CITY OF MARYVILLE	YEAR	SHEET NO.
	2023	1
PROJECT NO.	2021-0520-03	

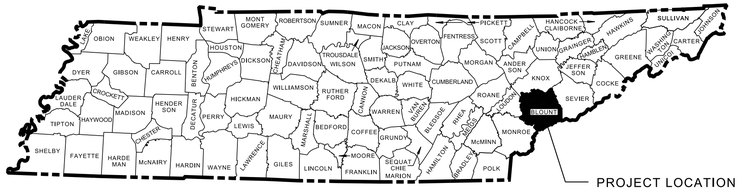
SEE SHEET 1A FOR INDEX

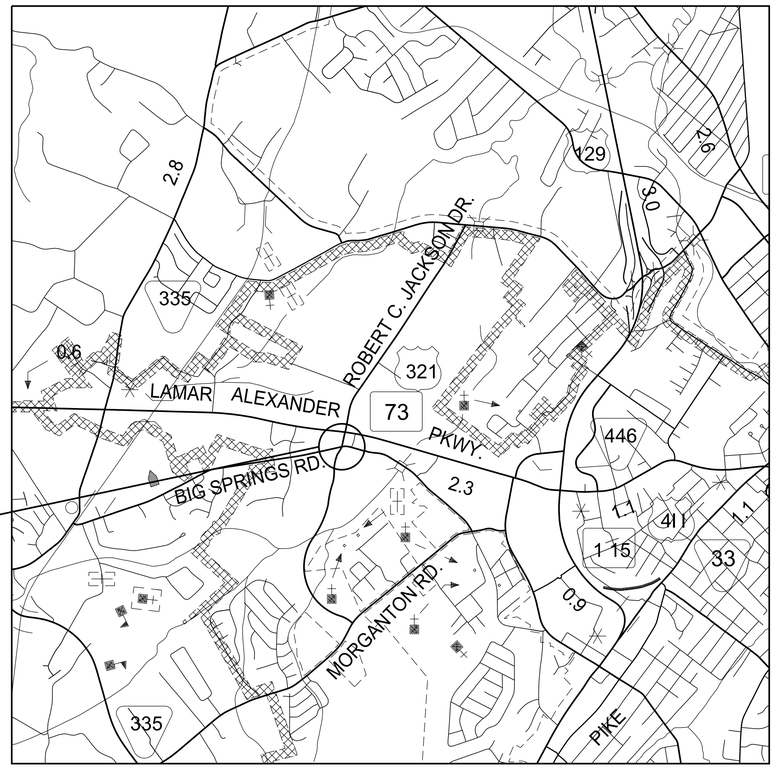
CITY of MARYVILLE
PEOPLE are the KEY

SIGNAL PLANS

ROBERT C. JACKSON DRIVE
AT BIG SPRINGS ROAD

CONSTRUCTION





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PROJECT LOCATION
ROBERT C. JACKSON DR. @
BIG SPRINGS RD.

PROJECT LENGTH 0.01 MILES
SCALE: 1" = 2000'

FINAL CONST. PLANS REVIEW

THIS PROJECT DOES NOT REQUIRE ANY R.O.W. AQUISITION OR EASEMENT

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE OWNER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

SEALED BY
MARK H. WASHING
REGISTERED
DEPARTMENT OF
AGRICULTURE
DEPARTMENT OF
COMMERCE
NO. 107908
STATE OF TENNESSEE
12/14/2023

DESIGNER: MARK WASHING, PE CHECKED BY: ANDREA HALL, PE

BARGE DESIGN SOLUTIONS
615 3rd Avenue South // Suite 700 // Nashville, Tennessee 37210
PHONE (615) 254-1500 // FAX (615) 255-6572

12/14/2023
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2023	2021-0520-03	1A

SHEET INDEX

TDOT STANDARD ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
ROADWAY DESIGN STANDARDS		
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
RD-L-2	02-20-20	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	03-01-23	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	02-20-20	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
MULTIMODAL		
MM-CR-5	06-28-19	SINGLE CROSSING CURB RAMP IN CURVE
MM-CR-7		CURB RAMPS IN CURVE BI-DIRECTIONAL DUAL CROSSING
SAFETY DESIGN AND GUARDRAIL		
S-CZ-1	06-28-19	CLEAR ZONE CRITERIA
DESIGN - TRAFFIC CONTROL		
T-M-4	07-17-20	STANDARD INTERSECTION PAVEMENT MARKINGS
T-WZ-50	04-02-12	TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 2 OR 3 LANE MAJOR ROUTES
T-WZ-55	10-29-21	SIDEWALK TRAFFIC CONTROL
T-WZ-FAB1		FLASHING YELLOW ARROW BOARD
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-3B	06-15-21	SILT FENCE
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-8	06-10-14	FILTER SOCK

TDOT STANDARD TRAFFIC OPERATIONS DRAWINGS

DWG.	REV.	DESCRIPTION
SIGNS		
T-S-16	07-02-2015	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-20	07-11-2017	SIGN DETAILS
SIGNALS		
T-SG-3A	06-27-16	ALTERNATE DETECTION DETAILS
T-SG-5	06-27-16	CONTROLLER CABINET DETAILS
T-SG-6	10-21-19	PEDESTRIAN SIGNAL DETAILS
T-SG-7	10-21-19	SIGNAL HEAD ASSEMBLIES
T-SG-7C		TYPICAL SIGNAL HEAD PLACEMENT ONE-LANE AND TWO-LANE APPROACHES
T-SG-7D	10-21-19	TYPICAL SIGNAL HEAD PLACEMENT TWO-LANE APPROACHES
T-SG-9	10-21-19	DETAILS OF CANTILEVER SIGNAL SUPPORT
T-SG-9A	07-12-17	MISCELLANEOUS SIGNAL DETAILS
T-SG-10	09-12-23	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-12	12-20-19	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS

TDOT STANDARD STRUCTURE DRAWINGS

DWG.	REV.	DESCRIPTION
NEW STRUCTURES		
STD-8-4		SIGN, LUMINAIRE, AND TRAFFIC SIGNAL SUPPORTS

SEALED BY

CITY OF MARYVILLE
BLOUNT COUNTY, TN

ROBERT C. JACKSON SIGNAL PLANS

SHEET INDEX AND TDOT STANDARD DRAWINGS

BARGE DESIGN SOLUTIONS

12/14/2023
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2023	2021-0520-03	2

