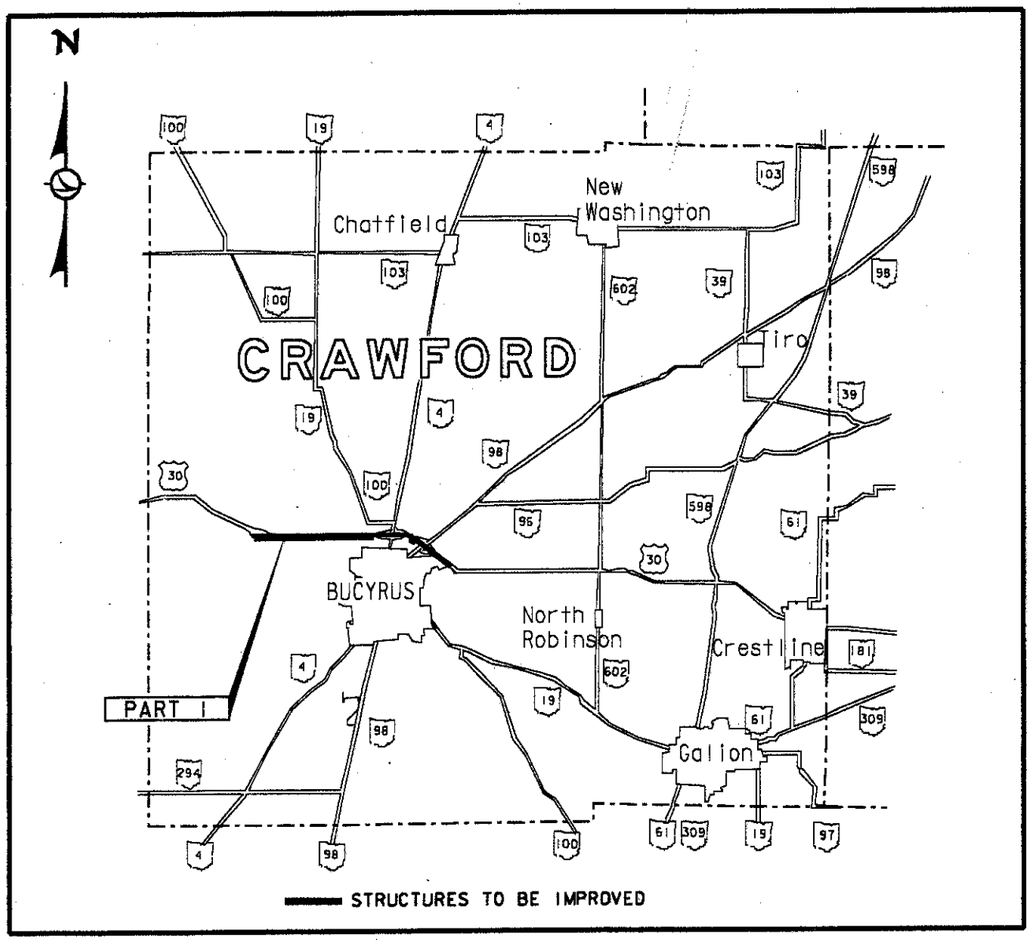
OHIO DEPARTMENT OF TRANSPORTATION

metric units

LOCATION MAP



CRA-30-6.453

PART	COUNTY	ROUTE	SECTIONS	CITY	VILLAGE
1	CRA	30	6.453		

BRIDGE DECK OVERLAYS

INDEX OF SHEETS:

1997 SPECIFICATIONS

THE STANDARD 1997 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 NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAYS AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

APPROVED DATE 6-9-97 — DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION

APPROVED DATE 6-13-97 — DIRECTOR, DEPARTMENT OF TRANSPORTATION

CRA-30-6.543
980058 02-04-98
41PGS DIST. 03

STANDARD DRAWINGS	
EXJ-4-87M	3/20/95
RB-1-55M	10/25/94
BP-3.1M	10/28/94
GR-1.1M	11/30/94
GR-1.2M	1/3/96
GR-2.1M	11/30/94
GR-3.4M	1/3/96
TC-41.20M	7/1/94
TC-52.10M	7/29/94
TC-52.20M	7/29/94
MT-35.10M	1/30/95

STANDARD DRAWINGS	
MT-35.11M	1/30/95
MT-95.30M	4/25/94
MT-98.12M	6/24/93
MT-98.13M	6/24/93
MT-98.14M	6/24/93
MT-98.15M	6/24/93
MT-98.16M	6/24/93
MT-99.10M	1/30/95
MT-105.10M	4/25/94
MT-105.11M	4/25/94

SUPPLEMENTAL SPECIFICATIONS	

FEDERAL PROJECT NO. NH-49(100)
PID NO. 17627
CONSTRUCTION PROJECT NO.
TITLE SHEET
CRA-30-6.453
1/41

DESIGN FILE: c:\bridge\cra030\title.dgn
WORKSTATION: eglover
DATE: 15 APR 97

GENERAL SUMMARY

metric units

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
614	11000	LUMP		MAINTAINING TRAFFIC
614	22200	1	kilometer	TEMPORARY EDGE LINE, CLASS I, 740.06, TYPE I
614	23400	500	meter	TEMPORARY CHANNELIZING LINE, CLASS I, 740.06, TYPE I
614	28400	300	meter	TEMPORARY GORE MARKING, CLASS II, 740.06, TYPE I
615	35001	22000	square meter	TEMPORARY PAVEMENT, AS PER PLAN
624	10000	LUMP		MOBILIZATION

BRIDGE NUMBER CRA-30-06453R (S.L.K.) CRA-30-0401R (S.L.M.) SFN 1701088

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
SPECIAL	53001300	87	meter	STRUCTURE, MISC.: JOINT SEALING

BRIDGE NUMBER CRA-30-06856L (S.L.K.) CRA-30-0426L (S.L.M.) SFN 1701118

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
SPECIAL	53001300	31	meter	STRUCTURE, MISC.: JOINT SEALING

BRIDGE NUMBER CRA-30-06856R (S.L.K.) CRA-30-0426R (S.L.M.) SFN 1701142

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
SPECIAL	53001300	31	meter	STRUCTURE, MISC.: JOINT SEALING

BRIDGE NUMBER CRA-30-11249L (S.L.K.) CRA-30-0699L (S.L.M.) SFN 1701207

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	806	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	10	each	REMOVAL MISC.: ROCKERS
202	98100	1	each	REMOVAL MISC.: STRIP SEAL
202	98200	20	meter	REMOVAL MISC.: STEEL RETAINERS
254	01000	267	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	87	liter	TACK COAT, 702.13
446	50000	10	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	10000	24	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	11210	20	meter	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	833	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	16	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	28	square meter	HAND CHIPPING
SPECIAL	51922400	833	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\equan.dgn
WORKSTATION: eglover DATE: 24 NOV 97

DESIGN AGENCY: DISTRICT THREE
DATE: 11-97
REVIEWED: RDW
STRUCTURAL FILE NUMBER:
DRAWN: EJG
REVISED:
DESIGNED: EJG 3-97
CHECKED: NRC

GENERAL SUMMARY

CRA-30-6.453

GENERAL SUMMARY

metric units

BRIDGE NUMBER CRA-30-11249R (S.L.K.) CRA-30-0699R (S.L.M.) SFN 1701231

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	806	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	10	each	REMOVAL MISC.: ROCKERS
254	01000	267	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	87	liter	TACK COAT, 702.13
446	50000	10	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	10000	24	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	833	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	16	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	28	square meter	HAND CHIPPING
SPECIAL	51922400	833	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

BRIDGE NUMBER CRA-30-11442L (S.L.K.) CRA-30-0711L (S.L.M.) SFN 1701266

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	458	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	10	each	REMOVAL MISC.: ROCKERS
202	98100	2	each	REMOVAL MISC.: STRIP SEAL
202	98200	12	meter	REMOVAL MISC.: STEEL RETAINERS
254	01000	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	70	liter	TACK COAT, 702.13
446	50000	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	01300	13	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	10000	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	11210	13	meter	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	483	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	9	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	16	square meter	HAND CHIPPING
SPECIAL	51922400	483	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

DESIGN AGENCY: DISTRICT THREE
DESIGNED: EJG 3-97
DRAWN: EJG
REVIEWED: RDW
DATE: 11-97
CHECKED: NRC
REVISED:
STRUCTURAL FILE NUMBER:
GENERAL SUMMARY
CRA-30-6.453
3
41

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\equan.dgn
WORKSTATION: eglover DATE: 24 NOV 97

GENERAL SUMMARY

metric units

BRIDGE NUMBER CRA-30-11442R (S.L.K.) CRA-30-0711R (S.L.M.) SFN 1701290

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	458	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	10	each	REMOVAL MISC.: ROCKERS
254	01000	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	70	liter	TACK COAT, 702.13
446	50000	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
516	10000	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	483	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	9	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	16	square meter	HAND CHIPPING
SPECIAL	51922400	483	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

BRIDGE NUMBER CRA-30-12231L (S.L.K.) CRA-30-0760L (S.L.M.) SFN 1701320

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	98100	10	each	REMOVAL MISC.: ROCKERS
254	01000	185	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	67	liter	TACK COAT, 702.13
446	50000	7	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	53001300	50	meter	STRUCTURE, MISC.: JOINT SEALING

DESIGN AGENCY: DISTRICT THREE

DESIGNED EJG 3-97 | DRAWN EJG | REVIEWED RDW 11-97 | DATE

CHECKED NRC | REVISED | STRUCTURAL FILE NUMBER

GENERAL SUMMARY

CRA-30-6.453

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WORKSTATION: eglover DATE: 24 NOV 97

GENERAL SUMMARY

metric units

BRIDGE NUMBER CRA-30-1223IR (S.L.K.) CRA-30-0760R (S.L.M.) SFN 1701355

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	574	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	10	each	REMOVAL MISC.: ROCKERS
202	98100	1	each	REMOVAL MISC.: STRIP SEAL
254	01000	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	70	liter	TACK COAT, 702.13
446	50000	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	01300	13	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	10000	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	599	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	12	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	20	square meter	HAND CHIPPING
SPECIAL	51922400	599	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

BRIDGE NUMBER CRA-30-13696L (S.L.K.) CRA-30-0851L (S.L.M.) SFN 1701444

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	890	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	14	each	REMOVAL MISC.: ROCKERS
202	98100	2	each	REMOVAL MISC.: STRIP SEAL
254	01000	318	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	98	liter	TACK COAT, 702.13
446	50000	11	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	01300	38	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	10000	32	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	46900	14	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	935	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	18	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	21	square meter	HAND CHIPPING
SPECIAL	51922400	935	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 3-97	EJG	RDN	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC			

GENERAL SUMMARY

CRA-30-6.453

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WORKSTATION: eglover DATE: 24 NOV 97

GENERAL SUMMARY

metric units

BRIDGE NUMBER CRA-30-13696R (S.L.K.) CRA-30-0851R (S.L.M.) SFN 1701479

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	568	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	10	each	REMOVAL MISC.: ROCKERS
202	98100	1	each	REMOVAL MISC.: STRIP SEAL
202	98200	12	meter	REMOVAL MISC.: STEEL RETAINERS
254	01000	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	70	liter	TACK COAT, 702.13
446	50000	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	10000	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	11210	13	meter	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	593	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	11	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	20	square meter	HAND CHIPPING
SPECIAL	51922400	593	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

BRIDGE NUMBER CRA-30-14033L (S.L.K.) CRA-30-0872L (S.L.M.) SFN 1701509

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	716	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	10	each	REMOVAL MISC.: ROCKERS
202	98100	2	each	REMOVAL MISC.: STRIP SEAL
254	01000	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	70	liter	TACK COAT, 702.13
446	50000	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	01300	31	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	10000	20	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	742	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	14	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	25	square meter	HAND CHIPPING
SPECIAL	51922200	5	cubic meter	FULL DEPTH REPAIR (MICRO-SILICA)
SPECIAL	51922400	742	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

DESIGN AGENCY: DISTRICT THREE

DATE: 11-97 | REVIEWED: KDW | STRUCTURAL FILE NUMBER

DRAWN: EJG | REVISED

DESIGNED: EJG 3-97 | CHECKED: AJRC

GENERAL SUMMARY

CRA-30-6.453

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WORKSTATION: eglover DATE: 24 NOV 97

GENERAL SUMMARY

metric units

BRIDGE NUMBER CRA-30-14033R (S.L.K.) CRA-30-0872R (S.L.M.) SFN 1701533

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	1087	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	14	each	REMOVAL MISC.: ROCKERS
202	98100	1	each	REMOVAL MISC.: STRIP SEAL
254	01000	455	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	147	liter	TACK COAT, 702.13
446	50000	16	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
516	01300	21	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	10000	42	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	46900	14	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51911704	27	meter	PATCHING CONCRETE STRUCTURE, MISC.: PATCHING AND WRAPPING PIER COLUMNS
SPECIAL	51922020	1134	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	22	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	25	square meter	HAND CHIPPING
SPECIAL	51922200	5	cubic meter	FULL DEPTH REPAIR (MICRO-SILICA)
SPECIAL	51922400	1134	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

BRIDGE NUMBER CRA-30-14597L (S.L.K.) CRA-30-0907L (S.L.M.) SFN 1701568

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	548	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	10	each	REMOVAL MISC.: ROCKERS
254	01000	232	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	74	liter	TACK COAT, 702.13
446	50000	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
516	10000	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	46900	10	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	574	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	11	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	18	square meter	HAND CHIPPING
SPECIAL	51922200	5	cubic meter	FULL DEPTH REPAIR (MICRO-SILICA)
SPECIAL	51922400	574	square meter	SURFACE PREPARATION USING HYDRODEMOLITION
606	35140	2	each	BRIDGE TERMINAL ASSEMBLY, TYPE 4

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 3-97	EJG	RDN	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC			

GENERAL SUMMARY

CRA-30-6.453

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\equan.dgn
WORKSTATION: eglover DATE: 24 NOV 97

GENERAL SUMMARY

metric units

BRIDGE NUMBER CRA-30-14597R (S.L.K.) CRA-30-0907R (S.L.M.) SFN 1701592

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
202	11300	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	23500	737	square meter	WEARING COURSE REMOVED, CONCRETE
202	98100	14	each	REMOVAL MISC.: ROCKERS
202	98100	1	each	REMOVAL MISC.: STRIP SEAL
202	98200	17	meter	REMOVAL MISC.: STEEL RETAINERS
254	01000	309	square meter	PAVEMENT PLANING, BITUMINOUS
407	13900	97	liter	TACK COAT, 702.13
446	50000	10	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
516	10000	28	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	11210	17	meter	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
516	46900	14	each	BEARING DEVICE, MISC.: ROCKER
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	51922020	778	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	51922130	15	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	51922134	18	square meter	HAND CHIPPING
SPECIAL	51922400	778	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

BRIDGE NUMBER CRA-30-15627 (S.L.K.) CRA-30-0971 (S.L.M.) SFN 1701622

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION
SPECIAL	53001300	79	meter	STRUCTURE, MISC.: JOINT SEALING

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\equan.dgn
WORKSTATION: eglover DATE: 24 NOV 97

DESIGN AGENCY: DISTRICT THREE
DATE: 11-97
REVIEWED: RDW
DRAWN: EJG
DESIGNED: EJG 2-97
CHECKED: NRC
STRUCTURAL FILE NUMBER
REVISED

GENERAL SUMMARY

CRA-30-6.453

BRIDGE DATA

metric units

BRIDGE DECK DATA								ROADWAY DATA	
PART	COUNTY, ROUTE, BRIDGE NO.	STRUCTURE TYPE	LENGTH (BRIDGE LIMITS)	WIDTH	BRIDGE DECK AREA	SKEW	EXISTING WEARING SURFACE	EXISTING APPROACH SLAB WIDTH	EXISTING APPROACH SLAB LENGTH
			mm	mm	SQ. METER			mm	mm
1	CRA-30-06453R (SLK) CRA-30-0401R (SLM)	STEEL BEAM	86 838	10 058	874	66° R. F.	CONCRETE	7315	7620
1	CRA-30-06856L (SLK) CRA-30-0426L (SLM)	CONCRETE SLAB	30 248	14 630	443	30° L. F.	CONCRETE	10 973	7620
1	CRA-30-06856R (SLK) CRA-30-0426R (SLM)	CONCRETE SLAB	30 248	16 825 AVG.	509	30° L. F.	CONCRETE	10 973	7620
1	CRA-30-08610 (SLK) CRA-30-0535 (SLM)	STEEL BEAM	71 323	7315	522	0°	CONCRETE	7315	7620
1	CRA-30-11249L (SLK) CRA-30-0699L (SLM)	STEEL BEAM	69 604	11 582	806	52° R. F.	CONCRETE	7315	7620
1	CRA-30-11249R (SLK) CRA-30-0699R (SLM)	STEEL BEAM	69 604	11 582	806	52° R. F.	CONCRETE	7315	7620
1	CRA-30-11442L (SLK) CRA-30-0711L (SLM)	STEEL BEAM	39 545	11 582	458	18° R. F.	CONCRETE	7315	7620
1	CRA-30-11442R (SLK) CRA-30-0711R (SLM)	STEEL BEAM	39 545	11 582	458	18° R. F.	CONCRETE	7315	7620
1	CRA-30-12231L (SLK) CRA-30-0760L (SLM)	STEEL BEAM	49 539	11 582	574	7° L. F.	CONCRETE	7315	7620
1	CRA-30-12231R (SLK) CRA-30-0760R (SLM)	STEEL BEAM	49 539	11 582	574	7° L. F.	CONCRETE	7315	7620
1	CRA-30-13696L (SLK) CRA-30-0851L (SLM)	STEEL BEAM	52 404	16 974 AVG.	890	20° L. F.	CONCRETE	14 538	7620
1	CRA-30-13696R (SLK) CRA-30-0851R (SLM)	STEEL BEAM	49 039	11 582	568	20° L. F.	CONCRETE	7315	7620
1	CRA-30-14033L (SLK) CRA-30-0872L (SLM)	STEEL BEAM	61 786	11 582	716	36° L. F.	CONCRETE	7315	7620
1	CRA-30-14033R (SLK) CRA-30-0872R (SLM)	STEEL BEAM	61 786	17 587 AVG.	1087	36° L. F.	CONCRETE	16 737	7620
1	CRA-30-14597L (SLK) CRA-30-0907L (SLM)	STEEL BEAM	44 976	12 192	548	10° L. F.	CONCRETE	7315	7620
1	CRA-30-14597R (SLK) CRA-30-0907R (SLM)	STEEL BEAM	44 976	16 383 AVG.	737	10° L. F.	CONCRETE	13 176	7620
1	CRA-30-15627 (SLK) CRA-30-0971 (SLM)	STEEL BEAM	78 879	10 058	793	14° R. F.	CONCRETE	10 058	6096

DESIGN AGENCY: DISTRICT THREE

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BRIDGE DATA

CRA-30-6.453

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EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATION AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C.M.S. SECTIONS 102.05, 105.02 AND 513.02. THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGE 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 STRUCTURE 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 SPECIFICATIONS:

THESE STRUCTURES CONFORM TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996, AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN DATA:

CONCRETE CLASS S - COMPRESSIVE STRENGTH 31.0 MPa

GUARDRAIL REPLACEMENT:

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE, GRADE, AND REINSTALL GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON THE SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF SAID COMPLIANCE.

PLACING ASPHALT CONCRETE FEATHERING ON BRIDGE APPROACHES:

SPECIAL CARE SHALL BE TAKEN, WHEN PLACING THE ASPHALT CONCRETE FEATHERING TO EFFECT A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK OR APPROACH SLAB. THE CONTRACTOR'S ATTENTION IS CALLED TO SECTION 404.16 OF THE CMS AND TO STANDARD DRAWING BP-3.1M FOR REQUIRED TOLERANCES.

BUTT JOINTS SHALL BE USED ON THIS PROJECT.

NOTE:

FOR ALL STRUCTURES: THE REAR ABUTMENT IS AT THE WEST END AND THE FORWARD ABUTMENT IS AT THE EAST END

NOTE:

FOR STRUCTURES WHERE THE ONLY ITEM OF WORK LISTED ON THE GENERAL SUMMARY IS ITEM SPECIAL- STRUCTURE, MISC.: JOINT SEALING, THE CONSTRUCTION JOINTS IN THE EXISTING CONCRETE OVERLAY SHALL BE SEALED

metric units

ITEM 202 - PORTIONS OF STRUCTURE REMOVED:

THIS ITEM SHALL BE USED AS PER DETAILS IN THE PLAN TO REMOVE CONCRETE FOR THE INSTALLATION OF THE ELASTOMERIC COMPRESSION SEAL.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC METER FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - REMOVAL MISC.: ROCKERS:

THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY MATERIALS AND LABOR TO REMOVE THE EXISTING R-450 AND R-575 ROCKER ASSEMBLIES, EXCEPT FOR THE TOP PLATES, AT THE REAR AND FORWARD ABUTMENTS.

THE CONTRACTOR SHALL FIELD MEASURE ALL NECESSARY DIMENSIONS BEFORE THE EXISTING ROCKERS ARE REMOVED.

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

ITEM 202 - REMOVAL MISC.: STEEL RETAINERS:

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING STEEL RETAINERS (TO THE LIMITS SPECIFIED IN THE PLANS) AT THE EXPANSION JOINTS INDICATED IN THE PLANS. CARE SHALL BE TAKEN NOT TO DAMAGE THE REMAINING STRUCTURE WHEN REMOVING THE EXISTING STEEL RETAINERS.

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

ITEM 202 - REMOVAL MISC.: STRIP SEAL:

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING ELASTOMERIC STRIP SEAL AT THE EXPANSION JOINTS INDICATED IN THE PLANS.

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

ITEM 407 - TACK COAT, 702.13:

THIS ITEM SHALL BE APPLIED AT A RATE OF 0.36 LITERS PER SQ. METER

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ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS:

THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY MATERIALS AND LABOR TO INSTALL A NEW ELASTOMERIC STRIP SEAL IN THE EXISTING STEEL RETAINERS AT THE EXPANSION JOINTS INDICATED IN THE PLANS.

THE INTERNAL PORTION OF THE EXISTING STEEL RETAINERS SHALL BE ABRASIVE BLASTED PRIOR TO INSTALLATION OF THE NEW STRIP SEAL.

THE PROPOSED STRIP SEAL SHALL BE THE SAME SIZE AND TYPE AND SHALL BE FROM THE SAME MANUFACTURER AS THE EXISTING SEAL.

THE EXISTING STRIP SEALS APPEAR TO BE SEALS MANUFACTURED BY WATSON BOWMAN ACME INC. THE CONTRACTOR SHALL VERIFY.

SEE STANDARD DRAWING EXJ-4-87M (SHEET 5/5) FOR ADDITIONAL NOTES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER METER FOR ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL:

THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY MATERIALS AND LABOR TO INSTALL NEW STEEL RETAINERS TO THE LIMITS SPECIFIED IN THE PLANS AND A NEW ELASTOMERIC STRIP SEAL IN THE STEEL RETAINERS AT THE EXPANSION JOINTS INDICATED IN THE PLANS.

THE PROPOSED STEEL RETAINERS AND STRIP SEAL SHALL BE THE SAME SIZE AND TYPE AND SHALL BE FROM THE SAME MANUFACTURER AS THE EXISTING STEEL RETAINERS AND STRIP SEAL.

THE EXISTING STEEL RETAINERS AND STRIP SEALS APPEAR TO BE THOSE MANUFACTURED BY WATSON BOWMAN ACME INC. THE CONTRACTOR SHALL VERIFY.

SEE STANDARD DRAWING EXJ-4-87M (SHEET 5/5) FOR ADDITIONAL NOTES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER METER FOR ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - BEARING DEVICE, MISC.: ROCKER:

THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY MATERIALS AND LABOR TO INSTALL NEW R-450 AND R-575 ROCKER ASSEMBLIES AT THE REAR AND FORWARD ABUTMENTS, AS PER STANDARD DRAWING RB-1-55M. THE NEW ASSEMBLIES SHALL INCLUDE THE ROCKER, BOTTOM PLATE, SHEET LEAD OR PREFORMED BEARING PADS AND ANY NECESSARY SHIMS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH FOR ITEM 516 - BEARING DEVICE, MISC.: ROCKER WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

metric units

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:

THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS, AND EQUIPMENT TO RAISE THE EXISTING STRUCTURES FOR REPLACEMENT OF THE ABUTMENT BEARINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND OPERATION OF AN ADEQUATE JACKING SYSTEM, INCLUDING ANY TEMPORARY OR PERMANENT SUPPORTS NECESSARY TO PERFORM THE WORK DESCRIBED IN THE PROJECT PLANS. THREE (3) SETS OF JACKING PLANS, WHICH INCLUDE THE INFORMATION DESCRIBED IN THIS NOTE, SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL AT LEAST THIRTY (30) DAYS BEFORE ACTUAL WORK IS TO BEGIN. THE PLANS SHALL BE PREPARED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER.

