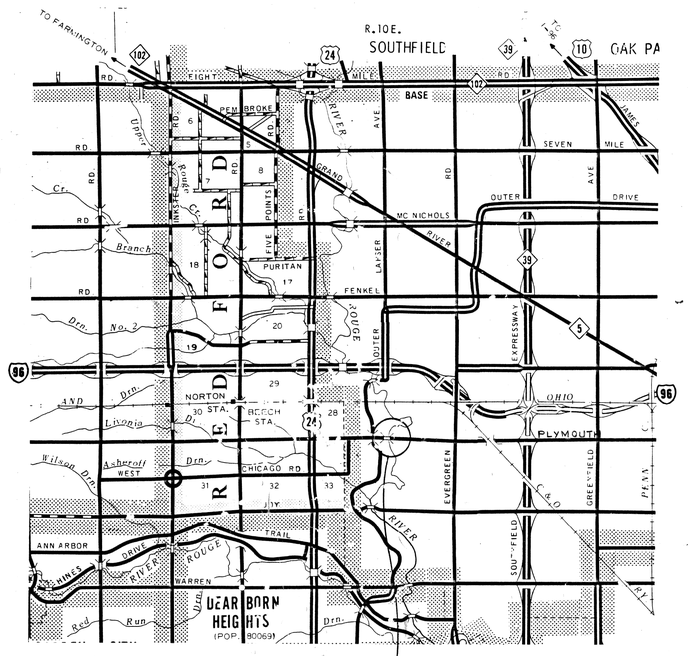
PLAN INDEX	
SHEET NO	TITLE
1	TITLE SHEET
1A, 1AA	QUANTITY SHEET
1B	M-14 STAGING PLANS
2	GENERAL PLAN OF SITE (INFORMATION ONLY)
3	GENERAL PLAN OF STRUCTURE (INFORMATION ONLY)
4	GENERAL PLAN OF SITE
5	GENERAL PLAN OF STRUCTURE
6	ABUTMENT & PIER DETAILS
7	PRESTRESSED CONCRETE I BEAM DETAILS
8-10	SUPERSTRUCTURE DETAILS
11-12	SCREED DETAILS
13	STEEL REINFORCEMENT DETAILS
14	GUARD RAIL ANCHORAGE- BRIDGE
15	LIGHTING PLANS

MICHIGAN
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED BRIDGES

MICHIGAN PROJECT MAMR 2000(089)
CONTROL SECTION MU 82101
JOB NUMBER 12349A

(OLD) M-14
WAYNE COUNTY
CITY OF DETROIT



INCLUDES LOG PROJECT

GENERAL NOTES

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, 1984 EDITION.

THE DESIGN OF THESE STRUCTURES IS BASED ON THE MICHIGAN DEPARTMENT OF HIGHWAYS SPECIFICATIONS FOR THE DESIGN OF HIGHWAY BRIDGES, 1958 EDITION AND CURRENT AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES H525 (AND ALTERNATE MILITARY) LOADING, LIVE LOAD PLUS IMPACT DEFLECTION DOES NOT EXCEED 1/800 OF SPAN LENGTH AND ~~OF CANTILEVER ARM~~. SEE TABLE FOR DESIGN LOADINGS AND IMPACT DEFLECTIONS.

THE SOIL BORING LOGS REPRESENT POINT INFORMATION. PRESENTATION OF THIS INFORMATION IN NO WAY INFERS THAT SUBSURFACE CONDITIONS ARE THE SAME AT LOCATIONS OTHER THAN THE EXACT LOCATION OF THE BORING.

ALL EXPOSED CONCRETE CORNERS SHOWN SQUARE ON THE PLANS SHALL BE BEVELED WITH 1/2" TRIANGULAR MOLDINGS EXCEPT AS OTHERWISE NOTED.

THE STATIONING AS SHOWN ON THESE PLANS FOR THE INTERSECTION OF THE CENTERLINE OF BRIDGE AND ROADWAY (AND THE RAILROAD) CENTERLINE IS BELIEVED TO BE CORRECT. IT SHALL, HOWEVER, BE CHECKED AT THE TIME OF STARTING CONSTRUCTION AND IF THE STATIONING SHOWN ON THE PLANS IS INCORRECT, IT SHALL BE REPORTED TO THE DESIGN OFFICE AT LANSING AND THE STRUCTURE SHALL BE STAKED OUT USING THE ACTUAL INTERSECTION OF THE CENTERLINE OF BRIDGE AND ROADWAY (AND THE RAILROAD) CENTERLINE AS THE CONTROL POINT.

THE DESIGN OF THE STRUCTURAL MEMBERS IS BASED ON MATERIAL OF THE FOLLOWING GRADES AND STRESSES.

CONCRETE: GRADES 35S, 45D	$f'c$	=	3,000 psi
STEEL REINFORCEMENT:	fy	=	60,000 psi
STRUCTURAL STEEL: A36	fy	=	36,000 psi
STRUCTURAL STEEL: A588	fy	=	50,000 psi
PRESTRESSED CONCRETE:	$f'c$	=	5,000 psi
PRESTRESSING STRANDS:	$f's$	=	270,000 psi

NOTE:

WHERE THE FOLLOWING ITEMS ARE CALLED FOR ON THE PLANS THEY ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARD PLAN GIVEN BELOW OPPOSITE EACH ITEM UNLESS OTHERWISE INDICATED.

STANDARD PLANS TO BE PRINTED

SHEET NO.	TITLE

STANDARD PLANS NOT TO BE PRINTED	
SHEET NO.	TITLE
II-40 E	LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS
II-41 D	LONGITUDINAL PAVEMENT JOINTS
II-45 D	CONVENTIONAL PAVEMENT REINFORCEMENT
II-39 H	TRANSVERSE PAVEMENT JOINTS
III-58 G	GUARD RAIL ENDINGS WITH CABLE ANCHORAGE
III-60 E	BEAM GUARD RAIL TYPES A, B, BD, C & CD

STANDARD PLANS NOT TO BE PRINTED	
SHEET NO.	TITLE
XI-103 C	MOLDING, BEVEL, LIGHT STD. ANCHOR BOLT ASSEMBLY, AND NAME PLATE DETAILS.
II-52 D	TEMPORARY CONCRETE BARRIER
VI-124 C	DRUM GUIDE RAILS & DRUMS
VI-125 F	TYPES II & III BARRICADES & LIGHTED ARROWS
VI-126 C	END TREATMENT FOR TEMPORARY CONCRETE BARRIER
X-18 B	BRIDGE RAILING, SOLID PARAPET TYPE
XI-101 A	DRAIN CASTING AND HANGER DETAILS

CONTRACT FOR BRIDGE DECK REPLACEMENT

APPROVALS

CHECKED — ENGINEER - BRIDGE DESIGN		6/7/85 DATE
RECOMMENDED FOR APPROVAL — ENGINEER OF DESIGN		6/17/85 DATE
RECOMMENDED FOR APPROVAL — ENGINEER OF TRAFFIC & SAFETY		7/9/85 DATE
RECOMMENDED FOR APPROVAL — ENGINEER OF CONSTRUCTION		7-15-85 DATE

MICHIGAN
DEPARTMENT OF TRANSPORTATION
JAMES P. PITZ - DIRECTOR

APPROVED BY — DEPUTY DIRECTOR - HIGHWAYS — 7/16/85 DATE

PLANS PREPARED BY: MACE, DESIGN UNIT

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED — DIVISION ADMINISTRATOR — DATE

CONTROL SECTION	JOB NUMBER	FEDERAL NUMBERS PROJECT	FEDERAL NUMBERS ITEM	SHEET NO.
B04 - 82101	12349A	MAMR 2000 (089)	UFO 395	1

B04 OF 82101 — 12349A
CONTROL SECTION — JOB NUMBER

012349A

BRIDGE TOTAL

SUMMARY OF QUANTITIES

ITEM DESCRIPTION	ITEM CODE	UNIT	PROJECT TOTAL	JOB SUBTOTAL	B04 OF 82101
REMOVAL OF PORTIONS OF STRUCTURES	2060002	LSUM	1	1	1
UNCLASSIFIED FOUNDATION EXCAVATION	2090003	CYD	260	260	260
STRUCTURE BACKFILL (CIP)	2090005	CYD	140	140	140
AGGREGATE BASE - CONCRETE					
(4" IN PLACE)	3010021	SYD	200	200	200
BITUMINOUS MIXTURE NO.1100T. 20AA	4000091	TON	373	373	373
EXPANSION JOINT E2	4500275	LFT	168	168	168
EXPANSION JOINT E3	4500276	LFT	168	168	168
REMOVING PAVEMENT	2070002	SYD	740	740	740
MISCELLANEOUS CONCRETE PAVEMENT					
REINFORCED 10"	4500080	SYD	740	740	740
EXPANSION ANCHORED LANE-TIES	4500296	EACH	132	132	132
TEMPORARY STEEL SHEET PILING	5010002	SFT	480	480	480
SUBSTRUCTURE CONCRETE	5030023	CYD	12	12	12
SUPERSTRUCTURE CONCRETE	5030024	CYD	540	540	540
FORMING, FINISHING, AND CURING					
SUPERSTRUCTURE CONCRETE	5030027	LSUM	1	1	1
STEEL REINFORCEMENT	5030030	LBS	7839	7839	7839
STEEL REINFORCEMENT, EPOXY COATED	5030031	LBS	72555	72555	72555
PROTECTIVE SEALANT COATING FOR					
CONCRETE	5030050	SFT	160	160	160
PROTECTIVE TREATMENT					
FOR BRIDGE DECKS	5030053	SFT	12800	12800	12800
PREFORMED NEOPRENE					
JOINT SEAL, 1 1/4"	5030070	LFT	228	228	228
Drain Casting Assembly-Type 2	5030141	Each	12	12	12
PREFORMED NEOPRENE JOINT SEAL, 3"	5030072	LFT	30	30	30
BULKHEADING EXISTING UTILITY DUCTS	5037000	LSUM	1	1	1
3/4" ELASTOMERIC BEARING	5040061	SFT	17	17	17
7/8" ELASTOMERIC BEARING	5047000	SFT	32	32	32
36" PRESTRESSED CONCRETE I-BEAM,					
FURNISHED	5050015	LFT	1409	1409	1409
36" PRESTRESSED CONCRETE I-BEAM,					
ERECTED	5050016	LFT	1409	1409	1409
JOINT WATERPROOFING	5060001	SFT	749	749	749
BRIDGE RAILING, SOLID PARAPET TYPE	5080002	LFT	237	237	237
HAND CHIPPING - OTHER THAN DECK	5090005	SYD	10	10	10
PATCHING MORTAR OR CONCRETE	5090015	CFT	25	25	25
FORMING FOR PATCHES	5090017	SFT	100	100	100
3/4" EPOXY ANCHORED BARS	5090032	EACH	184	184	184
CONCRETE CURB AND GUTTER, DETAIL C1	6090022	LFT	160	160	160
REMOVING MEDIAN	6097001	LFT	3293	3293	3293
4" CONCRETE SIDEWALK	6110002	SFT	100	100	100
GALVANIZED BEAM GUARD RAIL, TYPE B	6130002	LFT	250	250	250
GUARD RAIL ANCHORAGE - BRIDGE					
DETAIL A, TYPE 1	6130035	EACH	2	2	2
GUARD RAIL ANCHORAGE, CABLE	6130066	EACH	2	2	2
MOBILIZATION	6230001	LSUM	1	1	1
REMOVING PAVEMENT MARKING	6310003	LFT	5150	5150	5150
LIGHTED ARROW, TYPE A, FURNISHED	6310011	EACH	4	4	4
LIGHTED ARROW, TYPE A, OPERATED	6310012	EACH	4	4	4
BARRICADE, TYPE II,					
LIGHTED, FURNISHED	6310026	EACH	360	360	360
BARRICADE, TYPE II,					
LIGHTED, OPERATED	6310027	EACH	120	120	120
BARRICADE, TYPE III,					
LIGHTED, FURNISHED	6310036	EACH	4	4	4
BARRICADE, TYPE III,					
LIGHTED, OPERATED	6310037	EACH	4	4	4
TYPE B HIGH INTENSITY					
LIGHT, FURNISHED	6310045	EACH	4	4	4
TYPE B HIGH INTENSITY					
LIGHT, OPERATED	6310046	EACH	4	4	4
TEMPORARY CONCRETE BARRIER	6310049	LFT	920	920	920
MINOR TRAFFIC DEVICES	6310054	LSUM	1	1	1
SIGN, TYPE B TEMPORARY	6310057	SFT	220	220	220
TEMPORARY PAVEMENT MARKING, TYPE R	6310080	LFT	3200	3200	3200
FAST DRY PAVEMENT MARKING,					
4" WHITE	6310200	LFT	5000	5000	5000
FAST DRY PAVEMENT MARKING,					
4" YELLOW	6310201	LFT	12500	12500	12500
PREFORMED THERMOPLASTIC PAVEMENT					
MARKING, 6" CROSSWALK LINE	6310220	LFT	720	720	720
PREFORMED THERMOPLASTIC PAVEMENT					
MARKING, 24" STOP BAR	6310223	LFT	480	480	480

CONTROL SECTION 82101

JOB NUMBER 12349A

012349A

BRIDGE TOTAL

SUMMARY OF QUANTITIES

ITEM DESCRIPTION	ITEM CODE	UNIT	PROJECT TOTAL	JOB SUBTOTAL	B04 OF 82101
REMOVE 1 #6 OVERHEAD LINE	6900009	LFT	1190	1190	1190
REMOVE WOOD POLE	6900015	EACH	4	4	4
1 #6 OVERHEAD LINE	6900210	LFT	1720	1720	1720
3 #2 OVERHEAD LINE	6900217	LFT	860	860	860
40' CLASS 4 WOOD POLE	6900257	EACH	2	2	2
45' CLASS 4 WOOD POLE	6900262	EACH	2	2	2
REMOVE 3 #2 OVERHEAD LINE	6907001	LFT	860	860	860
3/4" Galvanized Steel Conduit	6097000	LFT	60	60	60

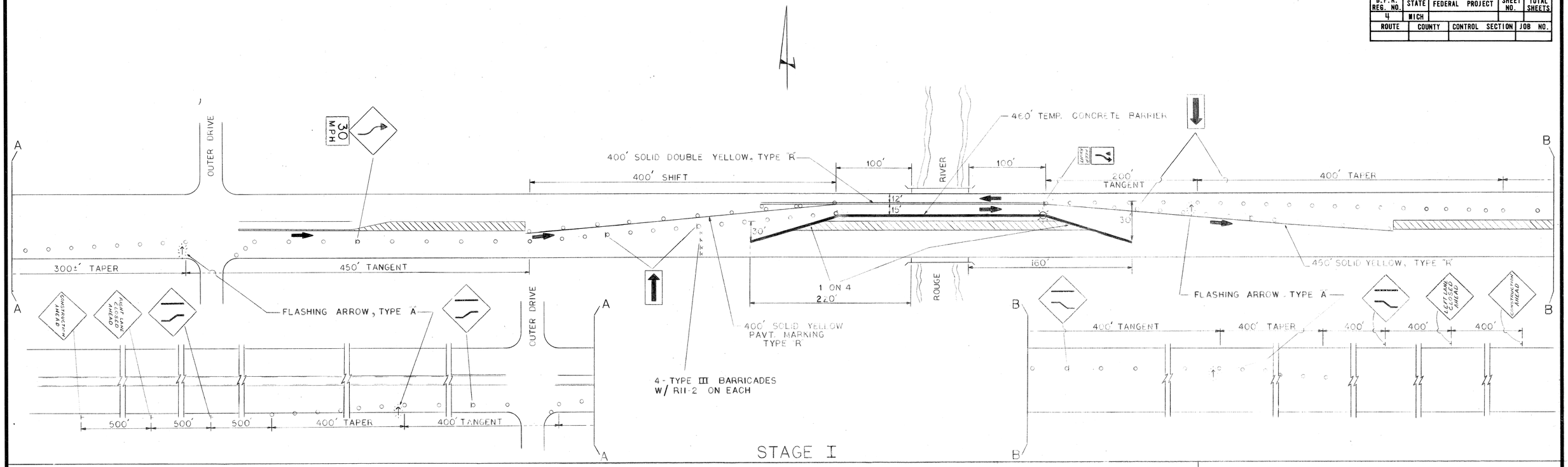
CONTROL SECTION 82101

JOB NUMBER 12349A

CONTROL SECTION	JOB NUMBER	FEDERAL PROJECT	SHEET NUMBER
MU 82101	12349 A	MAMR 2000(089)	1AA

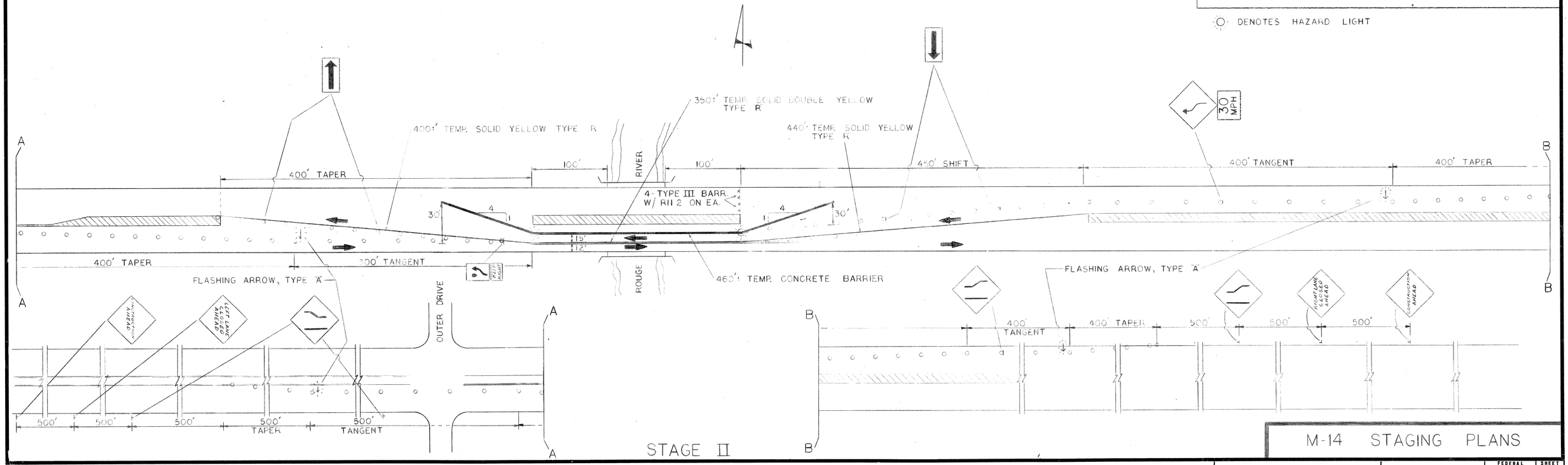
EDCO- 138 3 8-70

B.P.R. REG. NO.	STATE	FEDERAL PROJECT		SHEET NO.	TOTAL SHEETS
4	MICH				
ROUTE	COUNTY	CONTROL SECTION		JOB NO.	



