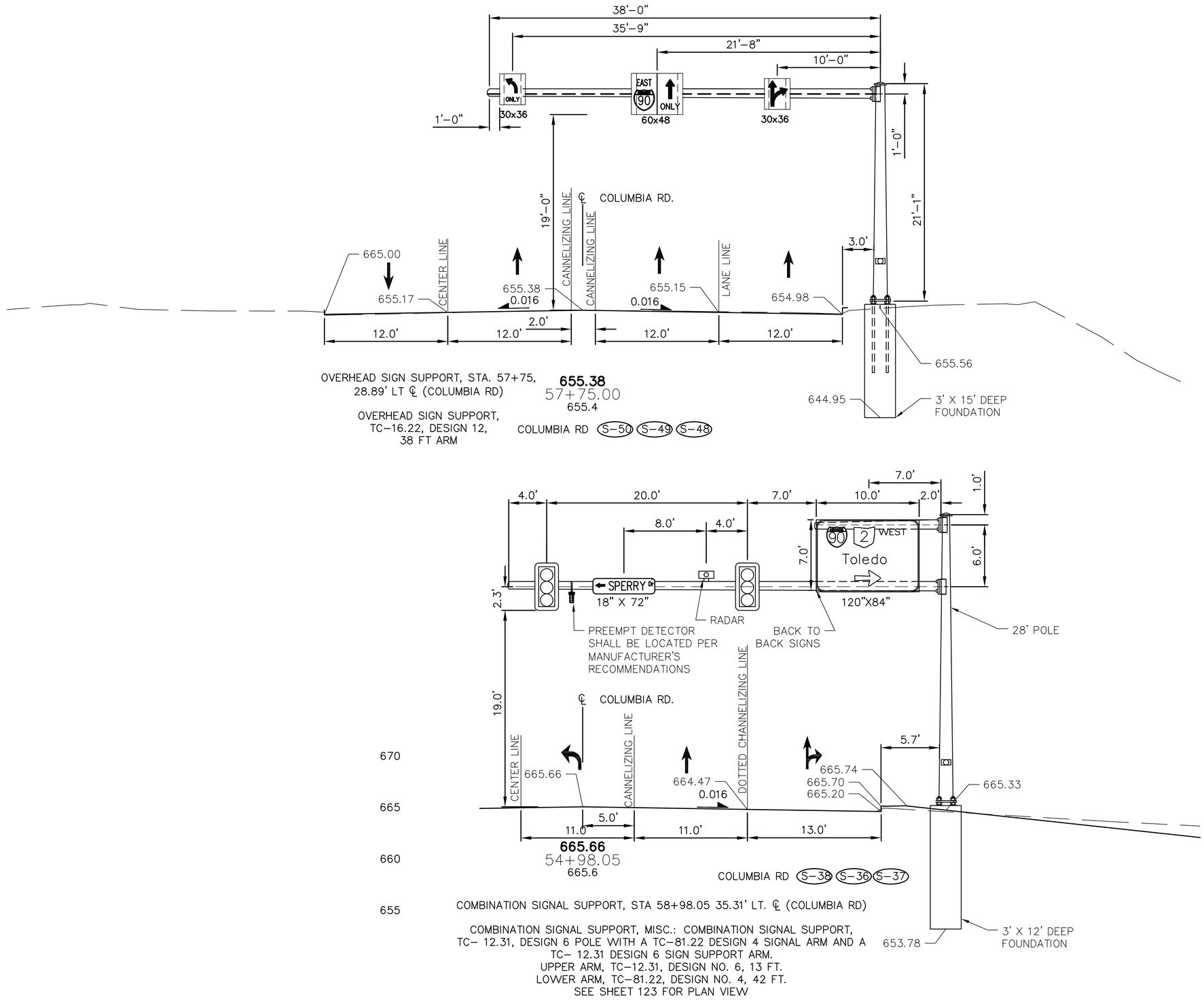
SHEET NUMBER																						PARTICIPATION	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	11	12	13	14	15		20	41	42	43	44	45	46	112	114	135	137	138	139	140		01/SAF/PV					
																											DRAINAGE (CON'T)	
		100																				100	611	01500	100	FT	6" CONDUIT, TYPE F	
											279											279	611	05900	279	FT	15" CONDUIT, TYPE B	
											49											49	611	06100	49	FT	15" CONDUIT, TYPE C	
											50											50	611	06700	50	FT	15" CONDUIT, TYPE F, 707.05 TYPE C OR 707.21	
											52											52	611	10200	52	FT	24" CONDUIT, TYPE A, 706.02, RCP	
											1											1	611	98470	1	EACH	CATCH BASIN, NO. 2-2B	
											1											1	611	98150	1	EACH	CATCH BASIN, NO. 3	
											5											5	611	98180	5	EACH	CATCH BASIN, NO. 3A	
											1											1	611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
											1											1	611	99574	1	EACH	MANHOLE, NO. 3	
									12													12	611	99710	12	EACH	PRECAST REINFORCED CONCRETE OUTLET	
		2000																				2000	SPECIAL	61199820	2000	LB	MISCELLANEOUS METAL	12
																											PAVEMENT	
				4200						7080												11280	254	01000	11280	SY	PAVEMENT PLANING, ASPHALT CONCRETE, T=3"	
										6120												6120	254	01000	6120	SY	PAVEMENT PLANING, ASPHALT CONCRETE, T=3.25"	
										2302												2302	304	20000	2302	CY	AGGREGATE BASE	
										5272												5272	305	13020	5272	SY	9" CONCRETE BASE, CLASS QC1 WITH QC/QA	
										2690												2690	407	20000	2690	GAL	NON-TRACKING TACK COAT	
										411												411	441	10101	411	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M	11
										273												273	441	10200	273	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)	
										62												62	441	50701	62	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), (UNDER GUARDRAIL), AS PER PLAN	11
										213												213	442	10001	213	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PG76-22M	11