JACKING SUBMITTALS SHALL INCLUDE AT LEAST THE FOLLOWING:

1. THE SIGNATURE AND NUMBER, OR PROFESSIONAL SEAL, OF THE REGISTERED PROFESSIONAL ENGINEER WHO PREPARED THE SUBMITTAL.
2. CALCULATIONS AND ANALYSIS OF THE STRUCTURE TO DETERMINE AND DEFINE THE ACTUAL LOADING APPLIED AT THE CONTRACTOR'S SELECTED JACKING POINTS.
3. A DRAWING SHOWING THE PHYSICAL AND DIMENSIONAL POSITION OF THE JACKS WITH RESPECT TO THE STRUCTURE INCLUDING CLEARANCES AND CENTER OF LIFT.
4. A SCHEMATIC LAYOUT OF JACKS, CHECK VALVES, PUMPS WITH 3 WAY RETRACTOR VALVE, PRESSURE GAGES, FLOW CONTROL VALVES, ETC. IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL JACKS FOR EACH ABUTMENT OR PIER SHALL BE CONNECTED TOGETHER. ALL JACKS AT EACH ABUTMENT OR PIER SHALL BE THE SAME SIZE.
5. ANALYSIS AND CALCULATIONS OF THE STRESSES INDUCED OR CREATED IN THE STRUCTURE AND ANY TEMPORARY OR PERMANENT SUPPORTS. DESIGN CALCULATIONS FOR ANY TEMPORARY OR PERMANENT SUPPORTS.
6. PHYSICAL DIMENSIONS, MATERIALS, AND FABRICATION DETAILS OF ANY TEMPORARY OR PERMANENT SUPPORTS. HORIZONTAL AND VERTICAL MOVEMENT RESTRAINT SHALL BE PROVIDED.
7. A STEP BY STEP PROCEDURE DETAILING ALL STEPS IN THE JACKING OPERATION.
8. METHOD OF ATTACHMENT TO STRUCTURAL MEMBERS. WELDING TO TENSION AREAS WILL NOT BE PERMITTED.

THE ENTIRE SYSTEM INCLUDING JACKS SHALL HAVE 20% MORE CAPACITY THAN REQUIRED BASED ON CALCULATED LOADS.

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FOR LIFTS GREATER THAN 25 mm, JACKS SHALL HAVE LOCKING NUTS TO POSITIVELY LOCK AND SUPPORT THE STRUCTURE DURING THE LIFT.

JACKS SHALL HAVE A SWIVEL LOAD CAP, A DOMED PISTON HEAD OR SOME OTHER DEVICE TO PROTECT AGAINST THE EFFECTS OF SIDE LOAD ON THE JACK.

JACKS ALONE SHALL NOT BE USED TO SUPPORT LOADS EXCEPT DURING THE ACTUAL JACKING OPERATION. TEMPORARY SUPPORTS, BLOCKING OR OTHER METHODS APPROVED BY THE DIRECTOR SHALL BE USED.

SINGLE ACTING RAMS WITH NO OVER-TRAVEL PROTECTION SYSTEM SHALL NOT BE USED.

SPARE EQUIPMENT SHALL BE AVAILABLE ON SITE FOR THE REQUIRED STRUCTURE RAISING TO PROCEED IN THE EVENT OF A BREAKDOWN. A LIST OF SPARE EQUIPMENT SHALL BE PROVIDED TO THE ENGINEER.

AT A MINIMUM, A JACKING OPERATION SHALL LIFT ALL BEAMS AT ANY ONE ABUTMENT OR PIER SIMULTANEOUSLY.

MAXIMUM DIFFERENTIAL JACKING HEIGHT BETWEEN ANY ADJACENT ABUTMENTS OR PIERS SHALL BE 25 mm OR LESS.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, THE JACKING OPERATION SHALL IMMEDIATELY CEASE AND APPROVED SUPPORTS SHALL BE INSTALLED. THE CONTRACTOR SHALL THEN ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. ANY BEAMS THAT SEPARATE FROM THE DECK SHALL BE EPOXY INJECTED FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH THE PROPOSAL NOTE "CONCRETE REPAIR BY EPOXY INJECTION". COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS SHALL BE BORNE BY THE CONTRACTOR.

THE CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER THAT THE BRIDGE BEARINGS ARE FULLY SEATED BETWEEN ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUITABLE MEANS OF REPAIR, SUBJECT TO THE APPROVAL OF THE ENGINEER, WILL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

THE JACKING OPERATION SHALL BE DIRECTED BY A PROFESSIONAL ENGINEER EMPLOYED BY THE CONTRACTOR. FAILURE TO HAVE A PROFESSIONAL ENGINEER PRESENT SHALL BE CAUSE FOR CEASING JACKING OPERATIONS.

PAYMENT SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 516- JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN AND SHALL INCLUDE ALL NECESSARY TOOLS, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM OF WORK.

metric units

ITEM 606 - BRIDGE TERMINAL ASSEMBLY, TYPE 4:

THIS ITEM SHALL BE USED TO CHANGE THE EXISTING TYPE 5 GUARDRAIL TO A BRIDGE TERMINAL ASSEMBLY, TYPE 4 AS PER STANDARD DRAWING GR-3.4M. THE EXISTING DEEP BEAM RAIL PANELS SHALL BE PRESERVED AND REUSED AS PART OF THE BRIDGE TERMINAL ASSEMBLY.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH FOR ITEM 606 - BRIDGE TERMINAL ASSEMBLY, TYPE 4 WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 614 - MAINTAINING TRAFFIC:

ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES USING STANDARD DRAWING MT-95.30M. STANDARD DRAWINGS MT-98.12M, MT-98.13M, MT-98.14M, MT-98.15M, AND MT-98.16M SHALL ALSO BE USED WHERE APPLICABLE.

FOR THE STRUCTURES TO BE OVERLAYED, THREE CONSECUTIVE STRUCTURES SHALL BE TREATED AS ONE WORK AREA. ALL WORK SHALL BE COMPLETED ON THE FIRST SET OF THREE STRUCTURES (LEFT AND RIGHT) BEFORE WORK ON THE SECOND SET OF THREE STRUCTURES IS STARTED.

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.

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metric units

ITEM 614 - TEMPORARY EDGE LINE, CLASS I, 740.06, TYPE I:
ITEM 614 - TEMPORARY CHANNELIZING LINE, CLASS I, 740.06, TYPE I:
ITEM 614 - TEMPORARY GORE MARKING, CLASS II, 740.06, TYPE I:

THESE ITEMS SHALL BE USED AT LOCATIONS SHOWN ON THE STANDARD DRAWINGS AND AT LOCATIONS SPECIFIED BY THE ENGINEER.

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

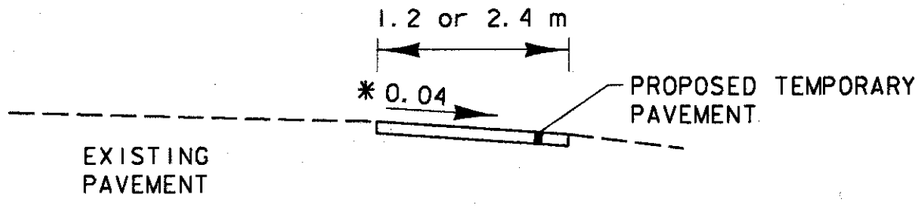
ITEM 615 - TEMPORARY PAVEMENT, AS PER PLAN:

THIS ITEM SHALL BE USED FOR PAVEMENT WIDENING AS PER DETAILS IN THIS NOTE.

THE EXISTING ASPHALT SHOULDERS (WIDTH = 1.2 m AND 2.4 m) SHALL BE REPLACED WITH TEMPORARY PAVEMENT FROM THE FORWARD ABUTMENT OF STRUCTURE CRA-30-11249 S.L.K. TO THE REAR ABUTMENT OF STRUCTURE CRA-30-14597 S.L.K. (EASTBOUND AND WESTBOUND).

THE TEMPORARY PAVEMENT BUILDUP SHALL CONSIST OF 150 mm OF 301 ON A SUBGRADE COMPACTED PER 203, TACK COAT, AND 32 mm OF 448.

THE CONTRACTOR SHALL, UNDER THE DIRECTION OF THE ENGINEER, LOCATE THE EDGES OF THE SOUND PAVEMENT, AND SHALL CUT AND TRIM THE EXISTING PAVEMENT TO A NEAT LINE AS ESTABLISHED BY THE ENGINEER. THE CONTRACTOR SHALL DISPOSE OF PAVEMENT FROM THE TRIMMING OPERATION.



TYPICAL SECTION

* TYPICAL, EXCEPT FOR SUPERELEVATED SECTIONS. ON THE LOW SIDE OF A SUPERELEVATED SECTION, USE 0.04 OR THE PAVEMENT SLOPE IF IT IS GREATER THAN 0.04. ON THE HIGH SIDE , USE 0.01

WIDENING SHALL BE DONE ON ONLY ONE SIDE OF THE PAVEMENT AT A TIME.

ALL EXCAVATION, PAVEMENT TRIMMING, FILL MATERIAL AND ANY OTHER INCIDENTAL ITEMS NEEDED SHALL BE INCLUDED IN THIS ITEM. WHEN NO LONGER NEEDED FOR TRAFFIC MAINTENANCE, THE TEMPORARY PAVEMENT SHALL REMAIN IN PLACE. ALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY RAISED PAVEMENT MARKERS SHALL BE REMOVED AS PER 641.10 AND 202.071.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE METER FOR ITEM 615 TEMPORARY PAVEMENT, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

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metric units

ITEM SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: PATCHING AND WRAPPING PIER COLUMNS:

THIS ITEM SHALL BE USED TO REPAIR THE EXISTING COLUMNS AT THE PIER INDICATED IN THE PLANS. THE REPAIR SHALL CONSIST OF PATCHING THE COLUMNS AS PER 519 IN THE CMS (EXCEPT AS NOTED BELOW) AND WRAPPING THE COLUMNS WITH A FIBER WRAP COLUMN CASING SYSTEM USING HIGH STRENGTH, HYBRID FIBER/EPOXY COMPOSITES FIELD APPLIED TO THE COLUMNS.

ONLY LOOSE AND DISINTEGRATED CONCRETE SURROUNDING THE REINFORCING STEEL SHALL BE REMOVED. THE MINIMUM PATCH DEPTH REQUIREMENTS IN 519.03 SHALL NOT BE USED.

WITHIN TWENTY-FOUR (24) HOURS BEFORE PLACING CONCRETE, THE EXISTING SURFACES AGAINST WHICH THE CONCRETE SHALL BE PLACED AND THE EXISTING REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY ABRASIVE BLASTING. ABRASIVE BLASTING SHALL BE AT LEAST EQUAL TO SA2 "THOROUGH BLAST CLEANING" AS OUTLINED IN ASTM D-2200 OR SSPC-SP6. ALL LOOSE AND DETERIORATED CONCRETE SHALL BE REMOVED WITH HAND TOOLS BEFORE ABRASIVE BLASTING.

THE FIBER WRAP COLUMN CASING SYSTEM SHALL BE MANUFACTURED BY RJ WATSON, INC. (P.O. BOX 85 EAST AMHERST, NY 14051) OR AN APPROVED ALTERNATE.

FOR THE FIBER WRAP COLUMN CASING SYSTEM, THE MANUFACTURER SHALL DETERMINE THE NUMBER OF WRAPS NEEDED.

THE FABRIC FOR THE COMPOSITE CASING SHALL BE CONTINUOUS FILAMENT WOVEN FABRIC. PRIMARY FIBERS FOR THE FABRIC SHALL BE ELECTRICAL (E) GLASS FIBERS. POLYESTER RESIN SHALL NOT BE USED AS A SUBSTITUTE FOR EPOXY RESIN.

THE ULTIMATE TENSILE STRENGTH IN THE PRIMARY FIBER DIRECTION (BASED ON DRY FABRIC THICKNESS) SHALL BE 448 MPa (MIN.). THE ULTIMATE TENSILE STRENGTH AT 90° TO THE PRIMARY FIBERS SHALL BE 38 MPa (MIN.).

THE COLUMN SHALL BE SMOOTH AND FREE FROM FINS, SHARP EDGES AND PROTRUSIONS THAT WILL CAUSE VOIDS BEHIND THE CASING OR THAT, IN THE OPINION OF THE ENGINEER, WILL DAMAGE THE FIBER. THE CONTACT SURFACES OF THE COLUMN SHALL BE COMPLETELY DRY AT THE TIME OF APPLICATION OF THE COMPOSITE. NEWLY PATCHED SURFACES SHALL HAVE CURED SUFFICIENTLY PRIOR TO APPLICATION OF THE COMPOSITE SYSTEM.

THE AMBIENT TEMPERATURE AND THE TEMPERATURE OF THE EPOXY COMPONENTS SHALL BE BETWEEN 13 AND 35 DEGREES CELSIUS AT THE TIME OF MIXING. THE COMPOSITE SHALL BE APPLIED WHEN THE RELATIVE HUMIDITY IS LESS THAN 85% AND THE SURFACE TEMPERATURE IS MORE THAN 3 DEGREES CELSIUS ABOVE THE DEW POINT. APPLICATION SHALL BEGIN WITHIN ONE HOUR AFTER THE EPOXY HAS BEEN MIXED.

THE EPOXY SHALL BE MIXED WITH A MECHANICAL MIXER AND APPLIED UNIFORMLY TO THE FIBER AT A RATE THAT SHALL INSURE COMPLETE SATURATION OF THE FABRIC.

THE FABRIC-EPOXY COMPOSITE SHALL BE APPLIED TO THE SURFACE OF THE COLUMN BY WRAPPING USING METHODS THAT PRODUCE A UNIFORM FORCE THAT IS DISTRIBUTED ACROSS THE ENTIRE WIDTH OF THE FABRIC. THE PRIMARY FIBERS OF THE FABRIC SHALL NOT DEVIATE FROM A HORIZONTAL LINE BY MORE THAN 13 mm PER METER AND THE TRANSVERSE FIBERS SHALL BE PERPENDICULAR TO THE PRIMARY FIBERS. ENTRAPPED AIR SHALL BE REMOVED BEFORE THE EPOXY SETS.

SUCCESSIVE LAYERS OF COMPOSITE MATERIALS SHALL BE PLACED BEFORE POLYMERIZATION PREVENTS A COMPLETE BOND BETWEEN THE LAYERS. IF POLYMERIZATION DOES OCCUR BETWEEN THE LAYERS THE SURFACE MUST BE ROUGHENED USING A LIGHT ABRASIVE THAT WILL NOT DAMAGE THE FIBERS.

THE FINAL LAYER OF FABRIC SHALL BE COVERED WITH A MINIMUM 375 µm COAT OF EPOXY THAT PROVIDES A UNIFORM FINISHED SURFACE.

A FINAL COATING SYSTEM IS REQUIRED TO PROTECT THE FIBERS FROM THE ELEMENTS AND TO GIVE THE FINAL AESTHETIC EFFECT.

AFTER THE FINAL EPOXY COAT IS COMPLETELY POLYMERIZED THE EXTERIOR SURFACES OF THE COMPOSITE WRAP SHALL BE CLEANED AND ROUGHENED BY A LIGHT ABRASIVE. CARE SHALL BE TAKEN NOT TO DAMAGE THE FIBERS DURING THE ROUGHENING PROCESS. THE CLEANED AND ROUGHENED SURFACES SHALL BE DRY BEFORE PAINTING.

AREAS TO BE PAINTED SHALL RECEIVE A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 100 µm.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER METER FOR ITEM SPECIAL- PATCHING CONCRETE STRUCTURE, MISC.: PATCHING AND WRAPPING PIER COLUMNS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

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WORKSTATION: eglover DATE: 21 APR 97

ITEM SPECIAL - STRUCTURE, MISC.: JOINT SEALING:

I. DESCRIPTION

THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY LABOR, MATERIALS, AND EQUIPMENT NEEDED FOR SURFACE PREPARATION, MIXING AND PLACING THE SEAL ON TO THE CONSTRUCTION JOINTS IN THE EXISTING CONCRETE OVERLAYS.

II. MATERIAL

THE JOINT SEAL SHALL BE FURNISHED BY ONE OF THE FOLLOWING:

MANUFACTURER	SEALER DESIGNATION
FORSROC INC. 2 SUMMIT PARK DRIVE SUITE 300 INDEPENDENCE, OH 44131 (216) 642-9342	NITOBOND ULV
SIKA CORPORATION 1300 GRANGER ROAD BROOKLYN HEIGHTS, OH 44131 (216) 749-7225	SIKADUR 35 HI-MOD LV
POLY-CARB 33095 BAINBRIDGE ROAD SOLON, OH 44139 (216) 248-1223	MARK - 135 SAFE-T-SEAL

THE MATERIAL MANUFACTURER SHALL PROVIDE BEFORE APPLICATION A CHART SHOWING AMBIENT TEMPERATURE VERSUS OPEN TIME (LIQUID STATE), INITIAL STATE (GEL) AND FINAL CURE (SOLID STATE).

THE SAND USED TO COVER THE EPOXY SHALL BE BEST 620 SILICA SAND AVAILABLE FROM:

WALTER C. BEST
P.O. BOX 87
CHARDON, OH 44024
(216) 285-3132

OR AN APPROVED ALTERNATE.

III. PLACEMENT

A) APPLICATION

THE JOINT SEAL SHALL BE POURED INTO THE JOINT WITH A NARROW NOZZLE CONTAINER. AS THE JOINT SEAL PENETRATES INTO THE JOINT, THE SEAL SHALL BE REAPPLIED. TO ENHANCE THE PENETRATION OF THE JOINT SEAL, A SQUEEGEE SHALL BE WORKED BACK AND FORTH ACROSS THE JOINT. ALL SEALING MATERIAL SHALL BE WITHIN A 100 mm WIDE AREA, 50 mm ON EITHER SIDE OF THE JOINT. ANY MATERIAL OUTSIDE OF THE AREA SHALL BE REMOVED TO THE ENGINEERS SATISFACTION AT NO COST TO THE STATE.

THE SEALED AREAS OF THE BRIDGE DECK SHALL HAVE SAND BROADCAST AFTER 45 MINUTES, BUT BEFORE THE EPOXY HAS PASSED FROM THE OPEN TIME (LIQUID STATE) TO THE GEL STATE. THE SAND SHALL SATURATE THE SEAL AT A RATE OF 2.0 Kg OF SAND TO 1.0 SQUARE METER. THE SAND SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 0.5 OF THE PERCENT ABSORPTION WHEN TESTED IN ACCORDANCE TO A CALIFORNIA TEST 226.

B) PLACEMENT LIMITATIONS

1) THE EPOXY SHALL BE PLACED AT AN AMBIENT TEMPERATURE DEFINED AS DECK SURFACE TEMPERATURE SUCH THAT THE OPEN TIME (LIQUID STATE) IS GREATER THAN ONE HOUR AND FINAL CURE IS LESS THAN SIX HOURS.

2) JOINT SEAL SHALL NOT BE PLACED WITHIN 48 HOURS AFTER A RAIN OR WHEN RAIN IS FORECAST WITHIN 12 HOURS. JOINT SEAL SHALL NOT BE APPLIED WHEN THE DECK SURFACE TEMPERATURE IS LESS THAN 3°C ABOVE THE DEW POINT OR WHEN THE RELATIVE HUMIDITY IS GREATER THAN 85%. JOINT SEAL SHALL NOT BE APPLIED TO WET OR DAMP SURFACES.

3) PLACEMENT SHALL NOT START UNTIL ATMOSPHERIC TEMPERATURE IS WITHIN 8°C OF THE PROJECTED MAXIMUM ATMOSPHERIC TEMPERATURE FOR THE DAY.

4) THE EPOXY SHALL BE PLACED WHEN THE DECK SURFACE TEMPERATURE IS BELOW 41°C.

C) CURE

THE CONTRACTOR MAY CONTROL CURE TIME BY VARYING THE SIZE AND SHAPE OF MIXING CONTAINER, AMOUNT MIXED AT ONE TIME, THE TEMPERATURE OF RESIN AND HARDENER AND THE TYPE OF HARDENER USED.

(CONTINUED)

metric units

DESIGN AGENCY DISTRICT THREE

DESIGNED EJG DRAWN EJG CHECKED NRC REVISED REVIEWED RDN DATE 4-97 REVISED STRUCTURAL FILE NUMBER

GENERAL NOTES

CRA-30-6.453

DESIGN FILE: c:\bridge\cra030\gnotes.dgn
WORKSTATION: eglover DATE: 21 APR 97

(CONTINUED)

D) CURE TIME TEST

THE CONTRACTOR SHALL MAKE 100 GRAM SAMPLES FOR CURE TIME TESTS FOR EACH BATCH OF EPOXY MIX. THE TIME TO INITIAL CURE (GEL STATE) AND FINAL CURE (SOLID STATE) SHALL BE RECORDED FOR EACH CURE TIME TEST. THESE TESTS SHALL BE USED TO VERIFY THE MANUFACTURER'S CHART AND TO ADJUST EACH EPOXY APPLICATION FOR FIELD CONDITIONS.

TRAFFIC AND EQUIPMENT SHALL NOT BE PERMITTED ON THE TREATED DECK UNTIL IT IS TACK FREE, A MINIMUM OF SIX HOURS HAVE ELAPSED SINCE TREATMENT AND SAND COVER ADHERES SUFFICIENTLY TO RESIST BRUSHING BY HAND OR ONE HOUR BEYOND THE TIME THE EPOXY HAS PASSED FROM INITIAL STATE (GEL) TO FINAL CURE (SOLID STATE).

IV. EQUIPMENT

THE CONTRACTOR SHALL PROVIDE THE ENGINEER THE FOLLOWING TEST EQUIPMENT IN GOOD WORKING CONDITION FOR THE DURATION OF THE PROJECT. IF NO TEST EQUIPMENT IS AVAILABLE NO WORK SHALL BE PERFORMED.

1) ONE (1) SLING PSYCHROMETER INCLUDING PSYCHROMETRIC TABLES USED TO CALCULATE RELATIVE HUMIDITY AND DEW POINT TEMPERATURES.

2) ONE (1) PORTABLE INFRARED THERMOMETER AVAILABLE FROM:

MODEL: RAYNGER ST SERIES (-18° TO 400°C)

MANUFACTURER: RAYTEK INC.
1201 SHAFFFER ROAD
P.O. BOX 1820
SANTA CRUZ, CA 95061-1820
(800) 227-8074

OR AN APPROVED ALTERNATE.

V. METHOD OF MEASUREMENT

THE QUANTITY SHALL BE THE ACTUAL LENGTH IN METERS OF JOINT SEALING, COMPLETE, IN PLACE AND ACCEPTED.

VI. BASIS OF PAYMENT

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT CONTRACT PRICE BID PER METER FOR ITEM SPECIAL STRUCTURE, MISC.: JOINT SEALING WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

metric units

ITEM SPECIAL- MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK):

ITEM SPECIAL- MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY:

THESE ITEMS SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

SEE THE PROPOSAL NOTE (BRIDGE DECK REPAIR AND OVERLAY WITH MICRO SILICA CONCRETE USING HYDRODEMOLITION).

THE COARSE AGGREGATE SHALL BE LIMESTONE.

THE JOINTS SHALL BE SEALED AS PER THE PROPOSAL NOTE.

