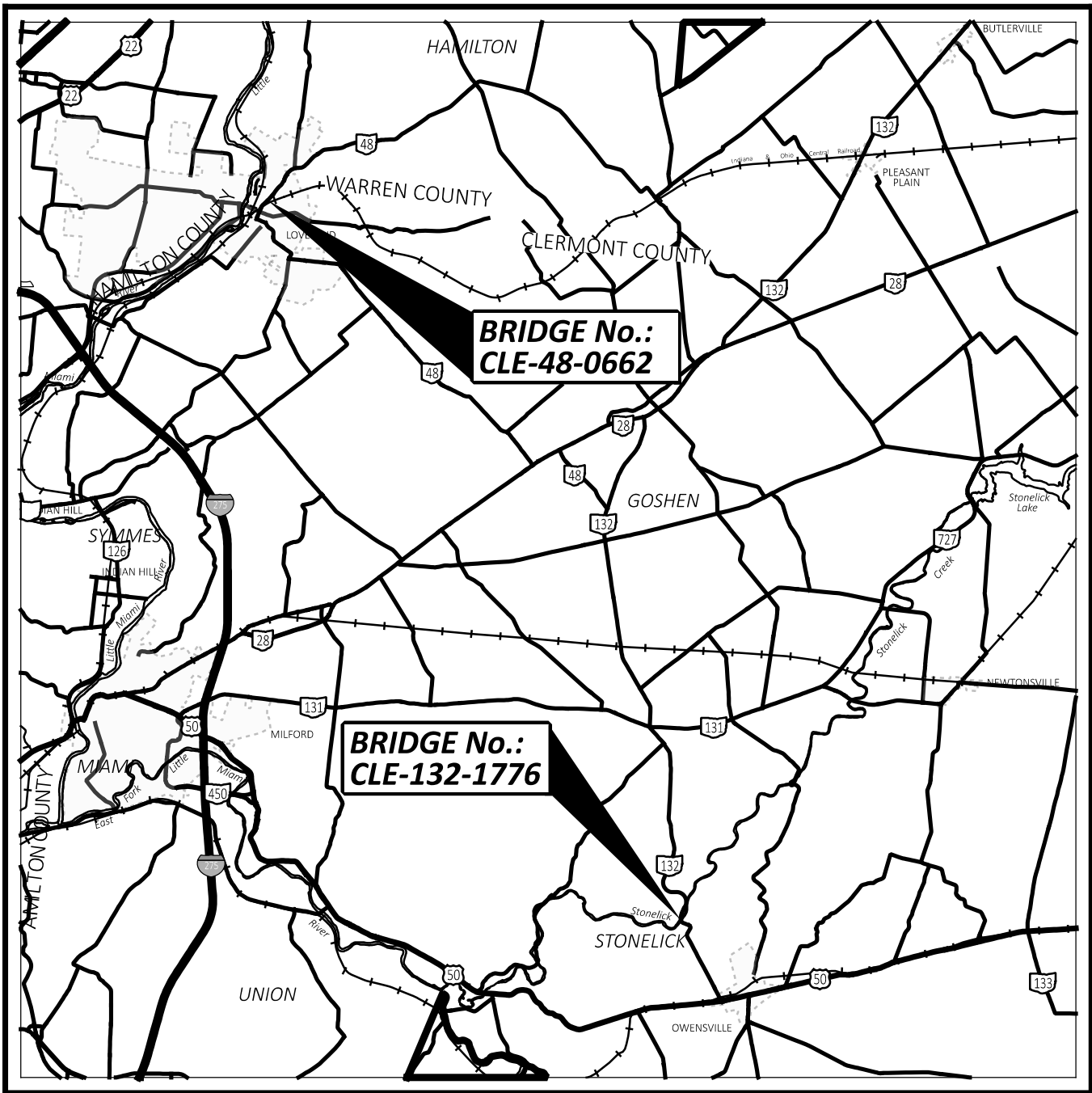




LOCATION MAP

LATITUDE: 39 °12'10.56" LONGITUDE: -84 °12'11.70"



PORTION TO BE IMPROVED	
INTERSTATE HIGHWAY	
FEDERAL ROUTES	
STATE ROUTES	
COUNTY & TOWNSHIP ROADS	
OTHER ROADS	

DESIGN DESIGNATION

CLE- SR 48 - 6.62

CURRENT ADT (2026)	7,200
DESIGN YEAR ADT (2038)	7,600
DESIGN HOURLY VOLUME	1,000
DIRECTIONAL DISTRIBUTION	0.63
TRUCKS (24 HOUR B&C)	2%
DESIGN SPEED	35
LEGAL SPEED	35

DESIGN FUNCTIONAL CLASSIFICATION:
04 - MINOR ARTERIAL ROADS (URBAN)

NHS PROJECT

CLE - SR 132 - 17.76

CURRENT ADT (2026)	3,700
DESIGN YEAR ADT (2038)	3,700
DESIGN HOURLY VOLUME (2038)	450
DIRECTIONAL DISTRIBUTION	0.52
TRUCKS (24 HOUR B&C)	4%
DESIGN SPEED	60
LEGAL SPEED	55

DESIGN FUNCTIONAL CLASSIFICATION:
05 - MAJOR COLLECTOR ROADS (RURAL)

NHS PROJECT

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES

Contact Two Working Days
Before You Dig

Before You Dig

OHIO811. 8-1-1. or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 8 - ENGINEERING DEPARTMENT
505 SR 741 LEBANON, OHIO 45036

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CLE SR 48/132 6.62/17.76

CITY OF LOVELAND
STONELICK TOWNSHIP
CLERMONT COUNTY

INDEX OF SHEETS:

TITLE SHEET	1
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STRUCTURES ESTIMATED QUANTITIES	10
STRUCTURES OVER 20 FOOT SPAN	
CLE-48-0662	11 - 12
CLE-132-1776	13 - 20

FEDERAL PROJECT NUMBER

E250 (212)

RAILROAD INVOLVEMENT

INDIANA AND OHIO RAILWAY COMPANY (IORY)

