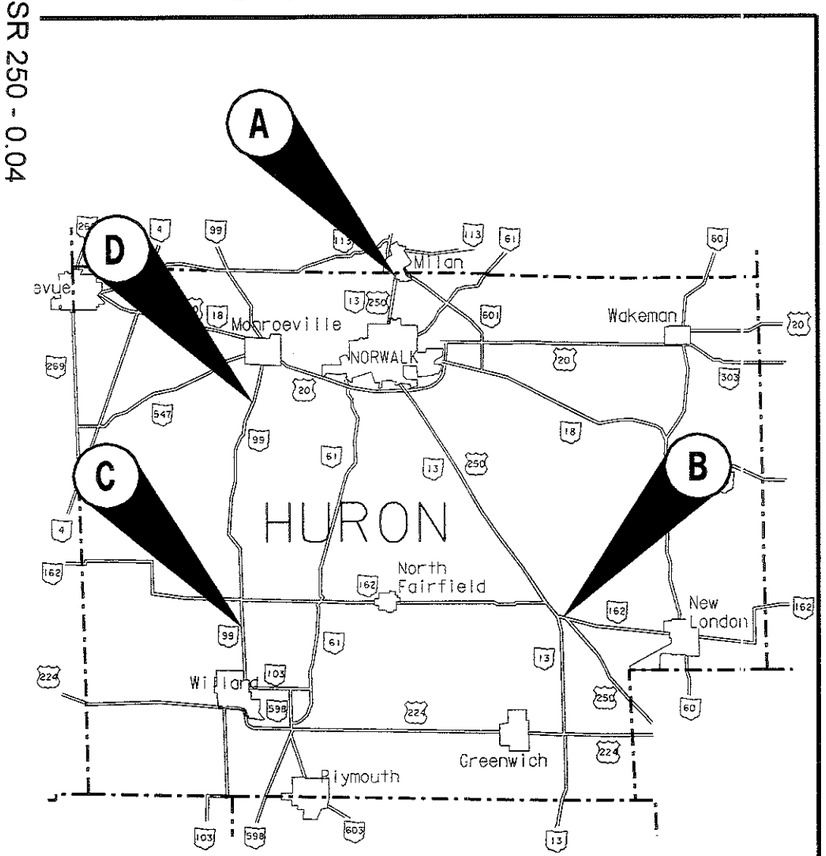
HUR - USR 250 - 0.04
020366 PID - 22684
Dist 3 7/31/2002

OHIO DEPARTMENT OF TRANSPORTATION

LOCATION MAP



PART	COUNTY	ROUTE	SECTION	PROJECT TERMINI		NET LENGTH	CITY	VILLAGE
				BEGIN	END			
A	**HURON**	**US 250**	**0.04**					MILAN
B	**HURON**	**US 250**	**15.56**					
C	HURON	SR 99	3.72					
D	HURON	SR 99	13.14					

HUR-250-0.04/VAR

PROJECT DESCRIPTION: This project will include bridge deck overlays, deck edge replacement, rock channel protection, pier and column encasements and patching of floorbeams as detailed in the plan.

INDEX OF SHEETS:

2002 SPECIFICATIONS

THE STANDARD 2002 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY FOR PART B AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PLAN AND PROPOSAL.

4/22/02 — APPROVED DATE
Thomas M. O'Leary /KW — DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION

5-7-02 — APPROVED DATE
Gordon Proctor — DIRECTOR, DEPARTMENT OF TRANSPORTATION

CONVERSION OF METRIC STANDARD DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.011 OF THE CMS. THE APPENDIX OF ASTM E 380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROXIMATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

TWO WORKING DAYS BEFORE YOU DIG
Call- 800-362-2764
TOLL FREE
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY

DISTRICT THREE PRODUCTION DEPARTMENT

ENGINEER'S SEAL

STATE OF OHIO — DAVID C. MOLLENSHOTT E-50210 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: David Mollenshott
DATE: 4/22/02

STANDARD DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	
GR-1.1M	10-21-97	MT-35.10	4-20-01	DS-1-92	12-15-94		
GR-1.2M	1-3-96	MT-96.10M	1-30-95	PCB-91	7-06-99	843	5-5-98
GR-2.1M	4-14-98	MT-96.11M	1-30-95	TST-1-99	10-20-00	848	2-8-02
		MT-96.20M	1-30-95			864	7-11-00
		MT-96.25	4-20-01				
		MT-97.10M	4-25-94				
		MT-101.20M	3-01-96				
		MT-101.60M	4-25-94				
		MT-105.10M	4-25-94				
		MT-105.11M	4-25-94				

FEDERAL PROJECT NO. NON-FEDERAL
PID NO. 22684
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
HUR-250-0.04
1 / 22

DESIGN FILE: i:\projects\22684\Geopak\title.dgn
WORKSTATION: dmollens DATE: 04/16/02

REFERENCES SHALL BE MADE TO STANDARD DRAWINGS:

DS-1-92	DATED	12/15/94	MT-96.11M	DATED	1/30/95
PCB-91	DATED	7/06/99	MT-96.20M	DATED	1/30/95
TST-1-99	DATED	10/20/00	MT-96.25	DATED	4/20/01
GR-1.1M	DATED	10/21/97	MT-97.10M	DATED	4/25/94
GR-1.2M	DATED	1/3/96	MT-101.20M	DATED	3/01/96
GR-2.1M	DATED	4/14/98	MT-101.60M	DATED	4/25/94
MT-35.10	DATED	4/20/01	MT-105.10M	DATED	4/25/94
MT-96.10M	DATED	1/30/95	MT-105.11M	DATED	4/25/94

AND TO SUPPLEMENTAL SPECIFICATIONS:

843	DATED	5/5/98
848	DATED	2/8/02
864	DATED	7/11/00

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATION AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.02. THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OHIO.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURES BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED ON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

DESIGN DATA:

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 PSI

REINFORCING STEEL - ASTM A615, A616, A617 - GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI

ALL REINFORCING STEEL IS TO BE GRADE 60 EPOXY COATED

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996 INCLUDING THE 1997, 1998, 1999 AND 2000 INTERIM SPECIFICATIONS, AND THE ODOT BRIDGE DESIGN MANUAL.

