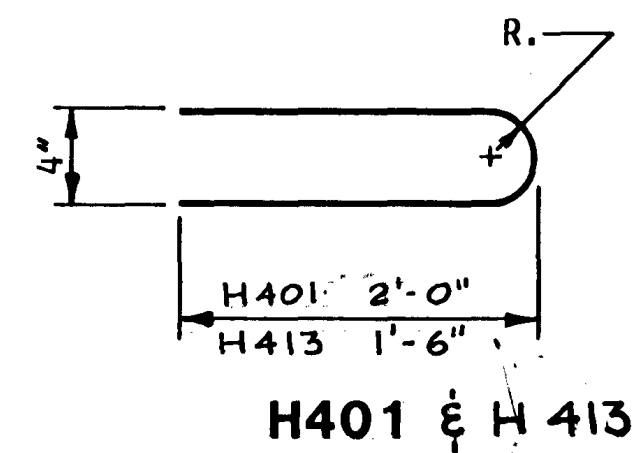
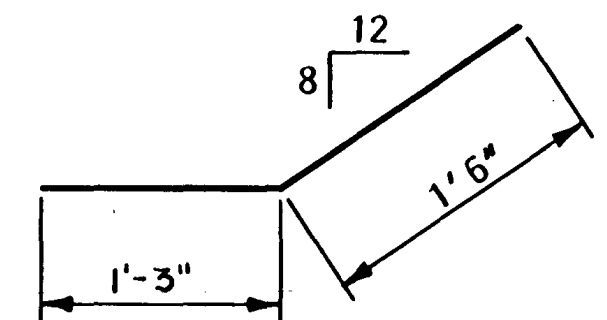


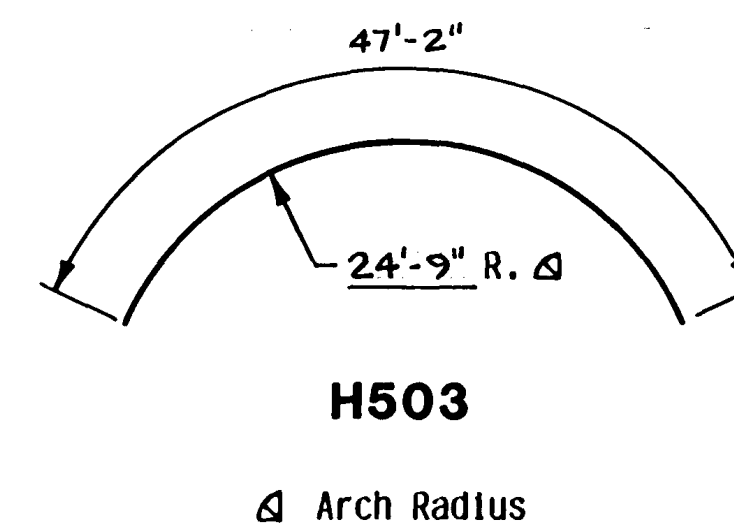
SPAN	RISE	RADIUS	HEADWALL HEIGHT	HEADWALL WIDTH	OPENING HEIGHT	OPENING WIDTH
40'-3"	10'-6"	24'-6"	12'-0"	42'-8 <sup>15</sup> / <sub>16</sub> "	9'-6"	38'-8 <sup>15</sup> / <sub>16</sub> "