PROJECT DESCRIPTION

REHABILITATION OF A BRIDGE THAT CARRIES SR 48 OVER O'BANNON CREEK AND REHABILITATION OF A BRIDGE THAT CARRIES SR 132 OVER STONELICK CREEK. WORK INCLUDES THE OVERLAY OF THE ORIGINAL DECK, INSTALLATION OF P.M.A.E.J.S., REPLACEMENT OF THE APPROACH GUARDRAIL, CONCRETE REPAIR, SEALING OF CONCRETE SURFACES, REPLACING THE DECK EDGE AND BRIDGE RAILING, PAINTING THE STRUCTURAL STEEL.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.10 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

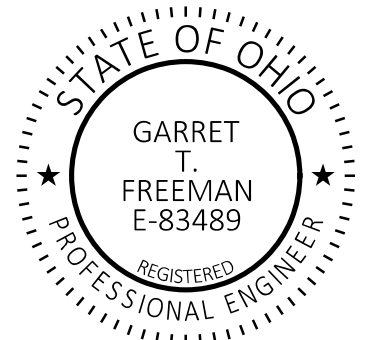
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET .

Douglas A. Gruver, P.E.
District 08 Deputy Director

Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24	DBR-3-11	7/15/11	TC-61.30	7/19/24			800-2023	1/17/25 ASBESTOS INSPECTION
		DS-1-92	7/15/22	TC-65.10	1/17/14			832	7/19/24 REPORT
DM-4.3	1/15/16	EXJ-4-87	1/19/24	TC-65.11	1/19/24			846	4/17/15 7/26/2024
DM-4.4	1/15/16	PCB-91	7/17/20					848	7/19/24
		TST-2-21	7/19/24						
MGS-1.1	7/16/21								
MGS-2.1	1/19/18	HL-50.21	7/15/22						
MGS-3.1	1/19/18								
MGS-3.2	1/18/13	MT-95.41	7/21/23						
MGS-3.3	7/16/21	MT-96.11	7/21/23						
MGS-4.2	7/19/13	MT-96.20	7/21/23						
MGS-4.3	1/18/13	MT-96.26	1/18/19						
MGS-5.3	7/15/16	MT-97.10	4/19/19						
MGS-6.1	1/19/18	MT-101.60	4/21/23						
		MT-101.70	7/19/24						
RM-4.2	4/17/20	MT-101.75	7/21/23						

ENGINEER'S SEAL



TITLE SHEET

DESIGN AGENCY



DESIGNER

GTf

REVIEWER

JE 01-14-25

PROJECT ID

102771

SHEET

1

TOTAL

20

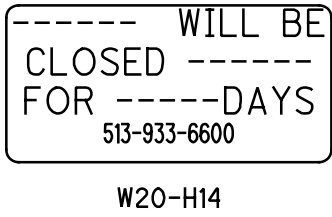
ITEM 614, MAINTAINING TRAFFIC

CLE-48-6.62:
A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 7 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET _4_. BEFORE AND AFTER THE CLOSURE, A MINIMUM OF ONE LANE OF TWO-WAY TRAFFIC MAY BE MAINTAINED USING FLAGGERS FROM 6 AM TO 4 PM. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$ 5,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

CLE-132-17.76:
A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 30 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET _5_. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$ 5,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

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.

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 CHANGABLE 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 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.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LASTLINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH AMOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TOBE A SPECIFIC OFFICE WITHIN THE DISTRIC RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES, PER SCD MT-101.60 AT THE LOCATIONS SHOWN IN THE "PROJECT LOCATIONS WITH DETOURS TABLE"

ITEM 614, MAINTAINING TRAFFIC (CONTINUED)

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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.

PROJECT LOCATIONS WITH DETOURS TABLE

PROJECT WORK LOCATION	DETOUR PLAN SHEET
CLE-48-0662	4
CLE-132-1776	5

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

FOURTH OF JULY (SR 48 ONLY)
CLERMONT COUNTY FAIR (SR 132 ONLY)

DAY OF HOLIDAY TIME ALL LANES
OR EVENT MUST BE OPEN TO TRAFFIC

SUNDAY 12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY 12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY 12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY 12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY 12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY (THANKSGIVING ONLY)
 6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY 12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY 12:00N FRIDAY THROUGH 6:00AM MONDAY

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 - DETOUR SIGNING

THE CONTRACTOR SHALL PROVIDE, MAINTAIN, AND SUBSEQUENTLY REMOVE ALL DETOUR SIGNING AND SUPPORTS AS SHOWN ON SHEETS 4 & 5 AND ON STANDARD CONSTRUCTION DRAWING MT-101.60. ALL WORK SHALL BE PAID FOR UNDER ITEM 614, DETOUR SIGNING.

WINDOW CONTRACT TABLE

USE THE FOLLOWING TABLE AS REFERRED TO IN THE PROPOSAL:

DESCRIPTION OR LOCATION OF CRITICAL WORK	CALENDER DAYS TO COMPLETE	DISINCENTIVE \$ PER DAY	WORK WINDOW	
			START	END
ALL WORK REQUIRING ROAD CLOSURE AND DETOUR AT CLE-48-6.62	7	\$ 5,000	6/1/2026	8/15/2026
ALL WORK REQUIRING ROAD CLOSURE AND DETOUR AT CLE-132-17.76	30	\$5,000	5/15/2026	7/10/2026

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 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		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

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

CONTACT THE FOLLOWING:

- DISTRICT PUBLIC INFORMATION OFFICER BY EMAIL AT DOT.D08.PIO@DOT.OHIO.GOV
- DISTRICT PERMIT SECTION BY EMAIL AT D08.PERMITS@DOT.OHIO.GOV
- CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY EMAIL AT HAULING.PERMITS@DOT.OHIO.GOV