POSTED SPEED 40 MPH ON PLYMOUTH RD.

DENOTES HAZARD LIGHT



M-14 STAGING PLANS

CONTROL SECTION	JOB NO.	FEDERAL PROJECT	SHEET NO.
			1B

12349 A

UTILITIES

Public Lighting Com.	Pole Line with 12 Wires - N. Side of Plymouth Road
Mich. Bell Tel. Co.	Underground Line - S. Side of Plymouth Road
City of Detroit	6", 12" and 24" Water Lines; 12" Water Drain; 48" Comb. Sewer
Detroit Edison Co.	12 Existing Ducts Underground N. Side Plymouth Road

BENCH MARKS

B.M. #9	Brass Cap in Bridge N.E. Wing Wall 39' Lt. Sta. 100+47
B.M. #10	Brass Cap In Mon. Box S. Sidewalk 50' Rt. Sta. 111+65

EXISTING STRUCTURE

Three 40' Concrete T-Beam Spans With a 60' Roadway, With 8' Sidewalks On Each Side

LOG OF BORING

T.H. #1 — 592.03

- Loose sands silt & clay (River wash)
- 589.03 Gray sand & gravel (River silty)
- 587.03 Loose gray sands River silty heavy tr. wood fibers
- 580.53 Loose gray sand Med & fine silty & Pebbley
- Firm gray clay Silty & Pebbley
- 576.03 Stiff gray clay Pebbley
- 571.03 (Mod. comp. gray sand Med & Fine
- 570.53 Firm gray clay
- 568.03 tr. Pebble. Pier 2 Bott. of Piles El = 561.52
- 567.53 (Mod. comp. gray sand Med & coarse Stiff gray clay Tr. Pebble
- 563.03 Stiff gray clay with lenses of coarse gray sand & granule gravel
- 560.03 Boulder - End of Boring

T.H. #2 — 587.64

- 587.44 Water
- Loose gray sand fine to coarse (River Silty)
- 583.64 (Mod. comp. gray sand & Gravel (Clean)
- Sa. #1 581.64 Undist.
- 581.64 Firm gray clay Gravelly
- Bott. of Ftg. Pier #2 El. 581.09
- Firm gray clay silty Tr. Pebble
- Sa. #2 575.14 Undist.
- 575.64
- Sa. #3 571.64 Undist.
- Stiff gray clay Tr. Pebble
- Sa. #4 567.64 Undist.
- 565.64
- Comp gray sand Med & Coarse gravelly
- 562.64 Stiff gray clay Pier 1 Bott. of Piles El = 561.72
- 560.64 Tr. Pebble
- Boulder - End of Boring

T.H. #3 — 587.64

- 586.14 Water
- Loose sands silt & clay woody (River wash)
- 583.14
- Sa. #1 580.64 Undist.
- Bott. of Ftg. Pier #1 El. 581.21
- Plastic gray clay Pebbley
- 578.64
- Sa. #2 578.14 Undist.
- Firm gray clay
- 576.64 Tr. Pebble
- Abut B, N. Ext. Bott. Ftg. El. 581.32
- Stiff gray clay Tr. Pebble.
- Sa. #3 571.64 Undist.
- 572.14
- Firm gray clay with gray sand lenses
- 570.14
- Hard gray clay Sandy & Pebbley
- 569.64 Hard gray clay
- 563.64 with cobble stones
- End of Boring

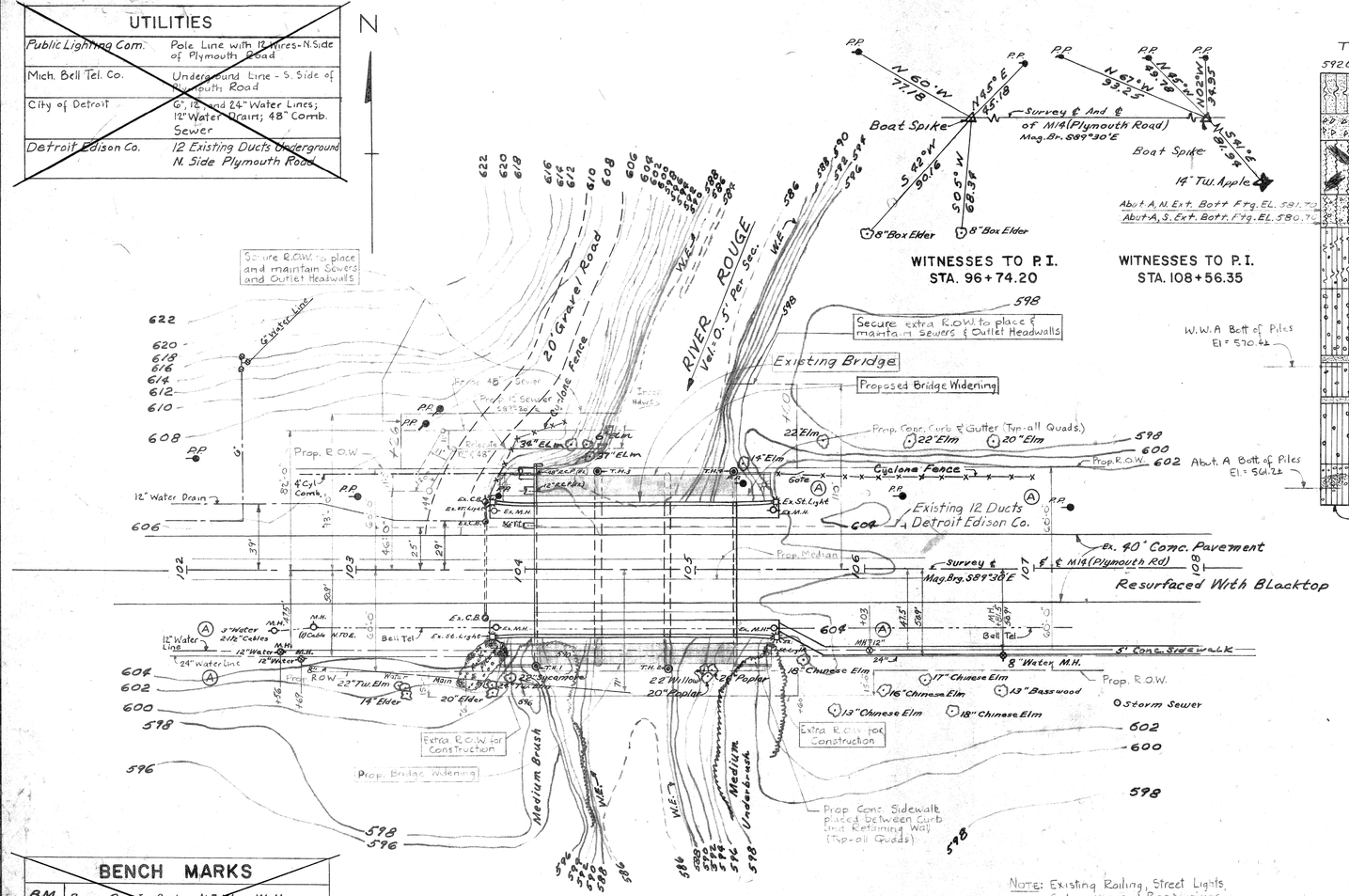
T.H. #4 — 594.61

- Loose brown sands Silt & clay (River wash)
- 588.61
- Loose gray sands Fine to Coarse woody
- 585.61
- Mod. comp. gray sands & gravel heavy trwood
- 581.61 fibers
- Abut B, S. Ext. Bott. of Fts. El. 581.32
- Firm gray clay silty & Pebbley
- 577.11
- Stiff gray clay Tr. Pebble
- 569.61 Firm gray clay
- 568.61 Sandy & gravelly
- 568.61 Comp. gray sand & gravel
- 562.61 Hard gray clay Sandy & gravelly
- End of Boring

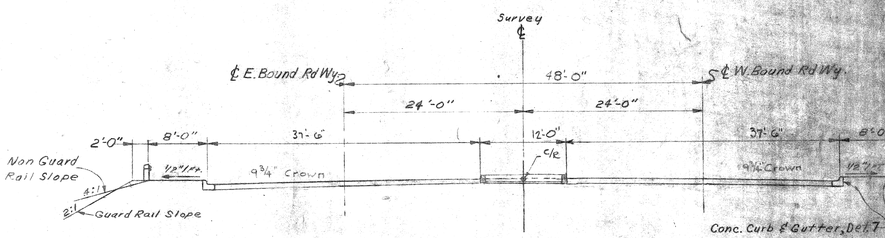
NOTE: Consistency determined by inspection of samples and substantiated by soils resistance to casing and jet rod, all T.H.'S. The river bank in the vicinity of T.H. #1 is covered with 36" to 48" boulders approximately 30 of them which will have to be removed. It was necessary to start T.H. #1, 3 or 4 times before we could get through the first 4' due to boulders and cobbles. This was also true at T.H. #3; however there are no boulders laying on the surface in this area.

SITUATION PLAN

SCALE 1" = 40'



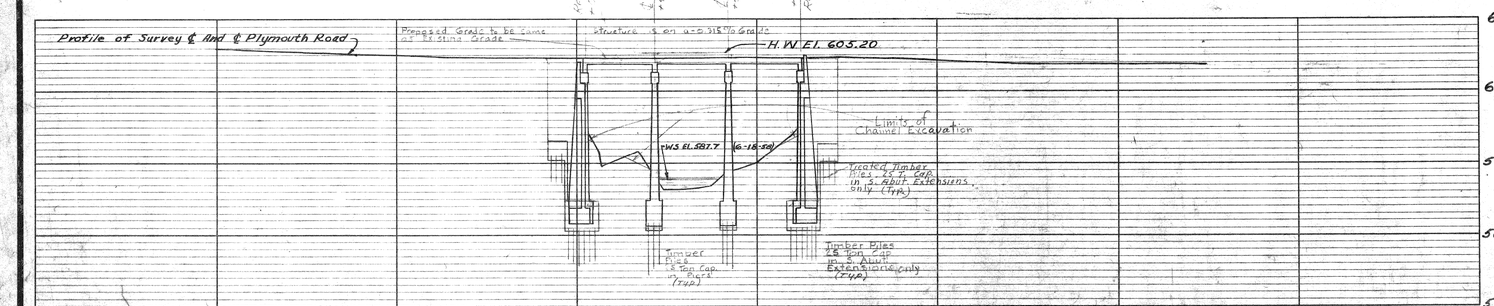
Approach Section



NOTE: ~~These Plans include removing portions of existing bridge.~~ Construction of proposed bridge widening including median on bridge placing steel sheet piling and porous material Grade A. All other work shown on these plans are detailed and itemized on the road plans

PROFILE

VERT. SCALE — 1" = 10'
HOR. SCALE — 1" = 40'



MISCELLANEOUS QUANTITIES

ITEM	UNIT	AMOUNT
Removing Portions of Existing Structure	Lump Sum	Lump Sum
Channel Excavation	Cu. Yds	310

REVISIONS

NO.	DESCRIPTION	DATE	BY
A	Misc. Rev. of Utilities location	12-16-53	EWW

FOR INFORMATION ONLY

CONTROL SECTION NO. 82101U

MICHIGAN STATE HIGHWAY DEPARTMENT

M-14 XING THE RIVER ROUGE IN THE CITY OF DETROIT

M-14 X NR THE RIVER ROUGE IN THE CITY OF DETROIT WAYNE COUNTY MICHIGAN

GENERAL PLAN OF SITE

SQUAD BOSS	L. Rivest	9-15-53
DRAWN BY	A.J.S.	8-14-53
TRACED BY	K. Fitzsimmons	
CHECKED BY	Patel	9-19-53
SHEET	2 OF 15	

APPROVED F. J. Cook 9-17-53 DESIGN SUPERVISING ENGINEER

APPROVED Mc Giles 9-19-53 ASST. ENGINEER OF DESIGN

BI OF 82-22-6, C4

B04 of 82101-C4 12349A

NOTES:

Portions of existing structure shown crosshatched are to be removed.
Existing Prestressed Concrete I Beams and Diaphragms shall be left in place.
Spalling on the substructure units shall be repaired, see Special Provision.
The contractor shall notify the Engineer a minimum of 48 hours prior to the removal time of the existing structure.
Portions of existing pavement shown hatched are to be removed.
Removal of Curb & Gutter is included in Removal of Pavement.
Elevations shown on this sheet are to be disregarded.

Note: New work shall be located with respect to Old Abutments & Piers as ... Pre-boring holes for all piles on the South side of the structure to Elev. 571.0 is required. (See Supplemental Specifications.)

REVISIONS			
NO.	DESCRIPTION	DATE	BY
A	Misc. Abut (S. end) Changes	12-17-58	

MICHIGAN STATE HIGHWAY DEPARTMENT

M14 XING RIVER ROUGE IN THE CITY OF DETROIT

GENERAL PLAN OF STRUCTURE

APPROVED F. J. Cook 9/19/58 DESIGN SUPERVISING ENGINEER

APPROVED W. C. Jones 9-11-58 ASST. ENGINEER OF DESIGN

SQUAD BOSS	Ruest	9-15-58
DRAWN BY		8-1-58
TRACED BY		8-7-58
CHECKED BY	Patel	8-21-58
SHEET 3 OF		

B1OF82-22-6, C4

MICROFILMED

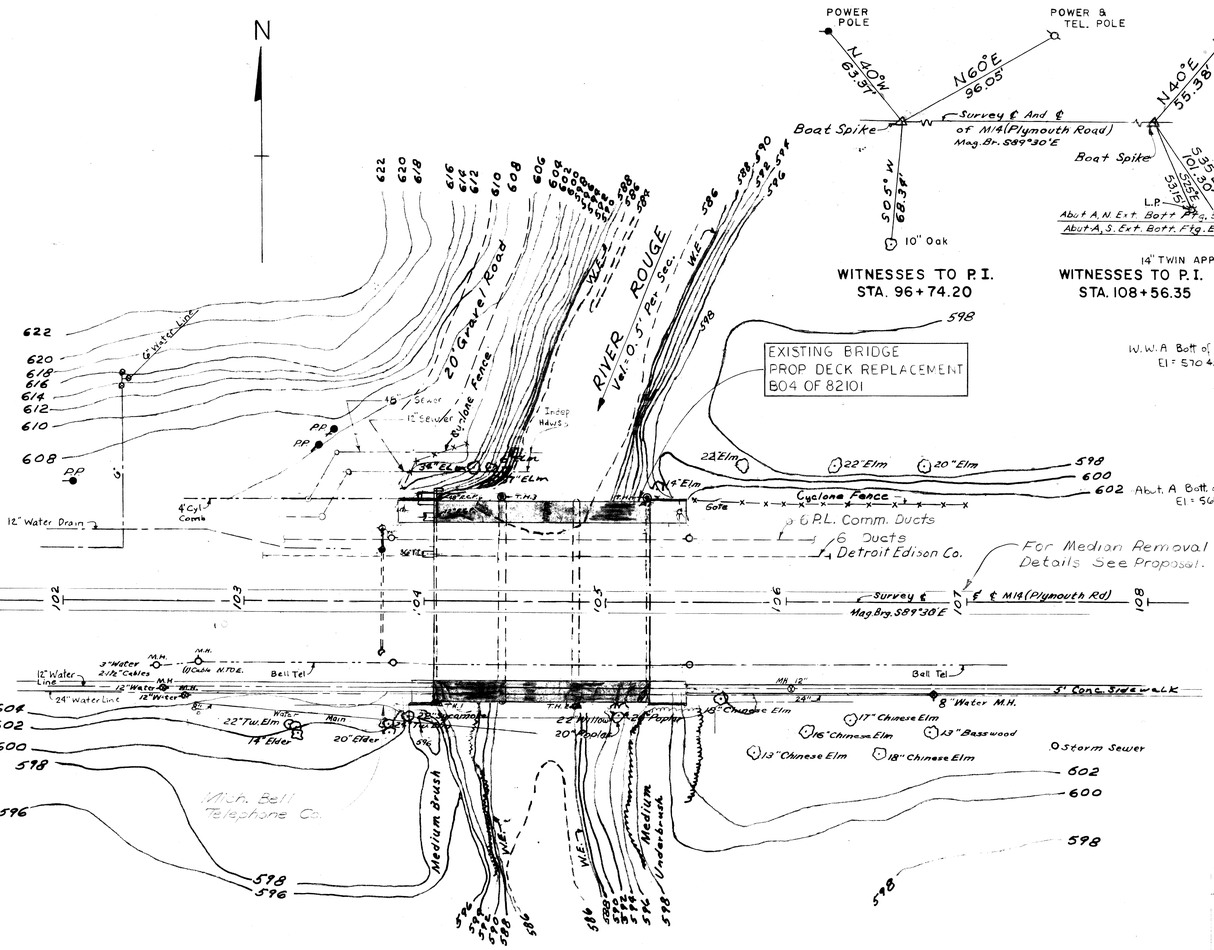
B04 of 82101-C4 12349A

BENCH MARK

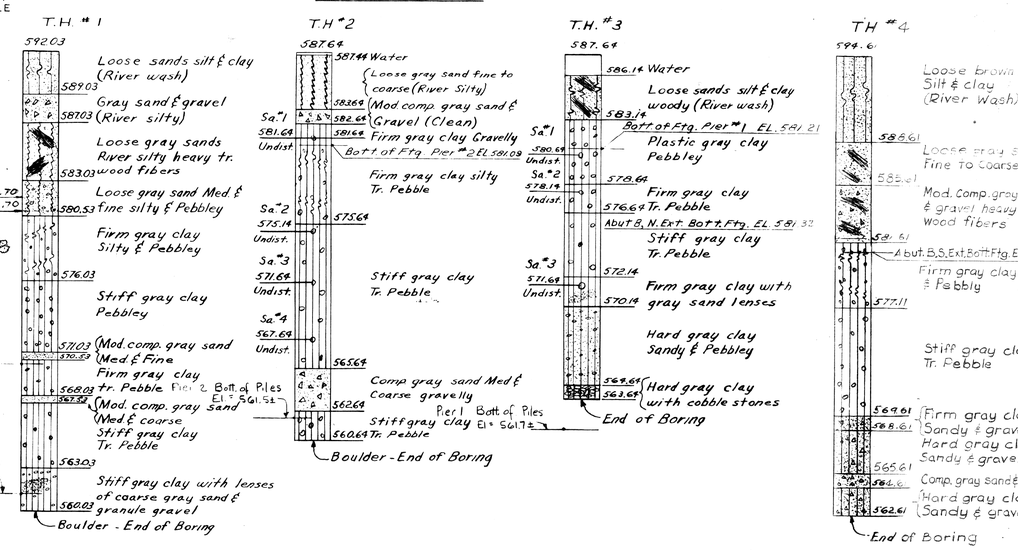
B.M. = B04-I ELEV. 605.35
BRASS DISC IN S.W. WINGWALL STAMPED "CITY OF DETROIT REF. MARK"

UTILITIES

Public Lighting Dept.	Pole Line with 12 Wires - North Side of Plymouth Rd. 6 Ducts North Side of Plymouth Rd.	Detroit Edison Co.	12 Ducts North Side of Plymouth Rd.
Mich. Bell Telephone Co.	6 Ducts South Side of Bridge (to be abandoned) Underground Cable 65' South of Survey ℄	City of Detroit	6-12" and 24" Water Lines; 12" Water Drain; 48" Conc. Sewer; and 6 Water Level Sensor Meter 47' North of Survey ℄ and 9.0' West of Ref. Line



LOG OF BORING



NOTE:
Consistency determined by inspection of samples and substantiated by soils resistance to casing and jet rod, at T.H.'s. The soil boring logs represent point information. Presentation of this information in no way implies that subsurface conditions are the same at locations other than the exact location of the boring.

