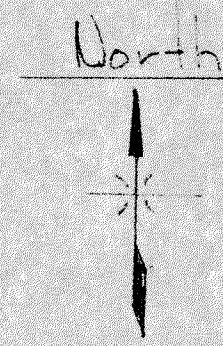
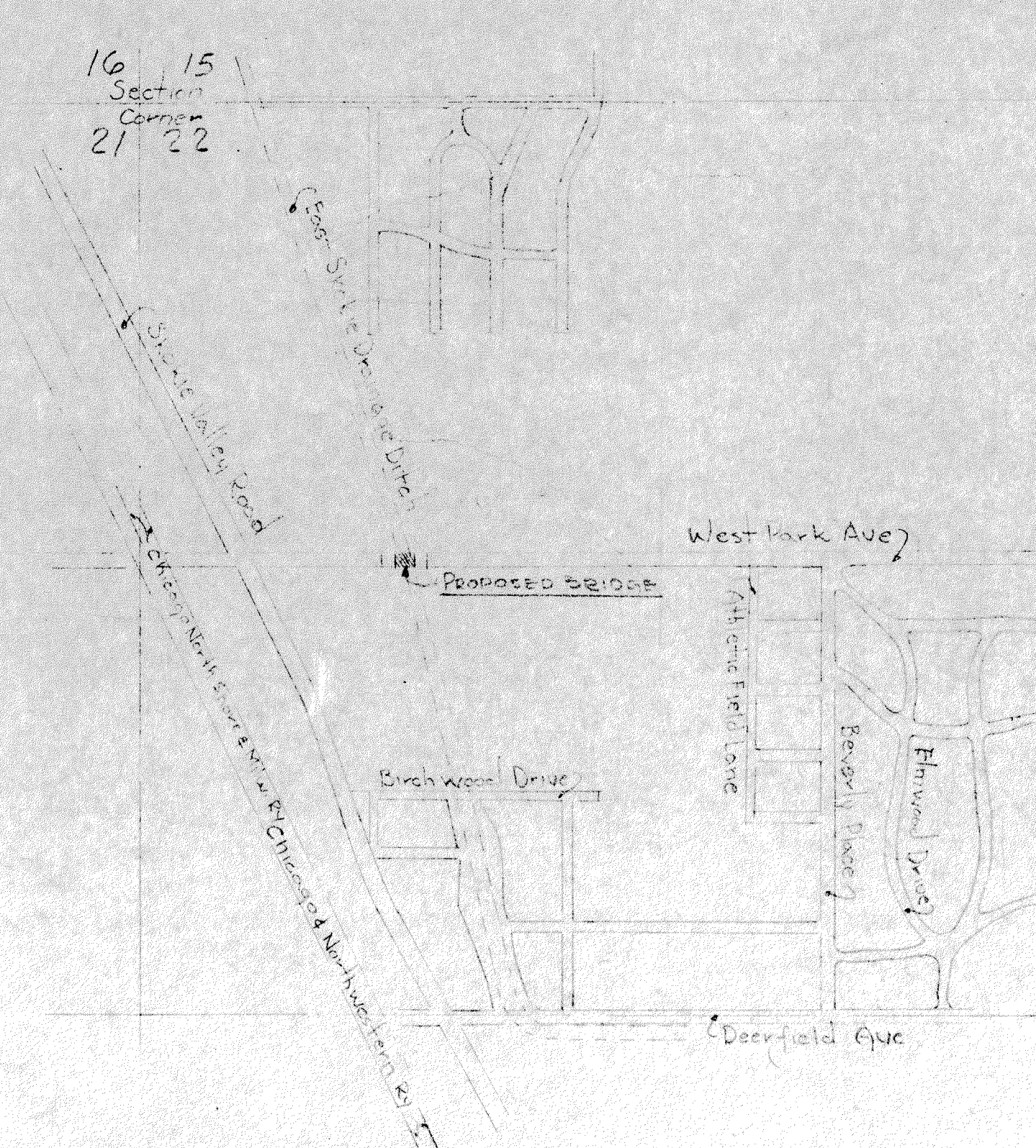


CITY OF HIGHLAND PARK, ILLINOIS
 CITY COUNCIL
 PLANS FOR PROPOSED
 SIMPLE SPAN STEEL BEAM BRIDGE
 LOCATED AT THE
 INTERSECTION EAST SKOKIE DRAINAGE DITCH
 AND WEST PARK AVE

SUMMARY OF QUANTITIES

1. Removal of Existing Bridge	one
2. Class X Concrete	238 cu. Yds.
3. Reinforcing Steel	31660 lbs.
4. Treated Timber Pile	2378 lin. ft.
5. Structural Steel	66045 lbs.
6. 8" Diam. Corrugated Perforated Pure Iron Pipe	137 lin. ft.
7. Compacted Fill	1056 cu. Yds.
8. 8" Waterbound Macadam with Double Seal Asphaltic Surface	670 sq. Yds.
9. Handrail	206 lin. ft.
10. Existing 8" Diam. Watermain	one
11. 24" Diam. Corrugated Pure Iron Pipe	90 lin. ft.

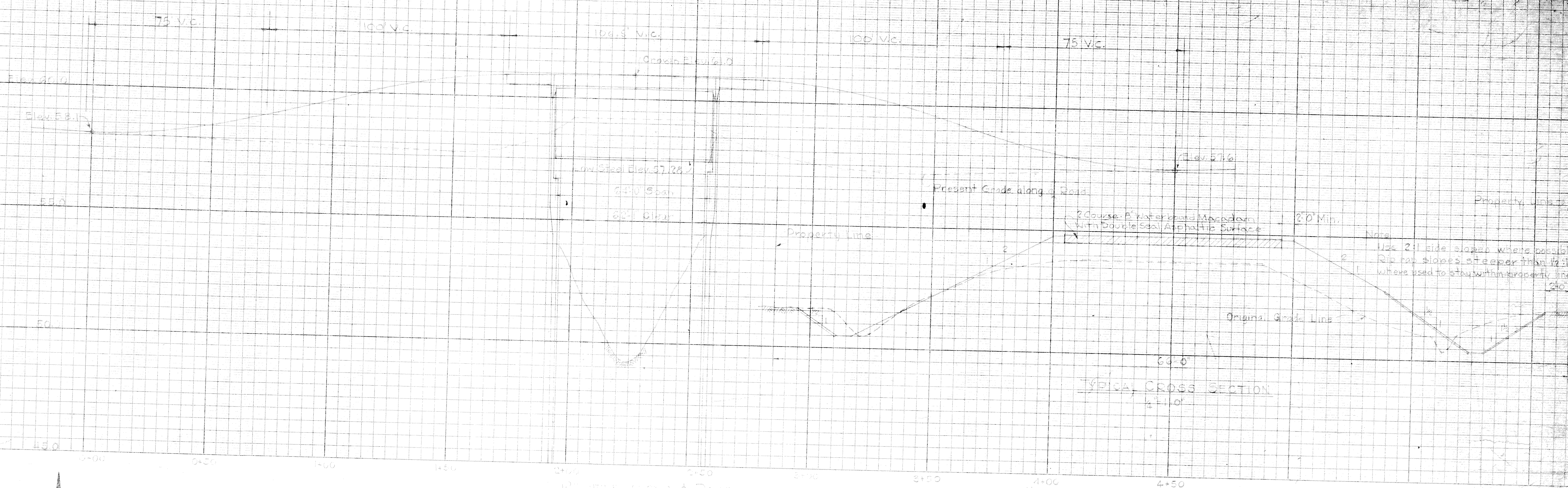


INDEX OF SHEETS

- SHEET A - Title Sheet
- SHEET 49-601 - Plot Plan & Profile
- SHEET 49-602 - General Plan & Sections
- SHEET 49-603 - Details of East Abutment
- SHEET 49-604 - Details of West Abutment
- SHEET 49-605 - Structural Steel Details
- SHEET 49-606 - Deck Details
- SHEET 49-607 - Cross Sections

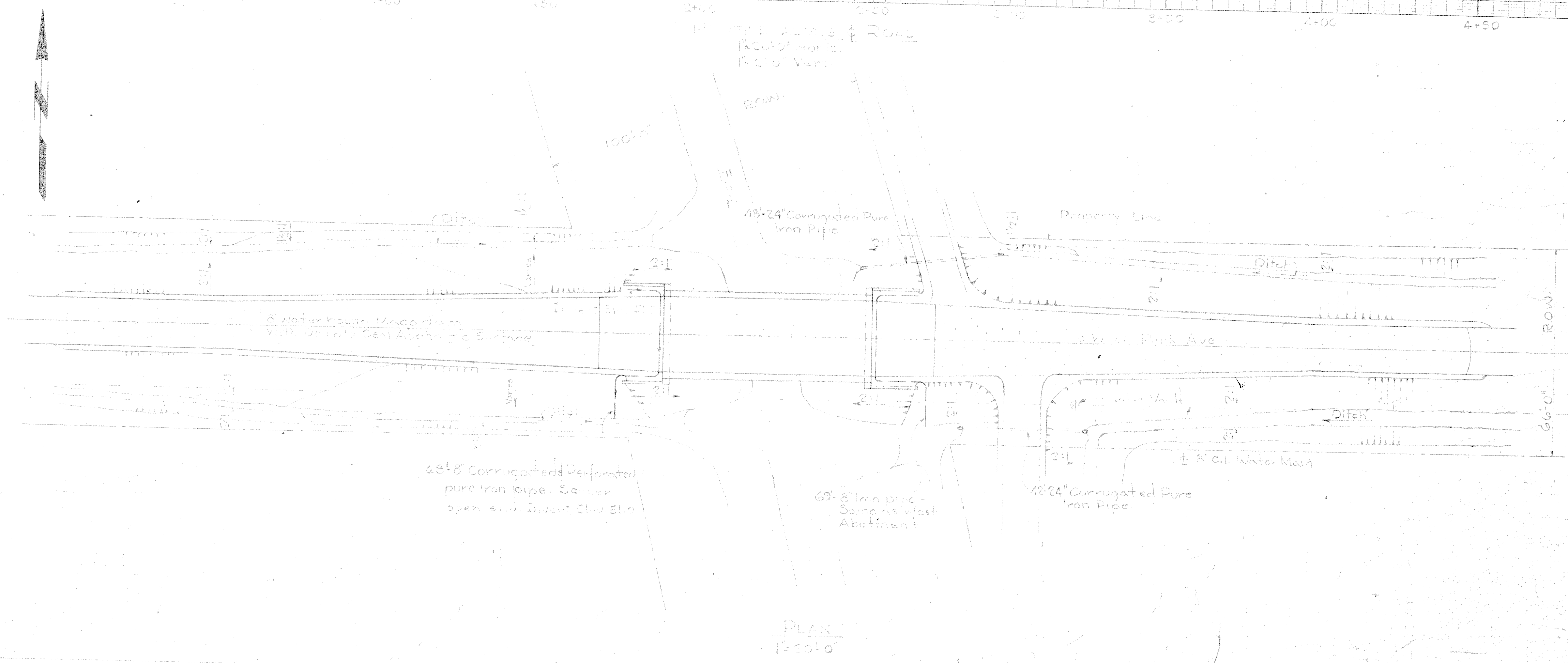
MADE IN U.S.A.
CHRYSLER ENGINEERING CO.
LARGE - 8 1/2" x 11"

MADE IN U.S.A.
CHRYSLER ENGINEERING CO.
LARGE - 8 1/2" x 11"



TYPICAL CROSS SECTION
4' 11" 0"