DESIGN AGENCY



DESIGNER

GTF

REVIEWER

SK MM-DD-YY

PROJECT ID

102771

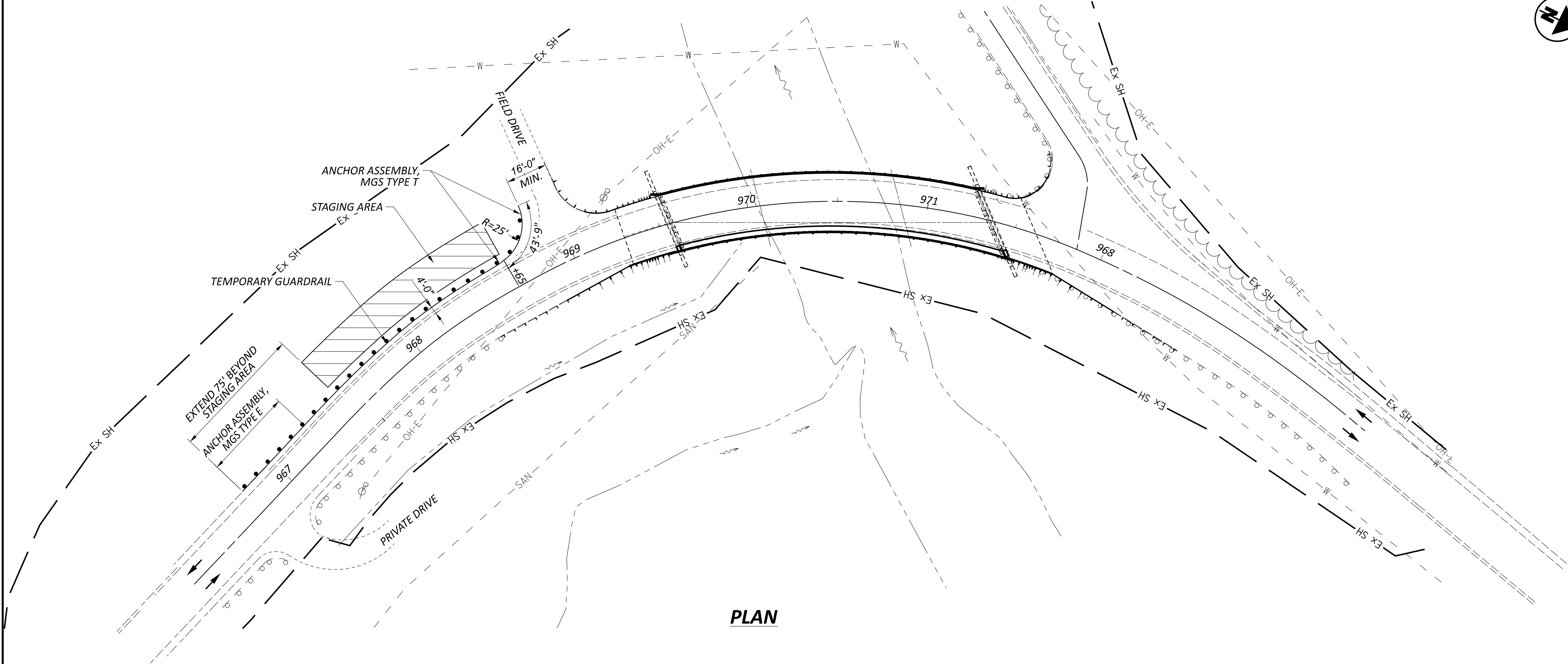
SHEET

TOTAL

3

20

MAINTENANCE OF TRAFFIC SUBSUMMARY													
STATION		SIDE	LENGTH (FEET)	202			209		606			614	
				GUARDRAIL REMOVED	ANCHOR ASSEMBLY REMOVED, TYPE E	ANCHOR ASSEMBLY REMOVED, TYPE T	LINEAR GRADING		GUARDRAIL, TYPE MGS	ANCHOR ASSEMBLY, MGS TYPE E	ANCHOR ASSEMBLY, MGS TYPE T	BARRIER REFLECTOR, TYPE 5 (BI-DIR.)	OBJECT MARKER, TWO-WAY
FROM	TO			FT	EACH	EACH	MILE		EACH	EACH	EACH	EACH	EACH
966+80	967+30	LT	50		1		0.01			1		1	1
967+30	968+65	LT	135	131.25			0.03		131.25			3	3
968+65	969+00	LT	35	43.75		2	0.01		43.75		2	1	1
TOTALS CARRIED TO GENERAL SUMMARY				175	1	2	0.05		175	1	2	5	5



PLAN

LEGEND	
TEMPORARY GUARDRAIL	
DIRECTION OF TRAVEL	
STAGING AREA	

- NOTES:**
- REFER TO SCD MGS-2.1 AND SCD MGS-5.3 FOR GRADING REQUIREMENTS FOR GUARDRAIL AND ANCHOR ASSEMBLIES.
 - REFER TO C&MS 614.035 FOR STORAGE OF EQUIPMENT, VEHICLE AND MATERIAL REQUIREMENTS.



ROADWAY ESTIMATED QUANTITIES													
ROUTE	STATION		SIDE	LENGTH		PAVEMENT AREA	202		209		608		
							WALK REMOVED		RESHAPING UNDER GUARDRAIL		4" CONCRETE WALK		
	FROM	TO		MILES	FT		SQ FT		MILE		SQ FT		
CLE 48 0662	2+35	2+45	LT		10		50				50		
CLE 48 0662	3+78	3+88	LT		10		50				50		
CLE 48 0662	1+48	2+32	RT	0.02					0.02				
CLE 48 0662	3+87	4+37	LT	0.01					0.01				
CLE 48 0662	3+80	4+23	RT	0.01					0.01				
CLE 132 1776	969+15	969+50	LT	0.01					0.01				
CLE 132 1776	968+86	969+56	RT	0.01					0.01				
CLE 132 1776	971+29	971+58	LT	0.01					0.01				
CLE 132 1776	971+50	972+20	RT	0.01					0.01				
TOTALS CARRIED TO GENERAL SUMMARY							100		0.07		100		