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

DESIGN AGENCY DISTRICT THREE

DESIGNED EJG 5-97 | DRAWN EJG | REVISED | REVIEWED RDN | DATE 11-97
CHECKED NRC | STRUCTURAL FILE NUMBER

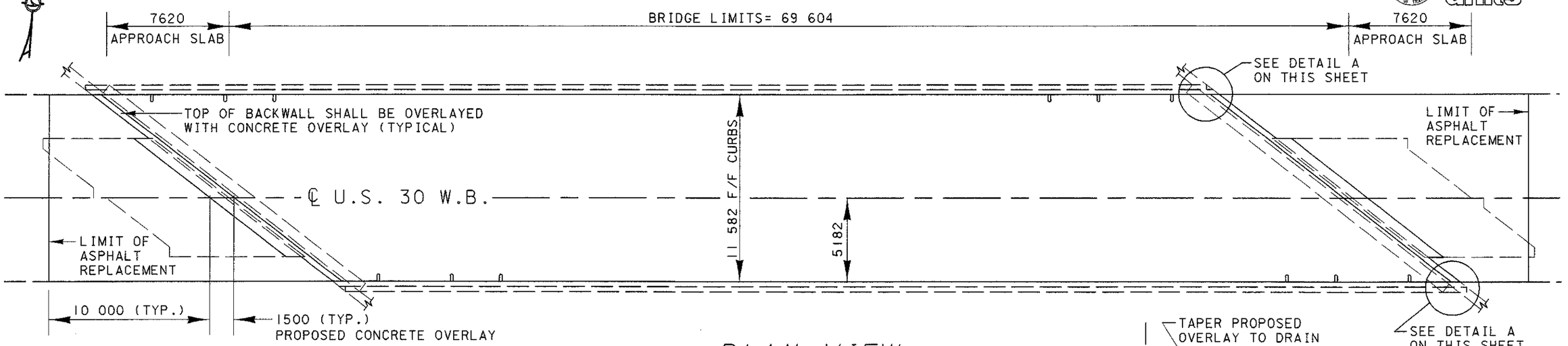
GENERAL NOTES

CRA-30-6.453

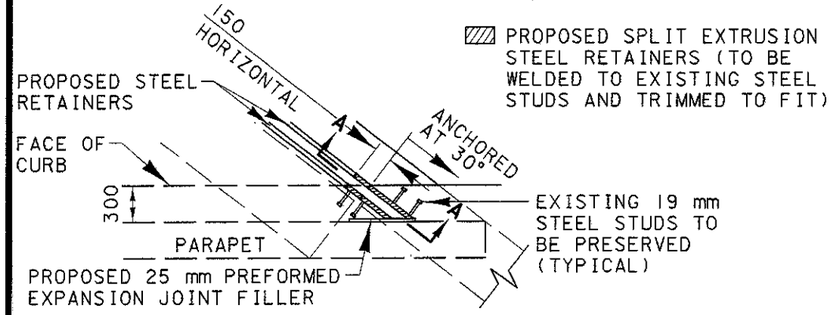
16/41

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\gnote.dgn
WORKSTATION: eglover DATE: 24 NOV 97

metric units

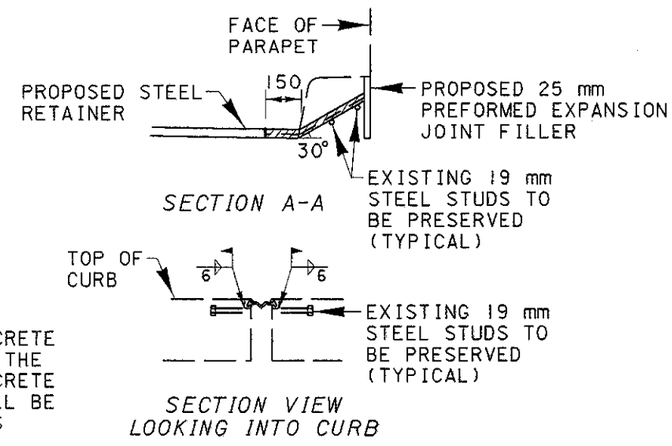


PLAN VIEW



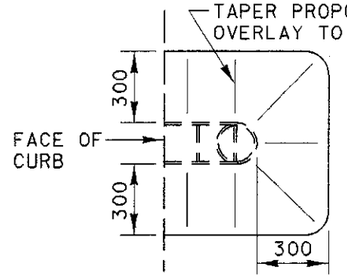
DETAIL A

NOTE: A MINIMUM AMOUNT OF EXISTING CONCRETE SHALL BE REMOVED ON EACH SIDE OF THE JOINT. MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS) SHALL BE USED TO FILL IN THE REMOVED AREAS

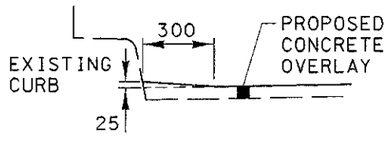


SECTION A-A

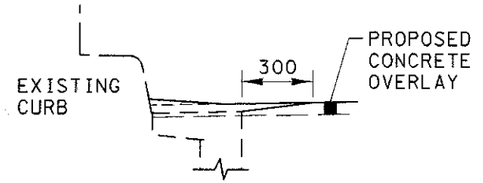
SECTION VIEW
LOOKING INTO CURB



PARTIAL PLAN
VIEW AT SCUPPER



TYPICAL SECTION
VIEW AT CURB



SECTION VIEW AT CURB
(AT SCUPPER)

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	806	square meter	WEARING COURSE REMOVED, CONCRETE
202	10	each	REMOVAL MISC.: ROCKERS
202	1	each	REMOVAL MISC.: STRIP SEAL
202	20	meter	REMOVAL MISC.: STEEL RETAINERS
254	267	square meter	PAVEMENT PLANING, BITUMINOUS
407	87	liter	TACK COAT, 702.13
446	10	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
516	24	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	20	meter	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	833	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	16	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	28	square meter	HAND CHIPPING
SPECIAL	833	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 2

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED
2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE
3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED
4) THE STRIP SEAL AND STEEL RETAINERS AT THE FORWARD ABUTMENT SHALL BE REPLACED
5) ALL MATERIALS, EXCEPT PROPOSED CONCRETE, AND LABOR (INCLUDING REMOVAL OF EXISTING CONCRETE) REQUIRED TO PERFORM THE WORK SHOWN IN DETAIL A IS INCLUDED IN ITEM 516- STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
6) THE EXISTING GUARDRAIL IS NOT SHOWN
7) SEE SHEET NO. 18 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

DESIGN AGENCY: DISTRICT THREE

DESIGNED EJG 5-97 | DRAWN EJG | REVISED | DATE REVISED RDW 11-97 | STRUCTURAL FILE NUMBER 1701207

CHECKED NRC

GENERAL PLAN

CRA-30-11249L S.L.M. CRA-30-0699L S.L.M.

CRA-30-6.453

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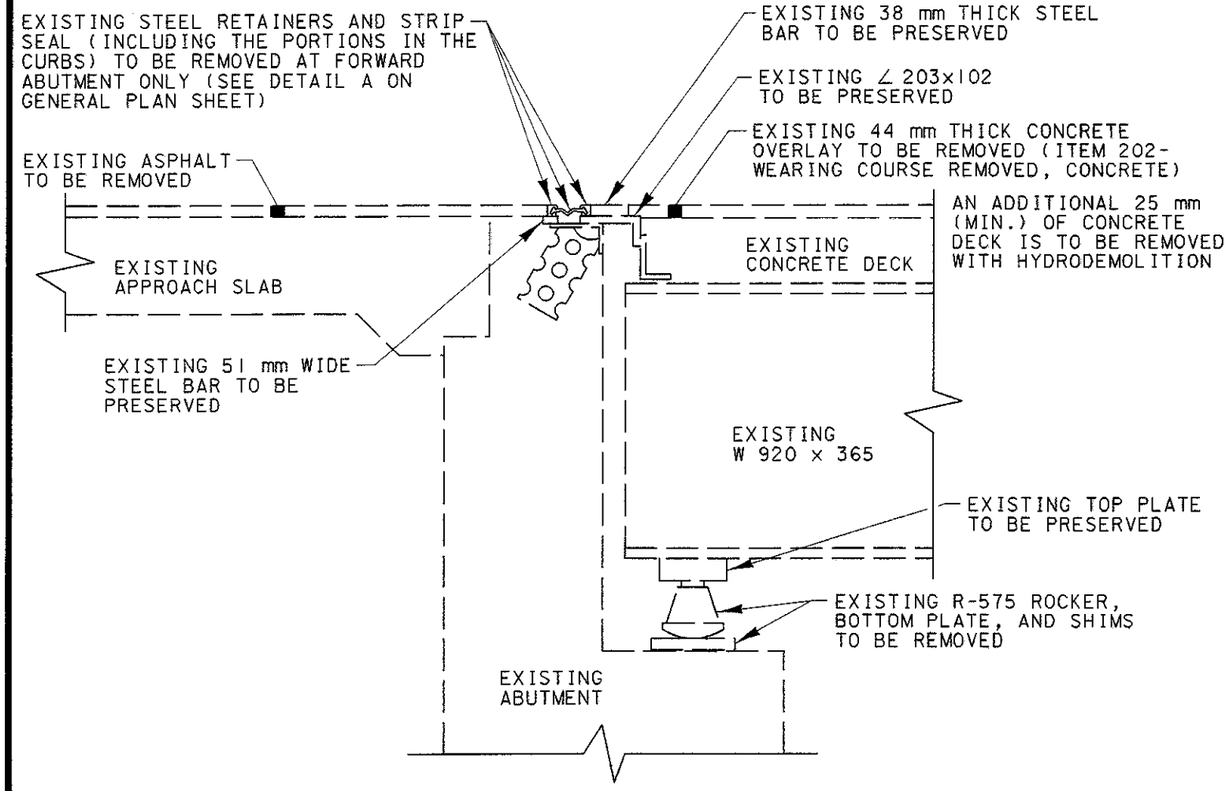
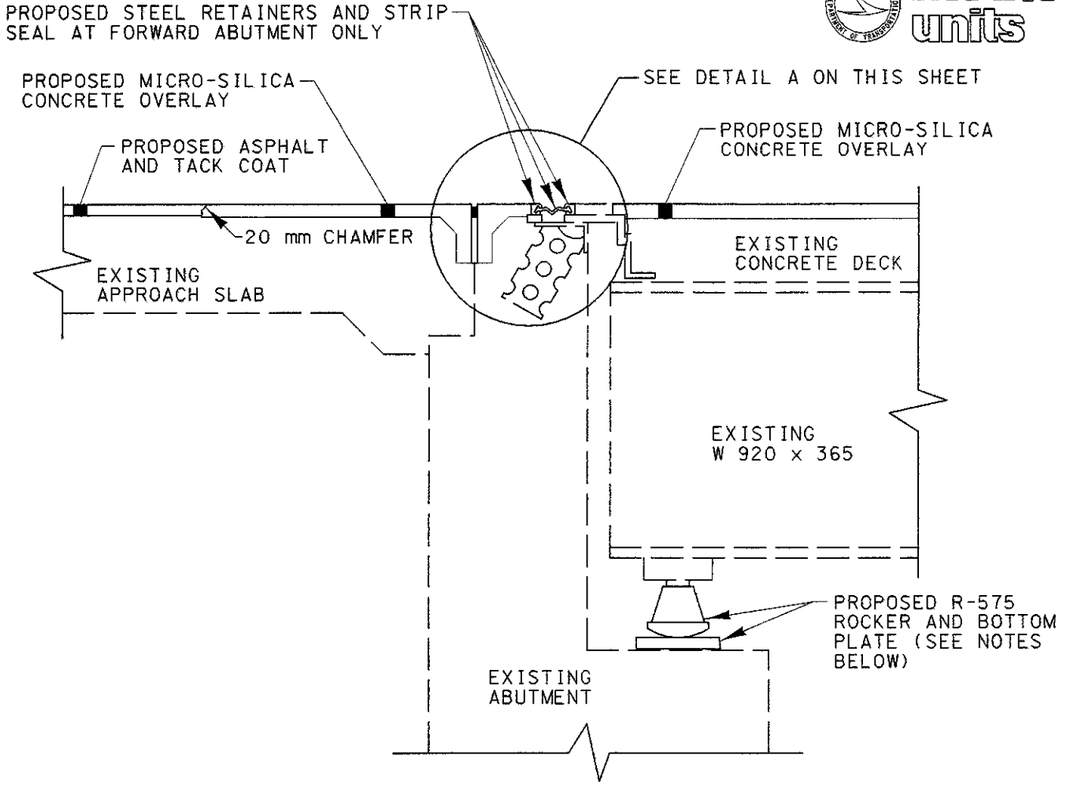
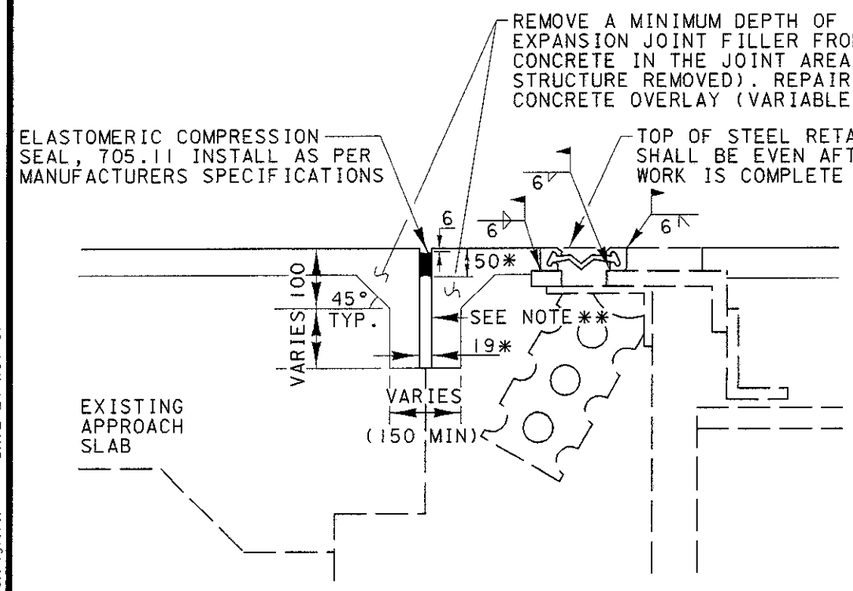
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) CARE SHALL BE TAKEN NOT TO DAMAGE THE REMAINING STRUCTURE WHEN REMOVING THE EXISTING STEEL RETAINERS. ALL DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE

2) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

3) THE PROPOSED BOTTOM PLATE SHALL BE 51 mm THICK AT THE REAR ABUTMENT AND 38 mm THICK AT THE FORWARD ABUTMENT

4) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3-20 mm AT THE REAR ABUTMENT AND 3-25 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 3-97	EJG	RDW	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701207	

TYPICAL SECTIONS

CRA-30-11249L S.L.K. CRA-30-0699L S.L.M.

CRA-30-6.453

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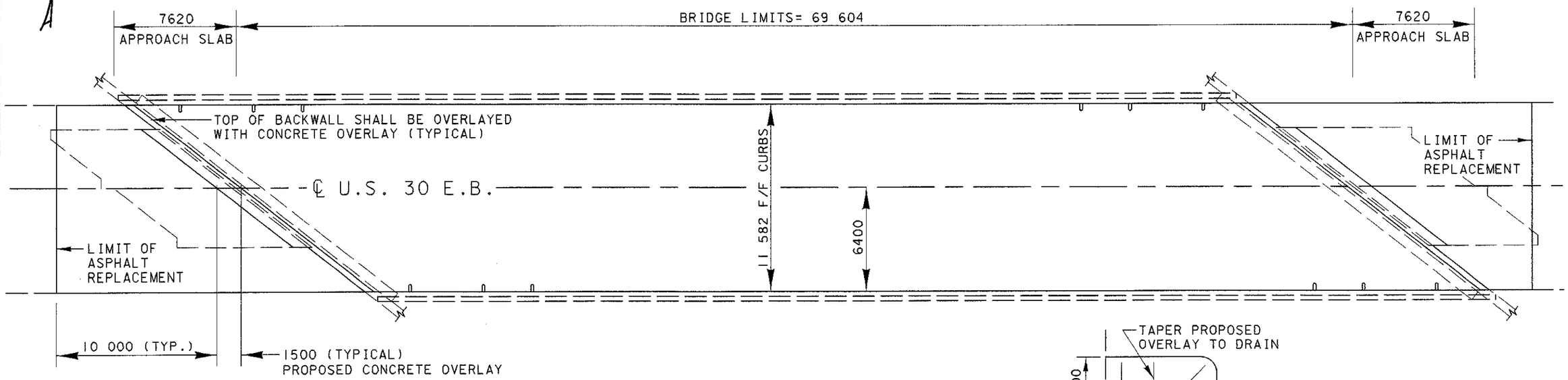
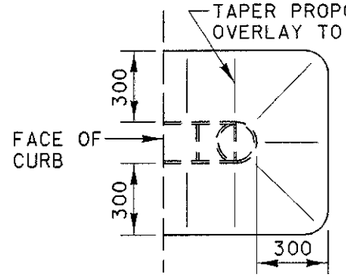
WORKSTATION: eglover DATE: 24 NOV 97

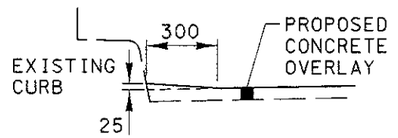
metric units



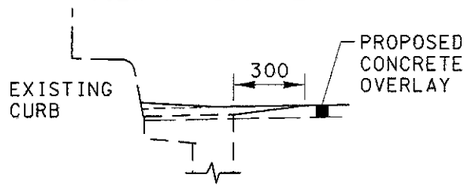
PLAN VIEW



PARTIAL PLAN VIEW AT SCUPPER



TYPICAL SECTION VIEW AT CURB



SECTION VIEW AT CURB (AT SCUPPER)

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	806	square meter	WEARING COURSE REMOVED, CONCRETE
202	10	each	REMOVAL MISC.: ROCKERS
254	267	square meter	PAVEMENT PLANING, BITUMINOUS
407	87	liter	TACK COAT, 702.13
446	10	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	24	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	833	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	16	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	28	square meter	HAND CHIPPING
SPECIAL	833	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 3

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED

2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE

3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED

4) THE EXISTING GUARDRAIL IS NOT SHOWN

5) SEE SHEET NO. 20 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

DESIGN AGENCY: DISTRICT THREE

DESIGNED EJG 5-97	DRAWN EJG	REVIEWED RDW 11-97	DATE
CHECKED NRC	REVISED	STRUCTURAL FILE NUMBER 1701231	

S.L.M.

GENERAL PLAN

CRA-30-11249R S.L.K. CRA-30-0699R S.L.M.

CRA-30-6.453

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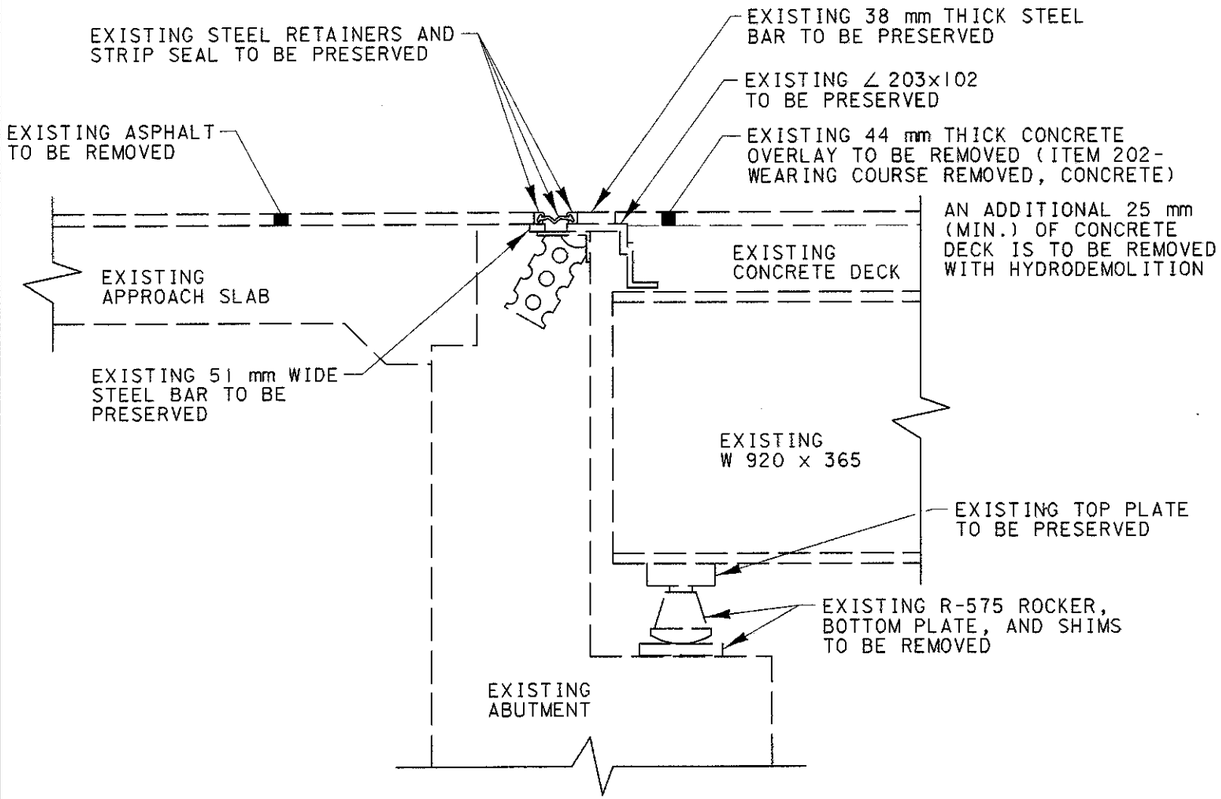
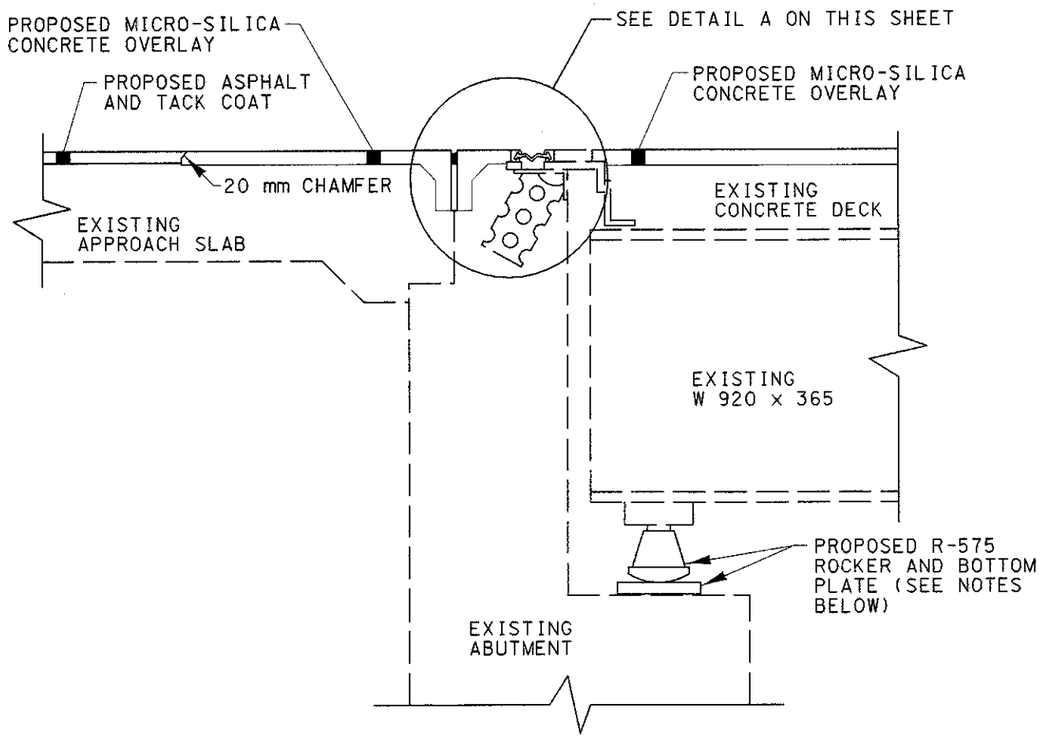
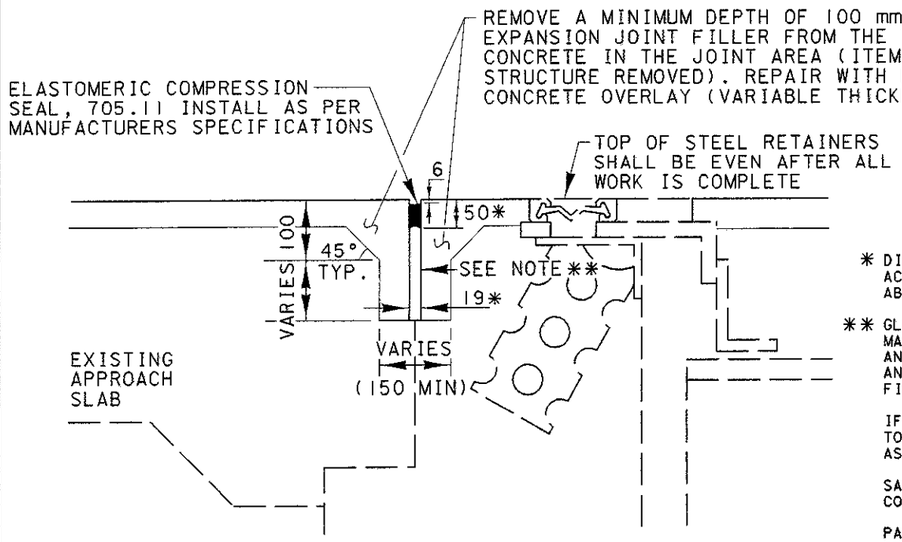
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

2) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT THE REAR ABUTMENT AND 44 mm THICK AT THE FORWARD ABUTMENT

3) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3-25 mm AT THE REAR ABUTMENT AND 3-15 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
E.J.G. 5-97	E.J.G.	RDW	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
N.R.C.		1701231	

TYPICAL SECTIONS

CRA-30-11249R S.L.K. CRA-30-0699R S.L.M.

