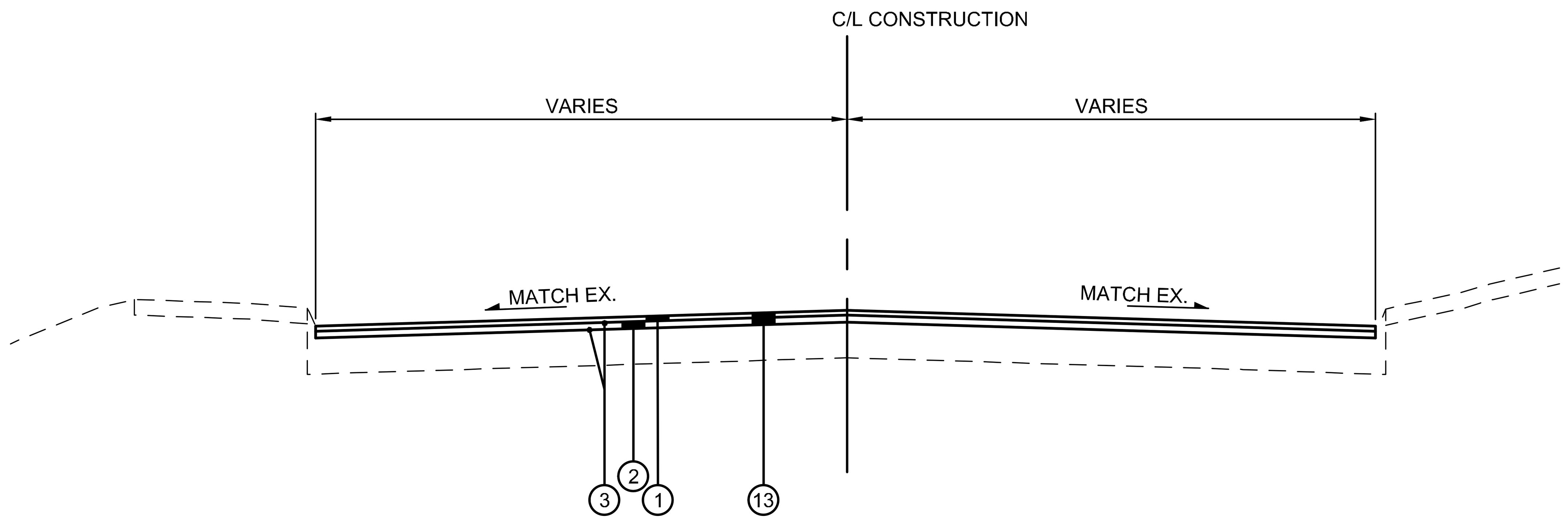
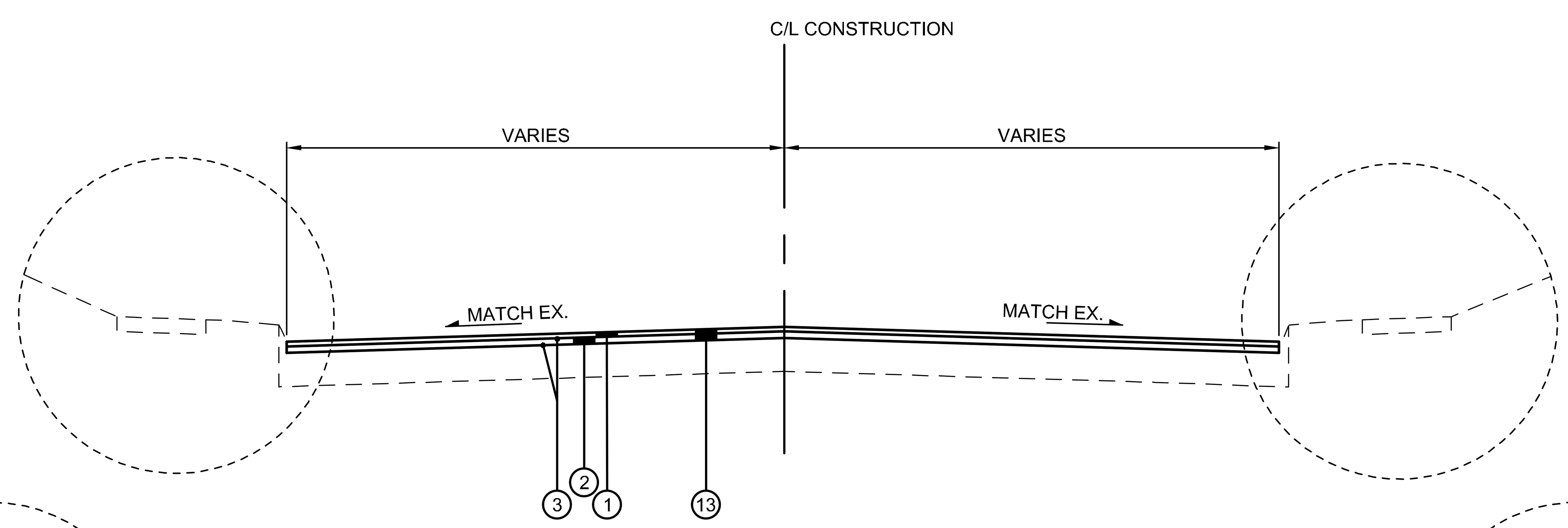
REMOVED