PART	ROUTE	STATION		TOTAL	646								621	REMARKS
					CENTER LINE		EDGE LINE, 6"						RPM	
		FROM	TO	MILE	DASHED MILE	SOLID MILE	WHITE MILE					EACH		
01/S>2/13	CLE 48 0662	2+18.18	4+00.12	0.03		0.03								
02/STR/13	CLE 132 1776	969+31.13	971+65.79	0.04		0.04	0.09					6		
TOTALS CARRIED TO GENERAL SUMMARY					0.07		0.09						6	

GUARDRAIL QUANTITY TABLE CLE-48-0662				
GUARDRAIL TYPE	BEGIN	END	SIDE	LENGTH
ANCHOR ASSEMBLY, MGS TYPE E	1+47.79,	2+00.91,	R	53'-1½"
GUARDRAIL, TYPE MGS	2+00.91,	2+07.16,	R	6'-3"
BRIDGE TERMINAL ASSEMBLY REMOVED	2+07.16,	2+32.16,	R	25'-0"
BRIDGE TERMINAL ASSEMBLY, TYPE 1	2+07.16,	2+32.16,	R	25'-0"
BRIDGE TERMINAL ASSEMBLY REMOVED	3+86.62,	4+11.62,	L	25'-0"
BRIDGE TERMINAL ASSEMBLY, TYPE 1	3+86.62,	4+11.62,	L	25'-0"
GUARDRAIL REMOVED	4+11.62,	4+36.62,	L	50'-0"
GUARDRAIL, TYPE MGS	4+11.62,	4+36.62,	L	50'-0"
BRIDGE TERMINAL ASSEMBLY REMOVED	3+79.58,	3+79.58,	R	-
BRIDGE TERMINAL ASSEMBLY, TYPE 2	3+79.58,	3+79.58,	R	-
GUARDRAIL, TYPE MGS	3+79.58,	4+10.83,	R	31'-3"
ANCHOR ASSEMBLY, MGS TYPE T	4+10.83,	4+22.57,	R	12'-6"
GUARDRAIL REMOVED	3+79.58,	4+22.57,	R	43'-9"

GUARDRAIL QUANTITY TABLE CLE-132-1776				
GUARDRAIL TYPE	BEGIN	END	SIDE	LENGTH
GUARDRAIL REMOVED	968+85.99,	969+30.48,	R	40'-3"
GUARDRAIL, TYPE MGS	968+85.99,	969+27.73,	R	37'-6"
BRIDGE TERMINAL ASSEMBLY REMOVED	969+30.48,	969+55.48,	R	25'-0"
BRIDGE TERMINAL ASSEMBLY, TYPE TST-2	969+27.73,	969+55.48,	R	27'-9"
BRIDGE TERMINAL ASSEMBLY REMOVED	971+49.76,	971+74.77,	R	25'-0"
BRIDGE TERMINAL ASSEMBLY, TYPE TST-2	971+49.76,	971+77.52,	R	27'-9"
GUARDRAIL REMOVED	971+74.77,	973+46.25,	R	171'-6"
GUARDRAIL, TYPE MGS	971+77.52,	973+46.25,	R	168'-9"

DESIGN AGENCY



DESIGNER

GTF

REVIEWER

JE 01-14-2025

PROJECT ID

102771

SHEET

7

TOTAL

20

GENERAL SUMMARY	
DESIGN AGENCY	
	
DESIGNER	
GTF	
REVIEWER	
JE	01-14-25
PROJECT ID	
102771	
SHEET	TOTAL
8	20

ESTIMATED QUANTITIES - STRUCTURE No.: CLE-48-0662 (SFN: 1300709) (01/S>2/13 FUNDING SPLIT)									
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET
512	10100	34	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	34				
512	74000	34	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	34				
512	73500	169	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN			169		
843	50000	15	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	15				
846	00110	24	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				24	
848	10001	566	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN			566		9
848	20000	566	SY	SURFACE PREPARATION USING HYDRODEMOLITION			566		
848	30000	8	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			8		
848	50000	19	SY	HAND CHIPPING			19		
848	50100	LS	LS	TEST SLAB			LUMP		

ESTIMATED QUANTITIES - STRUCTURE No.: CLE-132-1776 (SFN: 1302981) (02/STR/13 FUNDING SPLIT)									
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET
202	11203	LS	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	9
509	20001	165	LB	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN			165		9
509	26000	4239	LB	GALVANIZED STEEL REINFORCEMENT			4239		
510	10001	65	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN			65		9
511	34412	31	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			31		
511	45710	1	CY	CLASS QC2 CONCRETE WITH QC/QA, ABUTMENT	1				
512	10100	374	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	119	168	87		
512	74000	374	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	119	168	87		
514	00050	5386	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			5,386		
514	00056	5386	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			5,386		
514	00060	5386	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			5,386		
514	00066	5386	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			5,386		
514	00504	12	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			12		
514	10000	3	EACH	FINAL INSPECTION REPAIR			3		
516	31000	73	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL, 705.11				73	
517	75601	187.5	FT	DEEP BEAM BRIDGE RETROFIT RAILING, AS PER PLAN			187.5		9
517	70100	192	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING)			192		
519	11101	24	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN		24			9
625	33000	2	EACH	STRUCTURE GROUNDING SYSTEM			2		
848	10001	835	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN			835		9
848	20000	835	SY	SURFACE PREPARATION USING HYDRODEMOLITION			835		
848	30000	12	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			12		
848	50000	25	SY	HAND CHIPPING			25		
848	50100	LS	LS	TEST SLAB			LUMP		