CRA-30-6.453

20 / 41

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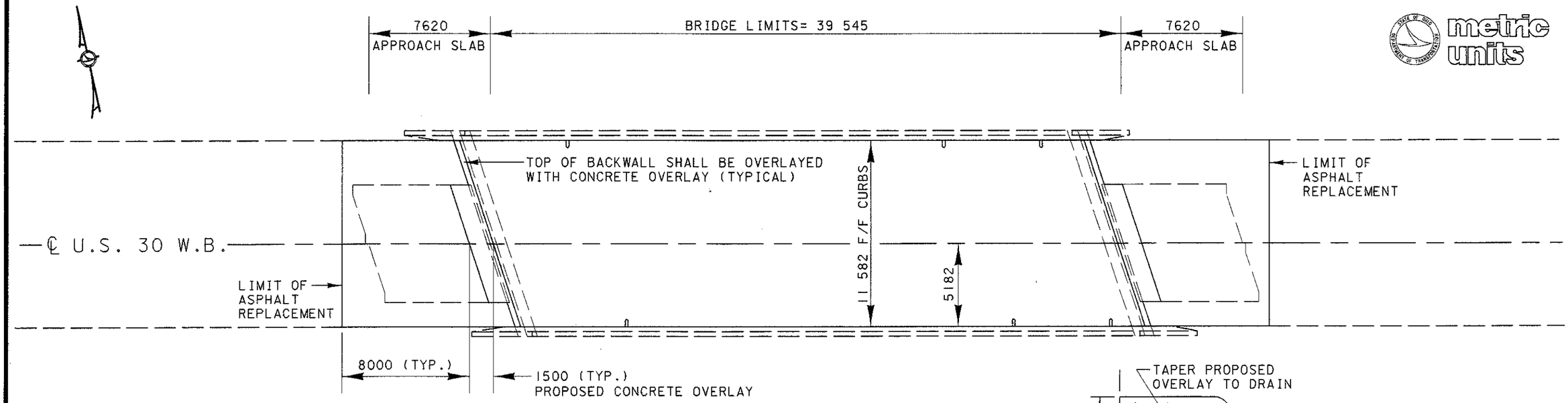
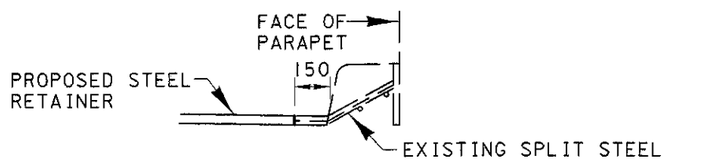
WORKSTATION: eglover DATE: 24 NOV 97



PLAN VIEW

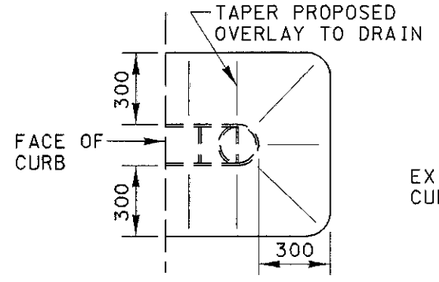
NOTE: THE EXISTING SPLIT EXTRUSION STEEL RETAINERS AT THE FORWARD ABUTMENT SHALL BE PRESERVED. THIS PORTION OF THE STEEL RETAINER EXTENDS FROM APPROXIMATELY 150 mm IN FRONT OF THE CURB UP INTO THE CURB



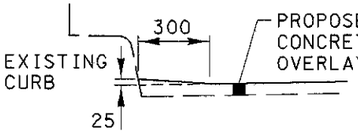
SECTION VIEW THROUGH CURB

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	458	square meter	WEARING COURSE REMOVED, CONCRETE
202	10	each	REMOVAL MISC.: ROCKERS
202	2	each	REMOVAL MISC.: STRIP SEAL
202	12	meter	REMOVAL MISC.: STEEL RETAINERS
254	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	70	liter	TACK COAT, 702.13
446	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	13	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	13	meter	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	483	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	9	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	16	square meter	HAND CHIPPING
SPECIAL	483	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

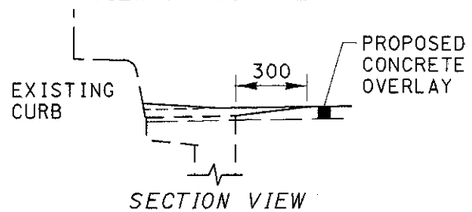
ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 3



PARTIAL PLAN VIEW AT SCUPPER



TYPICAL SECTION VIEW AT CURB



SECTION VIEW AT CURB (AT SCUPPER)

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED

2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE

3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED

4) THE STRIP SEAL AND A PORTION OF THE STEEL RETAINERS AT THE FORWARD ABUTMENT SHALL BE REPLACED. THE STRIP SEAL AT THE REAR ABUTMENT SHALL BE REPLACED

5) THE EXISTING GUARDRAIL IS NOT SHOWN

6) SEE SHEET NO. 22 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED EJG 3-97 | DRAWN EJG | REVIEWED RDW 11-97 | DATE | STRUCTURAL FILE NUMBER 1701266

CHECKED NRC | REVISED

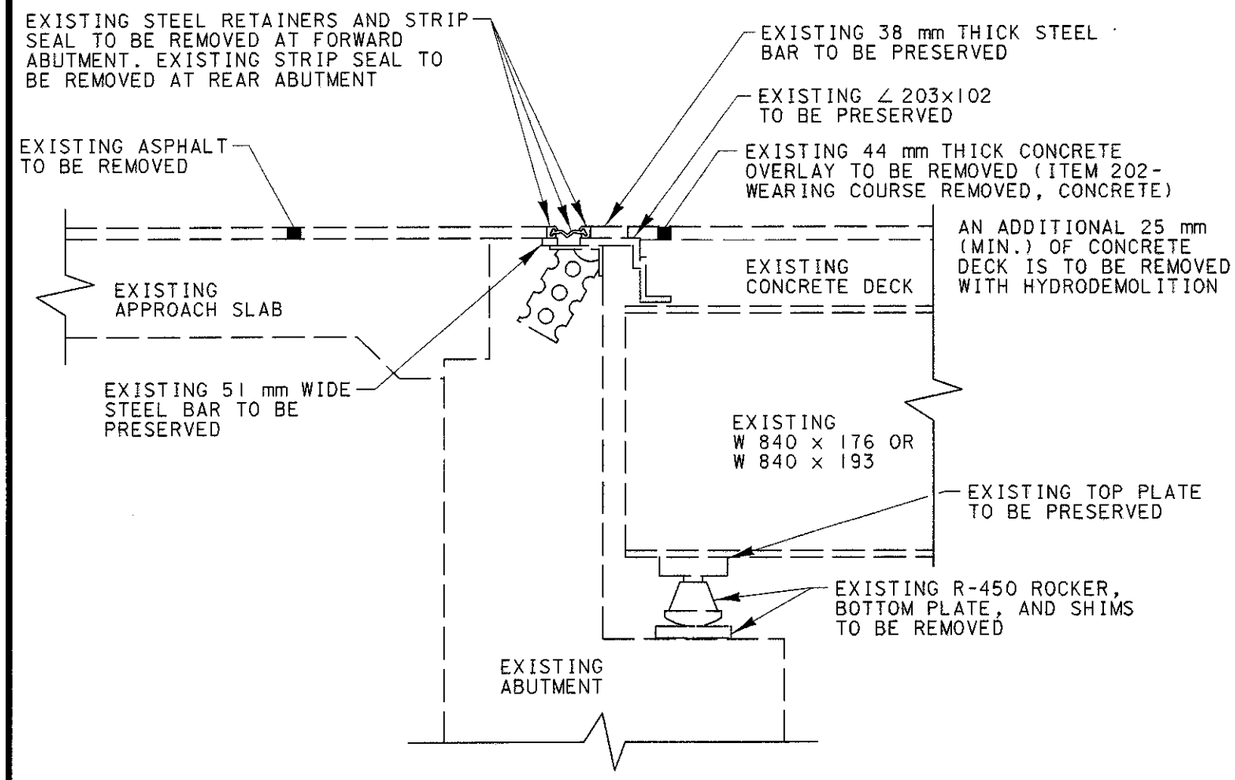
GENERAL PLAN

CRA-30-11442L S.L.K. CRA-30-07.11L S.L.M.

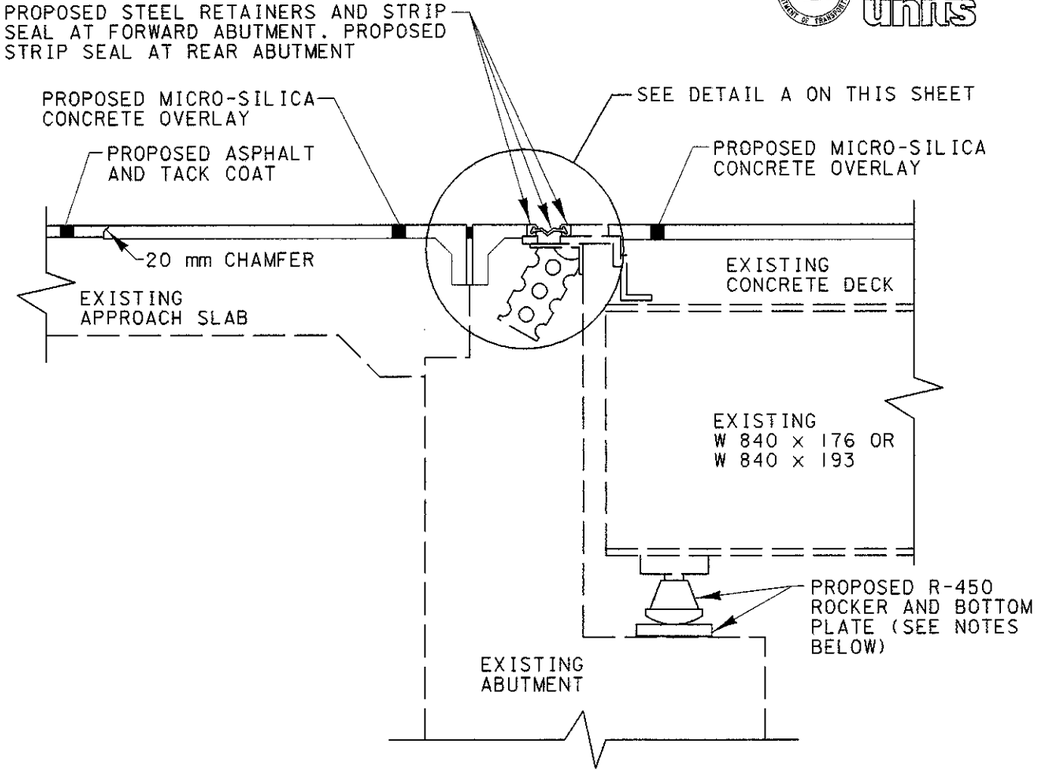
CRA-30-6.453

21
41

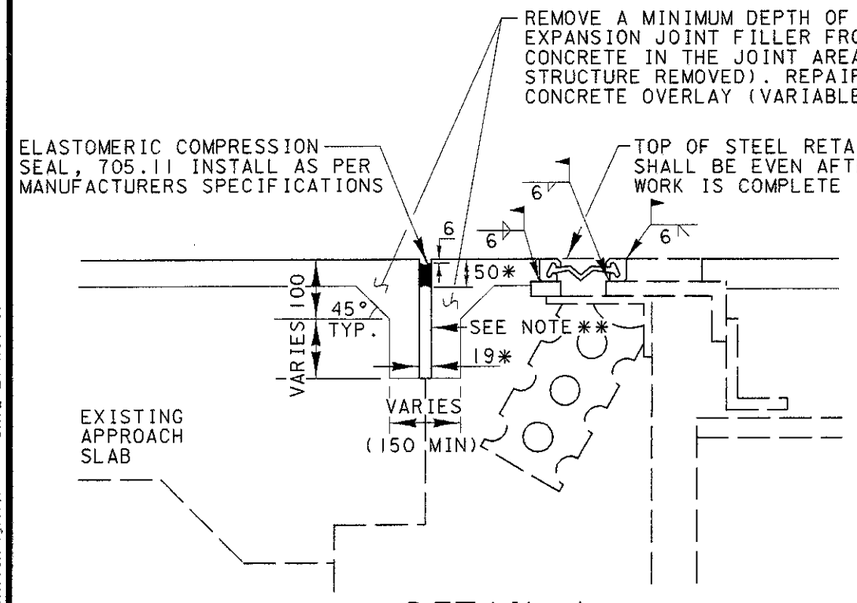
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) CARE SHALL BE TAKEN NOT TO DAMAGE THE REMAINING STRUCTURE WHEN REMOVING THE EXISTING STEEL RETAINERS. ALL DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE

2) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

3) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

4) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3 mm AT THE REAR ABUTMENT AND 3-20 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY DISTRICT THREE

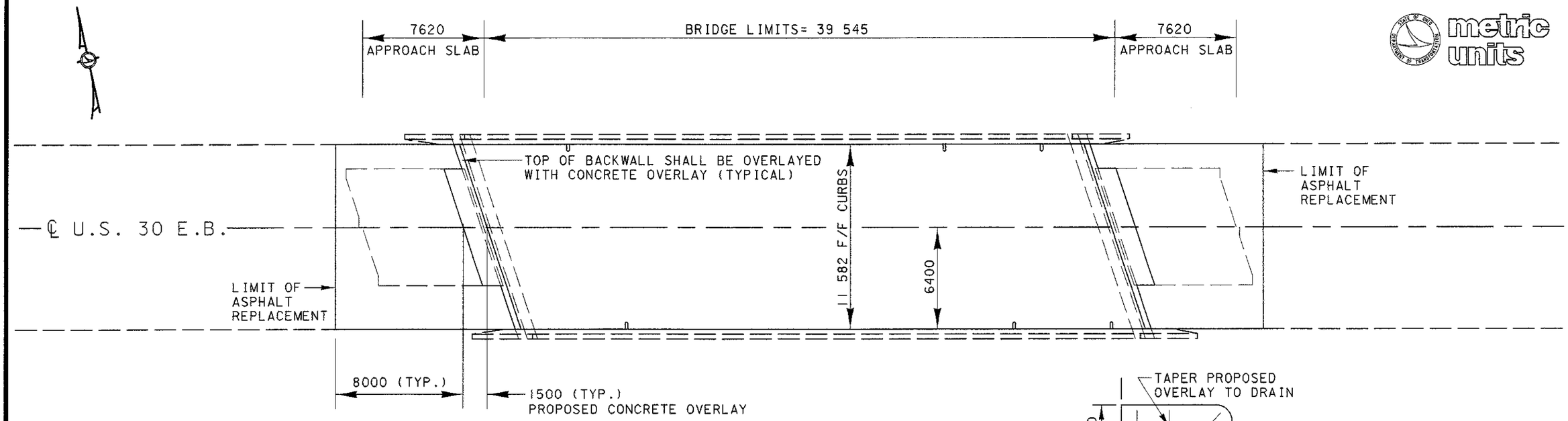
DESIGNED EJG CHECKED NRC
DRAWN EJG REVISED
REVIEWED RDW DATE 11-97
STRUCTURAL FILE NUMBER 1701266

TYPICAL SECTIONS
CRA-30-11442L S.L.K. CRA-30-0711L S.L.M.

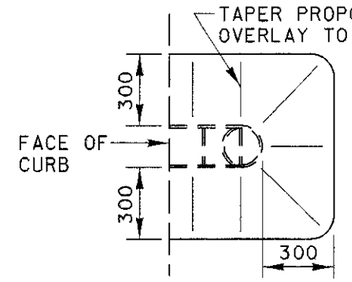
CRA-30-6.453

22
41

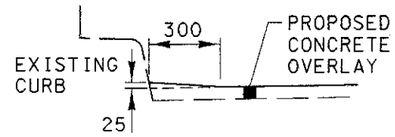
DESIGN FILE: i:\users\eglover\bridge\1997\cro1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



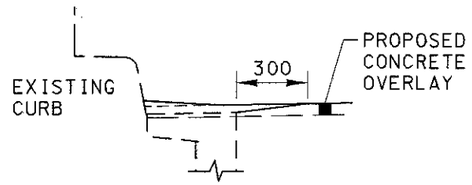
PLAN VIEW



PARTIAL PLAN VIEW AT SCUPPER



TYPICAL SECTION VIEW AT CURB



SECTION VIEW AT CURB (AT SCUPPER)

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	458	square meter	WEARING COURSE REMOVED, CONCRETE
202	10	each	REMOVAL MISC.: ROCKERS
254	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	70	liter	TACK COAT, 702.13
446	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	483	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	9	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	16	square meter	HAND CHIPPING
SPECIAL	483	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 4

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED

2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE

3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED

4) THE EXISTING GUARDRAIL IS NOT SHOWN

5) SEE SHEET NO. 24 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 5-97	EJG	RDW	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701290	

GENERAL PLAN

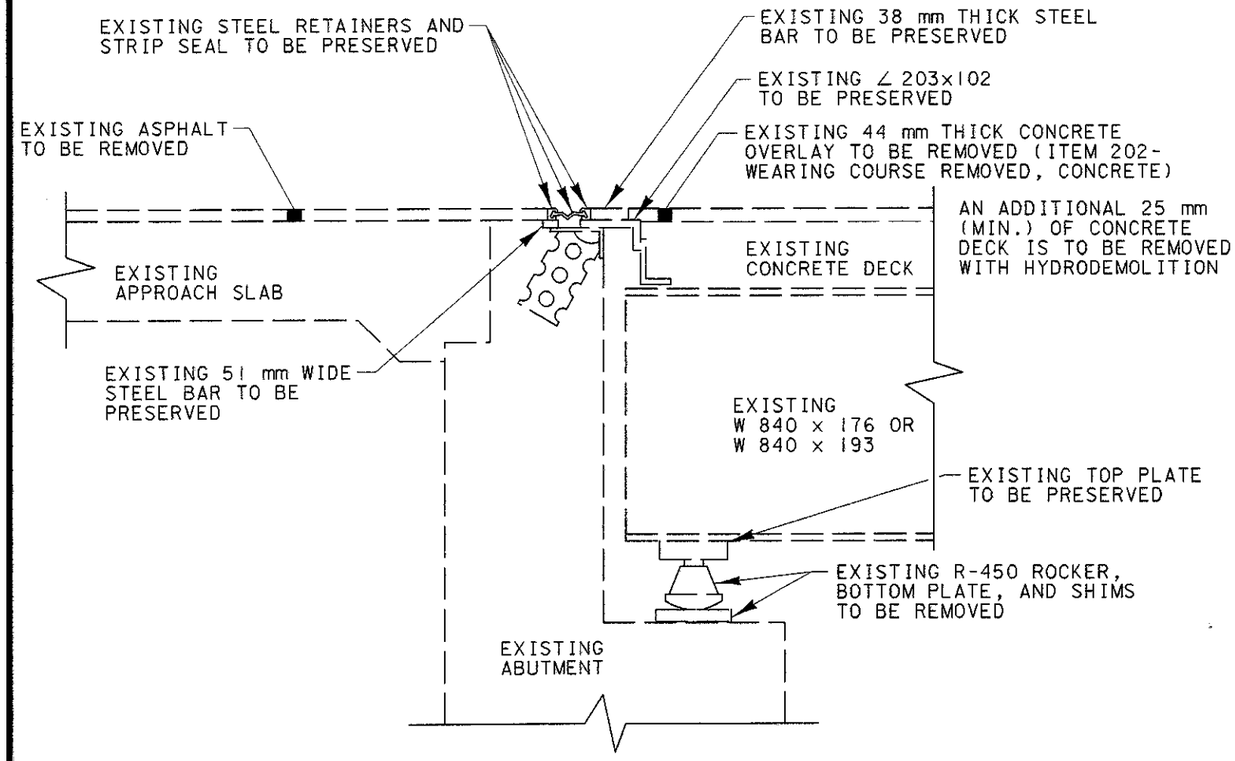
CRA-30-11442R S.L.K. CRA-30-07IIR S.L.M.

CRA-30-6.453

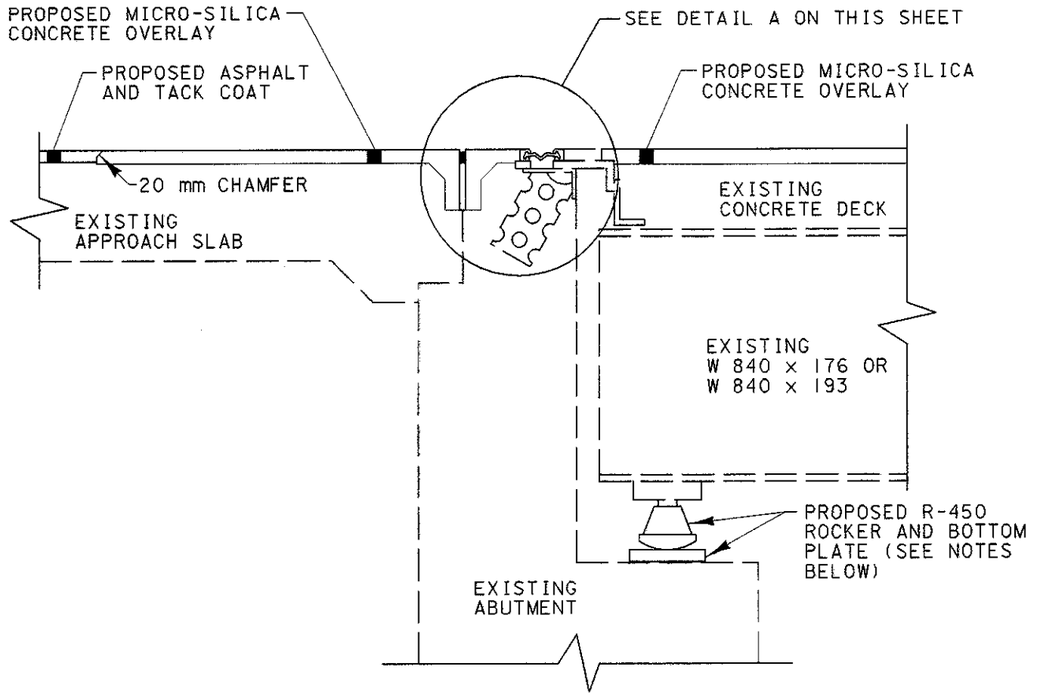
23
41

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eg/over DATE: 24 NOV 97

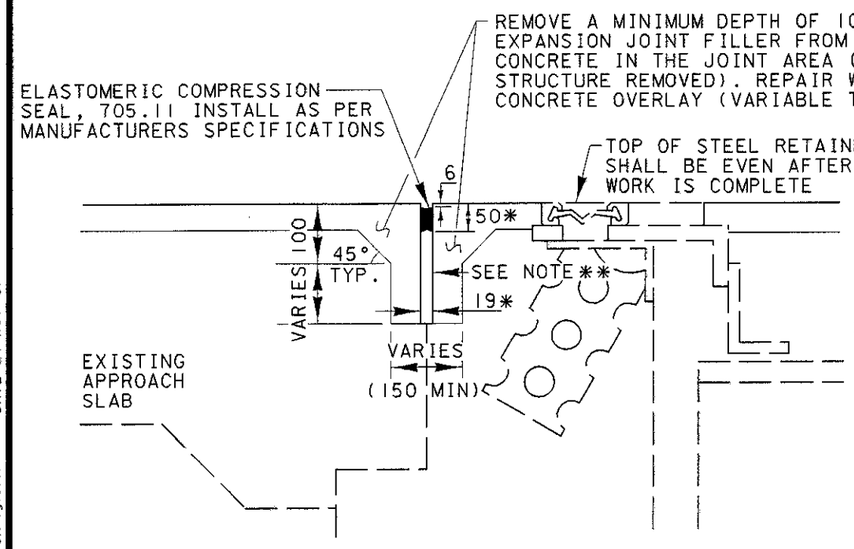
metric units



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

2) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

3) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3 mm AT THE REAR ABUTMENT AND 3-120 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97

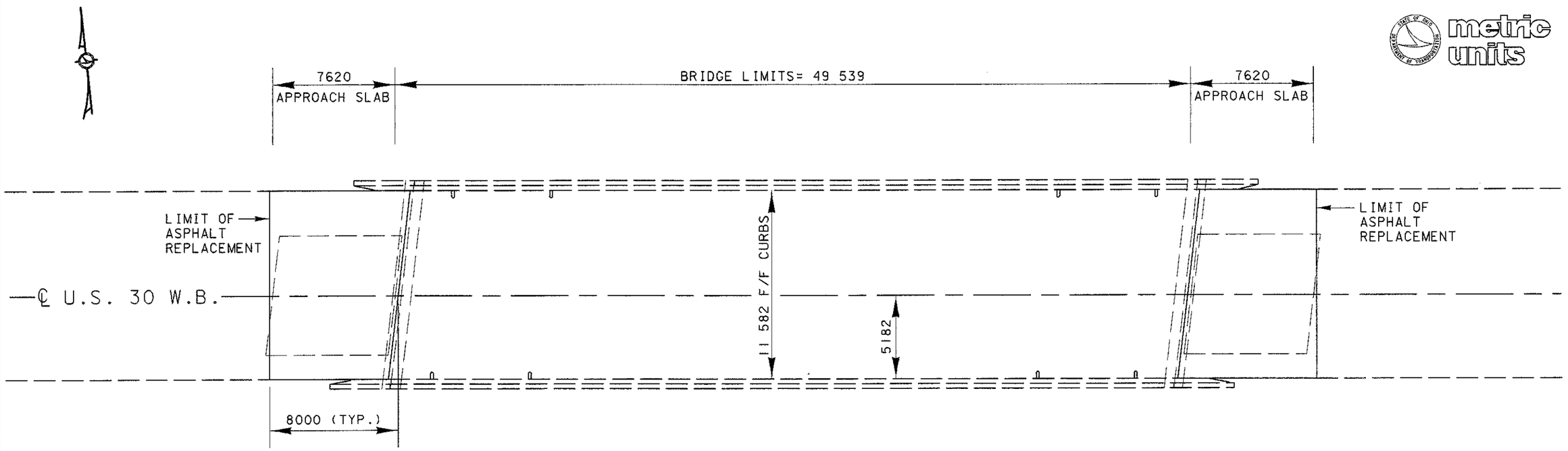
DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 5-97	EJG	RDJ	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		170/290	

TYPICAL SECTIONS

CRA-30-11442R S.L.K. CRA-30-071IR S.L.M.