NOTE:

The work covered by these plans includes Removal of Portions of Existing Structure, Construction of the Proposed Superstructure, Repairing Substructure, Miscellaneous Approach Work And Maintaining Traffic.

The contractor shall locate all active underground utilities prior to starting work and shall conduct his operations in such a manner as to ensure that those utilities not requiring relocation will not be disturbed.

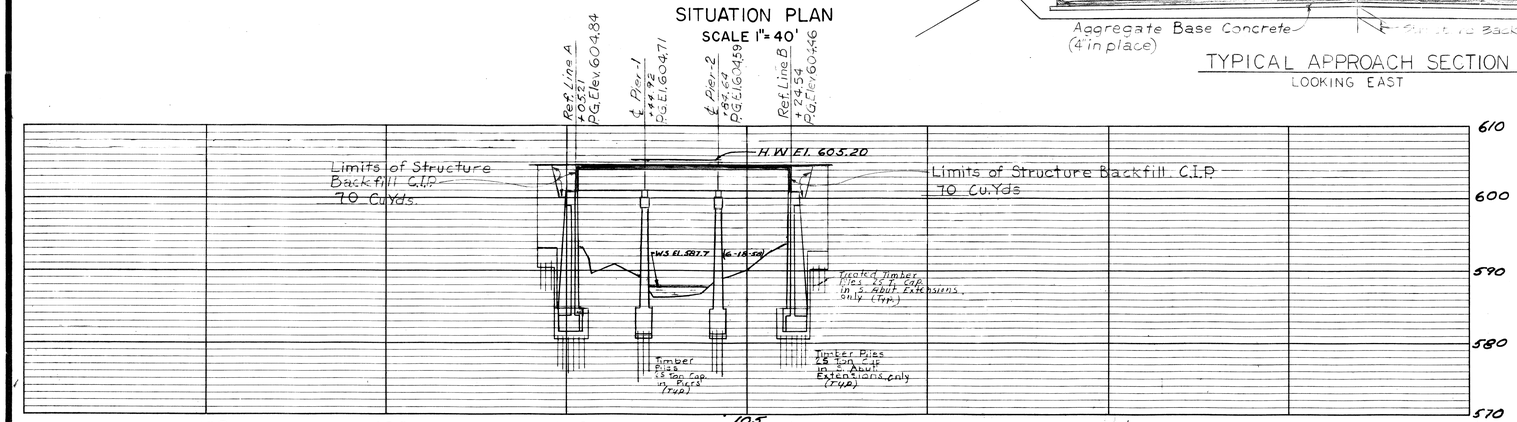
Topography shown hereon represents conditions existing at the time the field survey was made. However, these conditions may have been materially altered by the operations of others prior to this contract.

Plymouth Road traffic is to be maintained over the existing bridge.

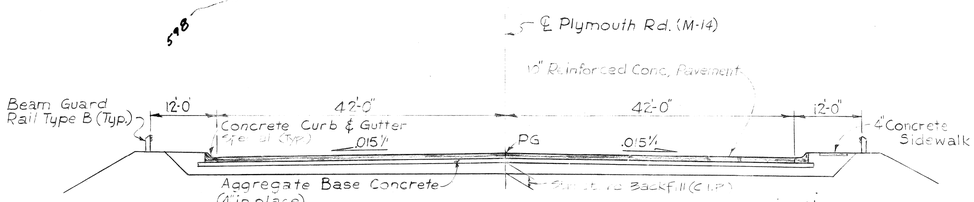
For protection of underground utilities, the contractor shall dial 800-482-7171 a minimum of 48 hours prior to excavating in the vicinity of utility lines. All "Miss Dig" participating members will thus be routinely notified. This does not relieve the contractor of the responsibility of notifying utility owners who may not be a part of the "Miss Dig" alert system.

Removal of approach median is included in the proposal.

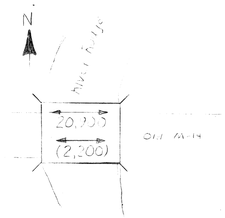
SITUATION PLAN
SCALE 1" = 40'



PROFILE
VERT. SCALE — 1" = 10'
HOR. SCALE — 1" = 40'



TYPICAL APPROACH SECTION
LOOKING EAST



TRAFFIC LEGEND (1981)
000 A.D.T.
(000) D.H.V.

REVISIONS

NO.	DESCRIPTION	DATE	BY

MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

(OLD) M-14 XING RIVER ROUGE IN THE CITY OF DETROIT

GENERAL PLAN OF SITE

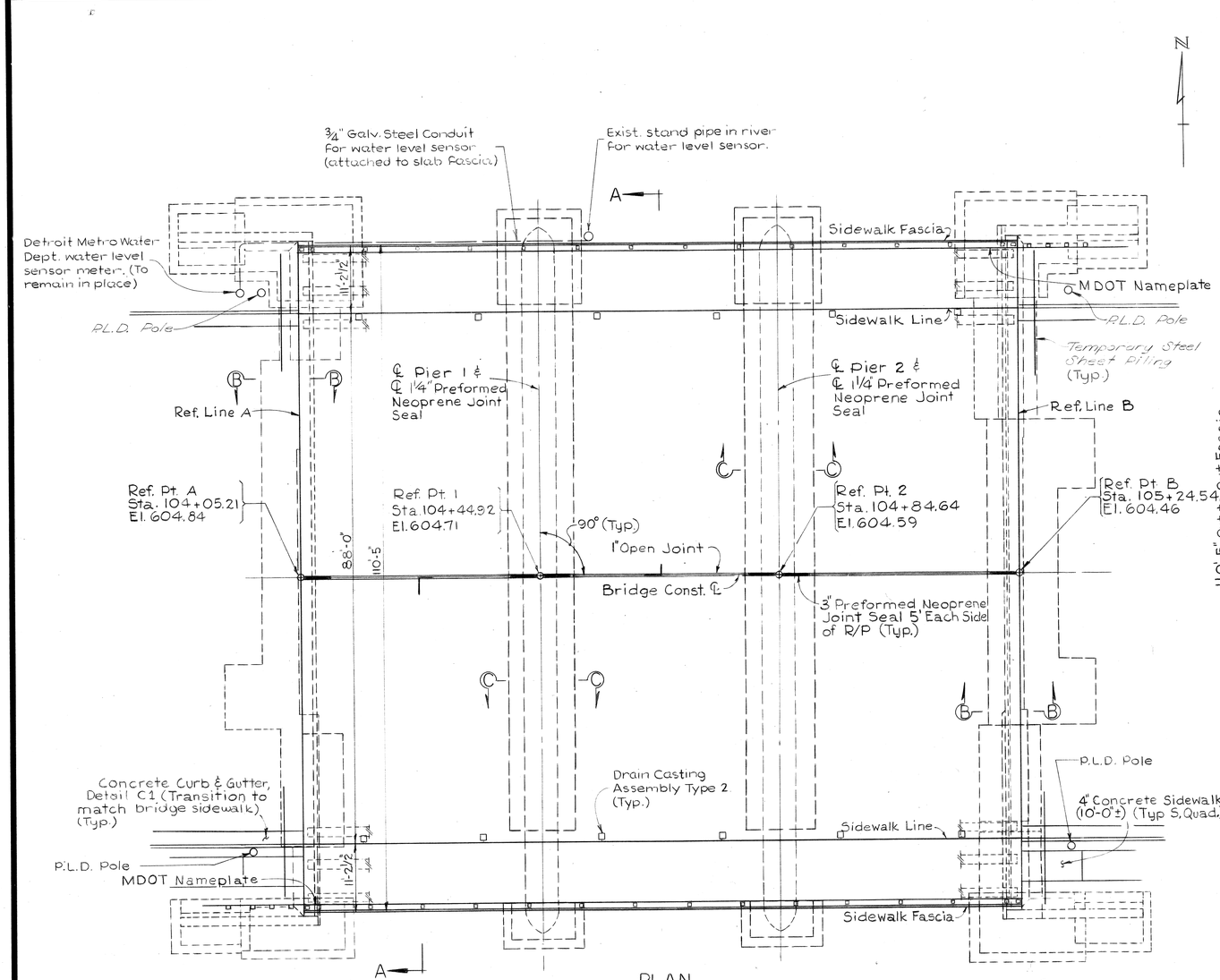
SQUAD BOSS	Mcue	6-3-85
DRAWN BY	R. Bush	9-20-82
CHECKED BY	TH/EGJ	10/15/82
SHEET 4 OF 15		

APPROVED _____ DESIGN SUPERVISING ENGINEER

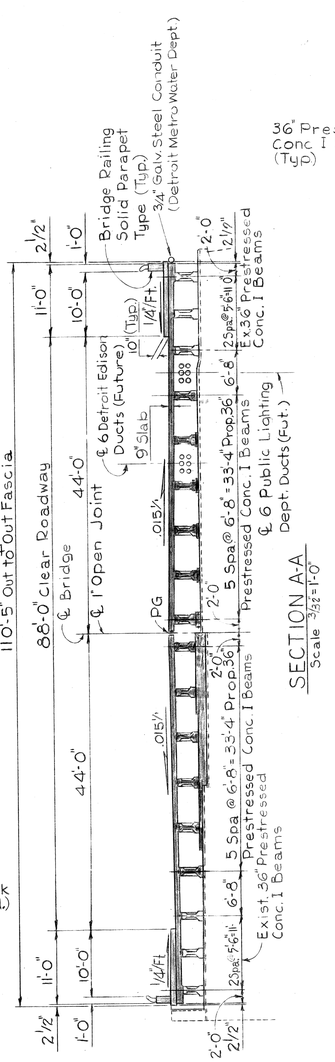
B04 OF 82101

123-19 A

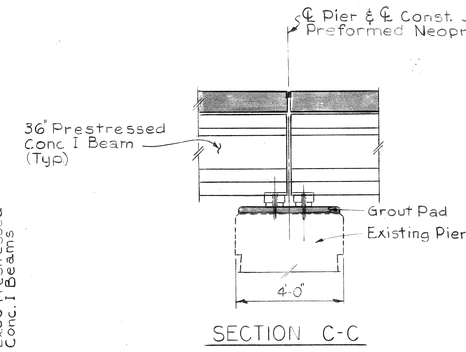
Corrs. o.k. cuc 5-2-85



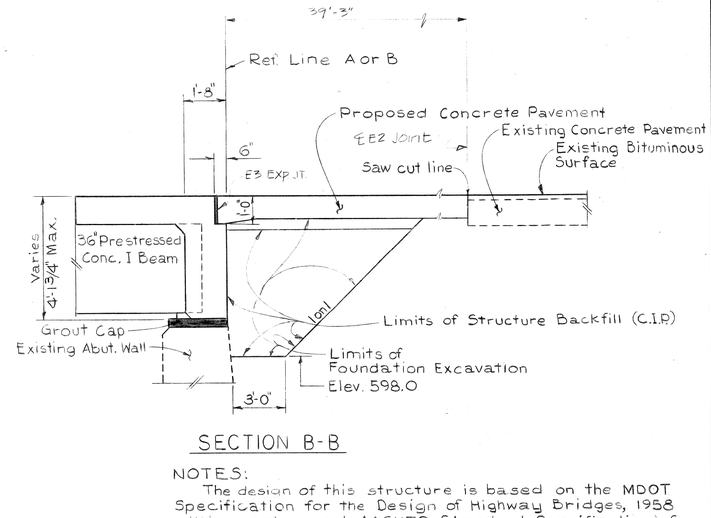
PLAN
Scale 3/32" = 1'-0"



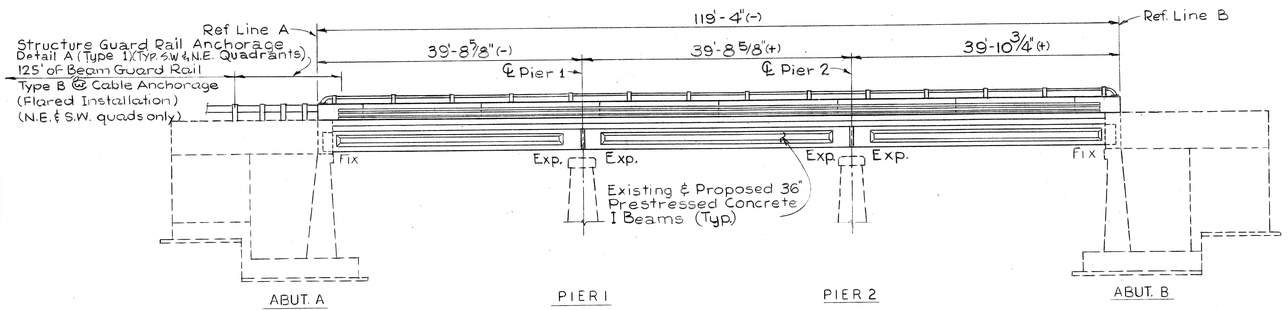
SECTION A-A
Scale 3/32" = 1'-0"



SECTION C-C



SECTION B-B



ELEVATION
Scale 3/32" = 1'-0"

NOTES:

The design of this structure is based on the MDOT Specification for the Design of Highway Bridges, 1958 edition, and current AASHTO Standard Specifications for Highway Bridges H525 loading. Live load plus impact deflection does not exceed 1/800 of span length. The Working Stress and Load Factor methods of design were used for this structure.

Except where otherwise indicated on this Structure Sheet or in the Proposal and Supplemental Specifications contained herein, all materials and workmanship shall be in accordance with the Michigan Department of Transportation Standard Specifications for Construction 1979 edition.

The top of roadway slab and tops of sidewalks are parallel to the tangent.

The item Removal of Portions of Structures includes burning off existing railing anchor bolts 1½" below top of concrete and filling with patching mortar or concrete (Return Walls Only)

Existing Detroit Edison ducts shall be bulkheaded near Reference Lines A & B. The work shall consist of furnishing all material, labor and equipment required for bulkheading the ducts and shall be paid for as Bulkheading Existing Utility Ducts. This work shall be as directed by the Engineer.

The Contractor shall drive temporary steel sheet piling to protect the Detroit Metro Water Level Sensor Meter and the P.L.D. pole shown on this sheet before excavating at the Ref. Lines. The limits of the temporary steel sheet piling shall be as directed by the Engineer.

The existing beams shall be patched as required. The location, area and depth of patches shall be as determined by the Engineer. Quantities are included in substructure quantities on Sheet 6.

Removing trees and clearing shall be as directed by the Engineer and shall be incidental to Removal of Portions of Structures.

NOTES (cont'd.)

Detroit Metro Water Dept.'s water sensor meter may be taken out of service during construction of the bridge but shall remain in place.

The proposed ¾" Galv. Steel Conduit shall be attached to the slab fascia with galvanized clamps spaced at 5'-0".

Electrical work for the water level sensor meter is by the Detroit Metro Water Dept.

