* STRUCTURES SET *

FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	1	10

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
AND
STATE HIGHWAY ADMINISTRATION OF MARYLAND
INTERSTATE DIVISION FOR BALTIMORE CITY

PLANS FOR
REPLACEMENT OF THE LANCASTER STREET BRIDGE
OVER HARFORD RUN

FAP NO. BR - SOS - 1 (174)
SHA NO. BC 304 - 24 - 815
BALTIMORE CITY NO. 2750

NOTE:
EFFECTIVE JULY 1, 1977, IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 526 OF THE ACTS OF THE 1970 GENERAL ASSEMBLY, WHEREVER THE TITLE "STATE ROADS COMMISSION" AND/OR THE TERM "COMMISSION" IS USED, IT SHALL BE CONSTRUED TO BE "THE STATE HIGHWAY ADMINISTRATION."

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE
2	ROADWAY PLAN AND SECTIONS
3	REMOVAL OF EXISTING STRUCTURES
4	ELECTRICAL CONDUIT RELOCATIONS
5	MANHOLE LAYOUTS AND DUCT SECTIONS
6	BRIDGE PLAN AND ELEVATION
7	ABUTMENTS
8	SUPERSTRUCTURE
9	MISCELLANEOUS DETAILS
10	SUMMARY OF QUANTITIES
1 7A	ABUTMENT MODIFICATION - LANCASTER STREET BRIDGE

FIELD SURVEY BOOKS
2171, 2173

DESIGN TRAFFIC DATA

DESCRIPTION	1983	2003
LANCASTER STREET		
A.D.T.	1200	2500
D.H.V.	12.5%	10%
DIRECTIONAL DISTRIBUTION D.H.V.	60% E.B	60% E.B.
PERCENT TRUCKS A.D.T.	20%	15%
PERCENT TRUCKS D.H.V.	9%	7%
CENTRAL AVENUE		
A.D.T.	1000	1600
D.H.V.	10%	10%
DIRECTIONAL DISTRIBUTION D.H.V.	50% E.B.	50% E.B.
PERCENT TRUCKS A.D.T.	15%	12%
PERCENT TRUCKS D.H.V.	7%	6%

LEGEND

EXISTING	PROPOSED
CURB & GUTTER	LIMIT OF NEW BITUMINOUS CONCRETE WEARING SURFACE
CURB	CORE BORING LOCATION
CONTOUR LINE & ELEVATION	PROPOSED PVC ELECTRICAL CONDUIT
PAVING EDGE	LIMIT OF PROPOSED CONCRETE WALK
GUARD RAIL	MODIFIED PEDESTRIAN RAMP TYPE 2
BULKHEAD FACE	TEMPORARY TRAFFIC SIGN
FENCE	PROPOSED GUARD RAIL
RAILROAD TRACKS	BASE OR SURVEY LINE
LAMP POST	RIGHT OF WAY
WATER VALVE	T.B.A. TO BE ABANDONED
WATER FIRE HYDRANT	
WATER MAIN	
ELECTRICAL CONDUIT	
C&P CONDUIT	
CONCRETE SIDEWALK	
PARKING AREA	

LIMIT OF WORK
STA. 3+07 LANCASTER ST.
F.A.P. NO. BR-SOS-1(174)
S.H.A. NO. BC 304-24-815
BALTO. CITY NO. 2750

LIMIT OF WORK
STA. 0+84 TO
STA. 2+10 CENTRAL AVE.
F.A.P. NO. BR-SOS-1(174)
S.H.A. NO. BC 304-24-815
BALTO. CITY NO. 2750

SITE LOCATION

LIMIT OF WORK
STA. 4+70 LANCASTER ST.
F.A.P. NO. BR-SOS-1(174)
S.H.A. NO. BC 304-24-815
BALTO. CITY NO. 2750

LOCATION MAP
SCALE 1"=750'

DESIGN SPEED 30 M.P.H.
LENGTH OF PROJECT = .04 MILES

AS BULTS 11-4-86

RK&K
STRUCTURES SET

CHECKED BY:	INITIALS	DATE
BUREAU OF WATER AND WASTEWATER		
WATER ENGINEERING DIVISION	DJK	7/1/83
WASTEWATER ENGINEERING DIVISION	NHL	7/1/83
BUREAU OF HIGHWAYS		
HIGHWAY ENGINEERING DIVISION		7-14-83
LIGHTING SECTION-HIGHWAY MAINT. DIV.		7/14/83
CONDUIT SECTION-HIGHWAY MAINT. DIV.	EFR	7-14-83
BUREAU OF CONSTRUCTION MANAGEMENT		
SURVEY AND RECORDS DIVISION		7-14-83
BUREAU OF UTILITIES		7/13/83
DEPARTMENT OF TRANSIT & TRAFFIC		7/1/83
SEDIMENTATION & EROSION CONTROL - I.D.B.C.		7-20-83
	INITIALS	DATE

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS

APPROVAL RECOMMENDED
George A. Perdikakis
HEAD, BUREAU OF HIGHWAYS

APPROVED
7/20/83
DIRECTOR OF PUBLIC WORKS

PREPARED BY
PURDUM & JESCHKE
CONSULTING ENGINEERS
1029 N. CALVERT STREET
BALTIMORE, MARYLAND 21202

JULY 8, 1983
DATE

STATE HIGHWAY ADMINISTRATION OF MARYLAND

REVIEWED AND APPROVAL RECOMMENDED
CHIEF, BUREAU OF DESIGN

APPROVAL RECOMMENDED
CHIEF, INTERSTATE DIVISION FOR BALTIMORE CITY

APPROVED
CHIEF ENGINEER

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR DATE

KAE BALTIMORE (301)553 HERCULENE MC 79999

FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-505-1(174)	2	10

N

INSERT

Note: Undisturbed existing electrical conduit and manholes within limits of work to be abandoned (See Special Provisions)

Note: Areas undisturbed by bridge construction to be brought to finish grade by striping and resurfacing. Recovered Belgian block to be salvaged (see Special Provisions).

Limit of new bituminous concrete wearing surface.

Limit of full depth pavement replacement. See typical roadway section and horizontal limit of roadway excavation.

10' Construction Easement

Sta. 4+00.06 Lancaster St. = 1+57.38 Central Ave. E 4721.129 S 5494.887

Sta. 2+50 Lancaster St Lt. to Sta. 2+10 Central Ave Lt. Reset 44' L.F. Granite Curb

Limit of work Sta. 3+07

Limit of work Sta. 2+10

Limit of work Sta. 4+70

Modified Pedestrian Ramp Type 2 Standard No. BC 655.21 Exposed Aggregate w/ sealer

Replace Existing Sidewalk (5' Wide) 5" depth Sta. 4+49 to Sta. 4+70 Lt. ℄ Survey & ℄ Lancaster St.

Prop. 8" Conc Curb See Typical Rd. Sec.

Remove and Reset Existing Fence. Erect Temporary Construction Fence. Remove Temporary Fence Following Paving Operations and Reset Salvaged fence at previous location.

Existing Guard Rail to be Removed and Reset as Required

Stop Signs to be installed on mirrors (Typical 3 Places)

Proposed Bridge (See details)

Proposed guard rail See Detail Sheet No. 9

Existing guard rail to be removed and reset.

Adjust road box to meet final grade

Replace missing guardrail section

Test Pit

Sta. 4+00.06 Lancaster St. = Sta. 1+06.67 Central Ave. E 4723.327 S 5545.520

℄ Survey & ℄ Central Avenue

Finish grade contours

Prop. Conc. Island

Ex. Elec. M.H.

Existing Conc. Drain

Existing Conduit

Ex. Elec. M.H.

Prop. 3-3" & 1-5" PVC Duct

Existing Duct

Proposed Conduit

Elect. Conduit

10" Water

Gate

Gate

E 4321.398 S 5511.026

E 4923.749 S 5536.217

℄ Survey & ℄ Lancaster Street

CITY OF BALTIMORE (Back Basin Boating Facility)

BALTIMORE HARBOR

PLAN

Scale : 1" = 20'

Boring Locations

1 - 20' Lt. Sta. 1+69 ℄ Survey & ℄ Central Ave. (Taken from Storm Drain Contract No. 388)

B1 - 20' Lt. Sta. 1+16 ℄ Survey & ℄ Central Ave.

B2 - 13' Lt Sta. 1+04 ℄ Survey & ℄ Central Ave.

Note: for Logs See Structure Sheet No. 6.

TYPICAL ROADWAY SECTION

NO SCALE

Areas Milled & Resurfaced - Varies

Limits Of Work

Existing Surface

Finish Grade

Existing Paving

Excavated Areas Varies

1" Ø Longitudinal Tie-Device - Type "A" @ 3'-0" c/c SHA NO. MD-572.61

To Drain

To Drain

18" Gutter

8"

8"

16"

2"

Replace Existing Sidewalk (5' Wide) 5" Depth Sta. 4+49 to Sta. 4+70 Lt. ℄ Survey & ℄ Lancaster Street.

¼" / Ft. Min.

Preformed Expansion Material

Std. Comb. Curb & Gutter Type "A" SHA STD. No. MD. 620.02 - See Detail this Sheet

Sta. 4+51 to Sta. 4+70 Lt. ℄ Survey & ℄ Lancaster Street.

3" Bituminous Surface Course (Band SN) in 2-1½" Layers

7" Plain Cement Concrete Base Course (Mix No. 7)

6" Crusher Run Aggregate Sub-base (CR-6)

RESET EXISTING GRANITE CURB

Not to Scale

6"±

Grade

Finished Pavement Surface Existing Pavement

May Vary 20" to 24"

4"

Grout Edge of Gutter

Bituminous Concrete Surface Course (3" Depth)

4" Subbase, Crusher Run

Existing surface

Finish grade

12" min

5'-0" (Typ.)

El. 6.53

Existing Surface

2"±

Strip existing surface to provide for 2" new surfacing (typical)

3" Bituminous Concrete Surface Course (Band SN) in 2-1½" Courses

Limits of Roadway Excavation (typical)

Central Ave.

℄

El. 6.32

Finish grade

7" Plain Cement Concrete Base Course (Typ.)

6" Crusher Run Aggregate Sub-Base (CR-6) (Typ.)

8" Water

Existing surface

Strip existing surface to provide for 2"± new surfacing. (typical)

MODIFIED "TYPE A" CURB @ TRAFFIC ISLAND

Not to Scale

Concrete Curb

7"

6"

3" Bituminous Paving

Crusher Run Aggregate Subbase (CR-6)

8" Varies

Strip 2'-0" Width of existing Bituminous Surfacing Material

Top of Existing Concrete Culvert

Drill and Grout Hole for #8 Dowels, 12" Long, 3'-0" O.C.