										600												600	442	10100	600	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)	
										28												28	442	20200	28	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448)	
										7418												7418	452	14020	7418	SY	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
									88													88	609	14000	88	FT	CURB, TYPE 2-A	
									1076													1076	609	16000	1076	FT	CURB, TYPE 2-B	
									88													88	609	26000	88	FT	CURB, TYPE 6	
										325												325	609	71000	325	SF	CONCRETE MEDIAN	
										3893												3893	609	71001	3893	SF	CONCRETE MEDIAN, AS PER PLAN A	11
										30												30	609	71001	30	SF	CONCRETE MEDIAN, AS PER PLAN B	12
																											WATER WORK	
								5														5	638	10800	5	EACH	VALVE BOX ADJUSTED TO GRADE	
																											LIGHTING	
																					17	17	625	00450	17	EACH	CONNECTION, FUSED PULL APART	
																					19	19	625	00480	19	EACH	CONNECTION, UNFUSED PERMANENT	
																					16	16	625	10490	16	EACH	LIGHT POLE, CONVENTIONAL, AT20B40	
																					16	16	625	14100	16	EACH	LIGHT POLE FOUNDATION, 24" X 8' DEEP	
																					210	210	625	23200	210	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
																					2240	2240	625	23400	2240	FT	NO. 10 AWG POLE AND BRACKET CABLE	
																					3393	3393	625	24320	3393	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
																						200	200	625	25500	200	FT	CONDUIT, 3", 725.04	
																					95		95	625	25902	95	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
																					21		21	625	26253	21	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN	140
																					3203		3203	625	29002	3203	FT	TRENCH, 24" DEEP	
																					4		4	625	30700	4	EACH	PULL BOX, 725.08, 18"	
																						4	4	625	30706	4	EACH	PULL BOX, 725.08, 24"	
																					2		2	625	31510	2	EACH	PULL BOX REMOVED	
																					1		1	625	31600	1	EACH	PULL BOX , MISC.: PULLBOX ADJUSTED TO GRADE	140

