

RT. FAI-80

SEC. 06-2HF-1



STATE OF ILLINOIS

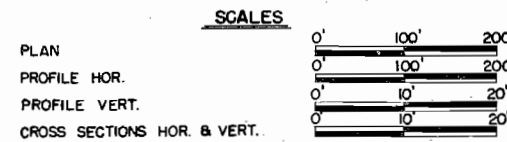
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED

FEDERAL AID HIGHWAY

FOR INDEX OF SHEETS
SEE SHEET NO. 2



F.A.I. ROUTE 80 SECTION 06-2HF-1

PROJECT I-80-I(46)45

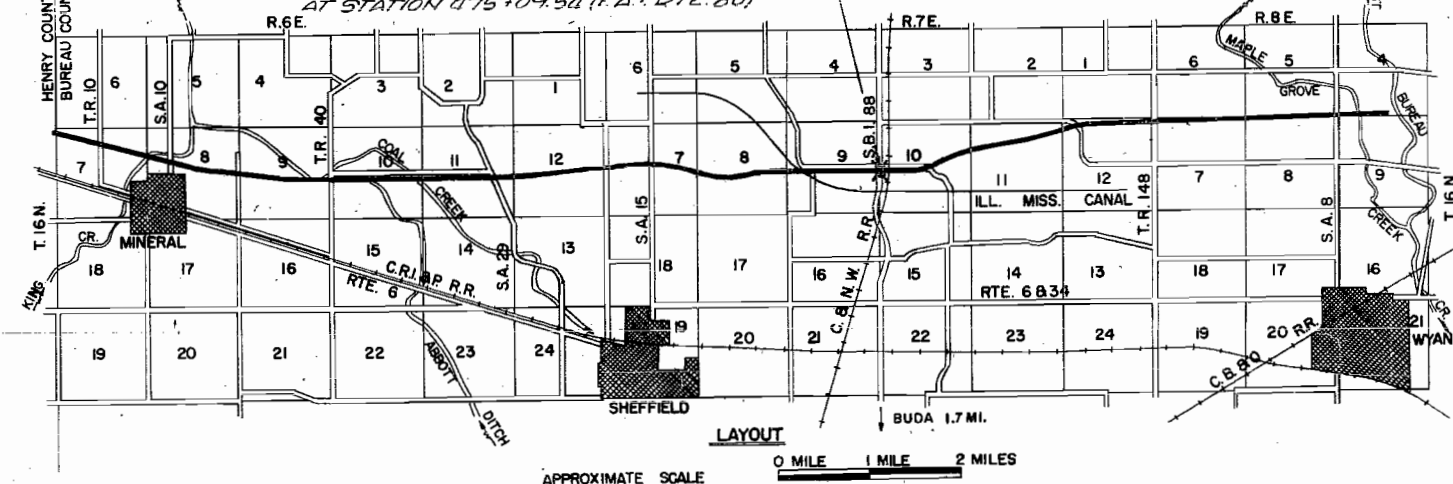
BUREAU COUNTY



LOCATION OF SECTION INDICATED THUS:—

SECTION 06-2HF-1 INCLUDES

FURNISHING, FABRICATING, SHOP
PAINTING AND DELIVERING THE
STRUCTURAL STEEL FOR ONE (1) 11 SPAN
CONTINUOUS STEEL W/ BEAM GRADE
SEPARATION STRUCTURE (CARRYING
S.B.I. RTE. 88 OVER F.A.I. RTE. 80) ON
R.C. PIERS ON TIMBER PILES AND
R.C. OPEN ABUTMENTS ON CONCRETE
PILES. SPANS: 50'-6"; 86'-9"; 86'-9"; 82'-6";
AT STATION 175+09.50 (F.A.I. RTE. 80)



APPROVED
FOR STRUCTURAL ADEQUACY ONLY
W.E. Bauman 9-12-62
Engineer of Bridge & Traffic Structures

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED 9-10 1962

DISTRICT ENGINEER
EXAMINED September 24 1962

ENGINEER OF ROAD PLANS & CONTRACTS
PASSED September 24 1962

ENGINEER OF DESIGN
APPROVED September 24 1962

CHIEF HIGHWAY ENGINEER
APPROVED September 24 1962

DIRECTOR

HIGHWAY CLASSIFICATION
S.B.I. ROUTE 88-550-T-70
F.A.I. ROUTE 80-1976-T-70

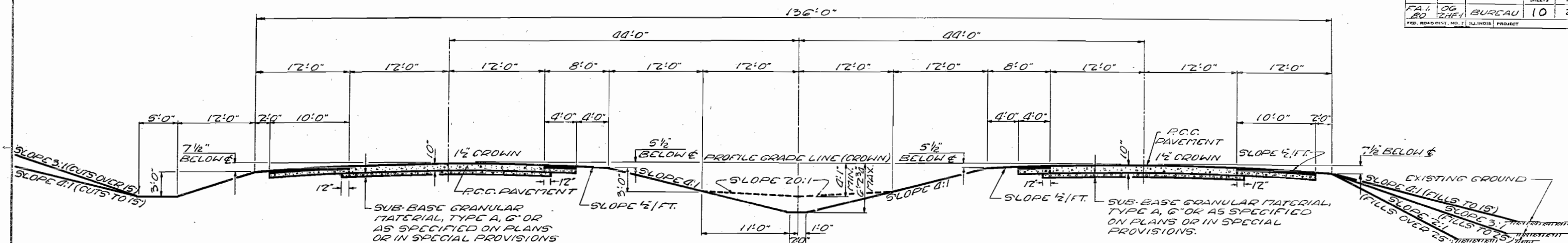
PLANS PREPARED BY
MISSMAN, STANLEY, FARMER & ASSOCIATES
CIVIL ENGINEERS
ROCK ISLAND, ILLINOIS