SECTION B-B

Scale : Horiz. : 1" = 5'
Vert. : 1" = 2'

Lancaster St. (West)

Finish grade El. 6.42

Electrical Conduit To be removed

Electrical Conduit To be removed

Lancaster St. (East)

3" Bituminous Concrete 2-1½" Courses Surface Course (Brand SN)

Existing surface

Existing Parapet wall

Finish grade El. 6.42

Existing Culvert

Proposed Closure Collar

Proposed Precast Concrete Units

SECTION A-A

Scale : Horiz. : 1" = 5'
Vert. : 1" = 2'

Existing surface

3" Bituminous Surface Course

8"

8" Plain Cement Concrete Island

Crusher Run Aggregate Subbase (CR-6)

Mod. Type 'A' Curb (See Detail this Sheet)

Slope of Pavement

1'-6"

8"

1"

7"

Slope ¼" / 1'-0"

1'-8"

8"

8"

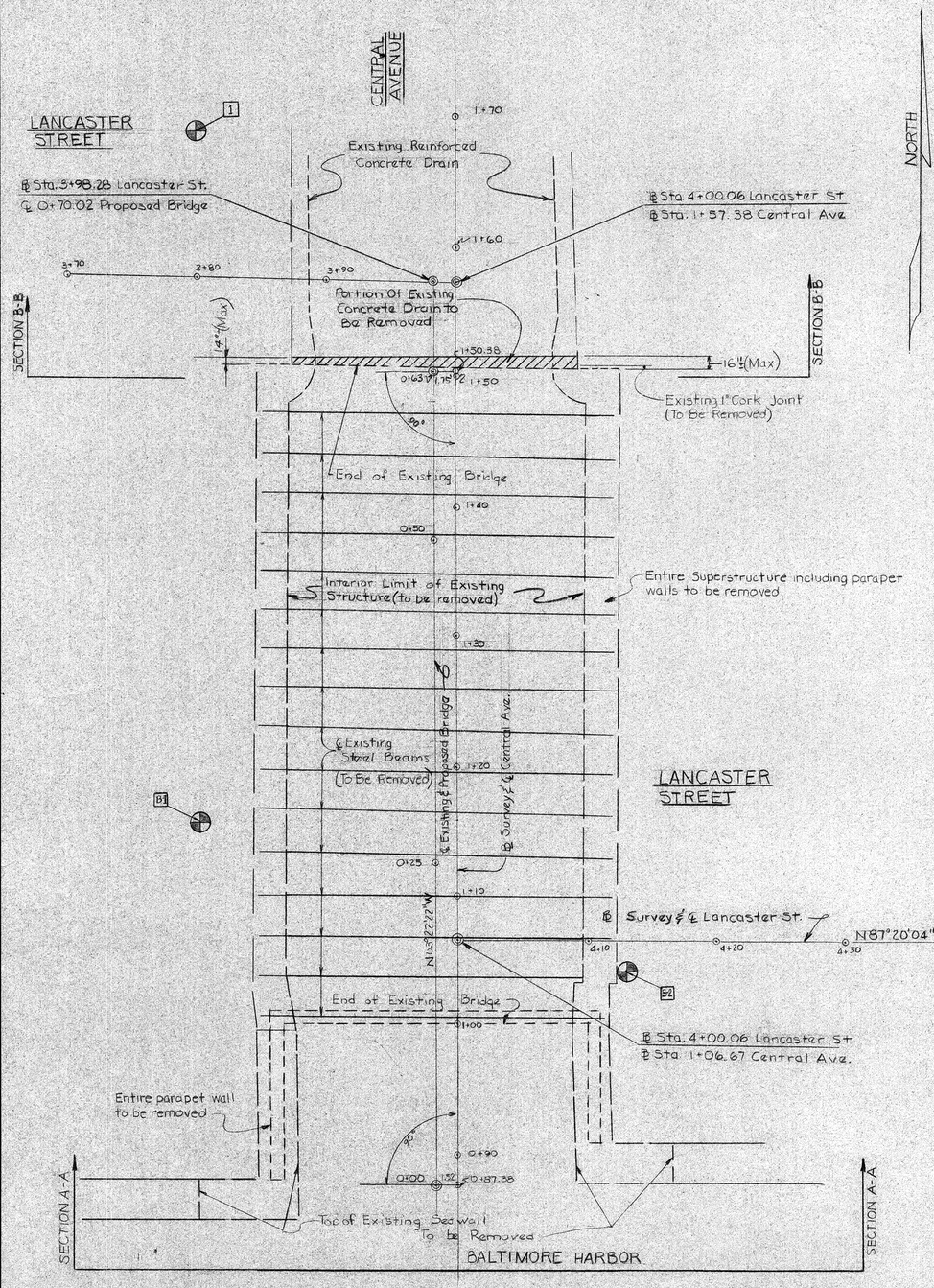
STANDARD "TYPE A" COMBINATION CURB & GUTTER

Scale: ¾" = 1'-0"

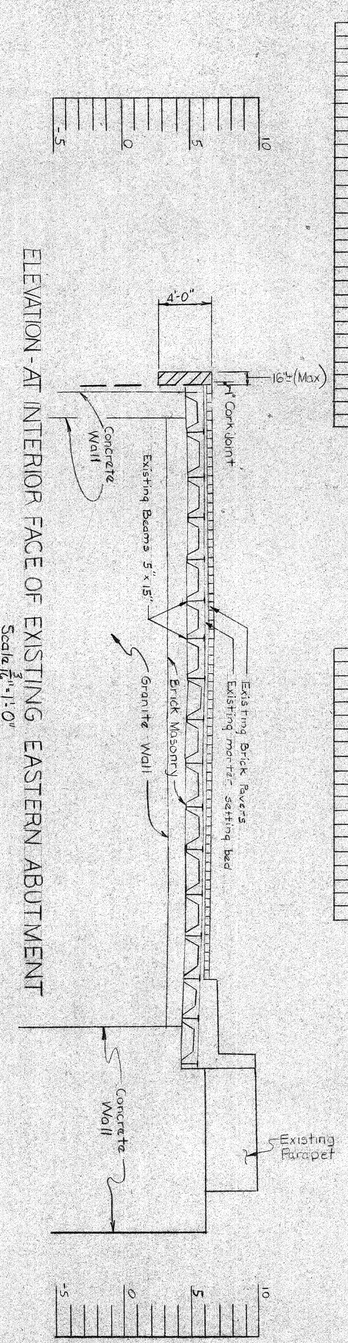
REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY	
	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN ROADWAY PLAN AND SECTIONS	DRAWN BY J.T. DES. BY J.T. TRACED BY PWR CHK. BY CGW F.A.P. NO. BR-505-1(174) S.H.A. NO. BC 304-24-615 BALTO. CITY NO. 2750 SCALE: AS SHOWN DATE: 7-8-83 SHEET NO. 2 OF 10

K&E BALTIMORE 19.1153 HERCULENE MO 79894

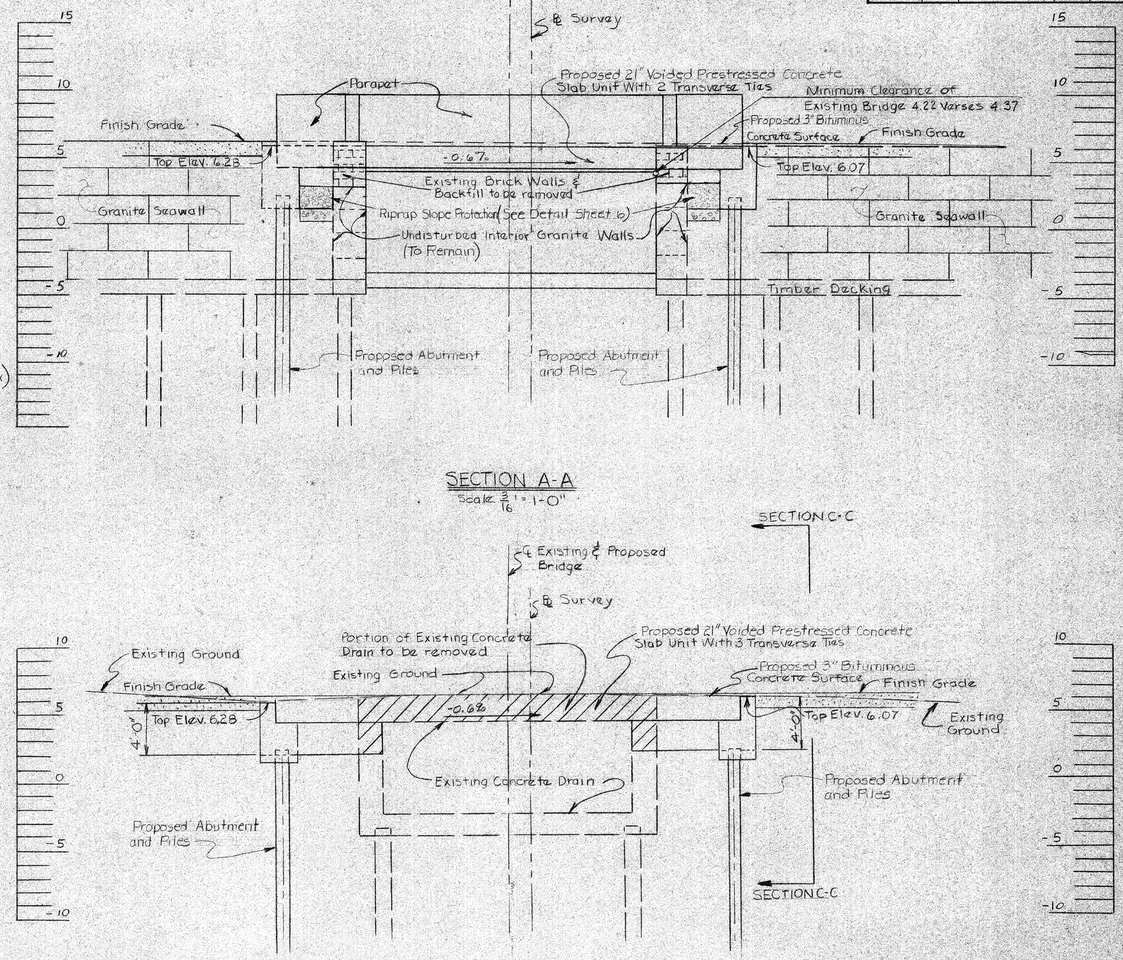
FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	3	10



REFLECTED PLAN OF EXISTING BRIDGE
Scale 3/16" = 1'-0"

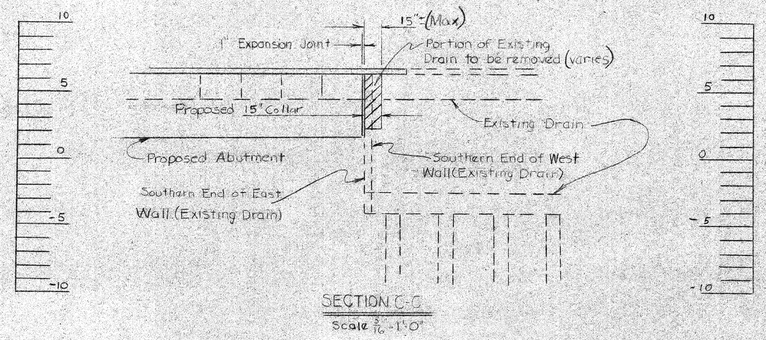


ELEVATION - AT INTERIOR FACE OF EXISTING EASTERN ABUTMENT
Scale 3/16" = 1'-0"



