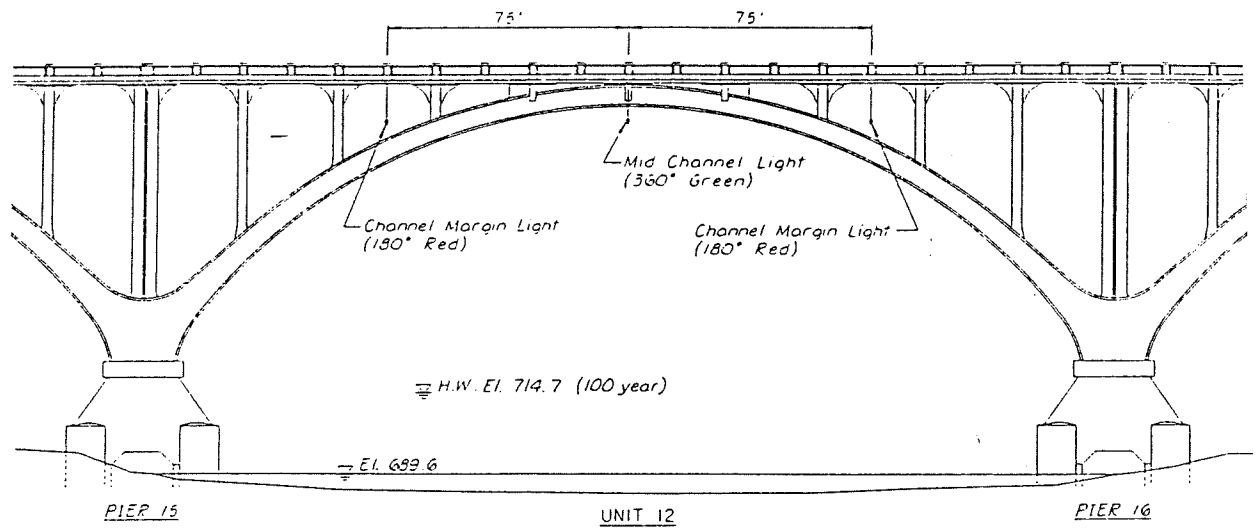


MODIFIED LIGHTING DETAILS FOR FEED POINTS L2R and L2X

SUMMARY OF QUANTITIES
FOR NAVIGATION LIGHTING SYSTEM

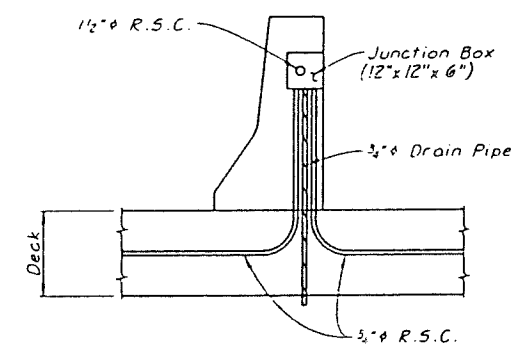
Junction Boxes	3	Each
1 1/2" Rigid Steel Conduit	830	Lin. Ft.
Expansion Fitting	2	Each
Combination Expansion/Deflection Fitting	1	Each
Navigation Light Fixture, 360 Degrees Green	2	Each
Navigation Light Fixture, 180 Degrees Red	4	Each
Swing Arm Lantern Mount	6	Each
3/4" Rigid Steel Conduit	291	Lin. Ft.
1 1/2" End Cap	1	Each

Quantities are for information only.
All materials listed above are included in
"NAVIGATION LIGHTING SYSTEM".



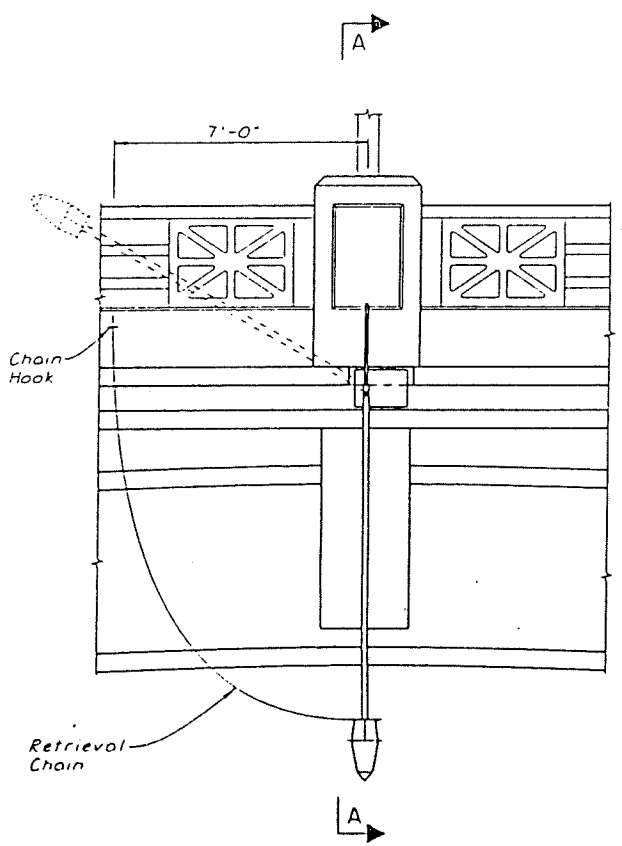
NAVIGATION LIGHTING ELEVATION

1/2 No. 4 - 2600'
1/2 No. 10 - 920'