ESTIMATED QUANTITIES

	TDOT ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY
(1)(2)	209-99.91	EROSION CONTROL	LS	1
(3)	701-02.03	CONCRETE CURB RAMP	S.F.	600
	712-01	TRAFFIC CONTROL	LS	1
(4)	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	16
	712-06	SIGNS (CONSTRUCTION)	S.F.	146
(4)	712-08.03	ARROW BOARD (TYPE C)	EACH	1
(5)	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
(6)	713-15.07	SUSPENDED FLAT SHEET ALUMINUM SIGN (0.080" THICK)	EACH	4
(7)	713-16.20	SIGNS (INTERNALLY ILLUMINATED STREET NAME SIGN)	EACH	4
(8)	713-16.21	SIGNS (W3-3)	EACH	2
(9)	716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	L.F.	335
(9)	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	150
(9)	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	1
(9)	716-02.08	PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.	215
	716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	140
	716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	60
	716-08.06	REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	1
	717-01	MOBILIZATION	LS	1
	725-03.09	ETHERNET SWITCH (TYPE A)	EACH	1
	725-23.25	FIBER OPTIC CLOSURE (72 F)	EACH	1
(10)	725-23.30	FIBER OPTIC TERMINATION CABINET (12 FIBER TERMINATION CABINET)	EACH	1
	730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	9
	730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	2
	730-03.21	INSTALL PULL BOX (TYPE B)	EACH	9
	730-03.23	INSTALL PULL BOX (FIBER OPTIC - TYPE A)	EACH	3
	730-03.36	FIBER SPLICE ENCLOSURE (AERIAL)	EACH	1
(11)	730-03.54	FIBER OPTIC DROP CABLE (12F)	L.F.	450
(12)	730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
	730-08.01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	2050
	730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	1325
	730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1650
(13)	730-11.10	RISER ASSEMBLY (2" RGS CONDUIT RISER)	EACH	1
	730-11.11	RISER ASSEMBLY (FIBER OPTIC RISER)	EACH	1
	730-12.16	CONDUIT (2" DIAMETER, PVC)	L.F.	350
	730-12.17	CONDUIT (2" DIAMETER, PVC, JACK AND BORE)	L.F.	1000
(14)	730-12.16	CONDUIT (2" DIAMETER HDPE)	L.F.	30
(14)	730-12.17	CONDUIT (2" DIAMETER HDPE - JACK AND BORE)	L.F.	250
(15)	730-13.14	VEHICLE DETECTOR (360-DEGREE CAMERA)	EACH	1
	730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	1
(16)	730-16.04	CONTROLLER (ATC)	EACH	1
	730-23.28	PEDESTAL POLE (TYPE A)	EACH	3
	730-23.88	CANTILEVER SIGNAL SUPPORT (1 ARM @ 45')	EACH	1
	730-25.07	CANTILEVER SIGNAL SUPPORT (1 ARM @ 55')	EACH	1
	730-25.11	CANTILEVER SIGNAL SUPPORT (1 ARM @ 60')	EACH	1
	730-25.15	CANTILEVER SIGNAL SUPPORT (1 ARM @ 75')	EACH	1
	730-26.11	COUNTDOWN PED SGNL HEAD W/ AUDIBLE PUSH BUTTON & 15IN SIGN	EACH	8
	730-35.06	BATTERY BACK-UP AND POWER CONDITIONER	EACH	1

FOOTNOTES

(1) SEE SUBSECTION 209.97 OF THE TDOT STANDARD SPECIFICATIONS FOR MAINTENANCE AND REPLACEMENT.
(2) EROSION PREVENTION AND SEDIMENT CONTROL TO BE INSTALLED AS DIRECTED BY THE CITY OF MARYVILLE SITE REPRESENTATIVE.
(3) ITEM NUMBER INCLUDES ALL NEW CONCRETE, TIE-INS TO EXISTING SIDEWALK, DETECTABLE WARNING SURFACES, AND REMOVAL OF OLD CURB RAMPS.
(4) TO BE USED AS DIRECTED BY THE CITY OF MARYVILLE SITE REPRESENTATIVE.
(5) ITEM NUMBER INCLUDES THE REMOVAL OF EXISTING STOP SIGNS AND ANY SIGNAGE THAT DOES NOT CONFORM TO THE NEW SIGNAL INSTALLATION.
(6) ITEM NUMBER TO BE USED FOR R10-12 SIGNS MOUNTED ON MAST ARMS.
(7) SHIELD CABLE FOR THE INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE AS REQUIRED BY MANUFACTURER AND SHALL BE INCLUDED IN THE COST OF THE SIGN.
(8) INCLUDES INSTALLATION OF SIGN, POST, AND FOOTING PER TDOT STANDARD DRAWINGS T-S-16 AND T-S-20.
(9) CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
(10) ITEM NUMBER INCLUDES THE SPLICING OF FIBER OPTIC CABLE ENDS AND TERMINATION OF FIBER OPTIC CABLES INTO TERMINATION CABINET
(11) FIBER OPTIC CABLE IS TO BE SINGLE MODE FIBER OPTIC CABLE.
(12) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL UTILITY TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTILITY FOR PROVIDING ELECTRICAL SERVICE TO THE SIGNAL CONTROLLER. THESE CHARGES AND ANY OTHER EQUIPMENT NECESSARY FOR A COMPLETE SERVICE CONNECTION SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM FOR PAYMENT BY THE CONTRACTOR.
(13) CONDUIT RISER ASSEMBLY FOR ELECTRICAL SERVICE CONNECTION.
(14) ITEM NUMBERS TO BE FOR FIBER OPTIC COMMUNICATION CABLING.
(15) ITEM NUMBERS FOR VIDEO DETECTION INCLUDE ALL EQUIPMENT AND WIRING NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONABLE DETECTION SYSTEM. THIS DETECTION SYSTEM IS FOR ONE PROCESOR AND 2 CAMERAS FOR THE INTERSECTION.
(16) PAY ITEM SHALL BE PEEK ATC-1000 TRAFFIC SIGNAL CONTROLLER.

TRAFFIC CONTROL SIGN TABULATION

M.U.T.C.D. SIGN NUMBER	LEGEND	SIZE IN INCHES L	X	W	S.F.	TOTAL NO. REQUIRED	TDOT ITEM NO. 712-06 (S.F.)	TDOT STANDARD DRAWING NO.	REMARKS
W20-1	ROAD WORK AHEAD	48	X	48	16	2	32	T-WZ-50	
W20-1	ROAD WORK 1/2 MILE	48	X	48	16	2	32	T-WZ-50	
W20-1	ROAD WORK 1000 FT.	48	X	48	16	2	32	T-WZ-50	
W20-1	ROAD WORK 500 FT.	48	X	48	16	2	32	T-WZ-50	
G20-2	END ROAD WORK	36	X	18	4.5	4	18	T-WZ-50	
						TOTAL	146	S.F.	

SEALED BY

CITY OF MARYVILLE
BLOUNT COUNTY, TN

ROBERT C. JACKSON SIGNAL PLANS

ESTIMATED QUANTITIES
AND
TABULATED QUANTITIES

BARGE DESIGN SOLUTIONS

12/14/2023
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2023	2021-0520-03	3

GENERAL NOTES

GRADING

(1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

SIGNALIZATION

(1) SALVAGEABLE EQUIPMENT SHALL BECOME THE PROPERTY OF THE MARYVILLE-ALCOA CENTRAL TRAFFIC OPERATIONS GROUP (MACTO) AND SHALL BE STOCKPILED AT A LOCATION DESIGNATED BY THE ENGINEER FOR PICKUP BY MACTO.

(2) ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.

(3) AN ADVANCE FLASH OPERATION PERIOD IS REQUIRED TO MAKE MOTORISTS AWARE OF THE PRESENCE OF NEW SIGNAL HEADS. NEW SIGNAL HEADS SHALL BE PUT IN FLASH OPERATION FOR MINIMUM OF SEVEN (7) CALENDAR DAYS UP TO FOURTEEN (14) CALENDAR DAYS PRIOR TO ACTIVATION OF NORMAL TRAFFIC SIGNAL OPERATION. OTHER FLASH OPERATION TIME PERIODS MAY BE CONSIDERED UPON WRITTEN APPROVAL FROM THE REGIONAL TRAFFIC ENGINEER.

(4) THE CONTRACTOR SHALL CONTACT MACTO A MINIMUM OF THIRTY (30) DAYS PRIOR TO ACTIVATION OF THE SIGNAL TO OBTAIN THE INITIAL SIGNAL TIMINGS.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

(2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

(3) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

(4) USE OF BARRICADES, PORTABLE BARRIER RAILS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(5) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(6) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(7) THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING CONSTRUCTION SIGNS. THE COST OF THIS WORK SHALL BE INCLUDED IN ITEM NO. 712-06, SIGNS (CONSTRUCTION), S.F.

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

(1) UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES.

SEDIMENT CONTROL

(2) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

(3) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFFSITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFFSITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE NEGOTIATED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

(4) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

(5) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.

(6) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

(7) ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE AND SPILLS.

UTILITY

(1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE, AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) OR NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.