SECTION A-A
Scale 3/16" = 1'-0"

SECTION B-B
Scale 3/16" = 1'-0"

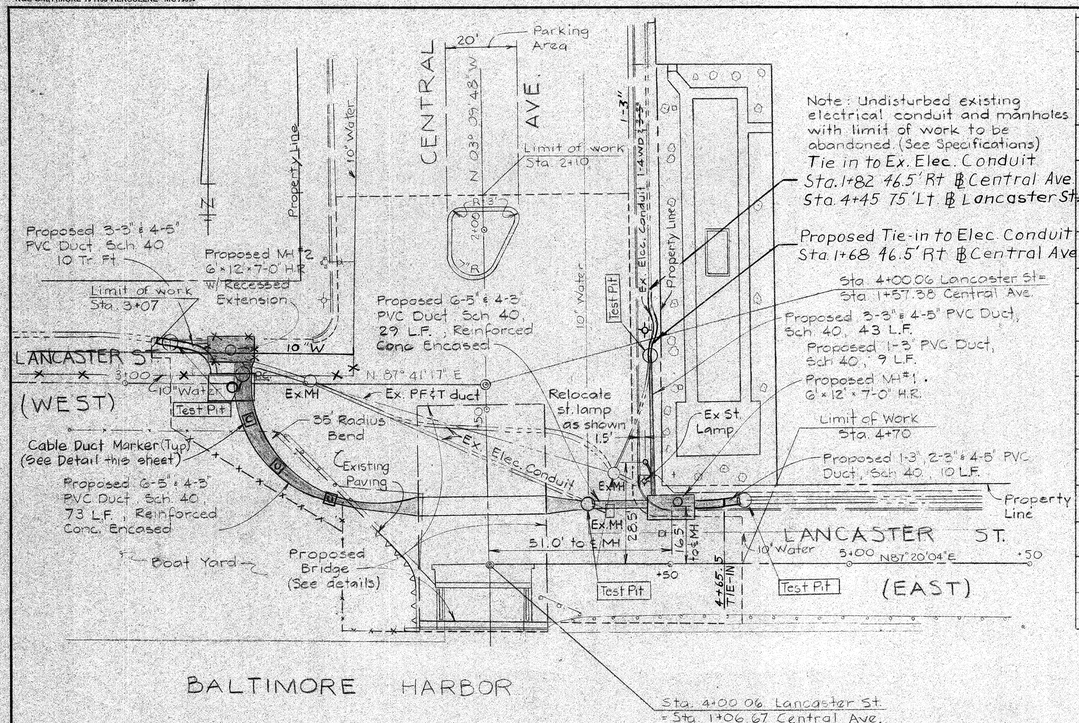


SECTION C-C
Scale 3/16" = 1'-0"

REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY	
	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN REMOVAL OF EXISTING STRUCTURES	DRAWN BY J.T. TRACED BY F.B. DES. BY J.T. CHK. BY C.G.W. F.A.P. NO. BR-SOS-1(174) S.H.A. NO. BC 304-24-815 BALTO. CITY NO. 2750 SCALE: AS SHOWN DATE: 7/8/83 SHEET NO. 3 OF 10

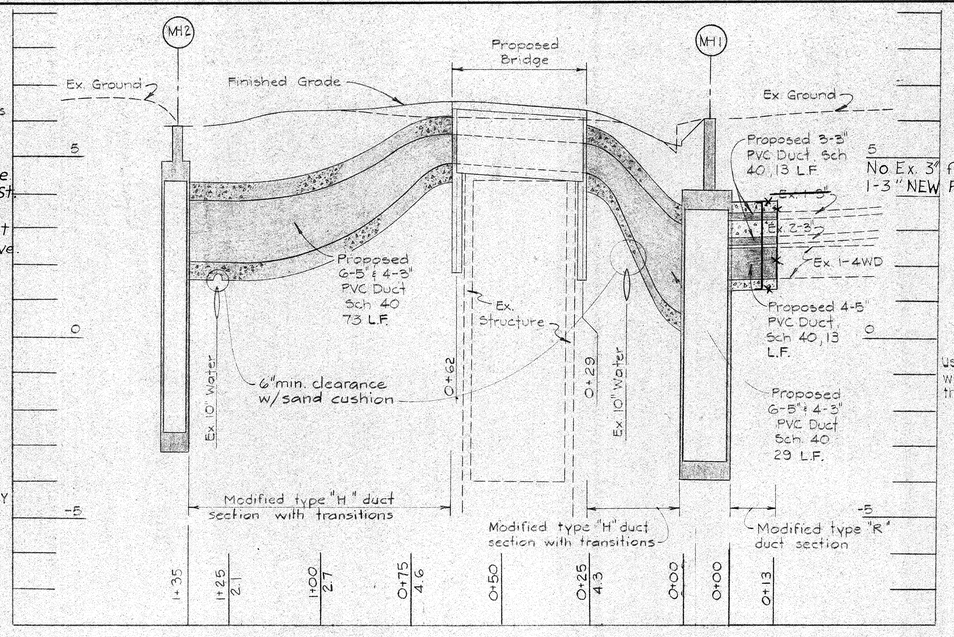
K&E BALTIMORE 19 1153 HERCULENE MC 79899

FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	4	10

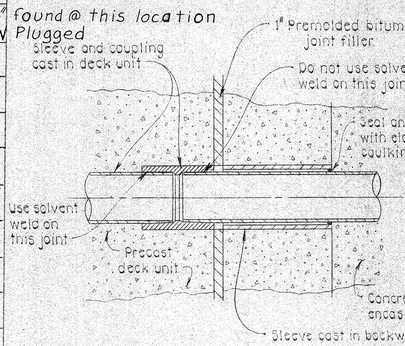


BALTIMORE HARBOR

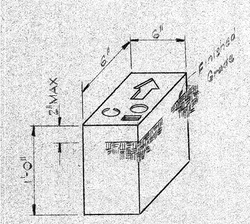
PLAN
Scale 1" = 20'



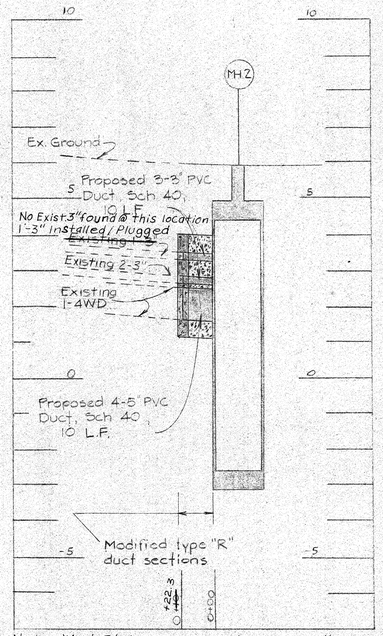
Note: See sheet 5 for conduit sections and layouts manhole



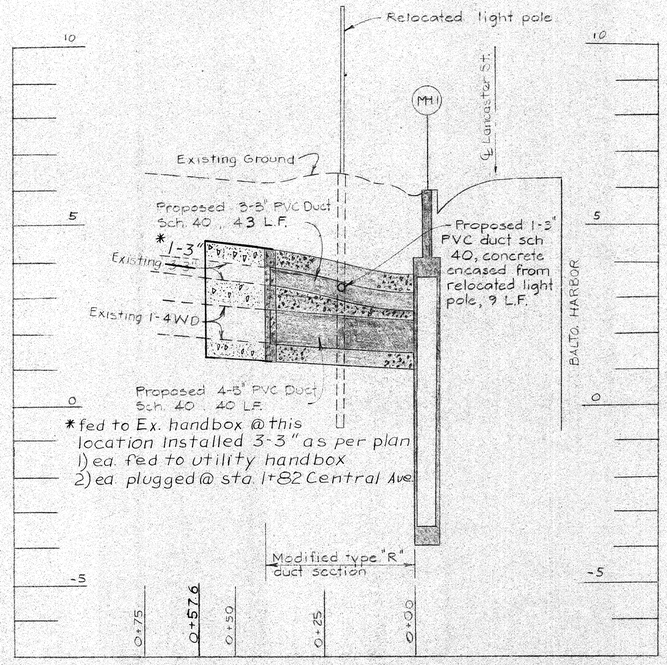
⚠ DETAIL OF CONDUIT CONNECTIONS TO BRIDGE DECK UNITS
Scale: 1½" = 1'-0"



CONCRETE CABLE DUCT MARKER



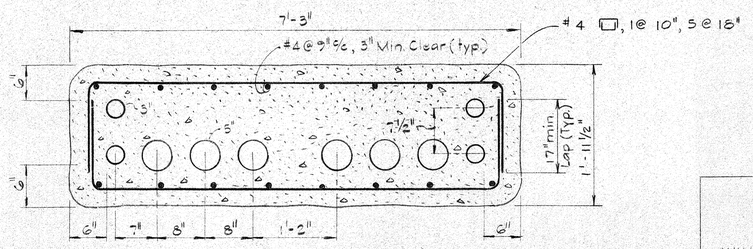
Note: Mod R' duct installed below 10"W @ pt of intersection with sand cushion



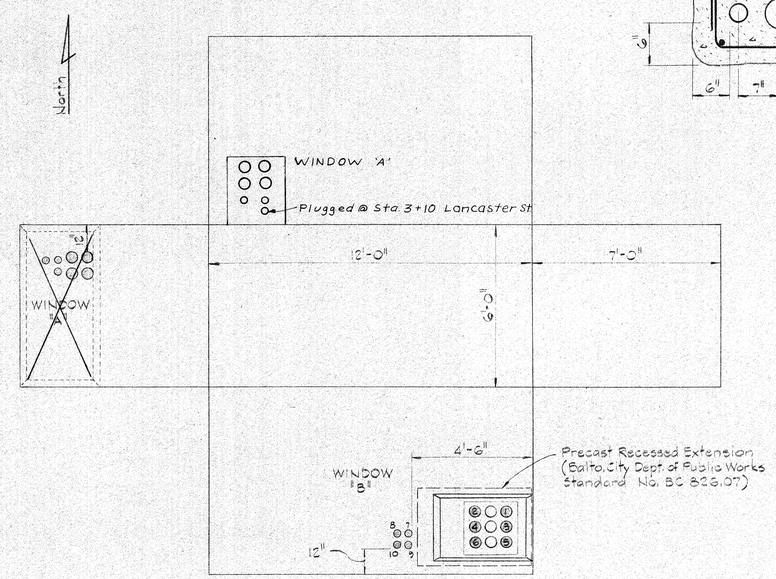
REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY	
⚠ Addendum No. 1 8-25-83 As Built 11-4-86	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN ELECTRICAL CONDUIT RELOCATIONS	DRAWN BY TAW/RCB DES. BY JCT TRACED BY CHK. BY CGW
		SCALE: AS SHOWN DATE: 7-8-83	F.A.P. NO. BR-SOS-1 (174) S.H.A. NO. BC 304-24-815 BALTO. CITY NO. 2750 SHEET NO. 4 OF 10

