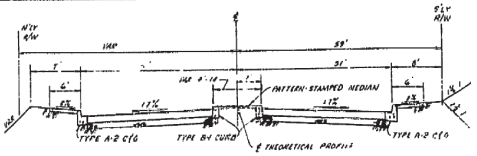
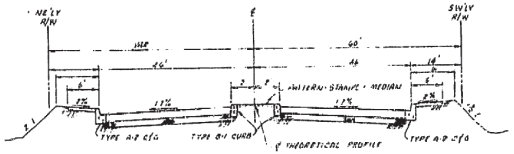
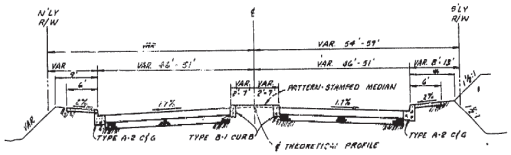


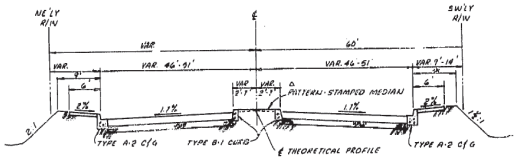
STA. 30+88.32 TO STA. 33+59.35



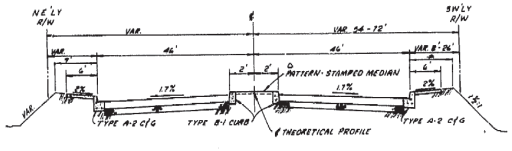
STA. 51+73.92 TO STA. 55+54.87
(END BRIDGE)



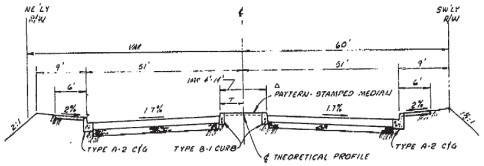
STA. 33+59.35 TO STA. 35+34.35



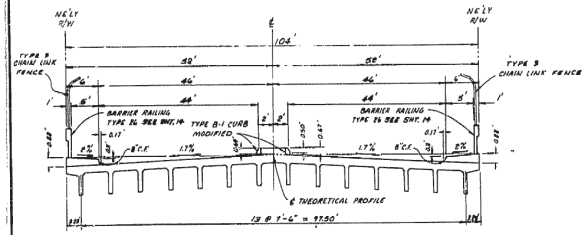
STA. 55+54.87 TO STA. 57+29.87



STA. 35+34.35 TO STA. 50+47.32
(BEGIN BRIDGE)

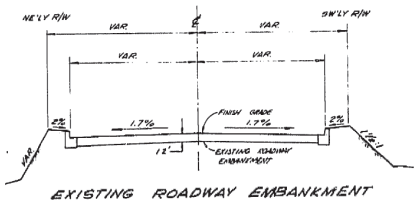


STA. 57+29.87 TO STA. 61+00.62



STA. 50+47.32 TO STA. 51+73.92
(BEGIN BRIDGE) (END BRIDGE)

NOTE: * EMBANKMENT SHOULDER @ R/W LINE, OR 9' FROM TC WHICHEVER IS LESS.
△ MEDIAN LANDSCAPING SOME LENGTHS, SEE PLAN & PROFILE SHEETS.



EXISTING ROADWAY EMBANKMENT
STA. 30+88' ± TO 50+33± ℄
STA. 51+68 ± TO 61+09 ±

GENERAL NOTES

SPECIFICATIONS

DESIGN
AASHTO DATED 1973 AND INTERIM SPECIFICATIONS 1974, 1975 AND CALIFORNIA DIVISION OF HIGHWAYS BRIDGE PLANNING AND DESIGN MANUALS.

CONSTRUCTION
CALIFORNIA DIVISION OF HIGHWAYS STANDARD SPECIFICATION DATED JANUARY 1975 AND THE SPECIAL PROVISIONS

LIVE LOAD HS20 ℄. AND ALTERNATIVE

ALLOWABLE DESIGN UNIT STRESSES:

CONCRETE:
28 DAY COMPRESSIVE STRENGTH f'_c = 4,250 PSI TYPE II PORTLAND CEMENT
f_c = 1,800 PSI DECK SLAB
f_c = 1,300 PSI ALL OTHER MEMBERS

REINFORCING STEEL:
ASTM A615 GRADE 60 f_y = 60 KSI
f_s = 24,000 PSI TENSION AND COMPRESSION IN GIRDERS
f_s = 20,000 PSI TENSION IN DECK SLAB, WEB REINFORCEMENT AND COMPRESSION IN PIER

PILE LOADING: 45 TON DESIGN BEARING LOAD 10 DP 42

REINFORCING STEEL CLEARANCES:

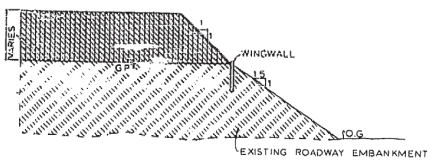
SUPERSTRUCTURE:
DECK ..... 2"
ALL OTHER SURFACES ... 1½" EXCEPT AS NOTED

ABUTMENTS, WINGWALLS, OTHER EARTH CONTACT
EARTH FACE ..... 2"
EXPOSED FACE ..... 1½"