(3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(4) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC AT 1-800-351-1111 WILL BE REQUIRED.

(5) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

MISCELLANEOUS

(1) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

SEALED BY

CITY OF MARYVILLE
BLOUNT COUNTY, TN

ROBERT C. JACKSON SIGNAL PLANS

GENERAL NOTES

BARGE DESIGN SOLUTIONS

12/14/2023
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2023	2021-0520-03	3A

SPECIAL NOTES

TRAFFIC SIGNAL POLES

(1) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.

(2) THE PROPOSED LOCATION OF THE SIGNAL SUPPORT POLES, AS SHOWN ON THESE PLANS, IS APPROXIMATE. SOME FIELD ADJUSTMENTS MAY BE REQUIRED IN ORDER TO AVOID CONFLICTS WITH EITHER UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND STAKING THE OPTIMUM LOCATION FOR THE POLES AND FOR RECEIVING APPROVAL FROM MACTO AND THE APPROPRIATE UTILITIES BEFORE INSTALLATION BEGINS. THE ENGINEER SHALL BE ADVISED BY THE CONTRACTOR OF ANY FIELD ADJUSTMENTS TO POLE LOCATIONS TO VERIFY THAT SUCH CHANGES ARE STRUCTURALLY POSSIBLE. PROPER ROADSIDE CLEAR ZONES SHALL BE OBSERVED.

(3) SHAFTS FOR FOOTINGS SHALL BE DRILLED THROUGH FIRM, UNDISTURBED, UNSATURATED SOIL AND SHALL BE VISUALLY INSPECTED BY THE ENGINEERING REPRESENTITIVE PRIOR TO PLACEMENT OF REINFORCEMENT. THE ENGINEERING REPRESENTITIVE SHALL BE ADVISED BY THE CONTRACTOR OF ANY GROUND WATER OR LOOSE SOIL ENCOUNTERED DURING DRILLING.

(4) THE CONTRACTOR AND/OR POLE FABRICATOR SHALL DETERMINE THE SIZE AND DESIGN OF ALL STEEL SIGNAL SUPPORT POLE(S) AND FOUNDATION(S). SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND TO MACTO FOR REVIEW AND APPROVAL PRIOR TO ORDERING. FOUNDATIONS ARE TO CONFORM TO TDOT STANDARD DRAWINGS.

(5) NEW TRAFFIC SIGNAL SUPPORT POLE(S) SHALL BE ROUND, TAPERED GALVANIZED STEEL STRAIN POLES WITH MAST ARM(S) IN ACCORDANCE WITH TDOT STANDARD DRAWINGS. MAST ARMS SHALL BE GALVANIZED.

(6) NO GROUT SHALL BE PLACED AT THE BASE OF STEEL POLE BETWEEN THE POLE BASE AND FOUNDATION. BASEOF POLE SHALL REMAIN OPEN TO PERMIT DRAINAGE AND AIR CIRCULATION.

SIGNAL DISPLAYS

(7) TRAFFIC SIGNAL HEADS SIGNAL HEAD PLACEMENT SHALL BE IN ACCORDANCE WITH TDOT STANDARD DRAWING T-SG-7C, 7D

(8) ALL NEW TRAFFIC SIGNAL HEADS SHALL BE FABRICATED FROM ALUMINUM AND THE ENTIRE SIGNAL HEAD SHALL BE YELLOW IN COLOR.

(9) ALL NEW TRAFFIC SIGNAL HEAD INDICATIONS SHALL HAVE 12 INCH LED FACES, CLEAR WITH INCANDESCENT LOOK.

(10) ALL VEHICLE SIGNAL HEAD ASSEMBLIES SHALL INCLUDE VACUUM-FORMED ABS FINISHED BACKPLATES OR APPROVED EQUIVALENT DULL BLACK BACKPLATES WITH A 2" YELLOW RETRO-REFLECTIVE BORDER.

(11) IF FIELD ADJUSTMENTS RESULT IN CHANGES TO SIGNAL HEAD PLACEMENT, ATTACHMENT HEIGHT OR MAST ARM LENGTH, THE ENGINEER SHALL RE-EVALUATE TO VERIFY THAT THE CHANGES ARE STRUCTUALLY ACCEPTABLE.

(12) SIGNAL HEADS ARE TO BE MOUNTED TO MAST ARMS USING ASTRO BRACKETS OR COMPATIBLE RIGID MOUNT.

(13) STREET NAME SIGNS SHALL BE INTERNALLY ILLUMINATED.

PEDESTRIAN FEATURES

(14) PEDESTRIAN DISPLAYS SHALL BE A SINGLE SECTION, LED, CAST ALUMINUM, YELLOW, HAND/MAN DISPLAYS WITH A COUNTDOWN TIMER.

(15) PEDESTRIAN PUSHBUTTONS SHALL BE ACCESSIBLE TYPE, MEETING ALL CURRENT MUTCD, PROWAG REQUIREMENTS. THE POLARA INAVIGATOR APS 3-WIRE SYSTEM (IN3 PUSH BUTTON STATION) IS APPROVED FOR USE IN THE CITY OF MARYVILLE. ALTERNATIVES WILL BE CONSIDERED ON A CASE-BY-CASE BASIS.

VIDEO DETECTION

(16) APPROVED VIDEO DETECTION UNITS SHALL BE GRIDSMART OR ALTERNATIVE CAPABLE OF PROVIDING COLOR VIDEO MONITORING AND BE IP ADDRESSABLE WITH AN ETHERNET PORT PROVIDED FOR REMOTE CONFIGURATION AND STREAMING VIDEO.

CABINET AND CONTROLLER

(17) THE CABINET SHALL BE A BASEMOUNTED 16-PHASE NEMA TS2 – TYPE 1 WITH P44 ENCLOSURE TYPE WITH 2 SHELVES, LED LIGHTING, 1 FAN, 1 THERMOSTAT, AND A 12"X16" AIR FILTER.

(18) CABINET SHALL BE INSTALLED WITH THE DOOR OPPOSITE THE INTERSECTION SO THE SIGNAL TECHNICIAN WILL HAVE A VIEW OF THE INTERSECTION WHILE FACING THE EQUIPMENT.

(19) THE CABINET BASE FOUNDATION WILL INCLUDE A POURED PAD WORK PLATFORM IN FRONT OF THE DOOR AT GROUND LEVEL. REFER TO "MACTO CD 1.0 CABINET DETAIL" FOR ALL CABINET BASE DIMENSIONS AND SPECIFICATIONS.

(20) THE TRAFFIC SIGNAL CABINET FURNISHED BY THE CONTRACTOR SHALL BE COMPLETE WITH ALL INCIDENTAL AND AUXILIARY EQUIPMENT NECESSARY FOR INSTALLATION AND OPERATION AS PART OF A SYSTEM OF INTERSECTIONS. ALL WIRING AND EQUIPMENT TO ACTIVATE THE SIGNAL HEADS AND OPERATE THE TRAFFIC SIGNAL AS SPECIFIED BY MACTO TECHNICAL SPECIFICATIONS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.

(21) THE CONTROLLER SHALL BE A PEEK ATC-1000 CONTROLLER CAPABLE OF PROVIDING FULLY ACTUATED OPERATION AND COMPLETE WITH ALL UPDATED SOFTWARE, FIRMWARE AND CABINET CONNECTIONS INCLUDING A PEEK SG1000 CONFILCT MONITOR.

CONDUIT

(22) ALL CONDUITS SHALL BE SCHEDULE 80 PVC UNLESS OTHERWISE NOTED. A PULL STRING IS TO BE PROVIDED IN EACH CONDUIT FROM JUNCTION TO JUNCTION.

(23) CONDUIT SHALL BE LAID AT A MINIMUM DEPTH OF 24 INCHES BELOW FINISHED GRADE AND SHALL COMPLY WITH TDOT TRENCHING DETAILS AND CONDUIT PLACEMENT.