K&E BALTIMORE 19 1153 HERCULENE MC7989

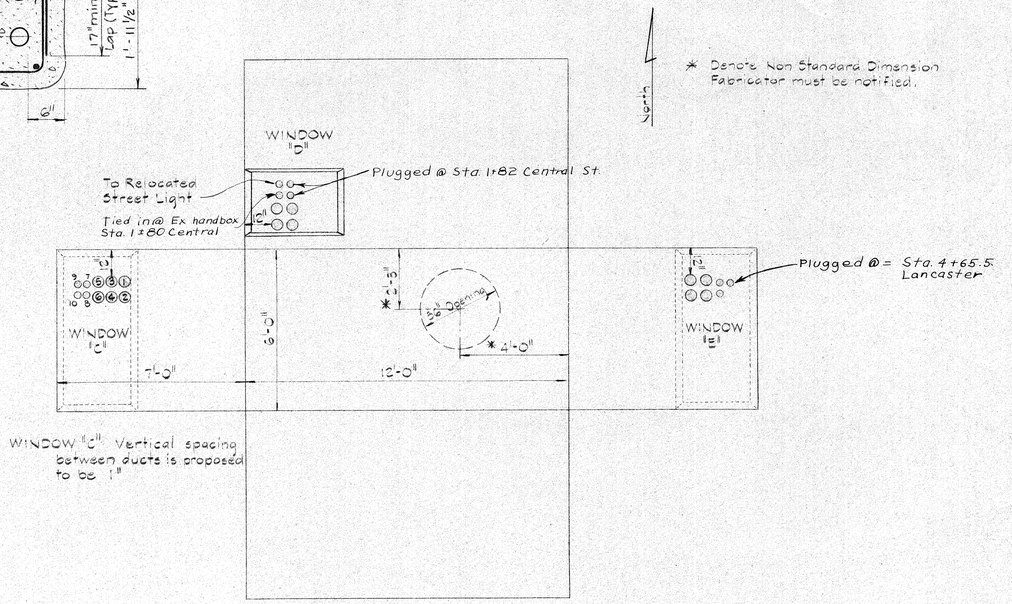
FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	5	10



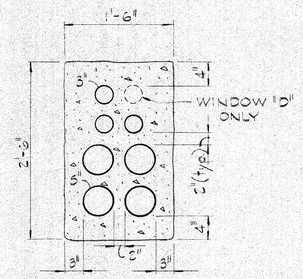
SECTION AT BRIDGE
Scale: 1" = 1'-0"



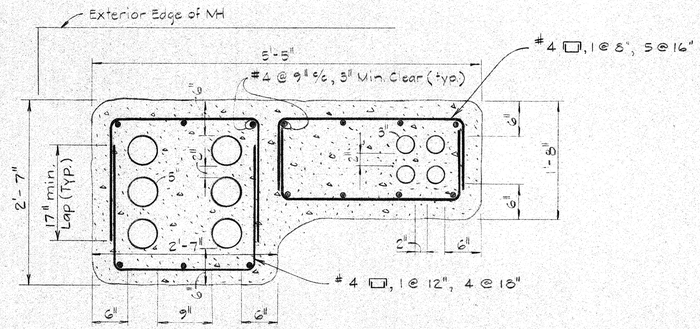
MANHOLE #2
Scale 3/8" = 1'-0"



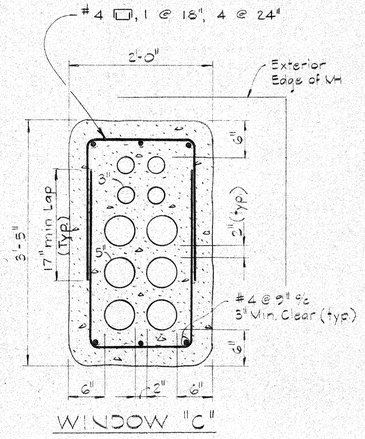
MANHOLE #1
Scale 3/8" = 1'-0"



WINDOW "A", "D" & "E"



WINDOW "B"



WINDOW "C"

NOTES
1. For profile of duct sections see sheet 4 of 9
2. Concrete for all duct encasements shall be Mix. No. 2

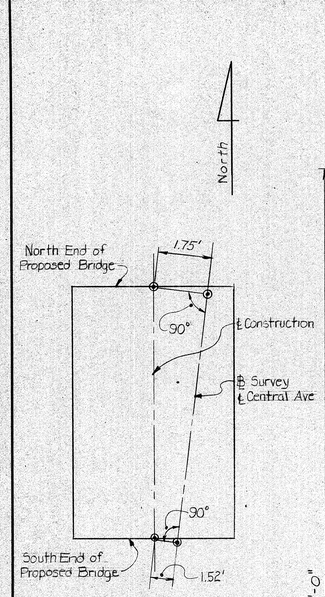
MODIFIED TYPE "R" DUCT SECTIONS
Scale 1" = 1'-0"

MODIFIED TYPE "H" DUCT SECTIONS WITH TRANSITIONS
Scale 1" = 1'-0"

REVISIONS	CONSULTANT		
As Built 11-4-86	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY	
		REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN MANHOLE LAYOUTS AND DUCT SECTIONS	DRAWN BY TAW DES. BY TAW TRACED BY CHK. BY KSC
		SCALE: AS SHOWN DATE: 7-8-83	F.A.P. NO. BR-SOS-1(174) S.H.A. NO. BC 304-24-815 BALTO. CITY NO. 2750 SHEET NO. 5 OF 10

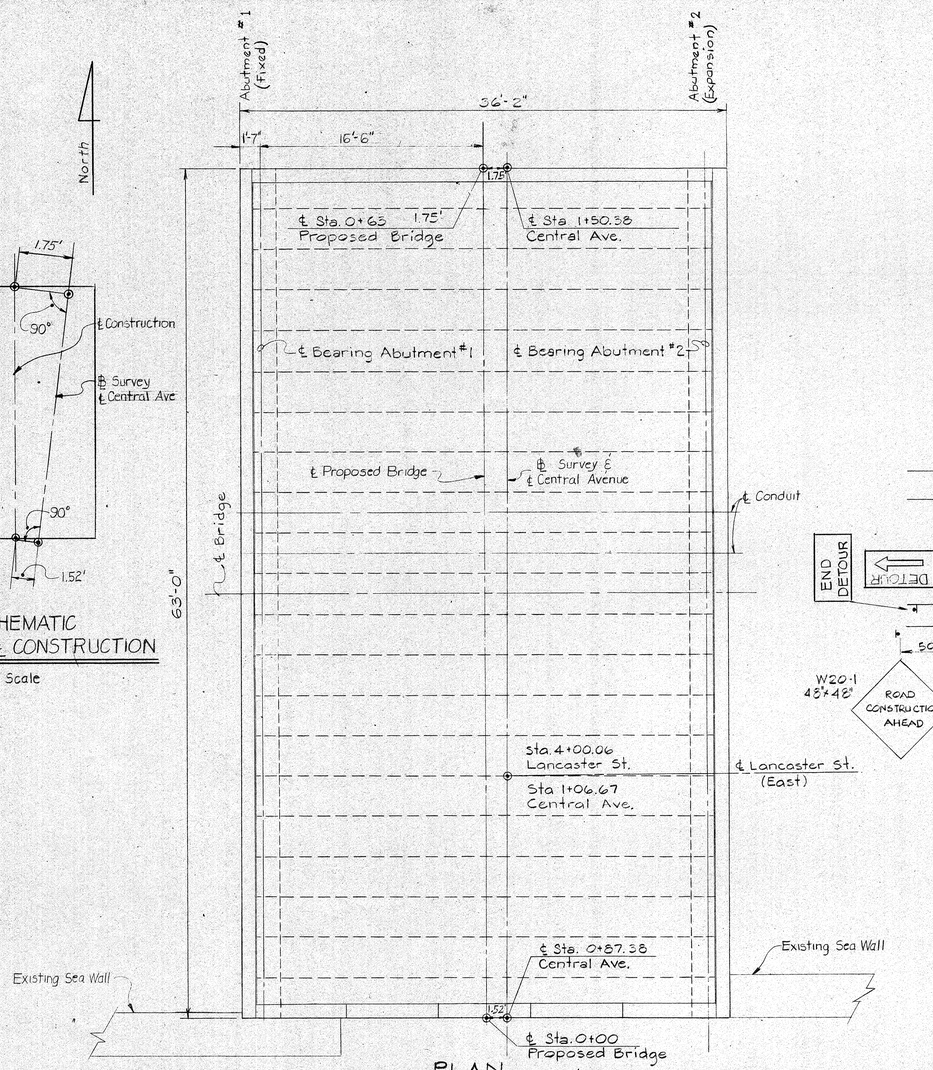
K&E BALTIMORE 19 1133 HERCULENE MC 79899

FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	C	10



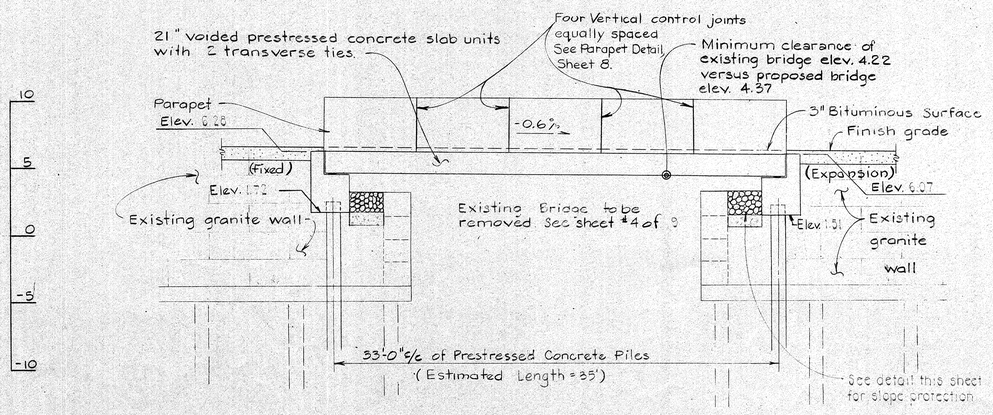
SCHEMATIC
℄ SURVEY - ℄ CONSTRUCTION

No Scale



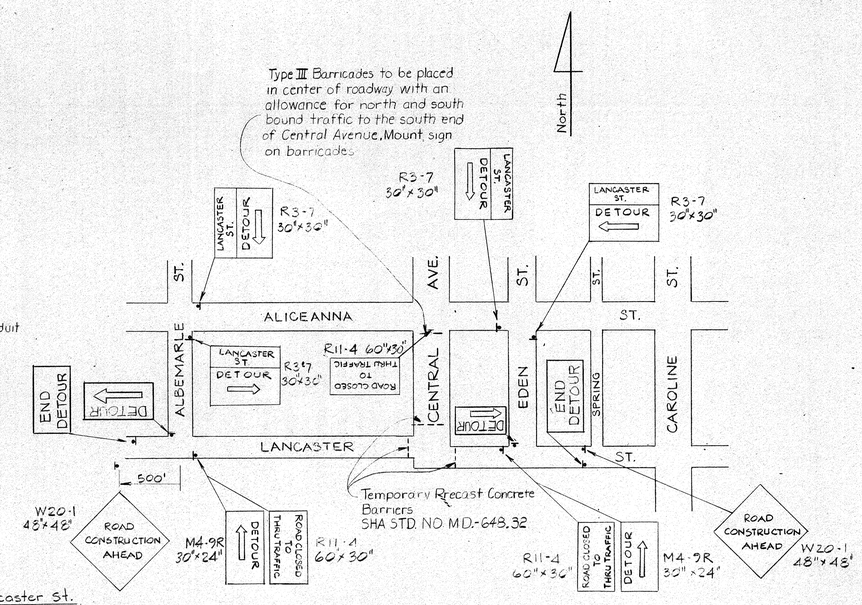
PLAN

Scale : 3/16" = 1'-0"