STRUCTURE ESTIMATED QUANTITIES



DESIGNER
GTF

CHECKER
BP

REVIEWER

CAH MM-DD-YY

PROJECT ID
102771

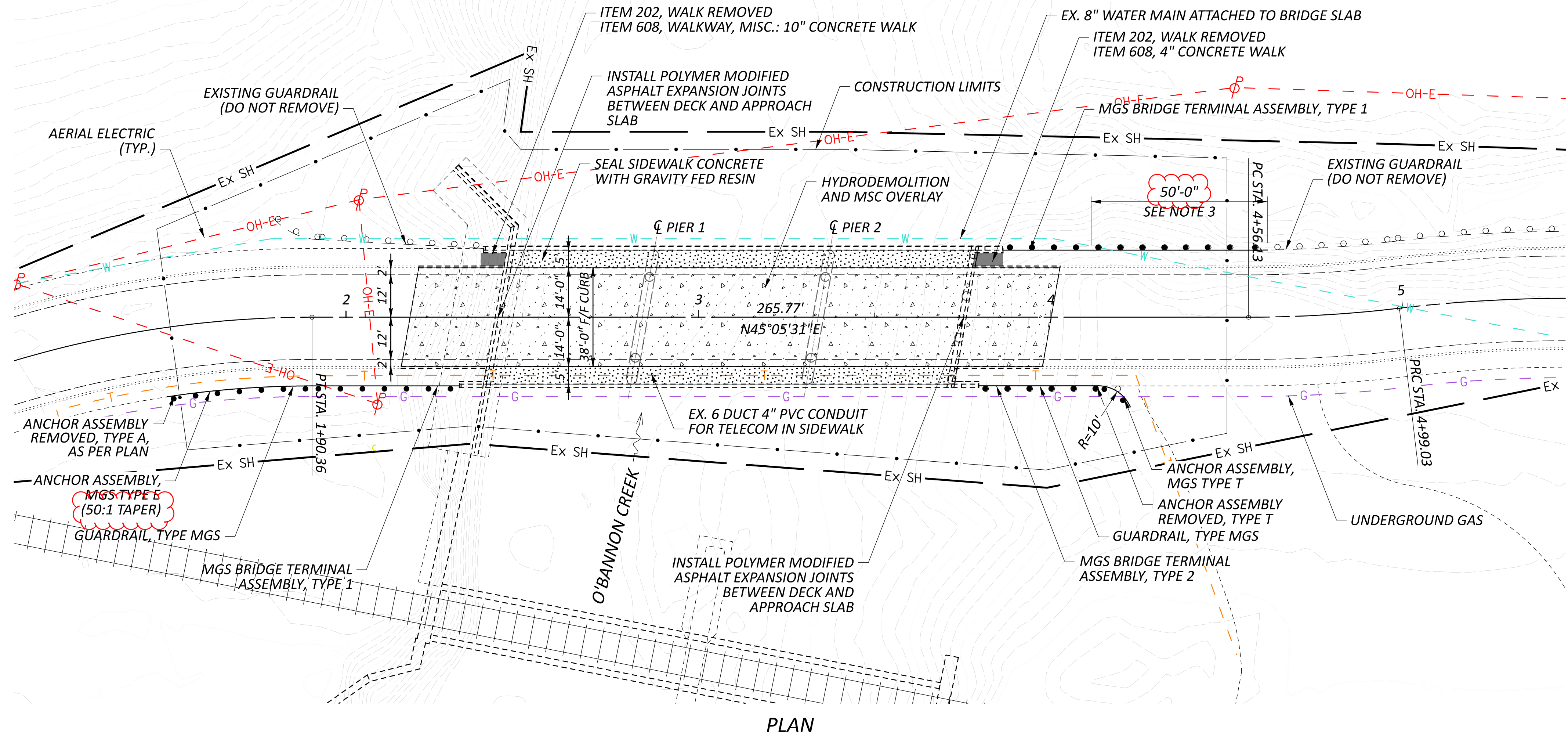
SUBSET
TOTAL

SHEET
10

TOTAL
20

SFN

DESIGN AGENCY



- 1) THIS SITE PLAN IS FROM ARCHIVED PLANS AND SHOULD BE USED AS REFERENCE ONLY
- 2) SEE SHEET 19 FOR SUBSTRUCTURE CONCRETE PATCHING AND SEALING LIMITS
- 3) REMOVE EXISTING GUARDRAIL AND INSTALL NEW GUARDRAIL. TRANSITION TO EXISTING TYPE 5 GUARDRAIL PER SCD MGS-4.3

 - HYDRODEMOLITION AND MSC OVERLAY
 - SEALING SIDEWALKS WITH GRAVITY FED RESIN
 - LIMITS OF SIDEWALK REPAIR

DRAINAGE AREA = 56.9 SQ. MILES
ORDINARY HIGH WATER MARK ELEV. = 570.00

$Q(4\% \text{ AEP}) = 11,200 \text{ CFS}$
 $Q(1\% \text{ AEP}) = 15,000 \text{ CFS}$

STRUCTURE CLEARS THE 25 YEAR
DESIGN HW BY 3.5 FEET.

EXISTING STRUCTURE	
TYPE:	3 SPAN CONTINUOUS CONCRETE SLAB WITH REINFORCED CONCRETE PIERS AND ABUTMENTS
SPANS:	40'-0"± - 50'-0"± - 40'-0"±
ROADWAY:	28'-0" CURB/CURB WITH 5'-0" WIDE SIDEWALK BOTH SIDES
LOADING:	HS 20-44 AND ALTERNATE MILITARY LOADING
SKEW:	10° L.F.
WEARING SURFACE:	1" MONOLITHIC CONCRETE
APPROACH SLABS:	AS-1-81 (25' LONG)
ALIGNMENT:	TANGENT
CROWN:	0.016 FT/FT
STRUCTURE FILE NUMBER:	1300709
DATE BUILT:	1988
DISPOSITION:	SEE PROPOSED WORK

PROPOSED WORK
1) REMOVE 1 1/2" OF THE ORIGINAL CONCRETE OVERLAY ON THE DECK AND APPROACH SLABS USING HYDRODEMOLITION PER SS848. REPLACE WITH 1 1/2" MICROSILICA CONCRETE (MSC) OVERLAY WITH MACROFIBERS
2) INSTALL POLYMER MODIFIED ASPHALT EXPANSION JOINTS BETWEEN THE DECK AND APPROACH SLABS
3) REPLACE APPROACH GUARDRAIL AS DESIGNATED IN THE PLANS
4) SEAL THE SIDEWALK ON THE BRIDGE WITH GRAVITY FED RESIN
5) PATCH FORWARD ABUTMENT WITH TROWELABLE MORTAR
6) PATCH FORWARD ABUTMENT WITH TROWELABLE MORTAR
7) SEAL FORWARD ABUTMENT CONCRETE WITH EPOXY URETHAN SEALER.
8) REMOVE AND REPLACE THE LEFT SIDEWALK WITHIN THE LIMITS OF THE FORWARD APPROACH SLAB.