(24) THE CONTRACTOR SHALL SEAL ALL OPEN CONDUIT ENTRANCE HOLES. WITH OR WITHOUT CABLES, WITH CONDUIT DUCT SEAL PUTTY. WHERE CABLES ENTER THE CONDUIT, THE SEALANT SHALL BE APPLIED AFTER INSTALLING THE CABLE. THESE LOCATIONS SHALL CONSIST OF CONDUIT ENDS AND PULL BOXES, CABINET BASES AND WEATHER-HEADS.

ELECTRICAL SERVICE

(25) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ELECTRICAL SERVICE TO THE SITE.

(26) CONTRACTOR SHALL INSTALL A 50 AMP, 2 POLE WEATHERPROOF EXTERNAL DISCONNECT OF THE POLE WITH AC SERVICE CONNECTION. ENCLOSURE SHALL BE METALLIC WITH A 50 AMP SINGLE POLE CIRCUIT BREAKER.

LIGHT EMITTING DIODES (LED)

(27) ALL SIGNAL DISPLAY LED MODULES SHALL BE INCANDESCENT LOOK SIGNAL LAMPS.

(28) COMPATABILITY WITH CONFLICT MONITORS AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.

(29) MANUFACTURER SHALL PROVIDE A MINIMUM FIVE-YEAR WARRANTY FOR OPERATION OF THE UNIT.

PAVEMENT MARKINGS

(30) ALL NEW PAVEMENT MARKINGS SHALL BE OF A THERMOPLASTIC MATERIAL AND APPLIED TO AREAS NOT ALREADY MARKED.

(31) ALL CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED USING AN ACCEPTABLE METHOD AS SPECIFIED BY TDOT STANDARD SPECIFICATION 712-TEMPORARY TRAFFIC CONTROL.

(32) IN TRANSITION AREAS, NEW PAVEMENT MARKINGS SHALL EXTEND 20 FEET INTO EXISTING PAVEMENT MARKINGS.

(33) EXISTING PAVEMENT MARKINGS SHALL BE REAPPLIED AS NEEDED.

CONSTRUCTION

(34) THE CONTRACTOR IS REQUIRED TO ATTEND A PRE-CONSTRUCTION MEETING WITH MACTO PRIOR TO THE COMMENCEMENT OF WORK ON THE PROJECT.

(35) THE CONTRACTOR SHALL SUBMIT A MATERIALS LIST TO MACTO FOR REVIEW AND APPROVAL PRIOR TO START OF CONSTRUCTION.

FIBER OPTIC CABLE

(36) CONTRACTOR TO COORDINATE WITH THE CITY OF MARYVILLE FOR TYPE OF FIBER OPTION CABLE NEEDED FOR INSTALLATION.

(37) THE FIBER CABLE IS THE RESPONSIBILITY OF THE CONTRACTOR AFTER INSTALLATION.

(38) THE CITY OF MARYVILLE WILL BE THE RESPONSIBLE FOR SPLICING THE INSTALLED FIBER INTO THE MAIN TRUNK LINE.

SEALED BY

MARK H. WASHING — REGISTERED ENGINEER — AGRICULTURE — STRUCTURE — ENVIRONMENT — COMMERCE — NO. 107908 — STATE OF TENNESSEE

12/14/2023

CITY OF MARYVILLE
BLOUNT COUNTY, TN

ROBERT C. JACKSON SIGNAL PLANS

SPECIAL NOTES

BARGE DESIGN SOLUTIONS

12/14/2023
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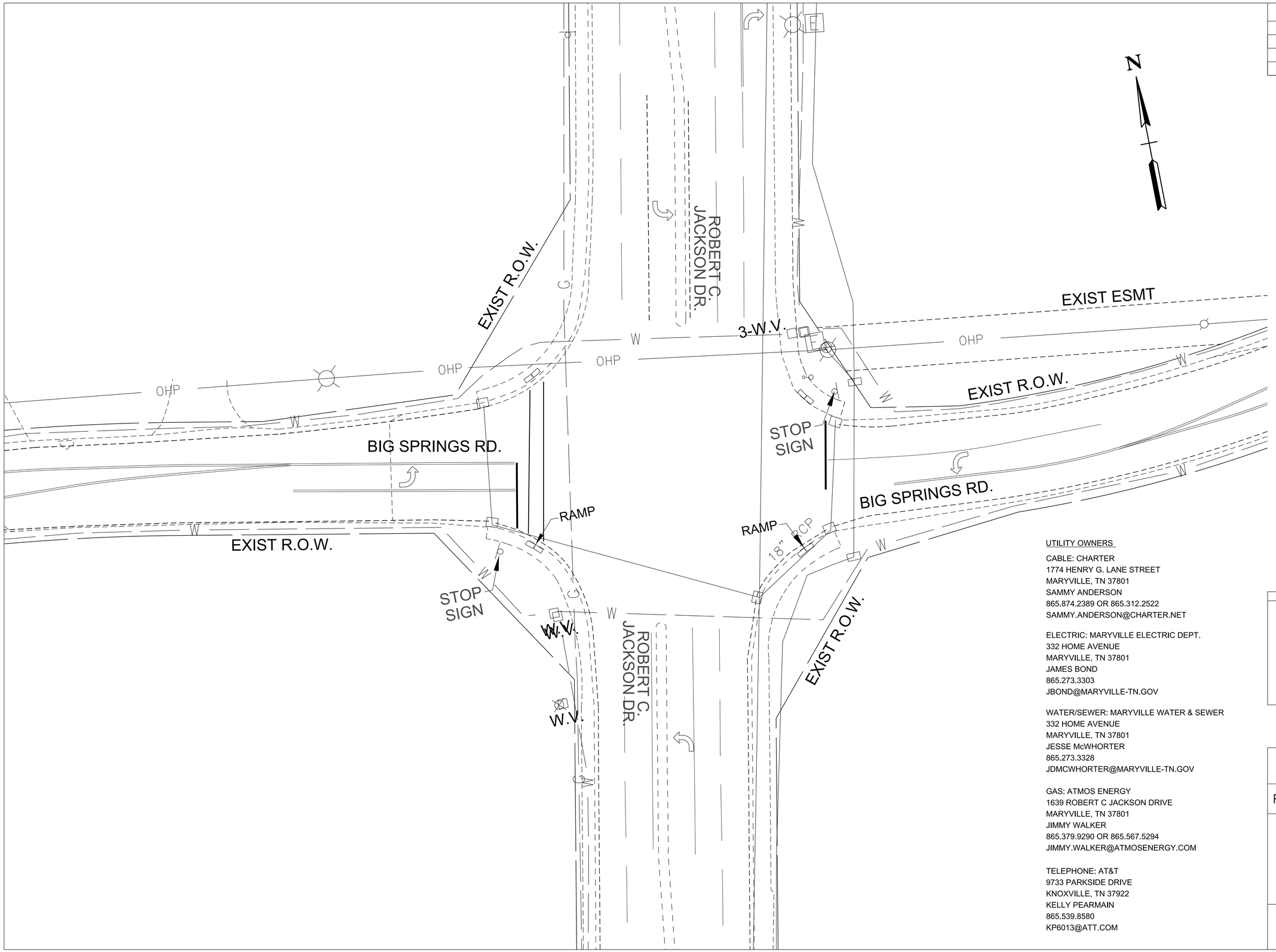
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2023	2021-0520-03	4



UTILITY OWNERS

CABLE: CHARTER
1774 HENRY G. LANE STREET
MARYVILLE, TN 37801
SAMMY ANDERSON
865.874.2389 OR 865.312.2522
SAMMY.ANDERSON@CHARTER.NET

