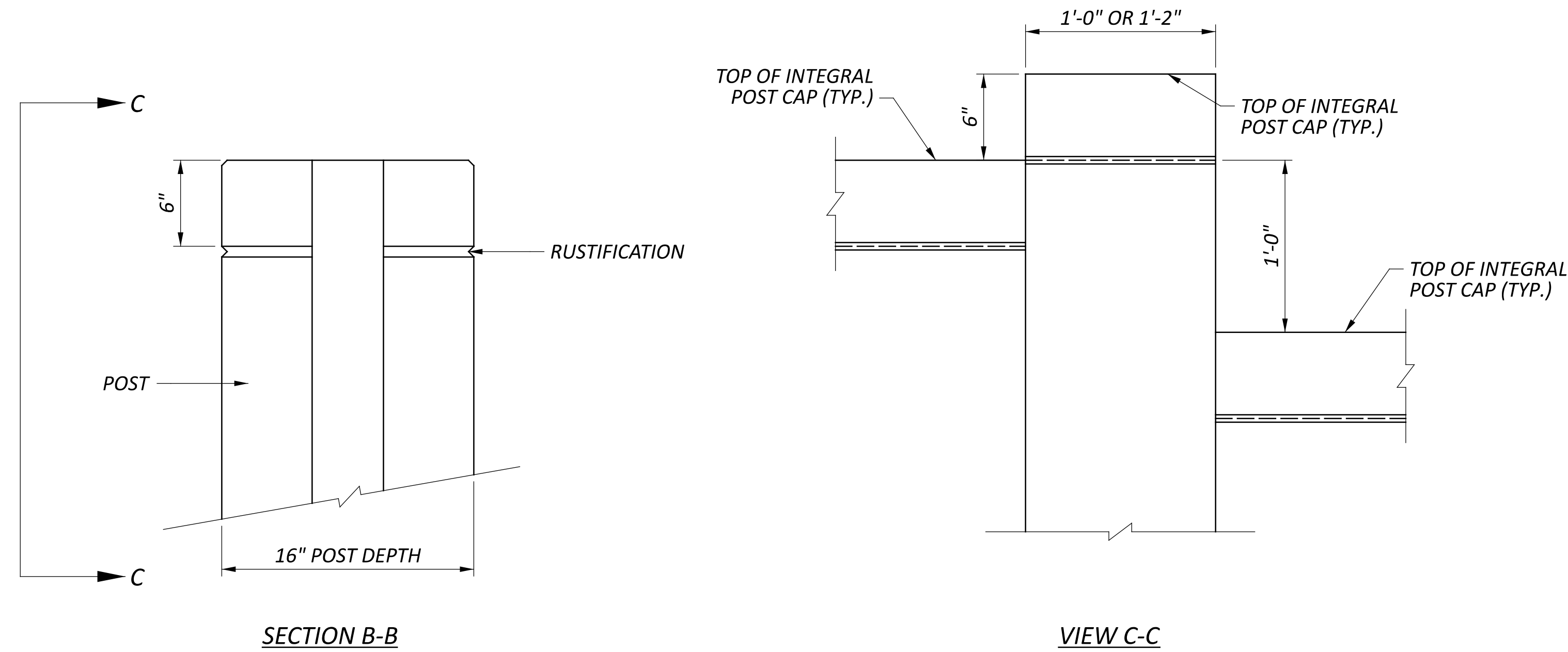


**NOTE:**

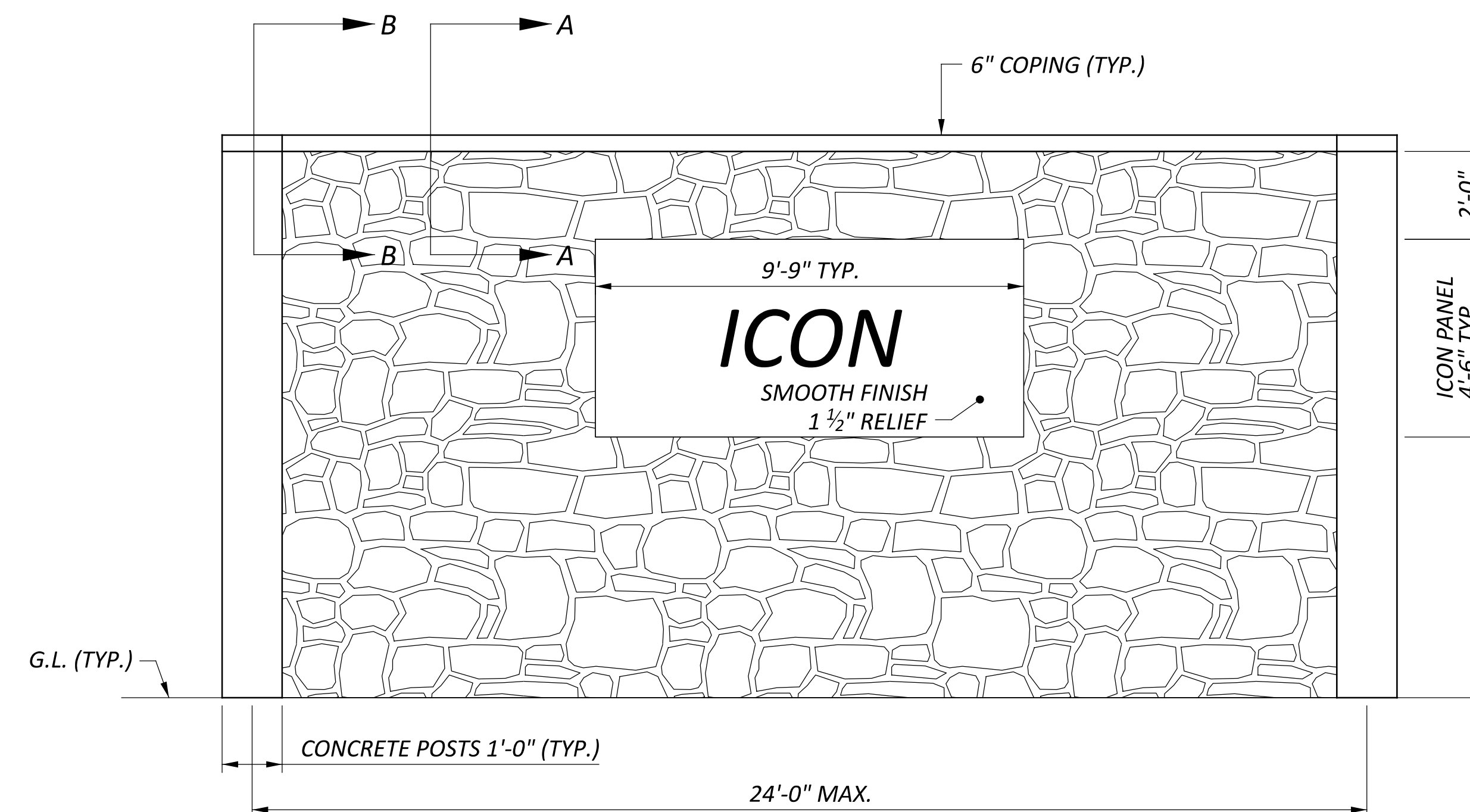
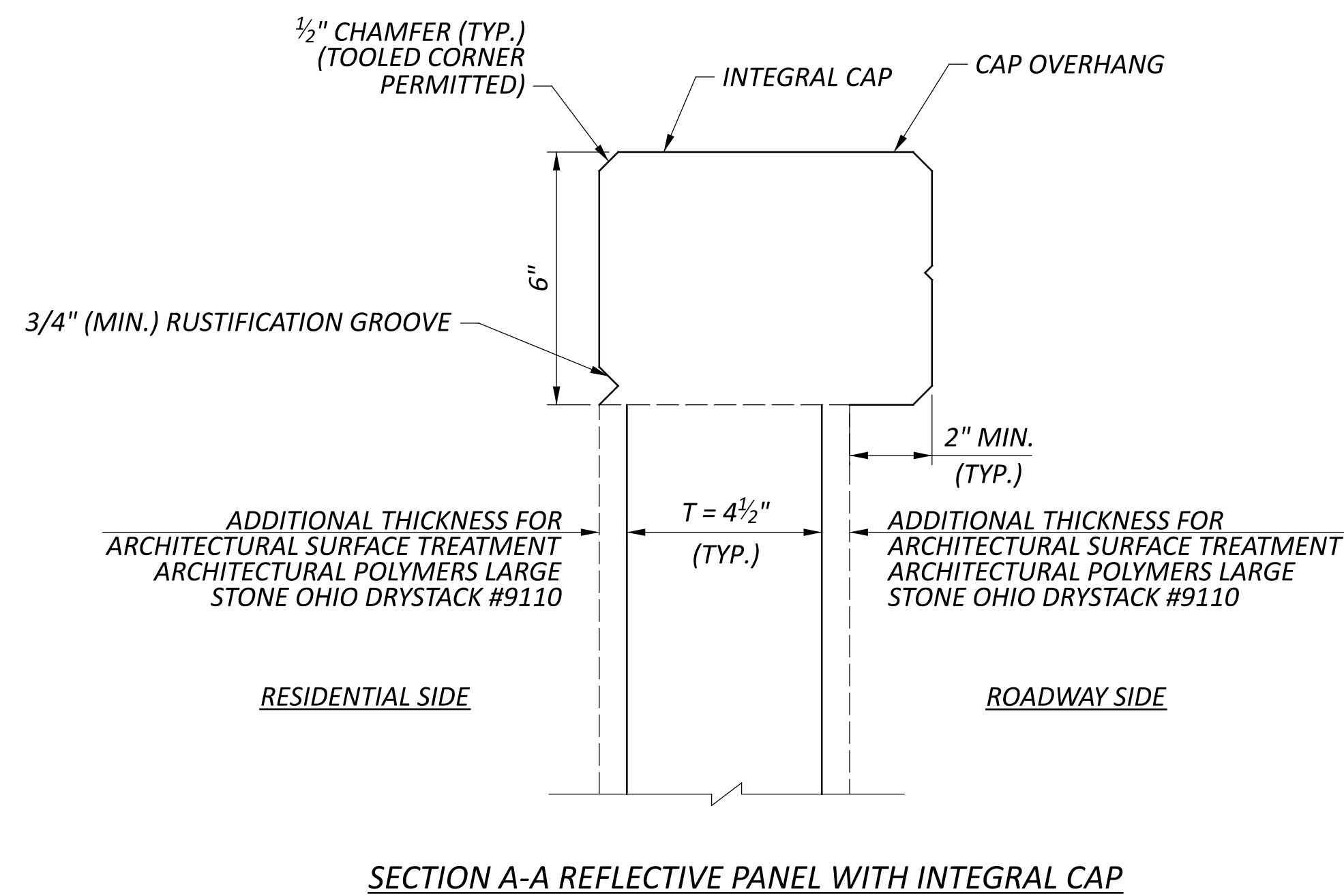
REFER TO NOISE BARRIER SPECIFICATIONS AND STANDARD DRAWINGS NBS-1-09. INTEGRAL POST CAPS AND INTEGRAL COPING SHALL BE UTILIZED FOR ALL NOISE BARRIERS. INTEGRAL CAP AND PANEL DETAIL TO BE APPROVED BY ENGINEER PRIOR TO USE.