UTILITIES:

THERE ARE NO KNOWN UNDERGROUND UTILITIES ON THIS PROJECT.

ITEM 202 - REMOVAL MISC.: PILE ENCASEMENT:

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE PILE ENCASEMENTS SHALL BE REMOVED USING CHIPPING OR HAND TOOLS. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 35 POUND CLASS.

ALL EXCAVATION IS INCLUDED IN THIS ITEM.

IF THE STEEL PILINGS ARE DAMAGED DURING REMOVAL OF PILE ENCASEMENTS THE DAMAGE MUST BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR ITEM 202 - REMOVAL MISC.: PILE ENCASEMENT WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - REMOVAL MISC.: DELAMINATED CONCRETE:

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE COLUMNS TO BE ENCASED SHALL BE SOUNDED TO DETERMINE THE AREAS OF CONCRETE TO BE REMOVED. DELAMINATED CONCRETE SHALL BE REMOVED FROM THE COLUMNS USING CHIPPING OR HAND TOOLS. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 35 POUND CLASS.

AFTER REMOVAL OF DELAMINATED CONCRETE THE SURFACE SHALL BE CLEANED BY AN ABRASIVE BLASTING OR BY ULTRA-HIGH PRESSURE WATER-BLASTING. BLASTING ABRASIVES CONTAINING MORE THAN 1% FREE SILICA WILL NOT BE ALLOWED. EXPOSED REINFORCING STEEL SHALL BE BLAST CLEANED TO GRADE Sa 2. ALL WORK SHALL BE DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 202 - REMOVAL MISC.: DELAMINATED CONCRETE WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 - CONCRETE, MISC.: ENCASEMENT:

THE CONCRETE SHALL BE CLASS C AND THE COARSE AGGREGATE SHALL CONSIST OF LIMESTONE.

ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (DECK EDGE RECONSTRUCTION):

THE COARSE AGGREGATE SHALL CONSIST OF LIMESTONE.

DESIGN FILE: i:\projects\22684\Geopak\struct.dgn
WORKSTATION: dmollens DATE: 04/16/02

DESIGN AGENCY: DISTRICT THREE

REVISED ACA 4/17/02 STRUCTURAL FILE NUMBER

DRAWN KAW REVISED

DESIGNED KAW 3-02 CHECKED RDN

GENERAL NOTES

HUR-250-0.04

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ITEM SPECIAL- STRUCTURE MISC.: EMBEDDED GALVANIC ANODE (EGA):

GENERAL

THIS SECTION INCLUDES FURNISHING ALL LABOR, TOOLS, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO PROPERLY INSTALL EMBEDDED GALVANIC ANODES.

REFERENCES

ASTM B418-95A (2000) STANDARD SPECIFICATION FOR CAST AND WROUGHT GALVANIC ZINC ANODES.

MATERIALS

EMBEDDED GALVANIC ANODES SHALL BE PUCK-SHAPED APPROXIMATELY 2 INCHES IN DIAMETER BY 1 INCH HIGH, PRE-MANUFACTURED, AND CONSIST OF ELECTROLYTIC HIGH GRADE ZINC IN COMPLIANCE WITH ASTM 8418 CAST AROUND A PAIR OF STEEL TIE WIRES AND ENCASED IN A HIGHLY ALKALINE CEMENTITIOUS SHELL WITH A PH OF 14 OR GREATER.

EMBEDDED GALVANIC ANODES (EGAs) SHALL BE CORR-STOPS CP AVAILABLE FROM CHEMREX 1-800-433-9517 OR GALVASHIELD XP AVAILABLE FROM VECTOR CORROSION TECHNOLOGIES (330) 723-1177 OR AN APPROVED EQUAL.

GALVANIC ANODE INSTALLATION

A. GALVANIC ANODES SHALL BE INSTALLED ALONG THE PERIMETER OF THE EXPOSED EXISTING REINFORCING STEEL AS DIRECTED BY THE ENGINEER. IN NO CASE SHALL THE DISTANCE BETWEEN ANODES EXCEED 30 INCHES.

B. PROVIDE SUFFICIENT CLEARANCE BETWEEN ANODES AND SUBSTRATE TO ALLOW REPAIR MATERIAL TO ENCASE ANODE.

C. SECURE THE GALVANIC ANODES AS CLOSE AS POSSIBLE TO THE PATCH EDGE USING THE ANODE TIE WIRES. THE TIE WIRES SHOULD BE TIGHTENED TO ALLOW LITTLE OR NO FREE MOVEMENT.

1. IF THE ANODE IS TO BE TIED ONTO A SINGLE BAR, OR IF LESS THAN 1 INCH OF CONCRETE COVER IS EXPECTED, PLACE ANODE BENEATH THE BAR AND SECURE TO CLEAN REINFORCING STEEL.

2. IF SUFFICIENT CONCRETE COVER EXISTS, THE ANODE MAY BE PLACED AT THE INTERSECTION BETWEEN TWO BARS AND SECURED TO CLEAN BAR.

ELECTRICAL CONTINUITY

CONFIRM ELECTRICAL CONNECTION BETWEEN ANODE TIE WIRE AND REINFORCING STEEL WITH A MULTI-METER.

ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2 1/4 INCH THICK):

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

THE SURFACE FINISH REQUIREMENTS BE AS PER CMS 511, SECTION 511.20 IN LIEU OF THAT WHICH IS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 848.

SEE THE SUPPLEMENTAL SPECIFICATION FOR DETAILS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE YARD FOR THE ABOVE ITEMS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN:

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

SEE THE SUPPLEMENTAL SPECIFICATION FOR DETAILS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 614 - BARRIER REFLECTOR, TYPE A2:
ITEM 614 - BARRIER REFLECTOR, TYPE B2:

REFLECTORS AND THEIR MOUNTING SHALL CONFORM TO ITEM 626 EXCEPT THAT THE SPACING SHALL BE AS SHOWN ON THE STANDARD DRAWING.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH FOR ITEM 614 - BARRIER REFLECTOR, TYPE A2 OR B2 WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

DESIGN FILE: i:\projects\22684\Geopak\struct.dgn
WORKSTATION: dmollens DATE: 04/16/02

DESIGN AGENCY DISTRICT THREE
DESIGNED KAW 2-02 DETAILED RDW
DRAWN KAW REVISED
REVIEWED MCH STRUCTURAL FILE NUMBER DATE 4/17/02
GENERAL NOTES
HUR-250-0.04
3 22

ITEM 614 - MAINTAINING TRAFFIC:

FOR STRUCTURE HUR-99-0372:

DURING REPLACEMENT OF THE CONCRETE OVERLAY, TWO WAY, ONE LANE TRAFFIC WITH TRAFFIC SIGNALS SHALL BE MAINTAINED AS SHOWN ON SHEET NO. 21 FOR A MAXIMUM OF 60 CONSECUTIVE CALENDAR DAYS (TOTAL BOTH PHASES). THE 60 CONSECUTIVE DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE 60 CALENDAR DAYS THAT THE HIGHWAY REMAINS IN A SIGNALIZED CLOSURE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER 108.07.

THE LOCATION OF THE ADVANCE WARNING SIGNS SHOULD BE ADJUSTED TO PROVIDE FOR ADEQUATE SIGHT DISTANCE FOR THE EXISTING VERTICAL AND HORIZONTAL ROADWAY ALIGNMENT.

THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FT. CLEARANCE TO EXISTING SIGNS.

FOR STRUCTURE HUR-99-1314:

DURING RECONSTRUCTION OF THE DECK EDGES AND REPLACEMENT OF THE CONCRETE OVERLAY AND BRIDGE RAIL, TWO WAY, ONE LANE TRAFFIC WITH TRAFFIC SIGNALS SHALL BE MAINTAINED AS SHOWN ON SHEET NO. 22 FOR A MAXIMUM OF 90 CONSECUTIVE CALENDAR DAYS (TOTAL BOTH PHASES) FOR EACH STRUCTURE. THE 90 CONSECUTIVE DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE 90 CALENDAR DAYS THAT THE HIGHWAY REMAINS IN A SIGNALIZED CLOSURE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER 108.07.

THE LOCATION OF THE ADVANCE WARNING SIGNS SHOULD BE ADJUSTED TO PROVIDE FOR ADEQUATE SIGHT DISTANCE FOR THE EXISTING VERTICAL AND HORIZONTAL ROADWAY ALIGNMENT.

THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FT. CLEARANCE TO EXISTING SIGNS.

NO EQUIPMENT OR MATERIAL SHALL BE LOCATED OTHER THAN BEHIND THE PORTABLE CONCRETE BARRIER.

FOR STRUCTURE HUR-250-0004:

TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT DURING WORKING HOURS WHEN ONE LANE MAY BE CLOSED USING FLAGGERS AS PER STANDARD DRAWING MT-97.10M.

THERE SHALL BE NO LANE CLOSURES UNLESS WORK IS CURRENTLY BEING DONE THAT WARRANTS SUCH A CLOSURE.

ALL LANE CLOSURES ON THIS STRUCTURE SHALL BE COMPLETED BY MAY 15, 2003. MAY 15, 2003 SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THIS DATE THAT THE HIGHWAY REMAINS IN A FLAGGERS CLOSURE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER 108.07.

ALL WORK VEHICLES LICENSED TO OPERATE ON THE HIGHWAY, INCLUDING MATERIAL TRUCKS, SHALL BE EQUIPPED WITH A FLASHING, ROTATING OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC FOR A MINIMUM OF 1/4 MILE IN BRIGHT SUNLIGHT AND SHALL BE OPERATED WITH LIGHTED HEAD AND TAIL LAMPS. THE AMBER LIGHT SHALL BE IN OPERATION AT ALL TIMES WITHIN THE WORK ZONE AND WHILE TRAVELING TO AND FROM THE WORK ZONE WHENEVER THE VEHICLE SPEED IS BELOW 40 MPH. VEHICLE HAZARD LAMPS DO NOT SATISFY THIS REQUIREMENT. ALL OTHER EQUIPMENT SHALL BE EQUIPPED WITH A FLASHING, ROTATING OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC FOR A MINIMUM OF 1/4 MILE IN BRIGHT SUNLIGHT. THE AMBER LIGHT SHALL BE IN OPERATION WHILE THE EQUIPMENT IS WITHIN THE WORK ZONE.

LIGHTING USED TO ILLUMINATE THE WORK AREA SHALL BE AIMED AND SHIELDED TO PREVENT GLARE ENCROACHING INTO OPEN TRAFFIC LANES.