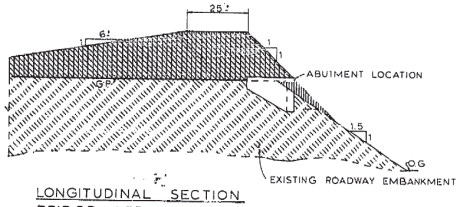
COLUMNS ..... 2"

SLOPE PAVING ..... 1 ½"

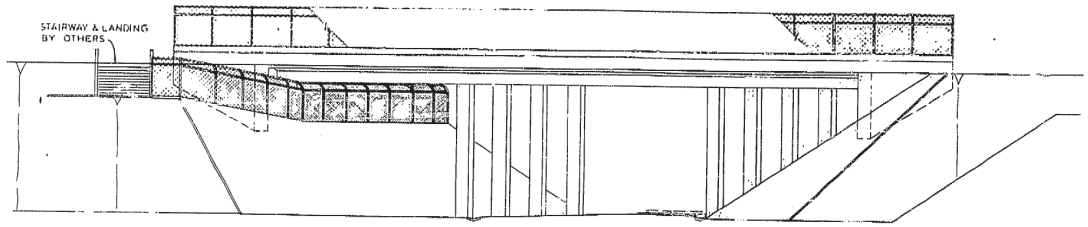
The Bridge As-Built Plans and corresponding BrDR Models are provided for example only and may not represent the modeling techniques used by your agency.



TRANSVERSE SECTION
BRIDGE APPROACH FILL



LONGITUDINAL SECTION
BRIDGE APPROACH FILL



BRIDGE ELEVATION – LOOKING NORTHWESTERLY
SCALE 1" = 10'

LEGEND

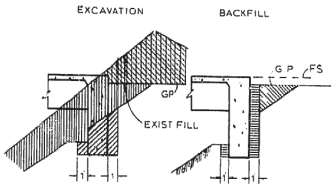
- STRUCTURE EXCAVATION
- STRUCTURE BACKFILL
- ROADWAY EXCAVATION
- ROADWAY EMBANKMENT
- BRIDGE EMBANKMENT SURCHARGE

ABBREVIATIONS

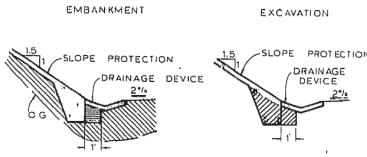
O.G. ORIGINAL GROUND
F.S. PLANNED FINISHED SURFACE
G.P. PLANNED GRADING SURFACE

CONSTRUCTION NOTES: (EXCEPT BRIDGE STRUCTURE NOTES)

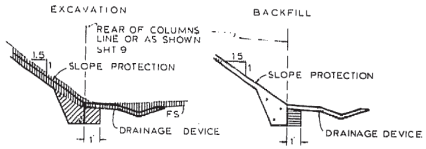
(1) CONST. 0.40' AC/1.40 AB
(2) CONST. CONC. CURB TYPE A-2 PER DETAIL (5) SHEET 13.
(3) CONST. SIDEWALK RETURNS PER DETAIL (5) SHEET 15
(4) CONST. SIDEWALK ACCESS RAMP PER DETAIL (4) SHEET 15
(5) CONST. CONC. MEDIAN CURB PER DETAIL (3) SHEET 13
(6) CONST. DEPRESSED CURB DRIVEWAY APPROACH PER DETAIL (18) SHEET 15
(7) CONST. PARKWAY CULVERT PER DETAIL (11) SHEET 13 (REMOVE EXIST. OUTLET STRUCTURE.)
(8) CONST. 6' CONC. SIDEWALK PER DETAIL (7) SHEET 15.
(9) REMOVE & SALVAGE METAL BEAM GUARD RAIL.
(10) SAWCUT & JOIN EXISTING A.C., PLACE UNTREATED A.C. CAP FOR SMOOTH RIDE
(11) RAISE EXIST. 60" MANHOLE TO GRADE PER DETAIL (2) SHEET 16.
(12) CONST. NATIVE STAMPED MEDIAN PAVEMENT PER DETAIL (F) SHEET 15
(13) PROTECT IN PLACE
(14) CONST. 10' BIKE TRAIL, PLACE 0.35'AC/1.5 PER DETAIL (2) SHEET 4.
(15) APPROX. LIMITS OF DEPRESSION TO RECEIVE EARTH MATERIALS FROM SURCHARGE REMOVAL, ROADWAY EXCAVATION, AND OTHER SOURCES. CONST. COMP. ROADWAY FILL TO GRADE
(16) CONST. R.C.C. RAMP PAVING AND BOTTOM LANDING PER DETAIL (3) SHEET 6
(17) CAP EXIST. STORM DRAIN PER DETAIL (C) SHEET 7.
(A) PLACE IMPERVIOUS MEMBRANE PER DETAIL (B) SHEET 15.
(18) CONST. MEDIAN DRAIN INLET PER DETAIL (1) SHEET 15.
(19) REMOVE OR RELOCATE WITHIN 1000' PER ENGINEER AND SPECIAL PROVISIONS.
(20) CONST. 8" A.C.P. MEDIAN DRAIN PIPE PER DETAIL (1) SHEET 15.
(21) CONST. 3" GALVANIZED PIPE; PLACE 36"(MIN.) BELOW FINISH GRADE.
(22) CONST. SIDEWALK RETURN PER DETAIL (3) SHEET 15.
(23) SAWCUT & REMOVE CONCRETE, EPOXY BROKEN SURFACE PER DETAIL (17) SHEET 16.
(24) SAWCUT & REMOVE EXISTING MEDIAN.
(25) CONST. HYPERBOLIC MEDIAN CURB TRANSITION PER DETAIL (E) SHEET 15
(26) CONST. 6" A.C. DIKE PER DETAIL (6) SHEET 16.
(R) PLACE EROSION CONTROL (TYPE D).