ELEVATION

Scale : 3/16" = 1'-0"



TRAFFIC CONTROL PLAN

Not to scale

BORING No. 1

Ground surface Elev. 6.35'

		Std. Pen. Test 1
0.0	Cinder & Sand Fill	2, 3
6.0	Silt, Cinder & Sand Fill	3, 2
10.0	Silt & Sand	1
13.0	Silt & Coarse Sand	1
18.0	Organic Matter & Sand	3
21.0	Brown Coarse Sand, Medium Gravel	39
28.0	Fine White Sandy Clay	54
33.0	Red & White Fine Sandy Clay	76
37.0	Fine Brown Sand	2, 4, 4
40.0	Fine White Sandy Clay Traces of Small Gravel	4, 7, 4
45.0		

Bottom Abutment #1 Elev. 1.72

Boring No. 1 obtained from Storm Water Contract No. 398
Date: April 15, 1959

BORING No. B-1

Ground surface Elev. 6.04'

0.0	Sand, gravel, silt cinders, brick	WL 1/2
6.0		WL 1
15.0	Dark brown dark gray moist very soft organic silt	Bottom Abutment Elev. 1.89 0/0
17.0		5/7
20.0	Brown and grey wet med. sand and gravel with trace of org. silt in sample #4	24/10
27.0	Brown pink tan gray red dry hard silt with trace of gravel some mica	15/22
39.0		20/51(4")
	Brown tan gray dry very dense silty fine to medium sand with some mica and rock fragments. (Possible decomposed rock) Sample #12 with some green in color	22/32
60.8		23/24
		20/51(3")
		20/51(4")
		33/51(4")
61.5		

June 14, 1983
Kidde Consultants, Inc.

BORING No. B-2

Ground surface Elev. 6.27'

		Std. Pen. Test 6'/6"
0.0	Very loose, wet, silt, cinders, sand, brick etc.	1/1
		0/1
		0/0
	Brown & Grey, wet med. dense to very dense, med. Sand & gravel w/t of clay	7/8
		24/34
		12/21
	Pink, grey, brown, red. dry, hard, silt w/t of gravel.	15/32
		30/31
		16/51(5")
	Brown, grey, green, dry to moist, very dense silty fine to med sand w/s mica and rock fragments (Possible decomposed rock)	32/32
		19/51
		15/38

June 7, 1983
Kidde Consultants, Inc.

Standard Penetration Test - Driving 2" OD sampler 1' with a 140# hammer falling 30". Count made at 6" intervals
Water Levels indicated were at time of test boring only.

GENERAL NOTES

SPECIFICATIONS: SHA SPECIFICATIONS DATED MARCH, 1968 I.D.B.C. SUPPLEMENT THERETO, DATED JULY, 1979 AND SPECIAL PROVISIONS FOR MATERIALS AND CONSTRUCTION.

A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES DATED 1977 FOR DESIGN INCLUDING 1978, 1979, 1980, 1981 AND 1982 INTERIM SPECIFICATIONS.

CONCRETE DESIGN: SERVICE LOAD DESIGN METHOD f_c = 1200 P.S.I. EXCEPT THAT IN PRECAST, PRESTRESSED BRIDGE DECK SLABS f_c = 2000 P.S.I.

REINFORCING STEEL DESIGN: f_s = 24,000 P.S.I.
PRESTRESSING STRAND DESIGN: f_s = 180,000 P.S.I.

LOADING: HS 20-44 WITH PROVISIONS FOR FUTURE 3" WEARING SURFACE (ALLOWS FOR FUTURE BELGIAN BLOCK SURFACE WHEN BITUMINOUS CONCRETE REMOVED).

CONCRETE: ALL CONCRETE FOR ABUTMENT BACKWALLS AND CAST-IN-PLACE SUPERSTRUCTURE PARAPET WALLS SHALL BE MIX NO. 6 (4500 P.S.I.). ALL PRECAST CONCRETE SHALL BE APPROVED BY THE ENGINEER FOR f'_c = 5000 P.S.I. ALL OTHER STRUCTURE CONCRETE SHALL BE MIX NO. 3 (3500 P.S.I.). SEE SPECIAL PROVISIONS.

CHAMFER: ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED WITH 3/4" x 3/4" MILLED CHAMFER STRIPS, EXCEPT ON UNEXPOSED FOOTINGS OR WHERE INDICATED BY THE FOLLOWING NOTATION ON THE PLANS "DO NOT CHAMFER".

REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO A.S.T.M. A-615 GRADE 60. ALL SPLICES, NOT SHOWN, SHALL BE LAPPED AS PER BAR LAP CHARTS. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTHERWISE NOTED.

ONLY GRADE 60 CAN BE USED ON THIS PROJECT.

ALL REINFORCING STEEL FOR SUPERSTRUCTURE, INCLUDING PARAPETS, ABUTMENT BACKWALLS AND BEARING SEAT PADS SHALL BE EPOXY COATED. SEE SPECIAL PROVISIONS.

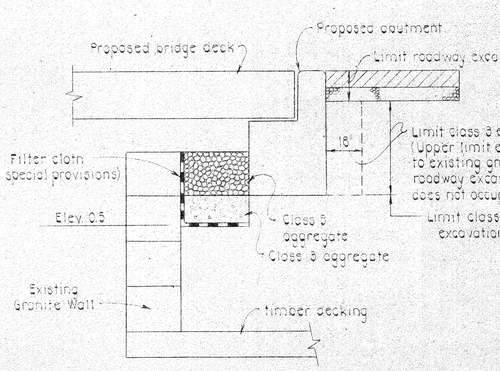
PRESTRESSING STEEL: A.A.S.H.T.O. M203, GRADE 270 WITH SPECIAL COATING. SEE SPECIAL PROVISIONS.

KEY: ALL KEYS ARE NOMINAL SIZE.

EXISTING STRUCTURES: ALL DIMENSIONS AFFECTED BY THE GEOMETRICS, AND/OR LOCATION OF THE EXISTING STRUCTURE ARE TO BE CHECKED IN THE FIELD BY THE CONTRACTOR, BEFORE ANY CONSTRUCTION IS DONE, AND BEFORE ANY REINFORCING STEEL, ETC., IS ORDERED OR FABRICATED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY THE ENGINEER WITH ALL FIELD DIMENSIONS REQUIRED TO CHECK DETAIL DRAWINGS. EXISTING STRUCTURES SHOWN IN LONG DASHED LINES. PORTIONS OF EXISTING STRUCTURES TO BE REMOVED SHOWN ON SHEET 3 of 9.

EPOXY BONDING COMPOUND: ALL EXISTING CONCRETE THAT WILL BE IN CONTACT WITH NEW CONCRETE SHALL BE COATING WITH AN EPOXY BONDING COMPOUND. SEE SPECIAL PROVISIONS.

PILES: THE MINIMUM SAFE BEARING VALUE AND MINIMUM PENETRATION SHOWN ON THESE PLANS MUST BE ACHIEVED FOR EACH PILE. IF THE "ESTIMATED TIP ELEVATION" IS NOT REACHED OR EXCEEDED WHILE ACHIEVING THE MINIMUM SAFE BEARING VALUE AND THE MINIMUM PENETRATION; THE PILE WILL BE CONSIDERED SATISFACTORY.



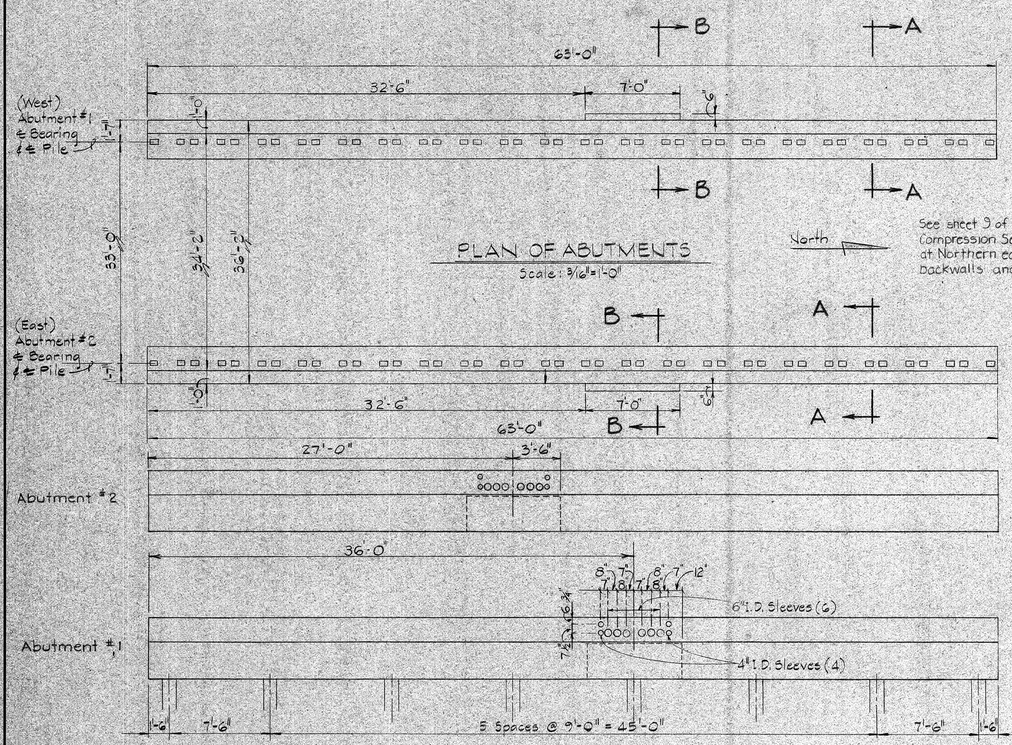
RIPRAP SLOPE PROTECTION AND EXCAVATION LIMITS

Scale: 3/8" = 1'-0"

REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY
	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN BRIDGE PLAN AND ELEVATION
		SCALE: AS SHOWN DATE: 7/8/83
		DRAWN BY PWR DES. BY KSC/MSA
		TRACED BY CHK. BY CGW
		F.A.P. NO. BR-SOS-1(174) SHEET NO.
		S.H.A. NO. BC-304-24-815 6 OF 10
		BALTO. CITY NO. 2750

K&E BALTIMORE 19 1153 HERCULENE MC7994

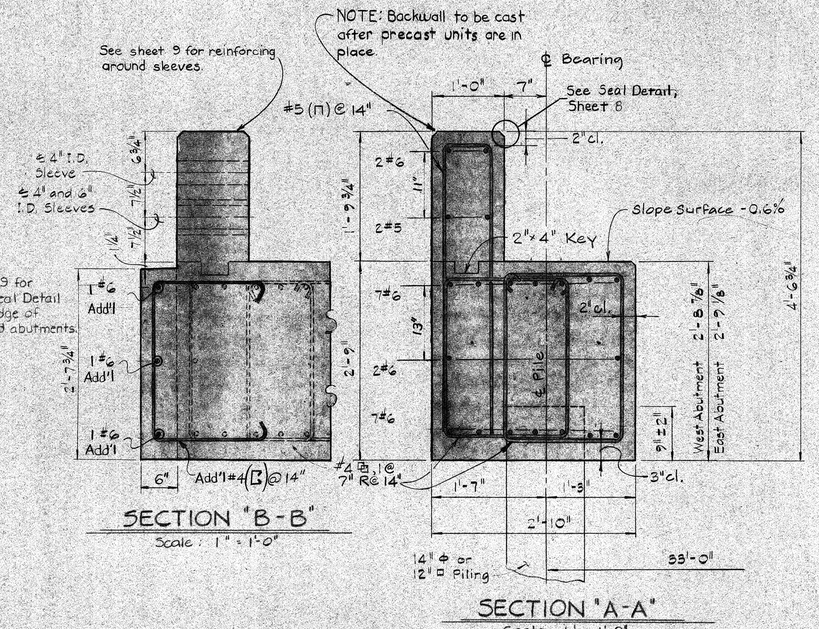
FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	7	10



PLAN OF ABUTMENTS
Scale: 3/16"=1'-0"

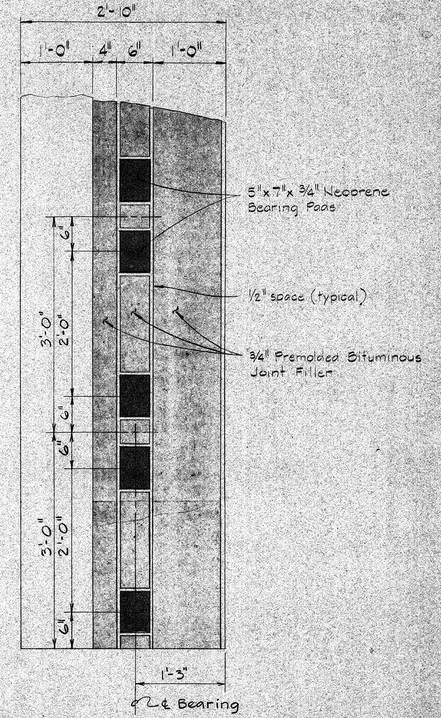
ABUTMENT ELEVATIONS
Scale: 3/16"=1'-0"

See sheet 9 of 9 for Compression Seal Detail at Northern edge of backwalls and abutments.



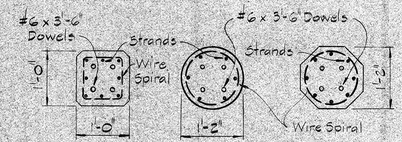
SECTION "B-B"
Scale: 1" = 1'-0"

SECTION "A-A"
Scale 1" = 1'-0"



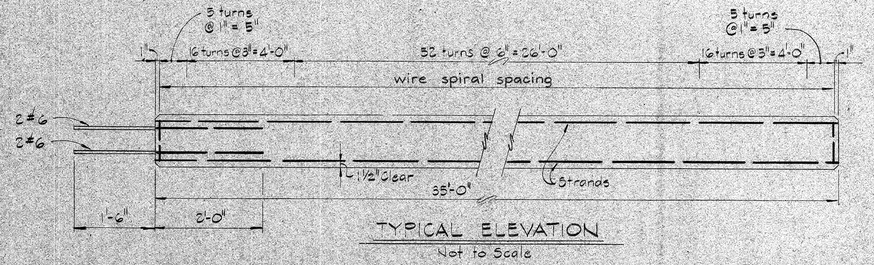
BEARING SEATS
Scale: 1"=1'-0"

NOTE:
Size of wire spiral (min. #3 wire) and number of strands (min. equiv. 4 - ½" ϕ) per approved manufacturers standards for capacity of 50 tons (AASHTO Methods)



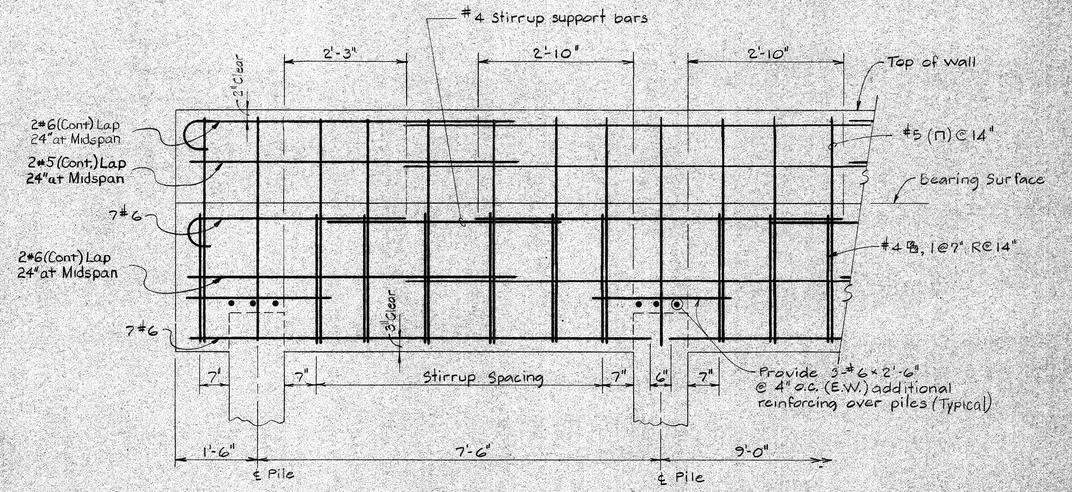
ALTERNATE SECTIONS
Scale: ¾"=1'-0"

PILE DATA	EAST	WEST
TOP OF PILE ELEVATION	2.33	2.54
MINIMUM TIP ELEVATION	-25.0	-25.0



TYPICAL ELEVATION
Not to Scale

PRECAST PRESTRESSED CONCRETE PILE-50 TON



ABUTMENT ELEVATION
Scale: ¾" = 1'-0"

REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY
	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN ABUTMENTS

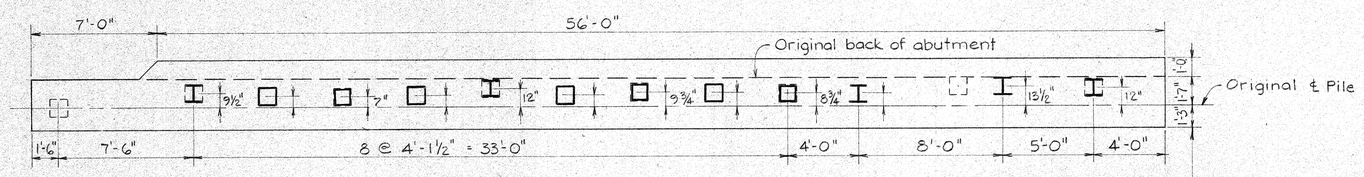
SCALE: AS SHOWN DATE: 7-8-83

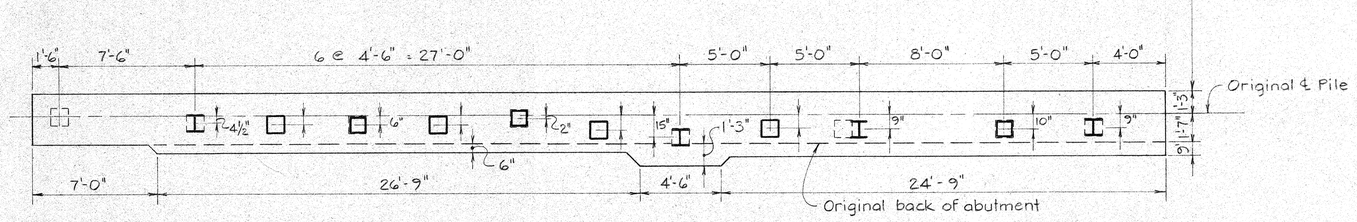
DRAWN BY EWR / TAW DES. BY KSC
TRACED BY CHK. BY EGW
F.A.P. NO. BR-SOS-1 (174)
S.H.A. NO. BC 304-24-815
BALTO. CITY NO. 2750
SHEET NO. 7 OF 10

K&E BALTIMORE 19 1153 HERCULENE MC 79994

FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.			

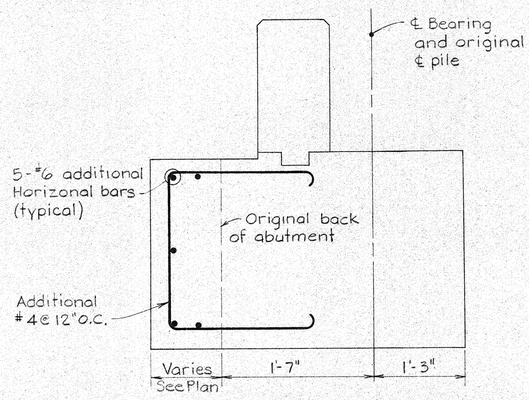
Z





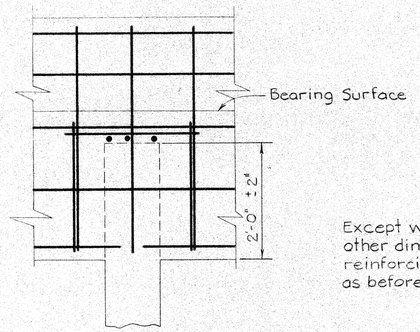
[ ] Existing (6-8-84) Pre-auger location
□ Precast Concrete pile
I HP 12 x 53

ABUTMENT PLAN
Scale : 1/4" - 1'-0"



SECTION "A-A"
Scale : 1" = 1'-0"

Except where noted, all other dimensions and reinforcing are the same as before.



ABUTMENT ELEVATION
Scale : 3/4" = 1'-0"

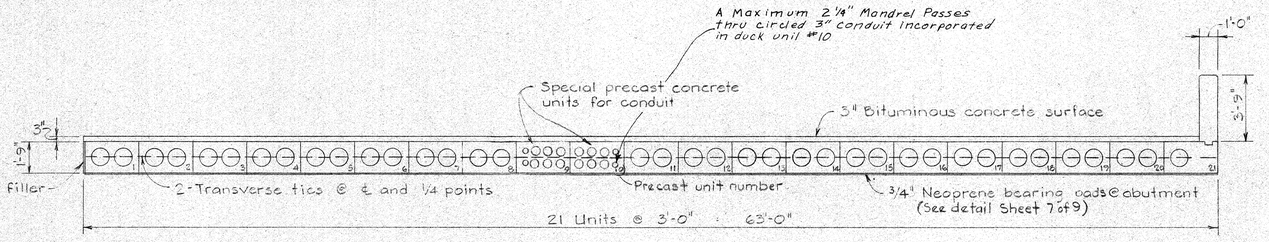
Except where noted, all other dimensions and reinforcing are the same as before.

1. Pile locations shown are based on auger data furnished by IDBC Resident Engineer; dated June 8, 1984; drive all piling as near to original ℄ pile as possible.
2. Drive most southerly pile in each abutment as far south as possible.
3. Additional reinforcing steel to be epoxy coated.

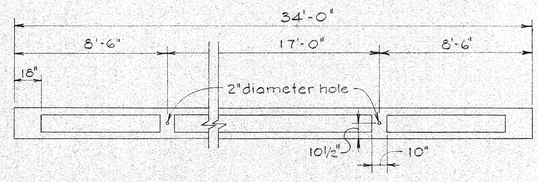
REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY	
1 NEW SHEET RED LINE REV. No.1 ... 7/31/84	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	- ABUTMENT MODIFICATION - LANCASTER STREET BRIDGE	DRAWN BY P.W.R. DES. BY C. WEINEL TRACED BY CHK. BY F.A.P. NO. BR-305-1 (174) S.H.A. NO. BC 304-24-815 BALTO. CITY NO. 2750 SCALE: AS SHOWN DATE: JUNE 14, 1984 SHEET NO. 7A OF

K&E BALTIMORE 19 1153 HERCULENE MG 7959

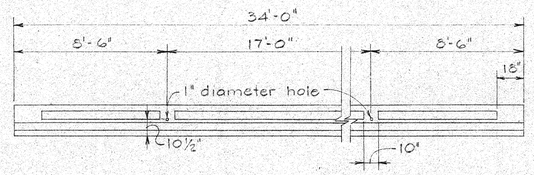
FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	8	10



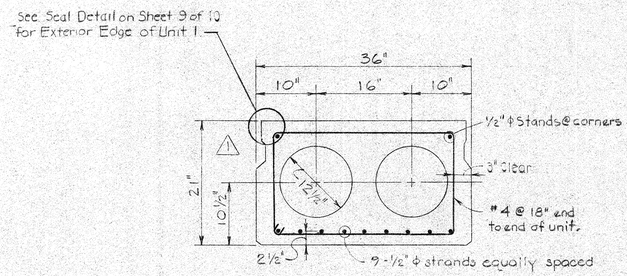
TYPICAL SECTION
Scale : ¼" = 1'-0"



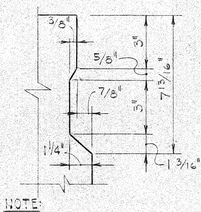
TYPICAL LONGITUDINAL SECTION
Scale : ¼" = 1'-0"



SPECIAL LONGITUDINAL SECTION FOR CONDUITS
Scale ¼" = 1'-0"

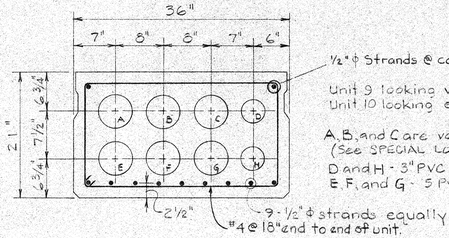


PRESTRESSED CONCRETE UNIT DETAIL (UNITS 1-8, 11-20)
Scale : 1" = 1'-0"



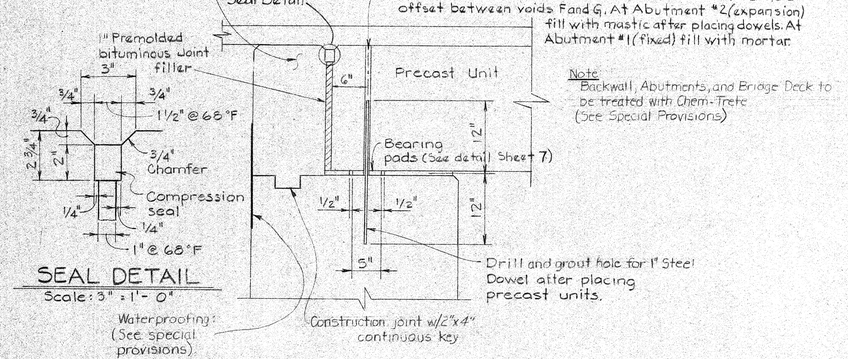
NOTE:
1. Omit keyway on exterior of Unit 21: See parapet detail this sheet.
2. Omit keyway on exterior of Unit 1 to provide support for compression seal; See seal detail sheet 9.

⚠ KEYWAY DETAIL
Scale: 3" = 1'-0"



SPECIAL PRECAST CONCRETE UNIT FOR CONDUIT (UNITS 9 & 10)
Scale : 1" = 1'-0"

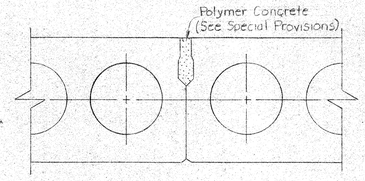
Note:
Backwall to be cast after precast units are in place.



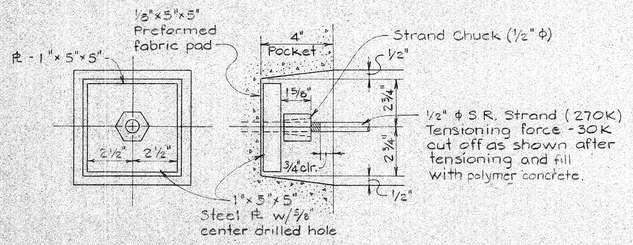
Note:
Backwall, Abutments, and Bridge Deck to be treated with Chem-Trete (See Special Provisions)

SEAL DETAIL
Scale: 3" = 1'-0"

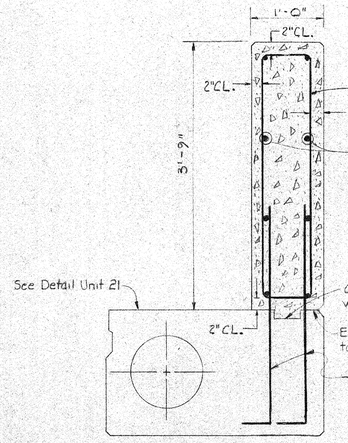
BEARING AND ANCHORAGE DETAIL
Scale : 1" = 1'-0"



GROUTING DETAIL
Scale: 1"=1'-0"

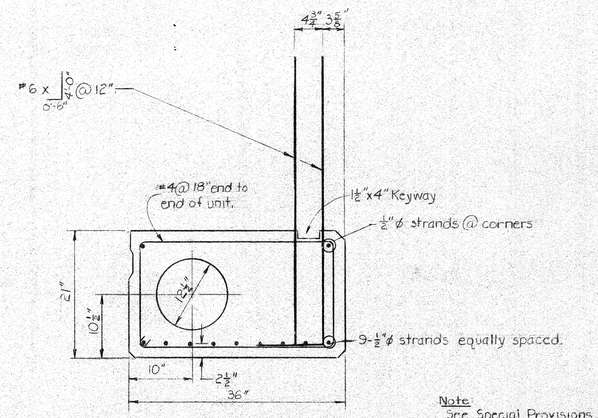


TRANSVERSE TIE DETAILS
Scale : 3" = 1'-0"



PARAPET DETAIL
Scale : 1" = 1'-0"

Note:
Vertical parapet joints shall be spaced as shown on Sheet 6 by placing alternate sections. The pours of adjacent sections shall have a 40 hour delay between pours. A paraffin coating shall be applied at every joint. No reinforcing steel shall pass thru the joint.



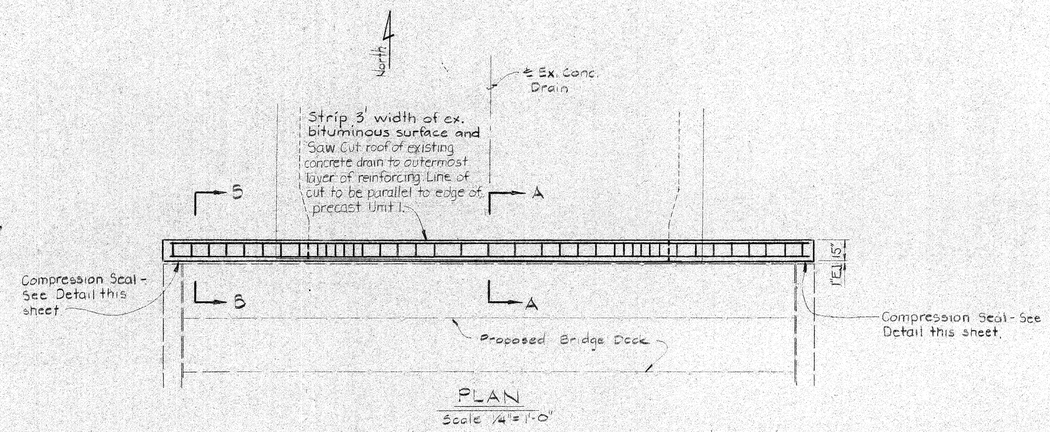
SPECIAL PRECAST CONCRETE UNIT BENEATH PARAPET (UNIT 21)
Scale: 1"-1'-0"

Note:
See Special Provisions for protective and epoxy coatings to be applied to Superstructure concrete.

REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY	
⚠ Addendum No. 1 5-25-83 As Built 11-4-86	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN SUPERSTRUCTURE SCALE: AS SHOWN DATE: 7-8-83	DRAWN BY PWR DES. BY MSA/KSC TRACED BY CHK. BY CGW F.A.P. NO. BR-SOS-1(174) SHEET NO. S.H.A. NO. BC 304-24-815 BALTO. CITY NO. 2750 8 OF 10

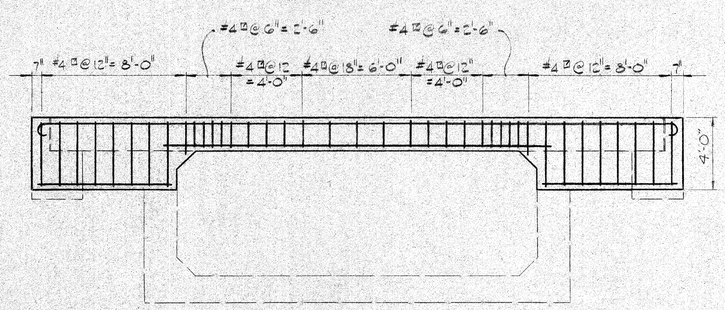
KAE BALTIMORE 19 1353 HERCULENE MC79894

FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	9	10



PLAN

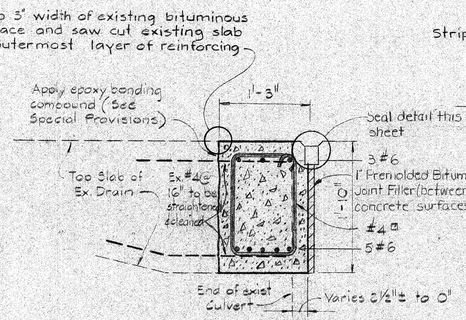
Scale 1/4"=1'-0"



ELEVATION

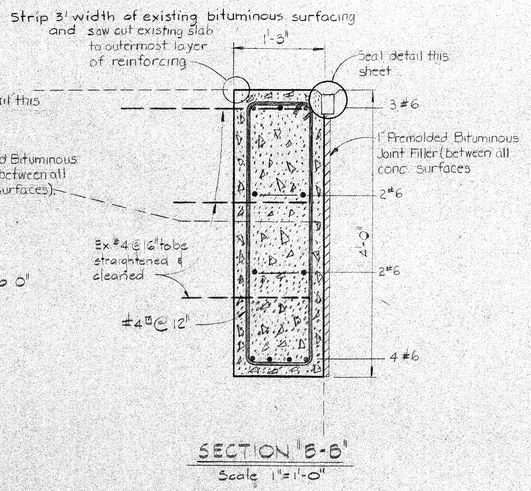
Scale 1/4"=1'-0"

NOTE:
ALL NEW REINFORCING STEEL TO BE EPOXY COATED (SEE SPECIAL PROVISIONS)



SECTION "A-A"

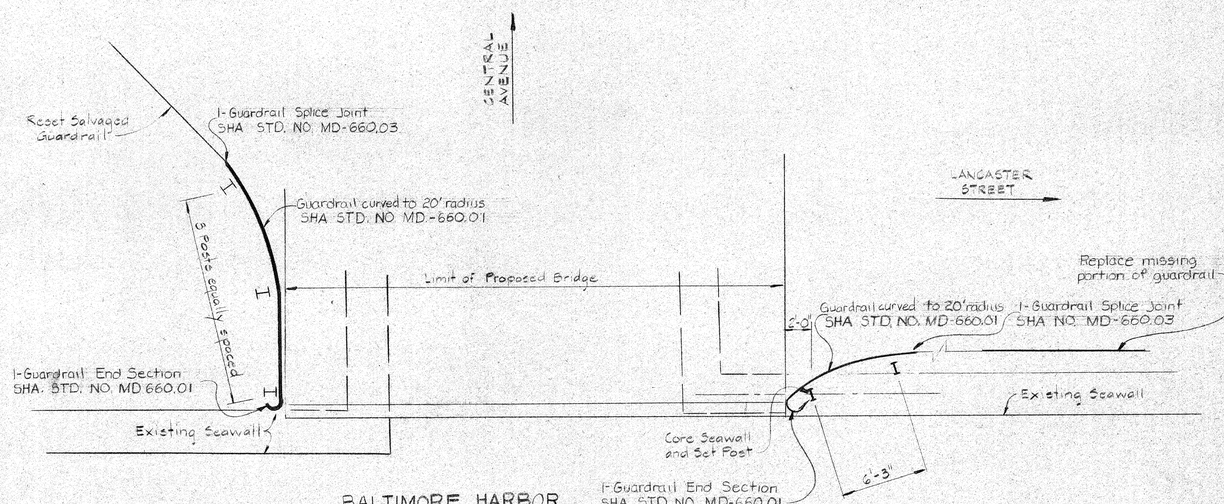
Scale 1"=1'-0"



SECTION "B-B"

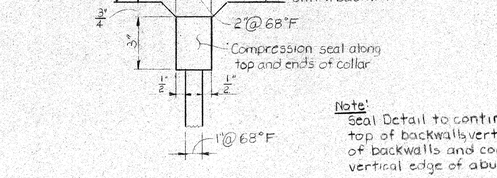
Scale 1"=1'-0"

CLOSURE COLLAR AT EXISTING CONCRETE DRAIN



GUARDRAIL DETAIL

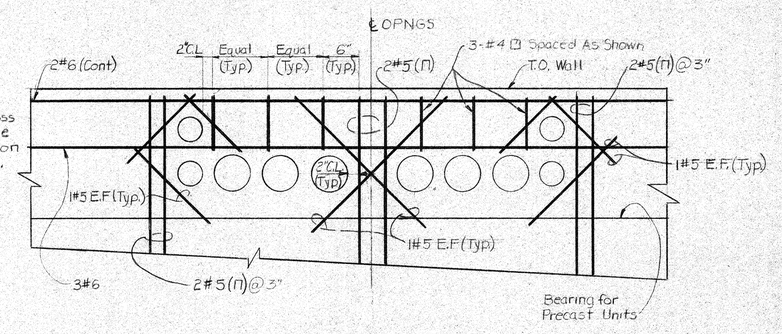
Scale 3/16"=1'-0"



SEAL DETAIL

Scale: 3"=1'-0"

Note:
Seal Detail to continue across top of backwalls, vertical edge of backwalls and continue on vertical edge of abutments.



ADDITIONAL REINFORCING AROUND SLEEVES IN BACKWALL

Scale: 1"=1'-0"

Note:
For size and spacing of openings see Abutment Elevation (Sheet 7 of 9)

CONSTRUCTION SEQUENCE FOR CLOSURE COLLAR

1. Remove portions of existing concrete drain as req'd for closure collar.
2. Set precast units in final position.
3. Attach premolded joint filler to precast unit and bridge abutments.
4. Place concrete for closure collar.
5. Install compression seal.

REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY	
	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN MISCELLANEOUS DETAILS	DRAWN BY TAW; TRACED BY; DES. BY JCT/KSC; CHK. BY CGW; F.A.P. NO. BR-505-1(174); S.H.A. NO. BC 304-324-915; BALTO. CITY NO. 2750; SCALE: AS SHOWN; DATE: 7-8-83; SHEET NO. 9 OF 10

K&E BALTIMORE 191153 HERCULENE MC7989

FHWA REGION	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD.	BR-SOS-1(174)	10	10

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	CONTINGENT QUANTITY	PROPOSAL QUANTITY
	CATEGORY 1 PRELIMINARY			
101	ENGINEERS FACILITIES	LUMP SUM		LUMP SUM
102	MAINTENANCE OF TRAFFICE	LUMP SUM		LUMP SUM
103	CONSTRUCTION STAKE-OUT	LUMP SUM		LUMP SUM
104	MOBILIZATION	LUMP SUM		LUMP SUM
105	ON THE JOB TRAINING	1000 HOURS		1000 HOURS
	CATEGORY 2 GRADING			
201	CLASS 1 EXCAVATION	100 C.Y.		100 C.Y.
202	CLASS 1A EXCAVATION		100 C.Y.	100 C.Y.
203	CONCRETE SAW CUT 2 IN. DEPTH	140 L.F.	10 L.F.	150 L.F.
204	CONTINGENT BORROW EXCAVATION	80 C.Y.	40 C.Y.	120 C.Y.
205	TEST PIT EXCAVATION	10 C.Y.	10 C.Y.	20 C.Y.
206	REMOVAL OF COMBINATION CURB AND GUTTER	20 L.F.		20 L.F.
207	REMOVAL OF SIDEWALK	9 S.Y.	1 S.Y.	10 S.Y.
208	STRIPPING BITUMINOUS SURFACING MATERIAL	270 S.Y.	30 S.Y.	300 S.Y.
	CATEGORY 3 DRAINAGE			
301	CONTINGENT TRENCH BACKFILL		50 C.Y.	50 C.Y.
302	SELECT BACKFILL #6 FOR ABANDONED MANHOLE	12 C.Y.	8 C.Y.	20 C.Y.
303	RIPRAP SLOPE PROTECTION #3 GABION STONE	20 TON		20 TON
304	RIPRAP SLOPE PROTECTION # 5 GABION STONE	35 TON	5 TON	40 TON
	CATEGORY 4 STRUCTURES			
401	PROTECTION OF EXISTING STRUCTURES	LUMP SUM		LUMP SUM
⚠ 402	PRECAST PRESTRESSED CONCRETE PILE, 50 TON	560 L.F.	80 L.F.	640 L.F.
403	CLASS #3 EXCAVATION	150 C.Y.		150 C.Y.
404	CLASS #4 EXCAVATION	10 C.Y.	10 C.Y.	20 C.Y.
405	REMOVAL OF PORTIONS OF EXISTING STRUCTURES	LUMP SUM		LUMP SUM
406	SUBSTRUCTURE CONCRETE	LUMP SUM		LUMP SUM
407	SUPERSTRUCTURE CONCRETE	LUMP SUM		LUMP SUM
⚠ 408	VIBRATION SURVEILLANCE		3 DAY	3 DAY
⚠ 409	PREAUGER FOR PILING		100 L.F.	100 L.F.

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	CONTINGENT QUANTITY	PROPOSAL QUANTITY
	CATEGORY 5 PAVEMENT			
501	6 IN. SUBBASE, TYPE 1	125 S.Y.	25 S.Y.	150 S.Y.
502	CRUSHER RUN AGGREGATE	10 TON		10 TON
503	BITUMINOUS CONCRETE SURFACE BAND SN	225 TON	25 TON	250 TON
504	7 IN. PLAIN PCC PAVEMENT	125 S.Y.	25 S.Y.	150 S.Y.
	CATEGORY 6 SHOULDERS			
601	SPECIAL PCC CURB	50 L.F.		50 L.F.
602	RESET EXISTING GRANITE CURB	44 L.F.		44 L.F.
603	MODIFIED PEDESTRIAN RAMP, TYPE 2	1 EACH		1 EACH
604	STANDARD TYPE A COMBINATION CURB AND GUTTER, 18 IN. PAN	45 L.F.		45 L.F.
605	5 IN. CONCRETE SIDEWALK	12 S.Y.	3 S.Y.	15 S.Y.
606	STANDARD BEAM TYPE GUARD RAIL	36 L.F.	4 L.F.	40 L.F.
607	REMOVE, SALVAGE AND RESET EXISTING GUARD RAIL	66 L.F.	4 L.F.	70 L.F.
	CATEGORY 7 LANDSCAPING			
701	2 IN. TOPSOIL, FURNISH AND PLACE		20 S.Y.	20 S.Y.
702	SEEDING AND MULCHING		20 S.Y.	20 S.Y.
703	SOLID SODDING		40 S.Y.	40 S.Y.
	CATEGORY 8 UTILITIES			
801	MODIFIED TYPE H DUCT SECTION	102 L.F.	3 L.F.	105 L.F.
802	MODIFIED TYPE R DUCT SECTION	63 L.F.	7 L.F.	70 L.F.
⚠ 803	ROADWAY FOUNDATION BASE, 11 IN. BOLT CIRCLE	1 EACH		1 EACH
804	PRECAST LINE MANHOLES	2 EACH		2 EACH

REVISIONS	CONSULTANT	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS & STATE HIGHWAY ADMINISTRATION OF MARYLAND INTERSTATE DIVISION FOR BALTIMORE CITY
⚠ ADDENDUM NO.1 8-25-83	PURDUM & JESCHKE CONSULTING ENGINEERS 1029 N. CALVERT ST. BALTIMORE, MARYLAND	REPLACEMENT OF LANCASTER STREET BRIDGE OVER HARFORD RUN SUMMARY OF QUANTITIES
		SCALE: AS SHOWN DATE: 7-8-83
		DRAWN BY JJ DES. BY DD TRACED BY J.M. CHK. BY C.W.
		F.A.P. NO. BR-SOS-1(174) S.H.A. NO. BC 304-24-815 BALTO. CITY NO. 2750
		SHEET NO. 10 OF 10