MISCELLANEOUS QUANTITIES

ITEM	UNIT	AMOUNT
REMOVAL OF PORTIONS OF STRUCTURES	LUMP SUM	1
Unclassified Foundation Excavation	Cu. Yd.	260
BULKHEADING EXIST. UTILITY DUCTS	LUMP SUM	1
REMOVING PAVEMENT	S.Y.D.	740
Miscellaneous Concrete Pavement Reinforced 10"	S.Y.D.	740
Expansion Anchored Lane Ties	EACH	132
EXPANSION JOINT E2	L.FT.	165
EXPANSION JOINT E3	L.FT.	165
CONC. CURB & GUTTER, DETAIL C1	L.FT.	160
4" CONC. SIDEWALK	S.FT.	100
GALVANIZED BM GUARD RAIL, TYPE B	L.FT.	250
GUARD RAIL ANCHORAGE - BRIDGE, DETAIL A, TYPE 1	EACH	2
GUARD RAIL ANCHORAGE, CABLE	EACH	2
AGGREGATE BASE - CONC. (4" IN PLACE)	S.Y.D.	200
Temporary Steel Sheet Piling	S.F.T.	480
¾" Galvanized Steel Conduit	L.F.T.	60

REVISIONS

NO.	DESCRIPTION	DATE	BY

MICHIGAN DEPARTMENT OF TRANSPORTATION

(OLD) M-14 XING RIVER ROUGE IN THE CITY OF DETROIT

GENERAL PLAN OF STRUCTURE

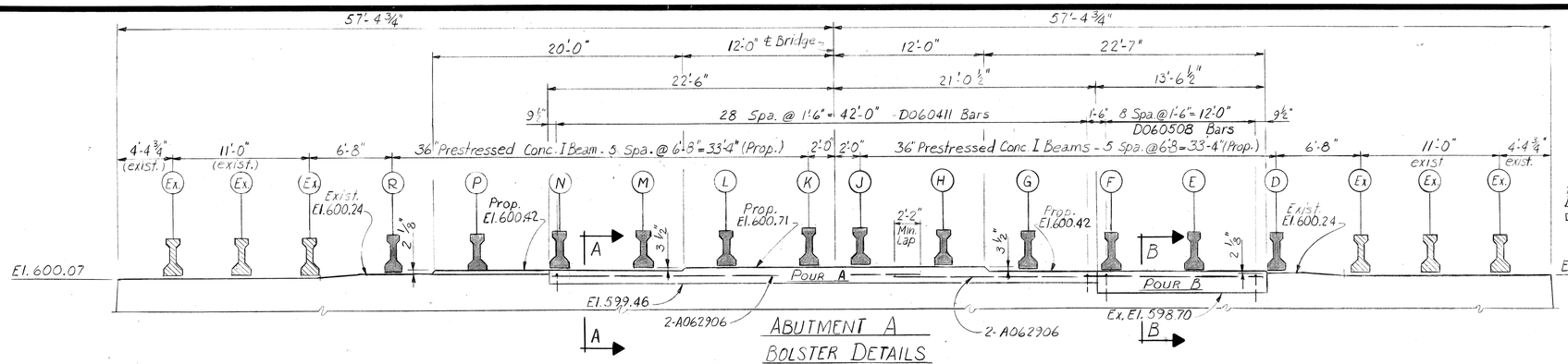
SQUAD BOSS	Mace	6-3-85
DRAWN BY	R. Bush	9-20-82
TRACED BY		
CHECKED BY	Till/Earl	10/20/82
SHEET	5 OF	15

APPROVED _____ 6-3-85
DESIGN SUPERVISING ENGINEER

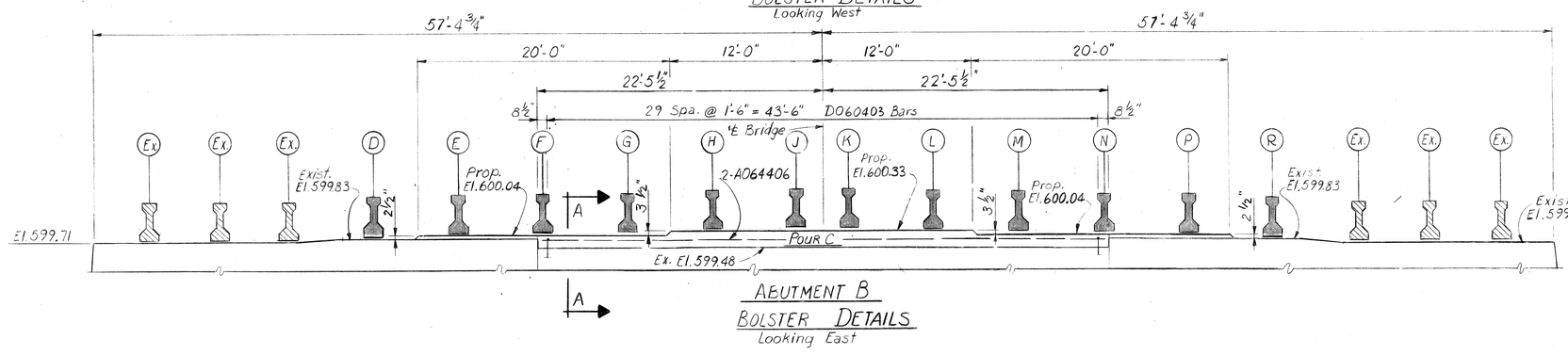
B04 of 82101

12349A

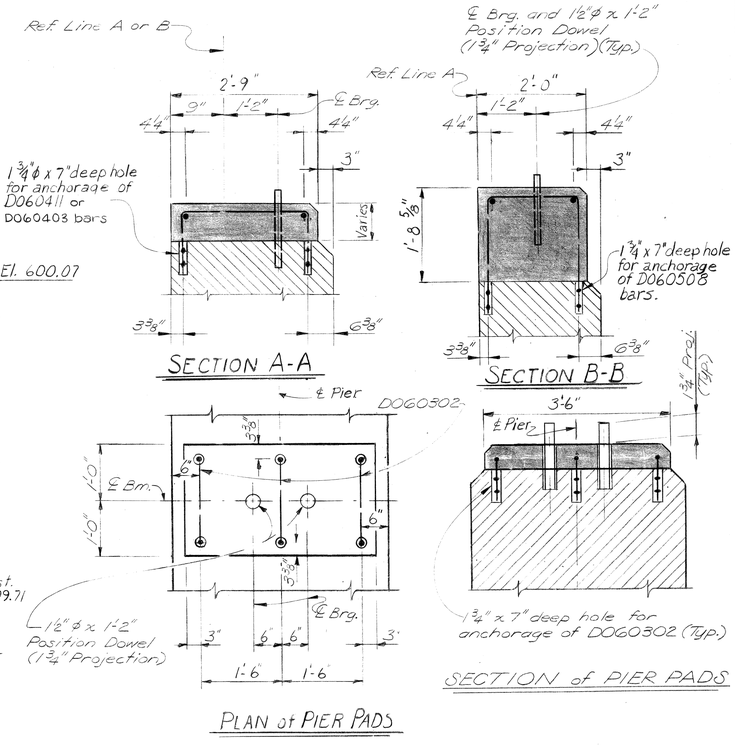
Corrs. ok. SME 5-2-85

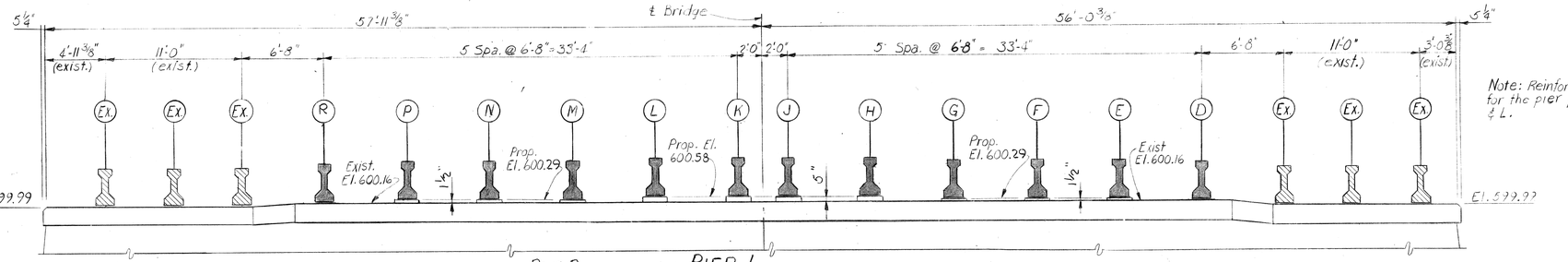


ABUTMENT A BOLSTER DETAILS
Looking West

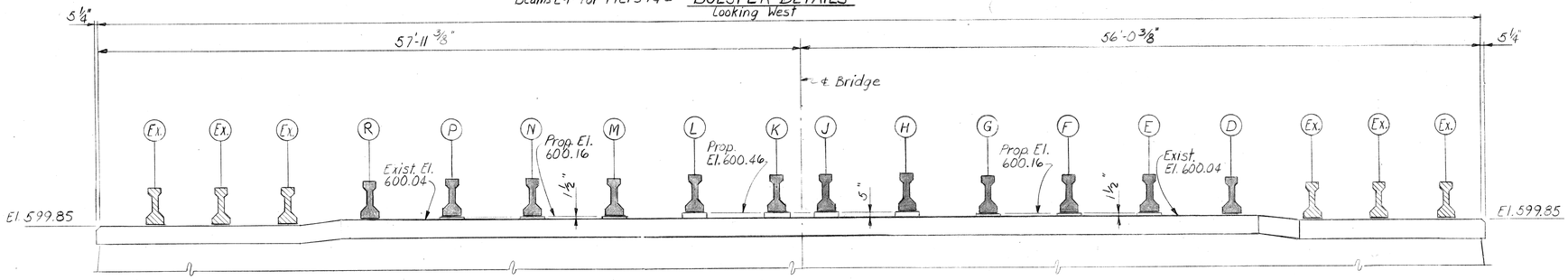


ABUTMENT B BOLSTER DETAILS
Looking East





PIER 1 BOLSTER DETAILS
Looking West



PIER 2 Bolster Details
Looking West

Note: Reinforcement shall only be used for the pier pads under beams H, J, K, & L.

TOP OF PIER PAD ELEVATION					
BEAM GROUP	D	E, F, G	H, J, K, L	M, N, P	R
PIER 1	–	600.29	600.58	600.29	–
PIER 2	–	600.16	600.46	600.16	–

SUBSTRUCTURE CONCRETE QUANTITIES (Cu.Yds.)				
Abut. A		Abut. B	PIERS 1 & 2	
Pour A	Pour B	Pour C	Pour D	
5.2	1.7	3.7	1.4	
TOTAL 12.0 Cu.Yds.				

SUBSTRUCTURE MISCELLANEOUS QUANTITIES		
Item	Unit	Amount
3/4" Epoxy Anchored Bars	Ea.	184
Hand Chipping - Other Than Deck	Syd.	10
Patching Mortar or Concrete	CFt.	25
Forming For Patches	SFt.	100
Protective Sealant Coating For Conc.	SFt.	160

NOTES:

For bevel and molding details, see Standard Plan XI-103.

The top of piers shall be given an application of Protective Sealant Coating for Concrete after the elastomeric bearings have been placed in final position on the structure.

The abutments and piers shall be patched as required. The location, area and depth of patches shall be as determined by the Engineer.

Position dowels shall be placed in accordance with Standard Specification 5.03.23.

MICHIGAN DEPARTMENT OF TRANSPORTATION
ABUTMENT & PIER DETAILS

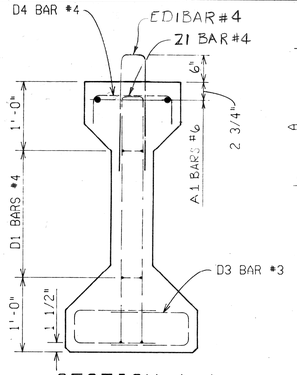
REVISIONS			
NO.	DESCRIPTION	DATE	BY

UNIT	Mace	6-3-85
DRAWN BY	Cheney	5/84
TRACED BY		
CHECKED BY	Krauss	5-3-84
SHEET 6 OF 15		

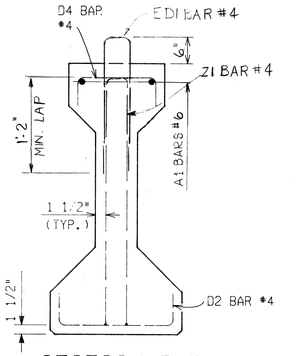
B04 of 82101

12349A

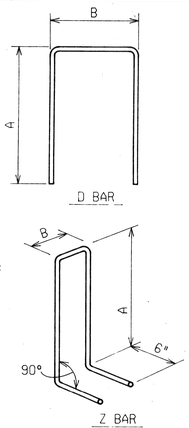
FHM DPD-3 IM 10-82 5403F



SECTION A-A



SECTION B-B



ELASTOMERIC PAD, BEARING PLATE* AND SHIM DIMENSIONS

	SPAN 1		SPAN 2		SPAN		SPAN 3	
	ABUT. A	PIER 1	PIER 1	PIER 2	PIER	PIER	PIER 2	ABUT. B
THICKNESS	3/4"	7/8"	7/8"	7/8"			7/8"	3/4"
PARALLEL TO BEAM	6"	6"	6"	6"			6"	6"
PERPENDICULAR TO BEAM	1'-5"	1'-4"	1'-4"	1'-4"			1'-4"	1'-5"
SHIMS	1 @ 3/32"	2 @ 3/32"	2 @ 3/32"	2 @ 3/32"	@	@	2 @ 3/32"	1 @ 3/32"
LAYERS	@	1 @ 3/32"	1 @ 3/32"	1 @ 3/32"	@	@	1 @ 3/32"	@
W	7"	8"	8"	8"			8"	7"
GG/HH	15/32" 7/16"	5/16" 5/16"	5/16" 5/16"	5/16" 5/16"	/	/	5/16" 5/16"	15/32" 7/16"

*BEARING PLATE THICKNESS IS GIVEN BELOW.

BEARING PLATE THICKNESS AND SLOPE TABLE

BEAM LINE	SPAN 1			SPAN 2			SPAN			SPAN 3		
	ABUT. A		PIER 1	PIER 1		PIER 2	PIER		PIER	PIER 2		ABUT. B
	R THK.	y*	y* R THK.	R THK.	y*	y* R THK.	R THK.	y*	y* R THK.	R THK.	y*	y* R THK.
D or R	1½"		¾"	¾"		¾"				¾"		2"
E or P	1½"		1½"	1½"		1½"				1½"		1½"
F or N	1½"		1¾"	1¾"		1¾"				1¾"		1½"
G or M	2¾"		2¾"	2¾"		2¾"				2¾"		2¾"
H or L	1½"		1½"	1½"		1½"				1½"		1½"
J or K	1¾"		1¾"	1¾"		1¾"				1¾"		1¾"

*NEGATIVE FOR NEGATIVE GRADES

BEAM DIMENSIONS

SPAN	1	2	3
TYPE	II	II	II
NO. REQ.	12	12	12
a	4	4	4
b	5	5	5
c	15	16	15
d	26	26	26
E	4½"	5"	5"
f	5	5	5
g	19	19	19
G	5"	5"	4½"
h	2	2	2
h'	2	2	2
J	1'-1½"	1'-2"	1'-1½"
K	1'-8"	1'-7"	1'-8"
L	0	0	0
M	8¾"		8¾"
N	1'-1"	1'-1"	1'-1"
P*	1'-1"	1'-1"	1'-1"
Q	2'-0"	2'-0"	2'-0"
R	—	—	—
T	38'-0½"	38'-8½"	38'-2¾"
V	1'-1"	1'-2¾"	1'-2½"
X	3'-6"	3'-6"	3'-6"
X'	3'-6"	3'-6"	3'-6"
Y	38'-10"	39'-6⅝"	39'-0¼"
Z	9"	9"	9"
ø	90°	90°	90°
APPROX. WEIGHT	7.5 Ton	7.6 Ton	7.5 Ton
A	8'-5"	3'-5"	3'-8½"
B	5'-0"	8'-0"	8'-0"
C	12'-5"	4'-1⅜"	3'-3¾"

*TYPE I P=9"
TYPE II P=1'-1"
~~TYPE III P=1'-5 1/2"~~
~~TYPE IV P=1'-10"~~

BAR DIMENSIONS

BAR	DIM.	BEAM TYPE I	II	III	IV
A1*6	A	Y-3"	Y-3"	Y-3"	Y-3"
D1*4	A	3'-4"	4'-0"	4'-9"	5'-6"
	B	2 1/2"	2 1/2"	3 1/2"	4 1/2"
D2*4	A	3"	3"	5"	5"
	B	11 1/2"	1'-3 1/2"	1'-5 1/2"	1'-9 1/2"
D3*3	A	1'-0"	1'-2"	1'-4"	1'-5"
	B	3 1/2"	3 1/2"	5 1/2"	5 1/2"
D4*4	A	2"	4"	5"	6"
	B	8"	8"	1'-0"	1'-4"
Z1*4	A	2'-6 1/2"	2'-5 3/4"	3'-11 1/2"	4'-8 1/2"
	B	3 1/2"	3 1/2"	4 1/2"	5 1/2"
EDI*4	A = 2'-6"	B = 3½"			

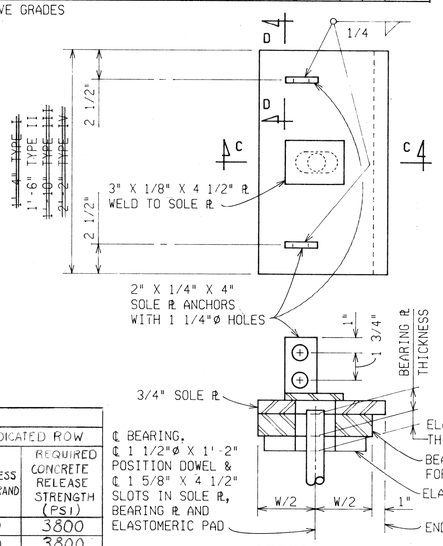
TABLE I

NUMBER OF 1/2"ø - 270KSI - 7 WIRE STRANDS IN INDICATED ROW

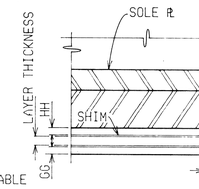
SPAN	TYPE	MID SPAN (SECTION B-B) BOTTOM (1)	(2)	(3)	(4)	END FACE (SECTION A-A) BOTTOM (1)	(2)	(3)	(4)	TOP (1)	(2)	TOTAL NUMBER	INITIAL PRESTRESS FORCE/STRAND (LBS.)	REQUIRED CONCRETE RELEASE STRENGTH (PSI)
1	II	2	6	0	2	2	6	0	2	0	0	10	28700	3800
2	II	2	6	0	2	2	6	0	2	0	0	10	28700	3800
3	II	2	6	0	2	2	6	0	2	0	0	10	28700	3800

NUMBER OF 1/2"ø - 270K - 7 WIRE LOW RELAXATION STRANDS IN INDICATED ROW

1	II	2	4	2	2	2	4	2	0	0	0	10	30900	3800
2	II	2	4	2	2	2	4	2	0	0	0	10	30900	3800
3	II	2	4	2	2	2	4	2	0	0	0	10	30900	3800

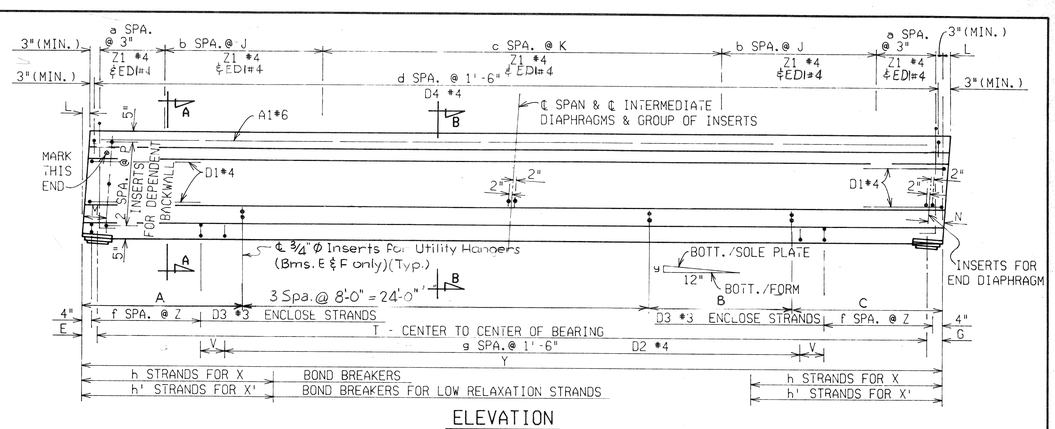


SECTION C-C

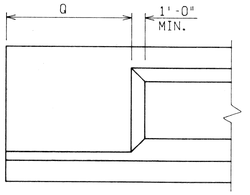


SECTION D-D

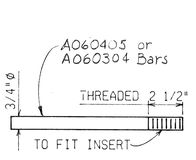
BEARING DETAILS



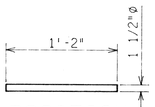
ELEVATION



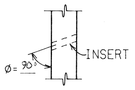
END BLOCK DETAIL
(OPTIONAL)



THREADED ANCHOR BAR DETAIL
INCLUDED IN PAY ITEM REINFORCING STEEL



POSITION DOWEL DETAIL



SECTION F-F

QUANTITIES

THICKNESS	ITEM	UNIT	AMOUNT
3/4"	ELASTOMERIC BEARING PADS	SFT	17
7/8"	ELASTOMERIC BEARING PADS	SFT	32
	ELASTOMERIC BEARING PADS	SFT	
DEPTH			
36"	PRESTRESSED CONCRETE I BEAMS - FURNISHED	LFT	1409
	PRESTRESSED CONCRETE I BEAMS - FURNISHED	LFT	
36"	PRESTRESSED CONCRETE I BEAMS - ERECTED	LFT	1409
	PRESTRESSED CONCRETE I BEAMS - ERECTED	LFT	

NOTES:

THE SOLE PLATE IS (W+1") WIDE, SEE TABLE FOR BEARING PLATE W.