H401 & H413

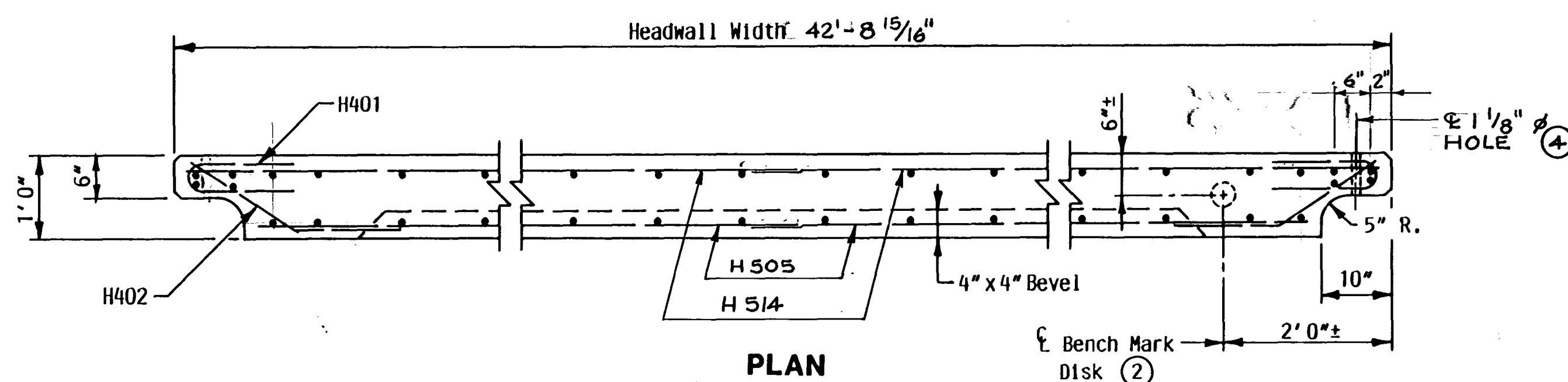


H402

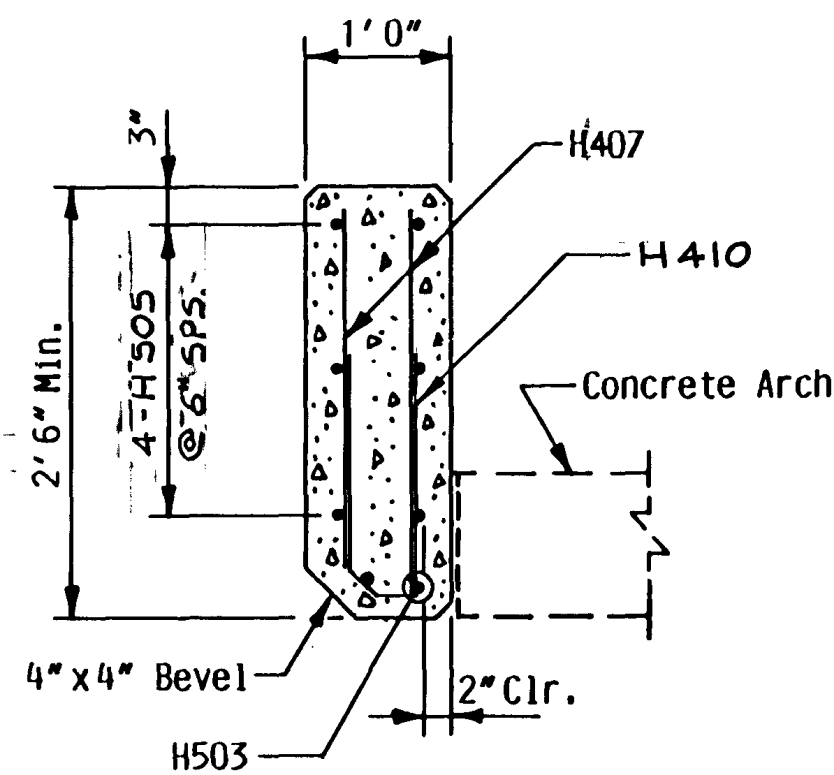


H503

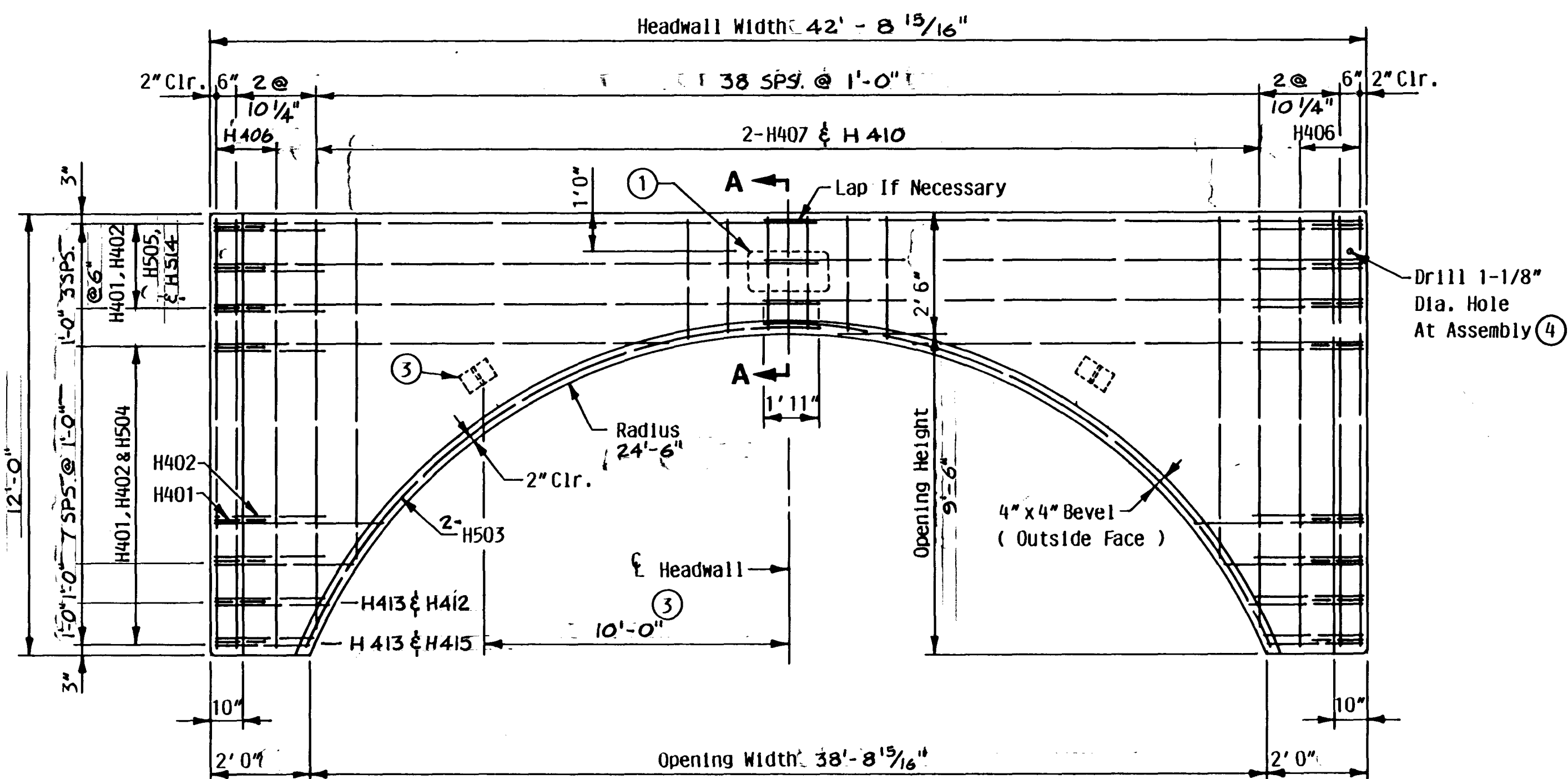
Arch Radius



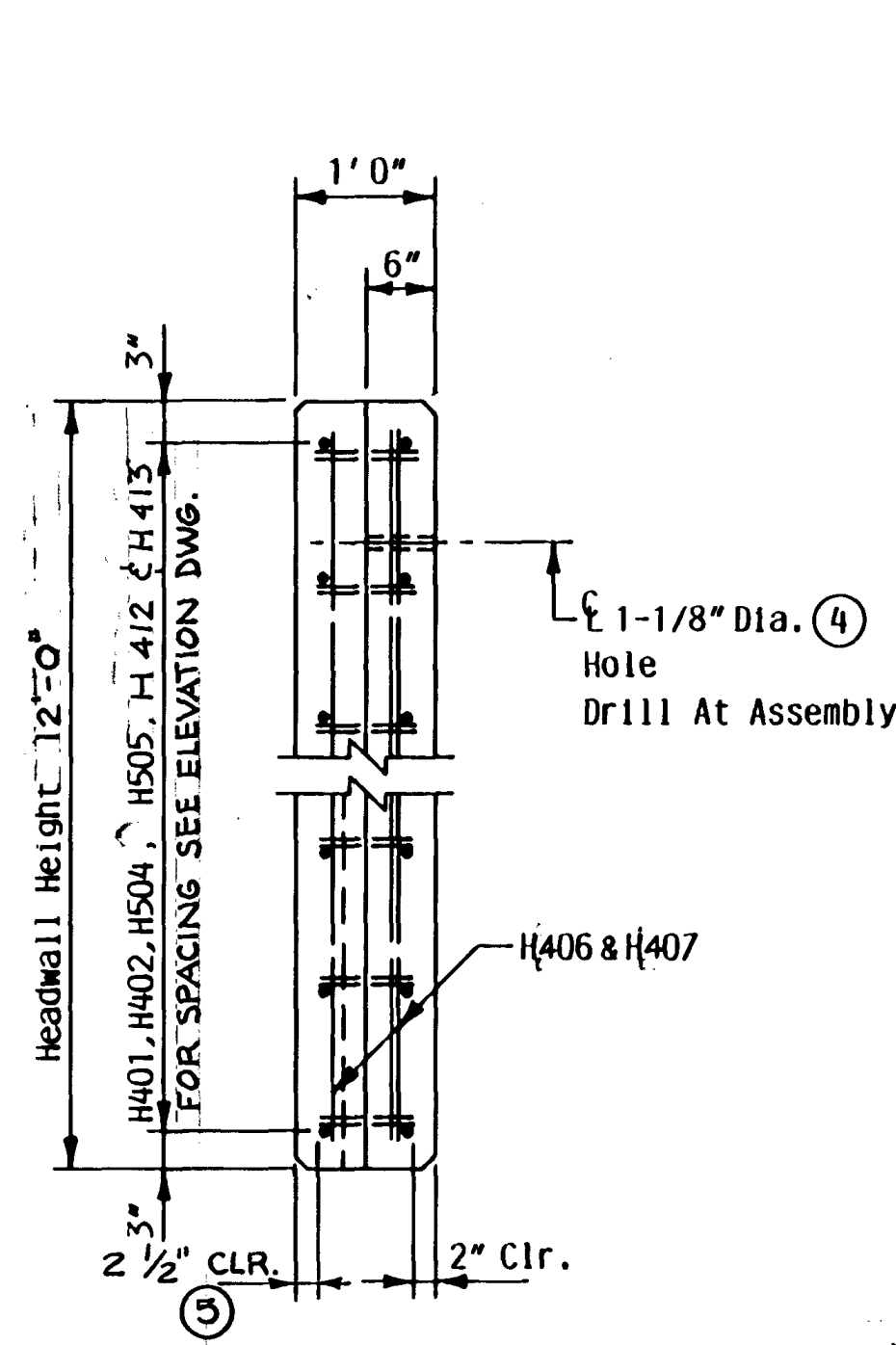
PLAN



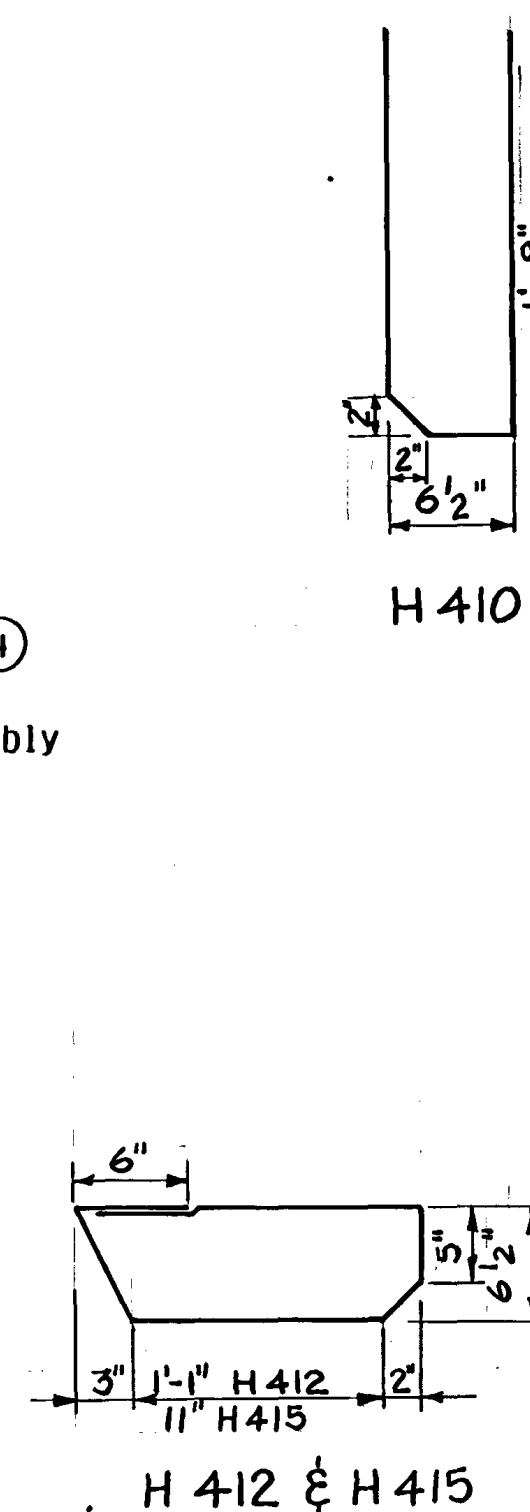
SECTION A-A



ELEVATION



END VIEW



H412 & H415

QUANTITIES FOR ONE HEADWALL

* BILL OF REINFORCEMENT FOR HEADWALL						
BAR NO.	NO.	LENGTH	SHAPE	LOCATION		
H401	26	4'-3"	Bent	Ends-Horizontal		
H402	24	2'-9"	Bent	Ends-Horizontal		