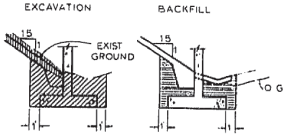
ABUTMENT ON EXISTING EMBANKMENT



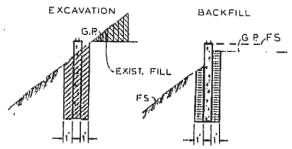
FILL CONDITIONS
SLOPE PROTECTION &
DRAINAGE DEVICE



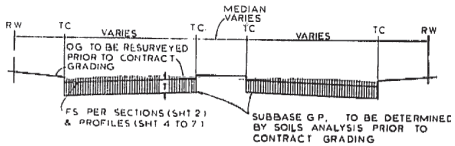
CUT CONDITIONS
SLOPE PROTECTION &
DRAINAGE DEVICE



COLUMN PILE CAPS

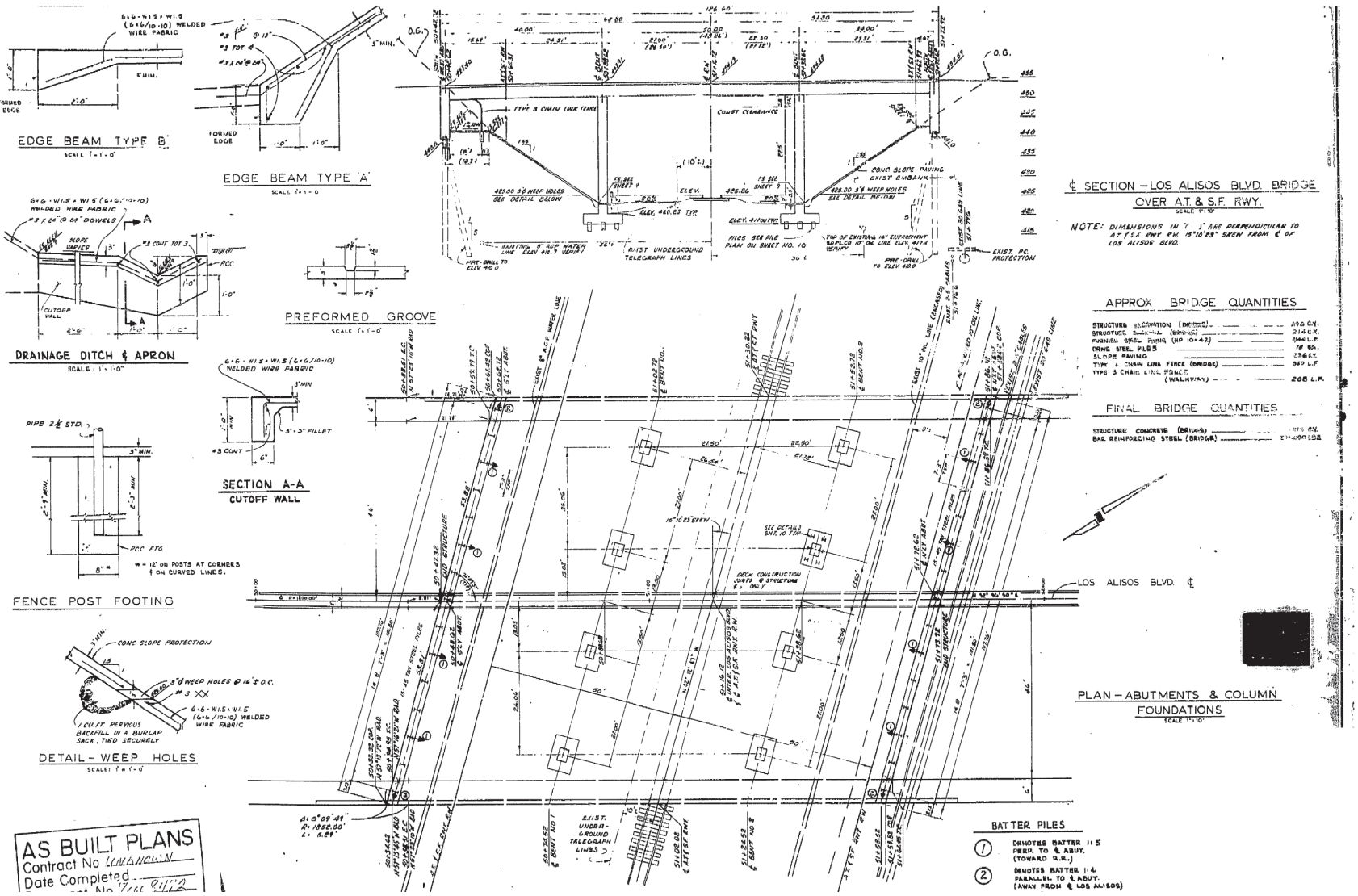


WINGWALLS

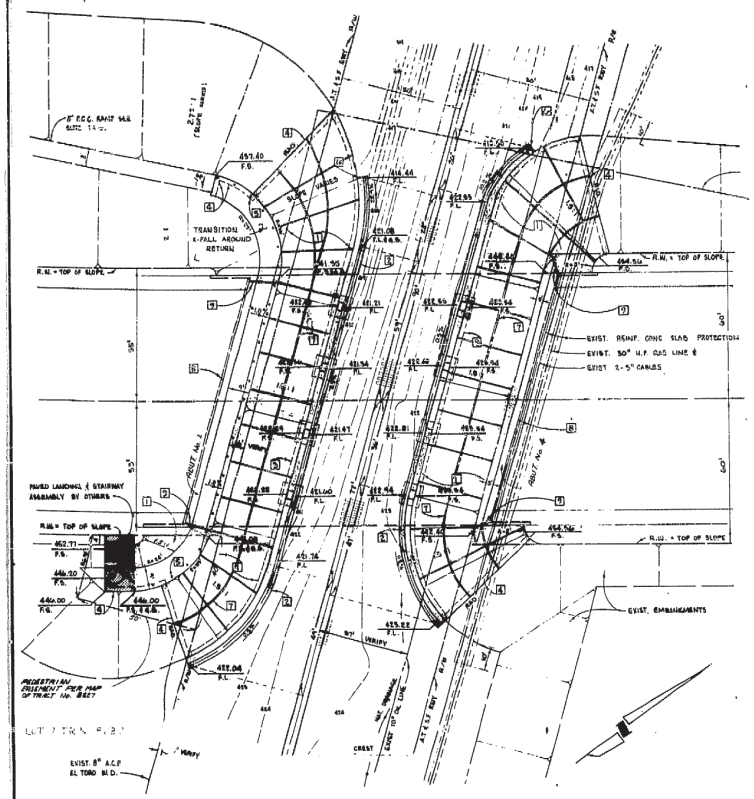


ROADWAY EXCAVATION

PLANS



AS BUILT PLANS
Contract No LINCOLN
Date Completed

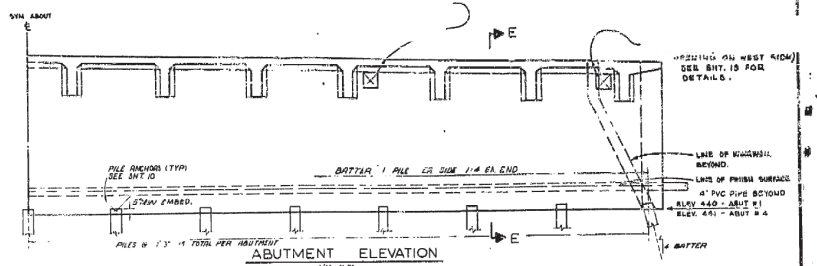


PLAN – SLOPE PAVING, PEDESTRIAN UNDERPASS AND SITE DRAINAGE PLAN

SCALE 1" = 20'

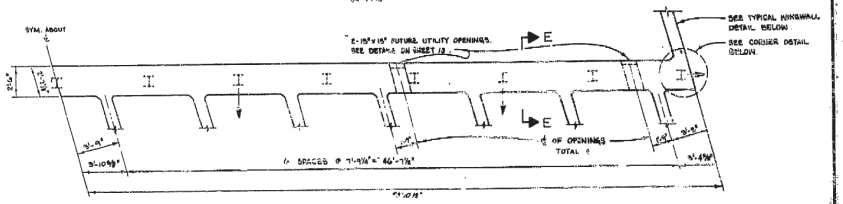