HIGHWAY SIDE OF NOISE BARRIER COLOR SCHEDULE		
NOISE BARRIER	COLOR	FEDERAL COLOR ID
A - Q	GENERAL/TAN	23522

CONCRETE SEALER TREATMENT SHALL BE LIMITED TO ENTIRE PANEL AND INTEGRAL CAP SURFACES ONLY. NOISE WALL POSTS AND POST CAPS SHALL REMAIN UNTREATED.

NON-HIGHWAY SIDE OF NOISE BARRIER TEXTURE SCHEDULE	
NOISE BARRIERS	TEXTURE
F, G, I, J, K, L, M, N	FIELDSTONE
A, B, C, O, P	DRY STACK
D, E, H, Q	ASHLAR STONE



HIGHWAY SIDE  
(OR ENGINEER APPROVED EQUAL)

ITEM 614 - MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

- 1. RAMPS AND LOCAL ROADS: A MINIMUM OF ONE 11 FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK, EXCEPT AS NOTED IN THE PLANS.
2. A MINIMUM OF 3 LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED ALONG THE MAINLINE OF IR-77 AT ALL TIMES BY USE OF THE EXISTING PAVEMENT UNLESS APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
4. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.
5. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-9AM AND 3-7PM), THE CONTRACTOR SHALL INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE. THIS REQUIREMENT SHALL ALSO APPLY TO THOSE ROUTES INCLUDED ON THE PERMITTED LANE CLOSURE CHART WHICH ARE NOT DETAILED IN THE PLAN SET.
6. TO ENSURE THAT WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND AND MOVING TRAFFIC, ALL WEIGHTED CHANNELIZERS UTILIZED ON INTERSTATES AND FREEWAYS SHALL BE FROM MANUFACTURERS ON THE OHIO DEPARTMENT OF TRANSPORTATION, OFFICE OF MATERIAL MANAGEMENT'S QUALIFIED PRODUCTS LIST (QPL) WHICH UTILIZE A MINIMUM OF A 30 POUND BALLAST.
7. NO WORK SHALL BE PERFORMED AND ALL AVAILABLE LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

Table with 2 columns: HOLIDAY, DATE. Includes Christmas (Observed), New Year's (Observed), Memorial Day, Thanksgiving, Fourth of July (Observed), Labor Day, General Election Day (Nov).

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

Table with 2 columns: DAY OF HOLIDAY, TIME ALL LANES MUST BE OPEN TO TRAFFIC. Lists days from Sunday to Saturday with corresponding times.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)

8. LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, 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.

9. NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

Table with 3 columns: ITEM, DURATION OF CLOSURE, SIGN DISPLAYED TO PUBLIC. Details sign requirements for ramps, lane closures, and start of construction.

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

10. ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 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.

DETOUR NOTIFICATION

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

ALTERNATE MAINTENANCE OF TRAFFIC PLANS

IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLANS SHALL BE PLACED IN EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING BY THE ODOT DISTRICT CONSTRUCTION ENGINEER.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

Table with 3 columns: ITEM, DURATION OF CLOSURE, NOTICE DUE TO PERMITS & PIO. Details notification requirements for ramps, lane closures, and construction changes.

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

ITEM 614 - MAINTAINING TRAFFIC MISC.: SAFETY REPAIRS FOR IMPACT ATTENUATORS OR GUARDRAIL DAMAGED BY THE MOTORING PUBLIC THE CONTRACTOR SHALL FOLLOW THE PROCESS OUTLINED IN 107.15. IF NO ACCIDENT REPORT IS AVAILABLE, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FROM THE VARIOUS POSSIBLE RESPONDING AGENCIES THAT NO ACCIDENT REPORT IS AVAILABLE. FOR INCIDENTS WITH AN ACCIDENT REPORT AVAILABLE, BUT THE OWNER OR INSURANCE COMPANY IS NON-RESPONSIVE, COPIES OF THE COMMUNICATION SHALL BE SUBMITTED TO THE PROJECT PER 107.15B. FOR BOTH CONDITIONS LISTED ABOVE, THE ENGINEER SHALL DETERMINE THE SAFETY ITEMS THAT MAY BE REPAIRED AND THE SAFETY ITEMS THAT SHALL BE REPLACED.