CONSTRUCTION EQUIPMENT, PRIVATE VEHICLES AND MATERIALS SHALL NOT BE PARKED OR STORED ON THE ROADWAY OR ADJACENT TO THE ROADWAY WITHIN THE 30 FT. CLEAR ZONE OF THE TRAVELED LANES.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AS WELL AS IN ACCORDANCE WITH PART 7 OF THE OMUTCD. PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO PROVIDE THIS METHOD OF TRAFFIC CONTROL SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DESIGN AGENCY: DISTRICT THREE

DESIGNED KAW 2-02 | DRAWN KAW | REVIEWED ACH | DATE 4/17/02

CHECKED RDN | REVISED | STRUCTURAL FILE NUMBER

GENERAL NOTES

HUR-250-0.04

4/22

DESIGN FILE: i:\projects\22684\Geopak\struct.dgn
WORKSTATION: dmollens DATE: 04/16/02

BRIDGE DECK DATA							
PART	COUNTY, ROUTE, BRIDGE NO.	STRUCTURE TYPE	LENGTH (BRIDGE DECK)	WIDTH	BRIDGE DECK AREA	SKEW	EXISTING WEARING SURFACE
			LIN.FT.	LIN.FT.	SQ.YD.		
A	HUR-250-0004	5-SPAN STEEL BEAM	255.0	28.0	794	0°	ASPHALT
B	HUR-250-1556	6-SPAN CONCRETE ARCH	167.75	29.0	541	0°	CONCRETE
C	HUR-99-0372	3-SPAN CONCRETE SLAB	60.0	36.0	240	0°	CONCRETE
D	HUR-99-1314	3-SPAN STEEL BEAM	125.7	44.0	615	25° R.F.	CONCRETE

DESIGN AGENCY: DISTRICT THREE

REVIEWED ACH DATE 4/17/02 STRUCTURAL FILE NUMBER

DRAWN K.AW REVISED

DESIGNED K.AW CHECKED RDN

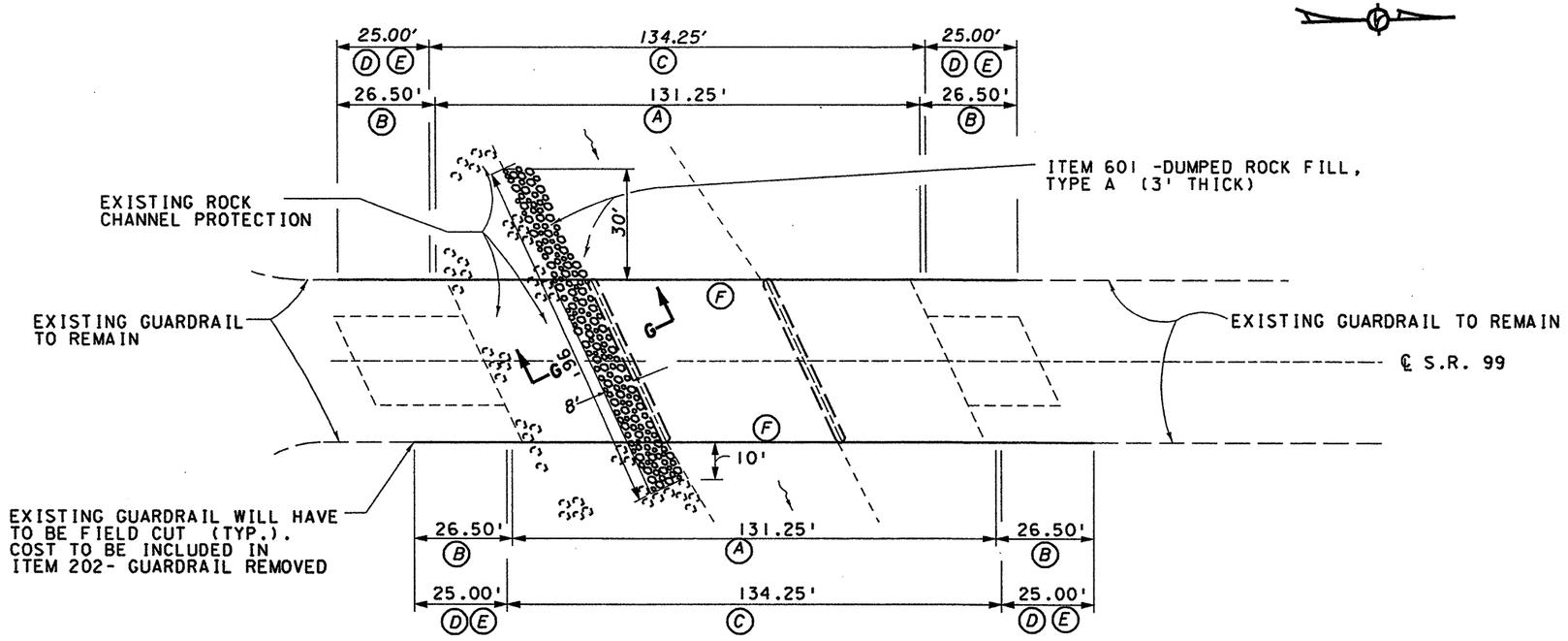
STRUCTURE INFORMATION

HUR-250-0.04

9/22

DESIGN FILE: i:\projects\22684\Geopak\struct.dgn
WORKSTATION: dmollens DATE: 04/16/02

(A) ITEM 202- BRIDGE RAILING REMOVED
(B) ITEM 202- GUARDRAIL REMOVED
(C) ITEM 517- RAILING (TWIN STEEL TUBE)
(D) ITEM 606- GUARDRAIL, TYPE 5
(E) ITEM 606- BRIDGE TERMINAL ASSEMBLY, TYPE 3 (MODIFIED)
(F) ITEM 802- BARRIER REFLECTOR, TYPE B