CONSTRUCTION NOTES

1 — CONST. 3" MIN. REINF. CONC. SLOPE PROTECTION PER DETAILS SHEET 8
2 — CONST 2' P.C.C. DRAINAGE "V" DITCH PER DETAIL SHT 8.
3 — CONST TYPE "A" EDGE BEAM PER DETAIL SHT 8.
4 — CONST TYPE "B" EDGE BEAM PER DETAIL SHT 8.
5 — CONST TYPE 5 CHAIN LINK FENCE ALONG PED U.P. PER DETAILS SHT 14. SEE SHT. 8 FOR PTA DETAIL.
6 — CONST CUT-OFF WALL PER DETAIL SHT 8.
7 — CONST. PREFORMED GROOVES @ 10'± O.C. PER DETAIL SHT 8.
8 — PLACE 4" SLOTTED (OR PERFORATED) PVC PIPE.
9 — PLACE 4" PVC PIPE.



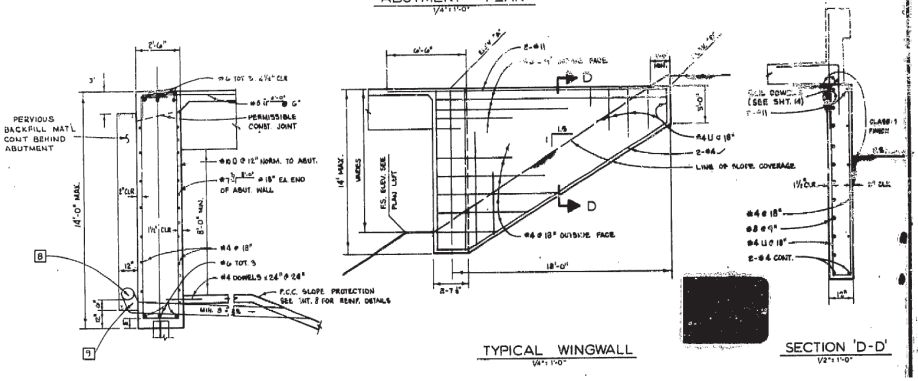
ABUTMENT ELEVATION

1/4" = 1'-0"