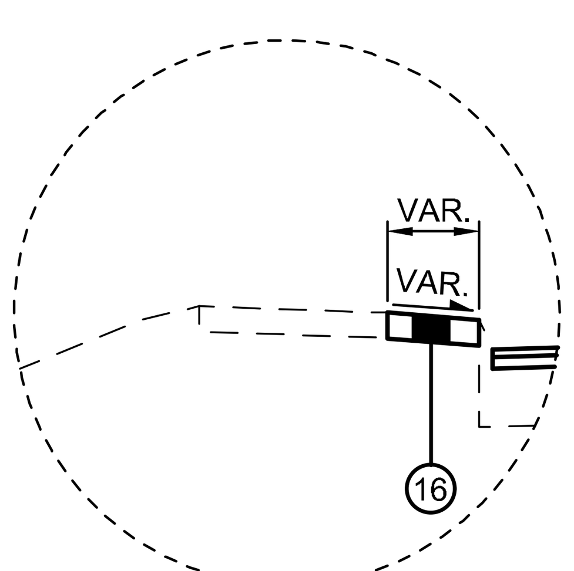
LAUREL AVE TYPICAL SECTION - RESURFACE

STA. 50+83.41 TO STA. 52+85.46 (INTERSECTION)
STA. 52+85.46 TO STA. 53+74.26

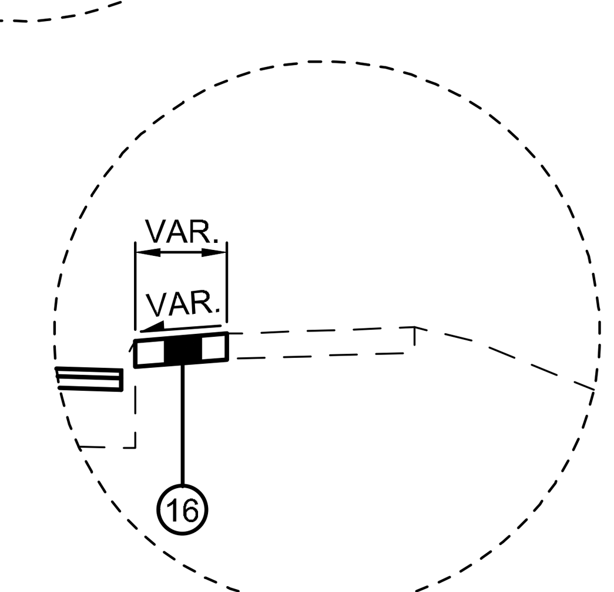


EUCLID AVE TYPICAL SECTION - RESURFACE

STA. 60+70.00 TO STA. 64+53.32



STA. 61+03.09 TO STA. 61+89.97



STA. 61+21.16 TO STA. 61+79.80

(1)	ITEM 441	1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22
(2)	ITEM 441	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
(3)	ITEM 407	NON-TRACKING TACK COAT PER 407.06-1
(4)	ITEM 301	6" ASPHALT CONCRETE BASE, PG64-22, (449)
(5)	ITEM 304	6" AGGREGATE BASE
(6)	ITEM 204	SUBGRADE COMPACTION W/PROOF ROLLING
(7)	ITEM 659	SEEDING AND MULCHING
(8)	ITEM 653	TOPSOIL FURNISHED AND PLACED
(9)	ITEM 204	EXCAVATION OF SUBGRADE (16" DEPTH) **
(10)	ITEM 204	16" GRANULAR MATERIAL TYPE C**
(11)	ITEM 204	GEOTEXTILE FABRIC**
(12)	ITEM 605	6" BASE PIPE UNDERDRAINS
(13)	ITEM 254	3" PAVEMENT PLANING, ASPHALT CONCRETE
(14)	ITEM 609	CURB, TYPE 6
(15)	ITEM 608	4" CONCRETE WALK
(16)	ITEM 608	WALKWAY, MISC,: BRICK PAVERS (SEE SHEET 80.)
(A)	*EXISTING ASPHALT PAVEMENT*	

