RESTORATION OF IMPACTED SIDEWALK AND OTHER PAVED SURFACES SHALL BE INCIDENTAL TO THE COST OF CONDUIT, MULTICELL, JACKED OR DRILLED, 4" AS PER PLAN.

THE COST FOR TRENCH AND INSTALLATION OF CONDUIT IN THESE AREAS SHALL BE INCIDENTAL TO THE COST OF CONDUIT, 4", MULTICELL, HDPE, JACKED OR DRILLED, AS PER PLAN. THE CONTRACTOR WILL BE COMPENSATED FOR EACH TEST HOLE EXCAVATION ACCORDING TO THE BID PRICE FOR ITEM 632 TEST HOLE PERFORMED, CONDUIT, AS PER PLAN.

METHOD OF MEASUREMENT

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

BASIS OF PAYMENT

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

DESIGN AGENCY



DESIGNER

AC

REVIEWER

JGW 07/19/24

PROJECT ID

117258

SHEET TOTAL

P.5 71