ABUTMENT PLAN

1/4" = 1'-0"



SECTION 'E-E'

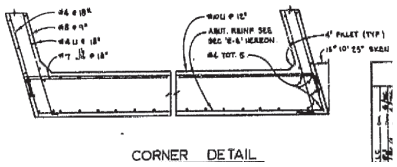
3/8" = 1'-0"

TYPICAL WINGWALL

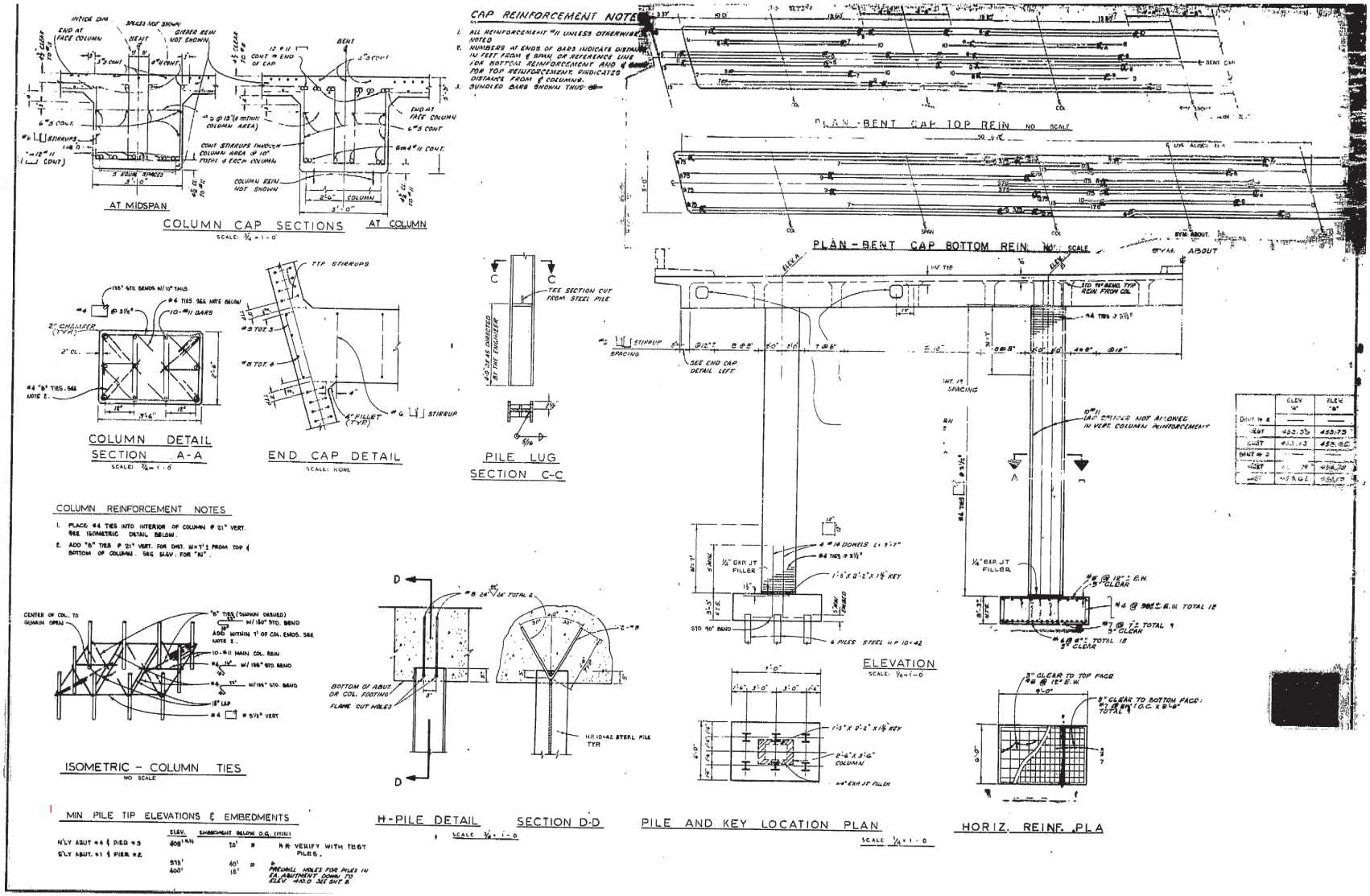
1/4" = 1'-0"

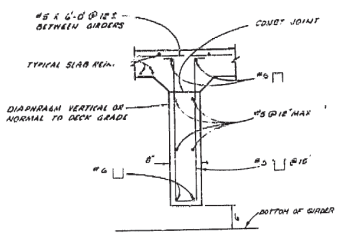
SECTION 'D-D'

1/2" = 1'-0"