NOTES:

SEE CROSS SECTIONS FOR EXACT TIE-IN SLOPES
SAWCUT TO SOUND PAVEMENT
** CONTINGENCY ITEM

CALCULATED SEF
CHECKED SAM

HAM-CR270-2.96 MIAMI AVENUE
TYPICAL SECTIONS

THE KLEINGERS GROUP

ITEM SPECIAL - CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION

ALL CONCRETE SHALL BE TESTED. ALL TESTING, INSPECTION AND QUALITY CONTROL FOR CONCRETE, NOT INCLUDED UNDER QC/QA PAY ITEMS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CONCRETE TESTING CONSULTANT WITH PREVIOUS EXPERIENCE AND FAMILIARITY IN ODOT PROCEDURES, CONCRETE TESTING REQUIREMENTS AND CONCRETE TESTING DOCUMENTATION. AT LEAST 30 DAYS PRIOR TO CONCRETE PLACEMENT, SUBMIT TO THE ENGINEER FOR APPROVAL, THE PROPOSED CONCRETE TESTING CONSULTANT ALONG WITH THE RESUMES OF THE PROPOSED TESTING PERSONNEL.

TESTING CONCRETE FOR STRUCTURES AND PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE PERFORMED AS OUTLINED IN CMS SPECIFICATIONS 455 RESPECTIVELY.

THROUGH THE CONTRACTOR, THE CONSULTANT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONCRETE PLACED IS IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE ODOT CONSTRUCTION INSPECTION MANUAL OF PROCEDURES FOR CONCRETE. THE CONCRETE CONSULTANT SHALL PROVIDE THE NECESSARY TRAINED TECHNICIAN(S), ALL EQUIPMENT, AND SHALL FURNISH THE PROJECT ENGINEER WITH TWO (2) COPIES OF ALL TEST RESULTS WITHIN 24 HOURS AFTER COMPLETION OF CONCRETE PLACEMENT.

THE TECHNICIAN SHALL BE ACI LEVEL 1 CERTIFIED AND WILL BE REQUIRED TO DEMONSTRATE HIS/HER COMPETENCE AND EXPERIENCE LEVELS TO THE ENGINEER PRIOR TO BEGINNING WORK. THE ENGINEER WILL ORDER THE CONTRACTOR TO REPLACE ANY TECHNICIAN THAT IS NOT VERSED IN THE REQUIRED TESTING PROCEDURE.

THE TECHNICIAN SHALL VERBALLY NOTIFY THE ODOT PROJECT ENGINEER OF ANY FAILING TEST AND SHALL SUBMIT FOLLOW-UP WRITTEN NOTIFICATION TO THE PROJECT ENGINEER OF REMEDIAL ACTION(S) TAKEN. TESTS SHALL BE TAKEN AS SPECIFIED WITHIN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, CONCRETE MANUAL OR APPROPRIATE SUPPLEMENTAL SPECIFICATION AS LISTED IN THE PROPOSAL GOVERNING THE PROJECT. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ***IMMEDIATE*** CORRECTIONS OR ADJUSTMENTS TO THE CONCRETE MIX VIA DIRECT COMMUNICATION WITH THE CONCRETE SUPPLIER'S PLANT PERSONNEL TO MAINTAIN UNINTERRUPTED COMPLIANCE WITH THE SPECIFICATIONS UPON NOTIFICATION OF CONCRETE MIX NON-COMPLIANCE BY THE CONSULTANT TECHNICIAN. THE PROJECT ENGINEER MAY REQUIRE MORE FREQUENT TESTING AS CONDITIONS WARRANT.

UPON COMPLETION OF DAILY CONCRETE PLACEMENT(S), THE CONCRETE CONSULTANT SHALL PROVIDE THE PROJECT ENGINEER WITH DAILY TEST REPORTS, TE-45'S, INSPECTORS DAILY REPORT AND SUPPORTING DOCUMENTATION FOR EACH ITEM OF CONCRETE WORK PERFORMED SEPARATED BY MIX DESIGN. SUBSEQUENTLY, UPON COMPLETION OF AN ENTIRE CONCRETE SPECIFICATION ITEM, THE CONCRETE CONSULTANT SHALL ALSO PROVIDE THE PROJECT ENGINEER WITH TWO (2) COPIES OF AN ADDITIONAL INSPECTION REPORT BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHICH CONTAINS THE TESTING-RESULTS SUMMARY FOR EACH ITEM BY CONTRACT REFERENCE NUMBER AND THE CONSULTANT'S CONCLUSIONS RELATIVE TO SPECIFICATION COMPLIANCE FOR ALL CONCRETE-TESTING WORK.