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

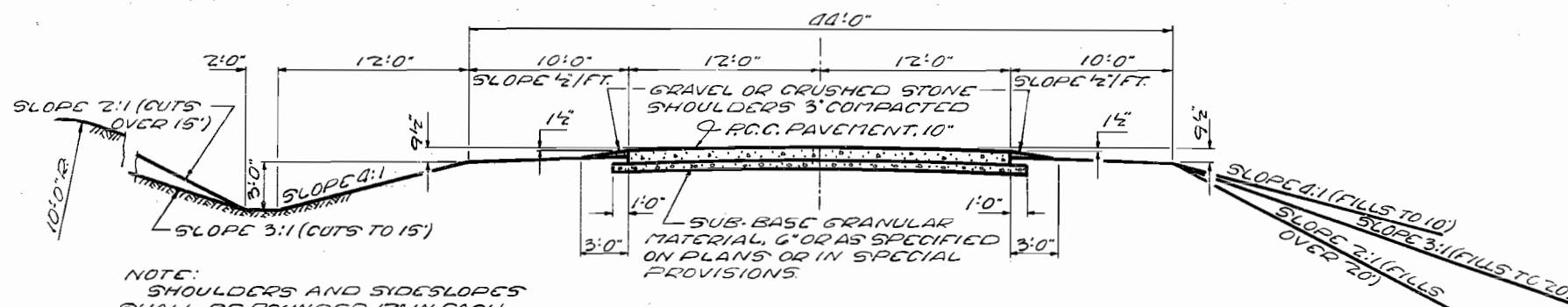
DIVISION ENGINEER

DATE



NOTES: SEE STANDARD 2150 FOR SHOULDER CONSTRUCTION DETAILS (RURAL AREAS). SHOULDERS AND SIDESLOPES SHALL BE ROUNDED 12" IN EACH DIRECTION FROM THE TANGENT INTERSECTION OF THESE SURFACES.

TYPICAL SECTION F.A.I. ROUTE 80



NOTE: SHOULDERS AND SIDESLOPES SHALL BE ROUNDED 12" IN EACH DIRECTION FROM THE TANGENT INTERSECTION OF THESE SURFACES.

TYPICAL SECTION S.B.I. ROUTE 88

SUMMARY OF QUANTITIES - SECTION 06-2HF-1

QUAN.	UNIT	ITEM	CODE NO.
304,840	POUND	FURNISHING STRUCTURAL STEEL	054002

INDEX OF SHEETS

SHEET NO.	TITLE
1	TITLE SHEET
2	TYPICAL SECTIONS F.A.I. 80 & S.B.I. 88, GENERAL NOTES
3	INDEX OF SHEETS & SUMMARY OF QUANTITIES
4	PLAN & PROFILE S.B.I. ROUTE 88
5	PLAN & PROFILE F.A.I. ROUTE 80
6	GENERAL PLAN & ELEVATION
7	LOCATION PLAN
8	DECK DETAILS
9	BORINGS AND EXPANSION GUARD DETAILS
10	STEEL FRAMING PLAN & DETAILS
11	STRUCTURAL STEEL (BEARINGS & DIAPHRAGMS)

GENERAL NOTES

ENTIRE SECTION INSPECTED AND APPROVED AS TO POLICY.
DATE 9-10-1962
DISTRICT ENGINEER M. M. Mealey

WHEREVER IN THESE PLANS, REFERENCE IS MADE TO THE "STANDARD SPECIFICATIONS" IT IS UNDERSTOOD TO INCLUDE THE "SUPPLEMENTAL SPECIFICATIONS," EFFECTIVE APRIL 2, 1962.

HIGHWAY CLASSIFICATION

S.B.I. ROUTE 88 - 550-T-70
F.A.I. ROUTE 80 - 1976-T-70

MAXIMUM GRADE -3.41%
LENGTH OF MAXIMUM GRADE 475'
MINIMUM STOPPING SIGHT DISTANCE 600'
MINIMUM HORIZONTAL RADIUS 8185.16'

U.S.G.S. DATUM
5TH. GA.-1929

BEGIN CONSTRUCTION
STA. 1418+42.14

SECTION 06-2HB-1 BEGINS
STA. 1420+42.14 (RELOC. S.B.I. 88)

Existing R.O.W. Line
CLAUDE BAILEY

P.O.T. 1432+59.16 S.B.I. 88=
P.O.T. 475+95.45 F.A.I. 80

STRUCTURE
SECTION 06-2SB
BY OTHERS

CUTTER REMOVAL
RT. AND LT. STA. 1441+41 - 1446+27 = 978 LIN. FT.
STEEL PLATE BEAM GUARD RAIL
RT. AND LT. STAS. 1444+00 - 1446+23 = 460 LIN. FT.
REMOVING AND RESETING GUARD RAIL
RT. STAS. 1443+67 - 1446+25 = 258 LIN. FT.
(SEE SPECIAL PROVISIONS)
Existing R.O.W. Line
CLAUDE BAILEY