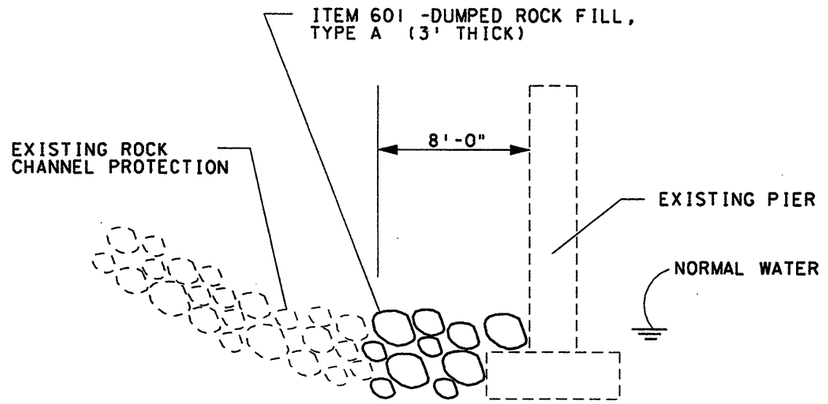
PLAN VIEW

NOTES:

1) SEE SHEET 19 FOR SUPERSTRUCTURE REPAIR DETAILS
2) THE EXISTING BRIDGE RAILING SHALL BE REPLACED WITH ITEM 517 - RAILING (TWIN STEEL TUBE) AS PER DETAILS ON SHEET 20

ITEM	QUANTITY	UNIT	DESCRIPTION
202	29	cu yd	PORTIONS OF STRUCTURE REMOVED (DECK EDGE)
202	106.0	ft	GUARDRAIL REMOVED
202	262.5	ft	BRIDGE RAILING REMOVED
509	2566	pound	EPOXY COATED REINFORCING STEEL
511	33	cu yd	CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (DECK EDGE RECONSTRUCTION)
517	268.5	ft	RAILING (TWIN STEEL TUBE)
SPECIAL	284	ft	STEEL DRIP STRIP
601	86	cu yd	DUMPED ROCK FILL, TYPE A
606	100.0	ft	GUARDRAIL, TYPE 5
606	4	each	BRIDGE TERMINAL ASSEMBLY, TYPE 3 (MODIFIED)
626	4	each	BARRIER REFLECTOR, TYPE B
848	620	sq yd	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2¼ INCH THICK)
848	555	sq yd	SURFACE PREPARATION USING HYDRODEMOLITION
848	12	cu yd	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
848	17	sq yd	HAND CHIPPING
848	lump		TEST SLAB
848	1	cu yd	FULL-DEPTH REPAIR
848	555	sq yd	EXISTING CONCRETE OVERLAY REMOVED (1¼ INCH NOMINAL THICKNESS)
864	103	sq yd	SEALING OF CONRETE SURFACES (EPOXY-URETHANE)

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET NO. 7



SECTION G-G

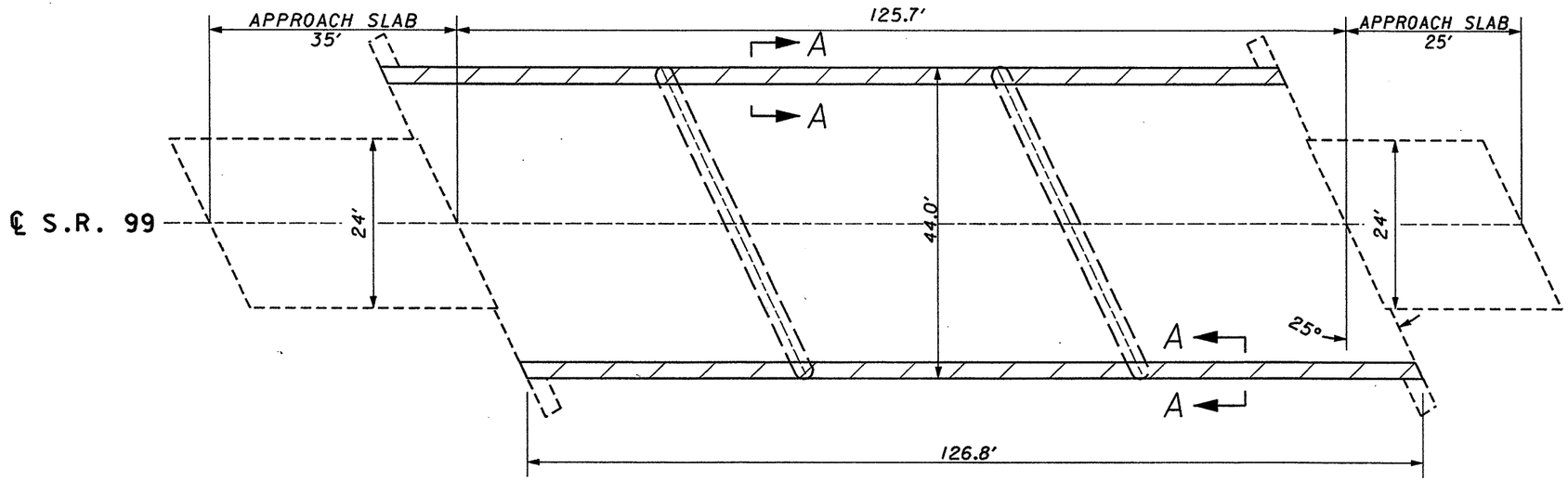
DESIGN FILE: I:\projects\22684\Geopak\struct.dgn
WORKSTATION: dmollens DATE: 04/16/02