CALCULATED TMA
CHECKED ZSS

GENERAL SUMMARY

CUY—90—3.56
SR 252/I—90 INTERCHANGE



NOTE: THIS ITEM SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE 2019 SPECIFICATIONS AND WITH THE REQUIREMENTS OF ITEM 632 – SIGNAL SUPPORT, TYPE TC–81.22, AS PER PLAN/ITEM 632 – PEDESTAL, 8' TRANSFORMER BASE, AS PER PLAN NOTE ON SHEET 127.

CALCULATED TMA
CHECKED SB

SIGNAL POLE/SIGN SUPPORT ELEVATION DETAILS

CUY–90–3.56
SR 252/I–90 INTERCHANGE

GROUNDING AND BONDING (CONT)

b. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.

4. GROUND ROD.

a. A ¾ INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.

b. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED COPPER.

5. THE GREEN CONDUCTOR IN SIGNAL CABLES (CONDUCTOR #4) SHALL NOT BE USED TO SUPPLY POWER TO A SIGNAL INDICATION. IT WILL BE CONNECTED TO THE SIGNAL BODY AS AN EQUIPMENT GROUND IN ALUMINUM HEADS AND IT WILL BE UNUSED IN PLASTIC HEADS. UNUSED CONDUCTORS SHALL BE GROUNDED IN THE CABINET. TYPICAL USE OF CONDUCTORS IS AS FOLLOWS:

COND. NO.	COLOR	VEHICLE SIGNAL	PEDESTRIAN SIGNAL
1	BLACK	GREEN BALL	#1 WALK
2	WHITE	AC NEUTRAL	AC NEUTRAL
3	RED	RED BALL	#1 DW/FDW
4	GREEN	EQUIP GND	EQUIP GND
5	ORANGE	YELLOW BALL	#2 DW/FDW
6	BLUE	GREEN ARROW	#2 WALK
7	WHITE/BLK ST	YELLOW ARROW	NOT USED

6. POWER SERVICE AND DISCONNECT SWITCH.

a. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.

b. THE SERVICE NEUTRAL(AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.

- NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.
- IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.

7. PAYMENT.

a. ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.

WORK INSPECTION

THE CONTRACTOR SHALL SUPPLY THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER WITH 72 HOUR NOTICE OF ANY SIGNAL WORK TO BE PERFORMED AT THE INTERSECTION SITE(S) SO THAT INSPECTION SERVICES CAN BE SUPPLIED.

ITEM 632 - REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN

TRAFFIC SIGNAL INSTALLATIONS, INCLUDING SIGNAL HEADS, CABLE, MESSENGER WIRE, STRAIN POLES, CABINET, CONTROLLER, DOWN GUYS, PULL BOXES AND OTHER INCIDENTAL ITEMS REQUIRED BY THE ENGINEER, SHALL BE REMOVED IN ACCORDANCE WITH C&MS 632.26 AND AS INDICATED ON THE PLANS. STORE REMOVED ITEMS ON THE PROJECT FOR SALVAGE BY THE CITY OF WESTLAKE IN ACCORDANCE WITH THE LISTING GIVEN HEREIN. ANY ITEMS NOT DESIGNATED FOR SALVAGE AND /OR ITEMS NOT SALVAGED BY THE MUNICIPALITY BY THE COMPLETION DATE SHALL, WHEN DIRECTED BY THE ENGINEER IN WRITING, BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.

STORE THE FOLLOWING ITEMS FOR SALVAGE:

SIGNAL HEADS, PED HEADS, PUSHBUTTONS, PREEMPT EQUIPMENT, RADAR DETECTION UNITS, CONTROLLER, CABINETS AND BBU

DISPOSE OF ALL REMOVED ITEMS INCLUDING:

WOOD POLES, PULL BOXES, CABLE, MESSENGER WIRE, DOWN GUYS

ITEM 632 - PEDESTRIAN PUSHBUTTON, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 632 AND 732.06, PROVIDE PEDESTRIAN PUSHBUTTONS WITH THE FOLLOWING FEATURES:

FURNISH PUSHBUTTONS THAT ARE RATED AS WATERPROOF AND WHICH INCORPORATE A SOLID NEOPRENE RUBBER GASKET TO SEAL ITSELF AGAINST MOISTURE. FURNISH PUSHBUTTONS WITH PIEZO DRIVEN SOLID-STATE VANDAL PROOF SWITCHES, INDICATOR LIGHTS AND AUDIBLE TONES.

SEAL THE PUSHBUTTON HOUSING TO THE SIGNAL SUPPORT, PEDESTAL OR POLE WITH SILICONE SEALANT. HOUSING SHALL BE BLACK.

PAYMENT FOR ITEM 632 - PEDESTRIAN PUSHBUTTON, AS PER PLAN SHALL BE MADE FOR THE NUMBER OF COMPLETE PEDESTRIAN PUSHBUTTON FURNISHED, INSTALLED AND TESTED, INCLUDING LABOR, EQUIPMENT, MATERIALS AND NEW ATTACHMENT HARDWARE AT LOCATIONS SHOWN IN THE PLAN.