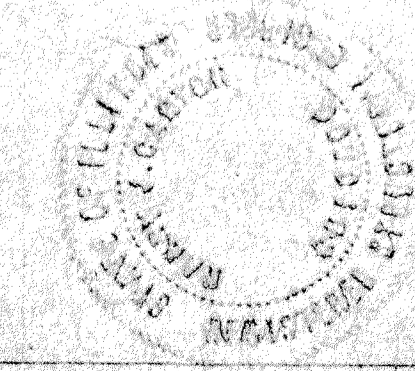
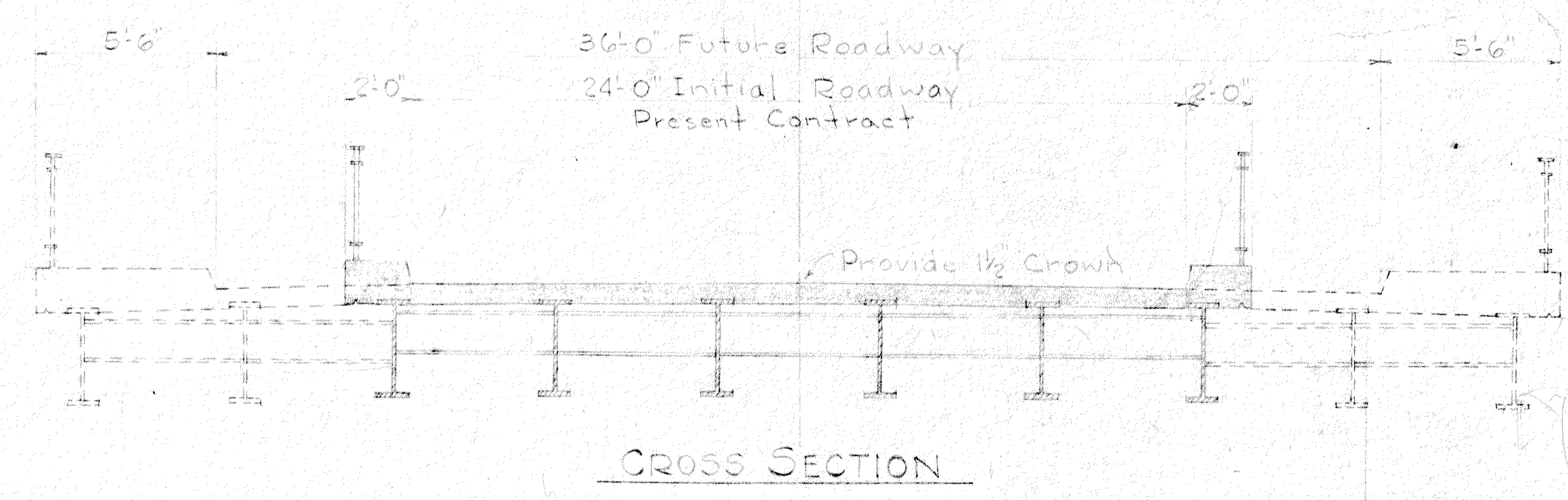
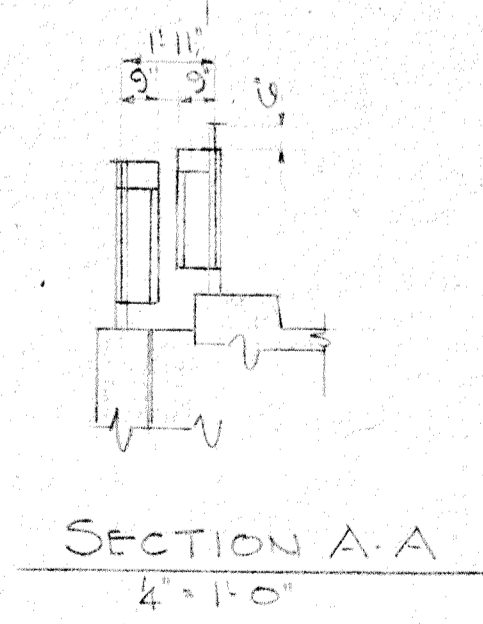
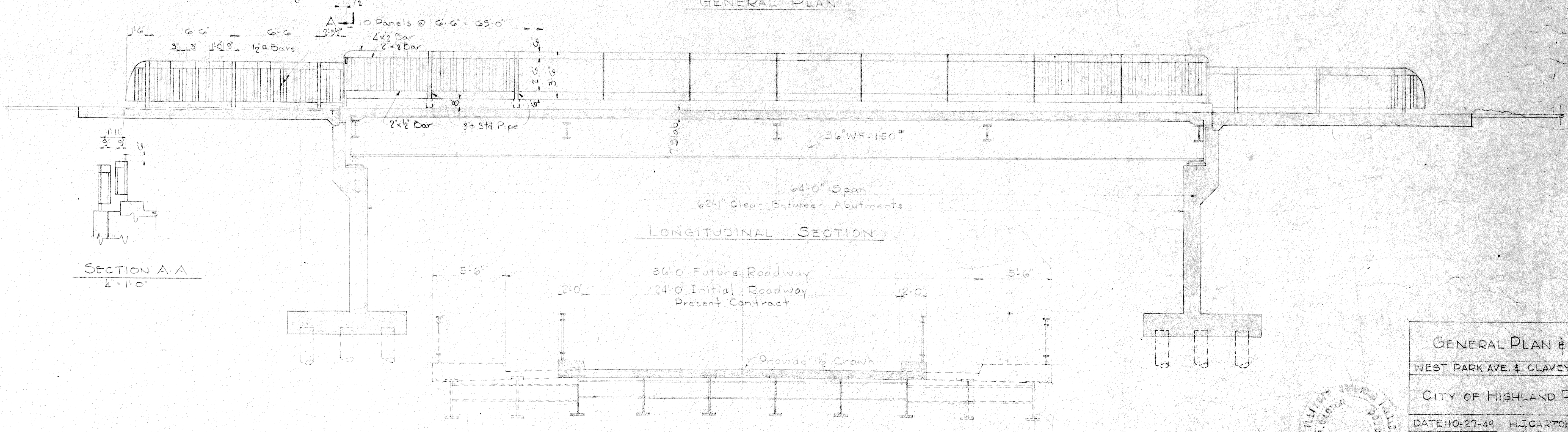
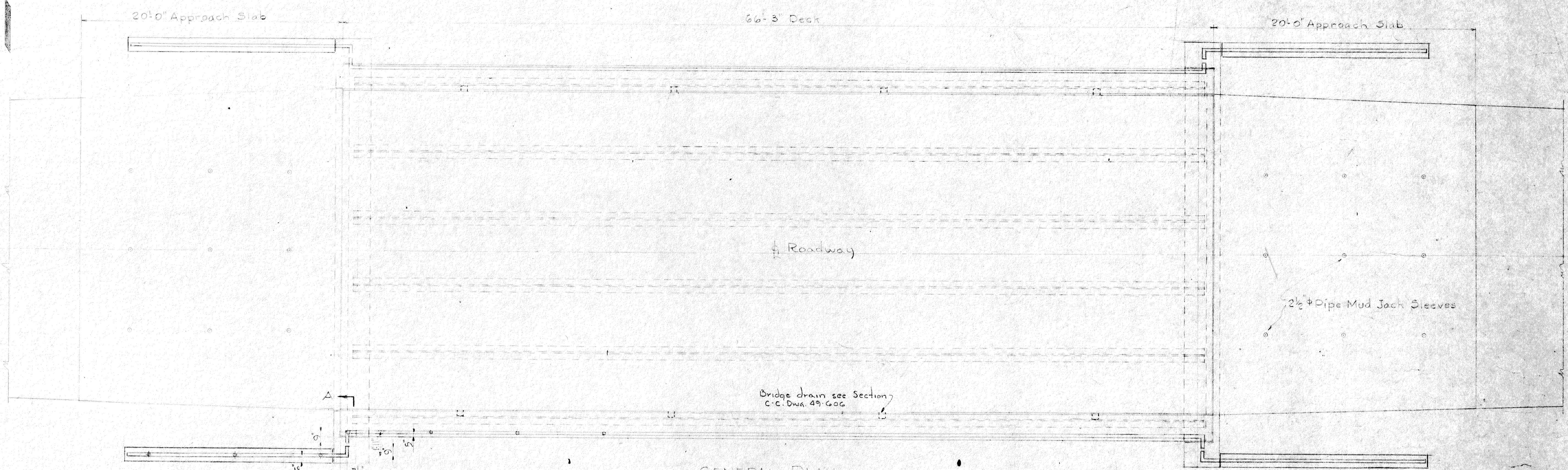
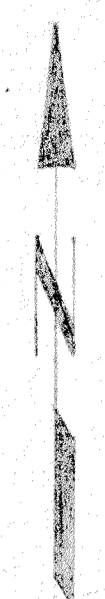
Note:
Use 2:1 side slopes where possible.
If any slopes steeper than 2:1
where used to stay within property line
2' 0" Min.



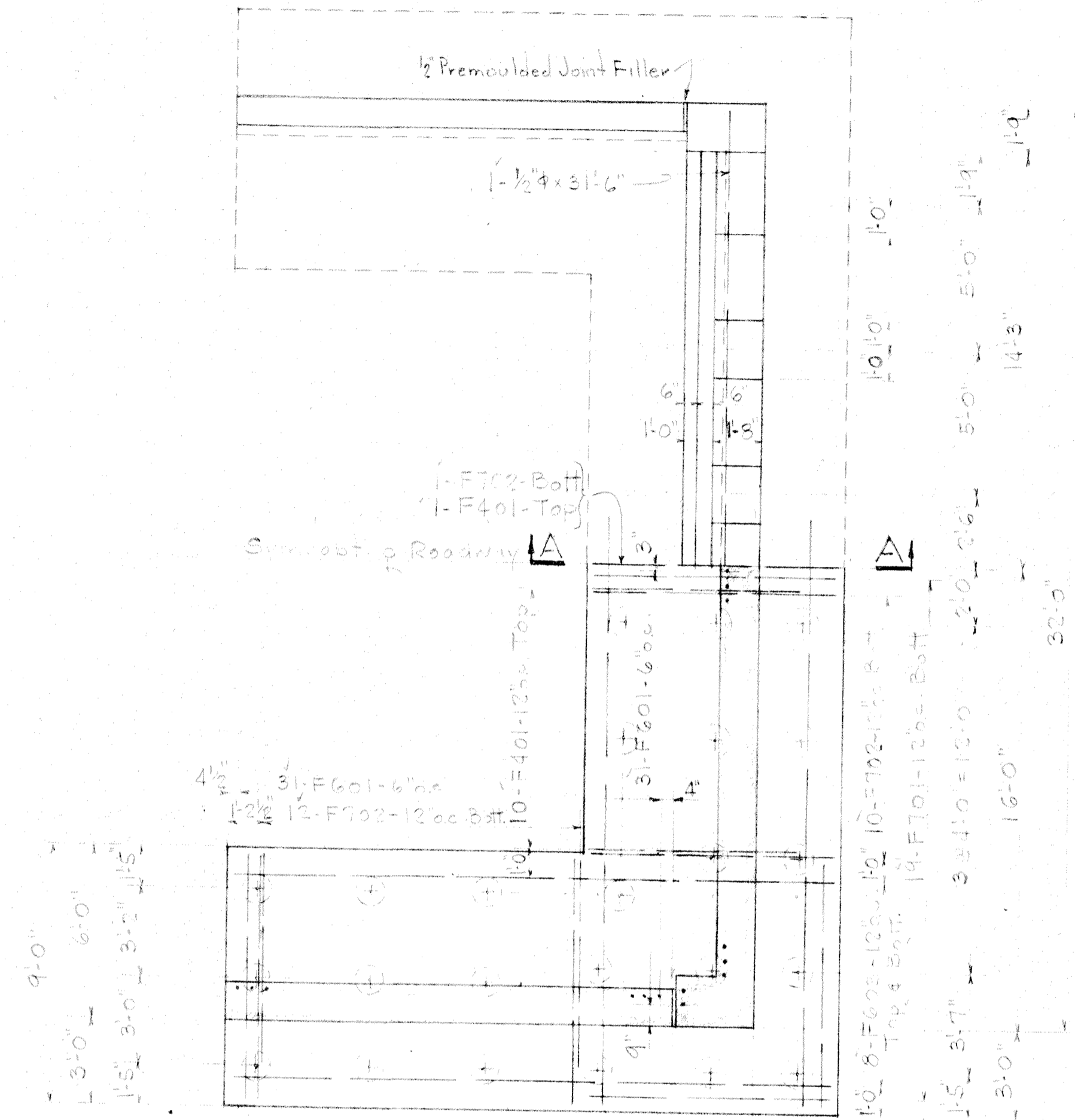
PLAN
1" = 50' 0"

PLOT PLAN & PROFILE		
WEST PARK AVE. BRIDGE		
CITY OF HIGHLAND PARK ILLINOIS		
DATE 10-25-49	H.J. CARTON	DRAWING NO.
SCALE As Noted	R.S.E.	
DESIGN 112	5011 N. Major Ave	4-1-60
APPROVED H.J.C.	CHICAGO	