THE ODOT PROJECT ENGINEER RESERVES THE RIGHT TO MAKE UNANNOUNCED QUALITY-CONTROL TESTS TO VERIFY PROCEDURES USED AND RESULTS BEING OBTAINED BY THE CONTRACTOR.

THE CONCRETE TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MONTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER.

ADDITIONALLY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.

PAYMENT SHALL BE BID AS LUMP SUM FOR ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. THE ITEM WILL BE PAID FOR AS FOLLOWS:
UPON APPROVAL OF CONSULTANT 20%
PROGRESSIVE EQUIVALENT PAYMENTS 50%
UPON SUBMISSION OF FINAL REPORT . . . . 30%.

THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.

ADA RAMP WAIVERS

ADA FEATURE	APPROVAL DATE	SHEET #	DESIGNATION	WAIVED COMPONENT
RMP0021324	30/05/2023	60	CR-1	RAMP, LANDING
RMP0021329	30/05/2023	60	CR-3	RAMP, LANDING, FLARE
RMP0021330	30/05/2023	61	CR-4	RAMP, LANDING
RMP0021321	30/05/2023	61	CR-6	RAMP, LANDING
RMP0021327	30/05/2023	62	CR-8	FLARE
RMP0021331	30/05/2023	62	CR-12	FLARE
RMP0021316	30/05/2023	65	CR-25	RAMP
RMP0021318	30/05/2023	65	CR-27	FLARE
RMP0021317	30/05/2023	65	CR-28	FLARE

ITEM 608 - CURB RAMP, AS PER PLAN

CURB RAMP LANDINGS SHALL BE CONSTRUCTED OUT OF BRICK PAVERS WHERE SHOWN ON THE STREETSCAPE PLANS.

ITEM 608 - DETECTABLE WARNINGS, AS PER PLAN

DETECTABLE WARNINGS SHALL BE CAST IRON AS SHOWN IN STREETSCAPE DETAILS.

INDIANA & OHIO RAILWAY

1. CONTRACTOR TO NOTIFY G&W PUBLIC PROJECTS DEPARTMENT 30 DAYS PRIOR TO STARTING CONSTRUCTION.

2. G&W FLAGGING SERVICES WILL BE REQUIRED FOR ALL WORK WITHIN G&W RIGHT-OF-WAY OR ANY WORK THAT HAS A "POTENTIAL TO FOUL".

3. THE CONTRACTOR MUST NOT USE THE RAILROAD RIGHT-OF-WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION. THE RAILROAD'S RIGHT-OF-WAY MUST REMAIN CLEAR AT ALL TIMES. THE CONTRACTOR MUST PLAN AND PERFORM THE WORK IN A MANNER SUCH THAT THE RAILROAD TRACKS AT THE PROJECT LOCATION REMAIN FULLY CAPABLE OF OPERATING RAIL TRAFFIC THROUGHOUT THE WORK PERIOD AND RAIL TRAFFIC IS NOT DELAYED OR OTHERWISE IMPACTED DUE TO THE WORK BEING PERFORMED.

4. ALL WORK PERFORMED ON, ABOVE, OR ADJACENT TO RAILROAD PROPERTY SHALL BE IN ACCORDANCE WITH THE PUBLIC PROJECT MANUAL, CURRENT EDITION. WORK PLANS SHALL BE SUBMITTED FOR REVIEW TO THE RAILROAD FOR TASKS RELATED TO SITE ACCESS, SOIL AND WATER MANAGEMENT, BALLAST PROTECTION, EXCAVATION, SHORING, ALL OTHER WORK THAT POTENTIALLY AFFECTS RAILROAD PROPERTY OR OPERATIONS. ALL WORK PLANS SHALL BE PREPARED AND SUBMITTED TO THE RAILROAD IN ADHERENCE WITH THE PUBLIC PROJECT MANUAL, SECTION 1.11 CONSTRUCTION SUBMISSION CRITERIA

5. THE CONTRACTOR WILL BE REQUIRED TO REACH OUT TO G&W REAL ESTATE FOR AN ROE APPLICATION AND AGREEMENT FOR WORK TO TAKE PLACE ON THE G&W RIGHT-OF-WAY.
   a. HERE IS THE INFORMATION FOR ROE INFORMATION: HTTPS://WWW.GWRR.COM/REAL_ESTATE/ACCESSING_PROPERTY

630 SIGNING MISC.: SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING A SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY. THE FLASHING UNIT SHALL BE SOLAR POWERED, PEDESTRIAN ACTIVATED, AND 2-SIDED WITH TWO LED ARRAY BASED YELLOW INDICATIONS ON EACH SIDE. MULTIPLE UNITS SHALL BE WIRELESSLY CONTROLLED AND SYNCHRONIZED. THE UNIT SHALL BE COMPLIANT WITH THE MOST CURRENT OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).