ALL STEEL IN THE BEARING IS TO BE A-36.

ALL STEEL IN THE BEARING IS INCIDENTAL TO "PRESTRESSED CONCRETE I-BEAM".

INSTALLATION OF ANCHOR BARS IS INCLUDED IN THE PAY ITEM OF PRESTRESSED CONCRETE I BEAMS.

WHERE CALLED FOR, INSERTS SHALL BE 3/4"ø RICHMOND TYPE T2 12M INSERT, TL2F INSERT, SUPERIOR 3/4"ø 12M COIL TIES OR COIL WITH FLARED LOOP OR EQUAL. (INCIDENTAL)

ELASTOMER FOR ELASTOMERIC BEARING PADS SHALL BE NOMINAL 70 DUROMETER HARDNESS FOR PLAIN BEARINGS AND 50 DUROMETER HARDNESS FOR LAMINATED BEARINGS. THE DESIGN OF THESE PADS IS BASED ON A MAXIMUM PRESSURE OF 500 PSI. D.L. AND 800 PSI. D.L. + L.L.

SHOP PLANS SHALL INCLUDE AN OUTLINE OF THE PROPOSED PRESTRESSING PROCEDURE FOR THE DRAPED STRANDS AND OF THE DETENSIONING PROCEDURE.

SHOP PLANS SHALL INCLUDE A DIAGRAM OF CASTING BED LAYOUT. WHERE THE "PULL DOWN" METHOD IS USED, THE JACKING FORCE FOR DRAPED STRANDS, TOGETHER WITH APPROPRIATE COMPUTATIONS SHALL ALSO BE SUBMITTED BY THE FABRICATOR.

PRESTRESSING STRANDS ARE TO BE 1/2"ø WITH AN AREA OF .1531 SQUARE INCHES AND SHALL BE ASTM A416, GRADE 270. LOW-RELAXATION STRAND AS SPECIFIED IN ASTM A416 SUPPLEMENT, MAY BE SUBSTITUTED AS SHOWN IN TABLE 1.

WHEN BOND BREAKERS ARE REQUIRED, THEY SHALL BE USED ON STRANDS IN THE SECOND ROW AND PLACED SYMMETRICALLY ABOUT THE ℄ OF THE BEAM. THE NUMBER AND LENGTH OF BOND BREAKERS SHALL BE AS SHOWN IN THE BEAM DIMENS. TABLE. LENGTH SHOWN IS FROM END OF BEAM TO END OF BREAKER. THEY SHALL CONSIST OF TWO TUBES (ONE INSIDE THE OTHER) WITH OVERLAP TURNED IN OPPOSITE DIRECTION.

END BLOCKS ARE OPTIONAL.

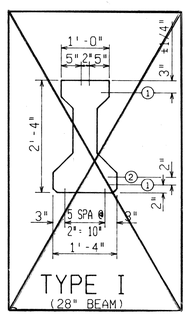
TOTAL ESTIMATED CHANGE OF LENGTH OF BOTTOM FLANGE AT TRANSFER OF PRESTRESS FORCE IS 3/16"

LIFTING SHALL BE BY EQUAL LOADS TO EACH PAIR OF LOOPS. OTHER TYPES OF LIFTING DEVICES MAY BE USED SUBJECT TO APPROVAL OF THE BUREAU OF HIGHWAYS, MICHIGAN DEPARTMENT OF TRANSPORTATION.

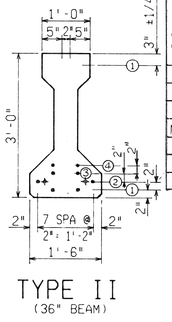
DO NOT POUR DECK UNTIL DIAPHRAGM CONCRETE ATTAINS A STRENGTH OF 2250 PSI.

THE COMPRESSIVE STRENGTH OF THE CONCRETE SHALL NOT BE LESS THAN 5000 P.S.I. AT 28 DAYS.

THE TOP FLANGE TOP SURFACE SHALL BE INTENTIONALLY ROUGHENED.

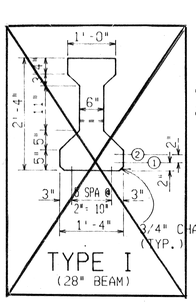


TYPE I
(28" BEAM)

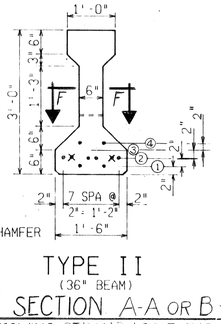


TYPE II
(36" BEAM)

SECTION A-A OR B-B
SHOWING STRAND ARRANGMENT FOR LOW RELAXATION ALT.



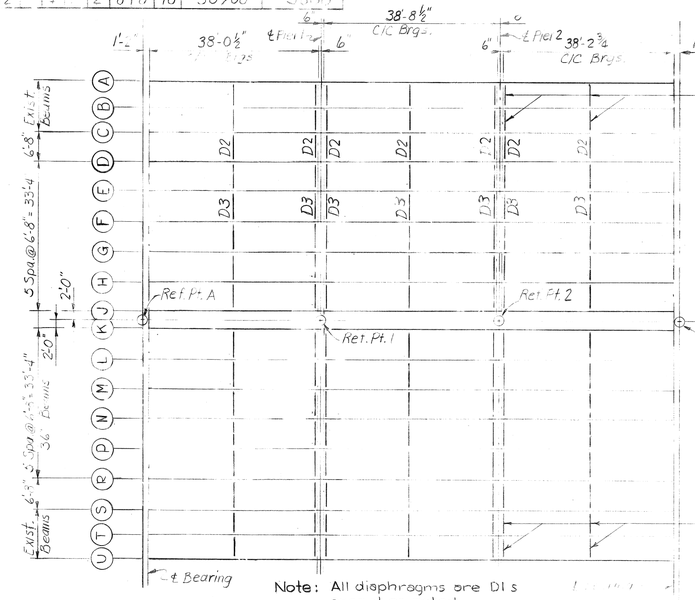
TYPE I
(28" BEAM)



TYPE II
(36" BEAM)

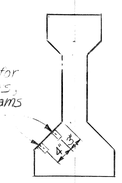
SECTION A-A OR B-B
SHOWING STRAND LOCATIONS FOR REGULAR STRAND OPTION

● STRAND LOCATION
× DEBONDED STRAND FOR REGULAR STRAND
+ DEBONDED STRAND FOR LOW RELAXATION STRAND



Note: All diaphragms are D1's except as noted.

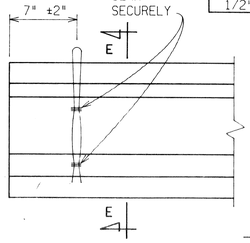
ERECTION DIAGRAM



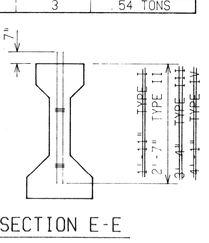
UTILITY INSERT DETAIL
Note: See Beam Elevation for insert spacing.

PRESTRESSING STRAND LIFT DEVICE CAPACITY

STRAND SIZE	NO. OF STRANDS	ALLOWABLE WT. OF BEAM
3/8"	2	20 TONS
7/16"	2	27 TONS
1/2"	2	36 TONS
3/8"	3	30 TONS
7/16"	3	40.5 TONS
1/2"	3	54 TONS



LIFTING DEVICE



SECTION E-E

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PRESTRESSED CONCRETE I BEAM DETAILS

REVISIONS NO.	DESCRIPTION	DATE	BY

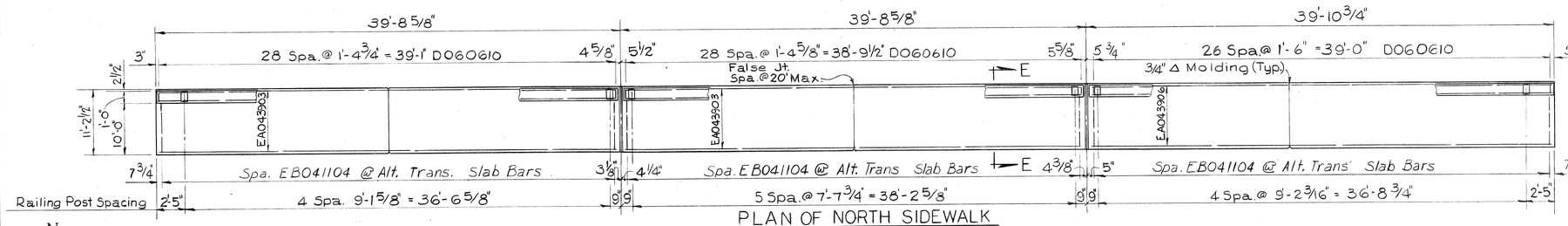
SQUAD BOSS	WDB/	10-25-82/
DRAWN BY	DJL/Cheney	10-25-82/ 12-84
CHECKED BY	MEL & Earl	10-25-82/4-13-84
SHEET	7 OF 15	

B04 of 82101

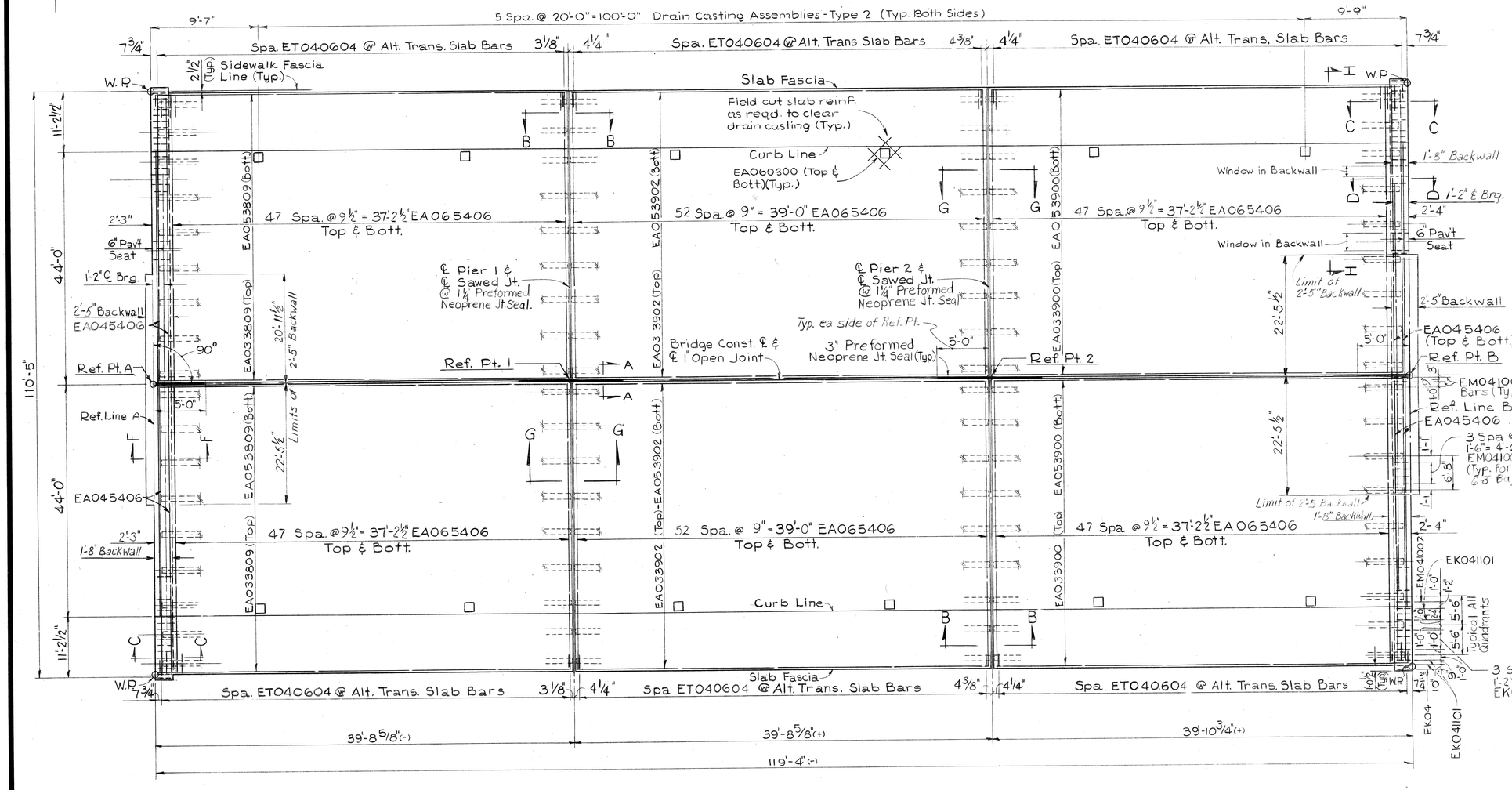
PC-1D

12349A

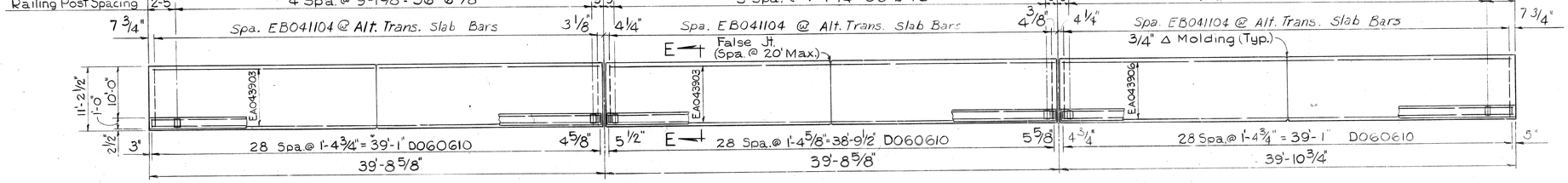
K&E 10 1253 3-81 4985•



PLAN OF NORTH SIDEWALK



PLAN OF SLAB



PLAN OF SOUTH SIDEWALK

MISCELLANEOUS QUANTITIES

Item	Unit	Amount
Preformed Neoprene Joint Seal, 1 1/4"	Lft.	228
Preformed Neoprene Joint Seal, 3"	Lft.	30
Protective Treatment for Bridge Decks	Sft.	12800
Forming, Finishing and Curing Superstructure Concrete	L.S.	1
Bridge Railing, Solid Parapet Type	Lft.	237
Joint Waterproofing	Sq.ft.	749
Drain Casting Assembly - Type 2	Each	12

CONCRETE QUANTITIES

POUR	Amount C.y.d.
A	11.9
B	61.5
C	62.0
D	62.3
E	12.0
F	15.5
G	15.5
H	15.6
J	12.5
K	61.5
L	62.0
M	62.4
N	12.4
P	15.5
Q	15.5
R	15.6
S	26.3
Total	540.0

NOTES:

J.W.P. denotes Joint waterproofing.

Protective treatment for bridge decks shall be applied to all superstructure concrete surfaces between inside faces of railing.

Sidewalk pours shall not be cast until slab concrete has attained 70 percent of its design strength as determined by Table 7.01-4 of the Standard Specifications. The restrictions of Article 5.03.10a regarding heavy equipment, however, shall be observed.

The District Utilities - Permits Engineer is to be notified one week in advance of the time of installation of the ducts in the backwall and diaphragms.

For details of Bridge Railing - Solid Parapet type and Guard Rail Anchorage, see Std. Plan X18A.

For details of Molding, Bar Chair, Bevel, Light Std. Anchorage Bolt Assy., and Name-Plate, see Standard Plan XI-103A.

A permanent camber, extending over the entire length of the bridge, with a middle ordinate of 1/2", shall be placed in the tops of sidewalks.

All diaphragms are Pour S.

Edge or groove denotes edging or grooving with an approved tool.

For details of drain casting assemblies see Standard XI-101.