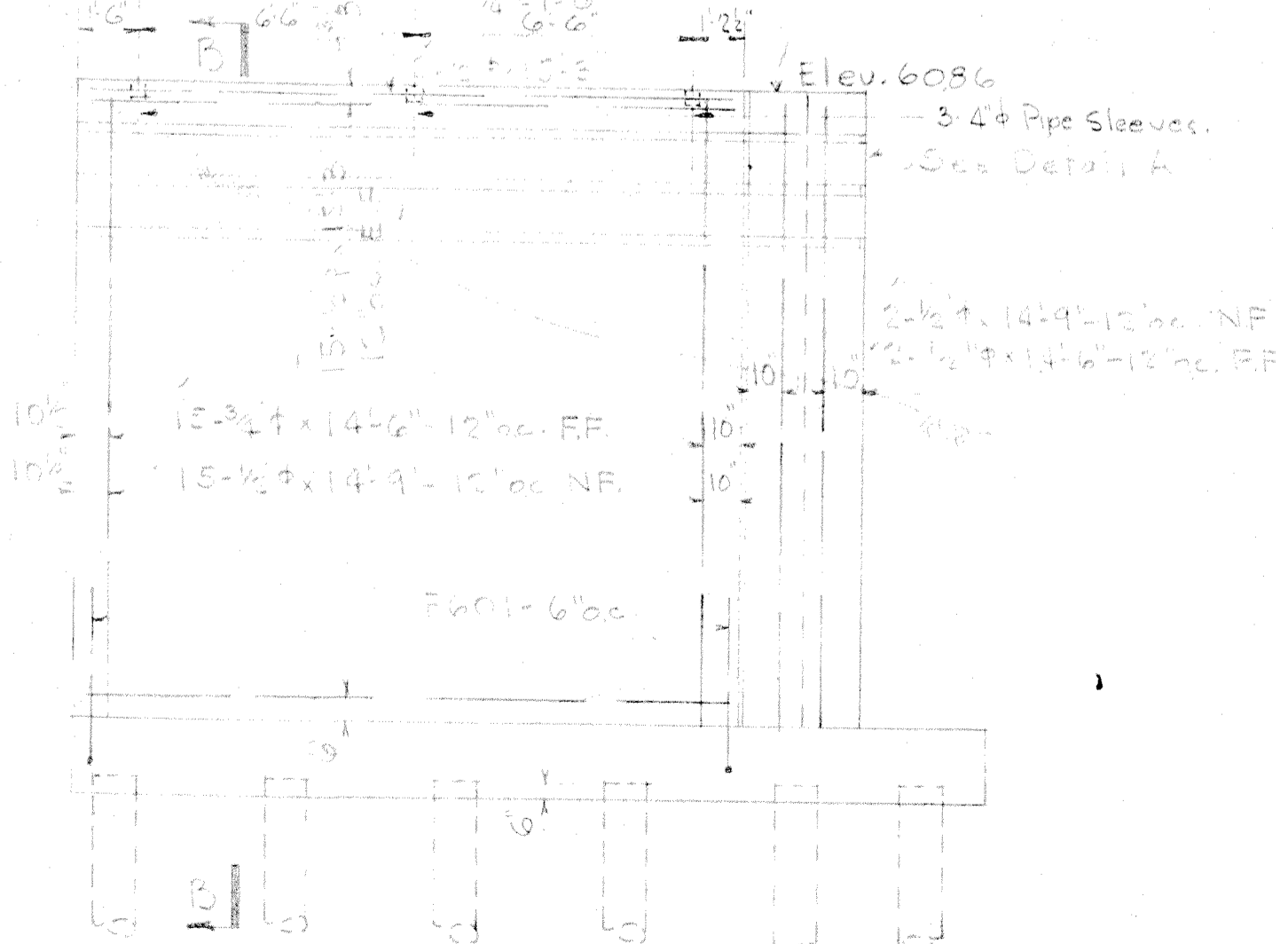




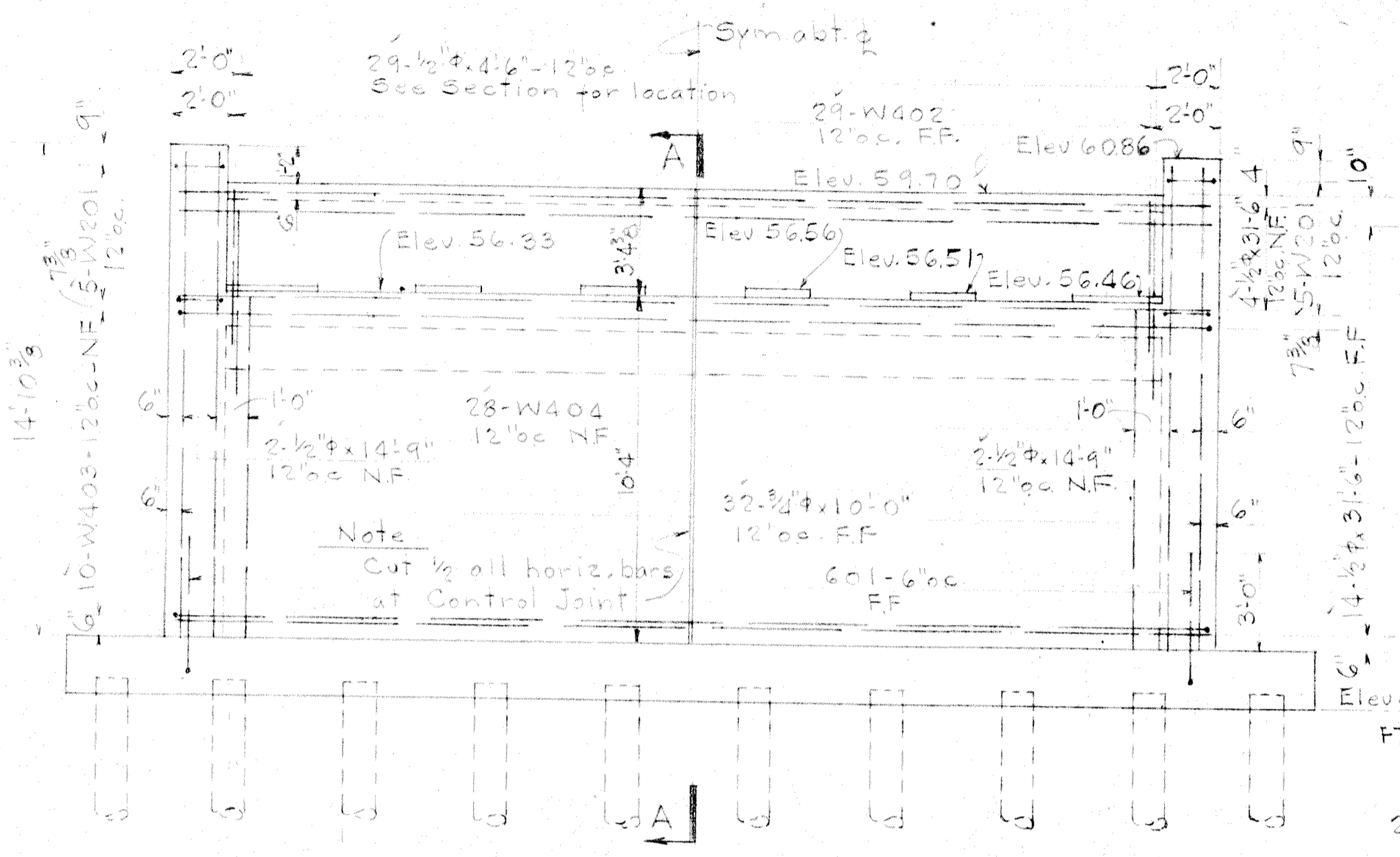
GENERAL PLAN & SECTIONS		
WEST PARK AVE. & CLAVEY RD. BRIDGES		
CITY OF HIGHLAND PARK ILLINOIS		
DATE: 10-27-49	H.J. CARTON	DRAWING NO.
SCALE: 1/4"=1'-0"	R.S.E.	
DESIGN: K.P.	5011 N. Major Ave.	49-802
APPROVED: H.C.	CHICAGO	



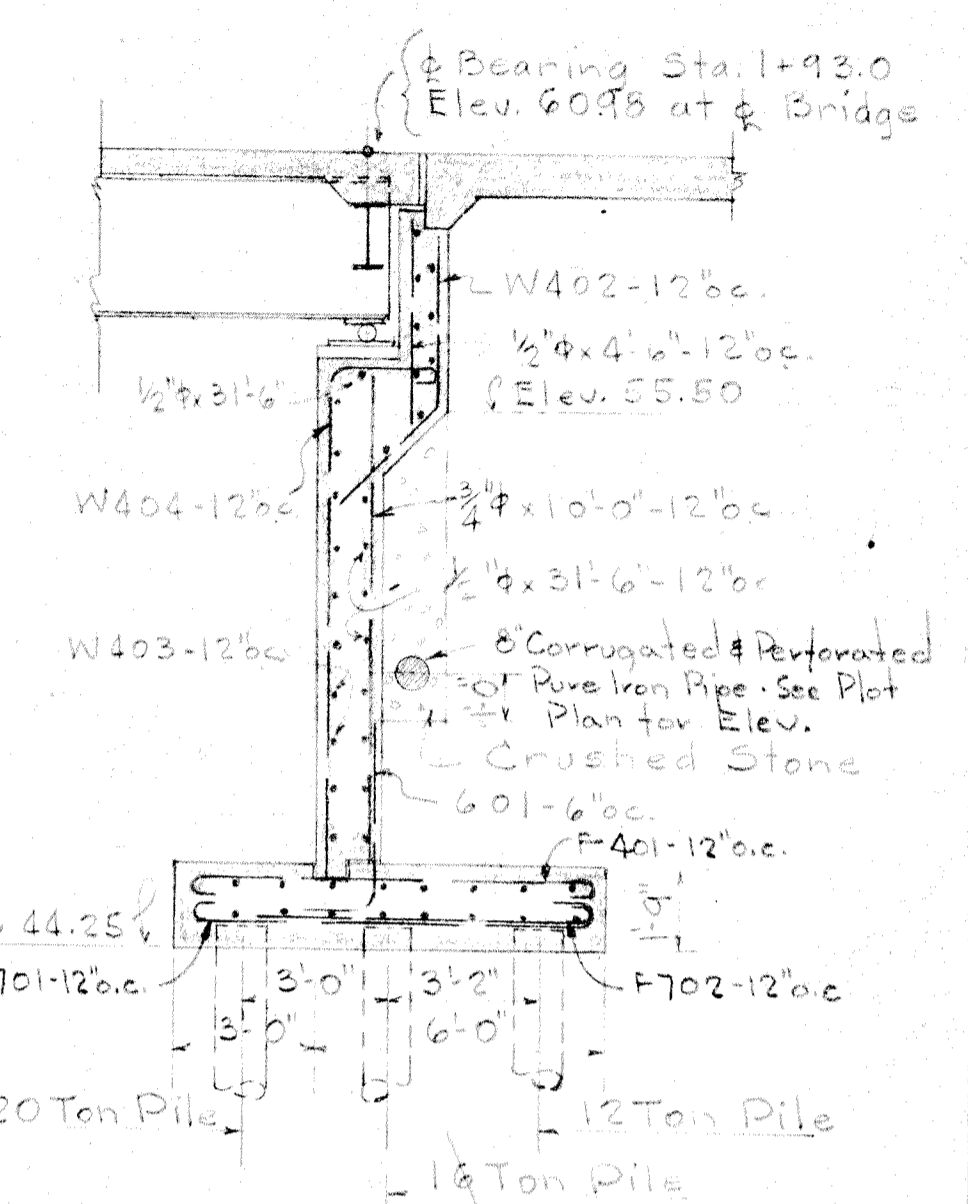
HALF PLAN-TOP OF ABUTMENT-ABOVE
HALF PLAN-ABUTMENT FOOTING-BELOW



ELEVATION OF S.W. WING WALL
ELEVATION OF N.W. WING WALL-OPP. HAND



ELEVATION OF WEST ABUTMENT



SECTION A-A

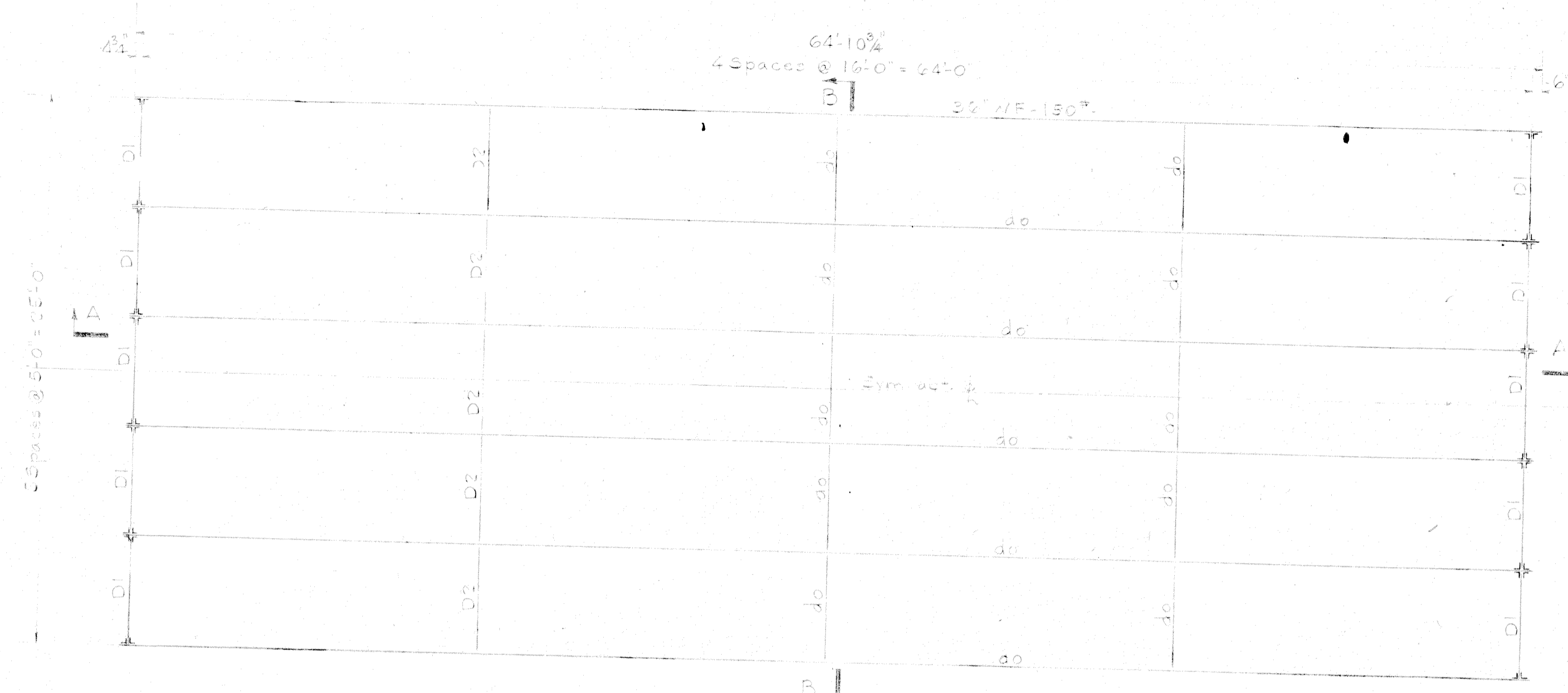
BENT BAR DIAGRAMS															
MARK	SIZE	LGTH	A	B	C	D	E	F	G	H	J	K	L	M	DIAGRAM
F701	3/8"	10'-3"	8'-6"	10'-6"	7'	5 1/2"									
F603	3/4"	22'-3"	20'-11"	8'	6'	4 1/2"									
F401	1/2"	9'-6"	8'-6"	6'	4'	3"									
F702	7/8"	9'-3"	7'-0"	10'	7'	5 1/2"									
F602	3/4"	22'-0"	21'-3"	9'	6'	4 1/2"									
F601	3/4"	5'-6"	4'-0"	1'-6"	1'-8"	3 1/4"									
W402	1/2"	6'-6"	3'-6"	3'-0"	2'-1 1/2"										
W403	1/2"	35'-9"	2'-0"	4'	3'-11"	4'	2'-2 1/2"	3'-6"							
W404	1/2"	12'-6"	1'-6"	11'	1'-8"	1'-5"	3"	11'-0"	10'-0"	2'-2 1/2"					
W201	1/4"	7'-6"	1'-3"	2'-2"	4'										