PT. 1444+28.02
Spike & Washer

80 06-2HF-1 BUREAU 10 3
1418+00 1448+00

REMOVE EXISTING CULVERTS
PROPOSED R.O.W. LINES
ILLINOIS POWER CO.
AC
Remove
5'x3' Existing Concrete Culvert (To be removed)
12" Dia. Conc. Water Tanks
Existing Drain Tile
PROPOSED 5' DITCH
NOTE: PLACE NO. 4 TIE BARS 2'-6" LONG AT 2'-6" CENTERS RT. STAS. 1424+49 - 1427+08.4 AND RT. AND LT. STAS. 1440+44.8 - 1443+05.6 FOR FUTURE RAMP CONNECTIONS. NO EXTRA COMPENSATION.
SURVEY LINE F.A.I. ROUTE 80
A sign conforming to Std. 2153-2 shall be erected at Station 1415+00.
Construct Std. 2143 width Transition Lt. Sta. 1418+42.14 to Lt. Sta. 1420+42.14.
PIPE CULVERTS, TYPE I, 15" TYPE I, 15" 31' L. 1419+12 34' L. 1419+50 33' L. 1419+83
GENERAL TELEPHONE CO.
PIPE CULVERTS TYPE I, 15" 31' L. 1419+12 34' L. 1419+50 33' L. 1419+83
Super = 0.02 ft. per ft.
Affain Super & Remove Crown: Sta. 1420+42.14 - 1421+09.14 And Sta. 1444+64.00 - 1443+94.52
STORM SEWERS, TYPE 2, (RCP CLASS II) 10" 110' RT. STA. 1429+00 - 140' LT. STA. 1430+00 = 270 LIN. FT.

MANHOLES SPECIAL, 4 FT. DIAMETER

110' RT. STA. 1429+00 = 1 EACH
140' LT. STA. 1430+00 = 1 "

GRAVEL OR CRUSHED STONE BASE COURSE, TYPE A

PER STA. 1419+12 = 20 TON

SODDING

BRIDGE CORN - STAS. 1431+23 - 1431+73 577 SQ. YDS.
BRIDGE CORN - STAS. 1433+50 - 1433+92 495 " "

TREE REMOVAL (OVER 15 INCH DIAMETER)
44' RT. STA. 1418+31 10 IN. DIA.
14' RT. STA. 1420+15 12 " "
29' RT. STA. 1421+98 15 " "
21' RT. STA. 1425+97 15 " "
57' LT. STA. 1429+66 12 " "
57' LT. STA. 1430+19 10 " "
63' LT. STA. 1430+69 11 " "
81' LT. STA. 1440+42 11 " "

CLAUDE BAILEY

P.E.R. STA. 1418+50 = 26 CU. YDS.
RT. AND LT. STAS. 1418+42.14 - 1431+23.57 = 48 CU. YDS.
RT. AND LT. STAS. 1433+93.82 - 1446+27.20 = 46 " "
(FROM DETOUR ROAD MATERIAL AND PLACED AS TYPE B SHOULDERS & SURFACE COURSE)

PAVEMENT REMOVAL

STAS. 1420+42.14 - 1424+00 = 716 SQ. YDS.
STAS. 1431+00 - 1434+20 = 640 " "
STAS. 1438+87 - 1444+64 = 1154 " "

WOOD GUARD RAIL REMOVAL

Rt. and Lt. Sta. 1443+67 - 1446+25 = 516 Lin. Ft.

INCIDENTAL BITUMINOUS SURFACING 3 TONS
PER STA. 1419+12 3 TONS
BITUMINOUS MATERIALS (PRIME COAT) 10 GAL.
PER STA. 1419+50 10 GAL.

NOTE: CONSTRUCT TEMPORARY APPROACH R. STA. 1419+50 FOR USE WHILE DETOUR IS IN OPERATION. SALVAGE EXISTING 15" PIPE CULVERT AND RE-SET UNDER TEMPORARY APPROACH. COST TO BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION.