Drain casting assembly anchor straps shall be attached to the existing beams with 1/2" ϕ Phillips Red Head Self-drilling Concrete Anchors, Chicago Expansion Bolt Co. - Special Self Drilling Anchor or approved equal. (Incidental to Drain Casting Assy-Type 2)

Work this sheet @ sheets #

MICHIGAN DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

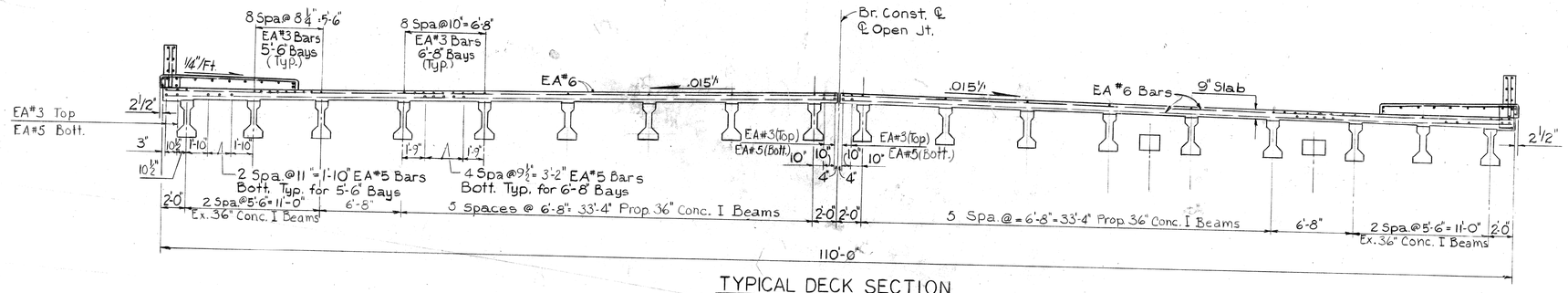
REVISIONS

NO.	DESCRIPTION	DATE	BY

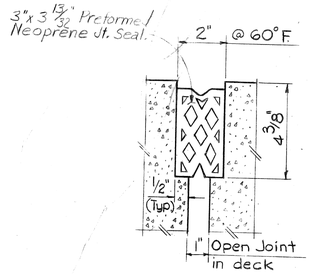
SQUAD BOSS	Mace	6-3-85
DRAWN BY	R. Bush	4/8/84
TRACED BY		
CHECKED BY	S.J. Earl	4-18-84
SHEET	5 OF 15	

B04 of 82101

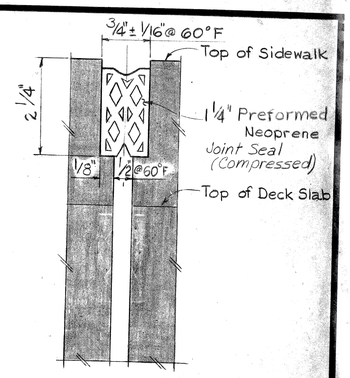
123494



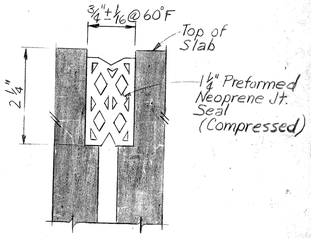
TYPICAL DECK SECTION
Looking West



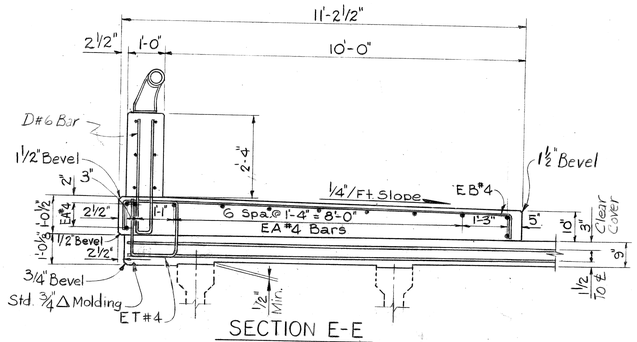
SECTION A-A



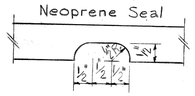
SECTION B-B



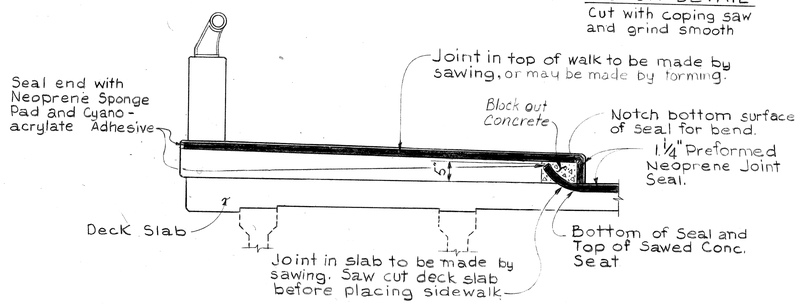
SECTION G-G



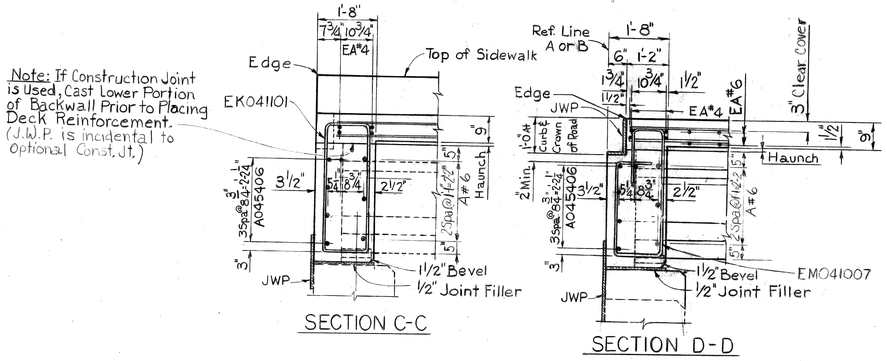
SECTION E-E



NOTCH DETAIL
Cut with coping saw and grind smooth

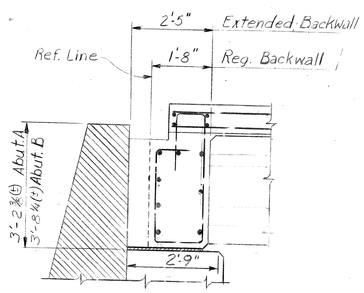


SECTION THRU WALK AT CONSTRUCTION JOINT

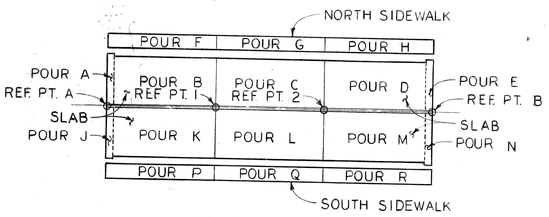


SECTION C-C

SECTION D-D



SECTION F-F



POUR DIAGRAM
Alphabetical designation of pours is not to be construed as a pour sequence.

Work This Sheet @ Sheet #

MICHIGAN DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

REVISIONS

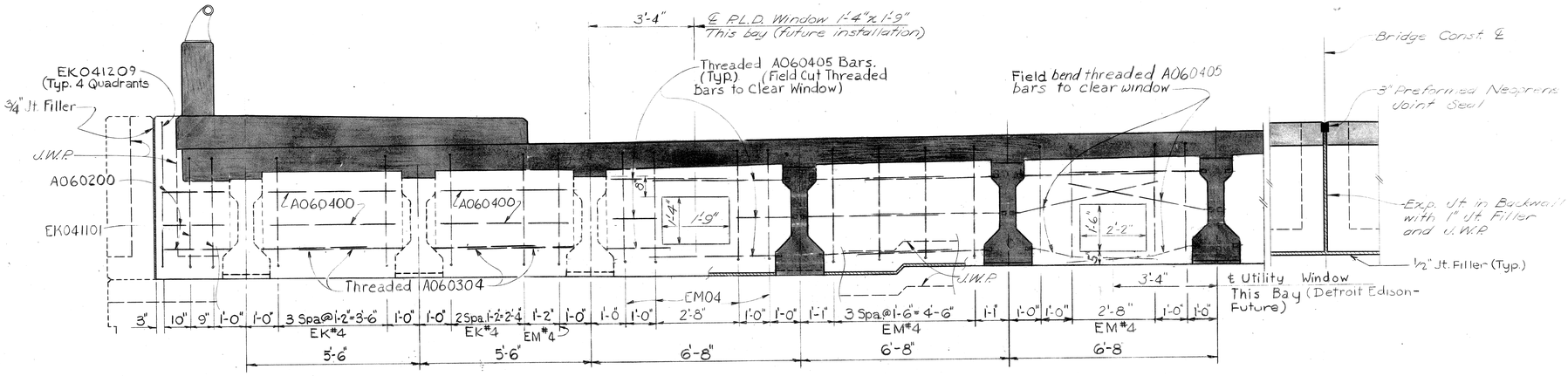
NO.	DESCRIPTION	DATE	BY

SQUAD BOSS	Mace	6-3-89
DRAWN BY	R. Bush	4-12-89
TRACED BY		
CHECKED BY	S.J. Earl	4-13-89
SHEET	9 OF 15	

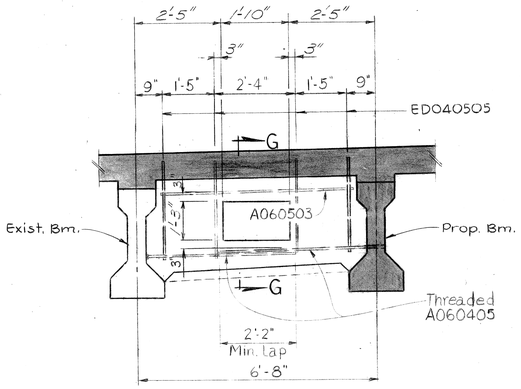
B04 of 82101

12349 A

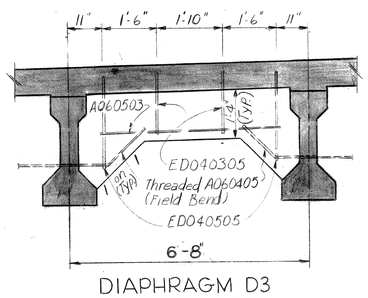
K&E 19 1253 3-81 4988a



SECTION H-H
Looking East, Abut. B Shown



DIAPHRAGM D2



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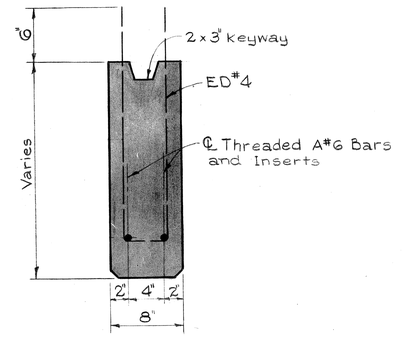
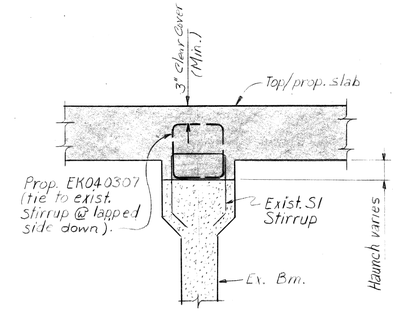
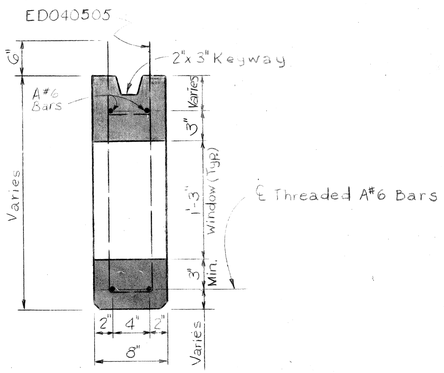


SECTION F-F

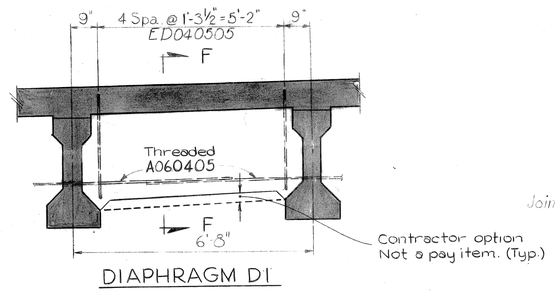


SHEAR CONNECTOR EXTENSION FOR EXISTING BEAMS
(Spans 1 & 3 only)

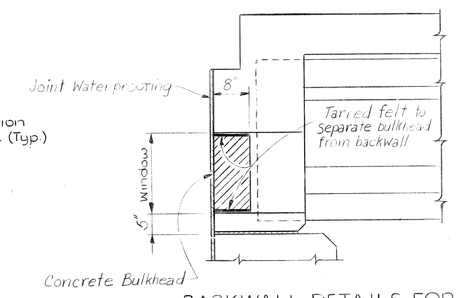
Note : Place 15-K040307 bars per beam, tied to existing stirrups, starting at the abutments and continuing to a point approximately 12' from the end of beam.



SECTION G-G



DIAPHRAGM D1



BACKWALL DETAILS FOR FUTURE ELECTRICAL CONDUITS
(For P.L.D. & Detroit Edison)

...ork This Sheet @ Sheet #

MICHIGAN DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

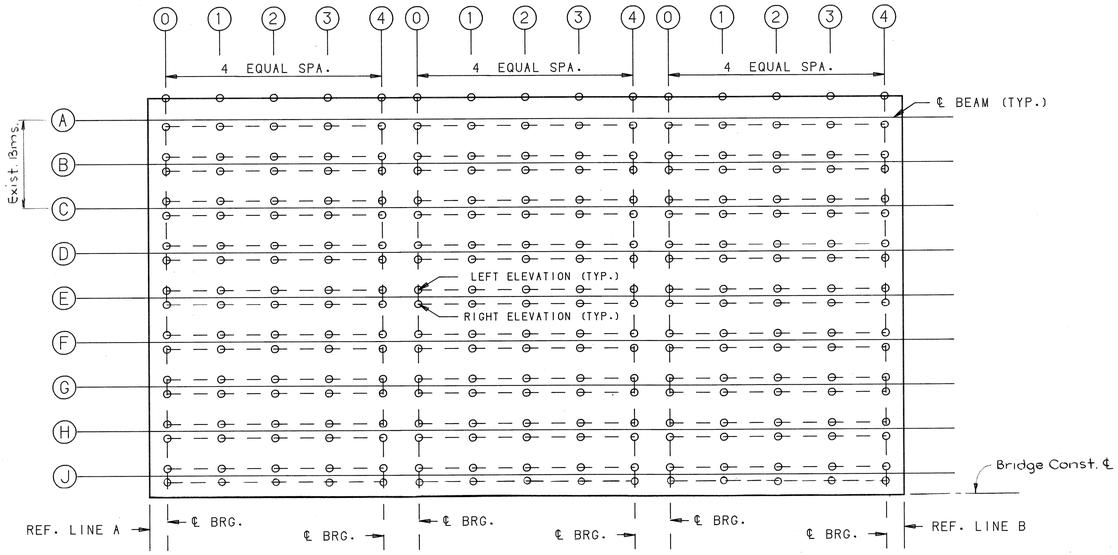
SQUAD BOSS	Mace	6-3-85
DRAWN BY	R. BUSH	4-18-84
TRACED BY		
CHECKED BY	B.J.Earl	4-18-84
SHEET	10 OF 15	

B04 of 82101

REVISIONS

NO.	DESCRIPTION	DATE	BY

12349A



PLAN OF SLAB

TOP OF BEAM ELEVATIONS

		0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
STAGE A	A	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
	B	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
	C	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
	D	603.42	603.44	603.42	603.38	603.30	603.30	603.31	603.30	603.25	603.17	603.17	603.19	603.17	603.13	603.05
	E	603.52	603.54	603.52	603.48	603.40	603.40	603.41	603.40	603.35	603.27	603.27	603.29	603.27	603.23	603.15
	F	603.62	603.64	603.62	603.58	603.50	603.50	603.51	603.50	603.45	603.37	603.37	603.39	603.37	603.33	603.25
	G	603.72	603.74	603.72	603.68	603.60	603.60	603.61	603.60	603.55	603.47	603.47	603.49	603.47	603.43	603.35
	H	603.82	603.84	603.82	603.78	603.70	603.70	603.71	603.70	603.65	603.57	603.57	603.59	603.57	603.53	603.45
	J	603.92	603.94	603.92	603.88	603.80	603.80	603.81	603.80	603.75	603.67	603.67	603.69	603.67	603.63	603.55

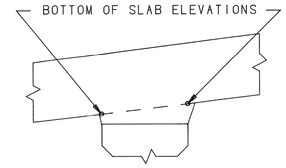
STAGE B	A	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
	B	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
	C	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
	D	603.42	603.44	603.42	603.38	603.30	603.30	603.31	603.30	603.25	603.17	603.17	603.18	603.17	603.12	603.05
	E	603.52	603.54	603.52	603.48	603.40	603.40	603.41	603.40	603.35	603.27	603.27	603.28	603.27	603.22	603.15
	F	603.62	603.64	603.62	603.58	603.50	603.50	603.51	603.50	603.45	603.37	603.37	603.38	603.37	603.32	603.25
	G	603.72	603.74	603.72	603.68	603.60	603.60	603.61	603.60	603.55	603.47	603.47	603.48	603.47	603.42	603.35
	H	603.82	603.84	603.82	603.78	603.70	603.70	603.71	603.70	603.65	603.57	603.57	603.58	603.57	603.52	603.45
	J	603.92	603.94	603.92	603.88	603.80	603.80	603.81	603.80	603.75	603.67	603.67	603.68	603.67	603.62	603.55
				SPAN 1					SPAN 2					SPAN 3		

BOTTOM OF SLAB ELEVATIONS

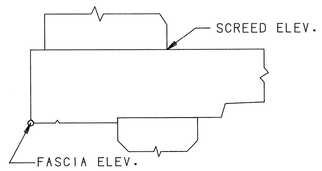
		0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
A	FASCIA	603.16	603.15	603.12	603.09	603.04	603.04	603.02	603.00	602.96	602.91	602.91	602.90	602.87	602.84	602.79
	RIGHT	603.43	603.41	603.39	603.35	603.30	603.30	603.29	603.26	603.22	603.18	603.17	603.16	603.13	603.10	603.05
B	LEFT	603.43	603.41	603.39	603.35	603.30	603.30	603.29	603.26	603.22	603.18	603.17	603.16	603.13	603.10	603.05
	RIGHT	603.43	603.41	603.39	603.35	603.30	603.30	603.29	603.26	603.22	603.18	603.17	603.16	603.13	603.10	603.05
C	LEFT	603.45	603.43	603.41	603.37	603.33	603.32	603.31	603.28	603.25	603.20	603.20	603.18	603.16	603.12	603.07
	RIGHT	603.46	603.45	603.42	603.39	603.34	603.34	603.32	603.30	603.26	603.21	603.21	603.20	603.17	603.13	603.09
D	LEFT	603.55	603.53	603.51	603.47	603.43	603.42	603.41	603.38	603.35	603.30	603.30	603.28	603.26	603.22	603.17
	RIGHT	603.56	603.55	603.52	603.49	603.44	603.44	603.42	603.40	603.36	603.31	603.31	603.30	603.27	603.23	603.19
E	LEFT	603.65	603.63	603.61	603.57	603.53	603.52	603.51	603.48	603.45	603.40	603.40	603.38	603.36	603.32	603.27
	RIGHT	603.66	603.65	603.62	603.59	603.54	603.54	603.52	603.50	603.46	603.41	603.41	603.40	603.37	603.33	603.29
F	LEFT	603.75	603.73	603.71	603.67	603.63	603.62	603.61	603.58	603.55	603.50	603.50	603.48	603.46	603.42	603.37
	RIGHT	603.76	603.75	603.72	603.69	603.64	603.64	603.62	603.60	603.56	603.51	603.51	603.50	603.47	603.43	603.39
G	LEFT	603.85	603.83	603.81	603.77	603.73	603.72	603.71	603.68	603.65	603.60	603.60	603.58	603.56	603.52	603.47
	RIGHT	603.86	603.85	603.82	603.79	603.74	603.74	603.72	603.70	603.66	603.61	603.61	603.60	603.57	603.53	603.49
H	LEFT	603.95	603.93	603.91	603.87	603.83	603.82	603.81	603.78	603.75	603.70	603.70	603.68	603.66	603.62	603.57
	RIGHT	603.96	603.95	603.92	603.89	603.84	603.84	603.82	603.80	603.76	603.71	603.71	603.70	603.67	603.63	603.59
J	LEFT	604.05	604.03	604.01	603.97	603.93	603.92	603.91	603.88	603.85	603.80	603.80	603.78	603.76	603.72	603.67
	RIGHT	604.06	604.05	604.02	603.99	603.94	603.94	603.92	603.90	603.86	603.81	603.81	603.80	603.77	603.73	603.69

SCREED ELEVATIONS

LEFT BARR	604.18	604.16	604.13	604.10	604.05	604.05	604.03	604.01	603.97	603.93	603.92	603.91	603.88	603.85	603.80
BRIDGE CONST. ℄	604.84	604.82	604.79	604.76	604.71	604.71	604.69	604.67	604.63	604.59	604.58	604.57	604.54	604.51	604.46



TYPICAL INTERIOR SECTION



TYPICAL FASCIA SECTION

BULKHEAD ELEVATIONS

STAGE B

REF. A			REF. B
604.18	604.05	603.93	603.80
604.18	604.05	603.93	603.80
604.21	604.08	603.96	603.83
604.31	604.18	604.06	603.93
604.41	604.28	604.16	604.03
604.51	604.38	604.26	604.13
604.61	604.48	604.36	604.23
604.71	604.58	604.46	604.33
604.81	604.68	604.56	604.43

NOTES

BOTTOM OF SLAB ELEVATIONS ARE AT RIGHT ANGLES TO THE BEAM ℄ AND ARE BASED ON THE CONDITION THAT ALL THE CONCRETE BEAMS HAVE BEEN ERECTED. BUT NO OTHER LOADS APPLIED. THESE ELEVATIONS INCLUDE ALLOWANCES FOR DEFLECTIONS DUE TO FORMS. STEEL REINFORCEMENT. DECK CONCRETE AND BARRIERS.