BILL OF MATERIAL				
MARK	NO	SIZE	LGTH	TYPE
	30	3/2"	14'-6"	Straight
	32	3/8"	10'-0"	"
	19	1/2"	31'-6"	Straight
	64	1/2"	15'-3"	"
	38	1/2"	14'-9"	"
	4	1/2"	14'-6"	"
	29	1/2"	4'-6"	"
F701	80	7/8"	10'-3"	Bent
F702	45	7/8"	8'-3"	"
F601	124	3/4"	5'-6"	"
F602	32	3/4"	22'-0"	"
F603	32	3/4"	22'-3"	"
F401	45	1/2"	9'-6"	"
W402	29	1/2"	6'-6"	"
W403	10	1/2"	35'-9"	"
W404	28	1/2"	12'-6"	"
W201	10	1/4"	7'-6"	"
Class 'X' Concrete				50 Cu.Yds.
Reinforcement				9180 Lbs.
Timber Piling				1184 Lin.Ft.

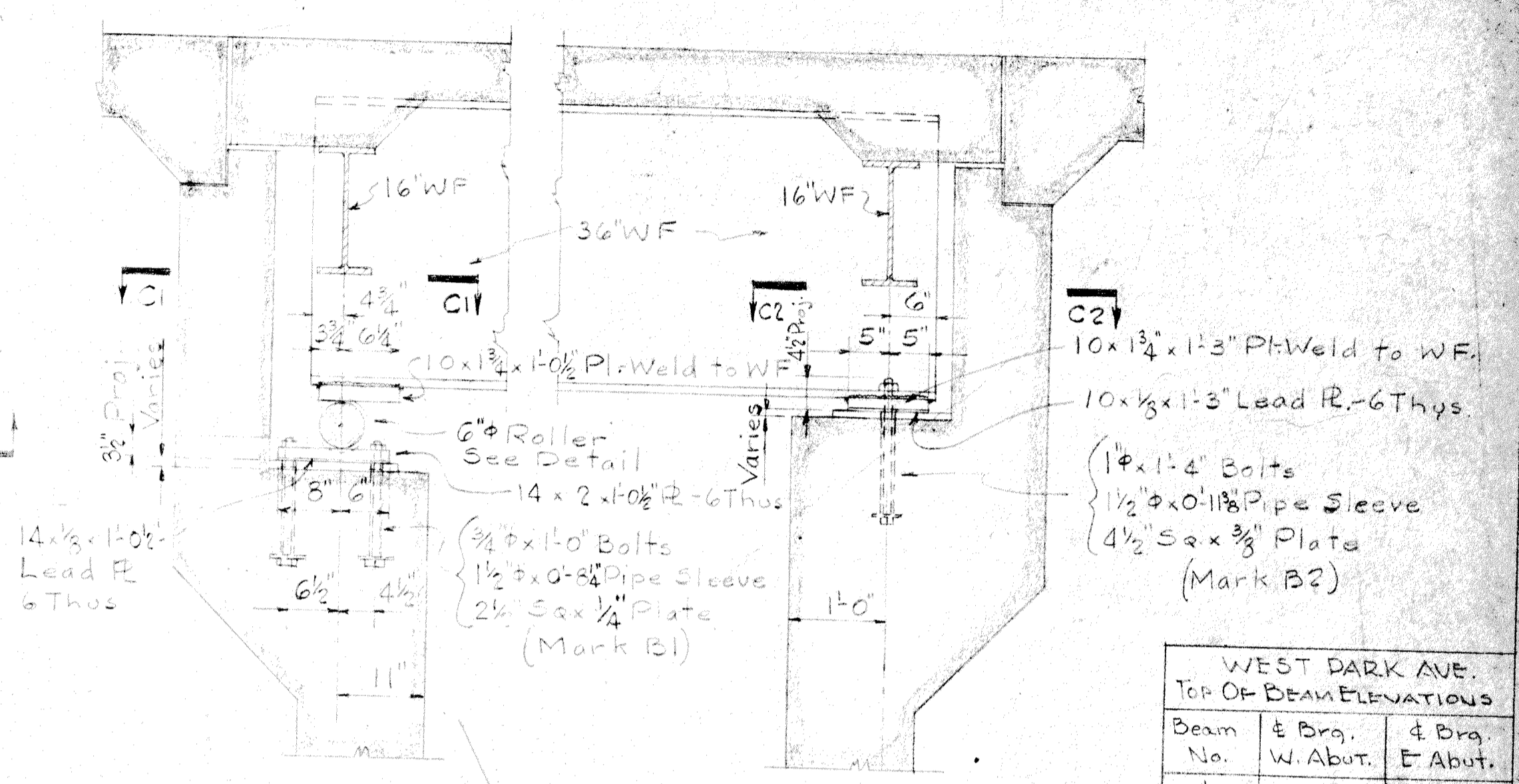
NOTES
 Estimate length of 20 Ton pile - 28'-0"
 16 - 24'-0"
 12 - 20'-0"
 All bars to have 2" minimum cover.
 All bar laps to be 40 bar diameters min.
 See Drawg. 49-603 for sections & details.

DETAILS OF WEST ABUTMENT
 WEST PARK AVENUE BRIDGE
 CITY OF HIGHLAND PARK ILLINOIS

DATE 11-10-49	H.J. CARTON R.S.E.	DRAWING NO.
SCALE As Noted		
DESIGN R.H.	5011 N. Major Ave	49-604
APPROVED H.J.C.	CHICAGO	

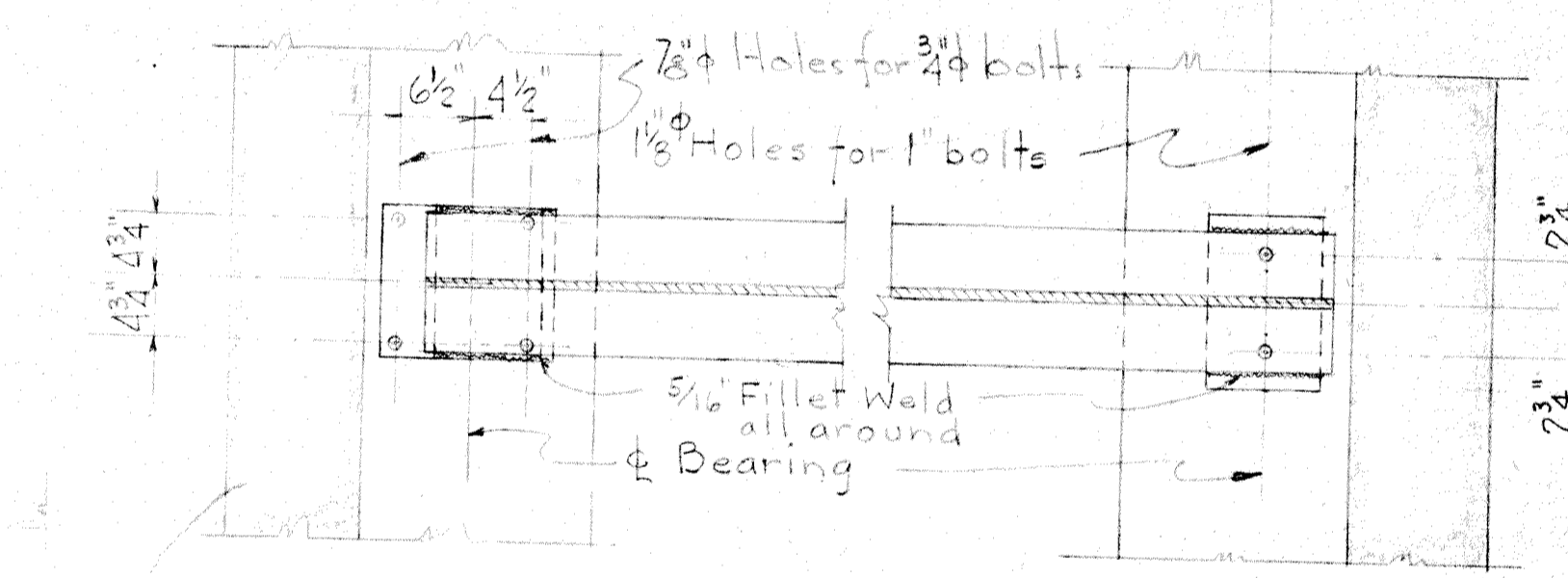


FRAMING PLAN
1/2" = 1'-0"



DETAILS OF BEARINGS
3/4" = 1'-0"

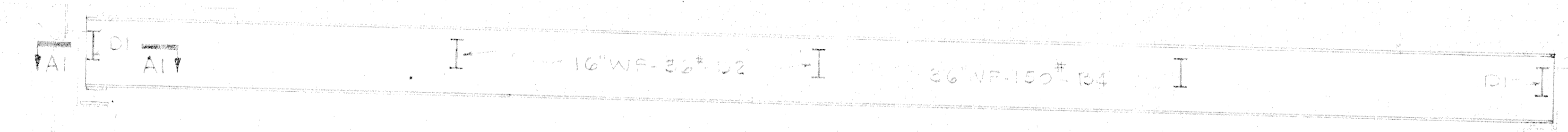
WEST PARK AVE. TOP OF BEAM ELEVATIONS			
Beam No.	W. Abut.	E. Abut.	
1	60.27	60.32	
2	60.32	60.32	
3	60.37	60.37	
4	60.37	60.37	
5	60.32	60.32	
6	60.27	60.27	



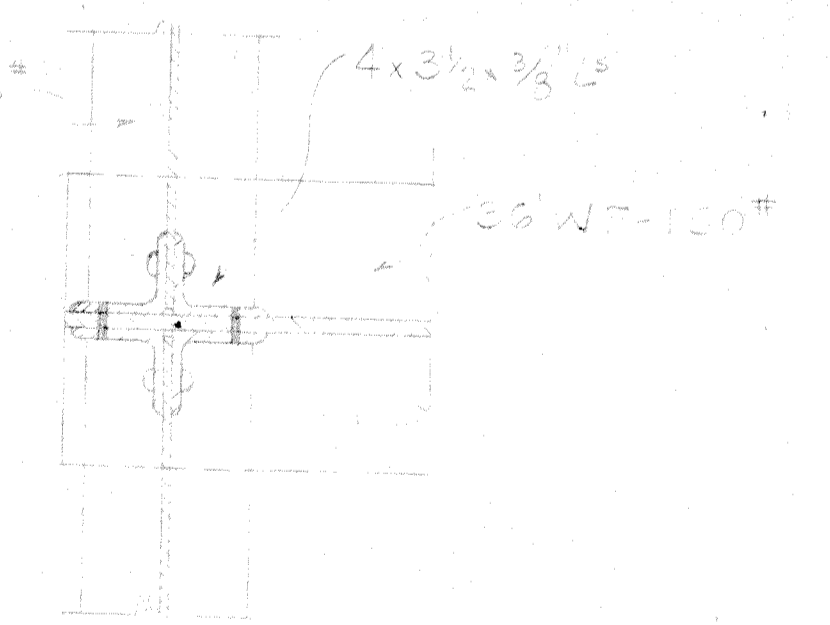
SECTION C1-C1
3/4" = 1'-0"

SECTION C2-C2
3/4" = 1'-0"