ELECTRIC: MARYVILLE ELECTRIC DEPT.
332 HOME AVENUE
MARYVILLE, TN 37801
JAMES BOND
865.273.3303
JBOND@MARYVILLE-TN.GOV

WATER/SEWER: MARYVILLE WATER & SEWER
332 HOME AVENUE
MARYVILLE, TN 37801
JESSE McWHORTER
865.273.3328
JDMCWHORTER@MARYVILLE-TN.GOV

GAS: ATMOS ENERGY
1639 ROBERT C JACKSON DRIVE
MARYVILLE, TN 37801
JIMMY WALKER
865.379.9290 OR 865.567.5294
JIMMY.WALKER@ATMOSENERGY.COM

TELEPHONE: AT&T
9733 PARKSIDE DRIVE
KNOXVILLE, TN 37922
KELLY PEARMAIN
865.539.8580
KP6013@ATT.COM

SEALED BY

MARK H. WASHING
LICENSED PROFESSIONAL ENGINEER
AGRICULTURE
ENGINEER
NO. 107908
STATE OF TENNESSEE

12/14/2023

COORDINATES ARE NAD/83(1995), ARE NOT DATUM ADJUSTED AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

CITY OF MARYVILLE
BLOUNT COUNTY, TN

ROBERT C. JACKSON SIGNAL PLANS

PRESENT LAYOUT

SCALE: 1"=20'

BARGE DESIGN SOLUTIONS

12/14/2023
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2023	2021-0520-03	5

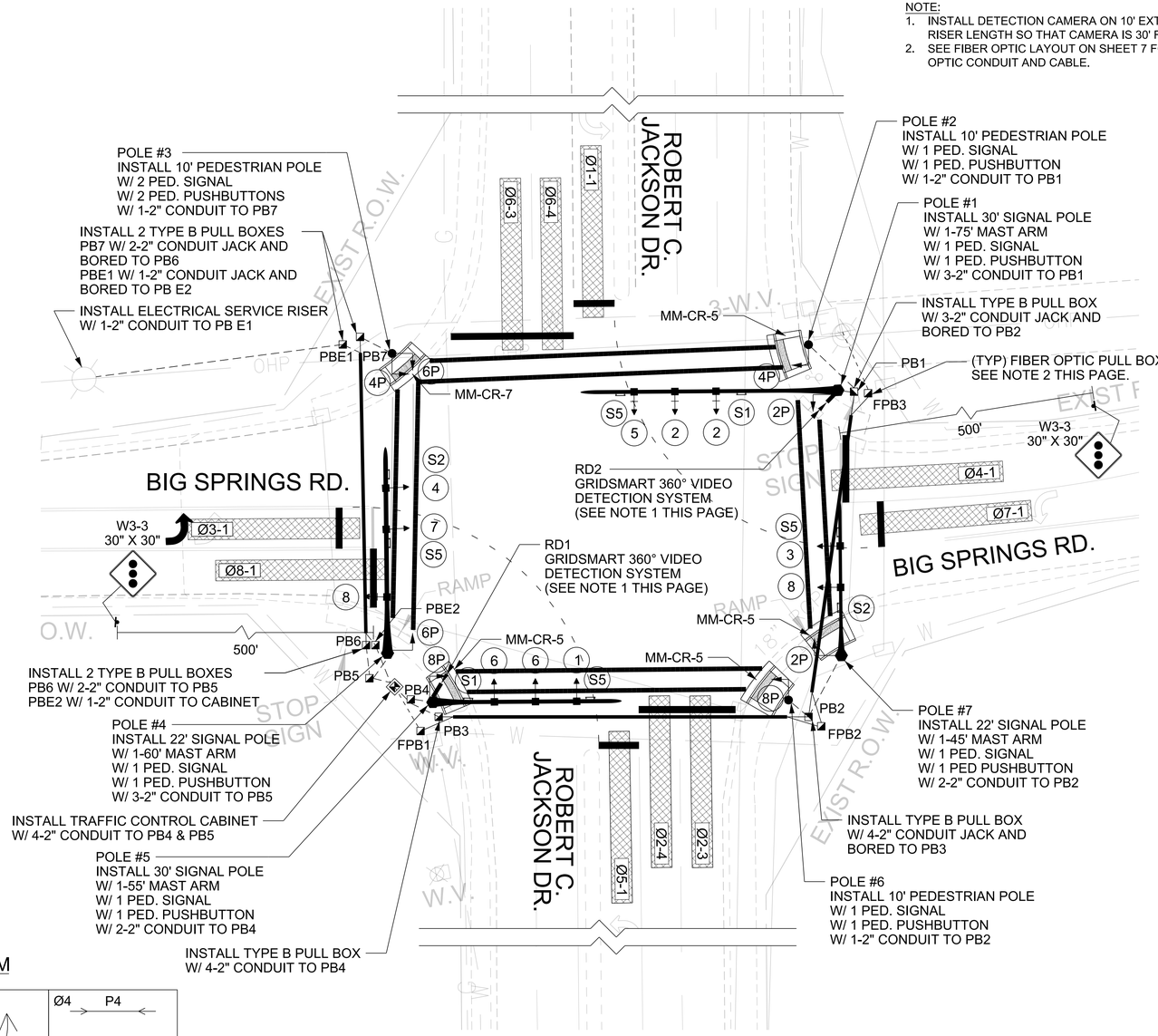
PROPOSED LEGEND

	SIGNAL SUPPORT POLE
	SIGNAL HEAD
	EMERGENCY VEHICLE PREEMPTION
	OVERHEAD SIGN
	PAD MOUNTED CONTROLLER CABINET
	PEDESTRIAN SIGNAL HEAD
	DETECTION ZONE
	VIDEO DETECTION CAMERA
	PULL BOX
	CROSSWALK (SEE TDOT STD. T-M-4)
	LEFT TURN PAVEMENT MARKING
	24" STOP BAR
	8" DOTTED WHITE LINE
	DETECTABLE WARNING SURFACE

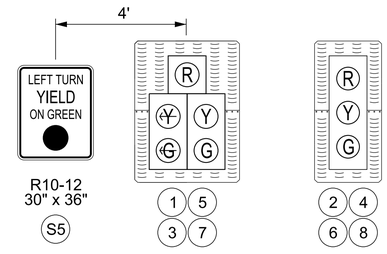
EXISTING LEGEND

	PULL BOX
	STREET LIGHT
	POWER POLE
	CROSSWALK
	LEFT TURN PAVEMENT MARKING
	24" STOP BAR

NOTE:
1. INSTALL DETECTION CAMERA ON 10' EXTENDED RISER POLE OR RISER LENGTH SO THAT CAMERA IS 30' FROM PAVEMENT.
2. SEE FIBER OPTIC LAYOUT ON SHEET 7 FOR DETAILS ON FIBER OPTIC CONDUIT AND CABLE.