SCREED ELEVATIONS ARE BASED ON THE CONDITION THAT NO SLAB CONCRETE HAS BEEN CAST AND THAT FORMWORK AND STEEL REINFORCEMENT ARE IN PLACE.

TRANSVERSE STRIKE OFF FINISHING MACHINE IS TO BE USED IN PLACING DECK CONCRETE.

STAGE A IS CONCRETE BEAMS ERECTED WITH NO OTHER LOADS APPLIED.

STAGE B IS FORMS AND STEEL REINFORCEMENT IN PLACE (ALL SPANS COMPLETE).

SCREED RAILS FOR FINISHING CONCRETE SHALL BE LOCATED OVER FASCIA BEAMS.

MICHIGAN DEPARTMENT OF TRANSPORTATION

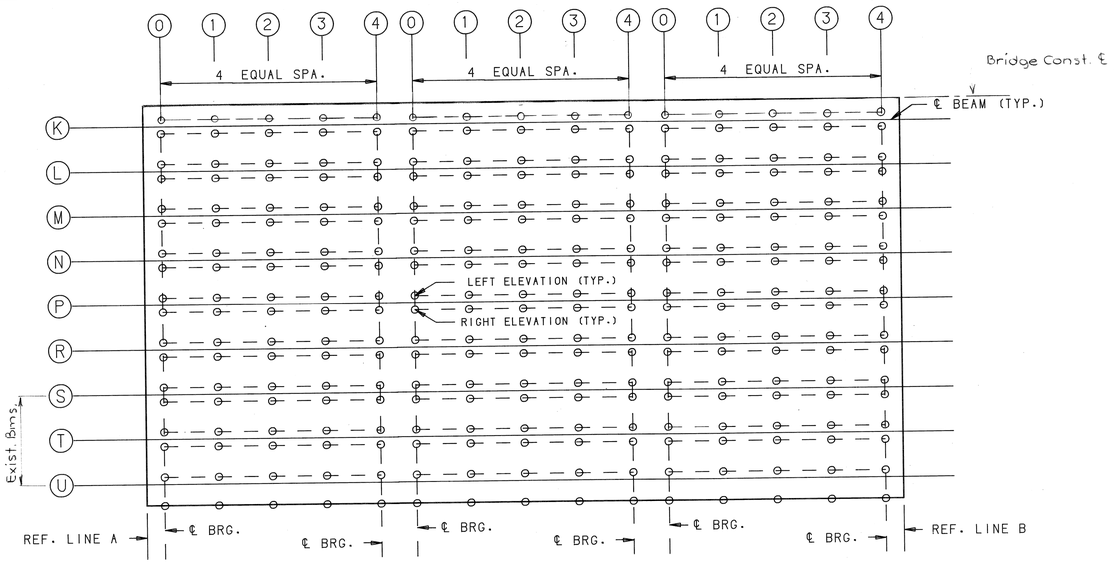
SLAB AND SCREED DETAILS

REVISIONS			
NO.	DESCRIPTION	DATE	BY

SQUAD	MACE	6-3-85
PLOTTED		3-29-85
SHEET 11 OF 15		
B04 - 82101		

#111

12349A



PLAN OF SLAB

TOP OF BEAM ELEVATIONS

STAGE A

	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
K	603.92	603.94	603.92	603.88	603.80	603.80	603.81	603.80	603.75	603.67	603.67	603.69	603.67	603.63	603.55
L	603.82	603.84	603.82	603.78	603.70	603.70	603.71	603.70	603.65	603.57	603.57	603.59	603.57	603.53	603.45
M	603.72	603.74	603.72	603.68	603.60	603.60	603.61	603.60	603.55	603.47	603.47	603.49	603.47	603.43	603.35
N	603.62	603.64	603.62	603.58	603.50	603.50	603.51	603.50	603.45	603.37	603.37	603.39	603.37	603.33	603.25
P	603.52	603.54	603.52	603.48	603.40	603.40	603.41	603.40	603.35	603.27	603.27	603.29	603.27	603.23	603.15
R	603.42	603.44	603.42	603.38	603.30	603.30	603.31	603.30	603.25	603.17	603.17	603.19	603.17	603.13	603.05
S	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
T	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
U	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84

STAGE B

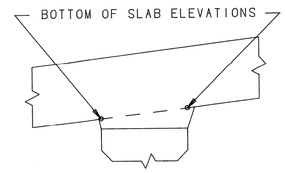
K	603.92	603.94	603.92	603.88	603.80	603.80	603.81	603.80	603.75	603.67	603.67	603.68	603.67	603.62	603.55
L	603.82	603.84	603.82	603.78	603.70	603.70	603.71	603.70	603.65	603.57	603.57	603.58	603.57	603.52	603.45
M	603.72	603.74	603.72	603.68	603.60	603.60	603.61	603.60	603.55	603.47	603.47	603.48	603.47	603.42	603.35
N	603.62	603.64	603.62	603.58	603.50	603.50	603.51	603.50	603.45	603.37	603.37	603.38	603.37	603.32	603.25
P	603.52	603.54	603.52	603.48	603.40	603.40	603.41	603.40	603.35	603.27	603.27	603.28	603.27	603.22	603.15
R	603.42	603.44	603.42	603.38	603.30	603.30	603.31	603.30	603.25	603.17	603.17	603.18	603.17	603.12	603.05
S	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
T	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
U	603.20	603.25	603.27	603.26	603.22	603.22	603.24	603.22	603.17	603.08	603.08	603.07	603.03	602.95	602.84
			SPAN 1					SPAN 2					SPAN 3		

BOTTOM OF SLAB ELEVATIONS

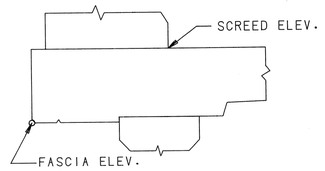
		0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
K	LEFT	604.06	604.05	604.02	603.99	603.94	603.94	603.92	603.90	603.86	603.81	603.81	603.80	603.77	603.73	603.69
	RIGHT	604.05	604.03	604.01	603.97	603.93	603.92	603.91	603.88	603.85	603.80	603.80	603.78	603.76	603.72	603.67
L	LEFT	603.96	603.95	603.92	603.89	603.84	603.84	603.82	603.80	603.76	603.71	603.71	603.70	603.67	603.63	603.59
	RIGHT	603.95	603.93	603.91	603.87	603.83	603.82	603.81	603.78	603.75	603.70	603.70	603.68	603.66	603.62	603.57
M	LEFT	603.86	603.85	603.82	603.79	603.74	603.74	603.72	603.70	603.66	603.61	603.61	603.60	603.57	603.53	603.49
	RIGHT	603.85	603.83	603.81	603.77	603.73	603.72	603.71	603.68	603.65	603.60	603.60	603.58	603.56	603.52	603.47
N	LEFT	603.76	603.75	603.72	603.69	603.64	603.64	603.62	603.60	603.56	603.51	603.51	603.50	603.47	603.43	603.39
	RIGHT	603.75	603.73	603.71	603.67	603.63	603.62	603.61	603.58	603.55	603.50	603.50	603.48	603.46	603.42	603.37
P	LEFT	603.66	603.65	603.62	603.59	603.54	603.54	603.52	603.50	603.46	603.41	603.41	603.40	603.37	603.33	603.29
	RIGHT	603.65	603.63	603.61	603.57	603.53	603.52	603.51	603.48	603.45	603.40	603.40	603.38	603.36	603.32	603.27
R	LEFT	603.56	603.55	603.52	603.49	603.44	603.44	603.42	603.40	603.36	603.31	603.31	603.30	603.27	603.23	603.19
	RIGHT	603.55	603.53	603.51	603.47	603.43	603.42	603.41	603.38	603.35	603.30	603.30	603.28	603.26	603.22	603.17
S	LEFT	603.46	603.45	603.42	603.39	603.34	603.34	603.32	603.30	603.26	603.21	603.21	603.20	603.17	603.13	603.09
	RIGHT	603.45	603.43	603.41	603.37	603.33	603.32	603.31	603.28	603.25	603.20	603.20	603.18	603.16	603.12	603.07
T	LEFT	603.43	603.41	603.39	603.35	603.30	603.30	603.29	603.26	603.22	603.18	603.17	603.16	603.13	603.10	603.05
	RIGHT	603.43	603.41	603.39	603.35	603.30	603.30	603.29	603.26	603.22	603.18	603.17	603.16	603.13	603.10	603.05
U	LEFT	603.43	603.41	603.39	603.35	603.30	603.30	603.29	603.26	603.22	603.18	603.17	603.16	603.13	603.10	603.05
	FASCIA	603.16	603.15	603.12	603.09	603.04	603.04	603.02	603.00	602.96	602.91	602.91	602.90	602.87	602.84	602.79

SCREED ELEVATIONS

BRIDGE CONST ℄	604.84	604.82	604.79	604.76	604.71	604.71	604.69	604.67	604.63	604.59	604.58	604.57	604.54	604.51	604.46
RIGHT BARR	604.18	604.16	604.13	604.10	604.05	604.05	604.03	604.01	603.97	603.93	603.92	603.91	603.88	603.85	603.80



TYPICAL INTERIOR SECTION



TYPICAL FASCIA SECTION

BULKHEAD ELEVATIONS

STAGE B

REF. A			REF. B
604.81	604.68	604.56	604.43
604.71	604.58	604.46	604.33
604.61	604.48	604.36	604.23
604.51	604.38	604.26	604.13
604.41	604.28	604.16	604.03
604.31	604.18	604.06	603.93
604.21	604.08	603.96	603.83
604.18	604.05	603.93	603.80
604.18	604.05	603.93	603.80

NOTES

BOTTOM OF SLAB ELEVATIONS ARE AT RIGHT ANGLES TO THE BEAM ℄ AND ARE BASED ON THE CONDITION THAT ALL THE CONCRETE BEAMS HAVE BEEN ERECTED, BUT NO OTHER LOADS APPLIED. THESE ELEVATIONS INCLUDE ALLOWANCES FOR DEFLECTIONS DUE TO FORMS, STEEL REINFORCEMENT, DECK CONCRETE AND BARRIERS.

SCREED ELEVATIONS ARE BASED ON THE CONDITION THAT NO SLAB CONCRETE HAS BEEN CAST AND THAT FORMWORK AND STEEL REINFORCEMENT ARE IN PLACE.

TRANSVERSE STRIKE OFF FINISHING MACHINE IS TO BE USED IN PLACING DECK CONCRETE.

STAGE A IS CONCRETE BEAMS ERECTED WITH NO OTHER LOADS APPLIED.

STAGE B IS FORMS AND STEEL REINFORCEMENT IN PLACE (ALL SPANS COMPLETE).

SCREED RAILS FOR FINISHING CONCRETE SHALL BE LOCATED OVER FASCIA BEAMS.

MICHIGAN DEPARTMENT OF TRANSPORTATION

SLAB AND SCREED DETAILS

REVISIONS

NO.	DESCRIPTION	DATE	BY

SQUAD	MACE	6-3-85
PLOTTED		3-29-85
SHEET 12 OF 15		
B04 - 82101		

12349A

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SUPERSTRUCTURE

BAR	DIMENSIONS a	b	c	d	e	f	g	h	j	k	NO. REQ'D	TOTAL WT.
EA033809	38'9"										150	2186
EA033902	39'2"										150	2209
EA033900	39'0"										150	2000
EA053809	38'9"										80	3233
EA053902	39'2"										80	3268
EA053900	39'0"										80	3254
EA065406	54'6"										596	48788
EA043903	39'3"										48	1259
EA043906	39'6"										24	633
EA045406	54'6"										16	582
EA060300	3'0"										96	433
A060400	4'0"										16	96
A060503	5'3"										28	221
A060405	4'5"			Threaded							480	3187
A060200	2'0"										12	36
A043903	39'3"										36	944
A045406	54'6"										16	582
A060304	3'4"			Threaded							16	80
EB041104	10'8½"	7½"									150	1185
ED040305	3'5"	1'6"	5"	1'6"							14	32
ED040505	2'6"	5"	2'6"								392	1419
DD060610	3'2"	6"	3'2"								174	1785
EK041011	1'3½"	2'5"	2'5"	3'6"							36	263
EK041209	1'3½"	2'10"	2'11	4'5"							4	34
EM041007	10½"	3'6"	1'3½"	2'6"	11¼"	1'6"					108	763
ET040604	1'2½"	1'5½"	1'5½"	8¼"							150	634
EK040307	9"	8"	8"	9"							180	430

Total Steel Reinforcement, Epoxy Coated 72,555

Total Steel Reinforcement 6931

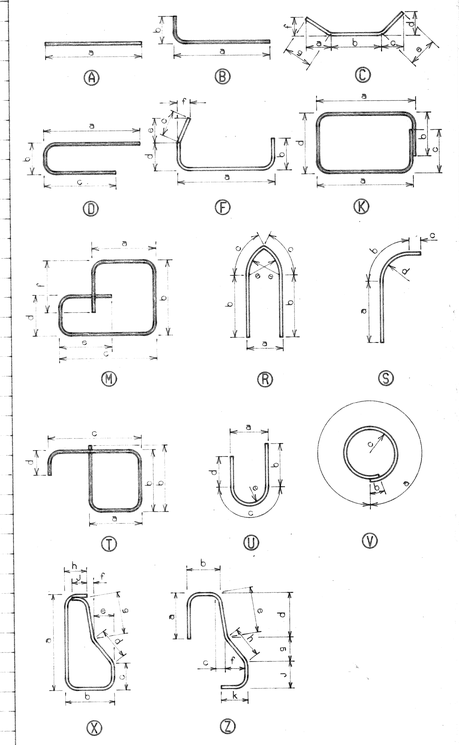
ABUTMENTS & PIERS

BAR	DIMENSIONS a	b	c	d	e	f	g	NO. REQ'D	TOTAL WT.
A062906	29'6"							4	177
A064406	44'6"							2	134
DD060403	1'0"	2'3"	1'0"					30	192
DD060411	1'4"	2'3"	1'4"					29	214
DD060508	2'1"	1'6"	2'1"					9	77
DD060302	10"	1'6"	10"					24	114

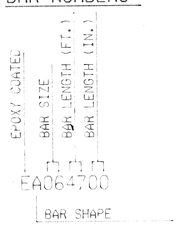
Total Steel Reinforcement 908

BAR	DIMENSIONS a	b	c	d	e	f	g	h	j	k	NO. REQ'D	TOTAL WT.

BAR BENDING DIAGRAM



BAR NUMBERS:



Note:
Threaded bar detail is shown on sheet 7.

WORK THIS SHEET WITH SHEET NO.

NOTE: ALL BENDS IN REINFORCING STEEL TO BE MADE ABOUT A PIN OF THE MINIMUM DIAMETER ALLOWED BY THE STANDARD SPECIFICATIONS.

TOLERANCES IN CUTTING AND BENDING BARS ARE AS ESTABLISHED IN MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE AND DETAILING MANUAL OF THE AMERICAN CONCRETE INSTITUTE.