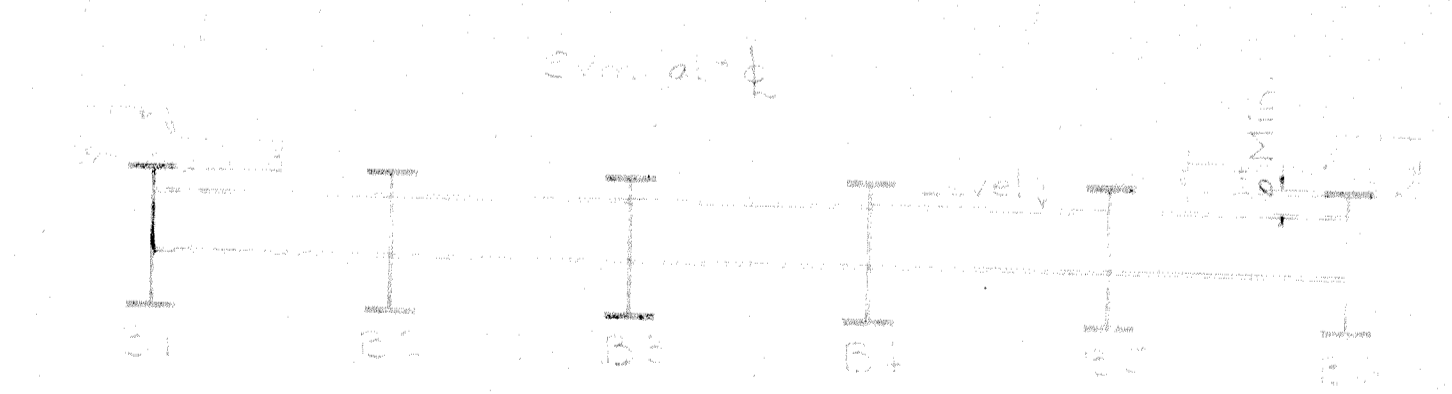
CLAVEY ROAD TOP OF BEAM ELEVATION			
Beam No.	W. Abut.	E. Abut.	
1	57.27	57.27	
2	57.32	57.32	
3	57.37	57.37	
4	57.37	57.37	
5	57.32	57.32	
6	57.27	57.27	



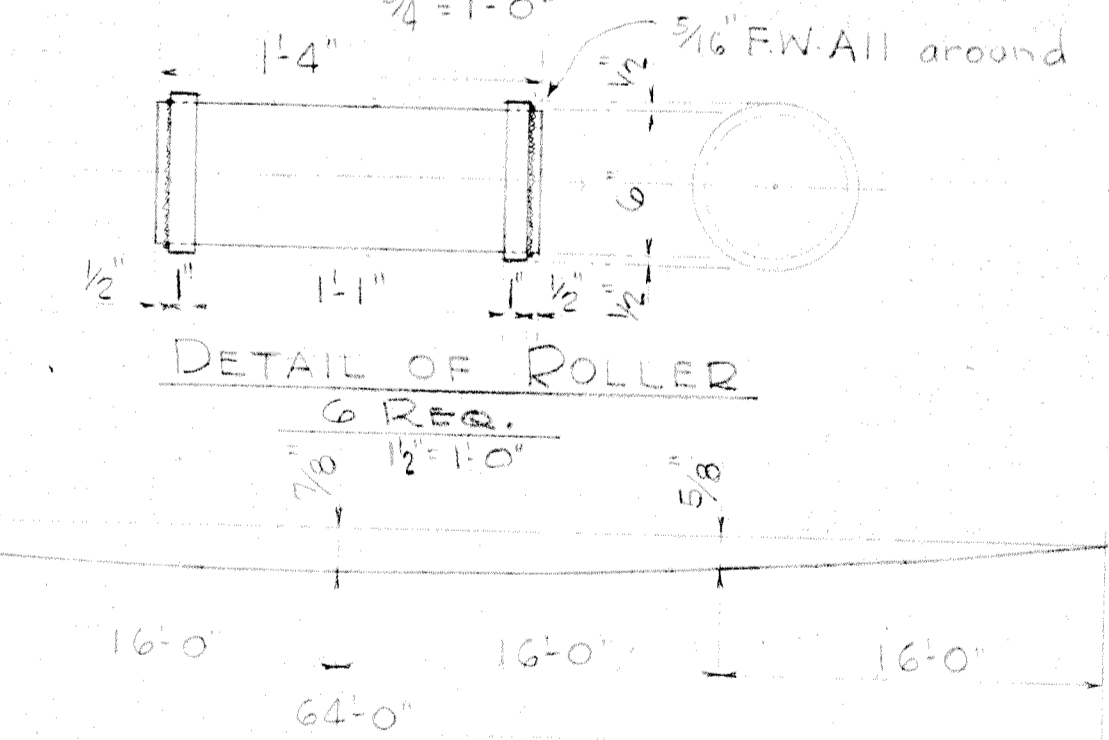
SECTION A-A
1/2" = 1'-0"



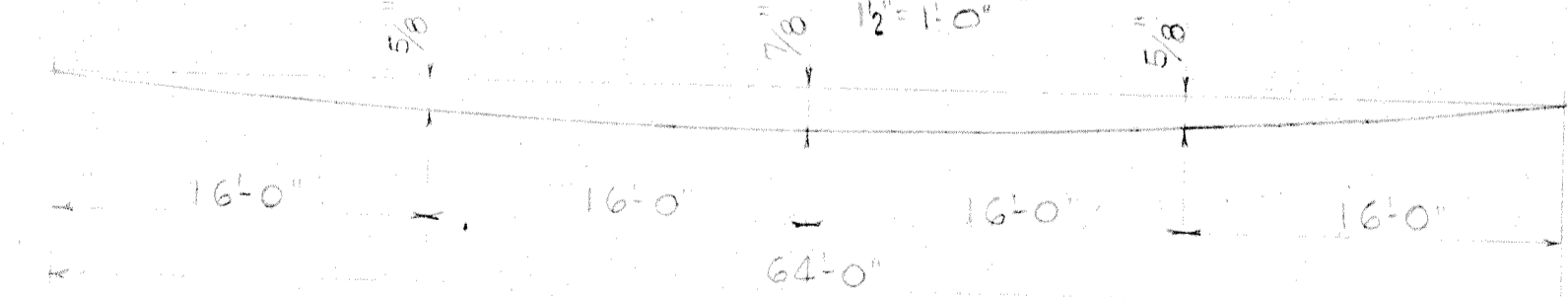
SECTION A1-A1
1/2" = 1'-0"



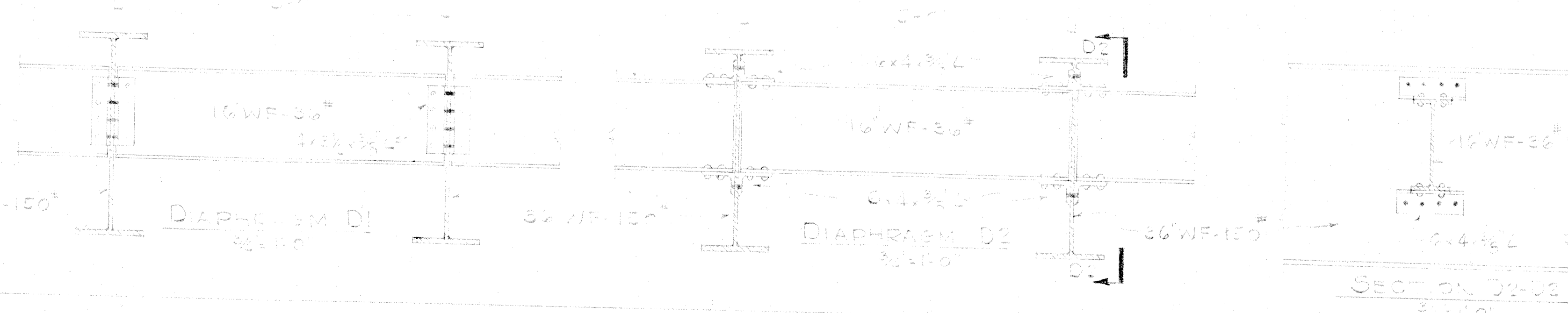
SECTION B-B
1/2" = 1'-0"



DETAIL OF ROLLER
3/4" = 1'-0"



DEAD LOAD DEFLECTION DIAGRAM
Concrete fillers shall be increased in the amount of the Dead Load Deflection.



SECTION D2-D2
3/4" = 1'-0"

BOLT SCHEDULE						
Mark	No.	Size	Lgth.	Thrd.	Location	Detail
B1	24	3/4"	1'-0"	2"	West Abut.	Top of Concrete
B2	12	1"	1'-4"	2 1/2"	East Abut.	1/2" Pipe Sleeve

NOTES

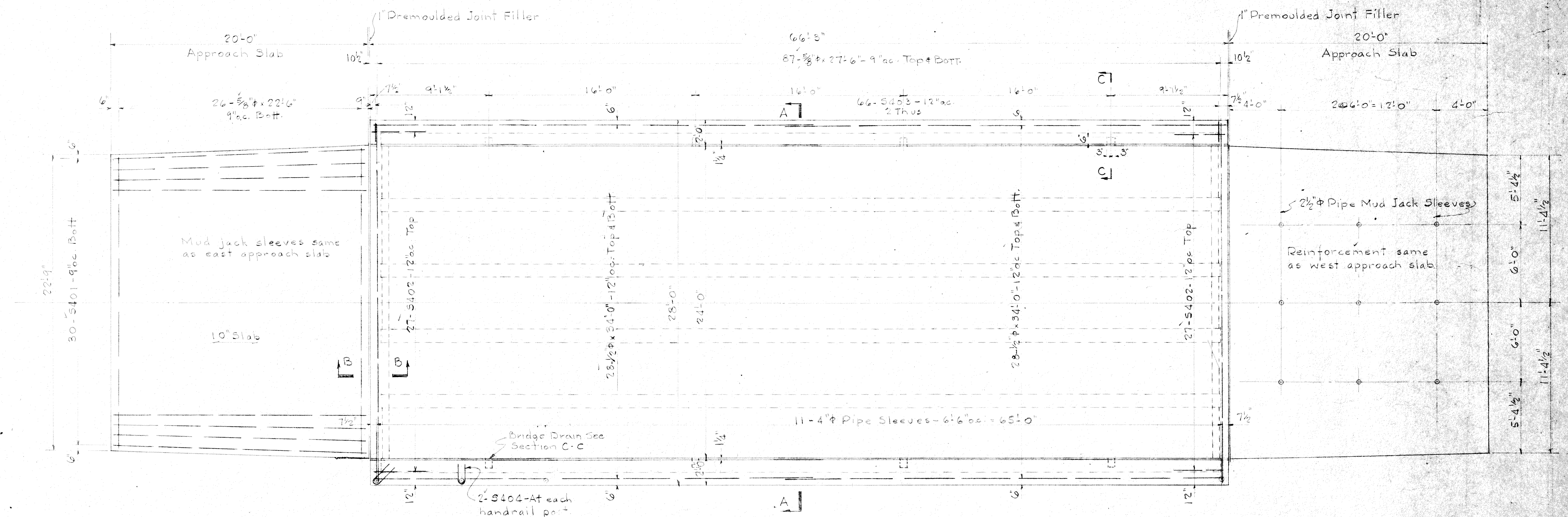
- Structural steel shall be carbon steel and shall conform to ASTM Spec. A7-46
- Rivets shall be 3/8" Open holes 1 1/2"
- Field connections shall be riveted.
- Holes for rivets shall be subpunched 1/16" and reamed to 1/16"
- Welding shall conform to the Spec. of the A.W.S. for fusion Welding of Hwy and Railroad Bridges 1941.
- Contact surfaces of shop connections and surfaces to be in contact with placed concrete shall not be painted.
- Exposed surfaces shall be given one shop coat of Red Lead and two field coats of Aluminum paint.
- Rollers shall be turned down from a solid bar cast steel (ASTM A27 Grade 60)
- Edges of plates in contact with rollers to be cut square, finished or rolled.
- Estimated weights:
Beams, diaphragms & conn. angles. 63570
Rollers, plates bolts & sleeves. 1990
Lead plates. 85

All quantities indicated are for one bridge.