CRA-30-6.453



PLAN VIEW

ITEM	QUANTITY	UNIT	DESCRIPTION
202	10	each	REMOVAL MISC.: ROCKERS
254	185	square meter	PAVEMENT PLANING, BITUMINOUS
407	67	liter	TACK COAT, 702.13
446	7	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	50	meter	STRUCTURE, MISC.: JOINT SEALING

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 4

NOTES:

1) THE EXISTING CENTERLINE CONSTRUCTION JOINT IN THE CONCRETE OVERLAY SHALL BE SEALED USING ITEM SPECIAL- STRUCTURE, MISC.: JOINT SEALING

2) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED

3) THE EXISTING GUARDRAIL IS NOT SHOWN

4) SEE SHEET NO. 26 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED EJG 5-97 | DRAWN EJG | CHECKED NRC | REVISED

DATE REVIEWED RDW 11-97 | STRUCTURAL FILE NUMBER 1701320

GENERAL PLAN

CRA-30-1223/L S.L.M. CRA-30-0760L

CRA-30-6.453

25
41

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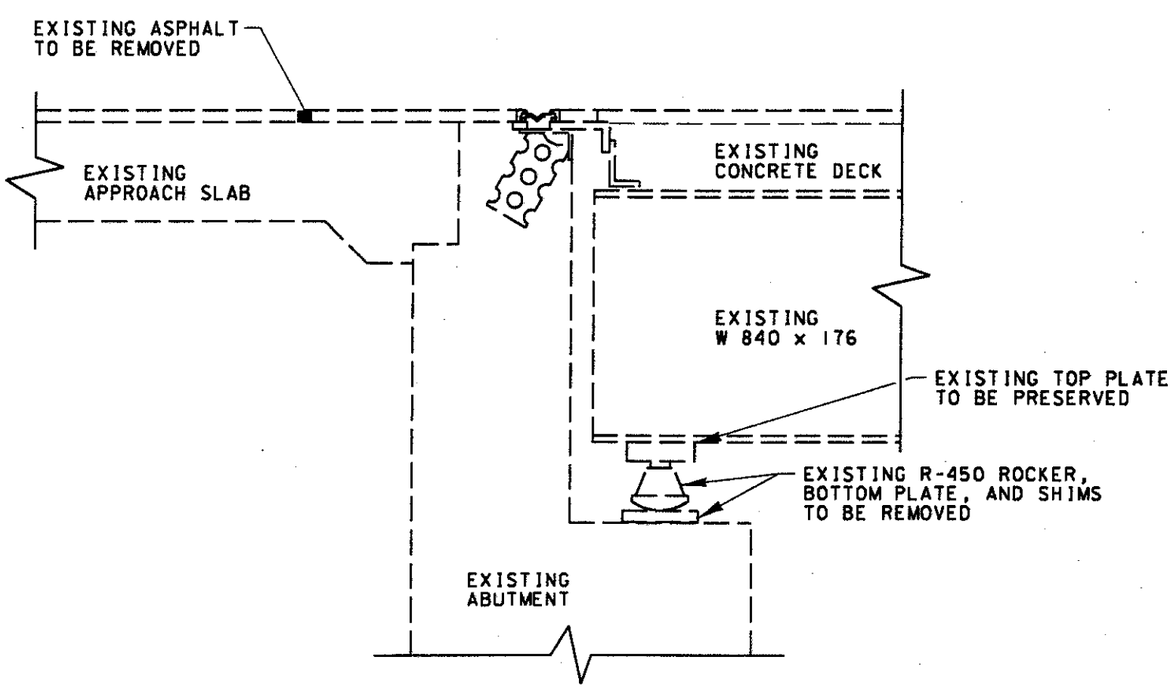
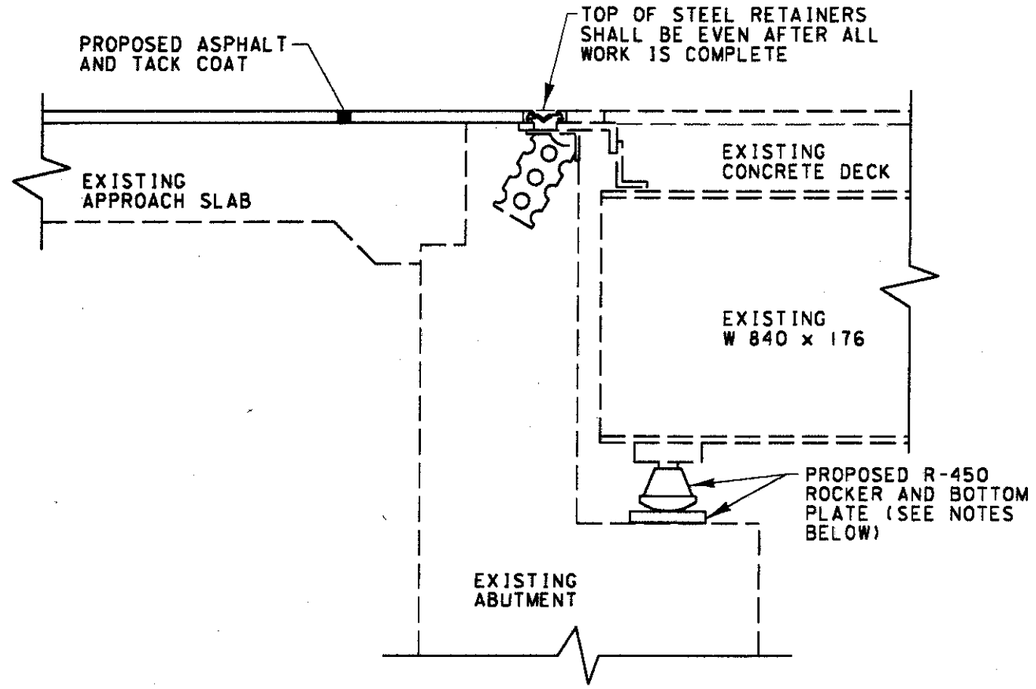
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW

NOTES:

1) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

2) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

3) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3-6 mm AT THE REAR ABUTMENT AND 3 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 3-97	EJG	RDN	4-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701320	

TYPICAL SECTIONS

CRA-30-1223IL S.L.K. CRA-30-0760L S.L.M.

CRA-30-6.453

26
41

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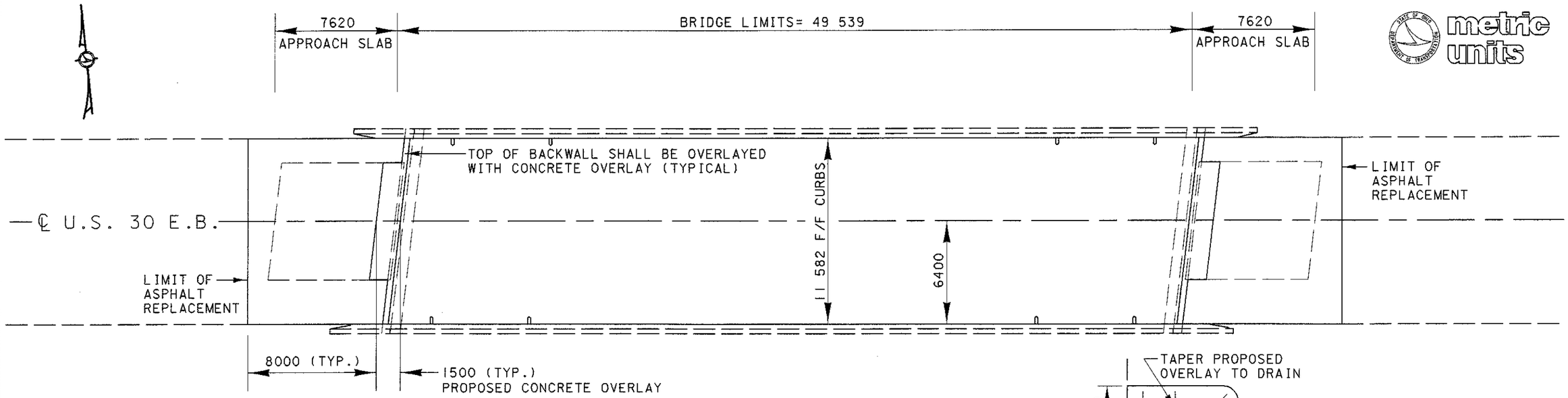
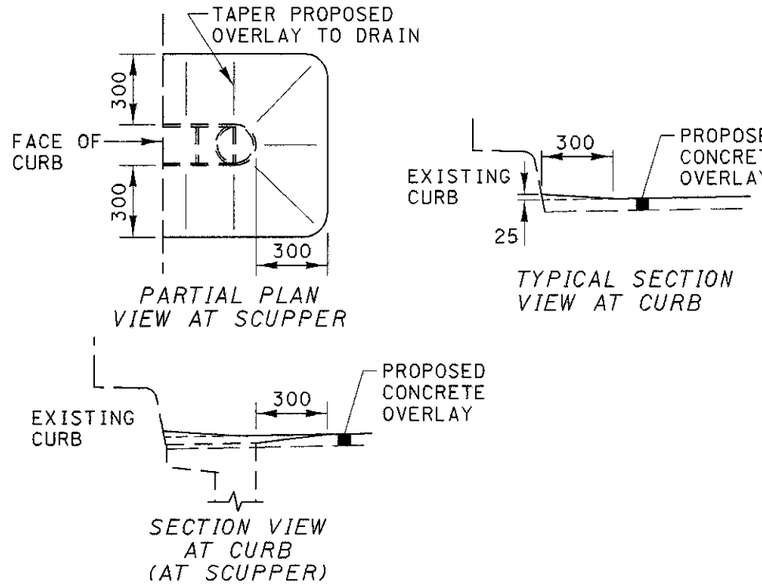
WORKSTATION: eglover DATE: 21 APR 97



PLAN VIEW



ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	574	square meter	WEARING COURSE REMOVED, CONCRETE
202	10	each	REMOVAL MISC.: ROCKERS
202	1	each	REMOVAL MISC.: STRIP SEAL
254	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	70	liter	TACK COAT, 702.13
446	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	13	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	599	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	12	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	20	square meter	HAND CHIPPING
SPECIAL	599	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 5

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED

2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE

3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED

4) THE STRIP SEAL AT THE REAR ABUTMENT SHALL BE REPLACED

5) THE EXISTING GUARDRAIL IS NOT SHOWN

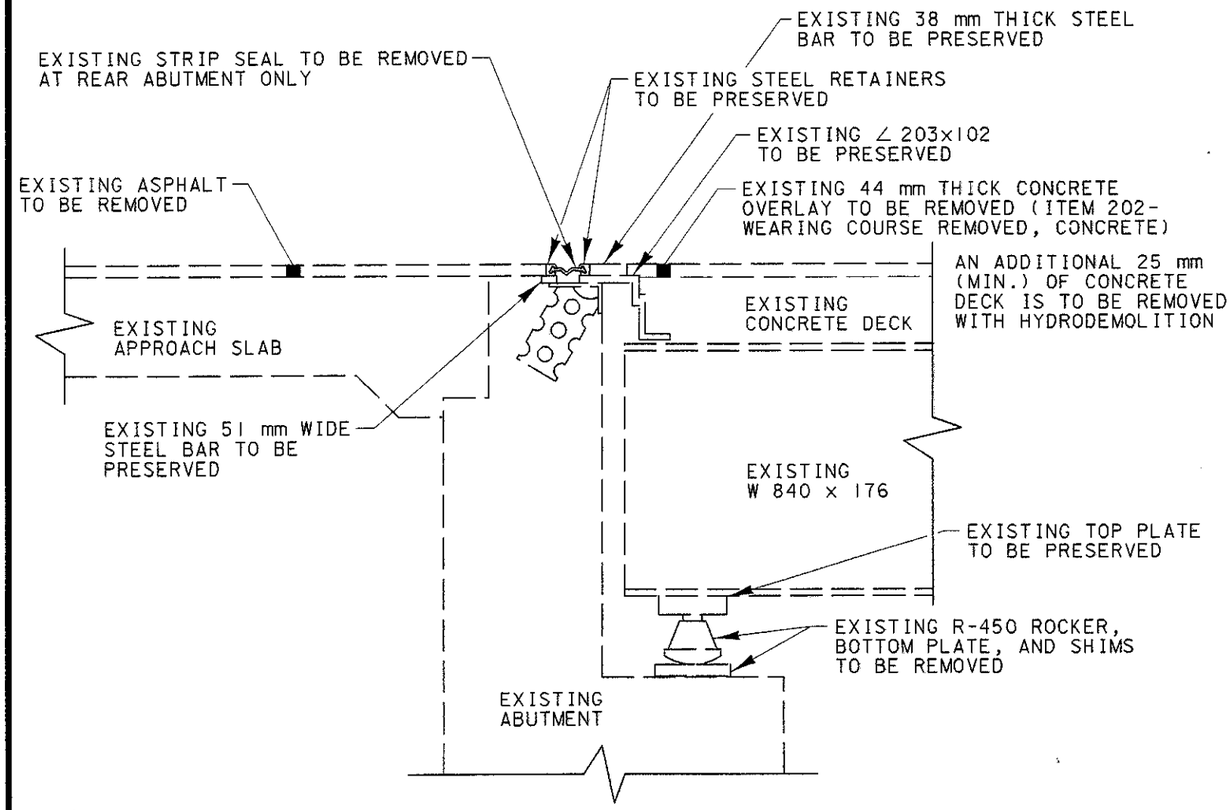
6) SEE SHEET NO. 28 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

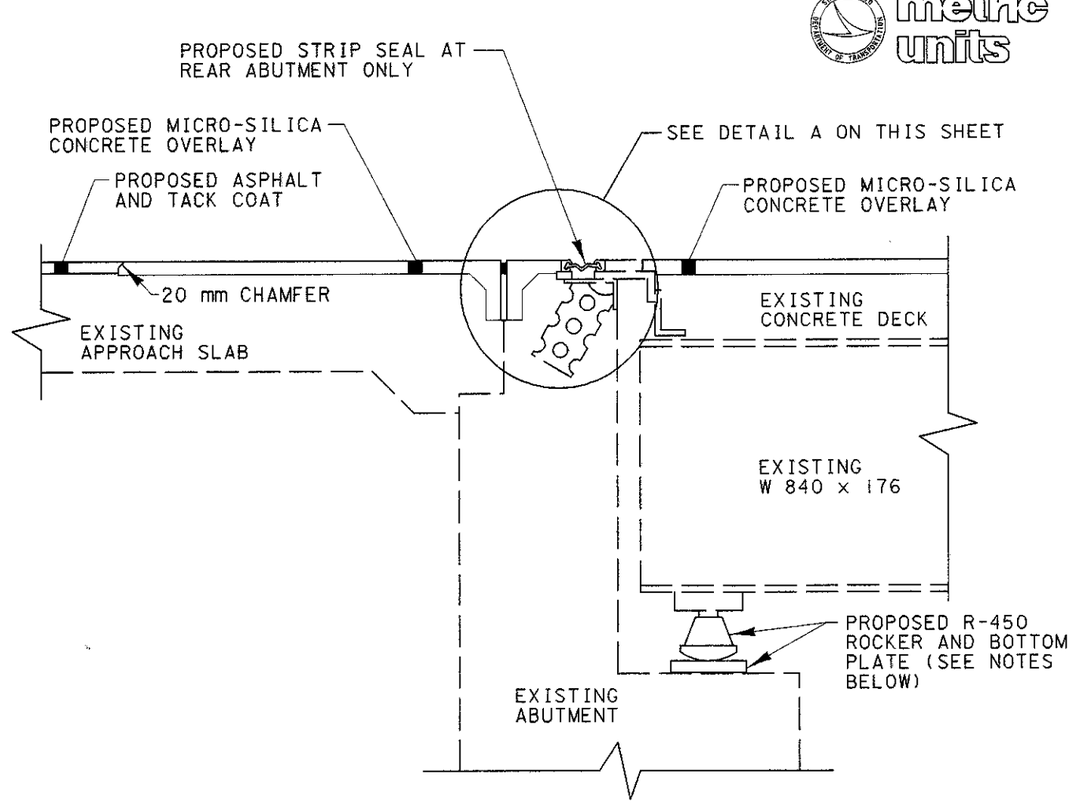
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97

DESIGN AGENCY: DISTRICT THREE
DESIGNED EJG 5-97 CHECKED NRC
DRAWN EJG REVISED
REVIEWED RDN 11-97 DATE STRUCTURAL FILE NUMBER 1701355

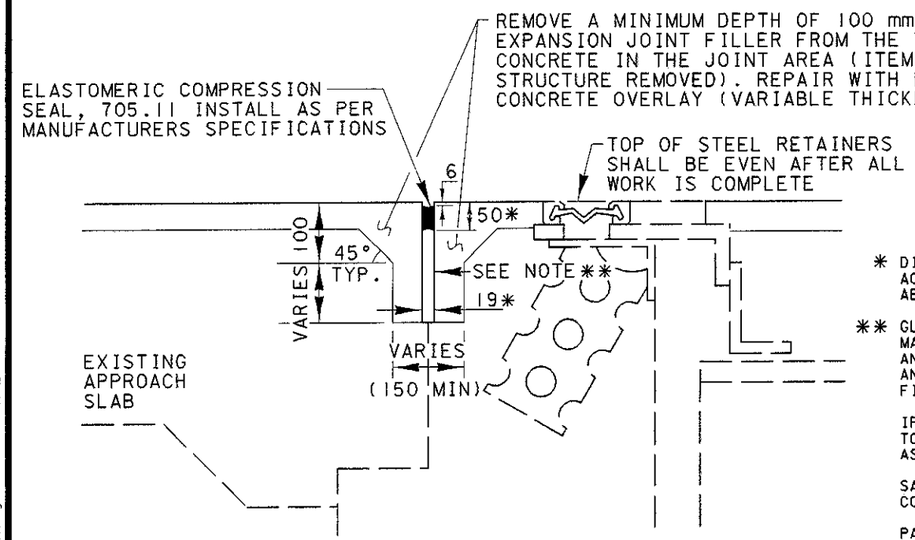
GENERAL PLAN
CRA-30-1223(R S.L.K. CRA-30-0760R S.L.M.
CRA-30-6.453
27
41



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

2) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

3) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3-10 mm AT THE REAR ABUTMENT AND 3-6 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED EJG | DRAWN EJG | REVIEWED RDW | DATE 1197 | STRUCTURAL FILE NUMBER 1701355

CHECKED NRC | REVISED

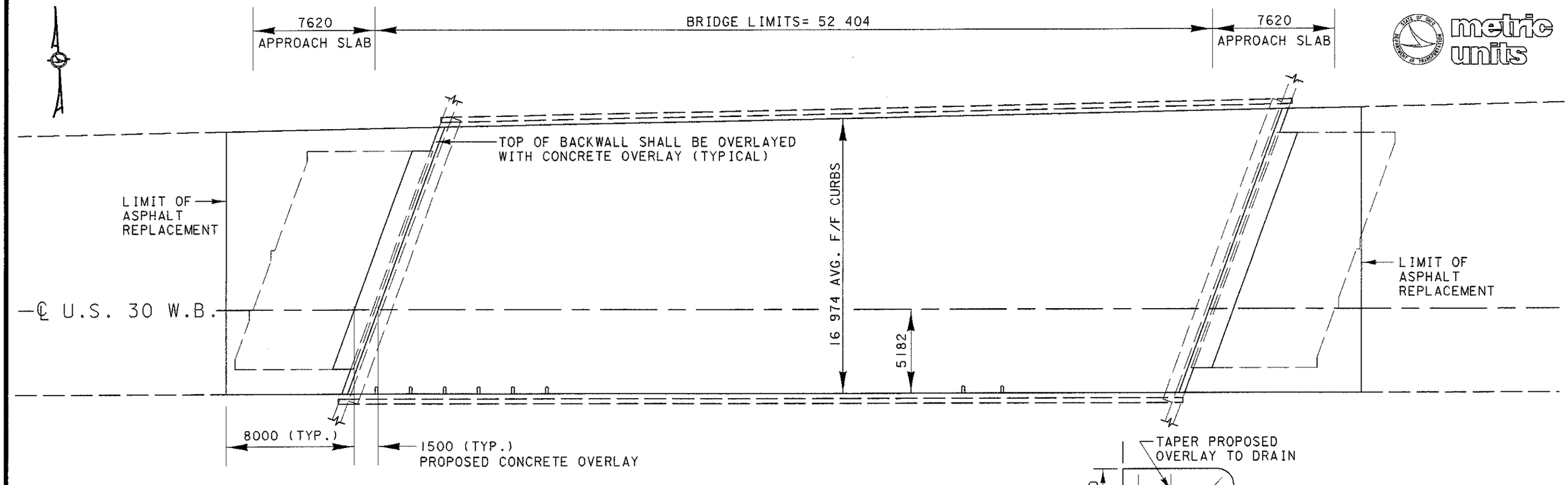
TYPICAL SECTIONS

CRA-30-1223JR S.L.K. CRA-30-0760R S.L.M.

CRA-30-6.453

28
41

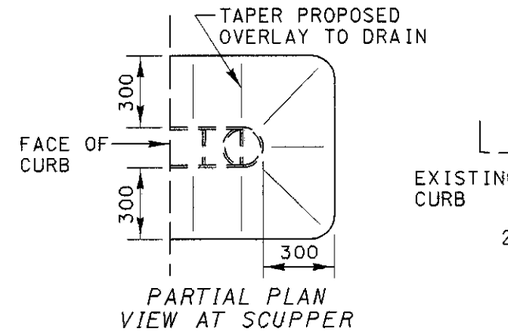
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



PLAN VIEW

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	890	square meter	WEARING COURSE REMOVED, CONCRETE
202	14	each	REMOVAL MISC.: ROCKERS
202	2	each	REMOVAL MISC.: STRIP SEAL
254	318	square meter	PAVEMENT PLANING, BITUMINOUS
407	98	liter	TACK COAT, 702.13
446	11	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	38	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	32	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	14	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	935	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	18	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	21	square meter	HAND CHIPPING
SPECIAL	935	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 5



NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED

2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE

3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED

4) THE STRIP SEAL AT BOTH ABUTMENTS SHALL BE REPLACED

5) THE EXISTING GUARDRAIL IS NOT SHOWN

6) SEE SHEET NO. 30 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DATE: 11-97

REVISED: RDW

STRUCTURAL FILE NUMBER: 1701444

DRAWN: EJG

REVISED:

DESIGNED: EJG 5-97

CHECKED: NRC

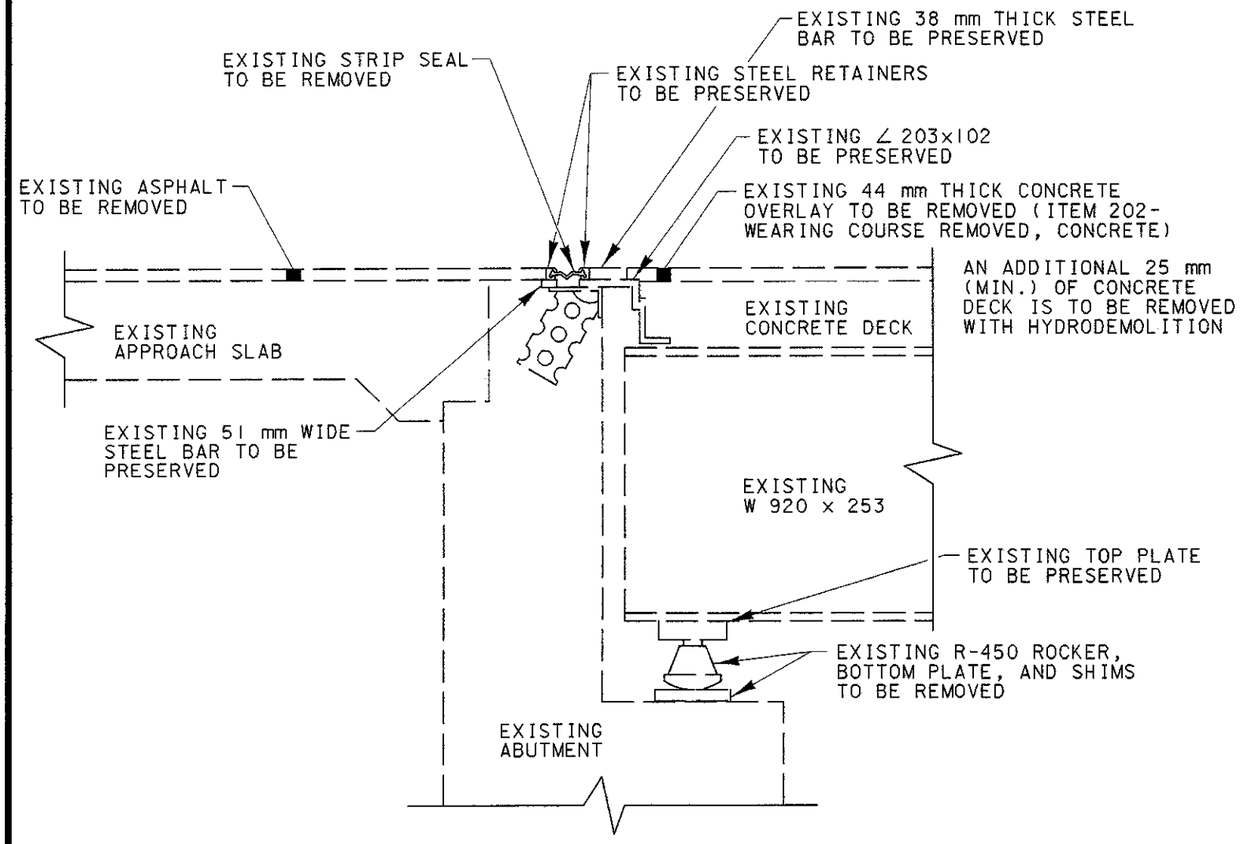
GENERAL PLAN

CRA-30-13696L S.L.K. CRA-30-085/L S.L.M.