PROFILE OF EXISTING PAVEMENT ALONG &

RT. DITCH - 2.70%
LT. DITCH - 2.35%
RT. DITCH - 2.00%
LT. DITCH - 0.43%
LT. DITCH - 0.20%

BRIDGE SECTION
06-2HB-1

CROWN OF PROPOSED IMPROVEMENT
PROFILE OF EXISTING GROUND ALONG SURVEY LINE

4334 CU. YDS. EARTH EXCAVATION
3223 CU. YDS. EMBANKMENT

12970 CU. YDS. EARTH EXCAVATION
4747 CU. YDS. EMBANKMENT

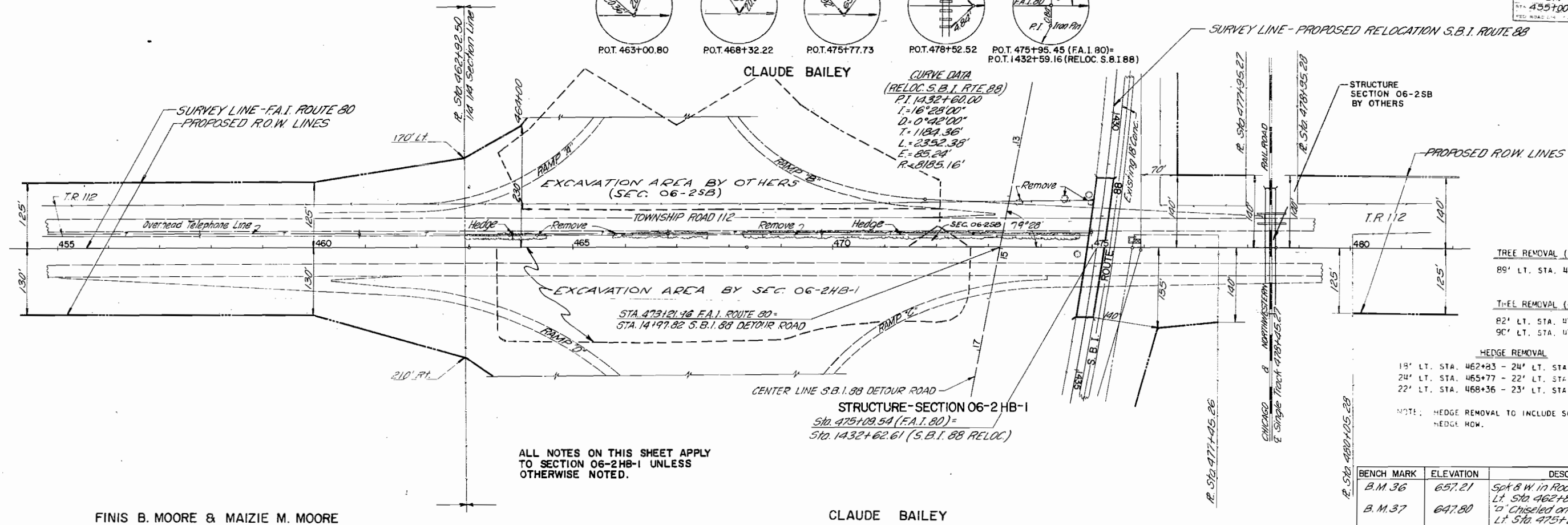
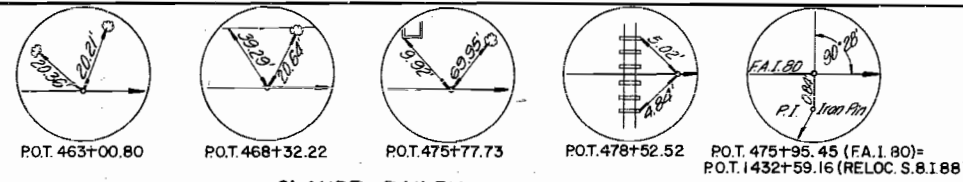
6557 CU. YDS. EARTH EXCAVATION
4746 CU. YDS. EMBANKMENT