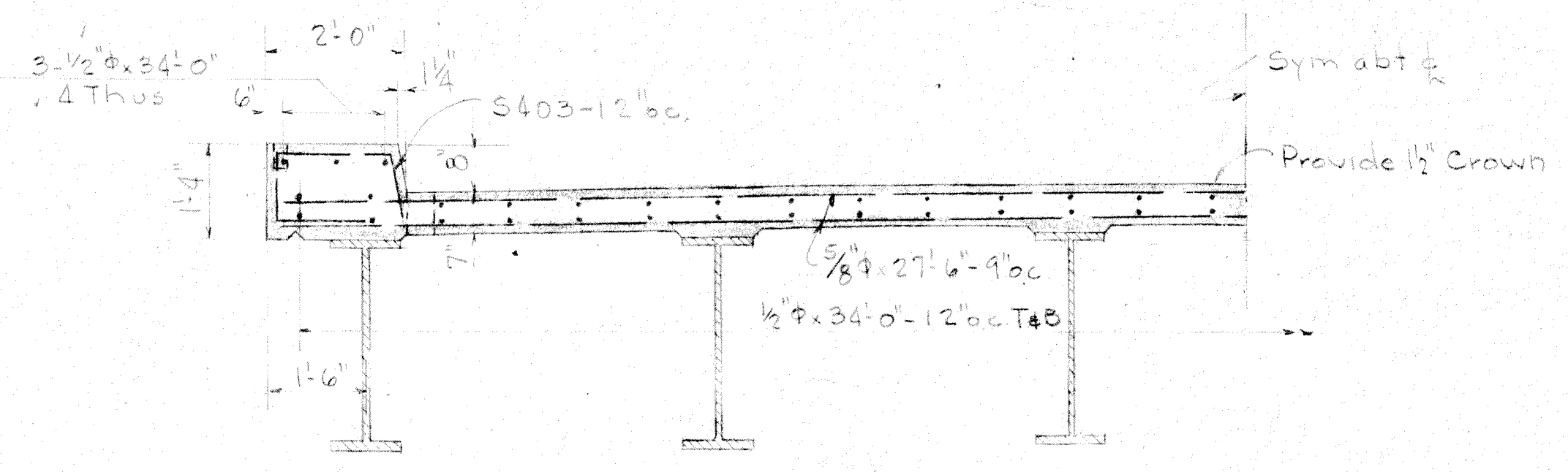
STRUCTURAL STEEL DETAILS
WEST PARK AVE & CLAVEY ROAD BRIDGES

CITY OF HIGHLAND PARK ILLINOIS

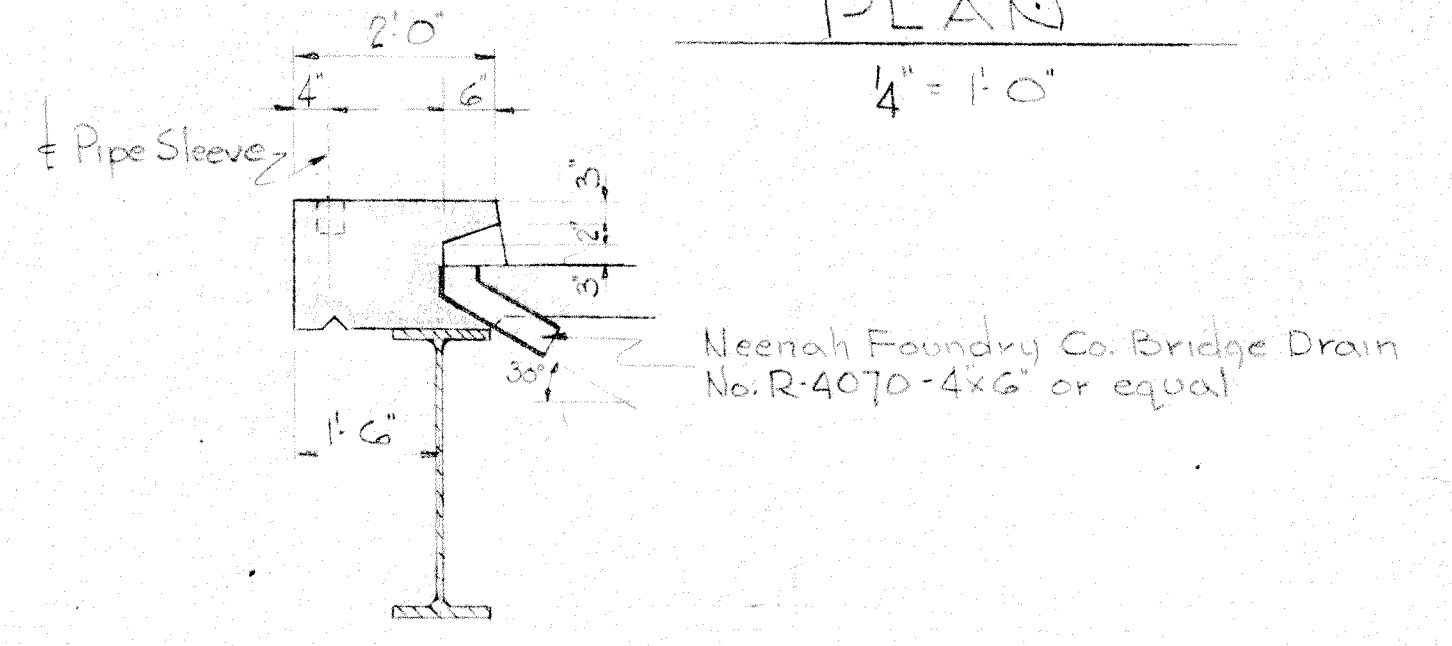
DATE 11-15-49	H.J. CARTON	DRAWING NO.
SCALE As Noted	D.S.E.	
DESIGN H.J.C.	5011 N. Major Ave	49-60
APPROVED H.J.C.	CHICAGO	



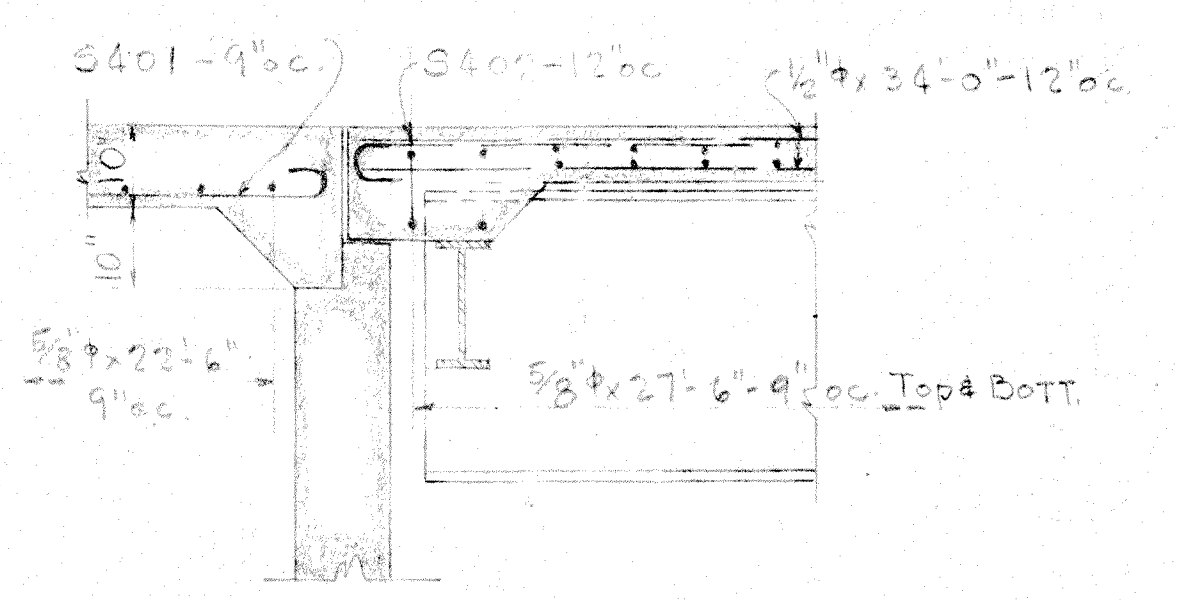
PLAN
1/4" = 1'-0"



SECTION A-A
1/2" = 1'-0"



SECTION C-C
TYPICAL SECTION FOR BRIDGE DRAIN
1/2" = 1'-0"



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

BILL OF MATERIAL				
MARK	NO.	SIZE	LGTH	TYPE
	174	5/8"	27'-6"	Straight
	52	5/8"	22'-6"	"
	124	1/2"	34'-0"	"
S402	54	1/2"	5'-0"	"
S401	60	1"	21'-9"	"
S404	44	3/8"	3'-3"	"
S403	132	1/2"	4'-9"	"
Class X Concrete				76 Cu Yds
Reinforcement				13240 Lbs.

Notes
All bars to have 1" minimum cover
All bar laps to be 40 diameter min.

BENT BAR DIAGRAMS															
MARK	SIZE	LGTH	A	B	C	D	E	F	G	H	J	K	L	M	DIAGRAM
S401	1"	21'-9"	19'-7"	15'-1"	10"	8"									(D) A (C) B
S402	1/2"	5'-0"	4'-6"	6"	4"	3"									(C) (D) A (B)
S404	3/8"	3'-3"	1'-3"	9"	6"	5 1/4"									(B) (D) A (C)
S403	1/2"	4'-9"	1'-3"	1'-0"	1'-7"	11"	2"								(B) (C) A (D)

DETAIL OF DECK SLAB & APPROACH SLABS		
WEST PARK AVE. & CLAVEY ROAD BRIDGES		
CITY OF HIGHLAND PARK ILLINOIS		
DATE 11-25-49	H.S. CARTON	DRAWING NO.
SCALE As Noted	R.S.E.	
DESIGN H.S.	5011 N. Major Ave.	49-606
APPROVED H.S.	CHICAGO	

BRIDGE REPAIR QUANTITIES

CITY OF
HIGHLAND
PARK

QUANTITIES
ALL
BRIDGE
PROJECTS

DESIGN BY



ALFRED
BENESCH
& COMPANY
consulting engineers

ITEM NO.	DESCRIPTION	UNIT	CLAVEY	DEAN	FOREST	JUDSON	LAKE COOK	LINDEN	WADE	TOTAL
	281001	STONE DUMPED RIPRAP	TON	150	-----	-----	-----	-----	-----	150
*	281002	SLOPE REPAIR	SQ. YD.	-----	100	-----	50	-----	50	200
	282003	FILTER FABRIC FOR USE WITH RIPRAP	SQ. YD.	100	-----	-----	-----	-----	-----	100
	406004	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4	5	-----	8	-----	16	33
	406005	BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TON	8	15	48	25	-----	34	130
	440006	BITUMINOUS SURFACE REMOVAL	SQ. YD.	107	150	-----	222	-----	316	795
*	440007	BRIDGE DECK OVERLAY REMOVAL	SQ. YD.	176	517	405	329	-----	329	1756
	501008	BRIDGE RAIL REMOVAL	FOOT	-----	472	-----	-----	-----	-----	472
*	501009	REMOVAL OF EXISTING STRUCTURE	L.S.	-----	-----	1	-----	-----	-----	1
	503010	CONCRETE STRUCTURES	CU. YD.	-----	5.5	25.5	-----	-----	-----	31
	503011	PROTECTIVE COAT	SQ. YD.	-----	220	25	-----	-----	-----	245
*	503012	DECK SLAB REPAIR (PARTIAL)	SQ. YD.	10	10	-----	-----	-----	-----	20
*	503013	BRIDGE CURB REPAIR (PARTIAL)	SQ. YD.	4	-----	-----	-----	-----	-----	4
*	503014	BRIDGE CURB REPAIR (FULL DEPTH)	SQ. YD.	7	-----	-----	-----	-----	-----	7
*	503015	MISCELLANEOUS CONCRETE REPAIR	SQ. FT.	200	600	100	300	-----	300	1500
*	503016	REMOVAL AND REPLACEMENT AT DECK JOINT	FOOT	48	48	159	48	-----	48	351
*	503017	REPLACEMENT OF SALVAGED SUPERSTRUCTURE HARDWARE	L.S.	-----	-----	1	-----	-----	-----	1
*	504018	PRECAST CONCRETE DECK BEAM REPAIR	SQ. FT.	-----	-----	1000	200	-----	200	1400
*	504019	LONGITUDINAL KEY REPAIR	FOOT	-----	-----	300	200	-----	200	700
*	505020	REPAIR OF EXISTING BRIDGE RAIL	L.S.	1	-----	-----	-----	-----	-----	1
*	506021	CLEANING AND PAINTING STEEL BRIDGE, CLAVEY RD.	L.S.	1	-----	-----	-----	-----	-----	1
*	506022	CLEANING AND PAINTING STEEL BRIDGE, DEAN AVE.	L.S.	-----	1	-----	-----	-----	-----	1
*	506023	CLEANING AND PAINTING STEEL RAILING, CLAVEY RD.	L.S.	1	-----	-----	-----	-----	-----	1
	508024	REINFORCEMENT BARS, EPOXY COATED	POUND	-----	1160	6476	-----	-----	-----	7636
	510025	PIPE HANDRAIL, AVCON (SPECIAL)	FOOT	-----	472	-----	-----	-----	-----	472
*	510026	BRIDGE RAILING REPLACEMENT	FOOT	-----	-----	48	-----	-----	-----	48
	581027	WATERPROOFING MEMBRANE SYSTEM	SQ. YD.	176	517	405	329	-----	329	1756
*	701028	TRAFFIC CONTROL AND PROTECTION, CLAVEY RD.	L.S.	1	-----	-----	-----	-----	-----	1
*	701029	TRAFFIC CONTROL AND PROTECTION, DEAN AVE.	L.S.	-----	1	-----	-----	-----	-----	1
*	701030	TRAFFIC CONTROL AND PROTECTION, FOREST AVE.	L.S.	-----	-----	1	-----	-----	-----	1
*	701031	TRAFFIC CONTROL AND PROTECTION, JUDSON AVE.	L.S.	-----	-----	-----	1	-----	-----	1
*	701032	TRAFFIC CONTROL AND PROTECTION, LAKE COOK RD.	L.S.	-----	-----	-----	-----	1	-----	1
*	701033	TRAFFIC CONTROL AND PROTECTION, LINDEN AVE.	L.S.	-----	-----	-----	-----	-----	1	1
*	701034	TRAFFIC CONTROL AND PROTECTION, WADE ST.	L.S.	-----	-----	-----	-----	-----	1	1
*	Z00035	SAWING BITUMINOUS CONC. PAVEMENT	FOOT	48	48	-----	48	-----	48	192
*	Z00036	ALUMINUM GRATE SIDEWALK REPAIR	L.S.	1	-----	-----	-----	-----	-----	1
*	Z00037	STRIP SEAL JOINT ASSEMBLY WITH ELASTOMERIC CONCRETE HEADER	FOOT	-----	-----	-----	-----	142	60	202
		* SEE SPECIAL PROVISIONS								