DESIGN AGENCY: DISTRICT THREE
DESIGNED dcm DRAWN dcm CHECKED RSW
REVISED DATE: 4/17/02 STRUCTURAL FILE NUMBER 3902439

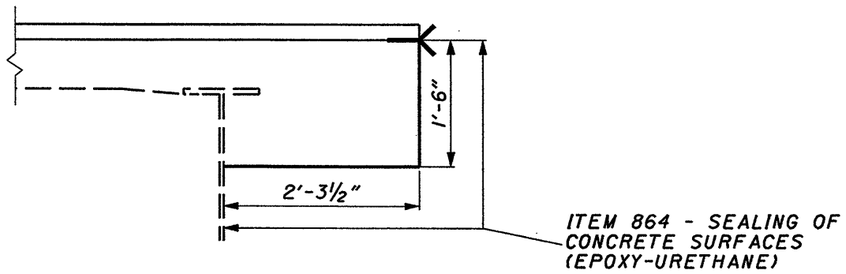
GENERAL PLAN
BRIDGE NO. HUR-99-1314 OVER FRINK RUN

HUR-250-0.04

18/22



PLAN VIEW



TYPICAL SEALING DETAIL

ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (DECK EDGE RECONSTRUCTION)

ITEM	QUANTITY	UNIT	DESCRIPTION
202	29	cu yd	PORTIONS OF STRUCTURE REMOVED (DECK EDGE)
509	2566	pound	EPOXY COATED REINFORCING STEEL
511	33	cu yd	CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (DECK EDGE RECONSTRUCTION)
SPECIAL	284	ft	STEEL DRIP STRIP
848	620	sq yd	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2¼ INCH THICK)
848	555	sq yd	SURFACE PREPARATION USING HYDRODEMOLITION
848	12	cu yd	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
848	17	sq yd	HAND CHIPPING
848	lump		TEST SLAB
848	1	cu yd	FULL-DEPTH REPAIR
848	555	sq yd	EXISTING CONCRETE OVERLAY REMOVED (1¼ INCH NOMINAL THICKNESS)
864	103	sq yd	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

ALL QUANTITIES CARRIED TO SHEET 18

NOTES:

1) THE EXISTING BRIDGE RAIL AND GUARDRAIL ARE NOT SHOWN. SEE SHEET NO.18 FOR DETAILS
2) SEE SHEET 20 FOR SECTION A-A
3) THE PROPOSED 2¼" THICK MICRO-SILICA MODIFIED CONCRETE OVERLAY SHALL EXTEND FROM EDGE TO EDGE OF DECK
4) THE EXISTING CONCRETE OVERLAY ON THE ENTIRE BRIDGE DECK SHALL BE REMOVED USING ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED (1¼" NOMINAL THICKNESS)
5) THE ENTIRE BRIDGE DECK SHALL BE OVERLAYED USING ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2¼" THICKNESS)

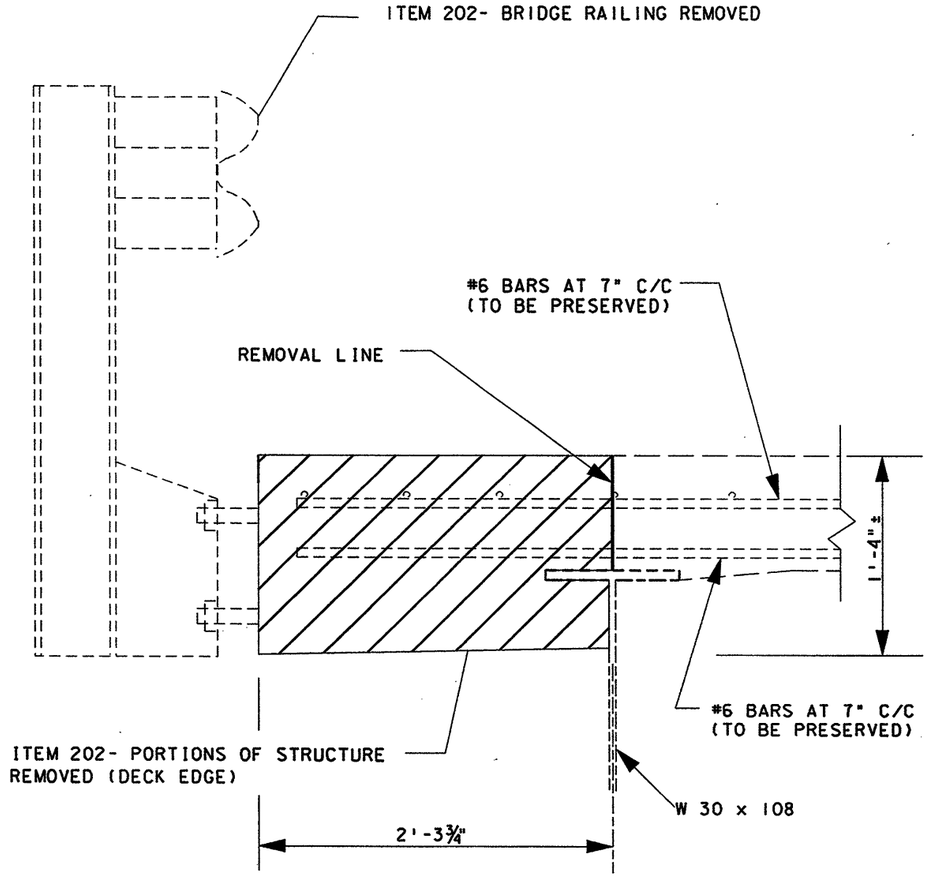
DESIGN AGENCY: DISTRICT THREE
DESIGNED: dcm
DRAWN: gls
REVIEWED: ACH
DATE: 4/7/02
CHECKED: RDN
REVISED:
STRUCTURAL FILE NUMBER: 3902439