GENERAL REQUIREMENTS -

EACH RRFB SHALL CONSIST OF TWO RAPIDLY FLASHED RECTANGULAR-SHAPED YELLOW INDICATIONS HAVING LED ARRAY BASED LIGHT SOURCE.

EACH RRFB SHALL BE A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.).

EACH RRFB SHALL CONTAIN A PEDESTRIAN INDICATION LIGHT VISIBLE TO THE PEDESTRIAN IN THE DIRECTION OF TRAVEL.

FUNCTIONAL REQUIREMENTS -

EACH RRFB SHALL UTILIZE SOLAR POWER.

EACH RRFB SHALL BE ACTIVATED BY ADA COMPLIANT ACCESSIBLE PEDESTRIAN PUSHBUTTONS.

THE RRFB SHALL BE NORMALLY DARK, SHALL INITIATE OPERATION ONLY UPON PEDESTRIAN ACTUATION, AND SHALL CEASE OPERATION AFTER A PREDETERMINED TIME LIMIT (BASED ON OMUTCD PROCEDURES).

EACH REMOTE RRFB SHALL BE WIRELESSLY ACTIVATED.

ALL RRFB LIGHT INDICATIONS SHALL BE WIRELESSLY SYNCHRONIZED (ALL LIGHTS WILL TURN ON WITHIN 120 MSEC AND REMAIN SYNCHRONIZED THROUGHOUT THE DURATION OF THE FLASHING CYCLE).

THE UNIT SHALL BE CAPABLE OF RUNNING 14 DAYS WITHOUT SUNLIGHT.

MATERIALS -

FURNISH A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS, AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.). THE RRFB ASSEMBLY INCLUDES THE FOLLOWING ITEMS:

1. RRFB INDICATIONS

a. EACH RRFB INDICATION LENS SHALL BE A MINIMUM SIZE OF APPROXIMATELY 5" WIDE X 2" HIGH.
b. THE RRFB INDICATIONS SHALL BE ALIGNED HORIZONTALLY, WITH THE LONGER DIMENSION OF THE INDICATION HORIZONTAL. THERE SHALL BE TWO INDICATIONS ON THE FRONT AND TWO INDICATIONS ON THE BACK.
c. EACH RRFB SHALL BE SUPPLIED WITH ALL REQUIRED HARDWARE TO INSTALL ASSEMBLY. ALL EXPOSED HARDWARE SHALL BE ANTI-VANDAL.
d. EACH RRFB SHALL BE LOCATED BETWEEN THE BOTTOM OF THE CROSSING WARNING SIGN AND THE TOP OF THE SUPPLEMENTAL DOWNWARD DIAGONAL ARROW PLAQUE.
e. THE LIGHT INTENSITY OF THE YELLOW INDICATIONS SHALL MEET THE MINIMUM CLASS 1 SPECIFICATIONS OF SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) STANDARD J595 (DIRECTIONAL FLASHING OPTICAL WARNING DEVICES FOR AUTHORIZED EMERGENCY, MAINTENANCE, AND SERVICE VEHICLES) DATED JANUARY, 2005.
f. TO MINIMIZE EXCESSIVE GLARE DURING NIGHTTIME CONDITIONS, AN AUTOMATIC SIGNAL DIMMING DEVICE SHALL BE USED TO REDUCE THE BRILLIANCE OF THE RRFB INDICATIONS.
g. AN LED PEDESTRIAN CONFIRMATION LIGHT DIRECTED AT AND VISIBLE TO PEDESTRIANS IN THE CROSSWALK SHALL BE INSTALLED INTEGRAL TO THE RRFB OR PUSHBUTTON TO GIVE CONFIRMATION THAT THE RRFB IS IN OPERATION.
h. THE PEDESTRIAN CONFIRMATION LIGHT SHALL HAVE A MINIMUM AREA OF 0.5 SQUARE INCHES AND BE CONSPICUOUS TO PEDESTRIANS AT ALL DISTANCES FROM THE BEGINNING OF THE CONTROLLED CROSSWALK TO A POINT 10 FEET FROM THE END OF THE CONTROLLED CROSSWALK DURING BOTH DAY AND NIGHT.