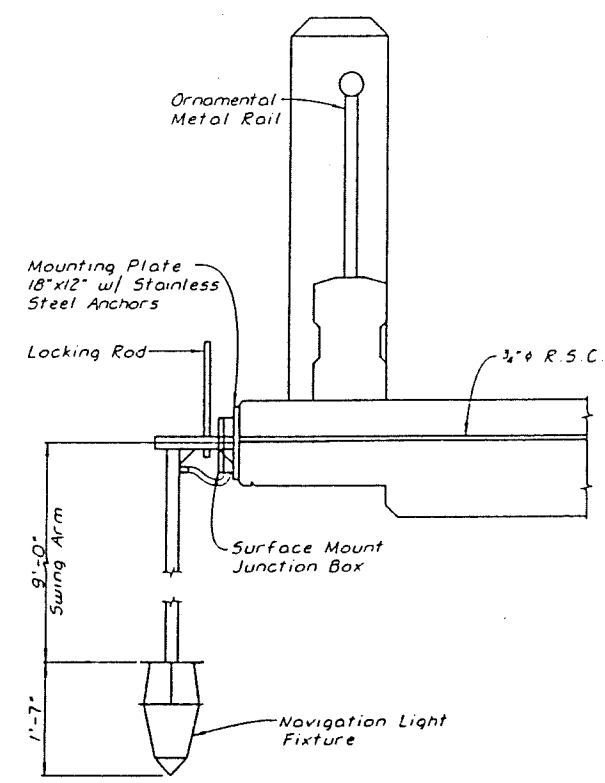


JUNCTION BOX DETAIL

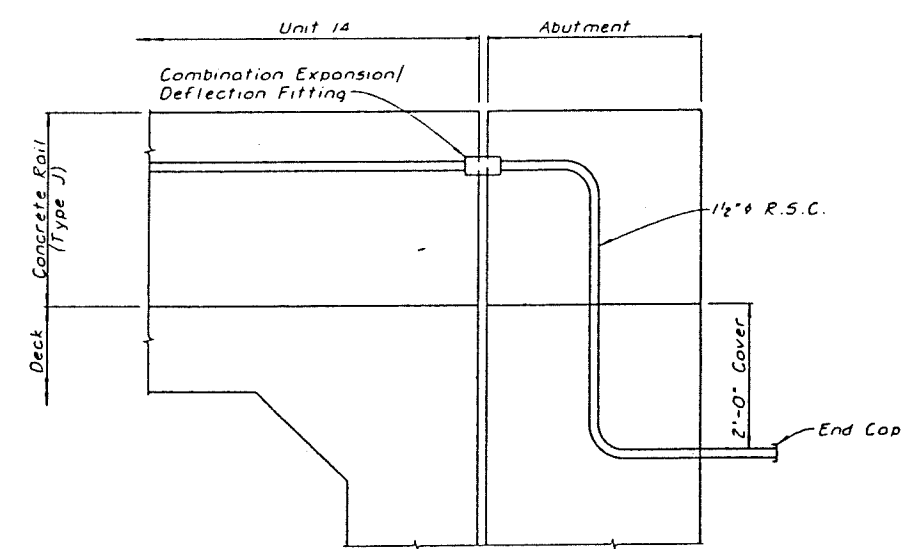
Wire not included here but it was bid as a system at a lump sum price.



END VIEW
Mid Channel Light
(Channel Margin Lights Similar)



SECTION A-A



DETAIL AT ABUTMENT

Notes:
For conduit and junction box locations see Conduit Plan, Sheet 71.
Temporary Navigation Lighting shall be provided during construction, see Special Provisions.