SUPERSTRUCTURE REPAIR
HUR-99-1314

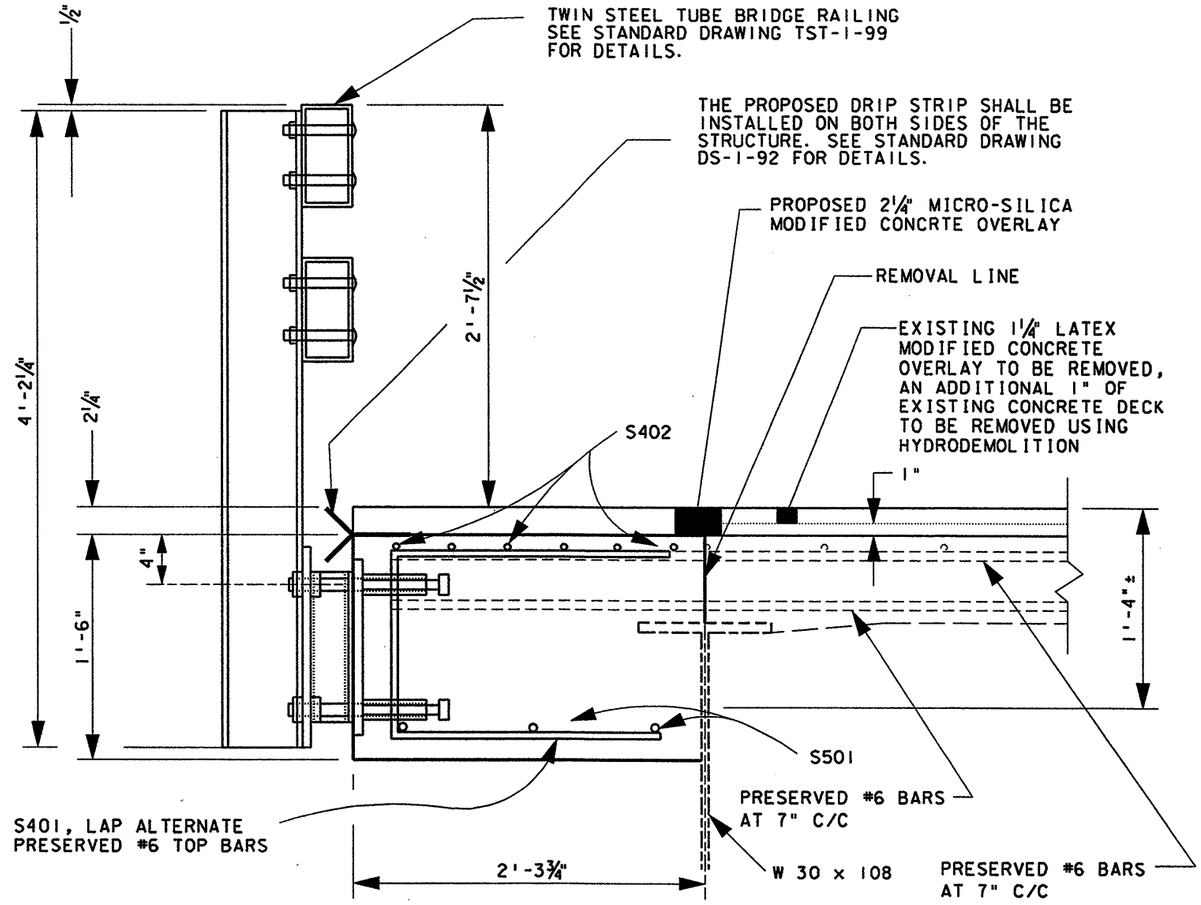
HUR-250-0.04

19
22

DESIGN FILE: i:\projects\22684\Geopak\struct.dgn
WORKSTATION: dmollens DATE: 04/16/02



EXISTING SECTION A-A



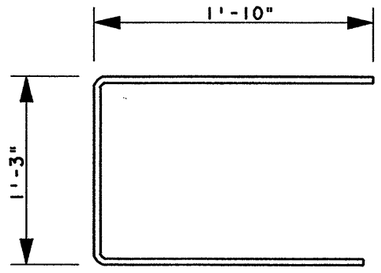
PROPOSED SECTION A-A

DECK LENGTH = 126.8'
SKEW = 25° R.F.

EPOXY COATED
REINFORCING STEEL, GRADE 60

REBAR DATA				
MARK	LENGTH	SHAPE	QUANTITY	WEIGHT
S401	4'-9"	B	210	666
S402	33'-1"	S	48	1061
S501	33'-6"	S	24	839
			TOTAL	2566

NOTE:
ADDITIONAL EXISTING BARS AT
THE PIERS AND ABUTMENTS
SHALL BE PRESERVED.



S401

NOTES:

1) REMOVE 2'-3¾" OF BOTH SIDES OF EXISTING DECK EDGES
2) LAP #4 BARS 2'-0" MINIMUM
3) LAP #5 BARS 2'-6" MINIMUM
4) BOTH DECK EDGES SHALL BE RECONSTRUCTED USING ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (DECK EDGE RECONSTRUCTION)
5) THE PROPOSED DECK EDGES SHALL BE SEALED USING ITEM 864 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE). FOR DETAILS SEE SHEET NO. 19

DESIGN AGENCY: DISTRICT THREE
DESIGNED: dcm | DRAWN: gls | REVIEWED: ACH 4/7/02 | DATE
CHECKED: RDW | REVISED | STRUCTURAL FILE NUMBER: 3902439

DECK EDGE REPLACEMENT DETAIL
BRIDGE NO. HUR-99-1314
OVER FRINK RUN

HUR-250-0.04

20
22

DESIGN FILE: i:\projects\22684\Geopak\struct.dgn
WORKSTATION: dmollens DATE: 04/16/02