SITE PLAN
BRIDGE No.: CLE-48-0662
STATE ROUTE 48 OVER O'BANNON CREEK



- 1) *THIS SITE PLAN IS FROM ARCHIVED PLANS AND SHOULD BE USED AS REFERENCE ONLY*
- 2) *SEE SHEETS 22 - 23 FOR SUBSTRUCTURE CONCRETE PATCHING AND SEALING LIMITS*
- 3) *REMOVE EXISTING GUARDRAIL AND INSTALL NEW GUARDRAIL. TRANSITION TO EXISTING TYPE 5 GUARDRAIL PER SCD MGS-4.3*
- 4) *FLARE INSTALLATION OF NEW GUARDRAIL PER SCD MGS-6.1 AND TIE INTO THE EXISTING TYPE E ANCHOR ASSEMBLY*

 - HYDRODEMOLITION AND MSC OVERLAY

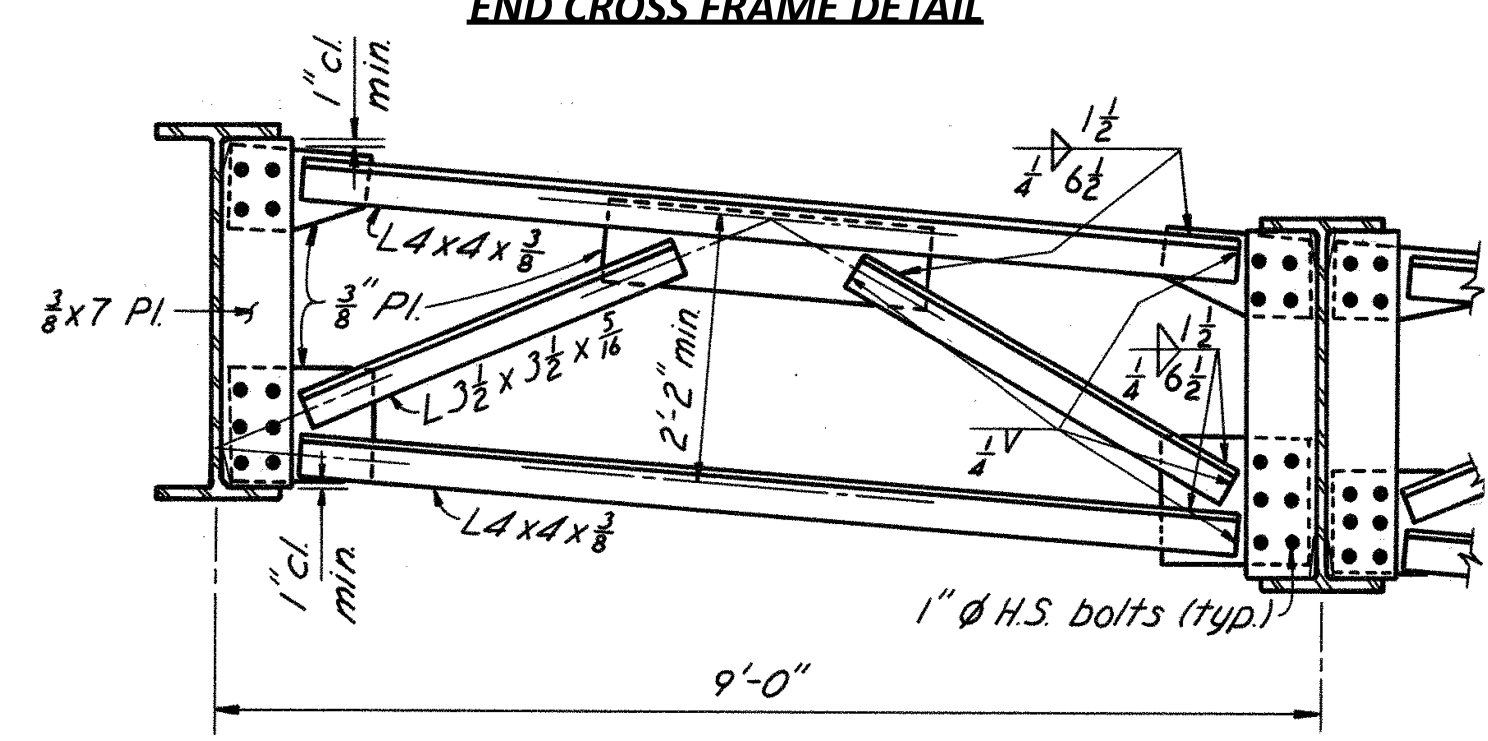
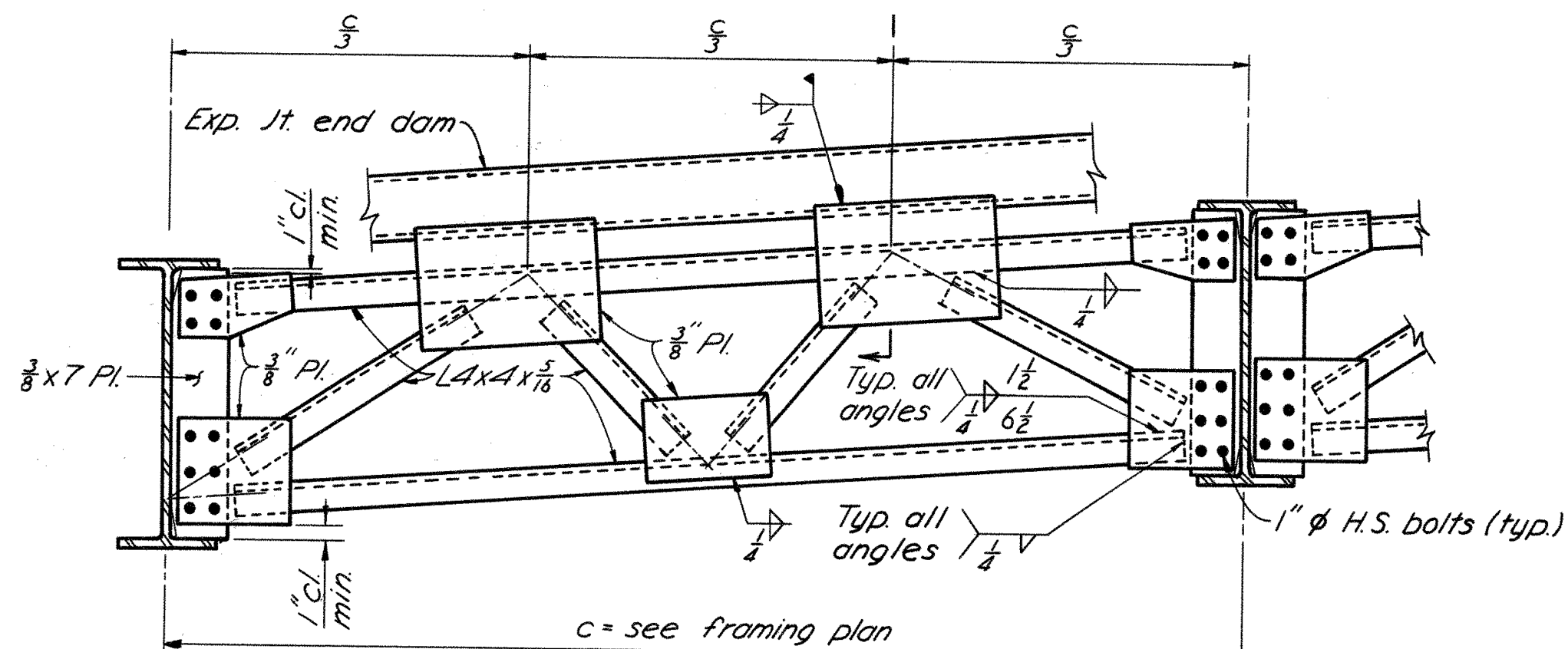
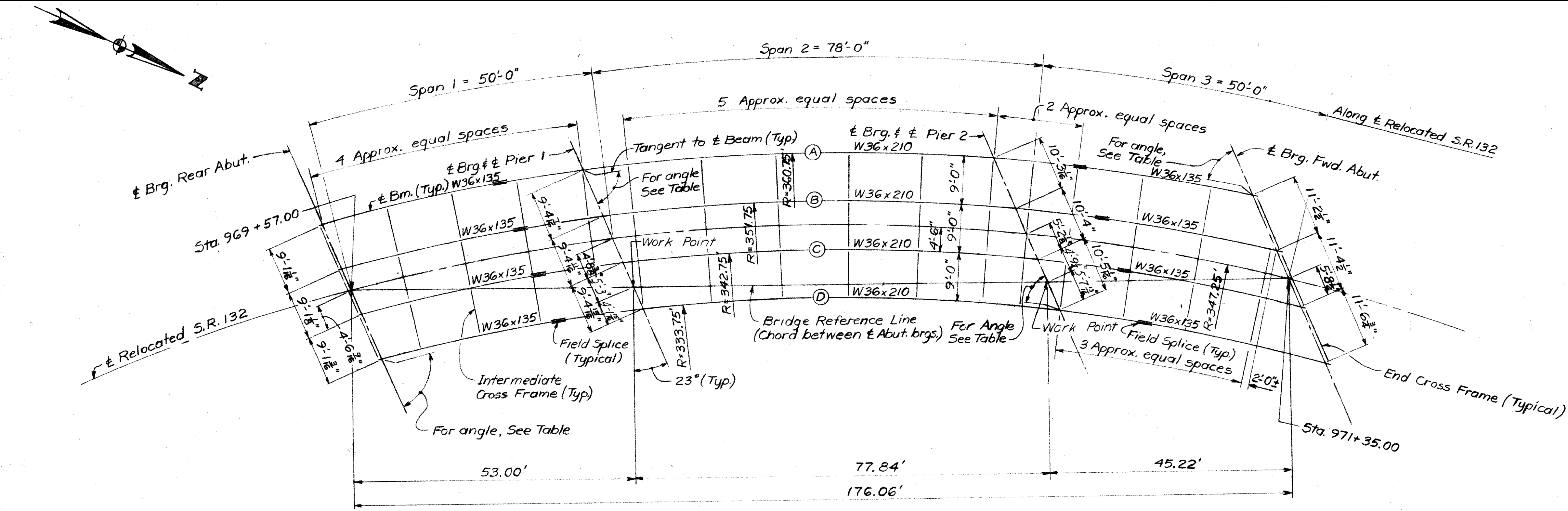
 - DECK EDGE REPLACEMENT