~~WHERE FIELD CUTTING OF EPOXY BARS IS REQUIRED, THE CONTRACTOR SHALL REPAIR THE EPOXY COATING AT THE CUT END AS PROVIDED FOR IN STANDARD SPECIFICATION 6.05.03 (INCIDENTAL TO STEEL REINFORCEMENT, EPOXY COATED).~~

STEEL REINFORCEMENT 7839 *

STEEL REINFORCEMENT, EPOXY COATED 72,555 *

MICHIGAN DEPARTMENT OF TRANSPORTATION

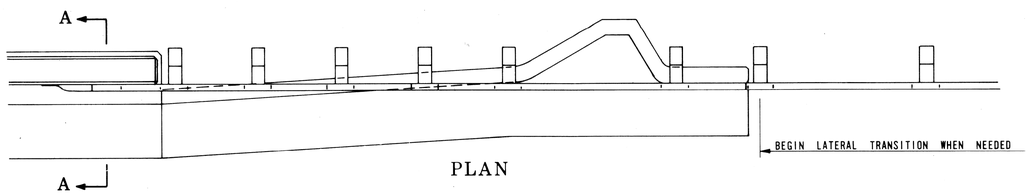
STEEL REINFORCEMENT DETAILS

REVISIONS NO.	DESCRIPTION	DATE	BY

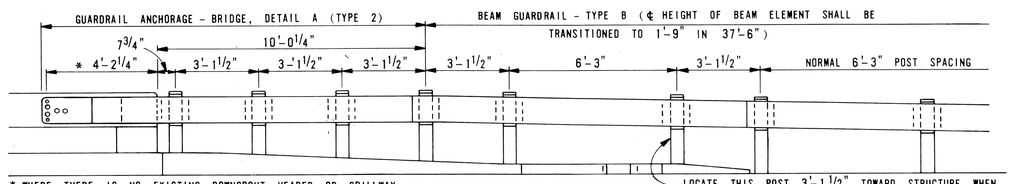
SQUAD BOSS	Mace	6-3-85
DRAWN BY	L BUENLER	5-2-84
CHECKED BY	C.Giller	5-3-84
SHEET 13 OF 15		

B04 OF 82101

12349A



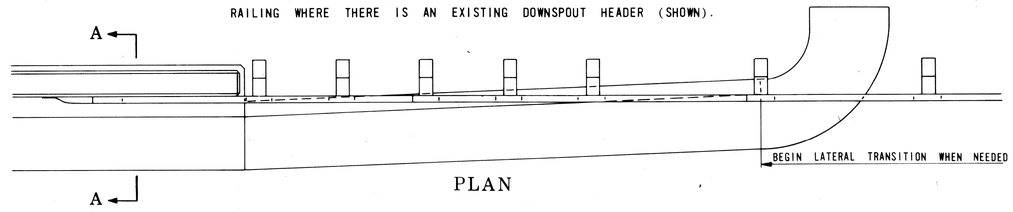
PLAN



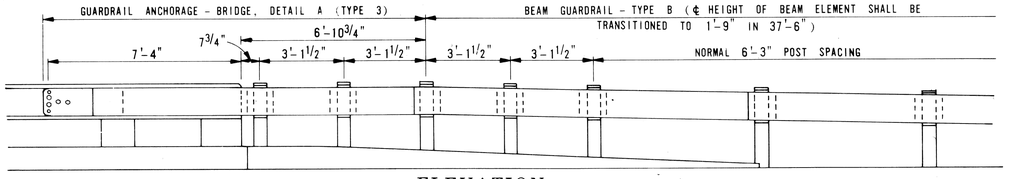
* WHERE THERE IS NO EXISTING DOWNSPOUT HEADER OR SPILLWAY, THIS DIMENSION MAY BE 3'-6" MINIMUM; THIS ANCHORAGE WILL BE DESIGNATED AS DETAIL A (TYPE 1).

ELEVATION

TO BE USED WHEN ANCHORING GUARDRAIL TO EXISTING BRIDGE PARAPET RAILING WHERE THERE IS AN EXISTING DOWNSPOUT HEADER (SHOWN).

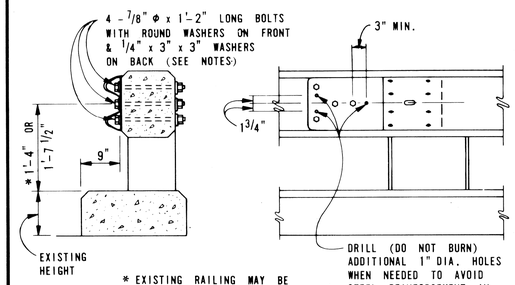


PLAN



ELEVATION

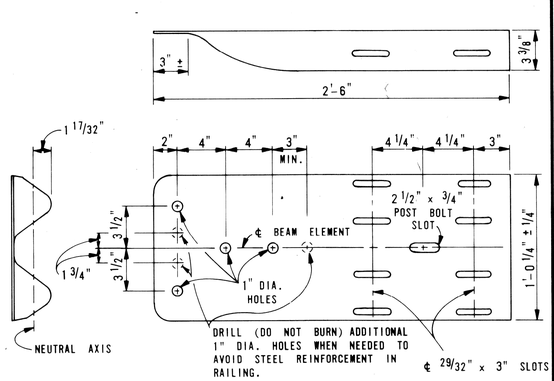
TO BE USED WHEN ANCHORING GUARDRAIL TO EXISTING BRIDGE PARAPET RAILING WHERE THERE IS AN EXISTING SPILLWAY



* EXISTING RAILING MAY BE EITHER OF TWO HEIGHTS

SECTION A-A

ELEVATION SHOWING BOLT PLACEMENT



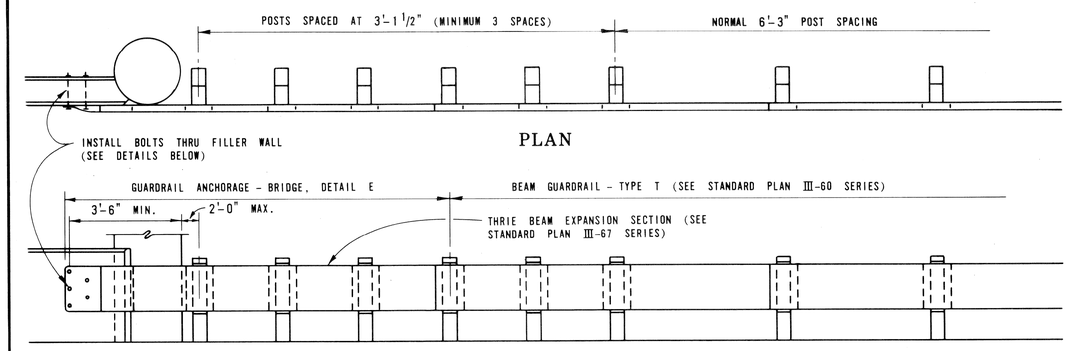
SPECIAL END SHOE

ENGINEER - BRIDGE DESIGN	L. A. Williams ENGINEER - ROAD DESIGN	K. Burkhardt ENGINEER OF DESIGN
PREPARED BY DESIGN DIVISION DRAWN BY: HAW/JLR CHECKED BY: VR	ENGINEER OF CONSTRUCTION ENGINEER OF TESTING AND RESEARCH M. E. Wittenen ENGINEER OF TRAFFIC AND SAFETY	Alfred H. Williams ENGINEER OF MAINTENANCE DEPARTMENT DIRECTOR JAMES P. PITZ BY: DEPUTY DIRECTOR - HIGHWAYS

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS SPECIAL DETAIL FOR

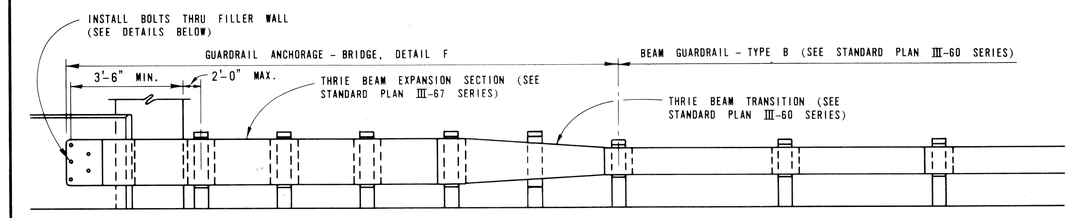
GUARDRAIL ANCHORAGE - BRIDGE, DETAILS A, E, AND F

F.H.W.A. APPROVAL	2-4-85 PLAN DATE	SPECIAL DETAIL 7-1	SHEET 1 OF 2

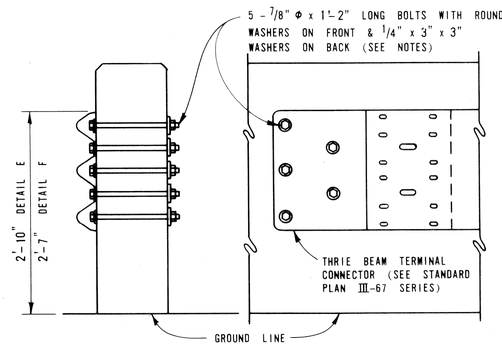


PLAN

ELEVATION OF ANCHORAGE CONNECTING BEAM GUARDRAIL - TYPE T



ELEVATION OF ANCHORAGE CONNECTING BEAM GUARDRAIL - TYPE B



ANCHORAGE ATTACHMENT DETAILS

BEAM ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC.

ALL RAIL ELEMENTS, END SHOES, AND HARDWARE SHALL CONFORM TO THE MATERIAL REQUIREMENTS FOR STEEL BEAM GUARDRAIL AND HARDWARE IN THE CURRENT STANDARD SPECIFICATIONS.

NOTES:

THIS SPECIAL DETAIL IS INTENDED FOR USE IN SAFETY UPGRADING OF EXISTING GUARDRAIL. FOR NEW CONSTRUCTION, AND FOR DETAILS OF GUARDRAIL HARDWARE, SEE STANDARD PLANS.

PLANS WILL SHOW APPLICABLE ANCHORAGE DETAIL TO GO WITH INDIVIDUAL GUARDRAIL INSTALLATIONS. THE PAY ITEM FOR BRIDGE ANCHORAGE DETAILS SHOWN ON THIS PLAN WILL BE "GUARDRAIL ANCHORAGE - BRIDGE, DETAIL _", EACH.

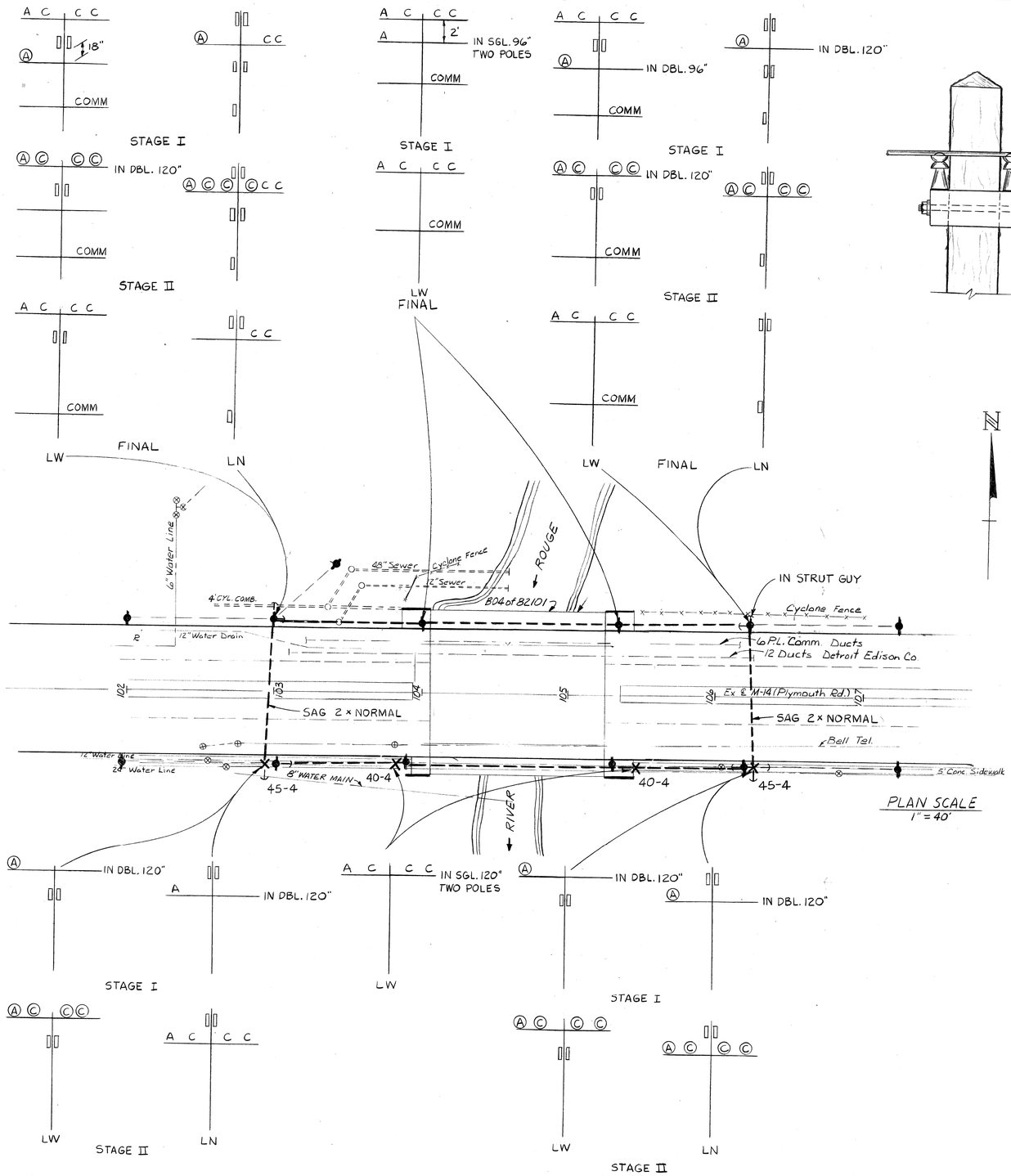
ENGINEER - BRIDGE DESIGN	L. A. Williams ENGINEER - ROAD DESIGN	K. Burkhardt ENGINEER OF DESIGN
PREPARED BY DESIGN DIVISION DRAWN BY: HAW/JLR CHECKED BY: VR	ENGINEER OF CONSTRUCTION ENGINEER OF TESTING AND RESEARCH M. E. Wittenen ENGINEER OF TRAFFIC AND SAFETY	Alfred H. Williams ENGINEER OF MAINTENANCE DEPARTMENT DIRECTOR JAMES P. PITZ BY: DEPUTY DIRECTOR - HIGHWAYS

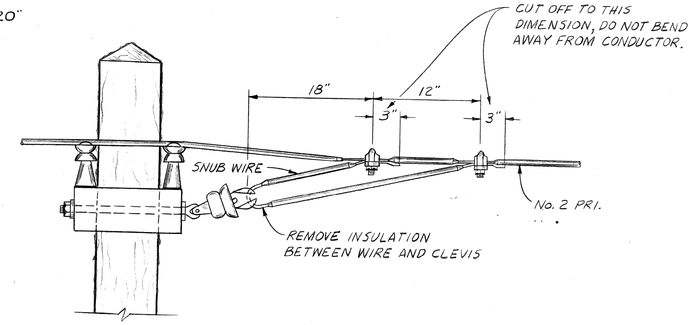
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS SPECIAL DETAIL FOR

GUARDRAIL ANCHORAGE - BRIDGE, DETAILS A, E, AND F

F.H.W.A. APPROVAL	2-4-85 PLAN DATE	SPECIAL DETAIL 7-1	SHEET 2 OF 2

CONTROL SECTION	JOB NO.	SHEET NO.
MU 82101	12349 A	14 OF 15





PRIMARY PARTIAL DEADEND 7200 VOLT
(SNUBBING DETAIL)
NOT TO SCALE

N

LEDGEND

EXISTING

- LUMINAIRE
- HANDHOLE
- POWER POLE
- UNDERGROUND CONDUIT

PROPOSED

- WOOD POLE - INSTALL-LATER, REMOVE
- WOOD POLE WITH LUMINAIRE
- OVERHEAD LINE

NOTES

1. WOOD POLES SUPPORTING TRAFFIC SIGNALS ARE TO BE GUYED AS SHOWN ON THE TRAFFIC SIGNAL PLANS. ANCHOR GUYS ARE INCIDENTAL TO THE ITEM "WOOD POLE" AND WILL NOT BE PAID FOR SEPARATELY.
2. ALL SPLICES, TEMPORARY CIRCUITS, AND CABLE CUTTING REQUIRED TO MAINTAIN CONTINUITY OF THE SERIES CIRCUITS ARE INCIDENTAL TO THE PROJECT AND WILL NOT BE PAID FOR SEPARATELY.
3. ALL POLES TO BE SET OR REMOVED BY THE CONTRACTOR THAT HAVE D.E. CO. OR MICHIGAN BELL TELEPHONE CO. LINES SHALL HAVE THE WORK COORDINATED BY THE COMPANIES AS DIRECTED BY THE ENGINEER.
4. FINAL LOCATION OF WOOD POLES TO BE SET AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL MAINTAIN A MINIMUM CLEARANCE OF 3½' HORIZ. AND 1' VERT. BETWEEN THE PROPOSED STRUCTURES AND THE EXISTING CITY SEWER OR WATERMAIN. WORK THESE ELECTRICAL SHEETS WITH SHEETS 16 TO 19.
5. ANCHOR GUYS ARE TO BE ⅜" EXCEPT AS NOTED.
6. ALL EXISTING STREET LIGHTING, TRAFFIC SIGNAL, PRIMARY, ETC., CIRCUITS SHALL ALWAYS BE MAINTAINED IN AN OPERATIONAL CONDITION (EXCEPT WHERE OTHERWISE NOTED).
7. ALL OVERHEAD WIRES AND UNDERGROUND CABLES SHALL CONSIST OF COPPER CONDUCTORS AS PER THE SPECIFICATIONS.
8. EXISTING COMMUNICATIONS SECONDARY FACILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS.
9. ALL NEW ANCHOR GUYS SHALL BE INSTALLED ON A 1:1 RATIO OR AS NEARLY AS POSSIBLE. (EXCEPT WHERE OTHERWISE NOTED, STRUT GUYS ARE EXCEPTED).
10. SNUBBING PRIMARY AS DETAILED AND CALLED FOR ON THE PLANS SHALL BE INCIDENTAL TO THE PROJECT.
11. NOTIFY THE SYSTEMS OPERATOR, PUBLIC LIGHTING DEPARTMENT, 234-0500 24 HOURS PRIOR TO WORKING ON ANY OVERHEAD LINES.

QUANTITIES ON THIS SHEET

ITEM	UNIT	QUANTITY
REMOVE 1 #6 OVERHEAD LINE	L.F.	1190
REMOVE 3 #2 OVERHEAD LINE	L.F.	860
REMOVE WOOD POLE	EACH	4
1 #6 OVERHEAD LINE	L.F.	1720
3 #2 OVERHEAD LINE	L.F.	860
40' CLASS 4 WOOD POLE	EACH	2
45' CLASS 4 WOOD POLE	EACH	2

MICHIGAN DEPARTMENT OF TRANSPORTATION

M-14 (PLYMOUTH RD.) - RIVER ROUGE
LIGHTING PLAN

REVISIONS			
NO.	DESCRIPTION	DATE	BY

E

UNIT	T. JILDEH	1984
DRAWN BY	C.B.	85
TRACED BY	M.V.P.	
CHECKED BY		

SHEET 15 OF 15

804 of 82101

12349 A

PRM DPD-3 IM 10-82 5483F