SIGNAL TIMING

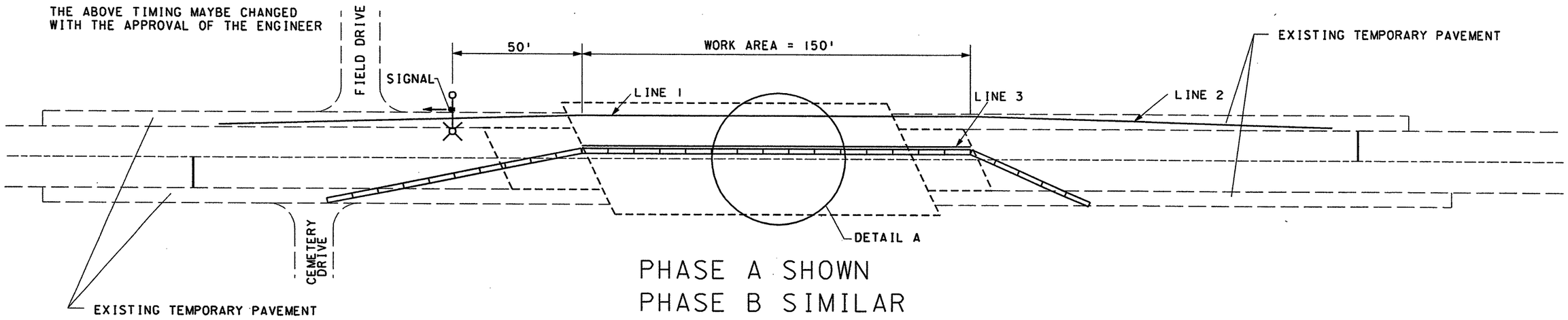
A TWO PHASE CONTROLLER WITH CABINET CAPABLE OF BEING SET WITH THE FOLLOWING SPLITS SHALL BE FURNISHED

CYCLE LENGTH: 60 SECONDS

	GREEN	AMBER	RED
PHASE A	15	5	10
PHASE B	15	5	10

THE ABOVE TIMING MAYBE CHANGED WITH THE APPROVAL OF THE ENGINEER

FOR DETAILS NOT SHOWN SEE STANDARD DRAWINGS
MT-96.11M, MT-96.20M, MT-96.25, MT-101.20M

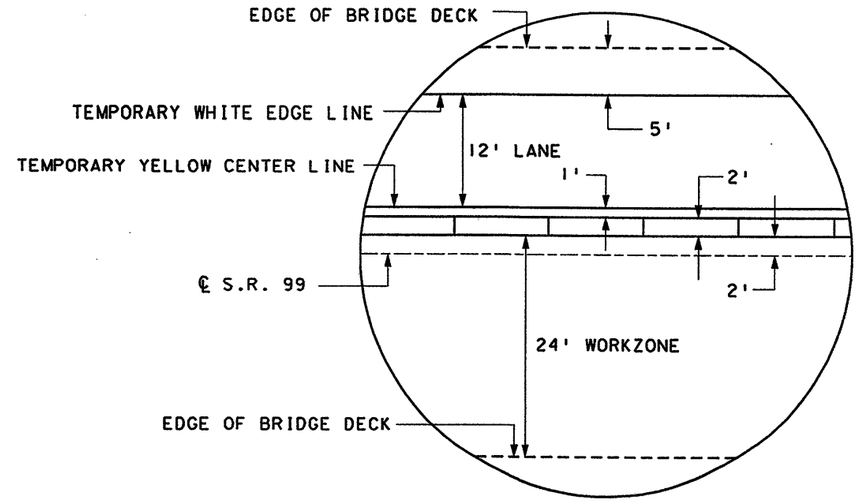


PHASE A SHOWN
PHASE B SIMILAR

TEMPORARY RAISED PAVEMENT MARKERS (TYPE A)			
	SPACING	QTY. (WHITE)	QTY. (YELLOW)
PHASE A LINE 1= 300'	5'-0"	61	61
LINE 2= 150'	5'-0"	30	
LINE 3= 150'	5'-0"	31	31
PHASE B LINE 1= 300'	5'-0"	61	61
LINE 2= 150'	5'-0"	30	
LINE 3= 150'	5'-0"	31	31
	TOTAL	244	184

ITEM	QUANTITY	UNIT	DESCRIPTION
614	428	each	WORK ZONE RAISED PAVEMENT MARKER
614	26	each	BARRIER REFLECTOR, TYPE A2
614	32	each	BARRIER REFLECTOR, TYPE B2
614	24	each	OBJECT MARKER
614	0.06	mile	WORK ZONE CENTER LINE, CLASS 1 (SOLID DOUBLE)
614	0.04	mile	WORK ZONE EDGE LINE, CLASS 1 (WHITE)
614	24	ft	WORK ZONE STOP LINE, CLASS 1
622	260	ft	PORTABLE CONCRETE BARRIER, 32"
622	300	ft	PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET NO. 8



DETAIL A

NOTES:

1) THE EXISTING BRIDGE RAILING AND GUARDRAIL ARE NOT SHOWN IN THE PLAN VIEW

DESIGN AGENCY: DISTRICT THREE
REVIEWED: ACH 4/17/02
DRAWN: dcm
DESIGNED: dcm
CHECKED: RDW
REVISED
STRUCTURAL FILE NUMBER: 3902439

MAINTENANCE OF TRAFFIC
BRIDGE NO. HUR-99-1314
OVER FRINK RUN

HUR-250-0.04

22/22

DESIGN FILE: i:\projects\22684\Geopak\struct.dgn
WORKSTATION: dmollens DATE: 04/16/02