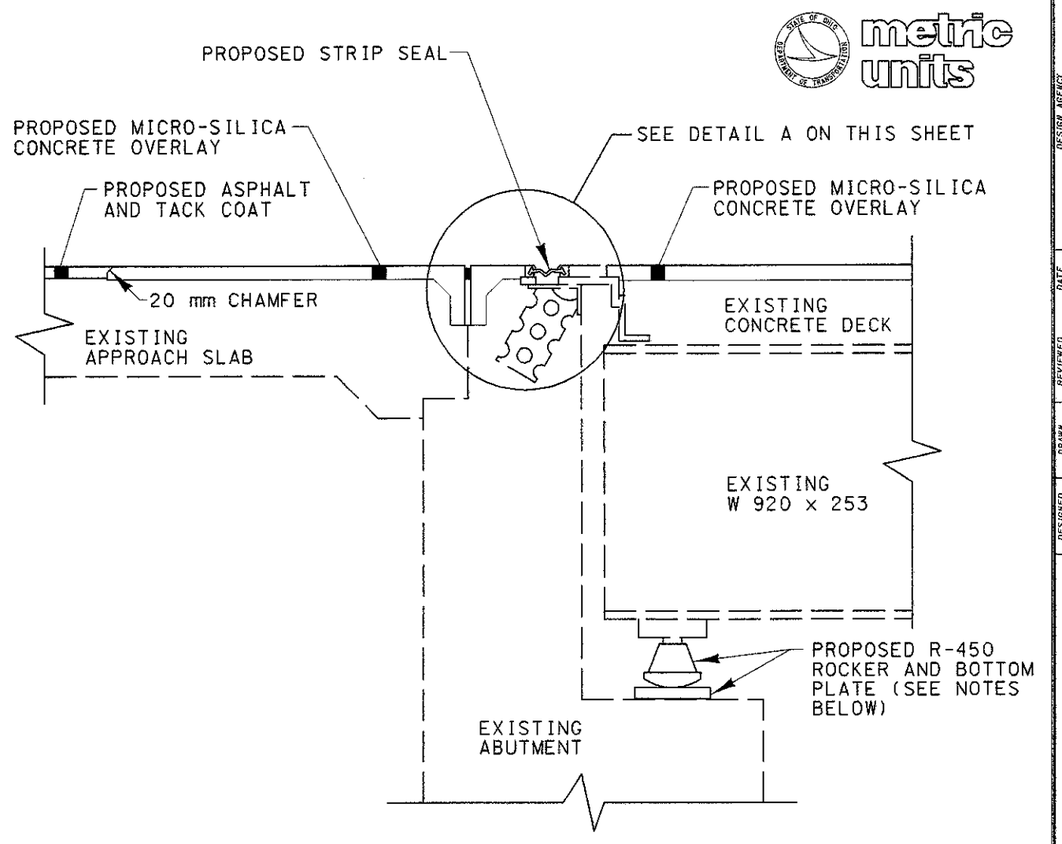
CRA-30-6.453

29
41

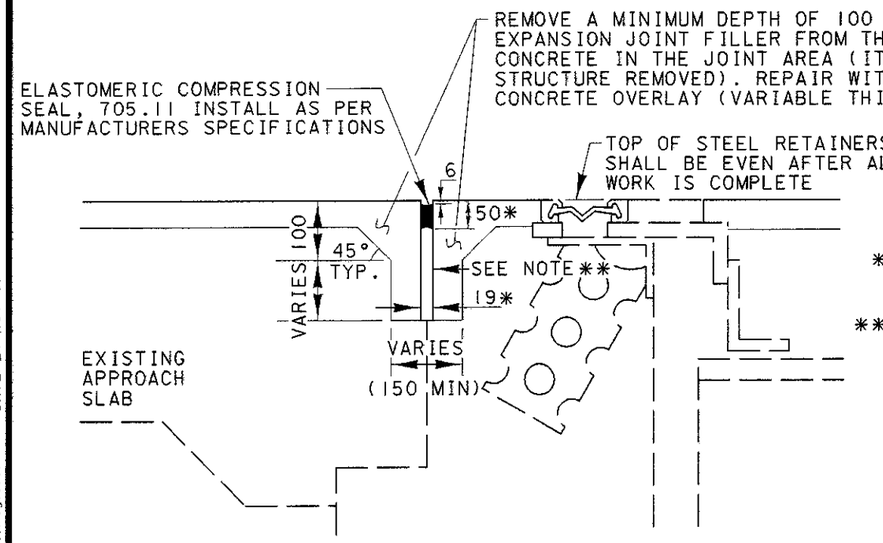
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

2) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

3) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3-20 mm AT THE REAR ABUTMENT AND 3-15 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 3-97	EJG	RDN	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701444	

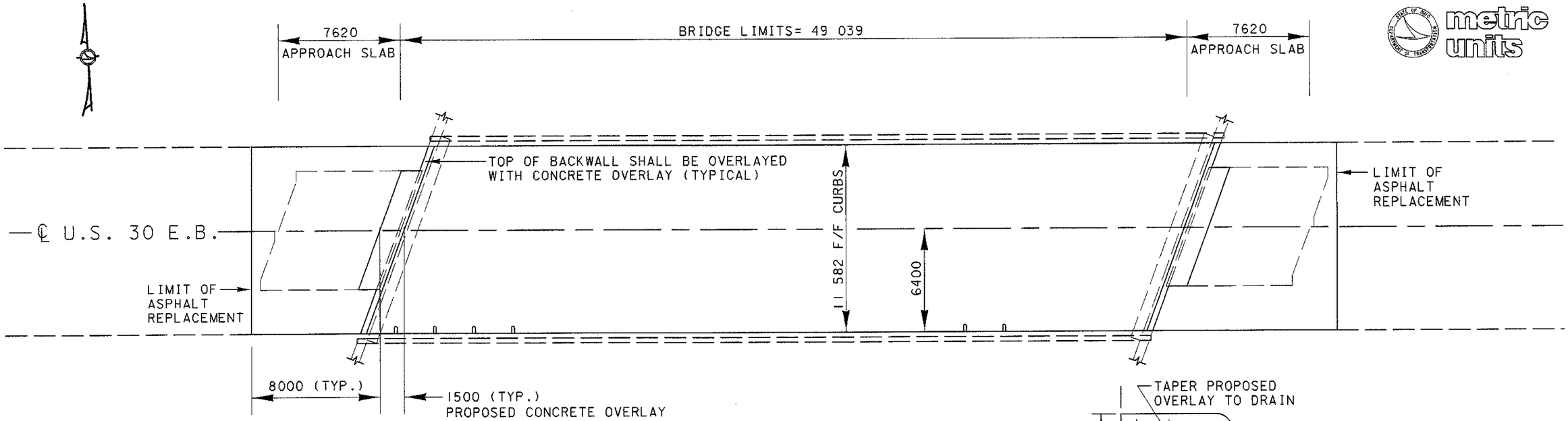
TYPICAL SECTIONS

CRA-30-13696L S.L.K. CRA-30-0851L S.L.M.

CRA-30-6.453

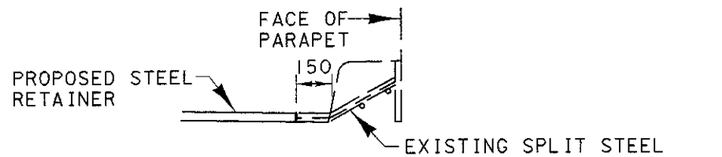
30
41

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



PLAN VIEW

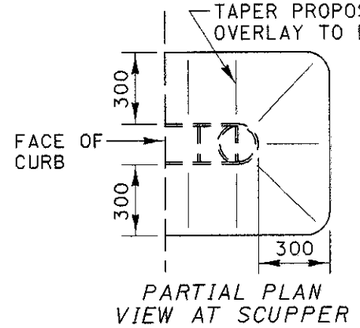
NOTE: THE EXISTING SPLIT EXTRUSION STEEL RETAINERS AT THE REAR ABUTMENT SHALL BE PRESERVED. THIS PORTION OF THE STEEL RETAINER EXTENDS FROM APPROXIMATELY 150 mm IN FRONT OF THE CURB UP INTO THE CURB



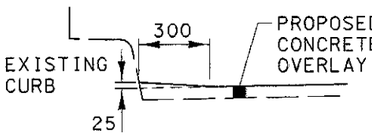
SECTION VIEW THROUGH CURB

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	568	square meter	WEARING COURSE REMOVED, CONCRETE
202	10	each	REMOVAL MISC.: ROCKERS
202	1	each	REMOVAL MISC.: STRIP SEAL
202	12	meter	REMOVAL MISC.: STEEL RETAINERS
254	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	70	liter	TACK COAT, 702.13
446	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
516	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	13	meter	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	593	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	11	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	20	square meter	HAND CHIPPING
SPECIAL	593	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

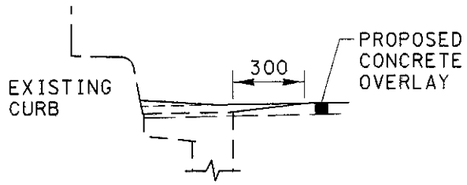
ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 6



PARTIAL PLAN VIEW AT SCUPPER



TYPICAL SECTION VIEW AT CURB



SECTION VIEW AT CURB (AT SCUPPER)

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED

2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE

3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED

4) THE STRIP SEAL AND A PORTION OF THE STEEL RETAINERS AT THE REAR ABUTMENT SHALL BE REPLACED

5) THE EXISTING GUARDRAIL IS NOT SHOWN

6) SEE SHEET NO. 32 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 5-97	EJG	RDW	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701479	

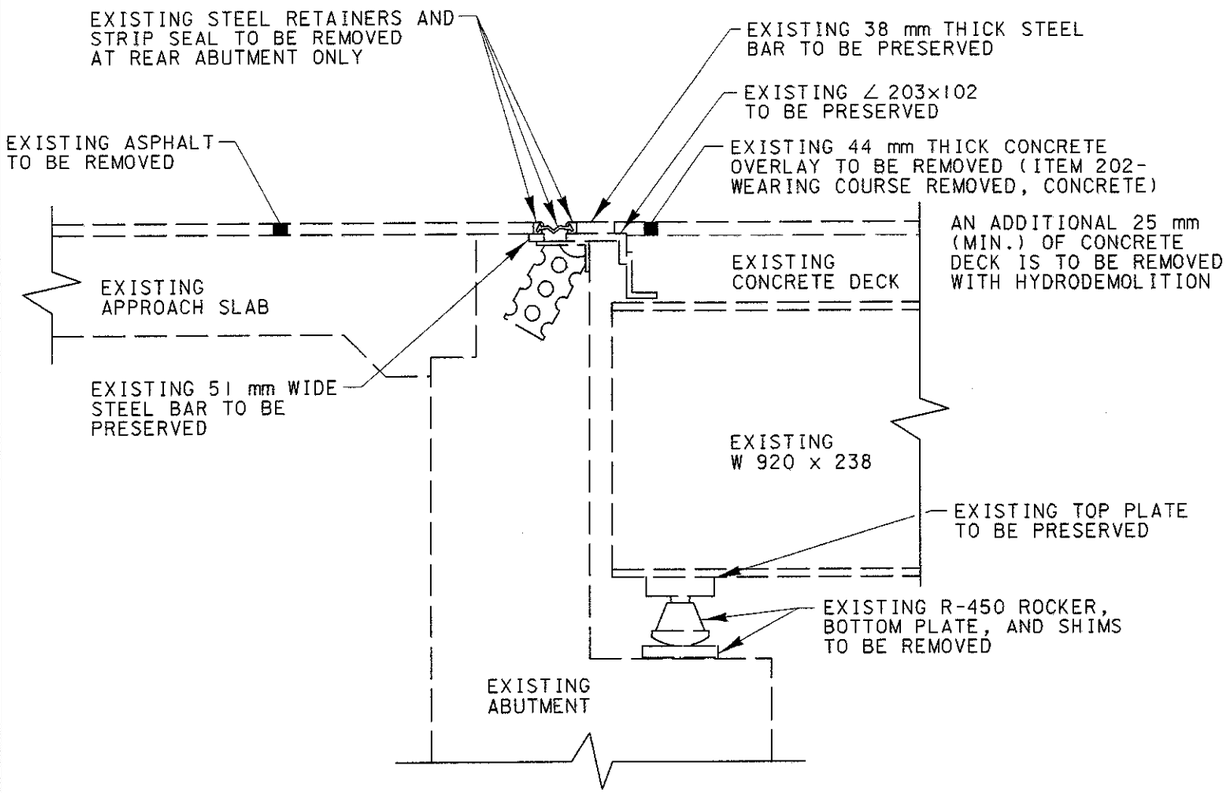
GENERAL PLAN

CRA-30-13696R S.L.K. CRA-30-0851R S.L.M.

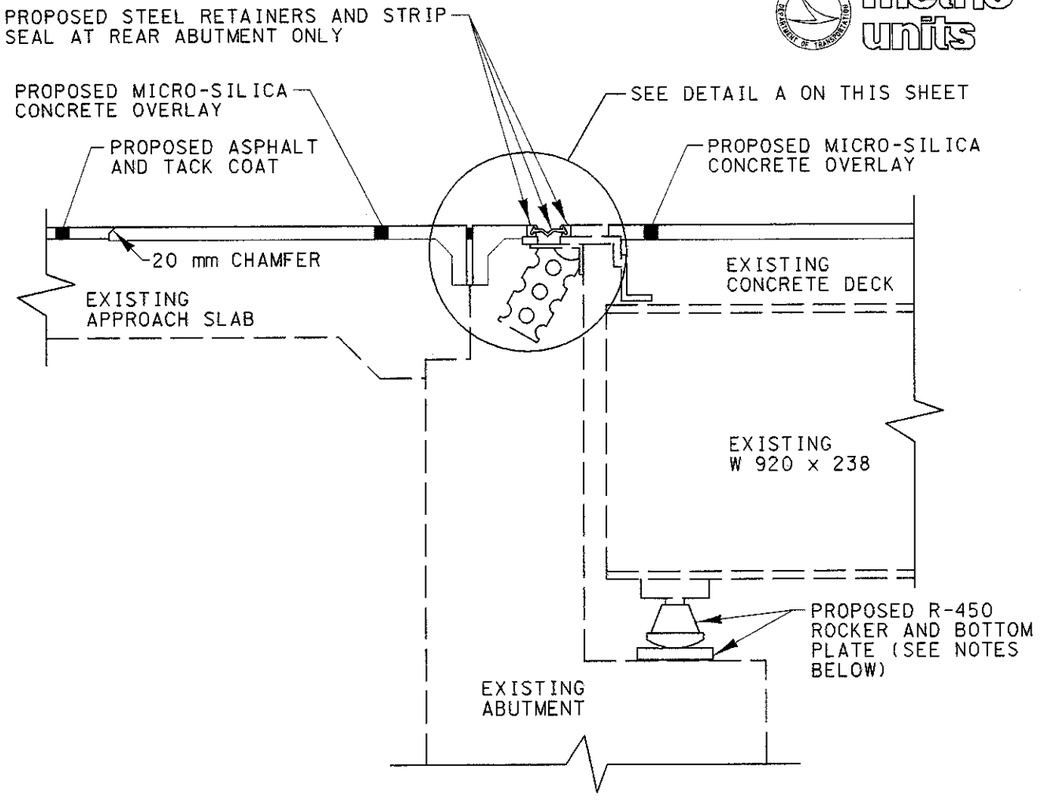
CRA-30-6.453

31/41

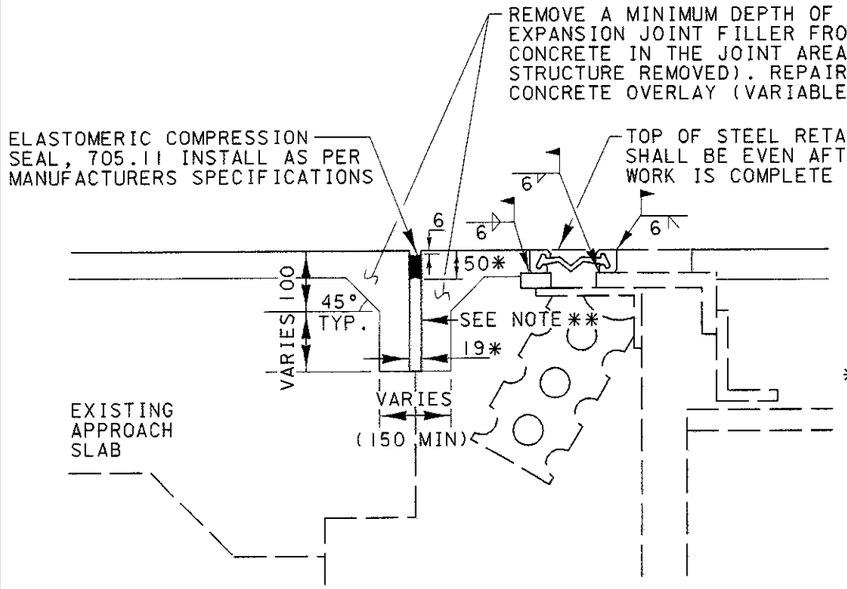
DESIGN FILE: i:\users\eglover\bridge\1997\crd1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) CARE SHALL BE TAKEN NOT TO DAMAGE THE REMAINING STRUCTURE WHEN REMOVING THE EXISTING STEEL RETAINERS. ALL DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE

2) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

3) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

4) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3-20 mm AT THE REAR ABUTMENT AND 3-15 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

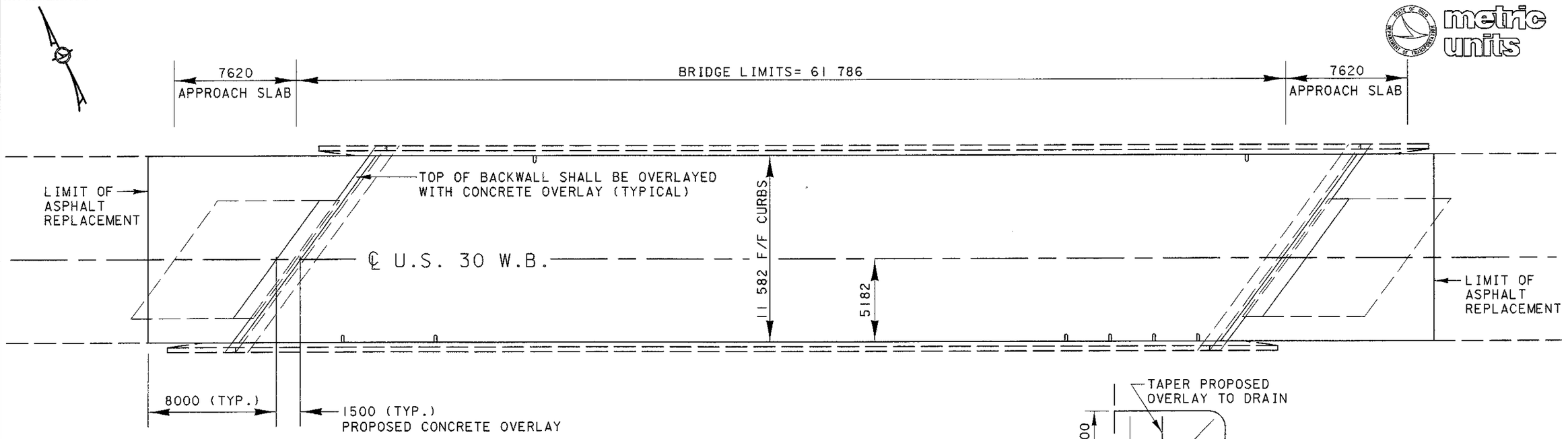
DESIGNED	DRAWN	REVISED	DATE
EJG 5-97	EJG	RDN	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701479	

TYPICAL SECTIONS

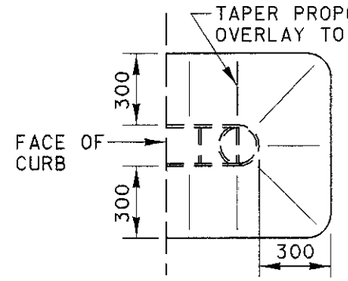
CRA-30-1/3696R S.L.K. CRA-30-085IR S.L.M.

CRA-30-6.453

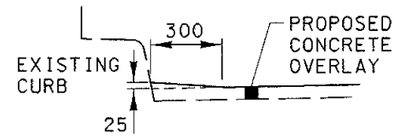
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



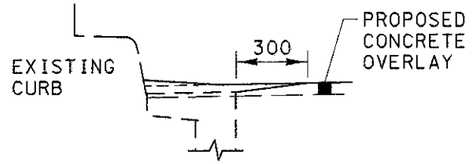
PLAN VIEW



PARTIAL PLAN
VIEW AT SCUPPER



TYPICAL SECTION
VIEW AT CURB



SECTION VIEW
AT CURB
(AT SCUPPER)

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	716	square meter	WEARING COURSE REMOVED, CONCRETE
202	10	each	REMOVAL MISC.: ROCKERS
202	2	each	REMOVAL MISC.: STRIP SEAL
254	220	square meter	PAVEMENT PLANING, BITUMINOUS
407	70	liter	TACK COAT, 702.13
446	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	31	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	20	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	742	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	14	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	25	square meter	HAND CHIPPING
SPECIAL	5	cubic meter	FULL DEPTH REPAIR (MICRO-SILICA)
SPECIAL	742	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 6

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED

2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE

3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED

4) THE STRIP SEAL AT BOTH ABUTMENTS SHALL BE REPLACED

5) THE EXISTING GUARDRAIL IS NOT SHOWN

6) SEE SHEET NO. 34 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY DISTRICT THREE

DESIGNED EJG 5-97 | DRAWN EJG | REVIEWED RDN 11-97 | DATE | STRUCTURAL FILE NUMBER 1701509

CHECKED NRC | REVISED

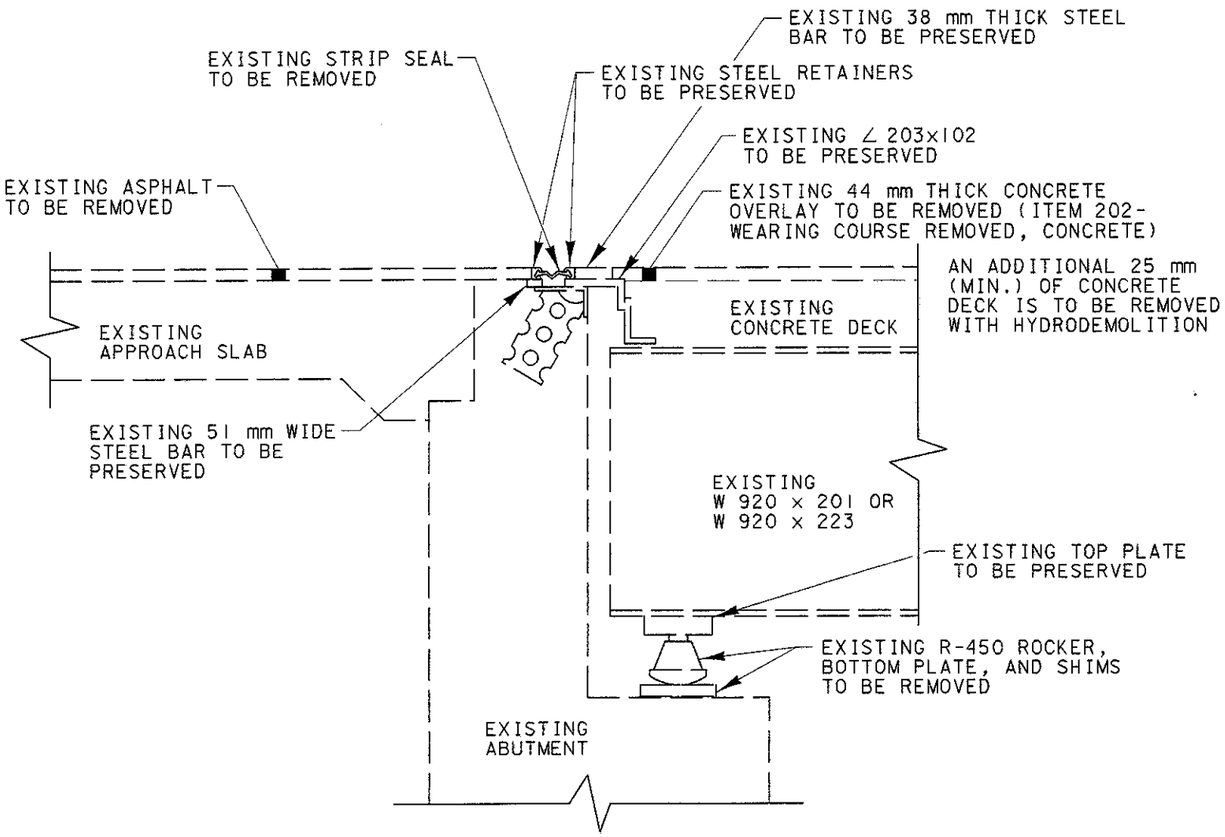
GENERAL PLAN

CRA-30-14033L S.L.K. CRA-30-0872L S.L.M.