PLANS PREPARED BY
EDWARDS AND KELCEY
MINNEAPOLIS, MINNESOTA

MINNESOTA DEPARTMENT
OF TRANSPORTATION

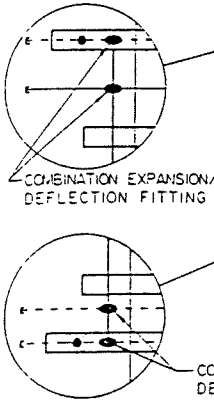
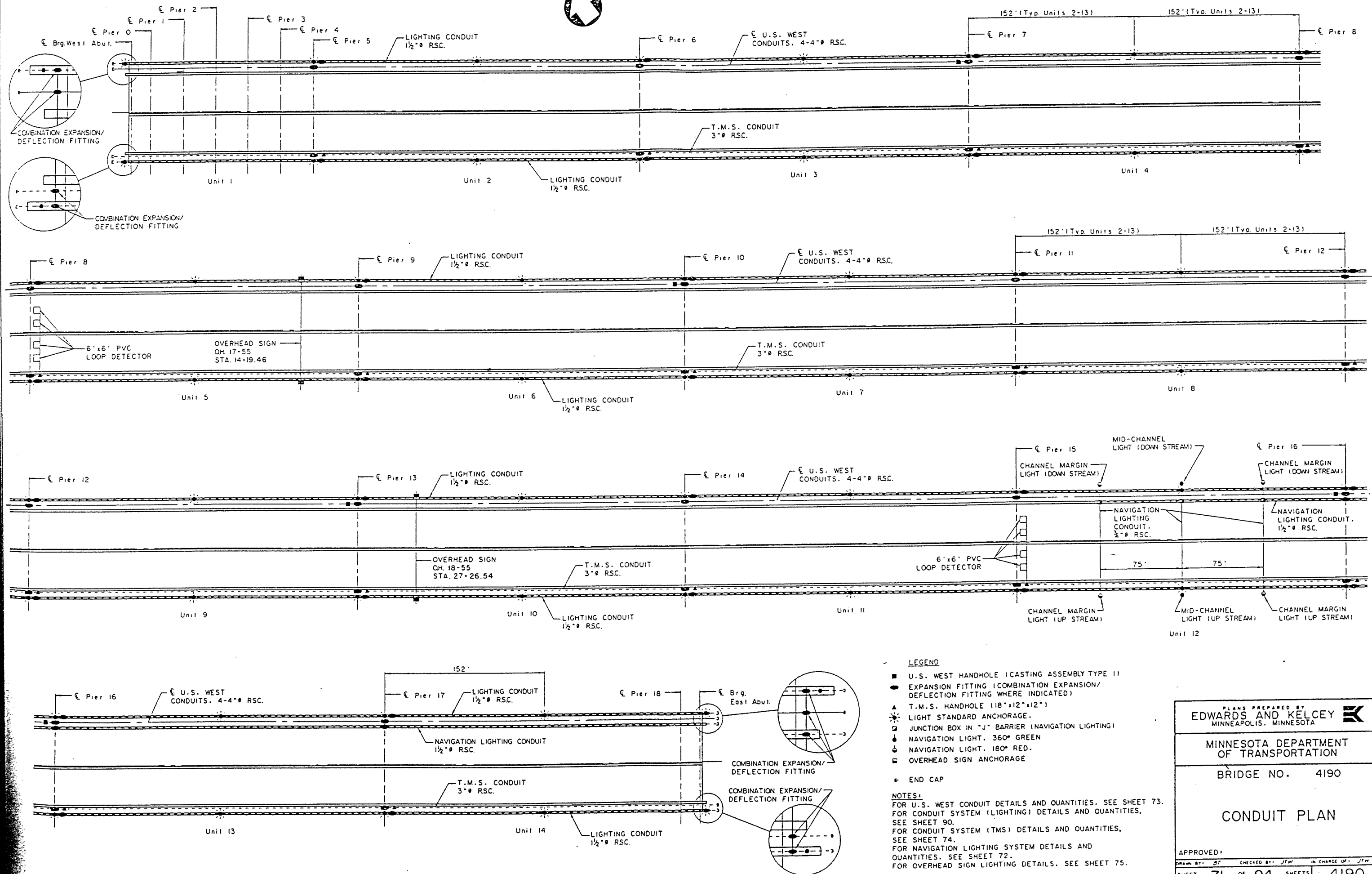
BRIDGE NO. 4190

NAVIGATION LIGHTING SYSTEM

APPROVED:

Drawn By: BT Checked By: JSM In Charge Of: JSM

SHEET 72 OF 94 SHEETS 4190



LEGEND

- U.S. WEST HANDHOLE (CASTING ASSEMBLY TYPE 1)
- EXPANSION FITTING (COMBINATION EXPANSION/DEFLECTION FITTING WHERE INDICATED)
- ▲ T.M.S. HANDHOLE (18"x12"x12")
- ☼ LIGHT STANDARD ANCHORAGE.
- JUNCTION BOX IN "J" BARRIER (NAVIGATION LIGHTING)
- ⬇ NAVIGATION LIGHT. 360° GREEN
- ⬆ NAVIGATION LIGHT. 180° RED.
- OVERHEAD SIGN ANCHORAGE
- ⊕ END CAP

NOTES:
 FOR U.S. WEST CONDUIT DETAILS AND QUANTITIES, SEE SHEET 73.
 FOR CONDUIT SYSTEM (LIGHTING) DETAILS AND QUANTITIES, SEE SHEET 90.
 FOR CONDUIT SYSTEM (TMS) DETAILS AND QUANTITIES, SEE SHEET 74.
 FOR NAVIGATION LIGHTING SYSTEM DETAILS AND QUANTITIES, SEE SHEET 72.
 FOR OVERHEAD SIGN LIGHTING DETAILS, SEE SHEET 75.

PLANS PREPARED BY EDWARDS AND KELCEY MINNEAPOLIS, MINNESOTA		
MINNESOTA DEPARTMENT OF TRANSPORTATION		
BRIDGE NO. 4190		
CONDUIT PLAN		
APPROVED:		
DRAWN BY: JF	CHECKED BY: JFW	IN CHARGE OF: JFW
SHEET 71	OF 94 SHEETS	4190