H503	2	47'-2"	Curve	Radius, Arch		
H504	20	18'-0"	Straight	Front & Back-Horizontal		
H505	8	21'-6"	Straight	Front & Back-Horizontal		
H406	12	11'-6"	Straight	Front & Back-Vertical		
H407	39	13'-0"	Straight	Front & Back-Vertical		
H410	39	4'-0"	BENT	RADIUS - VERTICAL		
H412	2	4'-4"	BENT	ENDS - HORIZONTAL		
H413	4	3'-3"	BENT	ENDS - HORIZONTAL		
H514	8	22'-3"	STRAIGHT	BACK - HORIZONTAL		
H415	2	4'-0"	BENT	ENDS - HORIZONTAL		

\* QUANTITY AND LENGTH OF BARS TO BE SUBMITTED WITH SHOP DRAWINGS.  
 Δ CUT 2 FROM 1, ONE LONG AND ONE SHORT

NOTES:

Rustication is required to be approved by the engineer.  
 Precast concrete headwalls shall be Mix No. 3W36.  
 If fencing is required, see standard bridge detail 8905 for post anchorage details.

- ① Mold bridge number and year built on each headwall face. Numbers to be 6" minimum height, 3/4" minimum depth in concrete and centered on outside face of headwall as shown.
- ② State will furnish disk. Payment for placing to be included in price bid for other items. See Standard Plate No. 9301 and Bridge Design Manual.
- ③ See Fig. 5-397.786 FOR HEADWALL BRACKET DETAILS.
- ④ Use 1" diameter bolt to tie headwall and wingwall sections together on parallel wingwalls only.
- ⑤ MAXIMUM DEPTH OF SURFACE TREATMENT IS 3/4".

REVISED: March 8, 1988

APPROVED: Sept. 14, 1987

FIG. 5-397.787

PRECAST CONCRETE ARCH STRUCTURE HEADWALL DETAILS

DES: \_\_\_\_\_ OR: \_\_\_\_\_ APPROVED: \_\_\_\_\_  
 CHK: \_\_\_\_\_ CHK: \_\_\_\_\_

Bridge No. 96834

Sheet No. 6C of 10C Sheets