2. SIGNS

a. ALL SIGN ASSEMBLIES SHALL USE ANTI-VANDAL FASTENERS TO MOUNT COMPONENTS TO SIGN AND SIGN TO FIXTURE.
b. ACCESSIBLE PEDESTRIAN PUSHBUTTONS SIGNS SHALL BE PROVIDED AND INCLUDE THE LEGEND "PUSH BUTTON FOR WARNING LIGHTS / WAIT FOR GAP IN TRAFFIC". SIGNS SHOULD BE MOUNTED ADJACENT TO OR INTEGRAL WITH EACH PEDESTRIAN PUSHBUTTON.
c. TWO SETS OF SIGNS SHALL BE REQUIRED PER UNIT FOR VIEW FROM EACH APPROACH.
d. ENSURE THE SIGN MEETS THE REQUIREMENTS OF C&MS 630.

3. CONTROL CIRCUIT

a. THE CONTROL CIRCUIT SHALL HAVE THE CAPABILITY OF INDEPENDENTLY FLASHING UP TO TWO INDEPENDENT OUTPUTS. THE LED LIGHT OUTPUTS AND FLASH PATTERN SHALL BE COMPLETELY PROGRAMMABLE.
b. THE CONTROL CIRCUIT SHALL BE SEALED WATERTIGHT TO ELIMINATE DIRT CONTAMINATION AND ALLOW FOR SAFE HANDLING IN ALL WEATHER CONDITIONS.
c. THE LEDS SHALL BE SEALED AGAINST DUST AND MOISTURE INTRUSION AS PER THE REQUIREMENTS OF NEMA STANDARD 250-1991 FOR TYPE 4 ENCLOSURE AND TO PROTECT ALL INTERNAL LED AND ELECTRICAL COMPONENTS.

4. BATTERY AND SOLAR PANELS

a. BATTERY UNIT SHALL BE A 12VDC, 35 AHR MINIMUM, SEALED GEL OR AGM LEAD ACID BATTERY. BATTERIES SHALL HAVE A WRITTEN TWO YEAR FULL REPLACEMENT WARRANTY.
b. THE SOLAR PANEL SHALL PROVIDE A MINIMUM OF 40 WATTS PEAK TOTAL OUTPUT.
c. THE SOLAR PANEL SHALL BE MOUNTED TO AN ALUMINUM PLATE AND BRACKET AT AN ANGLE OF 45 DEGREES- 60 DEGREES TO PROVIDE MAXIMUM OUTPUT.
d. ALL FASTENERS USED SHALL BE ANTI-VANDAL.

630 SIGNING MISC.: SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY (CONT'D)

5. WIRELESS RADIO

a. RADIO CONTROL SHALL OPERATE ON A 900 MHZ FREQUENCY HOPPING SPREAD SPECTRUM NETWORK, WI-FI OR APPROVED EQUAL.
b. RADIO SHALL INTEGRATE COMMUNICATION OF RRFB CONTROL CIRCUIT TO ACTIVATE SIGN FROM PUSHBUTTON INPUT.
c. THE RADIO SHALL BE SYNCHRONIZED SO ALL OF THE REMOTE RRFB LIGHT INDICATIONS WILL TURN ON WITHIN 120 MSEC OF EACH OTHER AND REMAIN SYNCHRONIZED THROUGH-OUT THE DURATION OF THE FLASHING CYCLE.

6. ACCESSIBLE PEDESTRIAN PUSHBUTTON

a. THE PUSHBUTTON SHALL BE CAPABLE OF CONTINUOUS OPERATION OVER A TEMPERATURE RANGE OF - 30 DEGREES F TO +165 DEGREES F.
b. PUSHBUTTON SHALL BE ADA COMPLIANT.

7. PEDESTAL SHAFT AND BASE - MOUNT ON A STANDARD 4.5-INCH OD ALUMINUM PEDESTAL POLE WITH BREAKAWAY BASE. POLE AND BASE SHALL HAVE A BLACK FINISH. A 14 FOOT POLE SHALL BE PROVIDED AND FIELD ADJUSTED AND CAPPED TO MAINTAIN THE PROPER SIGN MOUNTING HEIGHTS, UNLESS SPECIFIED OTHERWISE IN THE PLANS. POLE AND BASE MANUFACTURER SHALL BE LISTED ON ODOT'S QUALIFIED PRODUCTS LIST.

CONSTRUCTION –

THE RRFB SHALL BE ASSEMBLED AND CONSTRUCTED BY THE CONTRACTOR AS SHOWN AND SPECIFIED ON THE PLANS.