S.B.I. ROUTE 88

U.S.G.S. DATUM
5TH G.A. 1929

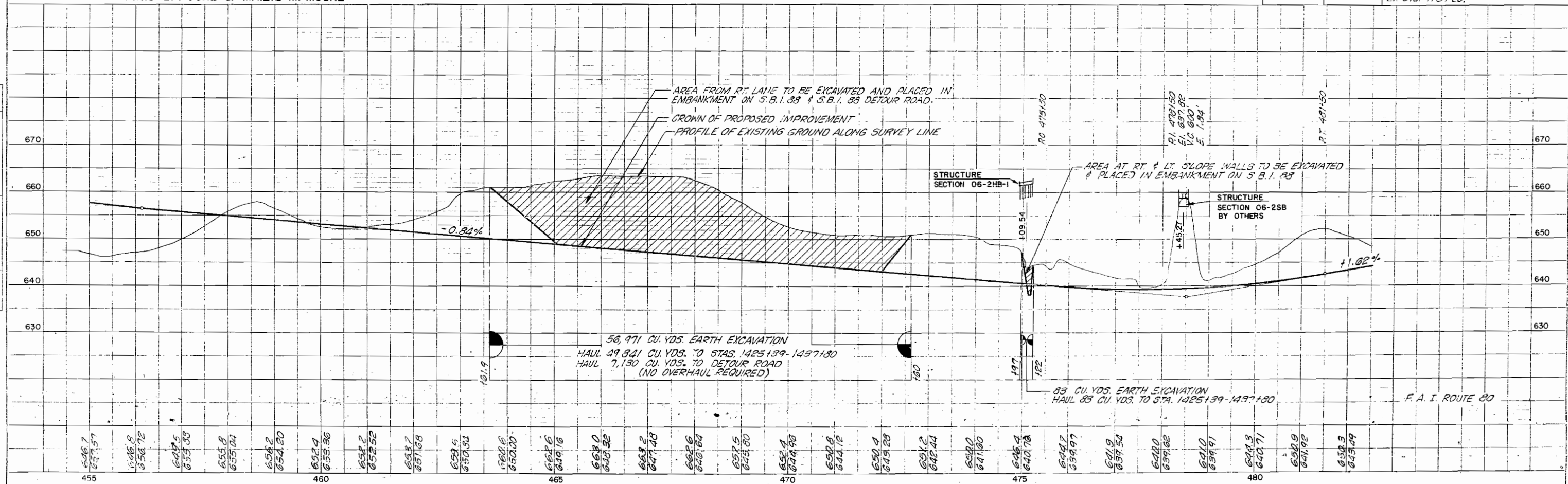
BECKHAM A. DYE & HARRIET DYE

80 28-1 BUREAU 10 4
455+00 480+00



FINIS B. MOORE & MAIZIE M. MOORE

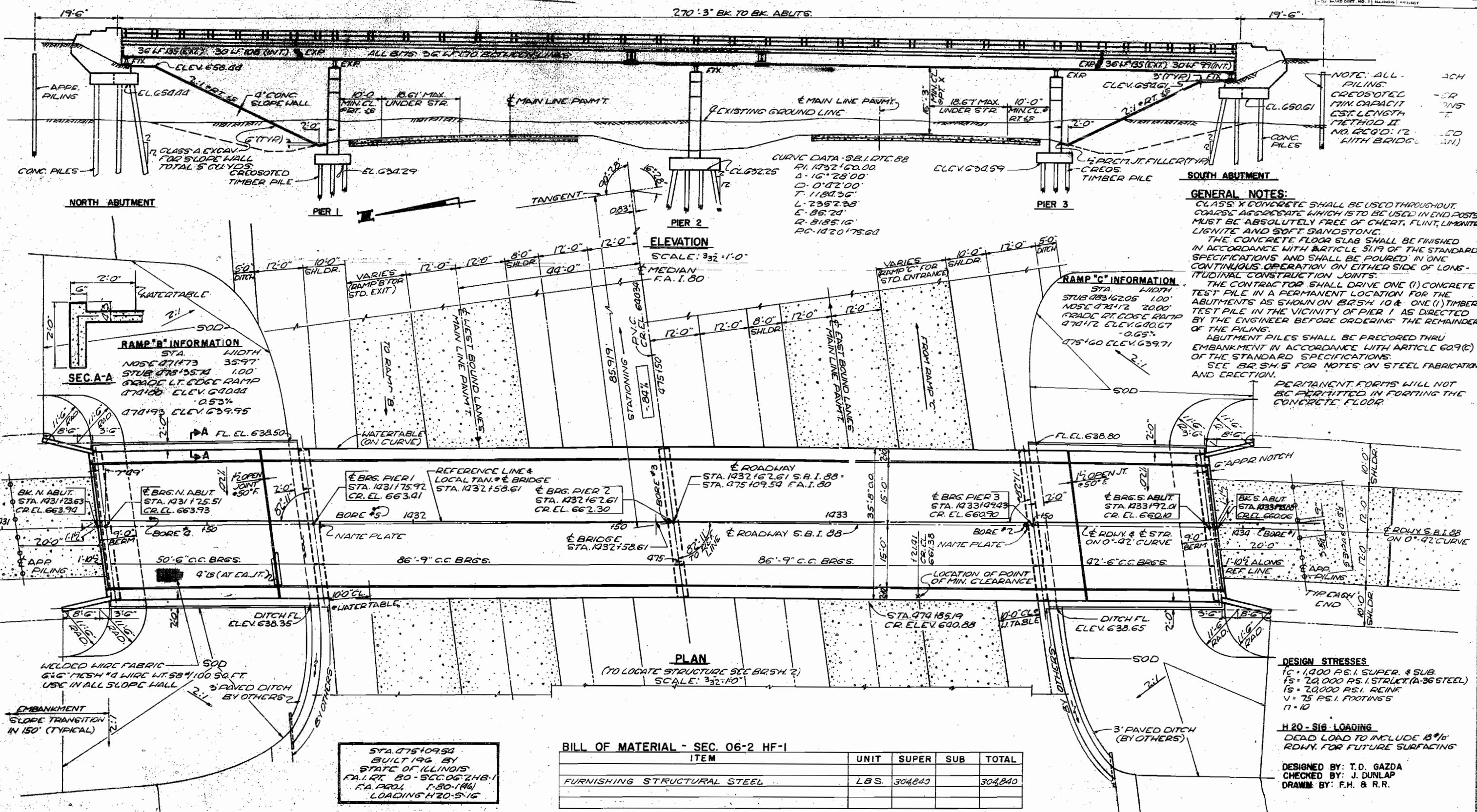
CLAUDE BAILEY



B.M. #37 - CHISELED "O" ON CONC. HEADWALL 280' LT.
STA. 475120 (F.A.I. 80) ELEV. 647180 (U.S.G.S. DATUM)
EXISTING STRUCTURE: NONE