REVISION/ISSUANCE		
NO.	TYPE	DATE

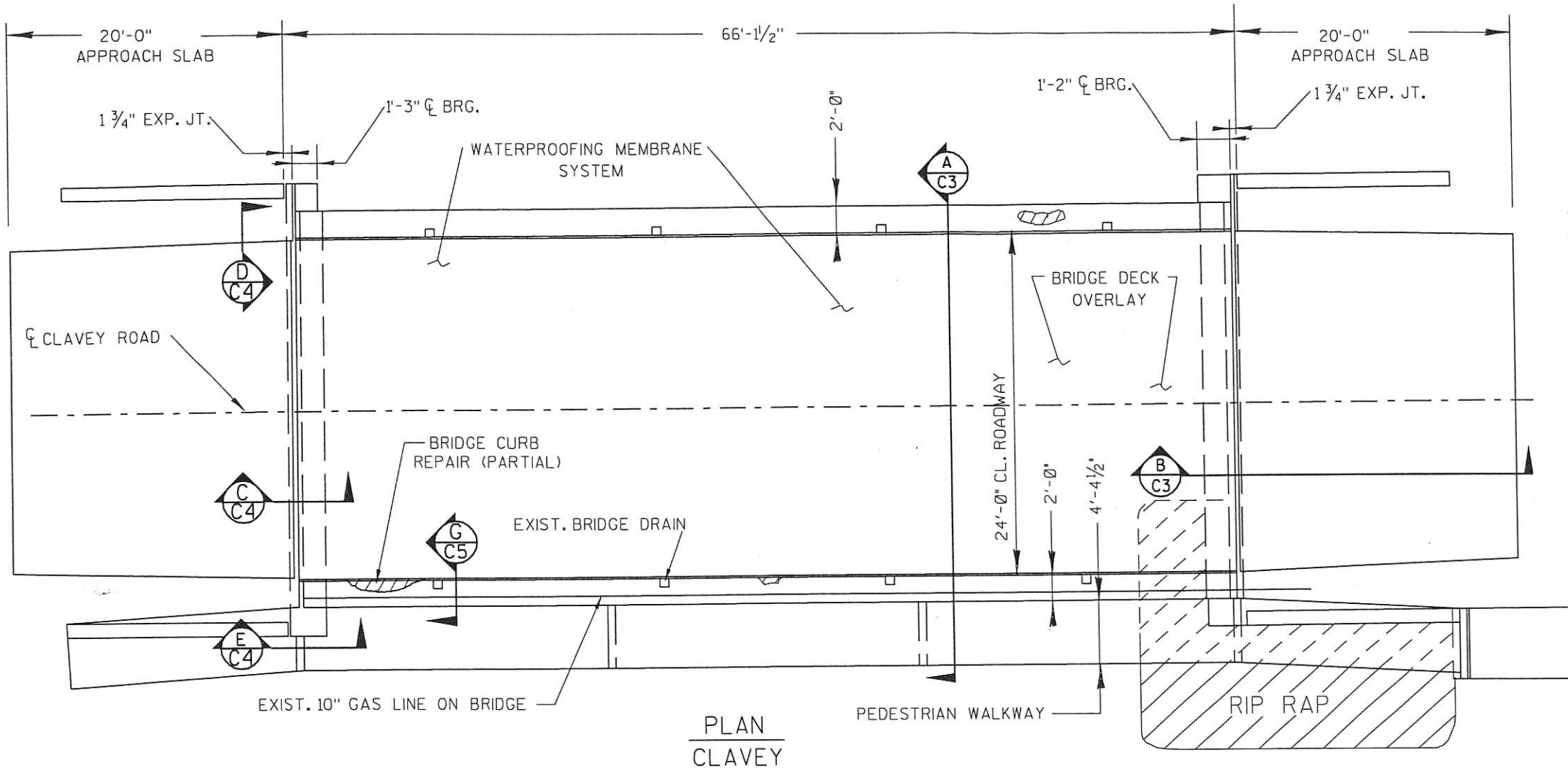
Sheet Description
QUANTITIES

Date 02-15-02 Drawn by DWH Checked by JWC

Job no.

SHEET NO.
2 OF 21

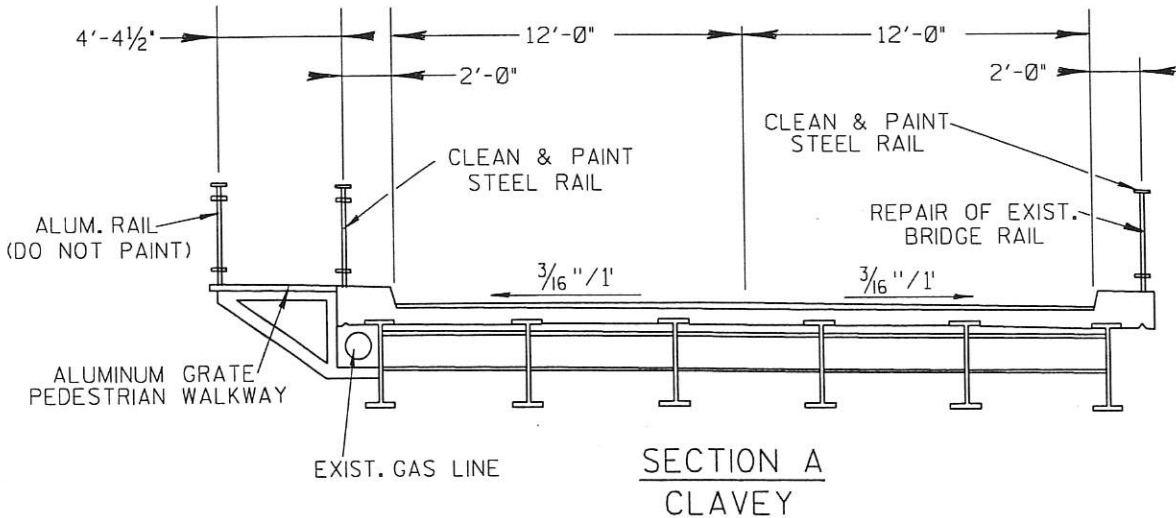
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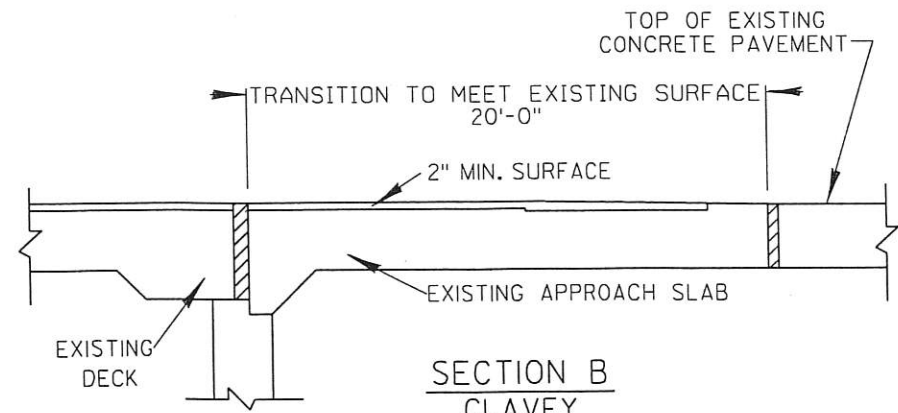
PLAN
CLAVEY



- NOTES:**
1. REMOVE EXISTING BRIDGE DECK OVERLAY AND REPAIR CONCRETE DECK AS SHOWN ON PLANS.
 2. REMOVE AND REPLACE EXISTING EXPANSION JOINTS AS SHOWN ON PLANS.
 3. PLACE NEW BRIDGE DECK OVERLAY WITH WATERPROOFING MEMBRANE SYSTEM.
 4. STRUCTURE TO BE OPEN TO ONE LANE OF TRAFFIC AT ALL TIMES DURING CONSTRUCTION. PAYMENT FOR TRAFFIC CONTROL WILL BE ITEM #701029.
 5. SPOT CLEAN AND PAINT STRUCTURAL STEEL.
 6. REPAIR JOINTS IN EXISTING SUB-STRUCTURE AND WINGWALLS.
 7. EXISTING DIELECTRIC PLATES PREVENT CORROSION BETWEEN THE ALUMINUM WALKWAY & THE STRUCTURAL STEEL. CARE MUST BE TAKEN TO PRESERVE & REPLACE THESE PLATES.
 8. THE EXISTING WATERPROOFING SYSTEM IS TO BE REMOVED AND A NEW WATERPROOFING MEMBRANE SYSTEM APPLIED TO THE DECK. THE SCARIFICATION OF THE EXISTING OVERLAY SHOULD NOT EXTEND INTO THE SURFACE OF THE CONCRETE DECK.



SECTION A
CLAVEY

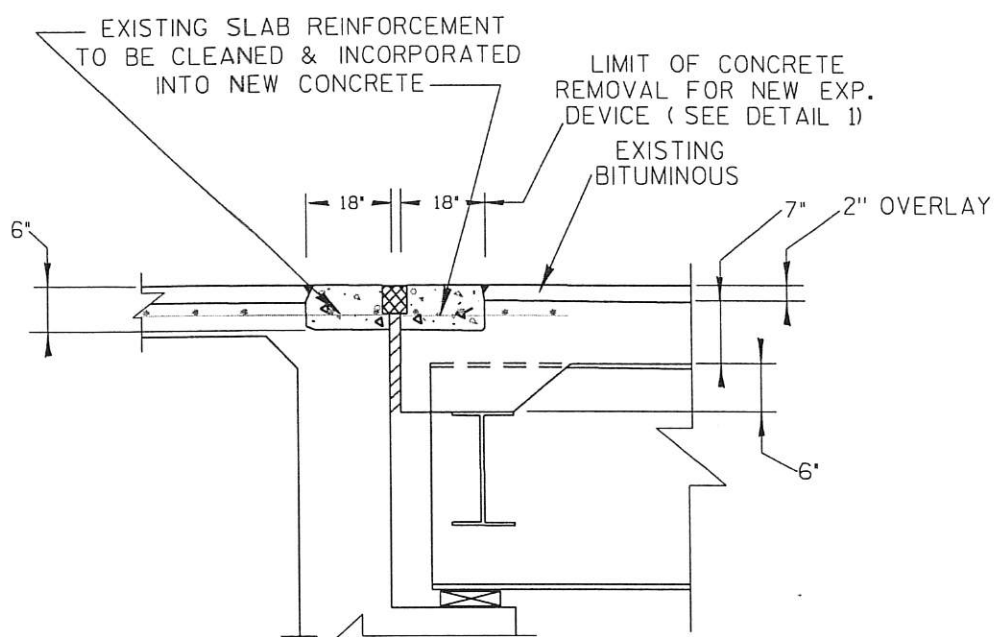


SECTION B
CLAVEY

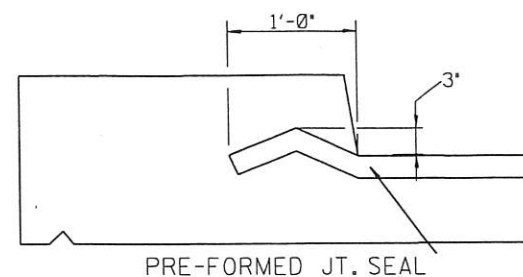
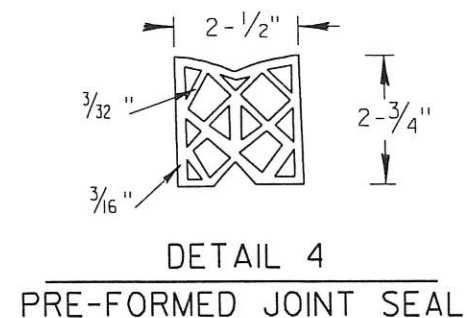
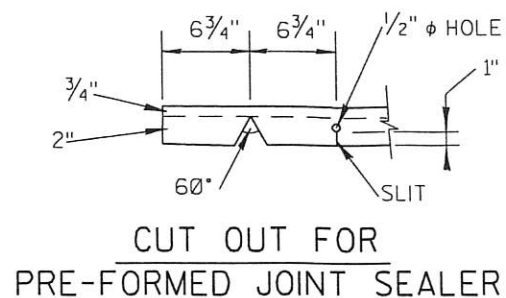
* REPAIR FOR ALUMINUM GRATE SIDEWALK AND SUPPORT STRUCTURE SHALL BE PAID FOR AS ALUMINUM GRATE SIDEWALK REPAIR, (SEE SPECIFICATIONS).