CORNER DETAIL


CAP REINFORCEMENT NOTES
1. ALL REINFORCEMENT #11 UNLESS OTHERWISE NOTED
2. NUMBERS AT ENDS OF BARS INDICATE DISTANCE IN FEET FROM ℄ BRG. OR REFERENCE LINE FOR BOTTOM REINFORCEMENT AND ℄ COLUMN FOR TOP REINFORCEMENT. FRACTIONS INDICATE DISTANCE FROM ℄ COLUMNS.
3. BUNDLED BARS SHOWN THUS:
PLAN - BENT CAP TOP REIN NO SCALE
PLAN - BENT CAP BOTTOM REIN NO SCALE
AT MIDSPAN
COLUMN CAP SECTIONS AT COLUMN
SCALE: 3/4" = 1'-0"
COLUMN DETAIL
SECTION A-A
SCALE: 3/4" = 1'-0"
END CAP DETAIL
SCALE: NONE
PILE LUG
SECTION C-C
TEE SECTION CUT FROM STEEL PILE
ELEVATION
SCALE: 1/4" = 1'-0"
COLUMN REINFORCEMENT NOTES
1. PLACE #4 TIES INTO INTERIOR OF COLUMN @ 21" VERT. SEE ISOMETRIC DETAIL BELOW.
2. ADD "B" TIES @ 21" VERT. FOR DIST. W=7'± FROM TOP & BOTTOM OF COLUMNS. SEE ELEV. FOR "W".
ISOMETRIC - COLUMN TIES
NO SCALE
H-PILE DETAIL SECTION D-D
SCALE 3/4" = 1'-0"
PILE AND KEY LOCATION PLAN
SCALE 1/4" = 1'-0"
HORIZ. REINF. PLA
MIN PILE TIP ELEVATIONS & EMBEDMENTS
N'LY ABUT #4 & PIER #3
S'LY ABUT. #1 & PIER #2
ELEV. 408' EMBEDMENT BELOW O.G. (MIN) 20'
ELEV. 418' 40'
ELEV. 400' 18'
** VERIFY WITH TEST PILES.
PREDRILL HOLES FOR PILES IN EA. ABUTMENT DOWN TO ELEV. 445.0 SEE SHT. 8

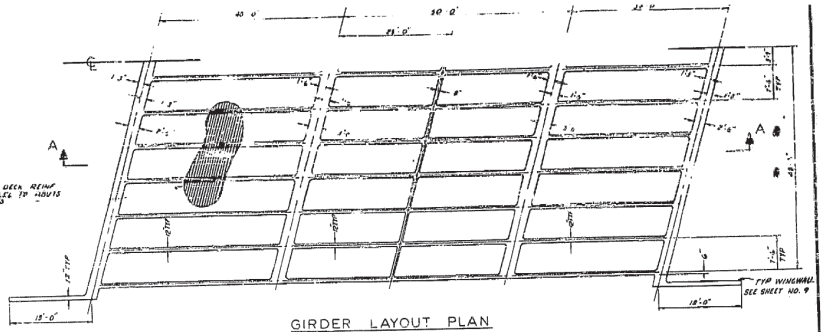


INTERMEDIATE DIAPHRAGM SECTION

SCALE 1 x 1 - 0

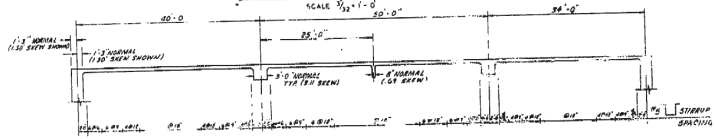
NOTES:

1. ALL MAIN GIRDER REINF ARE #11 BARS EXCEPT AS NOTED.
2. DIMENSIONS AT END OF BARS ARE FROM ℄ CAP (TOP REINF.) AND ℄ SPAN (BOTTOM REINF.) EXCEPT AS NOTED.
3. FOR ADDITIONAL REINF IN SLAB OVER INTERMEDIATE DIAPHRAGMS SEE DETAIL LEFT.
4. Ⓑ - THIS BOT REINF BAR IS BENT FROM ℄ CAP.
5. G-RADE REINF SHOWN SHALL BE PLACED AS SHOWN IN THE PLACING DIAGRAM.



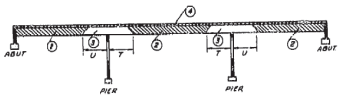
GIRDER LAYOUT PLAN

SCALE 3/32" = 1'-0"



SECTION A-A - GIRDER SECTION & STIRRUP SCHEDULE

SCALE 3/32" = 1'-0"



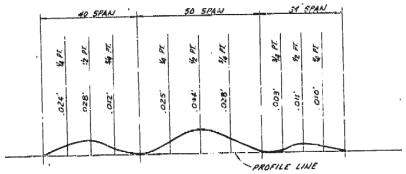
TEE BEAM SUPERSTRUCTURE PLACING DIAGRAM

NUMBERS (2) AND (3) INDICATE SEQUENCE OF PLACING GIRDER STEM CONCRETE. (3) MAY BE PLACED SIMULTANEOUSLY WITH (2) WHEN APPROVED BY THE ENGINEER, AND PROVIDED THAT THE (2) SECTIONS ARE PLACED IN BOTH ADJOINING SPANS.
TOP SLAB CONCRETE (4) SHALL BE PLACED SEPARATELY FROM (2) AND (3). (4) MAY BE PLACED CONTINUOUSLY OR IN PARTS AS APPROVED BY THE ENGINEER.