STRUCTURE CLEARS THE 25 YEAR
DESIGN HW BY 3.5 FEET.

SPANS: 50'-0"± - 78'-0"± - 50'-0"± (ALONG & S.R. 132)
ROADWAY: 32'-0" F/F GUARDRAIL
LOADING: HS 20-44 AND ALTERNATE MILITARY LOADING
SKEW: 10° L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: 16° 30' CURVE RIGHT
SUPERELEVATION: 0.08 FT/FT
STRUCTURE FILE NUMBER: 1302981
DATE BUILT: 1992
DISPOSITION: SEE PROPOSED WORK

- 1) REMOVE 1 1/2" OF THE ORIGINAL CONCRETE OVERLAY ON THE DECK AND APPROACH SLABS USING HYDRODEMOLITION PER SS848. REPLACE WITH 1 1/2" MICROSILICA CONCRETE (MSC) OVERLAY WITH MACROFIBERS
- 2) REMOVE AND REPLACE RIGHT CONCRETE DECK EDGE
- 3) INSTALL NEW TST-2-21 BRIDGE RAIL
- 4) RETROFIT THE EXISTING DEEP BEAM RAILING ON THE LEFT SIDE PER SCD DBR-3-11 AND REPLACE W-SHAPE RAILING.
- 5) PATCH PIER 2 RIGHT OVERHANG CONCRETE
- 6) PAINT THE EXISTING STEEL PER 514, SYSTEM OZEU. COLOR SHALL BE FEDERAL COLOR FS-595C-15526, LIGHT BLUE.
- 7) REPLACE APPROACH GUARDRAIL AS DESIGNATED IN THE PLANS