CITY OF HIGHLAND PARK			
CLAVEY ROAD BRIDGE			
S.N. 49-6586			
GENERAL PLAN SECTIONS NOTES	Date:	Job no:	Drawn by:
	02-15-02		DWH
		Chkd. by:	
		BJG/JWC	
SHEET NO.		C3 OF 21	

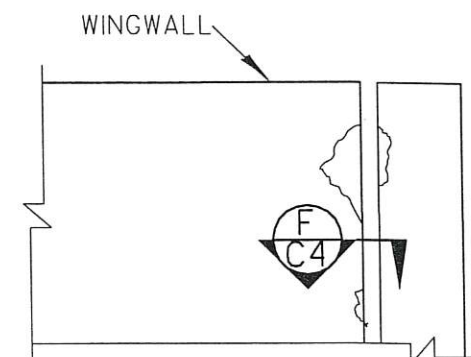
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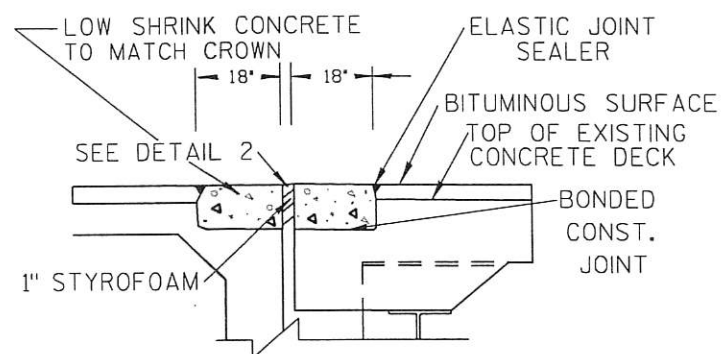
SECTION C
CONCRETE REMOVAL @ EXIST. ABUT.
CLAVEY



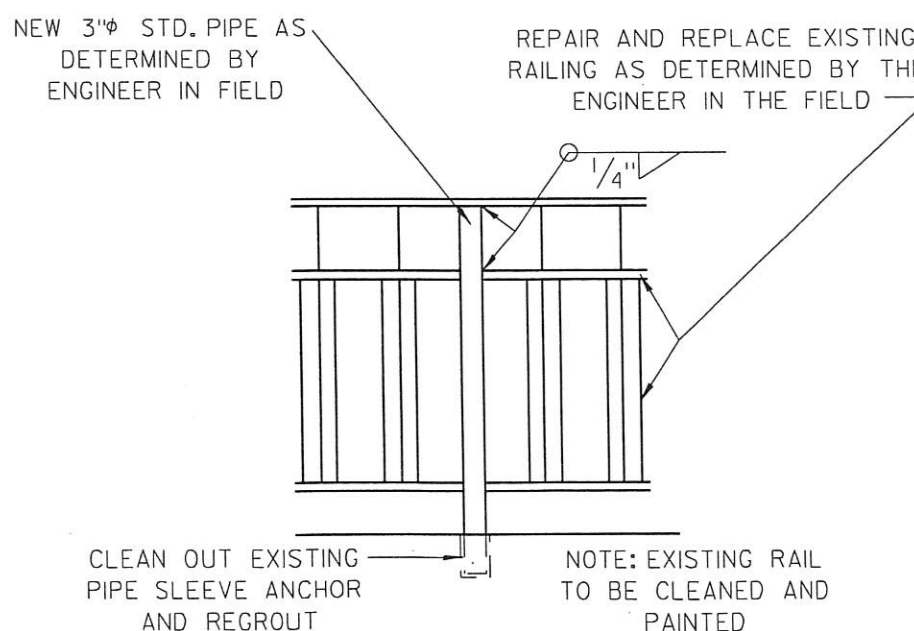
SECTION D
END TREATMENT OF
PRE-FORMED JOINT SEAL
@ CURB
CLAVEY



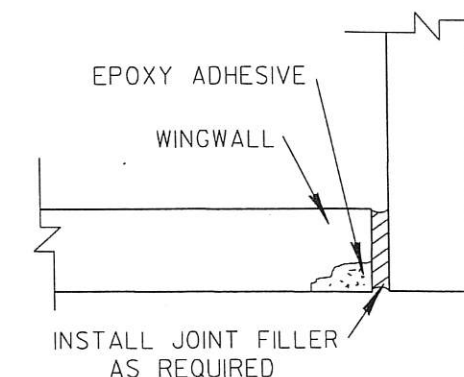
SECTION E
CONCRETE REMOVAL
& REPLACEMENT
CLAVEY



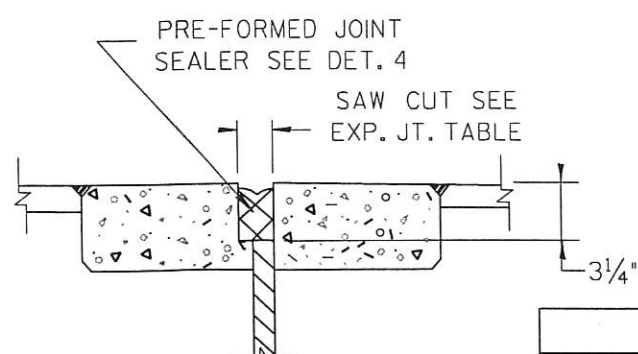
DETAIL 1
NEW EXPANSION JOINT
CLAVEY



EXISTING RAILING REPAIR
CLAVEY



SECTION F
CLAVEY



DETAIL 2
NEW EXPANSION JOINT

EXP. JOINT TABLE				
TEMP.	30°	50°	70°	90°
DISTANCE	1 7/8"	1 3/4"	1 5/8"	1 1/2"

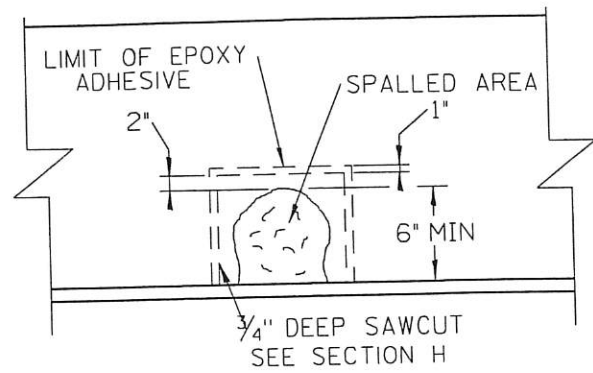
CITY OF HIGHLAND PARK
CLAVEY ROAD BRIDGE
S.N. 49-6586

REPAIR DETAILS

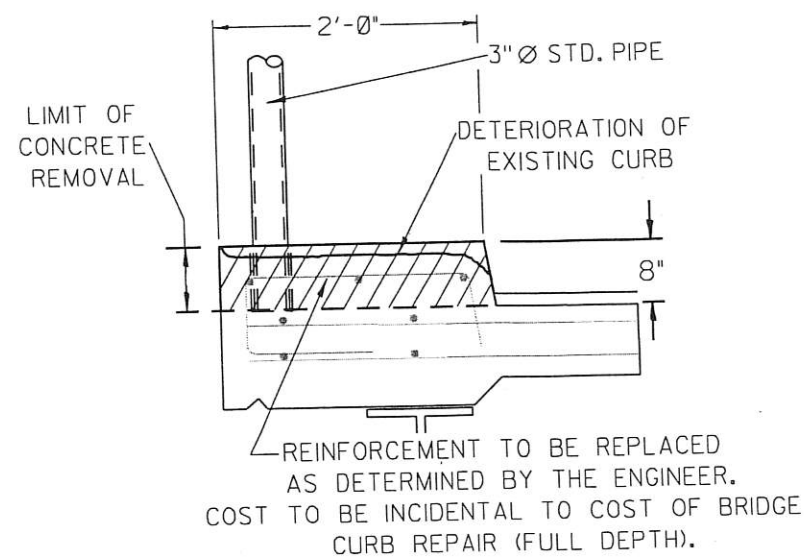
Date: 02-15-02 Job no: Drawn by: DWH Chkd. by: BJG/JWC

SHEET NO.
C4 OF 21

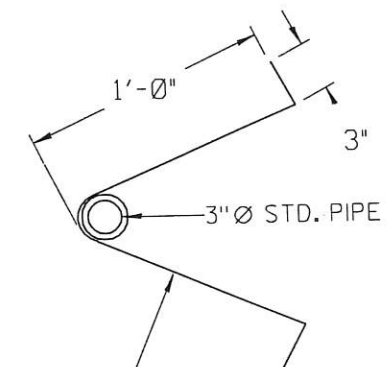
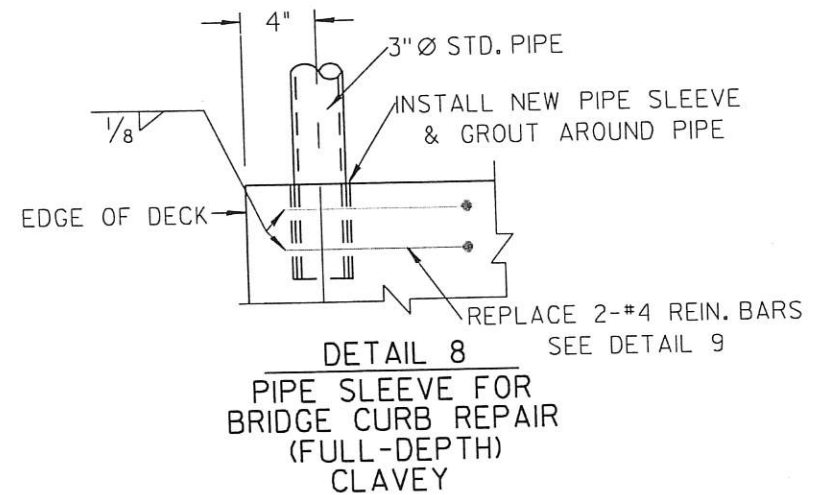
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4633 WASHINGTON ROAD, KENOSHA, WISCONSIN 53144-1511



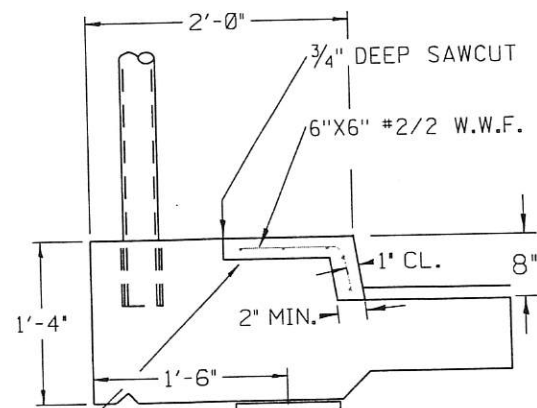
BRIDGE CURB REPAIR
(PARTIAL-DEPTH)
CLAVEY



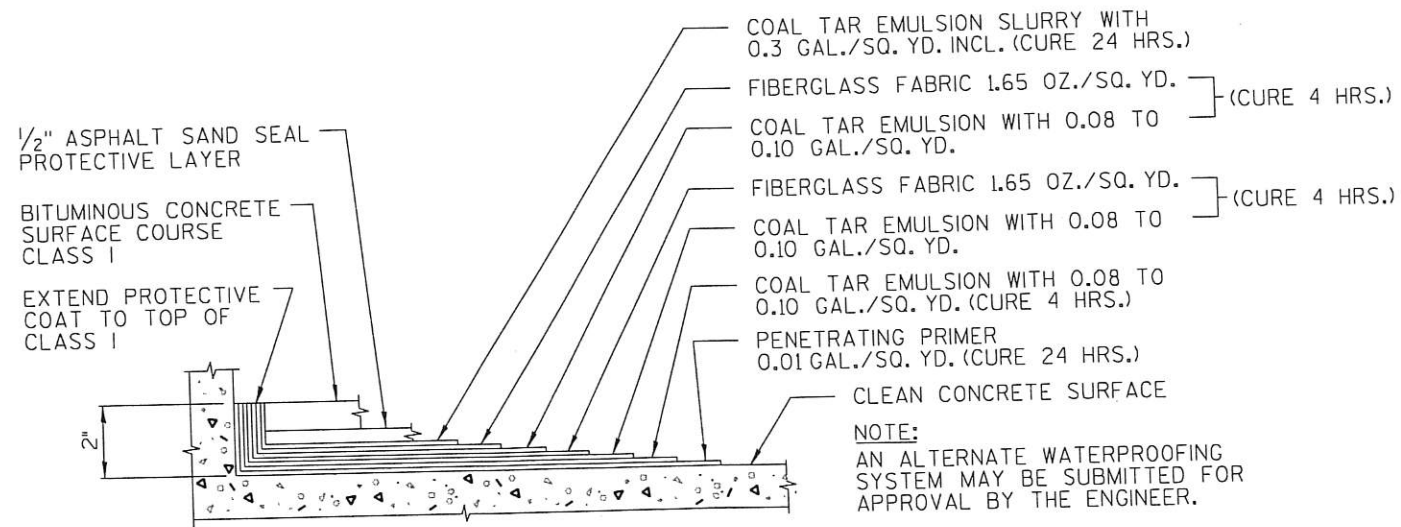
SECTION G
BRIDGE CURB REPAIR
(FULL-DEPTH)
CLAVEY



DETAIL 9
REINFORCEMENT BARS



SECTION H
BRIDGE CURB REPAIR
(PARTIAL-DEPTH)
CLAVEY



WATERPROOFING MEMBRANE SYSTEM
CLAVEY

NOTE:
AN ALTERNATE WATERPROOFING SYSTEM MAY BE SUBMITTED FOR APPROVAL BY THE ENGINEER.

CITY OF HIGHLAND PARK
CLAVEY ROAD BRIDGE
S.N. 49-6586

REPAIR DETAILS

Date: 02-15-02 Job no: Drawn by: DMH Chkd. by: BJC/JWC

SHEET NO.
C5 OF 21



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