ITEM 632 - PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS SECTIONS 632 AND 732, THE FOLLOWING REQUIREMENTS SHALL APPLY:

1. SIGNAL HEADS AND VISORS SHALL BE CONSTRUCTED OF BLACK POLYCARBONATE PLASTIC AND MEET I.T.E. SPECIFICATIONS.
2. PROPER EXTERIOR COLORS SHALL BE OBTAINED BY THE USE OF COLORED PLASTIC MATERIAL RATHER THAN PAINTING.
3. ATTACH PEDESTRIAN SIGNALS TO NON-DECORATIVE SIGNAL SUPPORTS USING THE OPTIONAL 2-PIECE HINGED BRACKET WITH STAINLESS STEEL FASTENERS AS PER TC-85.10. DO NOT BAND PEDESTRIAN SIGNAL HOUSING TO STEEL POLES.
4. THE PEDESTRIAN SIGNAL HEAD SHALL BE OF THE LED COUNTDOWN TYPE.
5. NEW ATTACHMENT HARDWARE AND FITTINGS SHALL BE USED.
6. THE LIGHT EMITTING DIODE (LED) MODULES SHALL MEET THE REQUIREMENTS OF C&MS 732.04-C. THE CONTRACTOR SHALL PROVIDE THE MUNICIPALITY, IN WRITING, WITH THE LED MANUFACTURER NAME, SERIAL NUMBER, PART NUMBER, DESCRIPTION OF LAMP AND DATE OF MANUFACTURE FOR ALL LED UNITS THAT ARE TO BE USED IN THE SIGNAL HEAD PRIOR TO INSTALLATION, FOR ACCEPTANCE AND WARRANTY PURPOSES.

PAYMENT FOR ITEM 632 - PEDESTRIAN SIGNAL HEAD (LED), (COUNTDOWN), TYPE D2, AS PER PLAN SHALL BE MADE FOR THE NUMBER OF COMPLETE SIGNAL HEADS FURNISHED AND INSTALLED, INCLUDING LABOR, EQUIPMENT, MATERIALS AND NEW ATTACHMENT HARDWARE.

ITEM 632 - SIGNAL SUPPORT, TYPE TC-81.22, AS PER PLAN
ITEM 632 - PEDESTAL, 8' TRANSFORMER BASE, AS PER PLAN

DUE TO THE POSSIBILITY OF CONFLICT WITH EXISTING OR PROPOSED UNDERGROUND OBSTRUCTIONS (INCLUDING THE POSSIBILITY OF UNRECORDED OBSTRUCTIONS) WHICH COULD AFFECT THE LOCATION OF THE FOUNDATIONS FOR THESE ITEMS, AND CONSEQUENTLY, THE DESIGN OF THE VARIOUS SUPPORTS, AND/OR ARMS. DO NOT PLACE FINAL ORDERS FOR THE SUPPORTS UNTIL THE FOUNDATIONS HAVE BEEN INSTALLED, AND WRITTEN NOTICE TO PROCEED WITH THE ORDERS FOR THESE ITEMS HAS BEEN RECEIVED FROM THE ENGINEER.

IF ANY FOUNDATION LOCATIONS MUST BE ADJUSTED, NOTIFY THE ENGINEER, WHO WILL DETERMINE THE REVISED LOCATIONS AND IF ANY SUPPORT DESIGN CHANGES ARE NECESSARY, IN CONSULTATION WITH THE MAINTAINING AGENCY. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DETERMINING THE REVISED DESIGN. THE ENGINEER WILL SUBSEQUENTLY INFORM THE CONTRACTOR OF ANY CHANGES NECESSARY, AND AUTHORIZE HIM TO ORDER THE SUPPORTS.

WHEN DEVELOPING THE PROGRESS SCHEDULE, ENSURE THAT THE FOUNDATIONS ARE INSTALLED AT THE EARLIEST TIME AS IS FEASIBLE AND PRACTICAL, AND INCLUDE SUFFICIENT TIME IN THE PROGRESS SCHEDULE FOR THE ORDERING, MANUFACTURE, DELIVERY, AND INSTALLATION OF THESE ITEMS AFTER THE FOUNDATIONS ARE IN PLACE.

PAINT PROCESS

ALL SUPPORTS AND PEDESTALS SHALL BE PAINTED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 916. THE PROCESS SHALL BE THE DRY PROCESS OR POWDER COATING SYSTEM OVER AN INITIAL COAT OF HOT DIP GALVANIZING.