T = 1/5 SPAN LENGTH

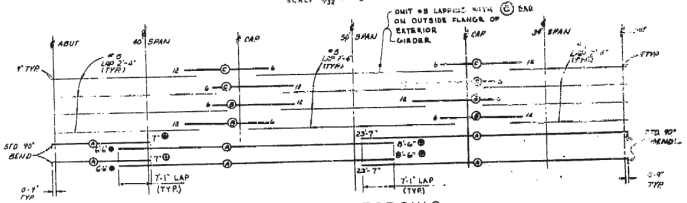
U = 1/4 SPAN LENGTH

FOR ANY DEVIATION FROM THE ABOVE THE CONTRACTOR SHALL SUBMIT A DIAGRAM TO THE ENGINEER FOR APPROVAL.



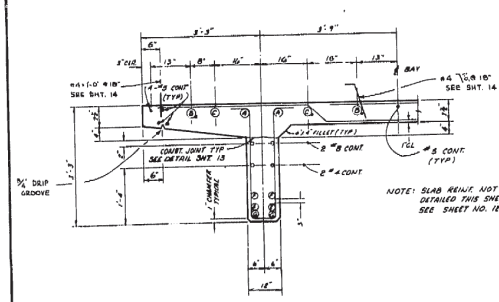
DEAD LOAD CAMBER DIAGRAM

NOTE: THE TOTAL DEFLECTION WILL BE REACHED ABOUT FOUR YEARS AFTER FALSEWORK REMOVAL. FOR VALUES AT TIME OF FALSEWORK REMOVAL, DIVIDE THOSE BY FOUR. AMOUNT OF CAMBER FOR CONSTRUCTION WILL BE DETERMINED BY THE ENGINEER. DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT.

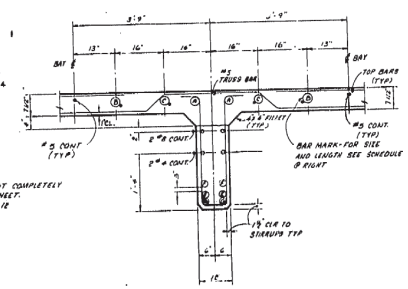


TOP REINFORCING

SCALE: 3/32" = 1'-0"

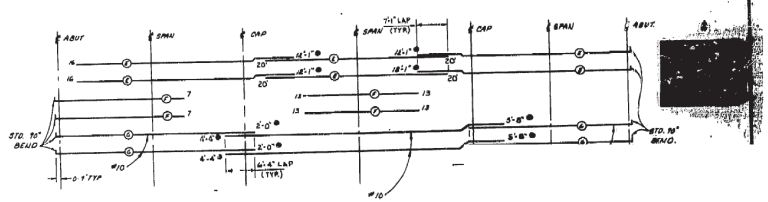


TYPICAL EXTERIOR GIRDER



TYPICAL INTERIOR GIRDER

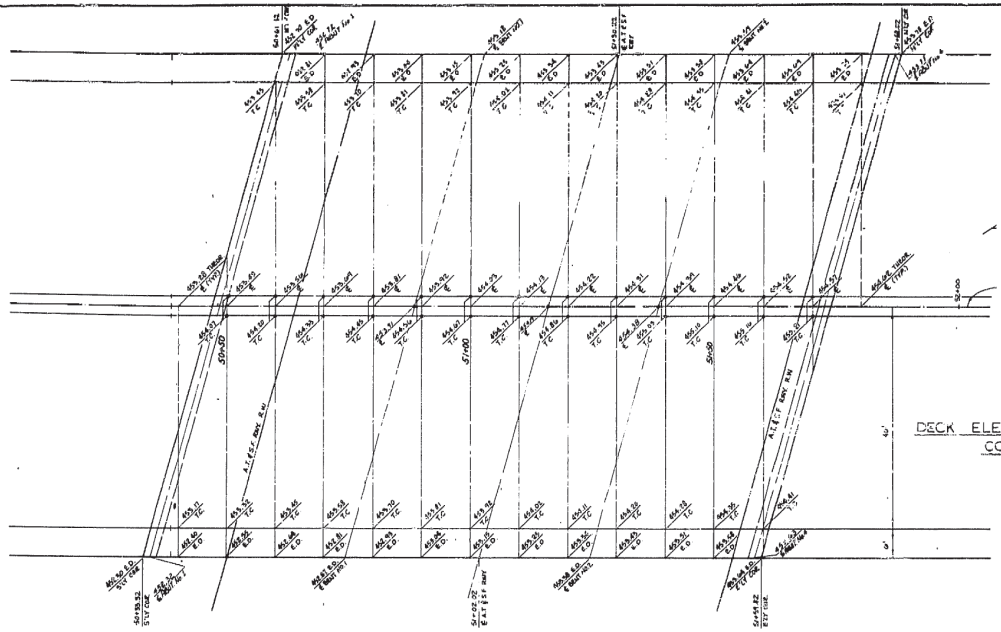
NOTE: SLAB REINF. NOT COMPLETELY DETAILED THIS SHEET. SEE SHEET NO. 12



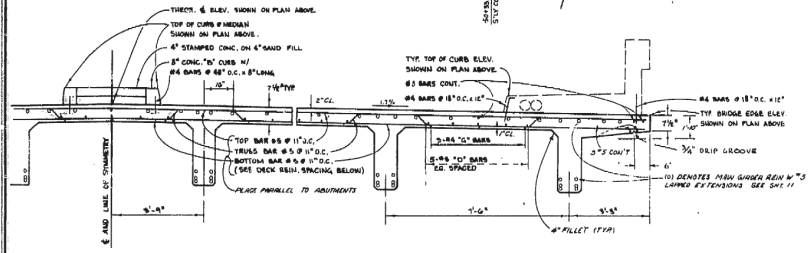
BOTTOM REINFORCING

SCALE 3/32" = 1'-0"