THE WORK WILL BE AS DIRECTED BY THE ENGINEER AND WILL INCLUDE ALL MAINTENANCE OF TRAFFIC COSTS ASSOCIATED WITH THE ACTIVITY. THE COST FOR EACH ITEM SHALL BE \$1.00. THE FIXED AMOUNT SHOWN IN THE PROPOSAL IS INCLUDED (AS ANY OTHER BID ITEMS) IN THE TOTAL BID AMOUNT. THIS FIXED AMOUNT IS THE DEPARTMENT'S ESTIMATE OF THE TOTAL COST FOR THE REPAIR OR REPLACEMENT OF SAFETY ITEMS WITHIN THE WORK LIMITS AS DIRECTED BY THE ENGINEER. CMS TABLE 104.02-2 DOES NOT APPLY TO REDUCTIONS IN THIS CONTRACT ITEM. FORCE ACCOUNT RECORDS SHALL BE KEPT TO TRACK AND ULTIMATELY DETERMINE THE AMOUNT OF THE PAY ITEM USED. THIS ITEM SHALL INCLUDE PAYMENT FOR ALL WORK, INCIDENTALS, AND ALL ASSOCIATED COSTS FOR THE REPAIR OR REPLACEMENT OF DAMAGED SAFETY ITEMS AS DIRECTED BY THE ENGINEER.

ITEM 614 - MAINTAINING TRAFFIC MISC.: SAFETY REPAIRS, 25,000 EACH

SEQUENCE OF CONSTRUCTION

NORTHBOUND AND SOUTHBOUND IMPROVEMENTS CAN BE COMPLETED CONCURRENTLY. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY CONCURRENT WORK. CONCRETE BARRIER CURE TIME SHALL BE INCLUDED IN RAMP CLOSURE DURATION. CONCRETE BARRIER CURING SHALL BE COMPLETE PRIOR TO OPENING A RAMP. LANE CLOSURES WITH DRUMS ON ALLENDALE AVENUE, COVENTRY STREET, BURKHARDT AVENUE SHALL BE OPENED DURING NON-WORKING TIMES TO ALLOW FOR PARKING IN THE VICINITY OF DRIVEWAYS.

NORTHBOUND PHASE - EAST SIDE WORK

- WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. CONSTRUCT NOISE BARRIERS I, J, K, L, M, N, O, P, AND Q WITH THE TIME RESTRICTIONS LISTED BELOW.
2. CONSTRUCT CONCRETE BARRIER AND GUARDRAIL PROTECTION ASSOCIATED WITH EAST SIDE NOISE BARRIERS.
MAINTAIN TRAFFIC AS FOLLOWS:
1. PLACE TEMPORARY TRAFFIC CONTROL AS NOTED IN THE PLAN SHEETS FOR CONSTRUCTION OF THE EAST SIDE NOISE BARRIER IMPROVEMENTS.
2. IMPLEMENT DETOUR AND FULL CLOSURE OF RAMP S9 (IR-77 NB TO WILBETH ROAD/WATERLOO ROAD) TO CONSTRUCT IMPROVEMENTS.
3. IMPLEMENT DETOUR AND FULL CLOSURE OF RAMP S7 (WILBETH ROAD TO IR-77 NB) TO CONSTRUCT IMPROVEMENTS.
4. MAINTAIN A SINGLE NORTHBOUND LANE ALONG ALLENDALE AVENUE AND COVENTRY STREET TO CONSTRUCT IMPROVEMENTS.

Table with 2 columns: NB RAMP CLOSURES, MAXIMUM DURATION OF CLOSURE. Details closure durations for various ramps and noise barriers.

SOUTHBOUND PHASE - WEST SIDE WORK

- WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. CONSTRUCT NOISE BARRIERS A, B, C, D, E, F, G, AND H WITH THE TIME RESTRICTIONS LISTED BELOW.
2. CONSTRUCT CONCRETE BARRIER AND GUARDRAIL PROTECTION ASSOCIATED WITH WEST SIDE NOISE BARRIERS.
MAINTAIN TRAFFIC AS FOLLOWS:
1. PLACE TEMPORARY TRAFFIC CONTROL AS NOTED IN THE PLAN SHEETS FOR CONSTRUCTION OF THE WEST SIDE NOISE BARRIER IMPROVEMENTS.
2. IMPLEMENT DETOUR AND FULL CLOSURE OF RAMP M (IR-76 EB TO IR-77 SB) TO CONSTRUCT IMPROVEMENTS.
3. IMPLEMENT DETOUR AND FULL CLOSURE OF RAMP S8 (IR-77 SB TO WILBETH ROAD) TO CONSTRUCT IMPROVEMENTS.
4. MAINTAIN A SINGLE SOUTHBOUND LANE ALONG COVENTRY STREET AND BURKHARDT AVENUE TO CONSTRUCT IMPROVEMENTS.
5. THE CONTRACTOR SHALL OPEN RAMP M TO TRAFFIC BY 4/1/2025.

