

INDEX OF SHEETS

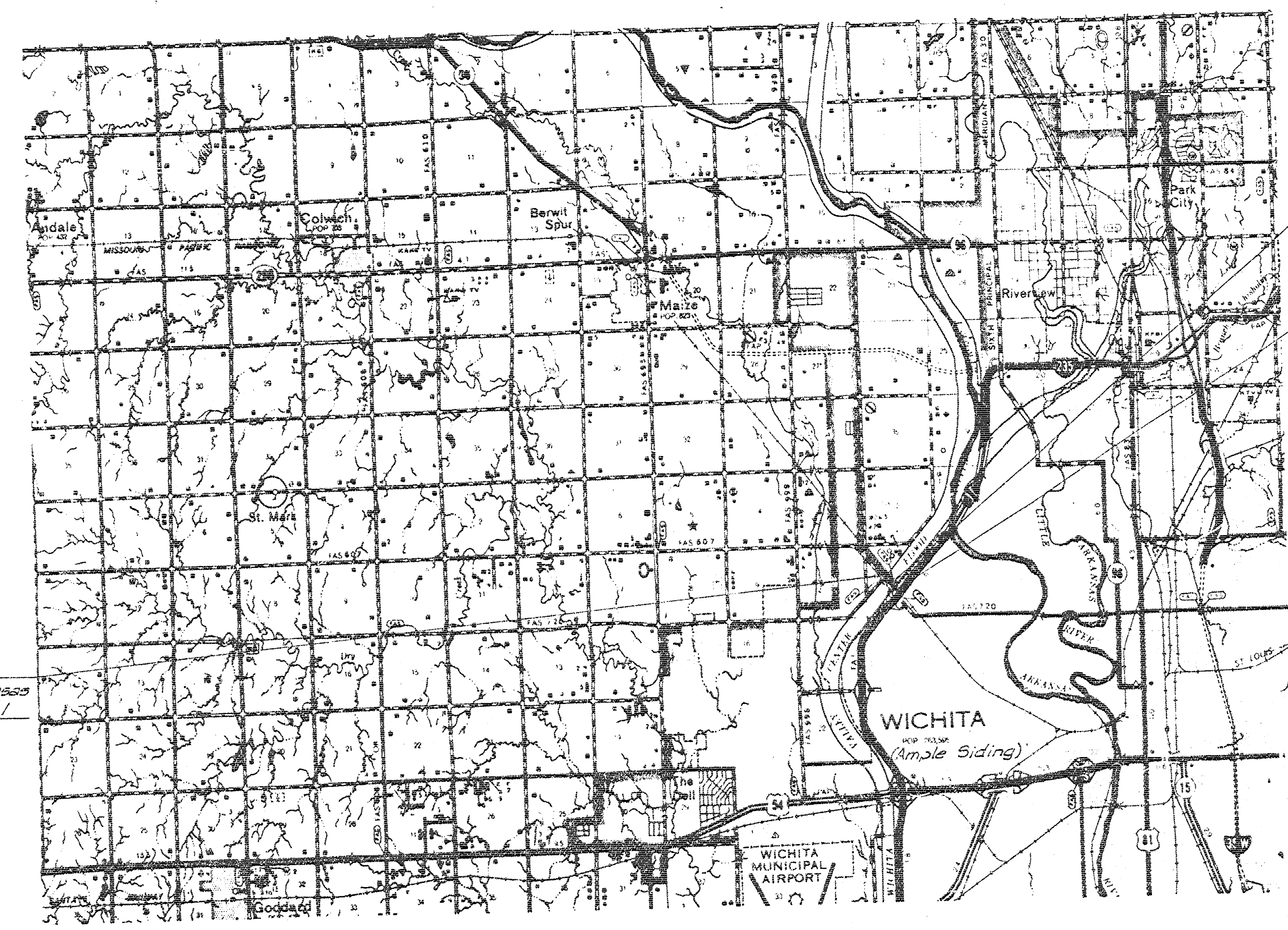
Sheet No.	Title
1	Title Sheet
2	Typical Section (Grading)
3	Construction Sequence (Grading)
4	Plan & Profile
5	Contour Map
6	Summary of Quantities
7	Construction Layout
8	Abutment Details
9 & 10	Pier Details
11	Bearing & Expansion Devices
12 & 13	Superstructure Details
14 & 15	Handrail Details
16 & 17	Stair Details
18	Wall & Walk Details & