Tennessee Valley Authority
Regulatory Submittal for Kingston Fossil Plant

Documents submitted:
Intake Channel Bridge Removal Work Plan (Revised)
RAWP - 087

Date Submitted:
04/07/2011

Submitted to whom
Leo Francendese, EPA

Concurrence

Received	Not Applicable	TVA
☐	☒	Steve McCracken
☒	☐	Kathryn Nash
☒	☐	Steve Cherry SCC
☒	☐	Michelle Cagley MC

Received	Not Applicable	Jacobs
☒	☐	Jack Howard
☒	☐	Darrell Guinn
☐	☐	
☐	☐	
☐	☐	
☐	☐	

Approvals

TVA Kathryn Nash Date 4/6/11

EPA Approved via e-mail (attached) Date 4/7/11

cc:

- ☒ Anda Ray, TVA
- ☒ Barbara Scott, TDEC
- ☒ Brenda Brickhouse, TVA
- ☒ John Dizer, TVA
- ☒ Craig Zeller, EPA
- ☒ Dennis Yankee, TVA
- ☒ Kathryn Nash, TVA
- ☒ Cynthia Anderson, TVA
- ☒ Steve McCracken, TVA
- ☒ EDM
- ☒ Jack Howard, Jacobs
- ☒ Michelle Cagley, TVA
- ☒ Greg Signer, TVA
- ☒ KIF Incident Document Control
- ☒ Katie Kline, TVA
- ☒ Dannena Bowman, EPA
- ☒ Robert Pullen, Jacobs

Cagley, April M

From: Francendese.Leo@epamail.epa.gov
Sent: Thursday, April 07, 2011 5:47 PM
To: Cagley, April M; Craig Zeller; Barbara Scott
Cc: Dannena Bowman; mgobla; Jim Lawrence; Macartney, James (Jamie) R
Subject: Re: Transmittal Cover for Regulatory Submittal - Intake Channel Bridge Removal Work Plan (Revised) pdf - Adobe Acrobat Professional.pdf - Adobe Acrobat Professional

Approved

From: "Cagley, April M" [amcagley@tva.gov]
Sent: 04/07/2011 03:54 PM AST
To: Leo Francendese
Subject: Transmittal Cover for Regulatory Submittal - Intake Channel Bridge Removal Work Plan (Revised) pdf - Adobe Acrobat Professional.pdf - Adobe Acrobat Professional

Leo,

Here is the document with the email added to the ended about Cs-137.

Document No. RAWP-087

Kingston Ash Recovery Project
Time-Critical Removal Action

Intake Channel Bridge Removal Work Plan

Prepared by:
Jacobs

for the Tennessee Valley Authority

Revision	Description	Date
0	Issued for TVA Review	February 23, 2011
1	Reissued to TVA with Changes	March 2, 2011
2	Reissued to TVA with Changes	March 28, 2011
3	Reissued to TVA with Changes	April 5, 2011

1 PURPOSE

As part of the overall Risk Mitigation Plan for Dike C at the Kingston Fossil Plant, the majority of the length of Dike C has received additional buttressing as described in the draft "Design Report for Dike C Buttress" dated September 3, 2010 by Stantec Consulting Services, Inc. Based on the challenges of constructing a conventional buttress at the location of the Stilling Basin Diffuser and Peninsula Bridge structures, TVA has opted to remove the bridge structure and widen the flow channel at the structure to maintain hydraulic capacity through this location and allow the construction of a conventional buttress of that section.

The bridge was originally constructed as a timber deck bridge built in 1975 and later modified to have concrete deck and abutments in 1984. The bridge is approximately 168 feet long and has four simply supported steel beam spans with a concrete deck. See drawing 208N1-208N7.

This work plan addresses the methodology planned for the demolition and removal of the bridge including the decking, structural beams and supports, handrails, and demolition debris.

2 DESIGN

There is no design for the demolition operations.

3 CONSTRUCTION/OPERATIONS (DEMOLITION)

The scope of work for this activity will include the removal and disposal of the bridge including:

- Concrete decking
- Guardrail
- All structural steel and concrete
- Pier A (Drawing 208N-1)
- Concrete abutment and piles on south end of bridge (concrete abutment and piles on north end of bridge shall remain in place)

All work will be performed from land with primary access to the bridge from the south as shown on attached map. Access from the north through the Kingston Ash Recovery Project site is not planned due to the HAZWOPER requirements and exclusion zone boundary. In general, the bridge demolition will begin by removing the concrete deck and sub-structural steel in sections based on the existing expansion/control joints and structural support piers. The concrete bridge deck removal will commence at the north end of the bridge and proceed toward the south. Precautions will be taken, when necessary, to prevent concrete debris from entering the waterway.

3.1 Sub-Structural Steel Removal

Testing of paint for lead and PCBs has been performed on the structural steel beams of the bridge and the report is available. The analysis indicated total lead is present in the paint in the samples taken at 170 mg/kg or 0.017% by weight. No PCBs were found in the samples taken. The contractor performing the bridge removal and demolition is required to work in accordance to all applicable safety standards with regards to lead, including **OSHA's Lead in Construction standard (29 CFR 1926.62) and TVA's Safety Manual Section 909: Lead.** Sub-structural steel will be removed in sections moving from north to south.

3.2 Piers and Abutments

Please reference drawing # 208N1- note flow arrow at the top of drawing and it is assumed the flow is to the plant. Pier A is the south pier and Pier C is the north pier. Pier A and the south abutment will be removed by the bridge removal and demolition contractor after the decking and sub-structural steel has been removed. The north abutment, including piles, will remain in place to ensure stability of the dike. Piers B and C will and be left in place.

Piers are expected to be free of sediments upon extraction however, a visual inspection will be performed and any sediment will be sprayed off during the removal to ensure sediments or contaminants are removed prior to shipment and disposal offsite. BMP's, including turbidity curtains, will be in place for wash down activities. Any underwater demolition services required will be coordinated and performed by TVA Diving Services in accordance with all TVA diving protocols.

4 SCHEDULE

The bridge demolition, consisting of Pier A, south abutment, concrete deck, and sub structural steel, is scheduled to begin April 11, 2011 and expected to be completed by May 14, 2011.

5 WASTE MANAGEMENT

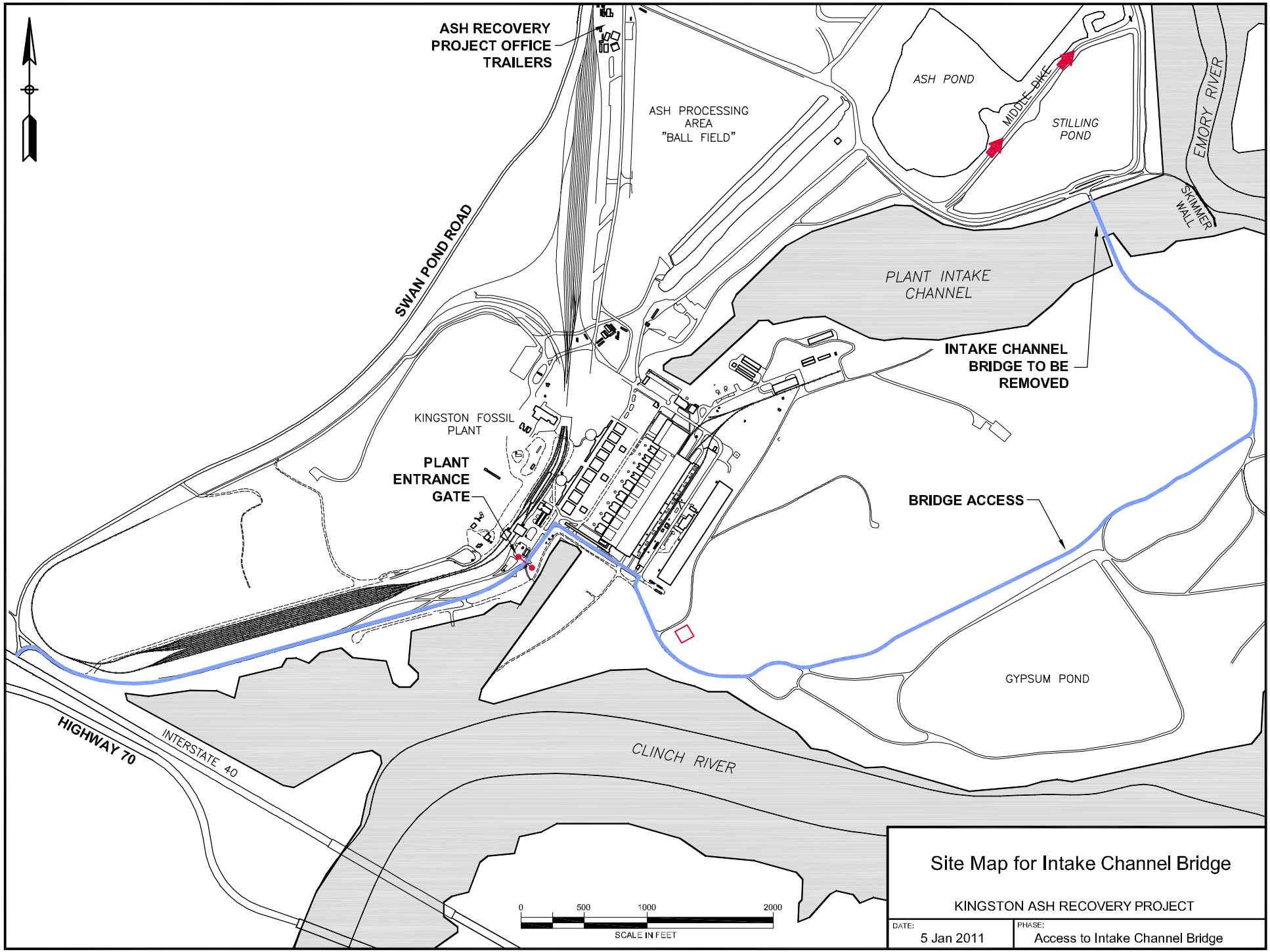
The contractor performing this work will be responsible for removal and disposal of all bridge material and debris associated with this contract in accordance with local, state, and federal laws and regulations.

Disposal of metal containing lead paint may go to recycling. Demolition will be performed in such a way that flaked paint is not released into the environment. Applicable local, state, and federal laws pertaining to the disposal (or recycling) of all materials containing lead will be followed.

6 HEALTH AND SAFETY

The activities in this work plan will follow the *Site Wide Health and Safety Plan for the TVA Kingston Fossil Plant Ash Release, Revision 5*, Document No. EPA-AO-003. Any operations requiring TVA Diving Services following all TVA diving protocols. All personnel, vehicles, and equipment will be subject to decontamination requirements as listed in the Site Wide Health and Safety Plan prior to leaving the site.

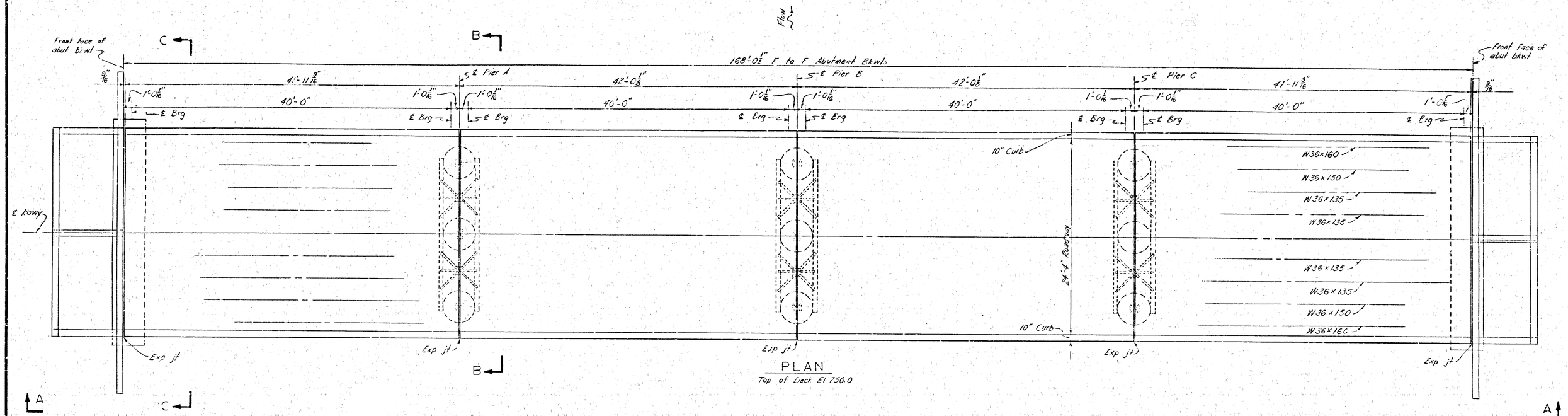
No.	Section / Para / Page	Reviewer Comment	Response to Comment
1.	Purpose, Pg 1	Original submittal does not have drawings 208N1-208N7.	Drawings have been attached to work plan.
2.	Section 3.2 Piers and Abutments	Change Pier A to read Pier C as per drawing 208N1-208N7. I have hardcopy of the drawing which indicates Pier A is at the north end of the bridge. Change Pier C to Pier A. Piers B and C could be pulled using a vibratory hammer with minimal to no impact to Dike C integrity.	Please reference drawing # 208N1- note flow arrow at the top of drawing and it is assumed the flow is to the plant. Pier A is the south pier and Pier C is the north pier.
3.	General	Movement has been detected in the inclinometer readings close to the location of the bridge. Care should be taken during removal of the piers to assure the foundation of the dike is not compromised.	Piers B and C (closest to the dike) are to remain in place.
4.	General	Upon removal of the materials from the channel (the piers etc.), in the addition to lead paint verification, there should be means to verify acceptable levels of radioactivity prior to hauling and disposal.	Piers are expected to be free of sediments upon extraction however, a visual inspection will be performed and any sediment will be sprayed off during the removal to ensure sediments or contaminants are removed prior to shipment and disposal offsite. BMP's, including turbidity curtains, will be in place for wash down activities.
5.			

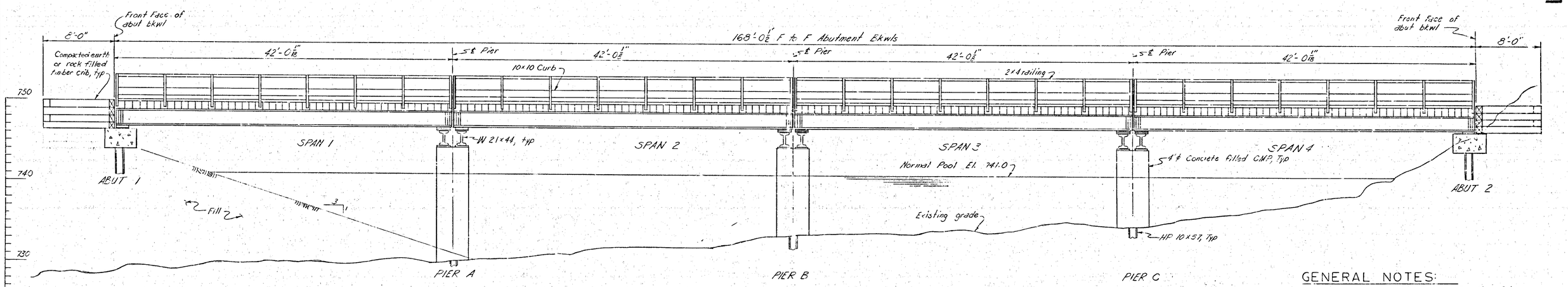


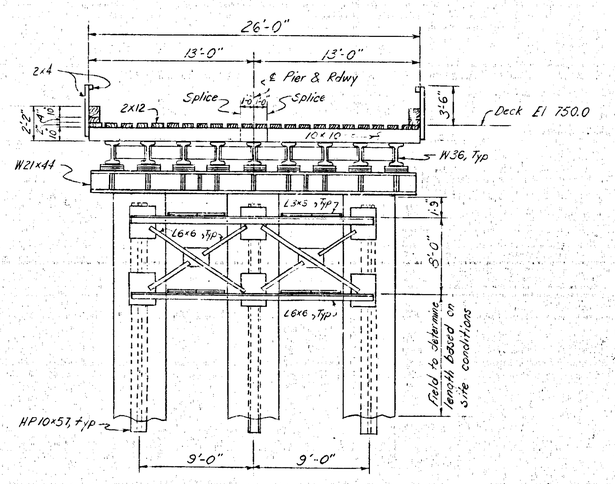
Site Map for Intake Channel Bridge

KINGSTON ASH RECOVERY PROJECT

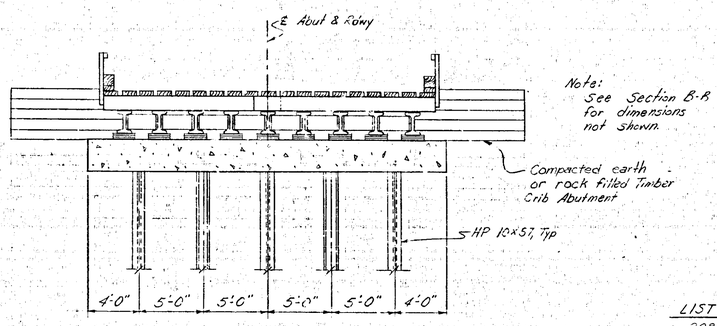
DATE:	PHASE:
5 Jan 2011	Access to Intake Channel Bridge







SECTION B-B



SECTION C-C

Note: See Section B-B for dimensions not shown.

GENERAL NOTES:

1. Design spec: 1973 AASHO Spec for Hwy Bridges
2. Design L.L.: B-70 Tournapull with 333A Elevating scraper.
3. Signs shall be erected limiting speed on Bridge to 20 MPH and limiting loaded vehicle to one vehicle on Bridge at a time.
4. Timber purchased under Reqn. "A" Lists. For bill of material see 208N4 & 208N6.
5. Miscellaneous structural shapes purchased under Reqn. "A" Lists. For Bill of Material see 208N2.
6. Girder spans and support beams are from Normandy Dam Construction Bridge. Reqn. "61615

See drawings 86CS3-208N1 Through N5

LIST OF DRAWINGS:

208N1 General Arrangement
208N2 Structural Steel Details Sheet 1
208N3 " " " " 2
208N4 Deck Details
208N5 Piers A-C
208N6 Abutments 1 & 2

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

REV NO.	DATE	MADE	CHKD	SUPV	INSP	SUBM	RECM
DSGN.				SUPV.			
DRWN.				INSP.			
CHKD.							
TRCD.				ENGINEER			
COMP.							

CONSTRUCTION PLANT
CONSTRUCTION BRIDGE

CONSTRUCTION HAUL BRIDGE
GENERAL ARRANGEMENT

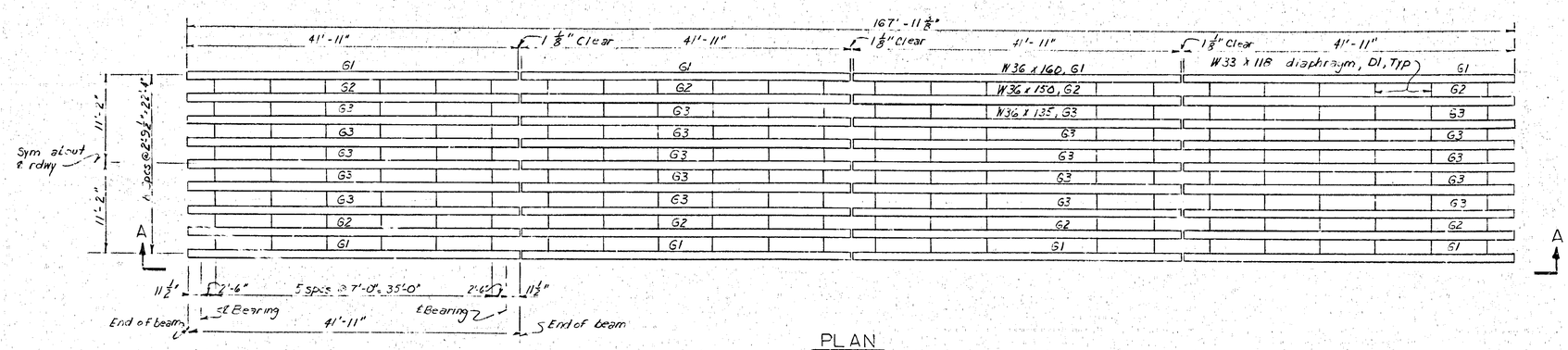
KINGSTON STEAM PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF CONSTRUCTION

SUBMITTED	RECOMMENDED	APPROVED

KNOXVILLE	9-22-75	36	CS	3	208N1	R0

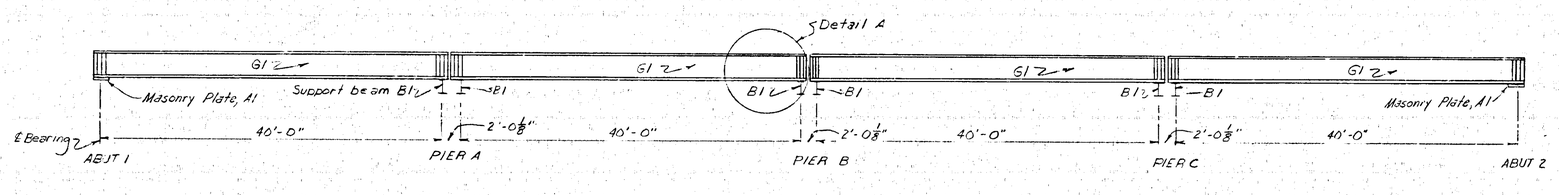
RECORD DRAWING AS CONSTRUCTED

MC 17100



PLAN

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



ELEVATION A-A

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

MARK NUMBER	QUANTITY REQD	DESCRIPTION	REMARKS
G1	8	W36 x 160 x 41'-11" Girder	Extising matl from Normandy Dam. See drawings 36CS3-208N1 Through N5
G2	8	W36 x 150 x 41'-11" "	
G3	20	W36 x 135 x 41'-11" "	
D1	192	W33 x 118 x 2'-8" Diaphragm	
B1	2	W21 x 44 x 25'-6" Support beam	
A1	18	Masonry plate assembly	
aa	12	L6 x 6 x 1/2 x 19'-0" Pier Bracing	Material purchased under regn. no. 2 Latin
ab	12	L6 x 6 x 1/2 x 10'-3" " "	
ac	24	L6 x 6 x 1/2 x 4'-9" " "	
ad	12	L3 x 3 x 1/2 x 6'-9" " "	
ae	24	L3 x 3 x 1/2 x 3'-2" " "	
pa	24	PL 1/2 x 24 x 2'-6" " " Connection	
pb	12	PL 1/2 x 24 x 2'-6" " " "	
pc	12	PL 1/2 x 13 x 2'-0" " " "	
pd	36	PL 1/2 x 9 x 2'-6" " " "	
pf	12	PL 1/2 x 12 x 1'-0" " " "	
ra	6	7/8" Ø x 4'-6" threaded rod with 4 heavy hex nuts	
AB-1	72	7/8" Ø x 2'-6" threaded rod with 2 heavy hex nuts	
pe	36	PL 1/4 x 8 x 0'-9"	
AB-2	72	1" Ø x 2'-3" threaded rod with 2 heavy hex nuts	
pg	16	PL 1/2 x 6 x 0'-6"	
B-1	88	7/8" Ø x 2'-6" threaded rod, 2 heavy hex nuts, washers	
B-2	264	7/8" Ø x 12" hex hd. bolt, heavy hex nut & washer	
W1	264	Plate 3/8 x 5 x 0'-5"	
EP-1	13	HP10 x 57 x 60'-0"	
ph	5	PL 1/2 x 18 x 24'-4" - joint cover plate	

NOTES:

1. For GENERAL NOTES see 208N1.
2. All material fabricated in field.
3. All field connections bolted with 7/8" Ø A325 bolts with friction type connections.
4. Existing bolts may be reused unless worn or damaged.
5. Bolts shall be tightened to a minimum of 39 Kips.

REV NO.	DATE	MADE	CHKD	SUPV	INSP	SUBM	RECM

DSGN. [illegible] SUPV.
DRAWN [illegible] INSP.
CHKD.
TRCD. ENGINEER
COMP. [illegible]

CONSTRUCTION PLANT
CONSTRUCTION BRIDGE

CONSTRUCTION HAUL BRIDGE STRUCTURAL STEEL DETAILS SHEET 1

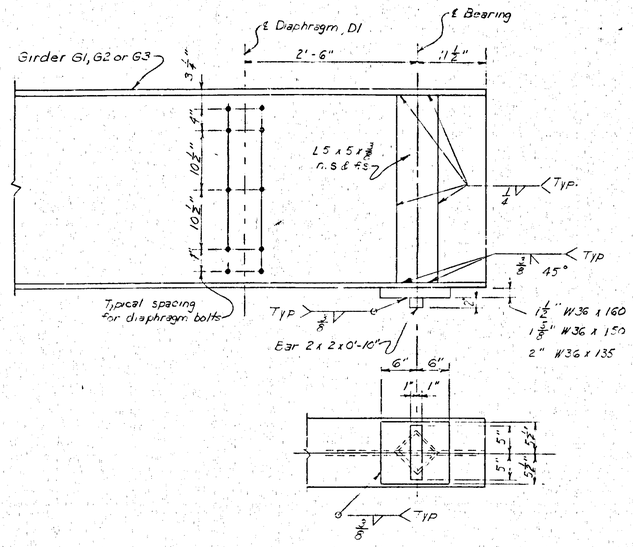
KINGSTON STEAM PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF CONSTRUCTION

SUBMITTED	RECOMMENDED	APPROVED
[illegible]	[illegible]	[illegible]

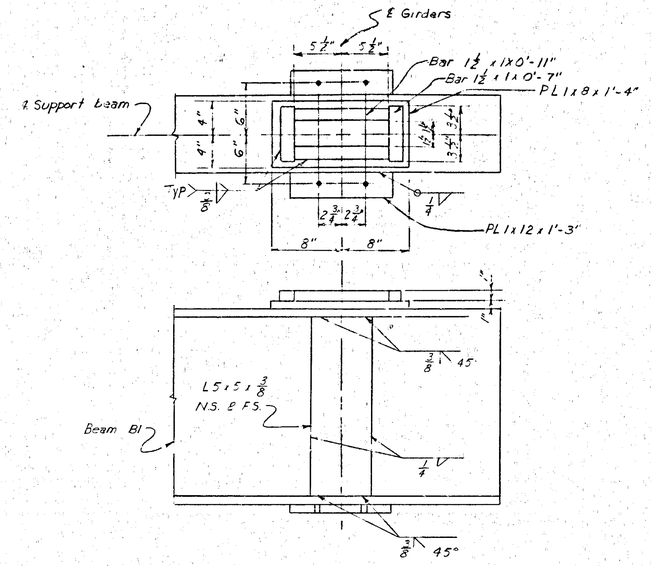
KNOXVILLE	9-22-75	36	CS	3	208N2	R3

RECORD DRAWING AS CONSTRUCTED

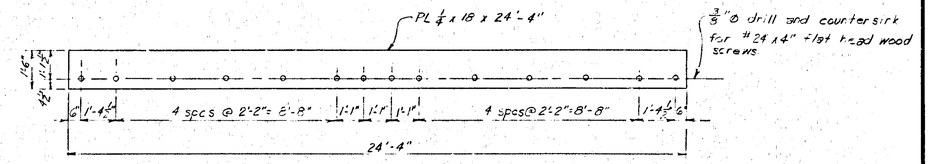
MC17101



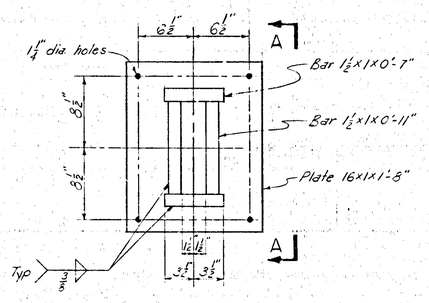
DETAIL A
Scale 1" = 1'-0"



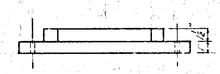
DETAIL B
Scale: 1½" = 1'-0"



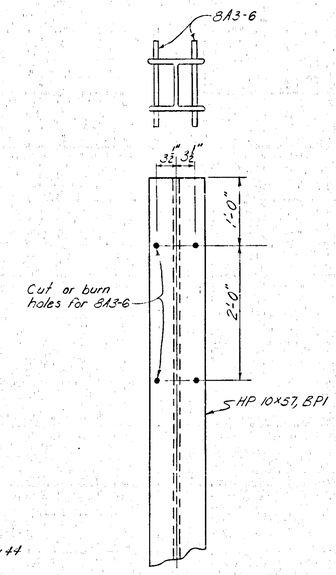
JOINT COVER PLATE -- ph
5- Reqd
Scale: ⅜" = 1'-0"



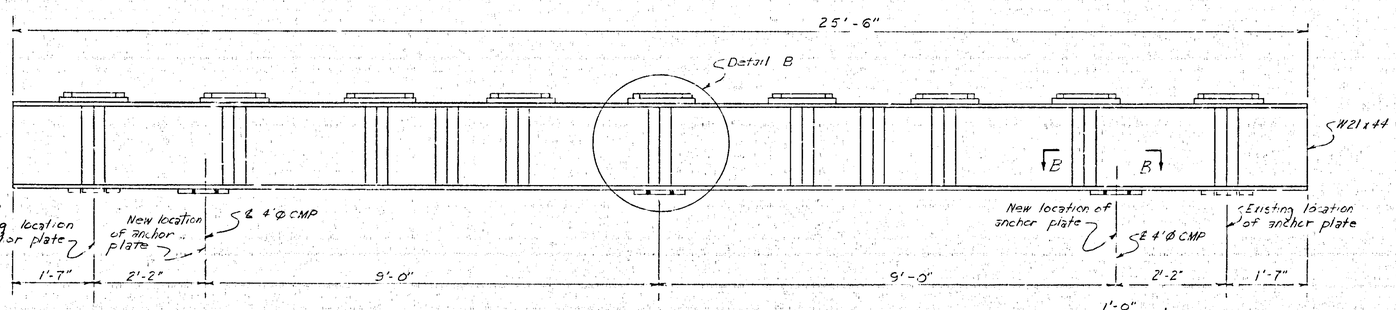
PLAN
MASONRY PLATE ASSEMBLY-A1
18-Reqd



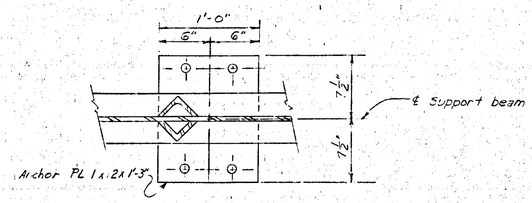
SECTION A-A



PILE DETAIL
9Reqd - At Piers



BEAM-B1
6 Reqd
Scale ¾" = 1'-0"



B-B

NOTES

1. For GENERAL NOTES see 208N1.
2. Holes to be 15/16" Ø for ⅞" Ø A325 bolts with friction type connections except as noted.
3. All materials to conform to A.S.T.M. A-36.
4. Welds shall be made using class E-70 electrodes for manual arc welding.

REV NO	DATE	MADE	CHKD	SUPV	INSP	SUBM	RECM

DSGN. [illegible] SUPV.
DRWN. [illegible] INSP.
CHKD.
TRCD. ENGINEER
COMP.

CONSTRUCTION PLANT
CONSTRUCTION BRIDGE

CONSTRUCTION HAUL BRIDGE
STRUCTURAL STEEL DETAILS
SHEET 2

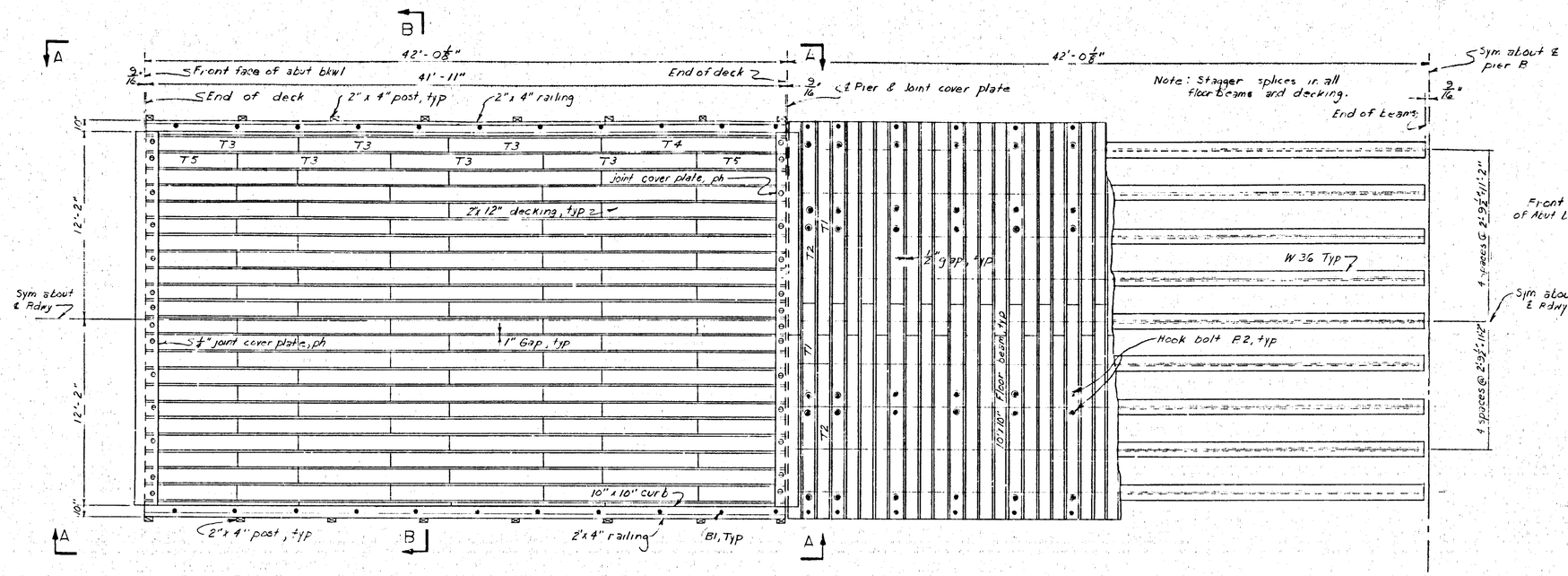
KINGSTON STEAM PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF CONSTRUCTION

SUBMITTED	RECOMMENDED	APPROVED
[illegible]	J. A. Bowles	[illegible]

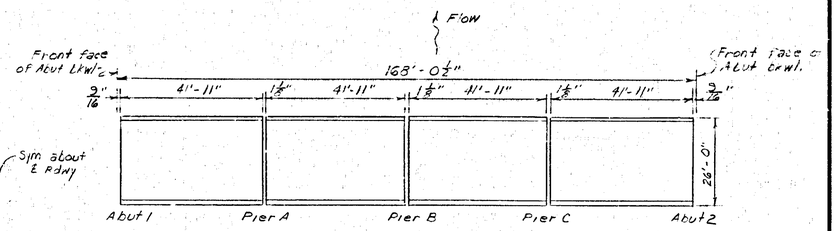
KNOXVILLE	9-22-75	36	CS	3	208N3	R0

RECORD DRAWING AS CONSTRUCTED

MC17102

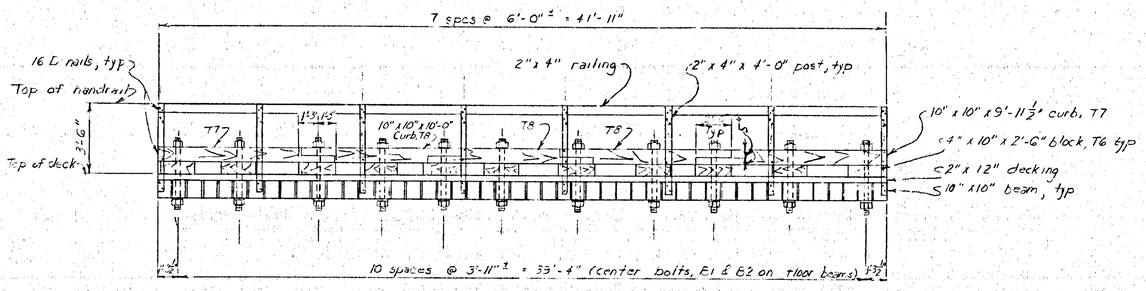


HALF PLAN
Scale 1/4" = 1'-0"

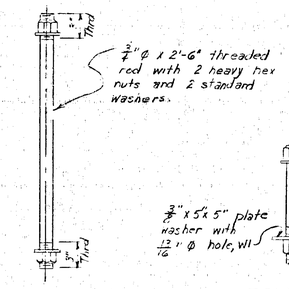


KEY PLAN
N.T.S.

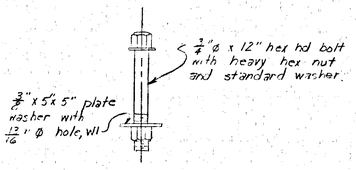
BILL OF MATERIAL				
LOCATION	MARK	NO. REQD	DESCRIPTION	LENGTH
Floor beams	T1	192	10" x 10"	14'-0"
Floor beams	T2	192	10" x 10"	12'-0"
Decking	T3	288	2" x 12"	10'-0"
Decking	T4	48	2" x 12"	11'-11"
Decking	T5	96	2" x 12"	5'-11 1/2"
Curb Block	T6	88	4" x 10"	2'-0"
Curb	T7	16	10" x 10"	9'-11 1/2"
Curb	T8	24	10" x 10"	10'-0"
Handrail		336 ft.	2" x 4"	Random
Handrail		64	2" x 4"	4'-0"
Nails		20 lbs.	16 D	
Nails		2500	Double Grip Spikes	6"



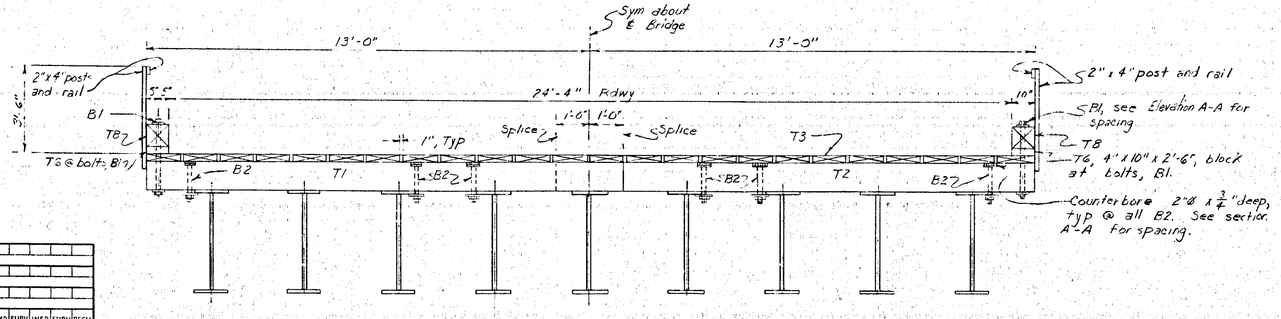
ELEVATION A-A
Typ All Spans
Scale 1/4" = 1'-0"



BOLT B1
38 - Reqd
Scale 1 1/2" = 1'-0"



BOLT B2
264 Reqd
Scale 1 1/2" = 1'-0"



SECTION B-B
Scale 1/2" = 1'-0"

NOTES

1. For GENERAL NOTES see Dwg 208N10.
2. Timber to be Southern Yellow Pine or Oak purchased under regn. number later.
3. Hook bolts and anchor rod material purchased under regn. number later.
4. Holes in timber to be same size as bolts.

REV NO	DATE	MADE	CHKD	SUPV	INSP	SUBM	RECM

DSGN. ..... SUPV. .....
DRWN. ..... INSP. .....
CHKD. .....
TRCD. ..... ENGINEER .....
COMP. .....

CONSTRUCTION PLANT
CONSTRUCTION BRIDGE

CONSTRUCTION HAUL BRIDGE DECK DETAILS

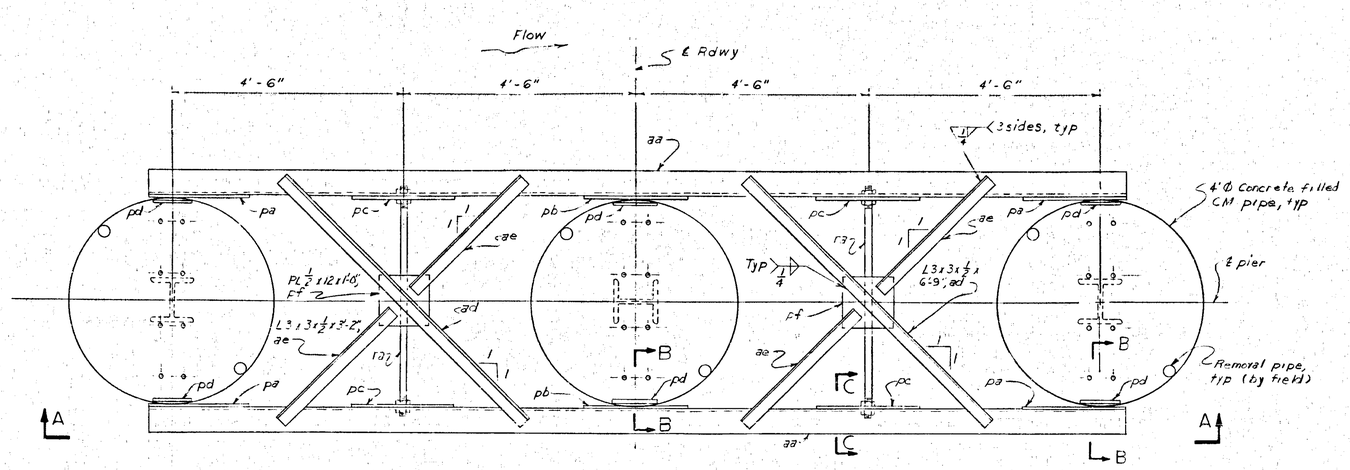
KINGSTON STEAM PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF CONSTRUCTION

SUBMITTED	RECOMMENDED	APPROVED
S.O. Henson	J.A. Bowles	[illegible]

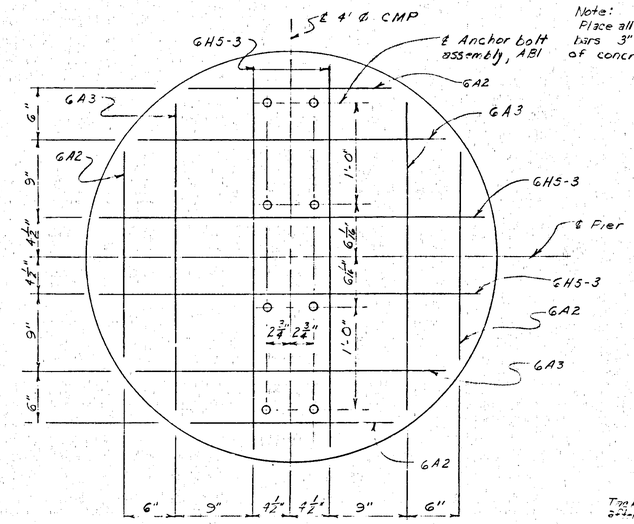
KNOXVILLE | 9-22-75 | 36 | CS | 3 | 208N4 | R)

RECORD DRAWING AS CONSTRUCTED

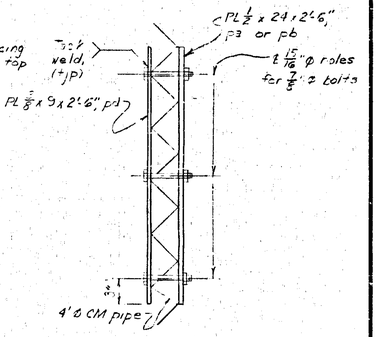
MC17103



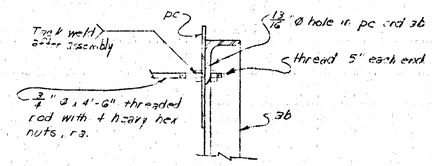
PLAN
Scale: 3/4" = 1'-0"



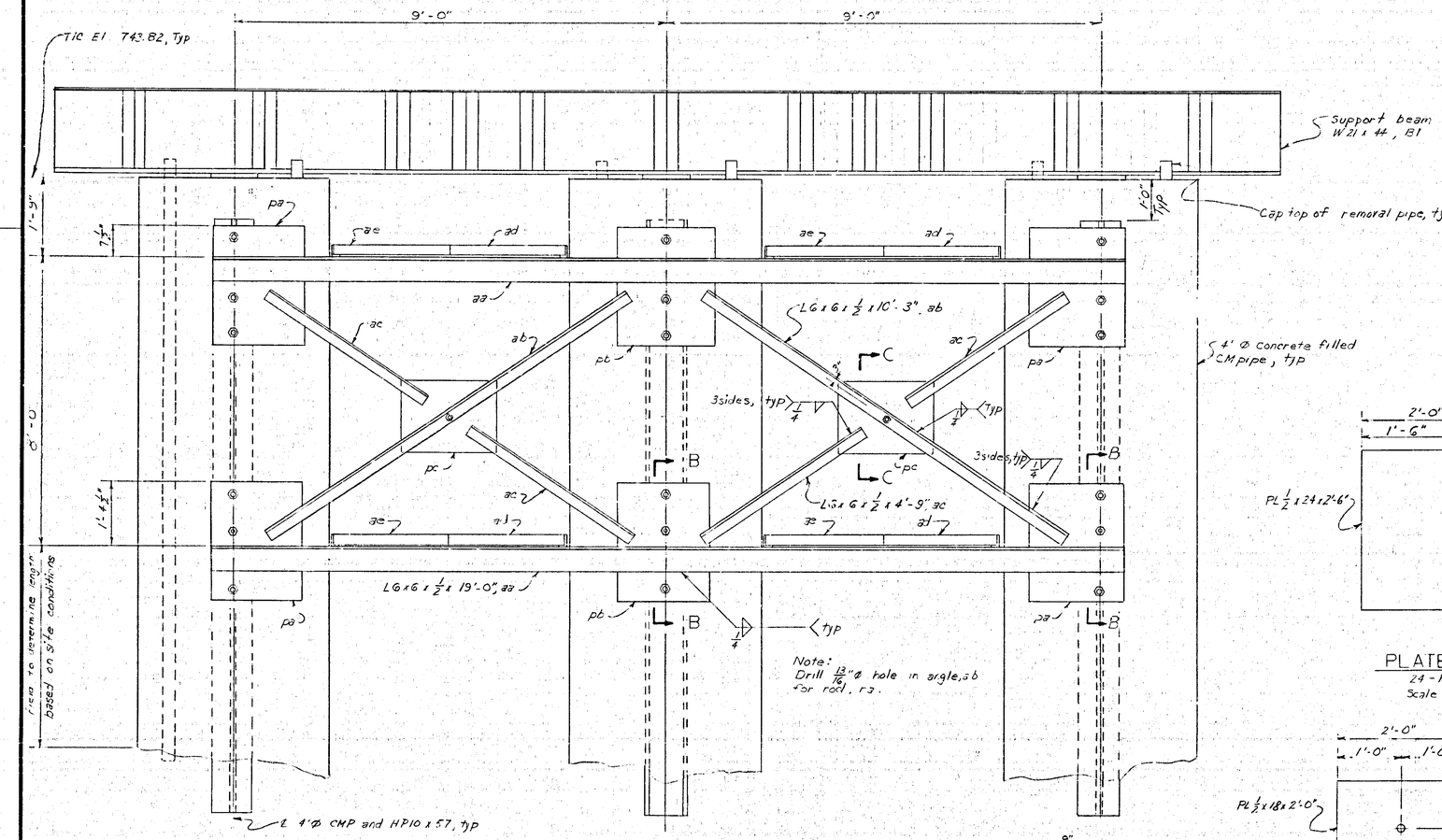
Note:
Place all reinforcing bars 3" below top of concrete.



SECTION B-B
TYP AT BRACING CONN.
Scale 1 1/2" = 1'-0"

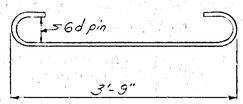


SECTION C-C
Scale 1" = 1'-0"



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

REINFORCING SCHEDULE	
ITEM	NO. REQD
GA2	36
GA3	36
GH5-3	36



6H5-3

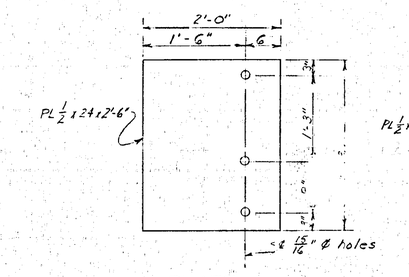


PLATE - pa
24 - Reqd
Scale: 1" = 1'-0"

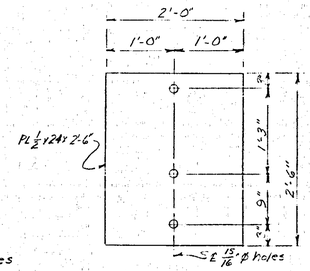


PLATE - pb
12 - Reqd
Scale: 1" = 1'-0"

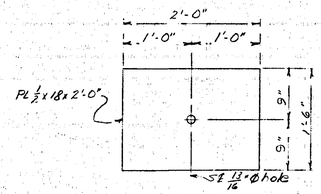


PLATE - pc
12 - Reqd
Scale: 1" = 1'-0"

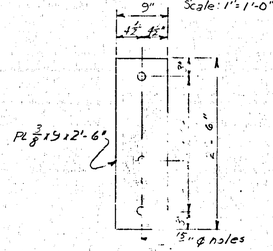


PLATE - pd
36 Reqd
Scale: 1" = 1'-0"

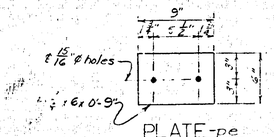
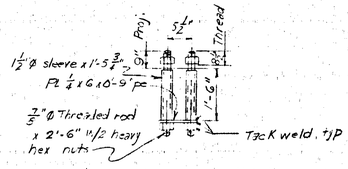


PLATE - pe
36 Reqd
Scale 1 1/2" = 1'-0"



ANCHOR BOLT ASSEMBLY AB-1
36 Reqd
N.T.S.

NOTES

1. For GENERAL NOTES see 208N1.
2. Concrete to have f'c = 3000 psi.
3. Bearing piles to be driven to refusal. See 208N3 for pile detail.

REV. NO.	DATE	MADE	CHKD	SUPV	INSP	SUBM	RECM

DSGN. J.T.W. SUPV.
DRWN. J.L.L. INSP.
CHKD.
TRCD. ENGINEER
COMP. H.J.C.

CONSTRUCTION PLANT
CONSTRUCTION BRIDGE

CONSTRUCTION HAUL BRIDGE
PIERS A-C

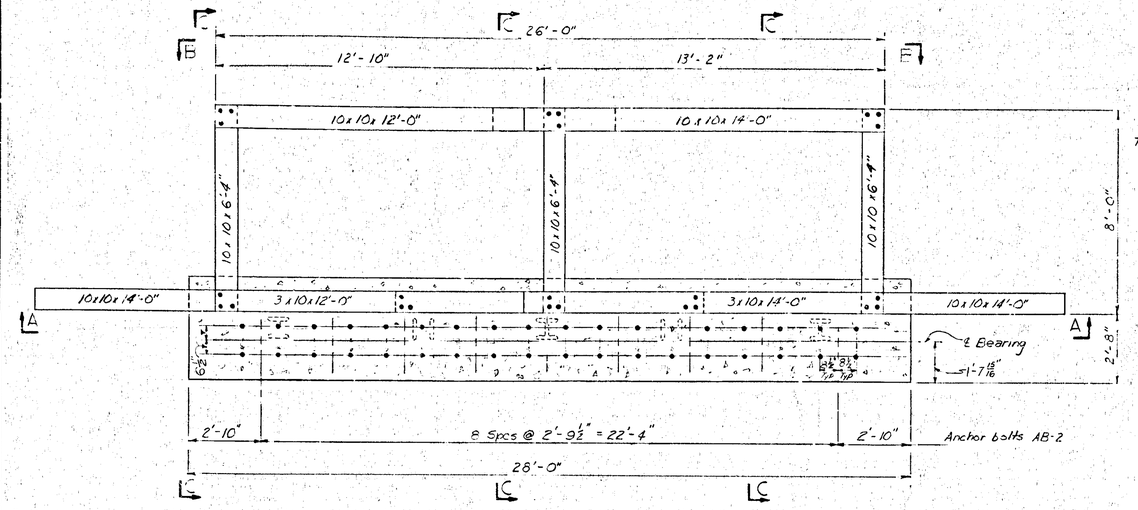
KINGSTON STEAM PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF CONSTRUCTION

SUBMITTED	RECOMMENDED	APPROVED
S.D. Zio	J.A. Bowles	Jack Jensen

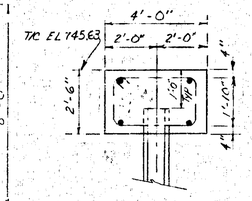
KNOXVILLE 9-22-75 36 CS 3 208N5 R0

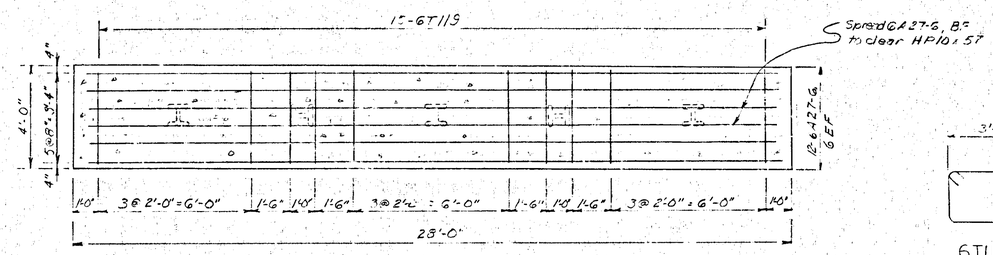
RECORD DRAWING AS CONSTRUCTED

MC 17104

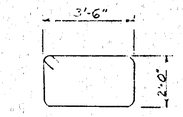


PLAN
Abut 1 & Abut 2



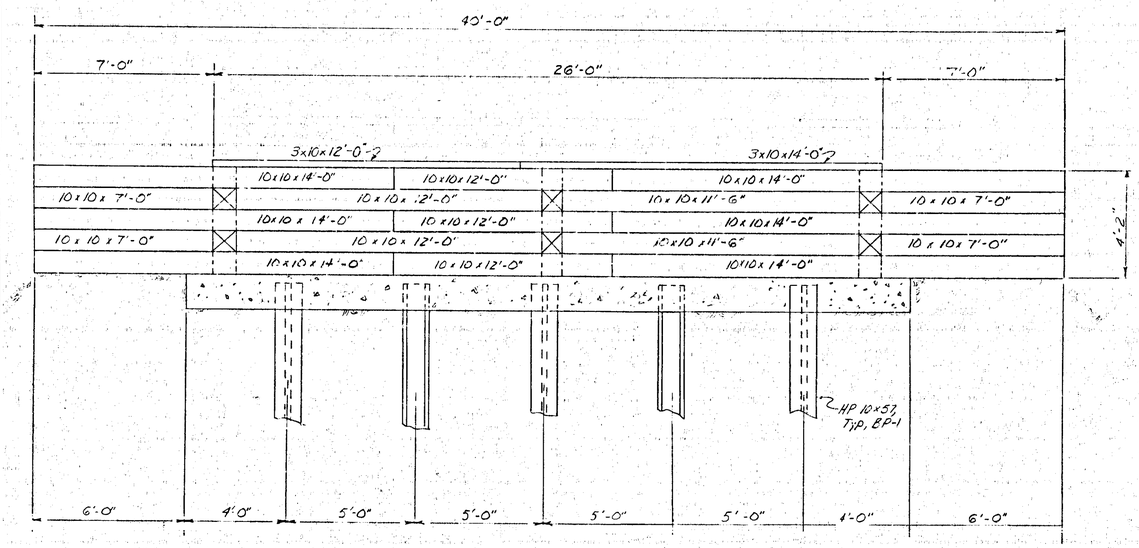


FOUNDATION DETAILS

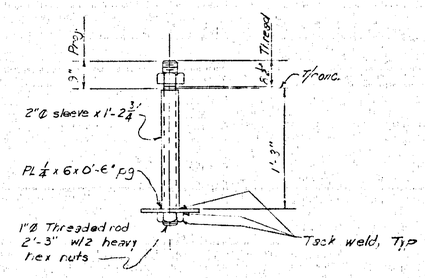


6T11-9
32-Reqd

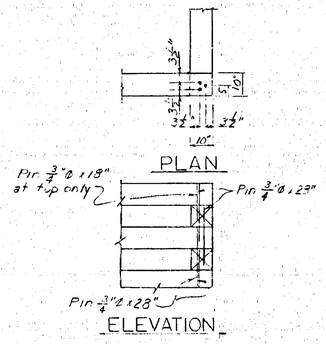
6A27-6
24-Reqd



SECTION A-A



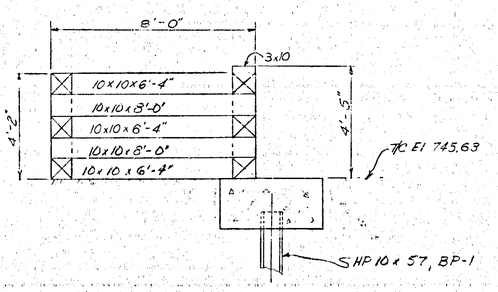
ANCHOR BOLT ASSEMBLY AB-2
72 Reqd
Scale 1 1/2" = 1'-0"



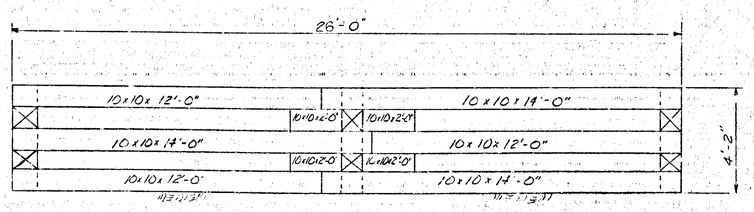
TYPICAL DRIFT PIN LOCATION
Typical at Corners and Splices

BILL OF MATERIAL		
NUMBER *	SIZE	LENGTH
2	10x10	2'-0"
12	"	6'-4"
12	"	7'-0"
12	"	8'-0"
4	"	11'-6"
16	"	12'-0"
16	"	14'-0"
2	3x10	12'-0"
2	3x10	14'-0"
16	3/4"ø rod	1'-6"
64	3/4"ø rod	2'-4"

* Number shown is total for the abutments.



SECTION C-C



SECTION B-B

NOTES

1. Bearing Piles for Abutments to be driven to refusal. See 208N3 for pipe details.
2. Timber to be rough (full size) Southern Yellow Pine or Oak.
3. Crib timbers to be connected to each adjacent timber with two drift pins.
4. Drift pins to be 3/4"Ø with 11/16"Ø holes drilled in timbers.
5. Concrete to have f'c = 3000 psi.
6. Abutments to be rock or compacted earth filled.

Scale: 3/8" = 1'-0"
Except as Noted

REV NO.	DATE	MADE	CHKD	SUPV	INSP	SUBM	RECM
DSGN.				SUPV.			
DRWN.				INSP.			
CHKD.							
TRCD.				ENGINEER			
COMP.							

CONSTRUCTION PLANT
CONSTRUCTION BRIDGE

CONSTRUCTION HAUL BRIDGE
ABUTMENTS 1 & 2

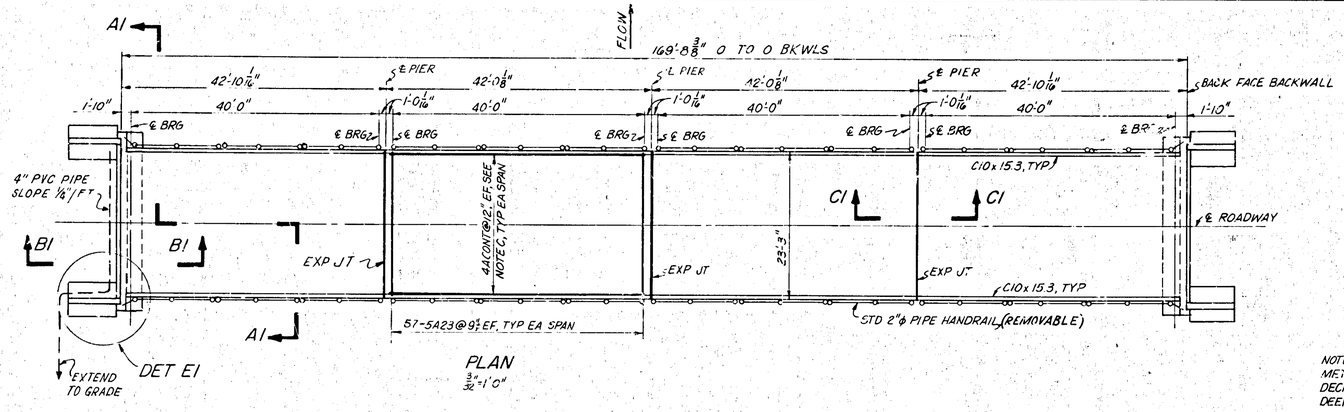
KINGSTON STEAM PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF CONSTRUCTION

SUBMITTED	RECOMMENDED	APPROVED

KNOXVILLE	9-22-75	3E	CS	3	208N6	RD

RECORD DRAWING AS CONSTRUCTED

MC17105



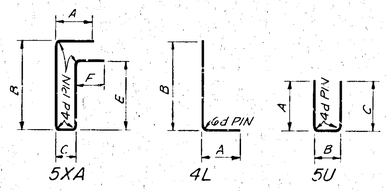
PLAN
3/32" = 1'-0"

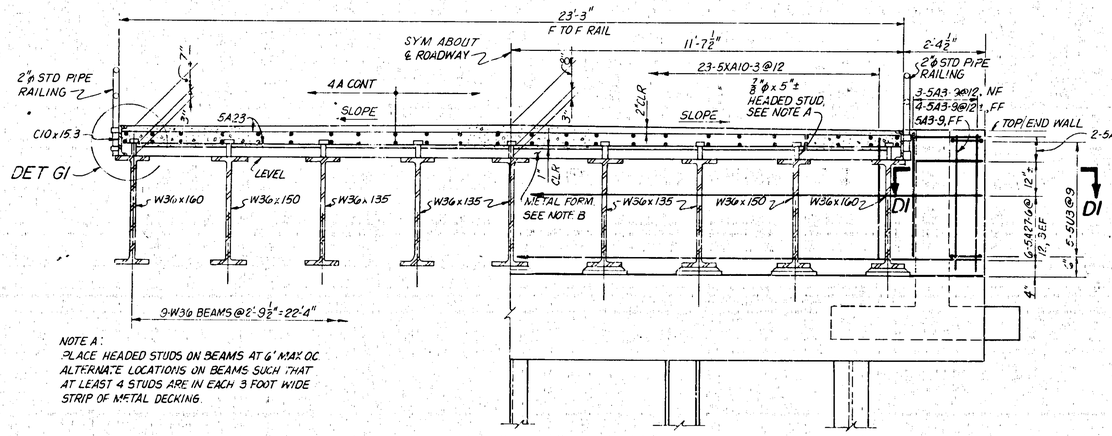
STRAIGHT BAR LIST			
BAR SIZE	BAR LENGTH	NO REQD	WEIGHT
5A	27-6	12	345
5A	23	456	10,940
5A	4	8	35
5A	3-9	28	110
4A	CONT	3963 LF	5,988
4A	7-9	40	210
4A	7-3	28	136
4A	5-9	16	62
4A	5	32	107
TOTAL LBS STRAIGHT BARS			17,933

BENT BAR LIST							
BAR MARK	NO REQD	BENDING DIMENSIONS					WEIGHT
		A	B	C	E	F	
5XA10-3	46	1-6	3-8	0-8	3-6	EX	492
5U3	20	1-3	0-8	EX			63
4LB-3	32	2-6	5-10				177
TOTAL LBS BENT BARS							732

NOTE B:
METAL DECKING SHALL BE FROM HTN PLANT SURPLUS. USE 3 INCH DECKING MANUFACTURED BY INRYCO, INC. THE PANELS ARE 3 INCHES DEEP AND 36 INCHES WIDE, GALVANIZED, 16 GA.

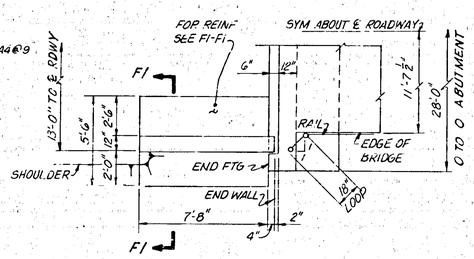
NOTE C:
4A CONTINUOUS BARS SHALL BE SPLICED A MINIMUM OF 1'-8" SPLICES SHALL BE STAGGERED WITH ADJACENT SPLICES A MINIMUM OF 5 FEET APART. NO BAR SHALL BE LESS THAN 10 FEET LONG.



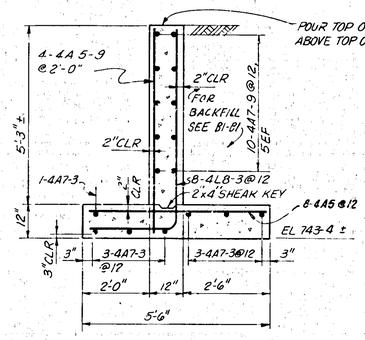


NOTE A:
PLACE HEADED STUDS ON BEAMS AT 6' MAX OC. ALTERNATE LOCATIONS ON BEAMS SUCH THAT AT LEAST 4 STUDS ARE IN EACH 3 FOOT WIDE STRIP OF METAL DECKING.

A1 - A1

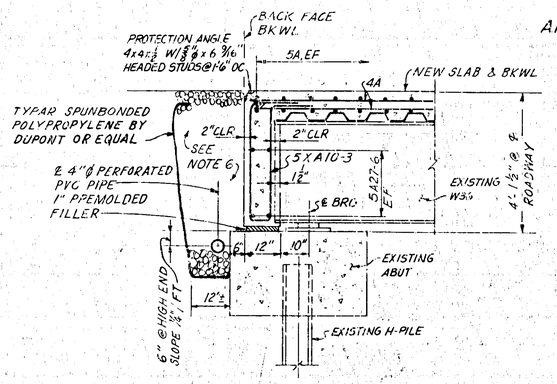


PLAN

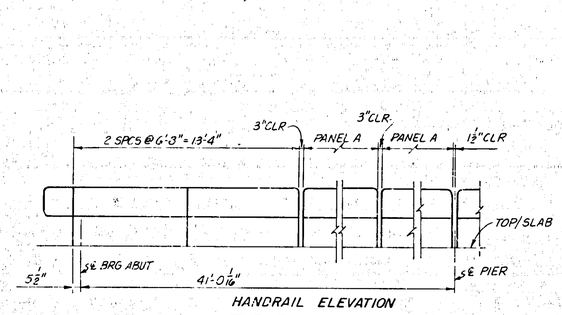


F1-F1

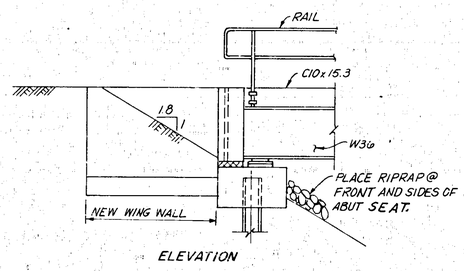
NOTES:
1. THIS CONSTRUCTION HAUL BRIDGE WAS BUILT IN 1975 BY CSB. THE TIMBER DECK AND TIMBER CRIBS AT ABUTMENTS HAVE DETERIORATED. THIS DRAWING IS FOR REPLACEMENT OF THE TIMBER DECK W[illegible]H A CONCRETE SLAB AND CONSTRUCTION OF CONCRETE [illegible] WALLS AT ABUTMENTS. THE BRIDGE IS TO BE [illegible] MAINTAINED BY THE PLANT.
2. ALL MATER[illegible] D CONSTRUCTION BY CSB IN ACCORDANCE WITH T.V.[illegible] [illegible]IFICATION T[illegible].
3. DESIGN LIVE LOAD: HS 20-44 AND CATERPILLAR 637D WHEEL TRACTOR-SCRAPER.
4. MATERIALS:
   STRUCTURAL STEEL — ASTM A36
   STEEL PIPE HANDRAIL — ASTM A53, A106 OR A501.
   REINFORCING STEEL — ASTM A615, GRADE 60.
   CONCRETE — GRADE A OR B
   HEADED STUDS — ASTM A108
   BOLTS — ASTM A307
5. THE PAINT WAS CONTRACTED BY THE PLANT.
6. BACKFILL BEHIND ABUTMENT WITH GRAVEL. ACCEPTABLE GRADATIONS: TI SECT 1015 (SIZE NO.1)
   TI SECT 1020
   TI SECT 1075 (BOT LAYER)
   TOP WITH ONE FOOT OF T[illegible] 1032 TO FINISHED GRADE.



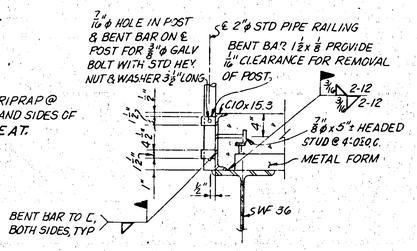
B1 - B1



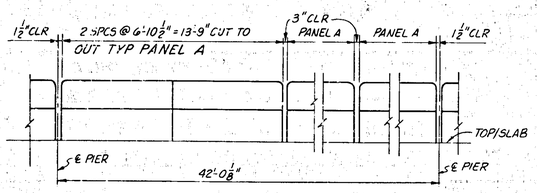
HANDRAIL ELEVATION
TYP END SPAN
NTS



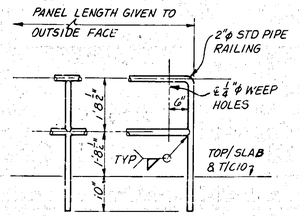
ELEVATION
DET E1
1/4" = 1'-0"

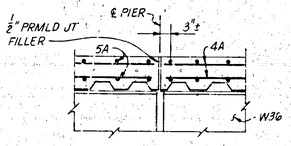


DET G1
1" = 1'-0"

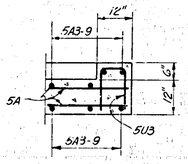


HANDRAIL ELEVATION
TYP INTERIOR SPAN
NTS





C1 - C1
3/4" = 1'-0"



D1 - D1

FIRST ISSUE FOR WO 450-33J-20674

COMPANION DRAWING: 36-CS-3-208N1-N6

REV NO	ECN NO	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECD	APPD

DSGN: [illegible]
DRWN: F.B. Daniels
CHKD: [illegible]
SUPV: [illegible]
INSP
ENGINEER: H. C. Morris

SCALE: 1/2" = 1'-0" EXCEPT AS NOTED

CONSTRUCTION PLANT
CONSTRUCTION BRIDGE

CONSTRUCTION HAUL BRIDGE DECK REPLACEMENT

KINGSTON STEAM PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

SUBMITTED	RECOMMENDED	APPROVED
H.C. Morris	[illegible]	R.O. Burnette

INSPECTED AND APPROVED FOR ISSUE: [illegible]

KNOXVILLE | 3/8/84 | 36 | CS | 208N7 | RO

RECORD DRAWING AS CONSTRUCTED

PRINT

McDermott, Mary F

From: Cagley, April M
Sent: Friday, April 09, 2010 10:22 AM
To: Guinn, Darrell
Subject: FW: Request for Concurrence--Decon of Recovered Skimmer Wall Material TVA Kingston

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From: Cagley, April M
Sent: Thursday, April 08, 2010 4:16 PM
To: 'Leo Francendese (Francendese.Leo@epamail.epa.gov)'; 'barbara.scott@tn.gov'; Yankee, Dennis Hunter; Nash, Kathryn Amanda; Incident.Documentation; Russ, Timothy A; Howard, Jack L
Cc: 'Clay, Paul'
Subject: FW: Request for Concurrence--Decon of Recovered Skimmer Wall Material TVA Kingston

This is response to the question concerning the potential need for characterization of the debris removed from the intake channel.

From: Clay, Paul F
Sent: Thursday, April 08, 2010 3:48 PM
To: Cagley, April M
Subject: FW: Request for Concurrence--Decon of Recovered Skimmer Wall Material TVA Kingston

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From: Darby, Jason Daniel [mailto:DarbyJD@oro.doe.gov]
Sent: Thursday, April 08, 2010 2:48 PM
To: Clay, Paul F
Subject: RE: Request for Concurrence--Decon of Recovered Skimmer Wall Material TVA Kingston

Paul,

I have looked over the data you provided. It's is consistent with our understanding that very little cesium exists in the Emory River sediment. Based on the few low level detections of cesium which are well below the action level of 11 pCi/g, it will not be necessary to characterize debris you remove from this area.

Jason D. Darby
Project Manager
USDOE
865-241-6343
fax 865-576-2347

From: Clay, Paul F [mailto:pclay@tva.gov]
Sent: Thursday, April 08, 2010 11:07 AM
To: Darby, Jason Daniel
Cc: Cagley, April M
Subject: Request for Concurrence--Decon of Recovered Skimmer Wall Material TVA Kingston

Jason-

This is a follow-up to our telephone conversation of Monday April 5 regarding TVA's work to recover debris from the plant intake channel skimmer wall that was destroyed by the December 2008 ash spill.

I am attaching a figure depicting vibracore sampling locations. As we cored, we collected samples from both the ash (if present) and native sediment layer in the core. The Cs-137 data for the ash is in red (upper box) and for the sediment blue (lower box). The skimmer wall debris is located at the top center of this figure where the plant intake channel meets the Emory River. The sampling points immediately adjacent to the skimmer wall debris are 56-61 in the channel and 50-55 in the Emory River.

A TVA subcontractor has mobilized a crane and barge to recover the skimmer wall debris which is primarily large sections of concrete and steel. As the material is lifted from the water, any ash and sediment will be pressure washed until visually clean (note that the work area will be surrounded by turbidity curtains to mitigate movement of the suspended ash/sediment). The cleaned material will be placed on a barge and transported to the contractor's facility for recycling.

The EPA On-scene Coordinator has requested concurrence that characterization of the recovered, decontaminated skimmer wall debris for Cs-137 is not necessary before it is transported from the area. Your response to this e-mail would be acceptable to him.

I will call shortly to follow up and provide any additional information you might need.

Thanks,

Paul

Paul Clay, PMP
Restoration Services, Inc.
TVA Ash Recovery Project
865-567-6540