Table with 2 columns: SB RAMP CLOSURES, MAXIMUM DURATION OF CLOSURE. Details closure durations for ramp M and SB ramps.

\* CONCURRENT WITH RAMP M CLOSURE

UNLESS OTHERWISE SPECIFIED IN THIS PLAN, THE CONTRACTOR SHALL MAINTAIN TRAFFIC USING THE LATEST PERMITTED LANE CLOSURE CHART (PLCC) AVAILABLE FROM THE ODOT WEBSITE (https://www.transportation.ohio.gov/working/data-tools/resources/permitted-lane-closure)

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 CMS 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).

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).

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.

IN GENERAL LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. 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 MAINTENANCE 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 DURING CONSTRUCTION OPERATIONS (CONTINUED) ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 200 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 ASSISTANCE.

DELINEATION OF PORTABLE AND PERMANENT BARRIER BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AT APPROXIMATELY 10-FOOT SPACING. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER. ONE-WAY. OBJECT MARKER SPACING SHALL BE AT APPROXIMATELY 25-FOOT INTERVALS.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AT APPROXIMATELY 25-FOOT INTERVALS AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ITEMS ARE QUANTIFIED IN THE SUBSUMMARY:

- ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY)
ITEM 614, OBJECT MARKER, ONE-WAY
ITEM 614, INCREASED BARRIER DELINEATION

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

WORK ZONE SPEED ZONES (WZSZS) THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

Table with 4 columns: WZSZ REVISION NO., COUNTY-ROUTE-SECTION, DIRECTION, and values for WZ-26212.

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE).

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION.

WORK ZONE SPEED ZONES (WZSZS) (CONTINUED) WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

Table with 5 columns: ORIGINAL POSTED SPEED LIMIT, WITH POSITIVE PROTECTION (WORKERS PRESENT, WORKERS NOT PRESENT), WITHOUT POSITIVE PROTECTION (WORKERS PRESENT, WORKERS NOT PRESENT).

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY 14 SIGN MONTHS [ASSUMING 2 DSL SIGN ASSEMBLIES FOR 7 MONTHS EACH]

PN 127- 01/18/2019 - LANE VALUE CONTRACT THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE DESCRIBED CRITICAL LANE/RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD.

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLAN.

Table with 4 columns: DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED, RESTRICTED TIME PERIOD, TIME UNIT, DISINCENTIVE \$ PER TIME UNIT.

FINAL PAVEMENT MARKINGS THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE TO REPLACE THE EXISTING MARKINGS TO THE NORMAL LANE ASSIGNMENTS AS IDENTIFIED BY THE ENGINEER.

- ITEM 642 - REMOVAL OF PAVEMENT MARKING 6.0 MILE
ITEM 646 - EDGE LINE, 6" 2.0 MILE
ITEM 646 - LANE LINE, 6" 4.0 MILE
ITEM 646 - CHANNELIZING LINE, 12" 1,500 FT
ITEM 646 - DOTTED LINE, 6" 2,000 FT

SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
14	15	20	23	45	92						01/IMS/20	EXT	TOTAL				
				138							LS	201	11000	LS		ROADWAY	14
				615							138	202	23000	138	SY	PAVEMENT REMOVED	
				93							615	202	32000	615	FT	CURB REMOVED	
					15						93	202	32500	93	FT	CURB AND GUTTER REMOVED	
											15	202	34900	15	FT	PIPE REMOVED	
				967							967	202	38000	967	FT	GUARDRAIL REMOVED	
				3							3	202	42010	3	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
				2							2	202	42040	2	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
					1						1	202	58100	1	EACH	CATCH BASIN REMOVED	
				11,257							11,257	202	75000	11,257	FT	FENCE REMOVED	
				226							226	204	10000	226	SY	SUBGRADE COMPACTION	
				1,275							1,275	606	15050	1,275	FT	GUARDRAIL, TYPE MGS	
				137.5							137.5	606	15150	137.5	FT	GUARDRAIL, TYPE MGS HALF POST SPACING	
				3							3	606	26150	3	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	15
				5							5	606	26550	5	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
				3							3	606	35002	3	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
				2							2	606	35102	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
				180							180	607	23000	180	FT	FENCE, TYPE CLT	
11,257											11,257	607	98000	11,257	FT	FENCE, MISC.:TEMPORARY FENCE	14
				520							520	622	10160	520	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
				5							5	622	25000	5	EACH	CONCRETE BARRIER END SECTION, TYPE D	
					1						1	623	39500	1	EACH	MONUMENT ASSEMBLY ADJUSTED TO GRADE	
											LS	SPECIAL	69091000	LS		AS-BUILT CONSTRUCTION PLANS	15
											LS	SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION	14
																EROSION CONTROL	
	2										2	659	00100	2	EACH	SOIL ANALYSIS TEST	
	2,193										2,193	659	00300	2,193	CY	TOPSOIL	
	19,750										19,750	659	10000	19,750	SY	SEEDING AND MULCHING	
	988										988	659	14000	988	SY	REPAIR SEEDING AND MULCHING	
	3										3	659	20000	3	TON	COMMERCIAL FERTILIZER	
	5										5	659	31000	5	ACRE	LIME	
	107										107	659	35000	107	MGAL	WATER	
											LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	15
											LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	15
											LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	15
	92,500										92,500	832	30000	92,500	EACH	EROSION CONTROL	
																DRAINAGE	
					10						10	611	05900	10	FT	15" CONDUIT, TYPE B	
					5						5	611	07400	5	FT	18" CONDUIT, TYPE B	
					1						1	611	99114	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
																PAVEMENT	
				38							38	301	56000	38	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
				38							38	304	20000	38	CY	AGGREGATE BASE	
				4							4	407	20000	4	GAL	NON-TRACKING TACK COAT	
				6							6	441	70000	6	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
				83							83	609	12000	83	FT	COMBINATION CURB AND GUTTER, TYPE 2	
																TRAFFIC CONTROL	
				6							6	625	31507	6	EACH	PULL BOX REMOVED AND REPLACED, AS PER PLAN	15
				11							11	626	00102	11	EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL	
				30							30	626	00116	30	EACH	BARRIER REFLECTOR, TYPE 5, BIDIRECTIONAL	
				333							333	630	80300	333	SF	SIGN, TEMPORARY OVERLAY	22
				333							333	630	81304	333	SF	SIGN ERECTED, TEMPORARY OVERLAY	22
				1							1	630	85100	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
				9							9	630	89894	9	EACH	REMOVAL OF TEMPORARY OVERLAY SIGN AND DISPOSAL	22
											6	642	30030	6	MILE	REMOVAL OF PAVEMENT MARKING	
											2	646	10010	2	MILE	EDGE LINE, 6"	
											4	646	10110	4	MILE	LANE LINE, 6"	
											1,500	646	10310	1,500	FT	CHANNELIZING LINE, 12"	

GENERAL SUMMARY

DESIGN AGENCY  
**ARCADIS**  
 222 SOUTH MAIN STREET SUITE 200  
 ARCADIS, MISSOURI 64733  
 (314) 434-1985  
 www.arcadis.com

DESIGNER  
**AZF**

REVIEWER  
 MH 01/08/24

PROJECT ID  
 113208

SHEET TOTAL  
 42 219



SUM-77-9.75

MODEL: Sheet PAPER: 34x22 (in.) DATE: 9/6/2024 TIME: 2:41:27 PM USER: AFarmer  
 p:\arcadis-us-pw\benley.com\arcadis-us-01\Documents\01 Active Projects\30129772\400\_CAD\401-Engineering\_Arcadis\Roadway\Sheets\13208\_GS002.dgn