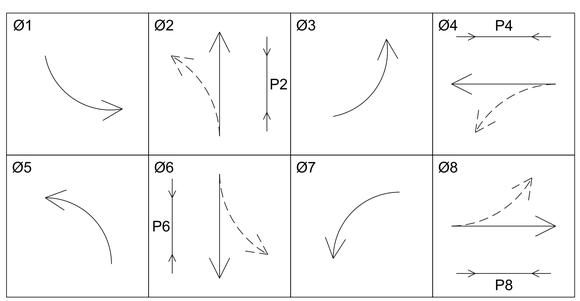
PROPOSED SIGNAL HEADS



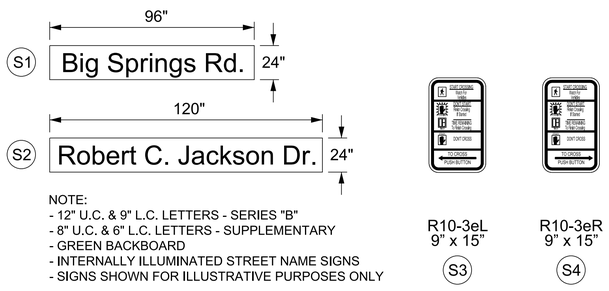
COUNTDOWN TYPE L.E.D.
PED WITH OVERLAPPING, FULLY POPULATED SOLID SYMBOLS

COLOR LEGEND
PERSON - WHITE
HAND - PORTLAND ORANGE

PHASING DIAGRAM

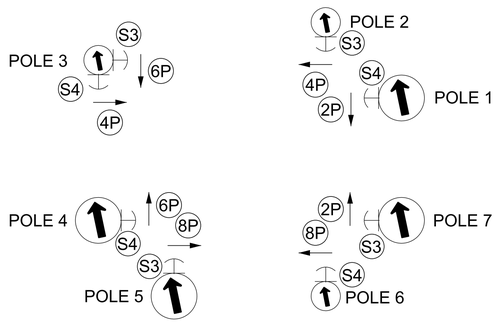


SIGNS



NOTE:
- 12" U.C. & 9" L.C. LETTERS - SERIES "B"
- 8" U.C. & 6" L.C. LETTERS - SUPPLEMENTARY
- GREEN BACKBOARD
- INTERNALLY ILLUMINATED STREET NAME SIGNS
- SIGNS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

PEDESTRIAN TRAFFIC SIGNS/PB/SIGNALS



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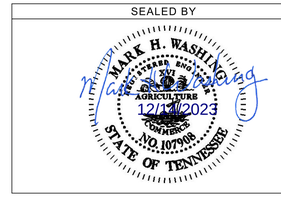

COORDINATES ARE NAD/83(1995), ARE NOT DATUM ADJUSTED AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

CITY OF MARYVILLE
BLOUNT COUNTY, TN

ROBERT C. JACKSON SIGNAL PLANS

SIGNAL LAYOUT

SCALE: 1"=20'

BARGE DESIGN SOLUTIONS

12/14/2023
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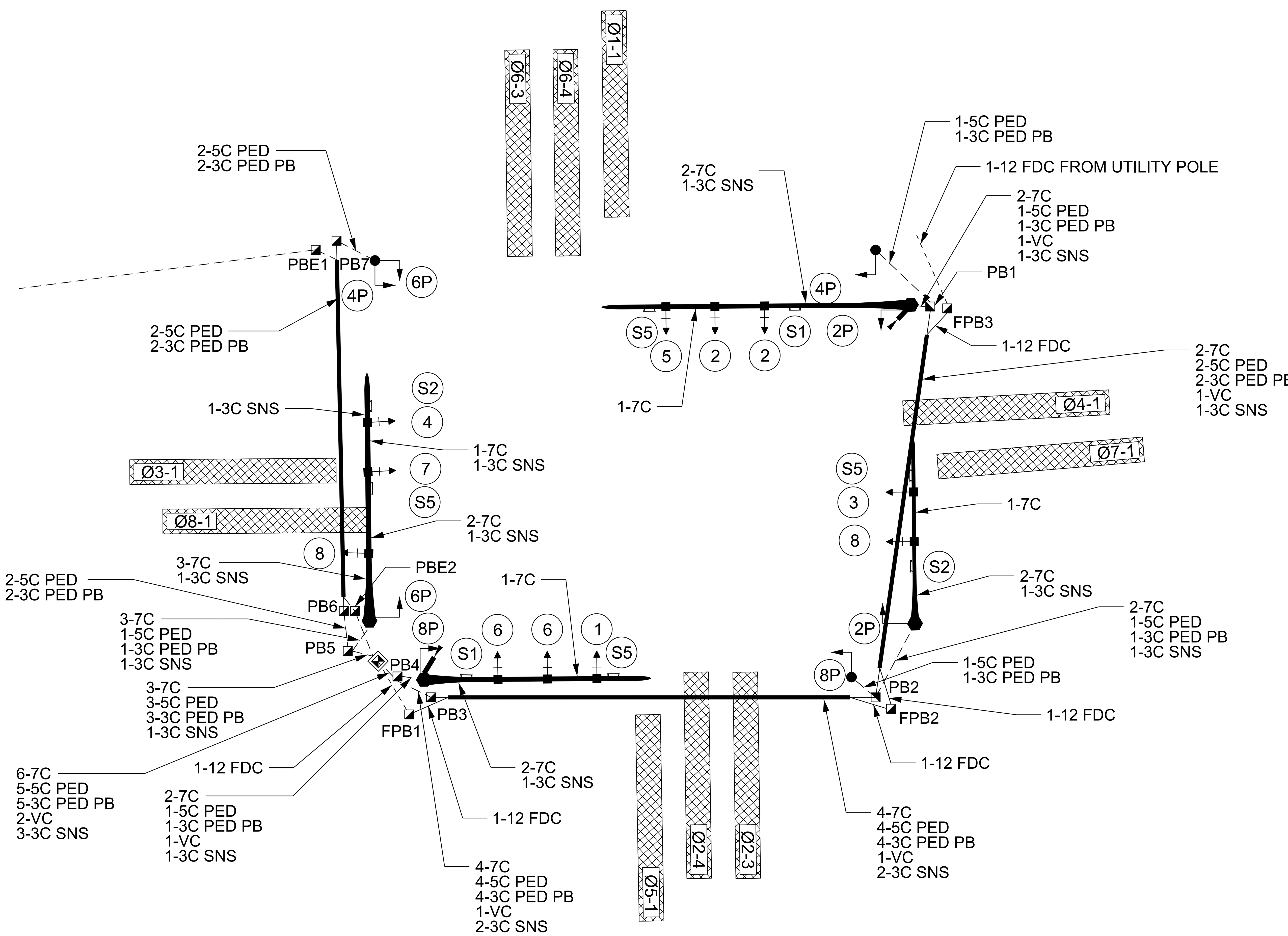
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2023	2021-0520-03	6