GIRDER REIN. PLACEMENT DETAILS



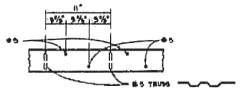
DECK ELEVATIONS – 10' STATIONS, CORNERS & BENTS
SCALE 1"=10'



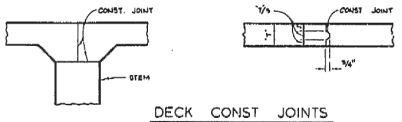
TYPICAL DECK SECTION
SCALE 1/2"=1'-0"

DECK PLACING NOTES

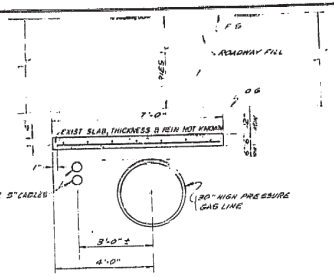
1. THE CONTRACTOR SHALL SUBMIT A DECK PLACING SCHEDULE WHICH WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
2. TRANSVERSE JOINTS MAY BE LOCATED AT ABOUT THE ⅛ POINT OF SPAN.
3. LONGITUDINAL JOINTS SHALL BE LOCATED AT THE EDGE OF A TRAFFIC LANE UNLESS OTHERWISE PERMITTED BY THE ENGINEER.
4. REINFORCING STEEL SHALL BE CONTINUOUS THRU ALL CONSTRUCTION JOINTS



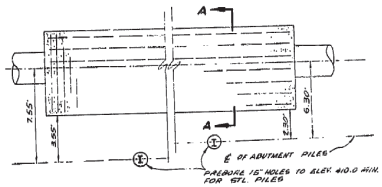
TRANSVERSE DECK REIN. SPACING
NO SCALE



DECK CONST JOINTS
SCALE 1"=1'-0"

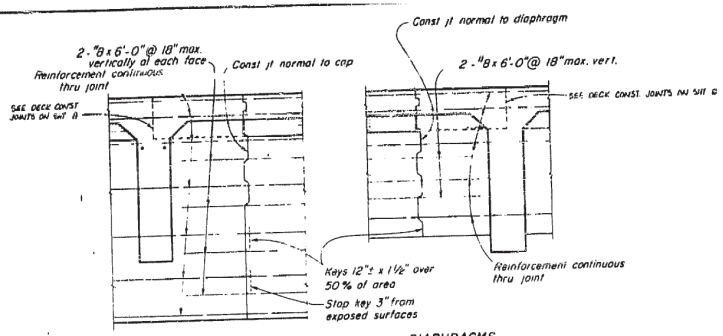


SECTION A-A
1/2" = 1'-0"

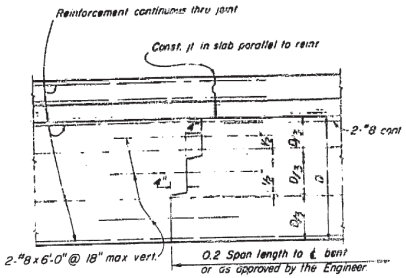


CLEARANCE OF ABUTMENT PILES TO EXISTING REINFORCED CONCRETE SLAB OVER GAS LINE

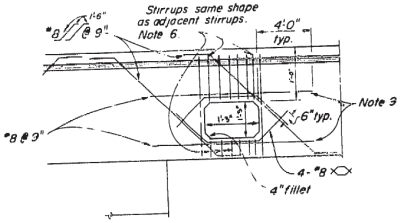
DETAIL
1/4" = 1'-0"



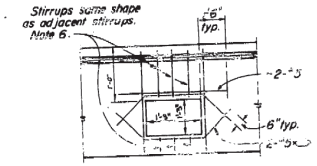
BENT CAP DIAPHRAGMS
LONGITUDINAL CONSTRUCTION JOINTS
DETAIL J-4



TRANSVERSE GIRDER CONSTRUCTION JOINTS
DETAIL J-3



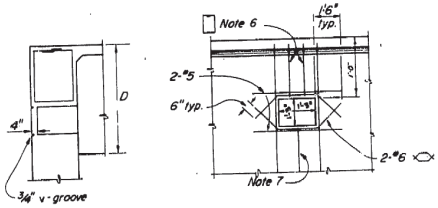
UTILITY OPENINGS / BENT CAP



UTILITY OPENINGS / INTER. DIAPHRAGM

NOTES:

1. The exact location, elevation, size and direction of openings shall be in accordance with the Project Plans and as directed by the Engineer.
2. Girders not shown. See Project Plans.
3. All reinf. detailed to be placed in addition to reinf. shown on Project Plans.
4. Seal utilities at abutments with concrete or mortar, after tightly wrapping utility with 2 layers of 15# building paper.
5. Main reinf. to clear opening.
6. Reinf. to be same bar size, and ⅓ the spacing of adjacent reinf. shown on Project Plans.
7. Reinf. to be same bar size and shape as adjacent reinf. shown on Project Plans.
8.
9. When there is insufficient space to place reinf. as shown, hook reinf. into exterior girder.



- FUTURE UTILITY OPENI

[redacted]