THE FINISH COAT COLOR SHALL MATCH THE LATEST REVISION OF FEDERAL STANDARD 595B, COLOR NUMBER 27038 (BLACK). A PAINT CHIP SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE THE CABINET IS PAINTED.

PAYMENTS FOR DELIVERED MATERIALS WILL NOT BE MADE FOR THESE ITEMS UNTIL THE FOUNDATIONS ARE IN PLACE, AND IF CHANGES IN THE DESIGN OF THESE ITEMS ARE REQUIRED, NO PAYMENTS WILL BE MADE FOR ITEMS MANUFACTURED TO THE ORIGINAL DESIGNS.

CALCULATED JAT CHECKED MWS

TRAFFIC SIGNAL GENERAL NOTES
INTERSTATE 90 W.B.

CUY-90-3.56
SR 252/I-90 INTERCHANGE

127
157

ITEM NO.							625																						
SHEET NO.	REF NO.	ROADWAY	STATION		SIDE	CIRCUIT	CONNECTION, FUSED PULL APART	CONNECTION, UNFUSED PERMANENT	LIGHT POLE, CONVENTIONAL, AT20B40	LIGHT POLE FOUNDATION, 24" X 8' DEEP	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	NO. 10 AWG POLE AND BRACKET CABLE	1 1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES		CONDUIT, JACKED OR DRILLED, 725.04, 3",	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN	TRENCH, 24" DEEP	PULL BOX, 725.08, 18"	UNDERGROUND WARNING / MARKING TAPE	PULL BOX REMOVED		PULL BOX , MISC.: PULLBOX ADJUSTED TO GRADE	GROUND ROD	POWER SERVICE, AS PER PLAN				
			FROM	TO			EACH	EACH	EACH	EACH	FT	FT	FT		FT	EACH	FT	EACH	FT	EACH		EACH	EACH	EACH				
142	EX-C-12	I-90 / RAMP A	171+71		LT	C	1	1																				
142	C-11	I-90 / RAMP A	174+08	76+25	LT	C	1	1	1	1		140	250			1	240		240			1	1					
142	C-10	RAMP A	76+25	78+00	LT	C	1	1	1	1		140	225			1	215		215				1					
142	C-9	RAMP A	78+00	79+75	LT	C	1	1	1	1		140	185			1	175		175				1					
142	C-8	RAMP A	79+75	81+50	LT	C	1	1	1	1		140	185			1	175		175				1					
142	C-7	RAMP A	81+50	83+25	LT	C	1	1	1	1		140	185			1	175		175				1					
142	C-6	RAMP A	83+25	85+00	LT	C	1	1	1	1		140	185			1	175		175				1					
142	C-5	RAMP A	85+00	86+75	LT	C	1	1	1	1		140	185			1	175		175				1					
142	C-4	RAMP A	86+75	88+16	LT	C	1	1	1	1		140	151			1	141		141				1					
142	C-3	RAMP A	88+16	89+70	LT	C	1	1	1	1		140	164			1	154		154				1					
142	C-2	RAMP A	89+70	91+65	LT	C	1	1	1	1		140	205			1	195		195				1					
142	C-1	RAMP A	91+65		LT	C	1	1	1	1		140	55			1	45		45				1					
142	C-22	RAMP R	22+00	20+67	RT	C	1	1	1	1		140	143			1	133		133				1					
142	C-23	RAMP R/RAMPQ	20+67	16+00	RT	C	1	1	1	1		140	328			1	318		318				1					
142	PB	RAMPQ	14+06		RT	C		2					125				115	1	115									
142	C-24	RAMP Q	16+00	18+00	LT	C	1	1	1	1		140	210			1	200		200				1					
142	C-25	RAMP Q	18+00	20+00	LT	C	1	1	1	1		140	130			1	120		120				1					
142	C-26	RAMP Q	20+00		LT	C	1	1	1	1		140				1												
142	EX. CONTROL CENTER	SR 252	56+69		RT/LT C & D						210				95			1		1				1			
142	D-14	RAMP Q (UNDERPASS)	23+56		LT											1												
142	D-15	RAMP Q (UNDERPASS)	24+06		LT											1												
142	D-16	I-90 WB (UNDERPASS)	188+58		LT											1												
142	D-17	RAMP Q (UNDERPASS)	188+84		LT											1												
142	D-18	RAMP Q (UNDERPASS)	189+08		LT											1												
142	PR. CONTROL CENTER	SR 252	51+80	56+69	RT								440				420	1	420									
142	PB	SR 252	51+48	51+80	RT								42				32	1	32									
142	EX. PB	RAMP C	89+60		LT															1								
143	EX. POLE	SR 252	56+68		RT																			1				
TOTALS CARRIED TO GENERAL SUMMARY							17	19	16	16	210	2240	3393		95	21	3203	4	3203	2		1	15	1				