SIGNAL HEAD, DETECTION ZONE IDENTIFICATION, AND WIRING LAYOUT

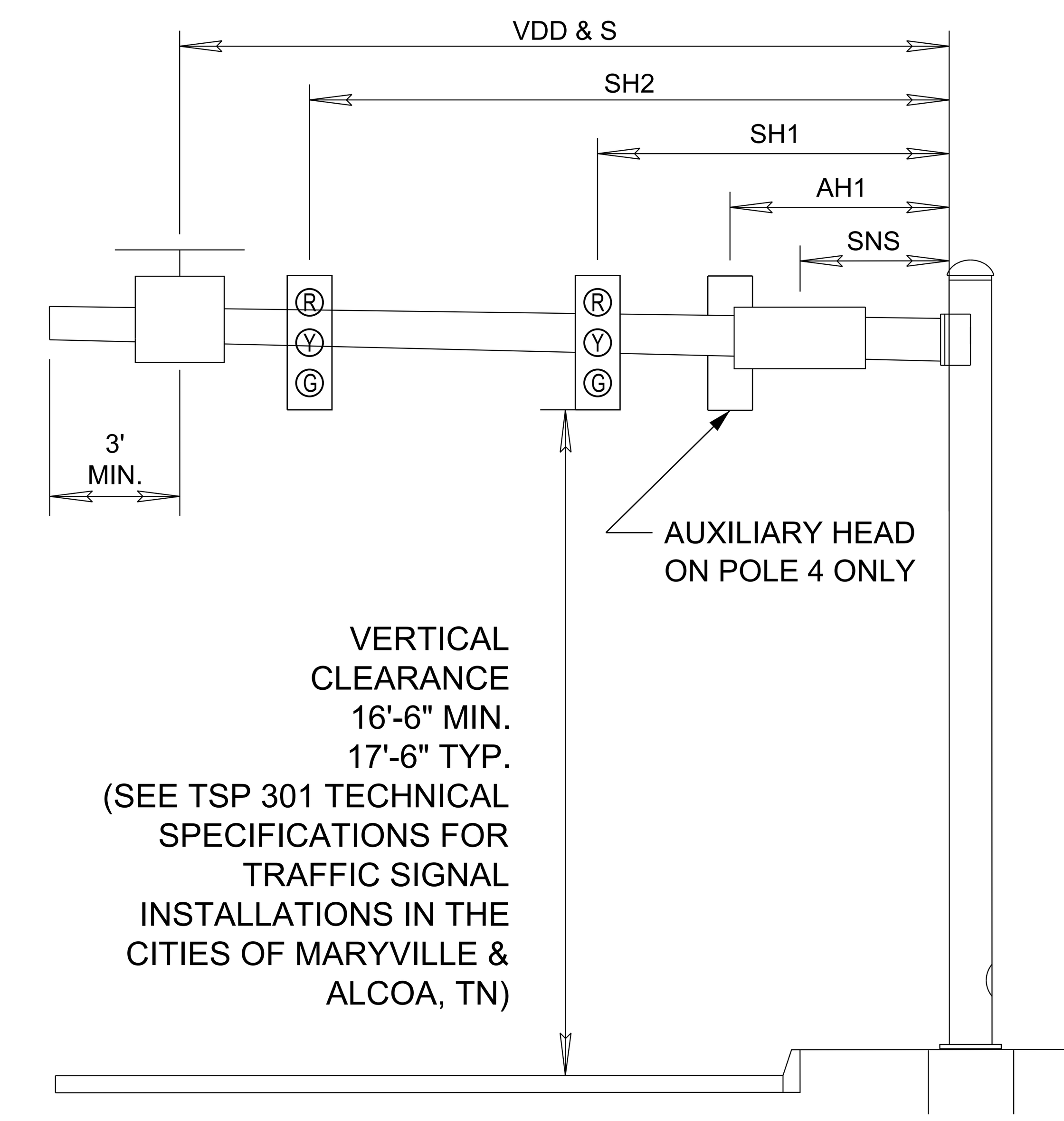


#C: TRAFFIC SIGNAL CABLE
PED: PEDESTRIAN SIGNAL CABLE
SC: SHIELDED CABLE
VC: VIDEO CABLE
SNS: STREET NAME SIGNS
FDC: FIBER DROP CABLE

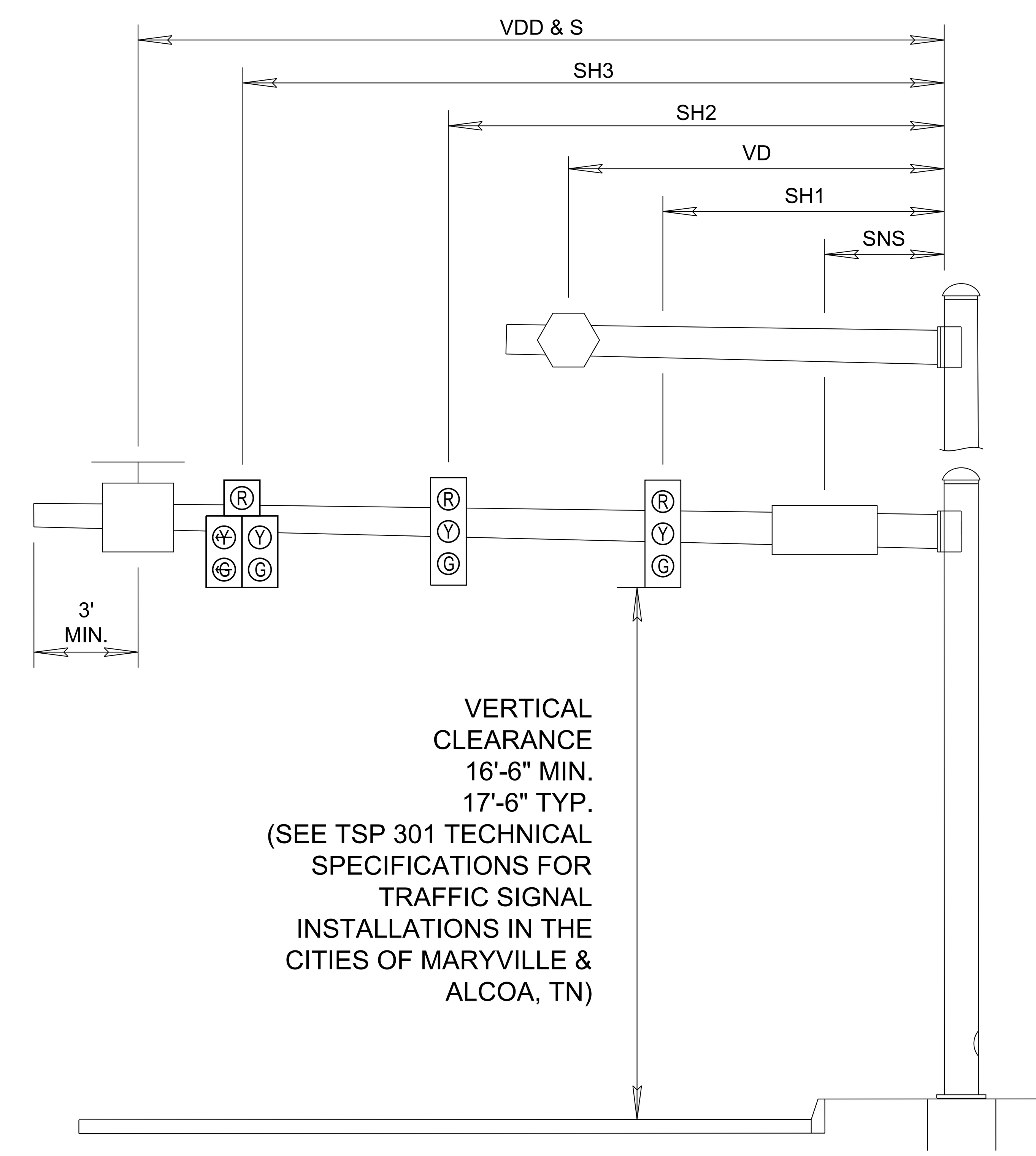
LEGEND

SYMBOL	DESCRIPTION
(R)(Y)(G)	SIGNAL HEAD
	STREET NAME SIGN
	VIDEO DETECTOR
	SIGN
	VIBRATION DAMPING DEVICE

S: SIGN
SNS: STREET NAME SIGN
VD: VIDEO DETECTOR
SHX: SIGNAL HEAD X
AHX: AUXILIARY HEAD X
VDD: VIBRATION DAMPING DEVICE



BIG SPRINGS RD. MAST ARM POLES (4 & 7)



ROBERT C. JACKSON DR. MAST ARM POLES (1 & 5)

DETECTOR ZONE ASSIGNMENT

ZONE ASSIGNMENT	VIDEO UNIT	SIZE	PHASE	MODE	DISTANCE FROM STOP BAR	DELAY (SEC)
Ø1-1	VD2	6X50	1	PRESENCE	-5'	0
Ø2-1	VD1	6X50	2	PRESENCE	-5'	0
Ø2-2	VD1	6X50	2	PRESENCE	-5'	0
Ø3-1	VD1	6X50	3	PRESENCE	-5'	0
Ø4-1	VD2	6X50	4	PRESENCE	-5'	0
Ø5-1	VD1	6X50	5	PRESENCE	-5'	0
Ø6-1	VD2	6X50	6	PRESENCE	-5'	0
Ø6-2	VD2	6X50	6	PRESENCE	-5'	0
Ø7-1	VD2	6X50	7	PRESENCE	-5'	0
Ø8-1	VD1	6X50	8	PRESENCE	-5'	0