REF. NO.	SHEET	LOCATION	STATION		SIDE	202	202	202	202	202	202	202	204	301	304	407	441	606	606	606	606	606	607	609	622	622	625	626	626	630		
			FROM	TO		PAVEMENT REMOVED SY	CURB REMOVED FT	CURB AND GUTTER REMOVED FT	GUARDRAIL REMOVED FT	ANCHOR ASSEMBLY REMOVED, TYPE E EACH	ANCHOR ASSEMBLY REMOVED, TYPE T EACH	FENCE REMOVED FT	SUBGRADE COMPACTION SY	ASPHALT CONCRETE BASE, PG64-22, (449) CY	AGGREGATE BASE CY	NON-TRACKING TACK COAT GAL	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 CY	GUARDRAIL, TYPE MGS FT	GUARDRAIL, TYPE MGS HALF POST SPACING FT	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016 EACH	ANCHOR ASSEMBLY, MGS TYPE T EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	FENCE, TYPE CLT FT	COMBINATION CURB AND GUTTER, TYPE 2 FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D FT	CONCRETE BARRIER END SECTION, TYPE D EACH	PULL BOX REMOVED AND REPLACED, AS PER PLAN EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL EACH	BARRIER REFLECTOR, TYPE 5, BIDIRECTIONAL EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION EACH	
NOISE BARRIER L																																
R1	89	I.R. 77	346+03.99	347+25.00	RT.	11	121		121																							
R2	89	I.R. 77	346+03.99	348+78.54	RT.	25	224		274																							
B1	89	I.R. 77	346+28.96	347+25.00	RT.							34	6	6	1	1					1				82	1		3				
B2	89	I.R. 77	346+28.96	348+53.07	RT.							79	13	13	1	2				1	1				196	2		4				
R3	89	I.R. 77	347+64.69	352+94.00	RT.					530																						
U1	89	I.R. 77	348+04.00		RT.																						1					
F1	90	I.R. 77	352+84.48	352+94.00	RT.																	10										
NOISE BARRIER M																																
R1	91	I.R. 77	354+03.44	364+39.00	RT.					1058																						
R2	92	I.R. 77	362+14.32	365+39.64	RT.	35	270		320																							
B1	92	I.R. 77	362+14.32	365+39.64	RT.						95	16	16	2	2					1	1				242	2		4				
R3	92	I.R. 77	363+21.04	363+23.26	RT.	67		93	64	1	1																					
GR1	92	I.R. 77	363+21.04	363+63.66	RT.										25					2										3		
P1	92	I.R. 77	363+23.26	363+98.92	RT.						18	3	3	1	1									83								
NOISE BARRIER O																																
GR1	96	I.R. 77	385+31.39	386+56.39	RT.												112.5			1										3		
NOISE BARRIER P																																
R1	97	I.R. 77	385+20.37	396+29.95	RT.					1120																						
F1	97	I.R. 77	385+20.37	385+39.18	RT.																		10									
F2	98	I.R. 77	396+19.98	396+29.95	RT.																		10									
NOISE BARRIER Q																																
R1	99	I.R. 77	396+97.55	406+57.29	RT.					990																						
F1	99	I.R. 77	396+97.55	397+06.42	RT.																		10									
F2	100	I.R. 77	406+52.49	406+57.29	RT.																		10									
SUBTOTALS THIS SHEET						138	615	93	779	1	1	3698	226	38	38	4	6	137.5	0	0	3	3	2	50	83	520	5	1	11	6	0	
SUBTOTALS FROM SHEET 44						0	0	0	188	2	1	7559	0	0	0	0	0	1137.5	137.5	3	2	0	0	130	0	0	0	5	0	24	1	
TOTALS CARRIED TO GENERAL SUMMARY						138	615	93	967	3	2	11257	226	38	38	4	6	1275.0	137.5	3	5	3	2	180	83	520	5	6	11	30	1	

ROADWAY SUBSUMMARY

DESIGN AGENCY  
**ARCADIS**  
 222 SOUTH MAIN STREET SUITE 200  
 ARCADIS, MISSOURI 64735  
 (314) 434-1995  
 www.arcadis.com

DESIGNER  
**AZF**

REVIEWER  
**MH 01/08/24**

PROJECT ID  
**113208**

SHEET TOTAL  
**45 | 219**