CALCULATED TMA
CHECKED SJB

LIGHTING SUBSUMMARY

CUY–90–3.56
SR 252/I–90 INTERCHANGE

139
157

625. PULL BOX CLEANED

THIS ITEM OF WORK SHALL CONSIST OF CLEANING AN EXISTING PULL BOX BY REMOVING ANY EXISTING CABLES NOT BEING RECONNECTED, AND DEBRIS SO THAT NEW CABLES CAN BE INSTALLED. ANY UNUSED OPENINGS SHALL BE CLOSED. DISTURBED AREAS NEAR THE PULL BOX SHALL BE CLEARED OF WEEDS OR DEBRIS AND SHALL BE FULLY RESTORED. MATERIAL REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF OF THE PROJECT SITE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER C&MS ITEM 625, "PULL BOX CLEANED" FOR EACH PULL BOX CLEANED WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

625. PULL BOX, MISC.: PULL BOX ADJUSTED TO GRADE

THIS ITEM OF WORK SHALL CONSIST OF ADJUSTING EXISTING PULL BOXES TO GRADE. PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER C&MS ITEM 625, "PULL BOX , MISC.: PULL BOX ADJUSTED TO GRADE" FOR EACH PULL BOX ADJUSTED TO GRADE AND SHALL INCLUDE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

PER THE APPROVAL OF THE ENGINEER, PULL BOXES MAY BE REPLACED IF THEY ARE FOUND TO BE IN UNSATISFACTORY CONDITION. THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 625 – PULL BOX 725.08, 24"	4 EACH
ITEM 625 – CONDUIT, 3" 725.04	200 FEET

625. POWER SERVICE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE FOLLOWING IS ADDED.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

FIRST ENERGY
6896 MILLER ROAD
BRECKSVILLE, OHIO 44141
PHONE # 1–(800) 589–3101
ATTN: CALL FOR NEW SERVICE

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL BE DONE NOT ONLY FOR EACH NEW POWER SERVICE ESTABLISHED BY THIS PROJECT BUT ALSO FOR EACH EXISTING POWER SERVICE, SINCE THERE MAY BE A REASSIGNMENT OF THE RESPONSIBILITY FOR AN EXISTING SERVICE AS A RESULT OF THE WORK PERFORMED BY THIS PROJECT.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "POWER SERVICE, AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

HIGH VOLTAGE TEST WAIVED

THE HIGH VOLTAGE TEST SHALL NOT BE PERFORMED ON THE CIRCUITS CONSTRUCTED BY THIS PROJECT, SINCE THE TEST COULD DAMAGE THE PORTION OF THE COMPLETED CIRCUIT WHICH HAS BEEN IN SERVICE PRIOR TO THIS PROJECT.

ITEM 625–LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, 480V

IN ADDITION TO SUPPLEMENTAL SPECIFICATION 813, USE ONE OF THE FOLLOWING LUMINAIRES OR APPROVED EQUAL AS DIRECTED BY THE HIGHWAY MAINTENANCE TRAFFIC ENGINEER:

GE LIGHTING ERLHH11(B3 OR C3)301GRAYGILR024 WITH A COLOR TEMPERATURE OF 3000K, TYPE III DISTRIBUTION AND AN AVERAGE OF 10000–13000 LUMEN PERFORMANCE.

AUTOBAHN ATBM P10 480 R3 4B 3K NR WITH A COLOR TEMPERATURE OF 3000K, TYPE III DISTRIBUTION AND AN AVERAGE OF 10000–13000 LUMEN PERFORMANCE.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE OF EACH FOR ITEM 625–LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

SPECIAL, MAINTAIN EXISTING LIGHTNG

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE.
THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "A" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

PADLOCKS AND KEYS

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH CMS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

CALCULATED TMA
CHECKED SJB

LIGHTING GENERAL NOTES

CUY–90–3.56
SR 252/I–90 INTERCHANGE

140
157