SIGNAL HEAD ASSIGNMENT

SIGNAL HEAD	PHASE(S)	FLASHING MODE
1	1 & 6	PHASE 6 Y
2	2	Y
4	4	R
5	2 & 5	PHASE 2 Y
6	6	Y
8	8	R

SIGNAL SUPPORT POLE DATA AND MAST ARM DETAILS

POLE #	NORTHING	EASTING	MAST ARM LENGTH	VD ARM LENGTH	SNS	AH1	SH1	SH2	SH3	VDD	S	GROUND ELEV.
1	522664.34	2557804.88	75'	10'	28'-1.68"	N/A	35'-5.88"	49'-5.88"	59'-4"	67'-4"	63'-4"	912.92'
2	522679.05	2557799.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	912.76'
3	522699.76	2557679.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	912.17'
4	522614.34	2557661.46	60'	N/A	52'-0"	16'-4.5"	36'-1"	48'-1"	N/A	56'-0"	32'-1"	912.19'
5	522597.76	2557671.69	55'	10'	10'-3"	N/A	17'-11"	29'-11"	41'-11"	49'-11"	45'-11"	912.77'
6	522578.57	2557773.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	913.04'
7	522588.37	2557791.11	45'	N/A	13'-11"	N/A	19'-10"	31'-10"	N/A	39'-10"	35'-10"	912.83'

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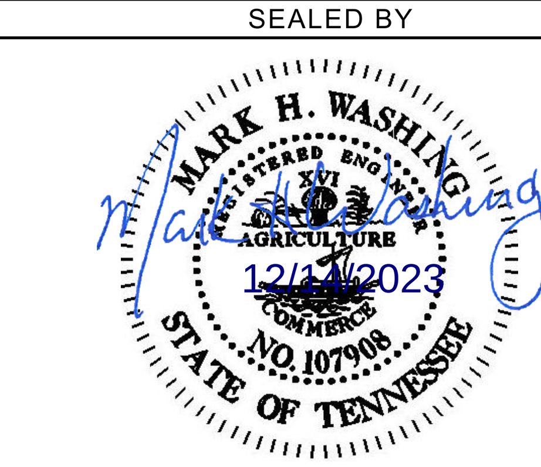

CITY OF MARYVILLE
BLOUNT COUNTY, TN

ROBERT C. JACKSON SIGNAL PLANS

SIGNAL DETAILS

N.T.S.

BARGE DESIGN SOLUTIONS

12/14/2023
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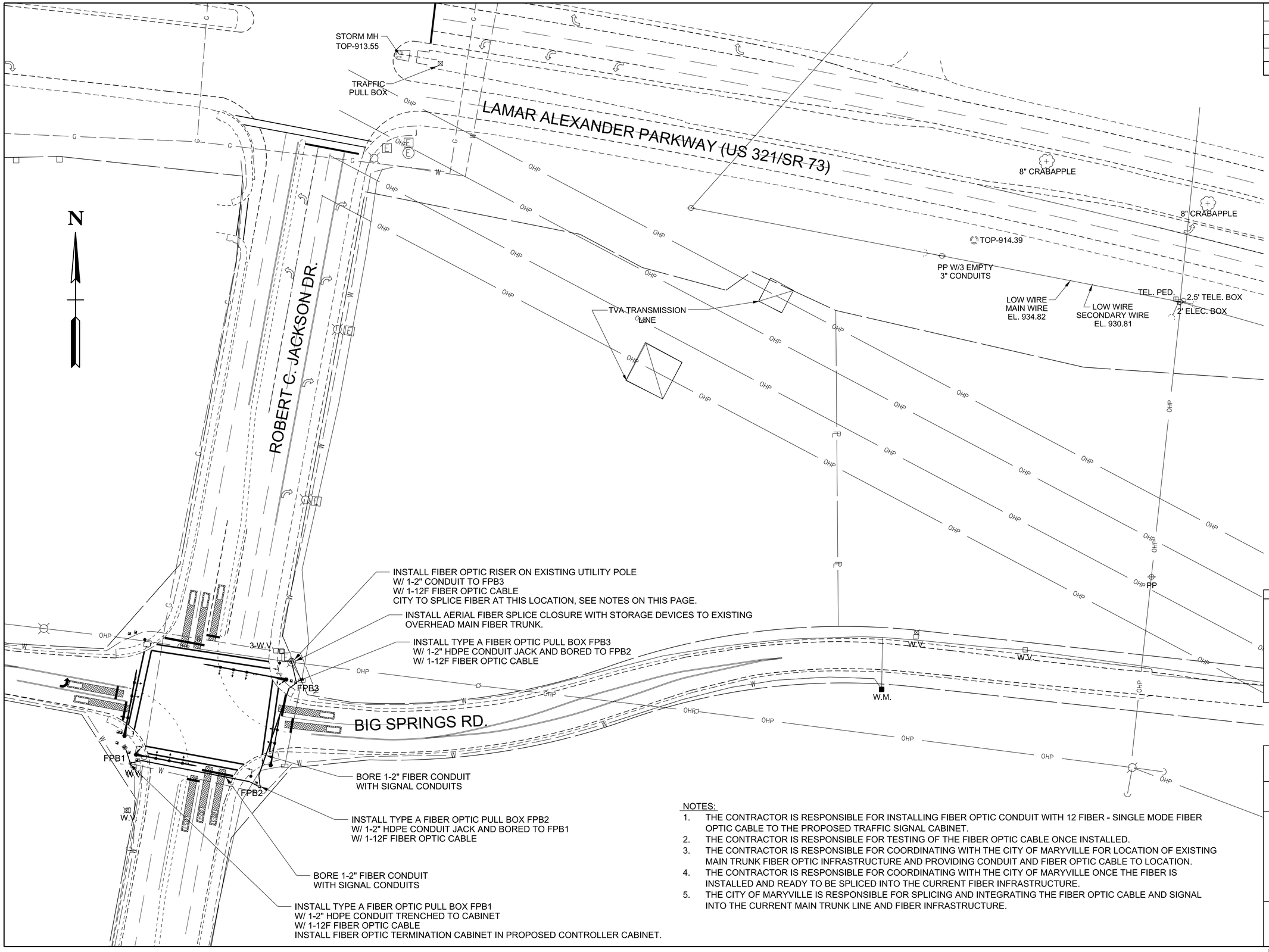
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2023	2021-0520-03	7



NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING FIBER OPTIC CONDUIT WITH 12 FIBER - SINGLE MODE FIBER OPTIC CABLE TO THE PROPOSED TRAFFIC SIGNAL CABINET.
2. THE CONTRACTOR IS RESPONSIBLE FOR TESTING OF THE FIBER OPTIC CABLE ONCE INSTALLED.
3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE CITY OF MARYVILLE FOR LOCATION OF EXISTING MAIN TRUNK FIBER OPTIC INFRASTRUCTURE AND PROVIDING CONDUIT AND FIBER OPTIC CABLE TO LOCATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE CITY OF MARYVILLE ONCE THE FIBER IS INSTALLED AND READY TO BE SPLICED INTO THE CURRENT FIBER INFRASTRUCTURE.
5. THE CITY OF MARYVILLE IS RESPONSIBLE FOR SPLICING AND INTEGRATING THE FIBER OPTIC CABLE AND SIGNAL INTO THE CURRENT MAIN TRUNK LINE AND FIBER INFRASTRUCTURE.

SEALED BY

MARK H. WASHINGTON
REGISTERED ENGINEER
AGRICULTURE
NO. 107908
STATE OF TENNESSEE

12/14/2023

CITY OF MARYVILLE
BLOUNT COUNTY, TN

ROBERT C. JACKSON SIGNAL PLANS

FIBER OPTIC LAYOUT

SCALE: 1" = 40'

BARGE DESIGN SOLUTIONS

12/14/2023
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