WARRANTY –

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

MEASUREMENT –

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

PAYMENT –

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH FOR ITEM 630 "SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY".

CALCULATED SEF
CHECKED SAM

HAM-CR270-2.96 MIAMI AVENUE
GENERAL NOTES

THE KLEINGERS GROUP

REMOVE

SHEET NUM. 6	22	23	23A	24	25		67	68	69	70	71	PART. 01/ERD/21 /MAD	PART. 02/SAF/21	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
																		PAVEMENT	
			52									52		253	02001	52	CY	PAVEMENT REPAIR, AS PER PLAN	3A
					6,531							6,531		254	01000	6,531	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3"	
				69	862							931		301	56000	931	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
				90	910							1,000		304	20000	1,000	CY	AGGREGATE BASE	
				58	1,640							1,698		407	20000	1,698	GAL	NON-TRACKING TACK COAT	
				16	408							424		441	70000	424	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
				21	570							591		441	70300	591	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	
				18	49							67		452	11010	67	SY	7" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
				3,214	482							3,696		609	26000	3,696	FT	CURB, TYPE 6	
																		WATER WORK	
	8											8		638	10300	8	EACH	FIRE HYDRANT EXTENDED AND ADJUSTED TO GRADE	
	51											52		638	10800	52	EACH	VALVE BOX ADJUSTED TO GRADE	
		14										14		SPECIAL	63820886	14	EACH	CUT AND PLUG EXISTING 16" WATER LINE, PER IHWW SPEC	14
																		LANDSCAPING	
												48		661	99900	48	EACH	PLANTING, MISC.: TREES	76
																		TRAFFIC CONTROL	
							183	225				408		630	03100	408	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
							2					2		630	08600	2	EACH	SIGN POST REFLECTOR	
							87	95				182		630	80100	182	SF	SIGN, FLAT SHEET	
							4	2				6		630	80500	6	EACH	SIGN, DOUBLE FACED, STREET NAME	
							23	16				39		630	84900	39	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
							15	10				25		630	86002	25	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
							2					2		630	97700	2	EACH	SIGNING, MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY	4A
775												775		642	30000	775	FT	REMOVAL OF PAVEMENT MARKING	
9												9		642	30020	9	EACH	REMOVAL OF PAVEMENT MARKING	
									0.11			0.11		644	00100	0.11	MILE	EDGE LINE, 4"	
									0.06			0.06		644	00200	0.06	MILE	LANE LINE, 4"	
									0.74			0.74		644	00300	0.74	MILE	CENTER LINE	
									908			908		644	00400	908	FT	CHANNELIZING LINE, 8"	
									266	119		385		644	00500	385	FT	STOP LINE	
										350	888	1,238		644	00630	1,238	FT	CROSSWALK LINE, 24"	
										150		150		644	00700	150	FT	TRANSVERSE/DIAGONAL LINE	
										51		51		644	00900	51	SF	ISLAND MARKING	
										2		2		644	01000	2	EACH	RAILROAD SYMBOL MARKING	
										1		1		644	01120	1	EACH	SCHOOL SYMBOL MARKING, 120"	
										64		64		644	01200	64	FT	PARKING LOT STALL MARKING	
										27		27		644	01300	27	EACH	LANE ARROW	
										107		107		644	01500	107	FT	DOTTED LINE, 4"	
										20		20		644	20800	20	FT	YIELD LINE	
											1,732	1,732		644	50200	1,732	SF	PAVEMENT MARKING, MISC.:DO NOT BLOCK INTERSECTION	74-75
																		TRAFFIC SIGNALS	
													118	625	25408	118	FT	CONDUIT, 2", 725.051	
													42	625	25504	42	FT	CONDUIT, 3", 725.051	
													8	625	25604	8	FT	CONDUIT, 4", 725.051	
													145	625	25908	145	FT	CONDUIT, JACKED OR DRILLED, 725.052, 4"	
													55	625	25920	55	FT	CONDUIT, MISC.: BORE AND JACK UNDER RAILROAD	83
													118	625	29400	118	FT	TRENCH IN PAVED AREA	
													2	625	30510	2	EACH	PULL BOX, 725.06, SIZE 4	
													3	625	30520	3	EACH	PULL BOX, 725.06, SIZE 7	
													1	625	30530	1	EACH	PULL BOX, 725.06, SIZE 18	
							2					2	5	625	32000	7	EACH	GROUND ROD	