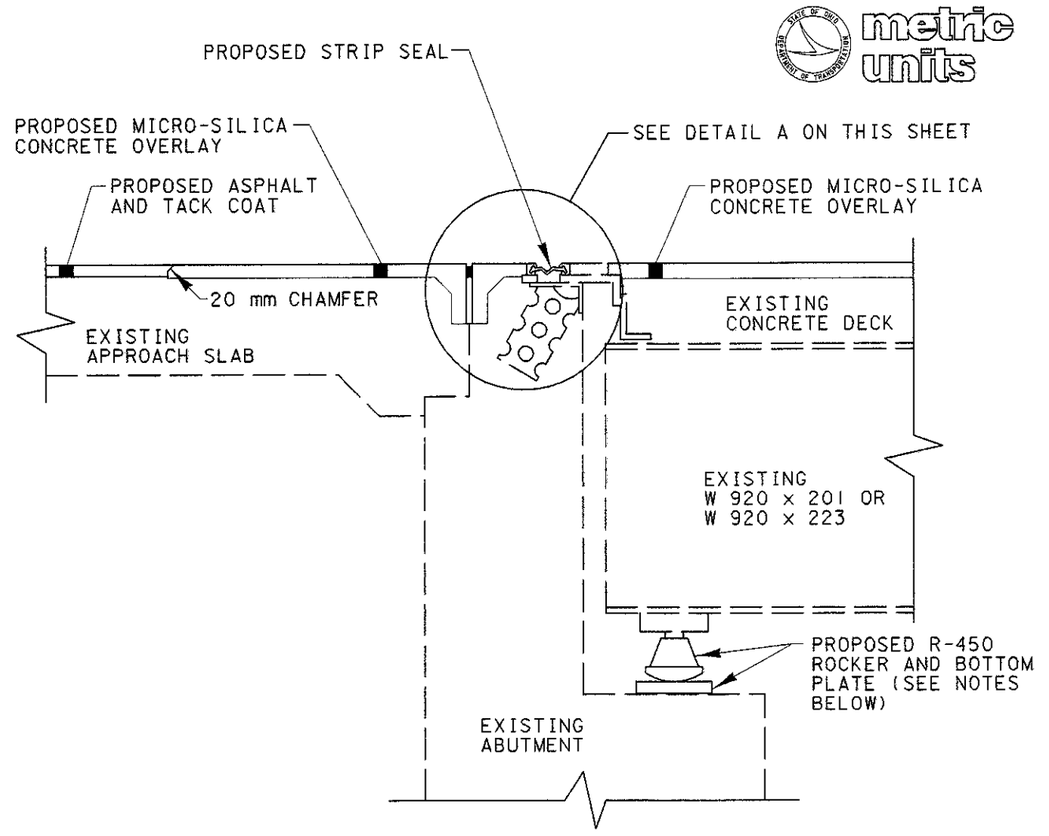
CRA-30-6.453

33
41

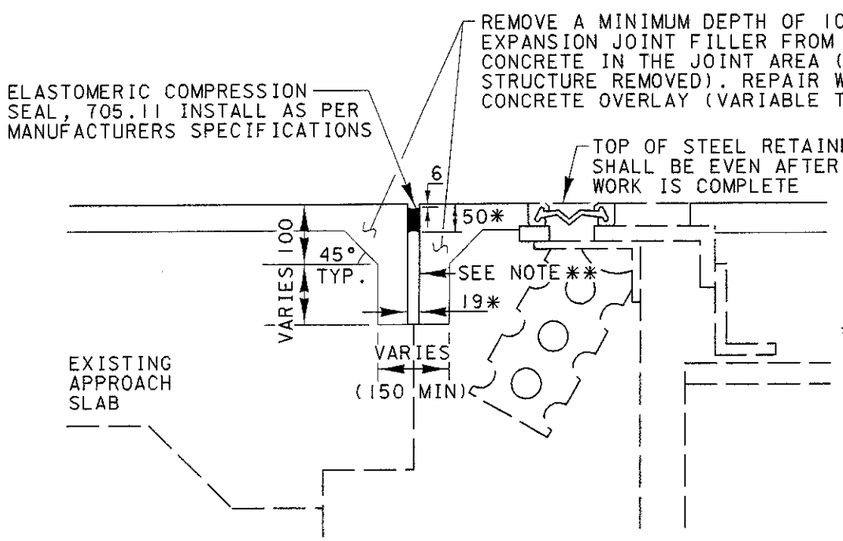
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

2) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

3) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3 mm AT THE REAR ABUTMENT AND 3-15 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

REVIEWED: RDN 11-97 | DATE | STRUCTURAL FILE NUMBER: 1701509

DRAWN: EJG | REVISED

DESIGNED: EJG 5-97 | CHECKED: NRC

TYPICAL SECTIONS

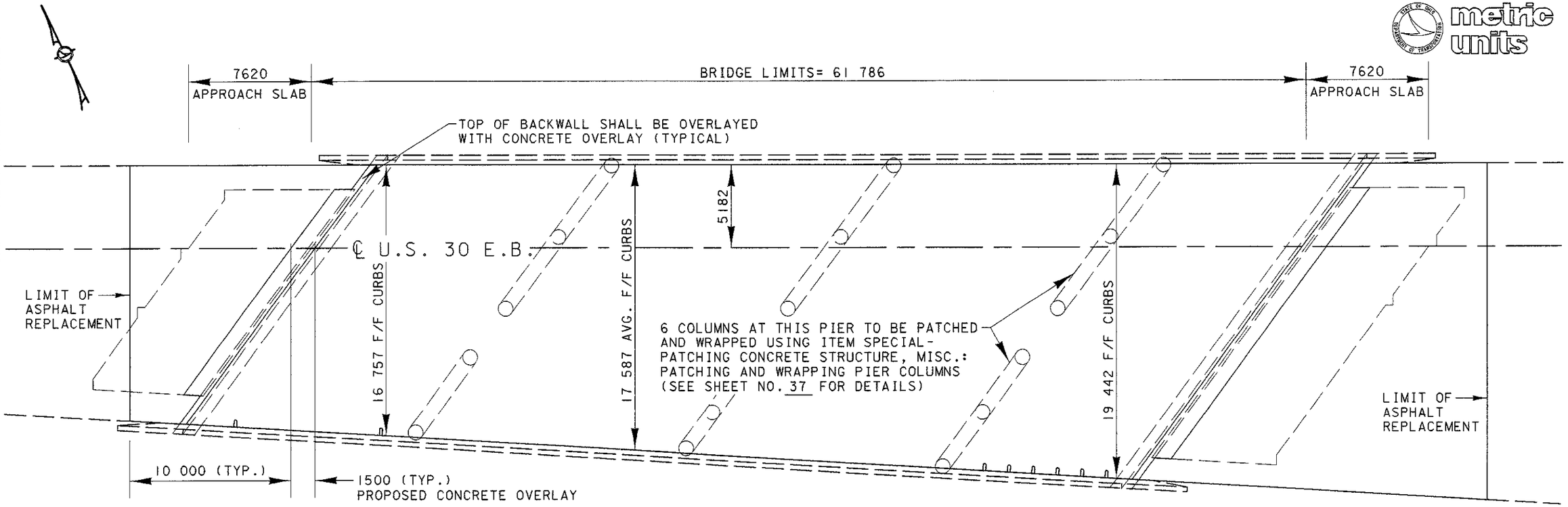
CRA-30-14033L S.L.K. CRA-30-0872L S.L.M.

CRA-30-6.453

34
41

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97

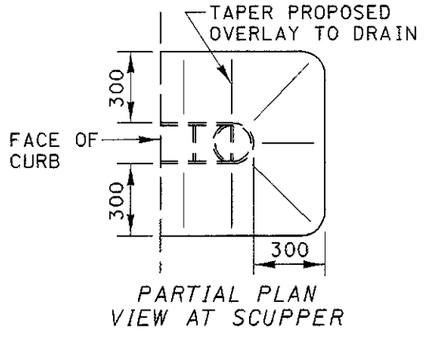
metric units



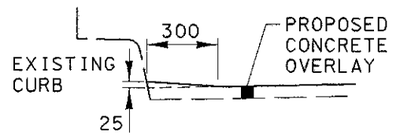
PLAN VIEW

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	1087	square meter	WEARING COURSE REMOVED, CONCRETE
202	14	each	REMOVAL MISC.: ROCKERS
202	1	each	REMOVAL MISC.: STRIP SEAL
254	455	square meter	PAVEMENT PLANING, BITUMINOUS
407	147	liter	TACK COAT, 702.13
446	16	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
516	21	meter	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS
516	42	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	14	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	1134	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	22	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	25	square meter	HAND CHIPPING
SPECIAL	5	cubic meter	FULL DEPTH REPAIR (MICRO-SILICA)
SPECIAL	1134	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

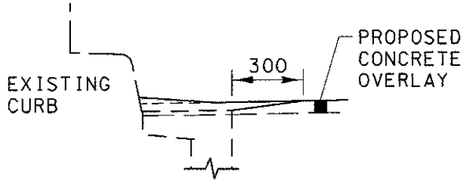
ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 7



PARTIAL PLAN VIEW AT SCUPPER



TYPICAL SECTION VIEW AT CURB



SECTION VIEW AT CURB (AT SCUPPER)

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY (BETWEEN THE CURBS) SHALL BE REMOVED
2) THE ENTIRE BRIDGE DECK (BETWEEN THE CURBS), THE TOP OF THE BACK-WALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE
3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED
4) THE STRIP SEAL AT THE REAR ABUTMENT SHALL BE REPLACED
5) THE EXISTING GUARDRAIL IS NOT SHOWN
6) SEE SHEET NO. 36 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 3-97	EJG	RDW	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701533	

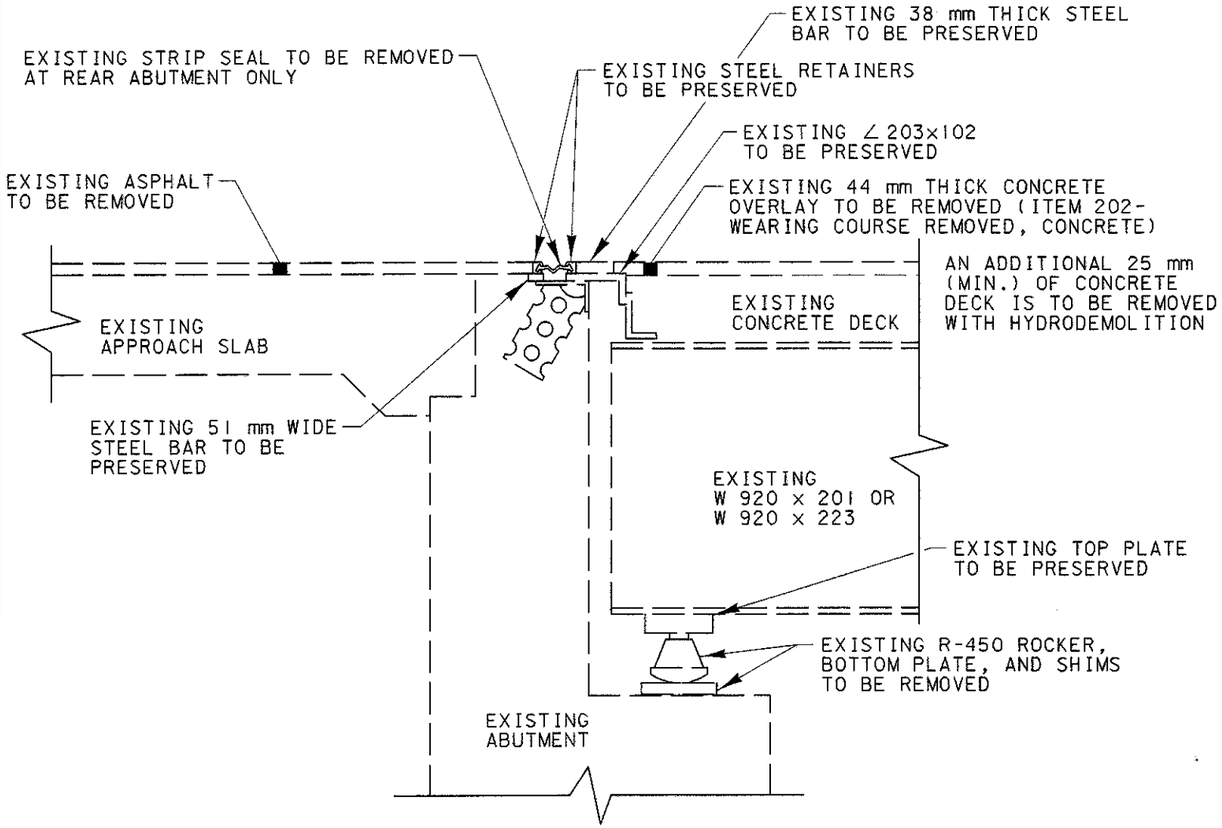
GENERAL PLAN

CRA-30-14033R S.L.K. CRA-30-0872R S.L.M.

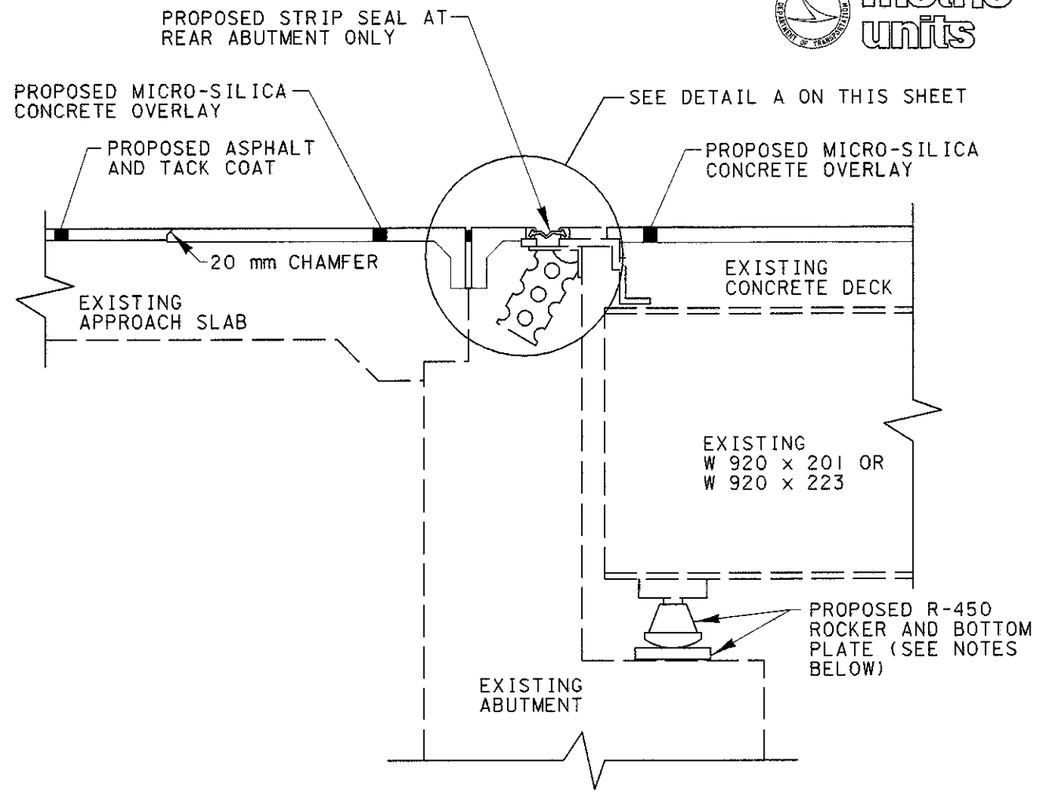
CRA-30-6.453

35
41

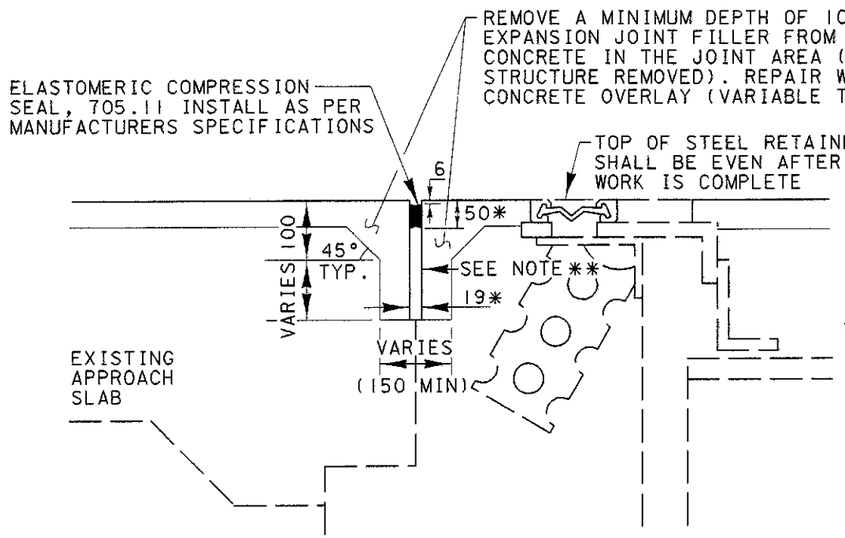
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

2) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

3) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3-15 mm AT THE REAR ABUTMENT AND 3-20 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVISED	DATE
EJG 5-97	EJG	RDW	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701533	

TYPICAL SECTIONS

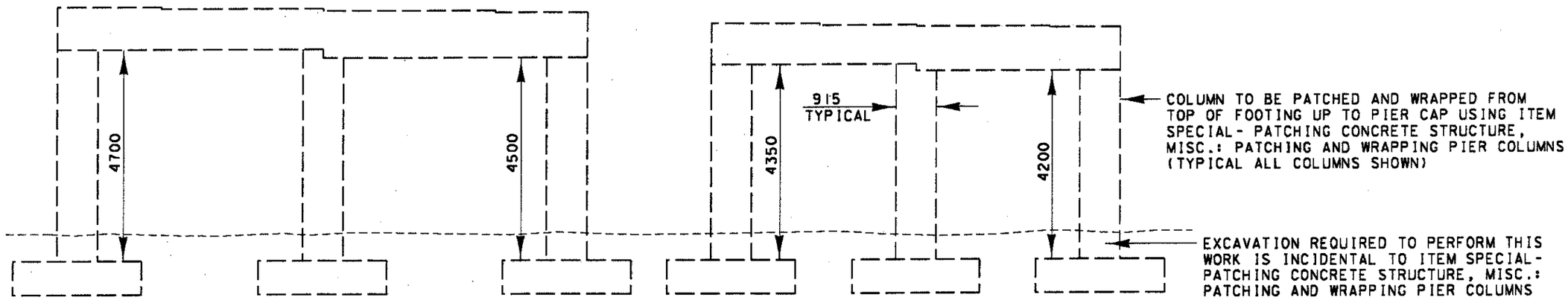
CRA-30-14033R S.L.K. CRA-30-0872R S.L.M.

CRA-30-6.453

36
41

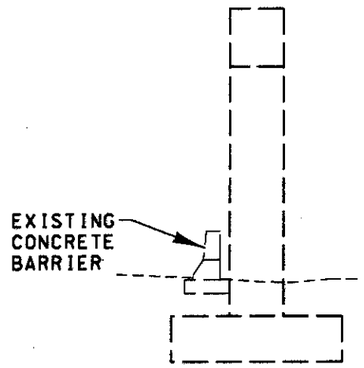
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97

metric units



ELEVATION VIEW

NOTE: THE EXISTING SUPERSTRUCTURE AND THE FOOTING PILES ARE NOT SHOWN



SECTION VIEW

ITEM	QUANTITY	UNIT	DESCRIPTION
SPECIAL	27	meter	PATCHING CONCRETE STRUCTURE, MISC.: PATCHING AND WRAPPING PIER COLUMNS

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 7

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

DESIGN FILE: c:\bridge\cra030\mlsd.dgn
WORKSTATION: eglover DATE: 21 APR 97

DESIGN AGENCY: DISTRICT THREE

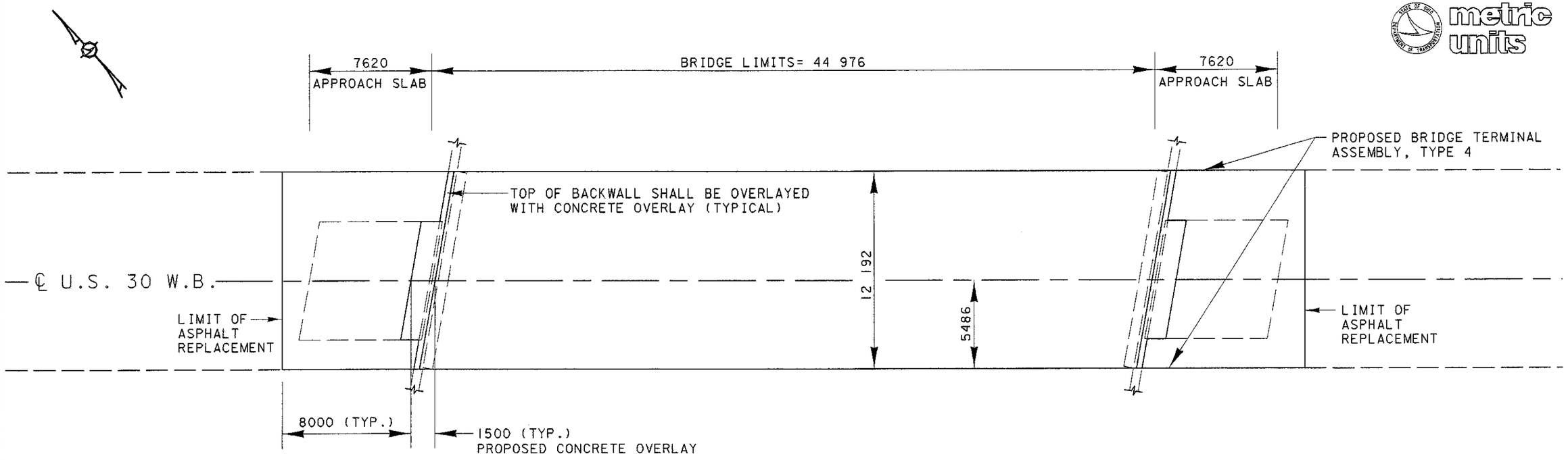
DESIGNED	DRAWN	REVISED	DATE
EJG 3-97	EJG	RDN	4-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		17015333	

FORWARD PIER DETAILS

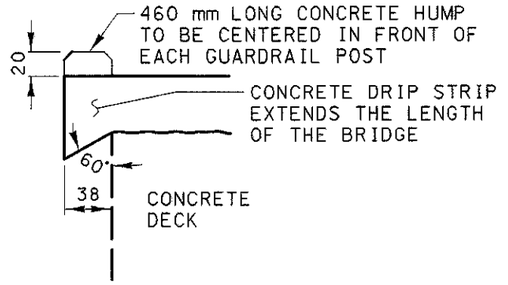
CRA-30-14033R S.L.M. CRA-30-0872R S.L.M.