P.I. STA. 1432100.00 ELEV. 66931
V.C. 1120' ELEV. 66174
+1.00% -3.91%

FA.I. 06-2 HF-1
BUREAU
10 5

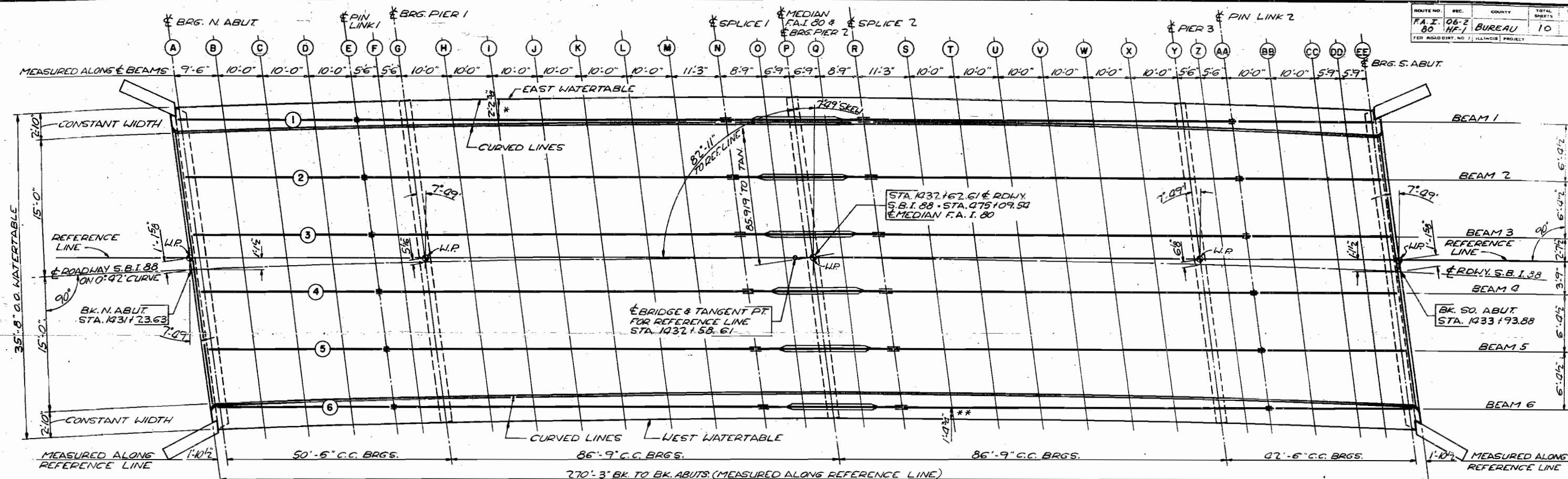


STA. 475109.50
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RTE. 80 - SEC. 06-2 HF-1
F.A. PROJ. 1-80-11145
LOADING H 20 - S16

LETTERING FOR NAMEPLATE
SEC. STD. 2115

BILL OF MATERIAL - SEC. 06-2 HF-1

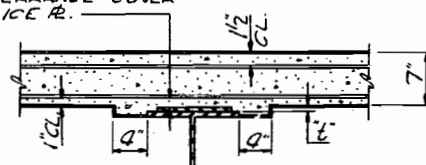
ITEM	UNIT	SUPER	SUB	TOTAL
FURNISHING STRUCTURAL STEEL	LBS.	304,840		304,840



LOCATION PLAN

(USE "REFERENCE LINE" TO LOCATE STRUCTURE IN FIELD)

3' MIN. CLEARANCE COVER R. OR SPLICE R.



METHOD OF DETERMINING FILLET HEIGHTS "f"

AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FLANGES OF THE BEAMS SHALL BE TAKEN AT THE REFERENCE POINTS SHOWN ON THIS SHEET. THESE ELEVATIONS SUBTRACTED FROM THE "THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION" SHOWN ON THIS SHEET, MINUS FLOOR THICKNESS EQUALS THE FILLET HEIGHTS ABOVE TOP OF BEAM.

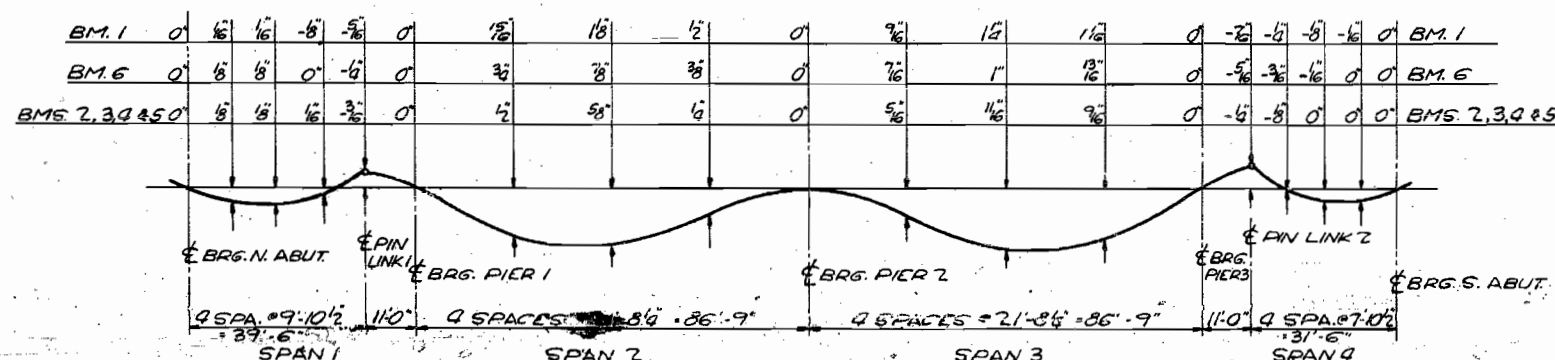
RIGHT ANGLE OFFSETS FROM BEAM 1 & 6 TO WATERTABLE

LOC.	BM. 1	BM. 6
A	1'-4 1/2"	2'-4 1/2"
B	1'-5 3/8"	2'-2 3/4"
C	1'-7 3/8"	2'-1 1/2"
D	1'-9 3/8"	1'-11 1/2"
E	1'-10 3/8"	1'-10 1/2"
F	1'-11 1/2"	1'-9 3/8"
G	2'-0 1/2"	1'-8 3/8"
H	2'-1 1/2"	1'-7 3/8"
I	2'-2 3/8"	1'-6 3/8"
J	2'-3 3/8"	1'-5 3/8"
K	2'-4 3/8"	1'-5 1/8"
L	2'-4 3/8"	1'-4 3/8"
M	2'-5"	1'-4 3/8"
N	2'-5 3/8"	1'-4"
O	2'-5 3/8"	1'-4"
P	2'-5 3/8"	1'-4"
Q	2'-5 3/8"	1'-4 1/8"
R	2'-5 3/8"	1'-4 1/8"
S	2'-4 3/8"	1'-4 1/8"
T	2'-4 3/8"	1'-5 1/8"
U	2'-3 3/8"	1'-6"
V	2'-3"	1'-6 3/8"
W	2'-2"	1'-7 3/8"
X	2'-1"	1'-9"
Y	1'-11 1/2"	1'-10 3/8"
Z	1'-11"	1'-11"
AA	1'-10 3/8"	1'-11 1/8"
BB	1'-8 3/8"	2'-1 1/2"
CC	1'-7 3/8"	2'-3 3/8"
DD	1'-6"	2'-4 3/8"
EE	1'-4 3/8"	2'-5 3/8"

* TYPICAL - SEE PLAN.

THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS

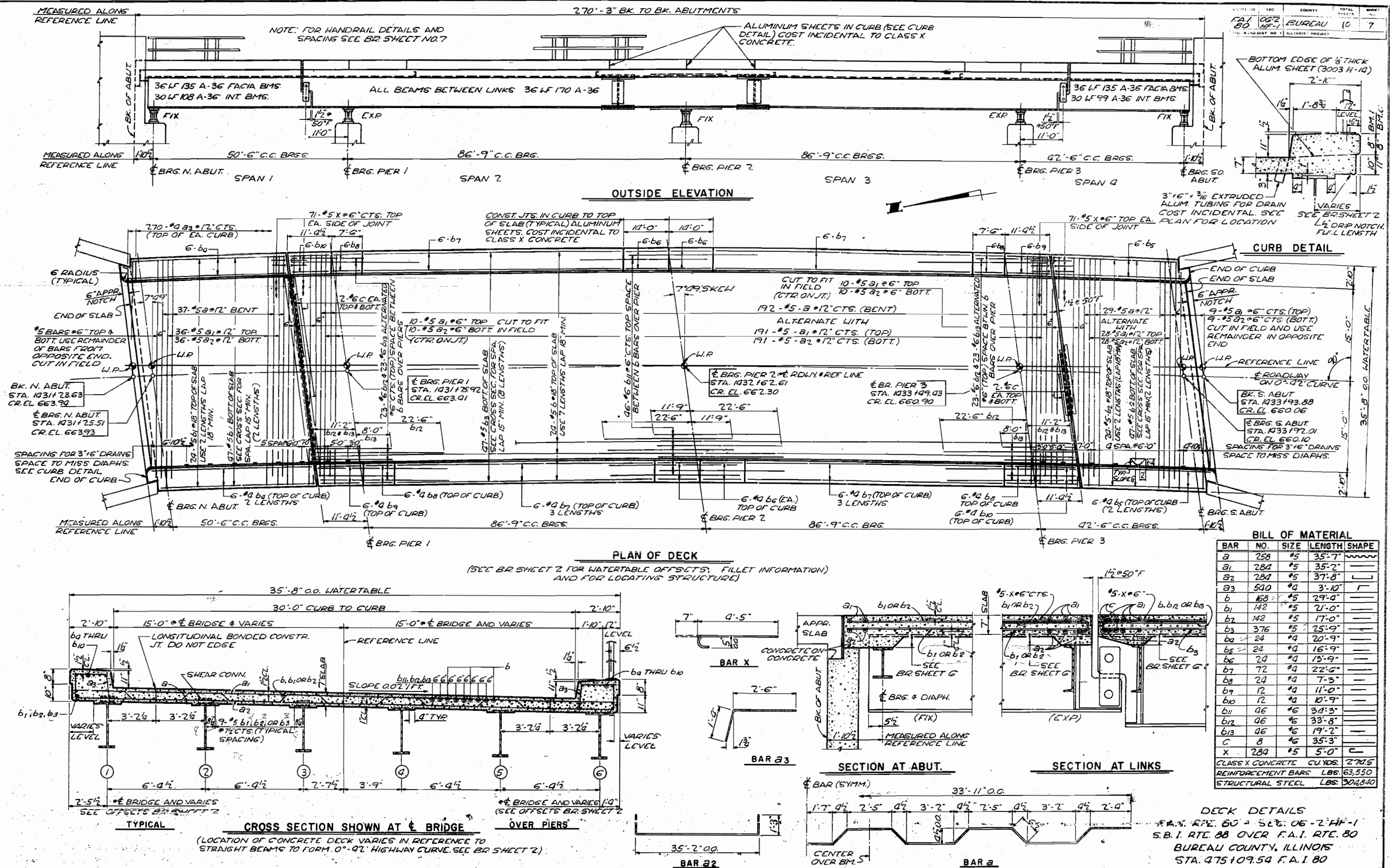
LOC.	BM. 1	BM. 2	BM. 3	BM. 4	BM. 5	BM. 6
A	664.27	664.14	664.00	663.87	663.73	663.60
B	664.19	664.06	663.92	663.79	663.65	663.51
C	664.09	663.96	663.83	663.69	663.55	663.41
D	663.97	663.85	663.71	663.58	663.44	663.30
E	663.85	663.72	663.59	663.45	663.31	663.17
F	663.80	663.67	663.53	663.39	663.26	663.12
G	663.76	663.62	663.48	663.34	663.20	663.07
H	663.68	663.53	663.39	663.25	663.11	662.98
I	663.60	663.45	663.29	663.15	663.01	662.89
J	663.49	663.31	663.18	663.04	662.90	662.78
K	663.37	663.19	663.05	662.91	662.77	662.66
L	663.23	663.05	662.91	662.77	662.64	662.52
M	663.08	662.91	662.77	662.63	662.49	662.37
N	662.88	662.73	662.60	662.45	662.31	662.18
O	662.74	662.60	662.46	662.32	662.18	662.04
P	662.64	662.50	662.36	662.22	662.08	661.94
Q	662.55	662.41	662.27	662.13	661.98	661.84
R	662.43	662.29	662.15	662.01	661.87	661.73
S	662.31	662.17	662.03	661.89	661.75	661.61
T	662.18	662.04	661.90	661.76	661.62	661.48
U	662.03	661.89	661.75	661.61	661.47	661.33
V	661.86	661.72	661.58	661.44	661.30	661.16
W	661.68	661.54	661.40	661.26	661.12	660.98
X	661.47	661.33	661.19	661.05	660.91	660.77
Y	661.25	661.11	660.97	660.83	660.69	660.55
Z	661.13	661.00	660.86	660.72	660.58	660.44
AA	661.02	660.89	660.75	660.61	660.47	660.33
BB	660.88	660.74	660.60	660.46	660.32	660.18
CC	660.68	660.54	660.40	660.26	660.12	659.98
DD	660.58	660.44	660.30	660.16	660.02	659.88
EE	660.47	660.33	660.19	660.05	659.91	659.77