SITE PLAN
BRIDGE No.: CLE-132-1776
STATE ROUTE 132 OVER STONELICK CREEK



FRAMING PLAN

FIELD PAINTING OF STRUCTURAL STEEL CALCULATIONS

BEAM	SIZE	QUANTITY	PERIMETER (FT)	LENGTH (FT)	SURFACE AREA (SQ FT)
B-1	W36x135	1	7.78	33.91	422.2
	W36x210	1	7.94	109.47	
	W36x135	1	7.78	33.20	
B-2	W36x135	1	8.55	33.97	451.2
	W36x210	1	8.66	109.81	
	W36x135	1	8.55	33.72	
B-3	W36x135	1	8.55	34.03	452.7
	W36x210	1	8.66	110.19	
	W36x135	1	8.55	34.30	
B-4	W36x135	1	7.78	34.10	426.6
	W36x210	1	7.94	110.61	
	W36x135	1	7.78	34.95	
		TOTAL		1753	

INTERMEDIATE CROSSFRAME	SIZE	QUANTITY	PERIMETER (FT)	LENGTH DIAGONAL MEMBERS (FT) [EACH-2 TOTAL]	LENGTH TOP-BOTTOM MEMBER (FT) [EACH-2 TOTAL]	SURFACE AREA (SQ FT)
CF-1	L4x4x3/8	44	1.29	3.40	7.82	1273.6
		TOTAL	44		TOTAL	1273.6

PLATE	SIZE	QUANTITY	THICKNESS (FT)	HEIGHT (FT)	WIDTH (FT)	SURFACE AREA (SQ FT)
PLATE-CF-1	3/8"	88	0.03125	2.83	0.583	301.5
PLATE-CF-2	3/8"	44	0.03125	0.83	2.667	204.0
PLATE-CF-3	3/8"	88	0.03125	0.58	1.417	154.8
PLATE-CF-4	3/8"	88	0.03125	1.42	1.417	365.1
		TOTAL	308		TOTAL	1025.33

END CROSSFRAME	SIZE	QUANTITY	PERIMETER (FT)	LENGTH DIAGONAL MEMBERS (FT) [EACH-4 TOTAL]	LENGTH TOP-BOTTOM MEMBER (FT) [EACH-2 TOTAL]	SURFACE AREA (SQ FT)
B1-B2 R	L4x4x3/8	6	1.29	2.98	9.13	69.8
B1-B2 F	L4x4x3/8	6	1.29	3.47	11.26	486.8
B2-B3 R	L4x4x3/8	6	1.29	2.98	9.14	342.1
B2-B3 F	L4x4x3/8	6	1.29	3.47	11.43	493.8
B3-B4 R	L4x4x3/8	6	1.29	2.98	9.14	342.3
B3-B4 F	L4x4x3/8	6	1.29	3.47	11.62	501.6
		TOTAL	36		TOTAL	2236.25

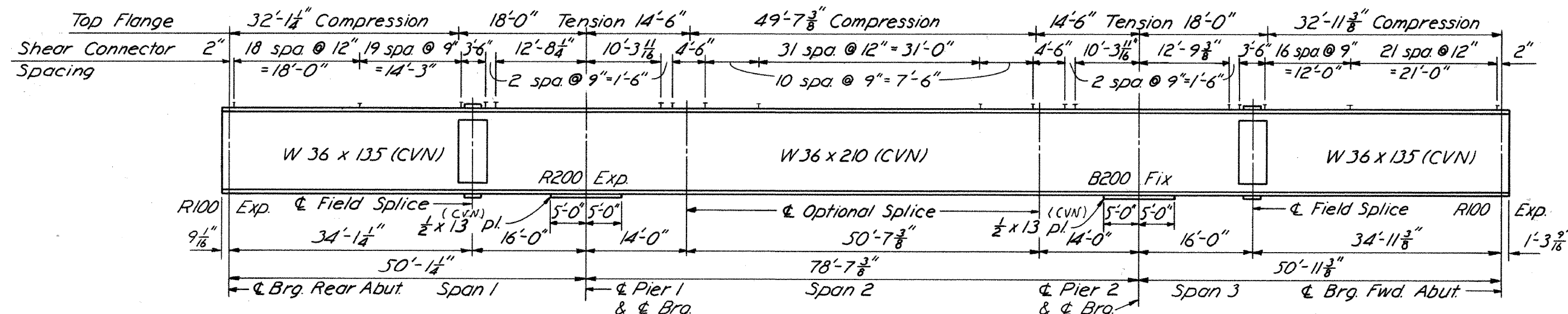
PLATE	SIZE	QUANTITY	THICKNESS (FT)	HEIGHT (FT)	WIDTH (FT)	SURFACE AREA (SQ FT)
PLATE-EF-1	3/8"	12	0.03125	2.83	0.583	41.1
PLATE-EF-2	3/8"	12	0.03125	1.750	2.000	86.2
PLATE-EF-3	3/8"	6	0.03125	1.250	1.417	22.0
PLATE-EF-4	3/8"	12	0.03125	0.583	1.417	21.1
PLATE-EF-5	3/8"	12	0.03125	1.417	1.417	49.8
		TOTAL	54		TOTAL	220.18

TOTAL SURFACE AREA * (SQ FT)	5,386
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*TOTAL SURFACE AREA INCLUDES:

2.875 SQ. FT. x 8 BEARINGS = 23 SQ. FT.
+ 2.0% ADDITIONAL FOR BOLTS. & MISC. = 105 SQ. FT.
= 128 SQ. FT.

TYPICAL BEAM ELEVATION
(BEAM 4 SHOWN, BEAMS 1-3 SIMILAR)



BENDING DIAGRAMS

TYPE-2