CALCULATED SEF CHECKED SAM

HAM-CR270-2.96 MIAMI AVENUE
GENERAL SUMMARY

THE KLEINGERS GROUP

REF NO.	SHEET NO.	STATION TO STATION		TO			605 6" BASE PIPE UNDERDRAINS (FT)	611 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS (FT)	253 PAVEMENT REPAIR, AS PER PLAN (CY)	608 CURB RAMP (SF)	608 CURB RAMP, AS PER PLAN (SF)	608 DETECTABLE WARNING, AS PER PLAN (SF)
UD-1	30-31	13+68	LT		15+71	LT	205	10				
UD-2	30-31	14+40	RT		15+83	RT	171	10				
UD-3	31	15+76	LT		17+33	LT	155	10				
UD-4	31	15+87	RT		17+29	RT	133	10				
UD-5	31	17+33	RT		18+18	RT	76	10				
UD-6	31	17+39	LT		18+06	LT	57	10				
UD-7	31	18+67	LT		19+55	LT	84	10				
UD-8	31	18+94	RT		19+74	RT	75	10				
UD-9	32	20+25	RT		20+89	RT	54	10				
UD-10	32	20+93	LT		21+54	LT	54	10				
UD-11	32	21+58	LT		23+50	LT	199	10				
UD-12	32	21+73	RT		23+61	RT	177	10				
UD-13	32-33	24+13	LT		25+47	LT	125	10				
UD-14	32-33	24+69	RT		25+73	RT	94	10				
UD-15	33	25+77	RT		26+37	RT	57	10				
UD-16	33	25+82	LT		27+34	LT	143	10				
UD-17	33	26+41	RT		27+30	RT	79	10				
UD-18	33	27+33	RT		28+61	RT	118	10				
UD-19	33	27+38	LT		28+62	LT	114	10				
UD-20	33-34	28+65	LT		31+37	LT	264	10				
UD-21	33-34	28+65	RT		30+49	RT	174	10				
UD-22	34	30+52	RT		31+50	RT	111	10				
UD-23	34	32+18	RT		33+48	RT	120	10				
UD-24	36	50+85	LT		51+81	LT	81	10				
CR-1	30	12+92	LT		13+12	LT			4	175		23
CR-2	30	13+71	LT		13+82	LT			2	58	25	10
CR-3	30	13+90	LT		14+06	LT			2	117	25	10
CR-4	30	13+41	RT		13+58	RT			2	91		10
CR-5	30	13+68	RT		13+85	RT			2	102		10
CR-6	30	14+29	RT		14+47	RT			3	113		10
CR-7	31	17+39	LT		17+55	LT			2	71	20	10
CR-8	31	17+34	RT		17+51	RT			2	75	38	10
CR-9	31	18+13	LT		18+33	LT				101	20	14
CR-10	31	18+69	LT		18+89	LT				90	20	17
CR-11	31	18+37	RT		18+54	RT				87	25	10
CR-12	31	18+93	RT		19+09	RT				60	25	10
CR-13	32	20+05	LT		20+18	LT				89	25	10
CR-14	32	20+56	LT		20+70	LT				76	20	10
CR-15	32	20+71	LT		20+88	LT				76	25	10
CR-16	32	20+71	RT		20+88	RT				75	40	10
CR-17	32	21+07	RT		21+25	RT				78	25	15
CR-18	32	21+54	RT		21+73	RT				90	25	15
CR-19	32	23+33	LT		23+48	LT				76	25	10
CR-20	32	24+01	LT		24+18	LT				81	17	10
CR-21	32	24+14	LT		24+31	LT				84	18	10
CR-22	32	23+55	RT		23+72	RT				72	25	10
CR-23	32	23+81	RT		23+98	RT				84	25	10
CR-24	32	24+41	RT		24+56	RT				76	24	10
CR-25	34	31+16	LT		31+33	LT			4	111	21	10
CR-26	34	31+32	LT		31+50	LT			6	73	20	10
CR-27	34	31+79	LT		31+98	LT			4	95	25	10
CR-28	34	31+92	LT		32+09	LT			2	78	25	10
CR-29	34	31+18	RT		31+49	RT			4	94	25	10
CR-30	34	31+38	RT		31+50	RT			2	85	20	10
CR-31	34	31+78	RT		31+94	RT			5	65	25	10
CR-32	34	31+86	RT		32+06	RT			6	72	25	10
TOTALS CARRIED TO GENERAL SUMMARY							2920	240	52	2770	678	354

REMOVE

HAM-CR270-2.96 MIAMI AVENUE
SUB SUMMARY

CALCULATED SEF
CHECKED SAM

THE KLEINGERS GROUP

23A
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