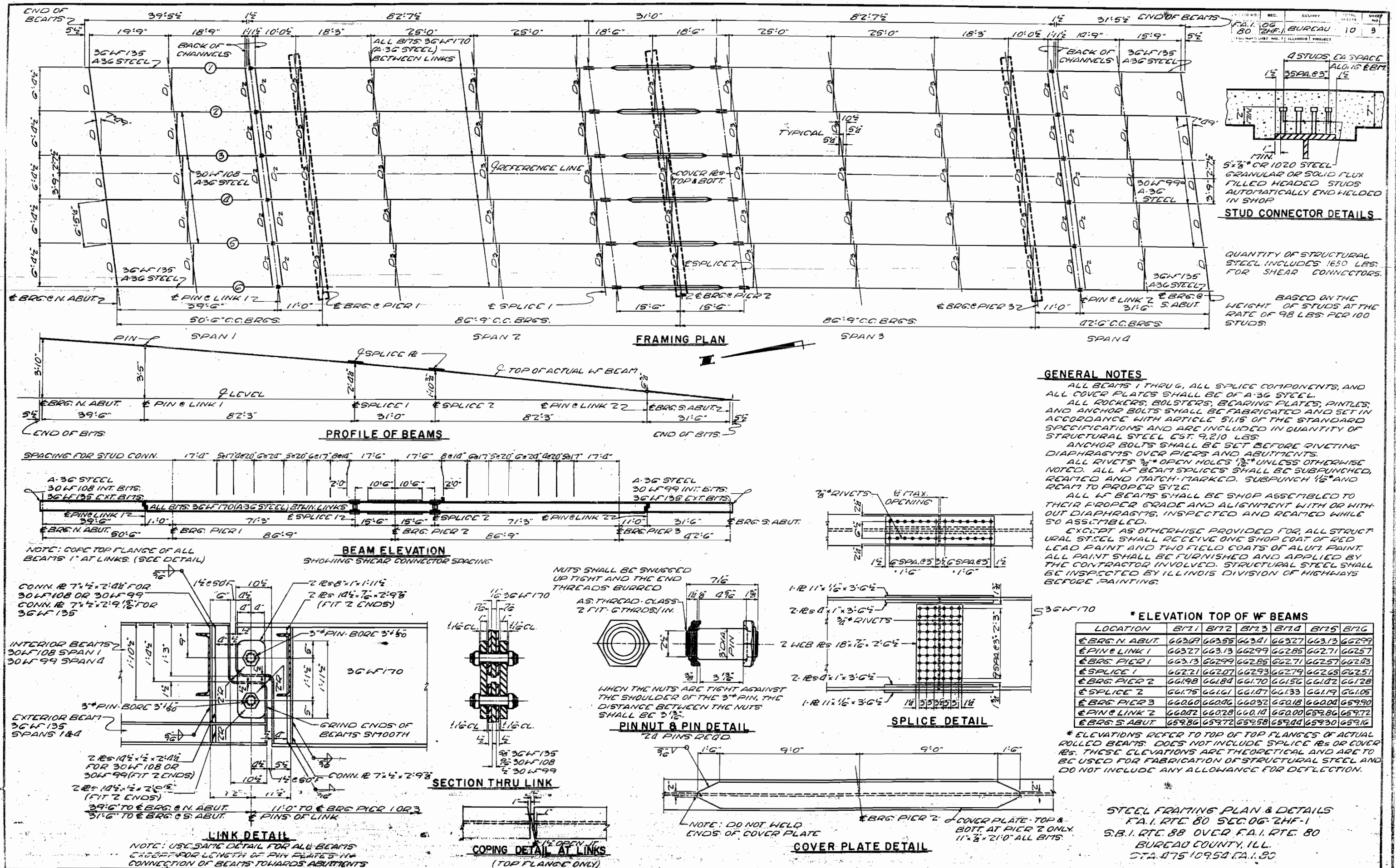
DEAD LOAD DEFLECTION DIAGRAM

(WEIGHT OF STRUCTURAL STEEL NOT INCLUDED. DIAGRAM FOR REFERENCE ONLY. DO NOT USE FOR CONSTRUCTION PURPOSES)

LOCATION PLAN
F.A.I. RTE. 80 - SEC. 06-2 HF-1
S.B.I. RTE. 88 OVER F.A.I. RTE. 80
BUREAU COUNTY, ILLINOIS
STA. 475+09.54 F.A.I. 80



BORINGS AND EXPANSION GUARD DETAILS
F.A.I. RTE. 80 SECTION 06-2HF-1
S.B.I. RTE. 88 OVER F.A.I. RTE. 80
BUREAU COUNTY, ILLINOIS
STA 475+09.54 F.A.I. 80



DETAIL OF BEARING AT ABUTMENTS AND PIER 2