CRA-30-6.453

metric units



PLAN VIEW



CONCRETE DRIP STRIP DETAIL

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	548	square meter	WEARING COURSE REMOVED, CONCRETE
202	10	each	REMOVAL MISC.: ROCKERS
254	232	square meter	PAVEMENT PLANING, BITUMINOUS
407	74	liter	TACK COAT, 702.13
446	8	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	16	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	10	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	574	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	11	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	18	square meter	HAND CHIPPING
SPECIAL	5	cubic meter	FULL DEPTH REPAIR (MICRO-SILICA)
SPECIAL	574	square meter	SURFACE PREPARATION USING HYDRODEMOLITION
606	2	each	BRIDGE TERMINAL ASSEMBLY, TYPE 4

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 7

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY SHALL BE REMOVED
2) THE ENTIRE BRIDGE DECK, THE TOP OF THE BACKWALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE
3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED
4) THE CONCRETE DRIP STRIP DETAIL SHALL BE USED ON BOTH DECK EDGES
5) THE EXISTING GUARDRAIL IS NOT SHOWN
6) SEE SHEET NO. 39 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

DESIGN AGENCY: DISTRICT THREE
DATE REVISED: RDW 1147
STRUCTURAL FILE NUMBER: 1701568
DRAWN: EJG
REVISED:
DESIGNED: EJG
CHECKED: NRC

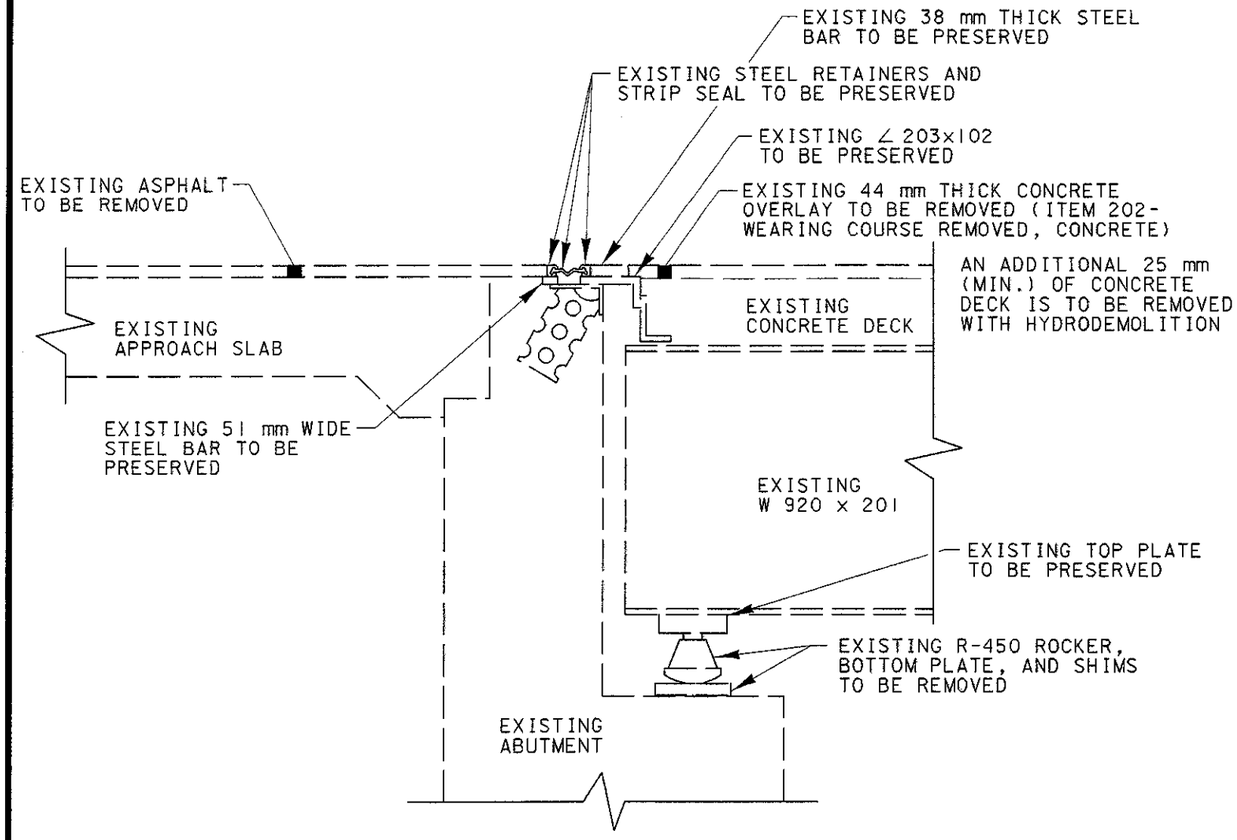
GENERAL PLAN

CRA-30-14597L S.L.K. CRA-30-0907L S.L.M.

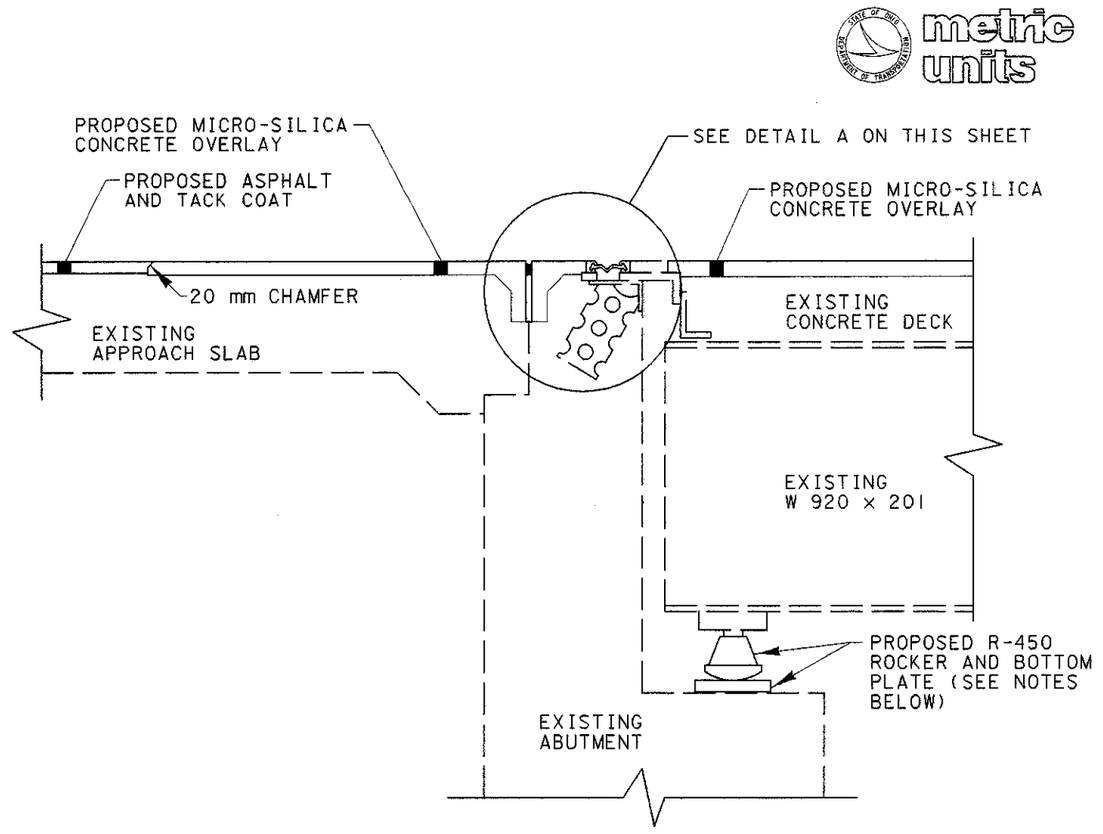
CRA-30-6.453

38
41

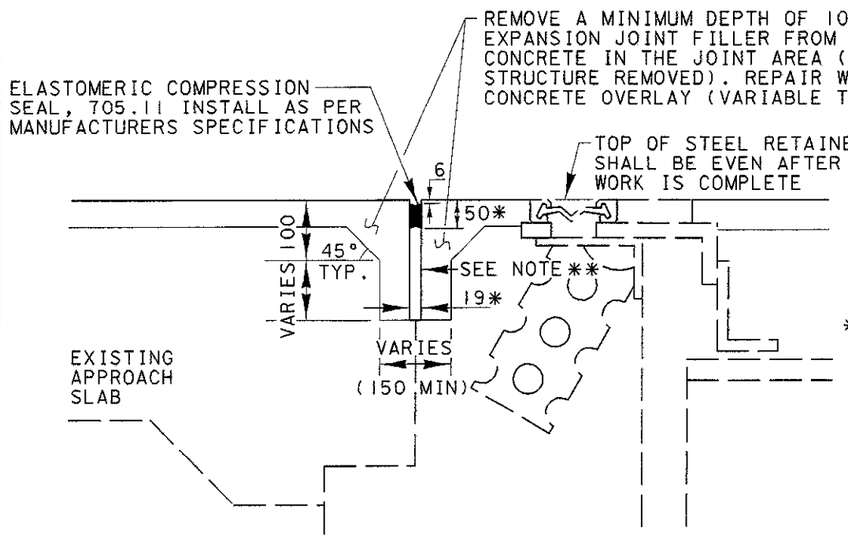
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

2) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

3) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3-6 mm AT THE REAR ABUTMENT AND 3-10 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 3-97	EJG	RDN	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701568	

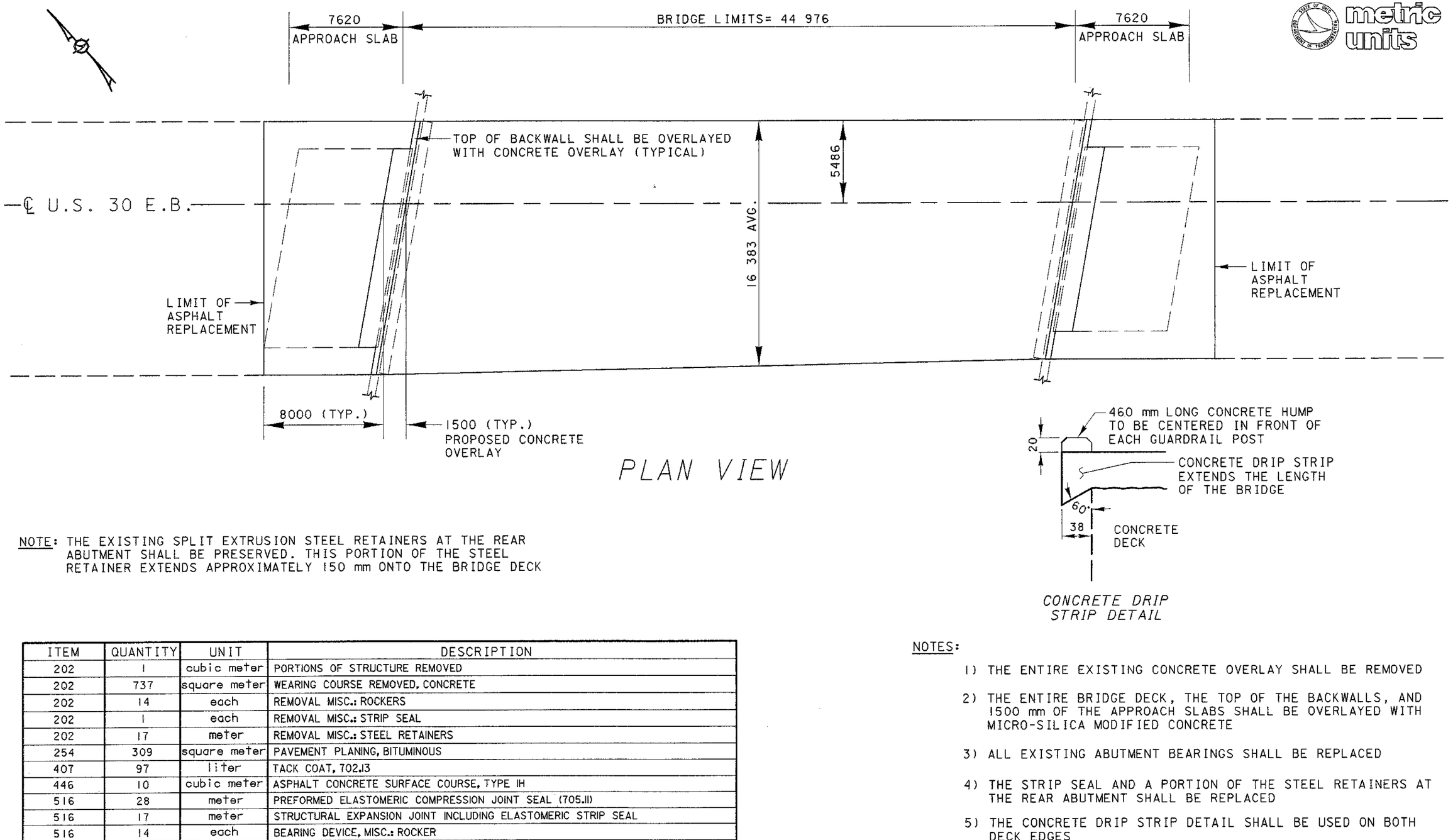
TYPICAL SECTIONS

CRA-30-14597L S.L.K. CRA-30-0907L S.L.M.

CRA-30-6.453

39
41

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



PLAN VIEW

NOTE: THE EXISTING SPLIT EXTRUSION STEEL RETAINERS AT THE REAR ABUTMENT SHALL BE PRESERVED. THIS PORTION OF THE STEEL RETAINER EXTENDS APPROXIMATELY 150 mm ONTO THE BRIDGE DECK

ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	cubic meter	PORTIONS OF STRUCTURE REMOVED
202	737	square meter	WEARING COURSE REMOVED, CONCRETE
202	14	each	REMOVAL MISC.: ROCKERS
202	1	each	REMOVAL MISC.: STRIP SEAL
202	17	meter	REMOVAL MISC.: STEEL RETAINERS
254	309	square meter	PAVEMENT PLANING, BITUMINOUS
407	97	liter	TACK COAT, 702.13
446	10	cubic meter	ASPHALT CONCRETE SURFACE COURSE, TYPE IH
516	28	meter	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)
516	17	meter	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL
516	14	each	BEARING DEVICE, MISC.: ROCKER
516	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	778	square meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY, USING HYDRODEMOLITION (69 MM THICK)
SPECIAL	15	cubic meter	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
SPECIAL	18	square meter	HAND CHIPPING
SPECIAL	778	square meter	SURFACE PREPARATION USING HYDRODEMOLITION

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET, SHEET NO. 8

CONCRETE DRIP STRIP DETAIL

NOTES:

1) THE ENTIRE EXISTING CONCRETE OVERLAY SHALL BE REMOVED
2) THE ENTIRE BRIDGE DECK, THE TOP OF THE BACKWALLS, AND 1500 mm OF THE APPROACH SLABS SHALL BE OVERLAYED WITH MICRO-SILICA MODIFIED CONCRETE
3) ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED
4) THE STRIP SEAL AND A PORTION OF THE STEEL RETAINERS AT THE REAR ABUTMENT SHALL BE REPLACED
5) THE CONCRETE DRIP STRIP DETAIL SHALL BE USED ON BOTH DECK EDGES
6) THE EXISTING GUARDRAIL IS NOT SHOWN
7) SEE SHEET NO. 41 FOR SECTION VIEWS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED EJG 3-97 | DRAWN EJG | REVISED | CHECKED NRC

REVIEWED RDW 11-97 | DATE | STRUCTURAL FILE NUMBER 1701592

GENERAL PLAN

CRA-30-14597R S.L.K. CRA-30-0907R S.L.M.

CRA-30-6.453

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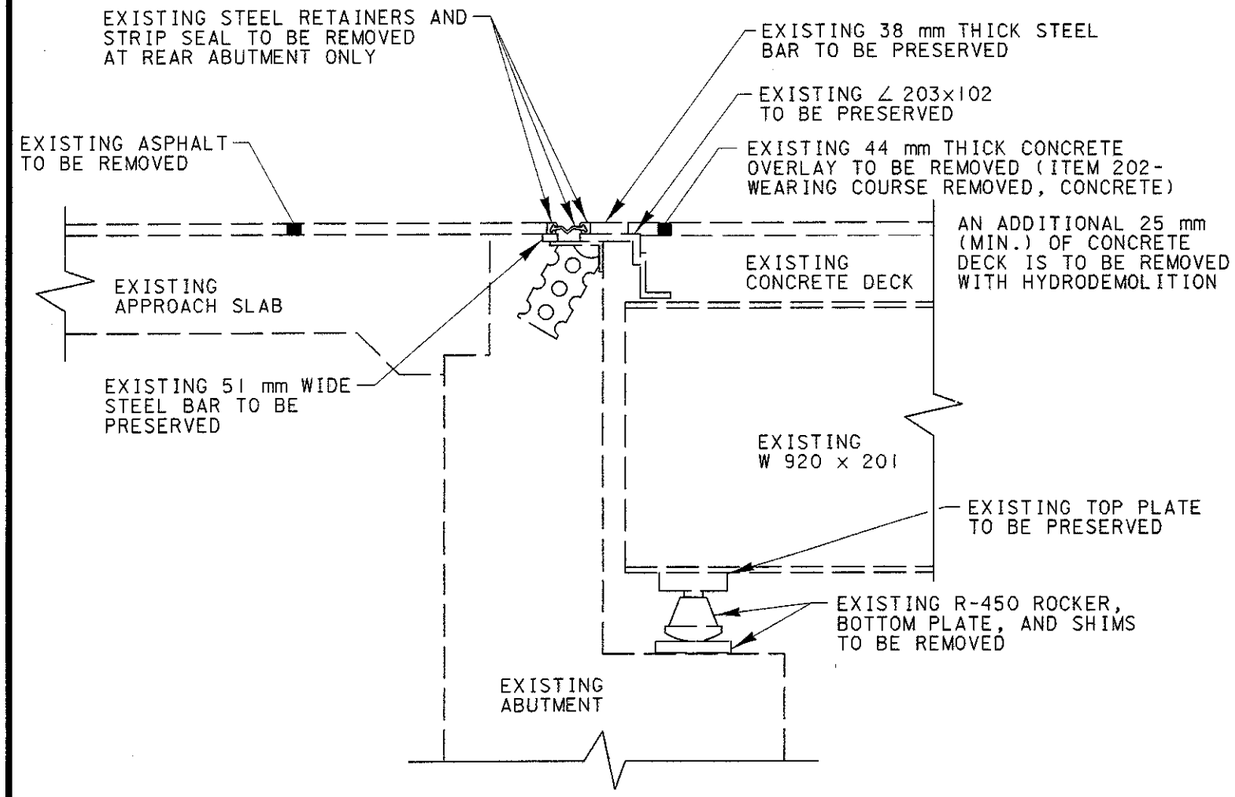
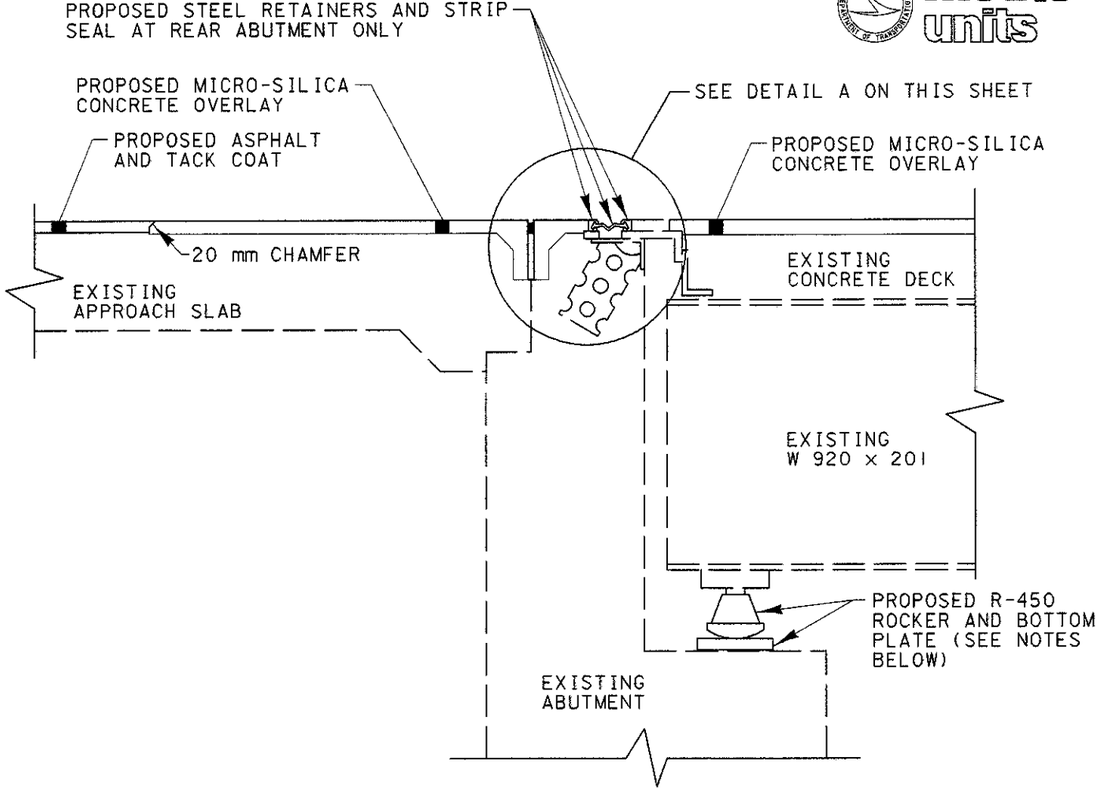
41

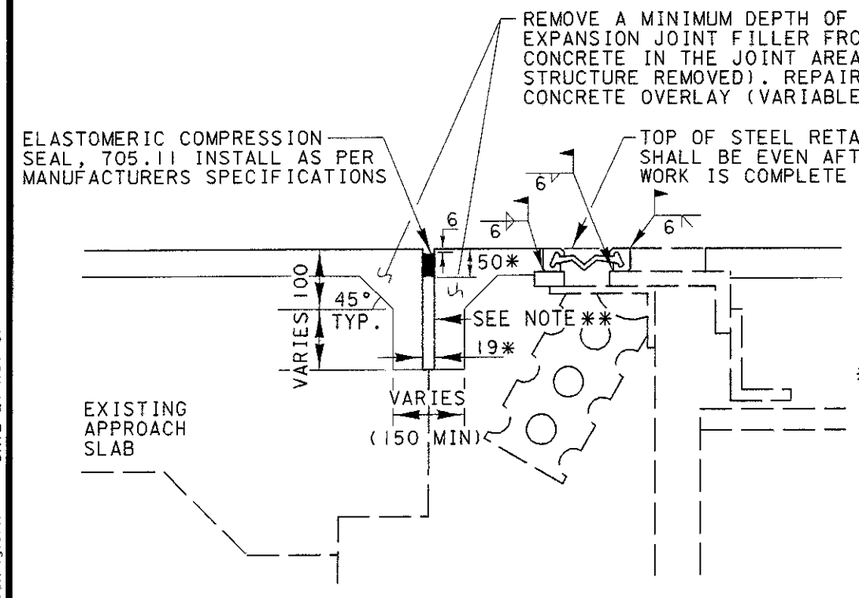
DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97



EXISTING SECTION VIEW



PROPOSED SECTION VIEW



DETAIL A

NOTE:
THE COMPRESSION SEAL SHALL BE ONE CONTINUOUS PIECE AND SHALL SEAL THE JOINT THE FULL WIDTH OF THE APPROACH SLAB

* DIMENSIONS ARE FOR WATSON BOWMAN ACME INC. WJ-125, STRUCTURAL ACCESSORIES SA1250 OR D.S. BROWN H-1250. USE ANY OF THE ABOVE OR APPROVED EQUAL AS PER 705.11.

** GLUE 13 mm EXPANDED POLYSTYRENE BETWEEN TWO PIECES OF 3 mm MASONITE, INSTALL TOTAL DEPTH OF REPAIRED AREA. THE MASONITE AND POLYSTYRENE SHALL BE IN PLACE BEFORE ANY CONCRETE IS PLACED; AND SHALL BE BELOW THE FINAL ROADWAY GRADE TO FACILITATE FINISHING OF THE CONCRETE ON BOTH SIDES OF THE JOINT.

IF THE CONCRETE ON BOTH SIDES OF THE JOINT IS NOT FINISHED TO THE SAME HEIGHT, THE JOINT SURFACE SHALL BE GROUND SMOOTH AS DIRECTED BY THE ENGINEER.

SAW OUT ENOUGH MASONITE AND POLYSTYRENE TO INSTALL THE COMPRESSION SEAL AFTER THE JOINT HAS BEEN REPAIRED.

PAYMENT FOR ALL MATERIALS, EXCEPT CONCRETE, AND LABOR TO REPAIR THE JOINT AS PER DETAILS ON THIS SHEET SHALL BE INCLUDED IN THE UNIT PRICE BID PER METER OF ITEM 516- PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (705.11)

NOTES:

1) CARE SHALL BE TAKEN NOT TO DAMAGE THE REMAINING STRUCTURE WHEN REMOVING THE EXISTING STEEL RETAINERS. ALL DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE

2) SEE STANDARD DRAWING RB-1-55M FOR ROCKER DETAILS

3) THE PROPOSED BOTTOM PLATE SHALL BE 38 mm THICK AT BOTH ABUTMENTS

4) NEW STEEL SHIMS HAVING THE SAME WIDTH AND LENGTH OF THE BOTTOM PLATE AT THE ROCKERS SHALL BE USED TO OBTAIN THE PROPER ELEVATION OF THE STEEL RETAINERS AS SHOWN IN DETAIL A ON THIS SHEET. THE APPROXIMATE SHIM HEIGHT WILL BE 3 mm AT THE REAR ABUTMENT AND 3-6 mm AT THE FORWARD ABUTMENT

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE

metric units

DESIGN AGENCY: DISTRICT THREE

DESIGNED	DRAWN	REVIEWED	DATE
EJG 5-97	EJG	RDN	11-97
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
NRC		1701592	

TYPICAL SECTIONS

CRA-30-14597R S.L.K. CRA-30-0907R S.L.M.

CRA-30-6.453

41
41

DESIGN FILE: i:\users\eglover\bridge\1997\cra1030\misc1.dgn
WORKSTATION: eglover DATE: 24 NOV 97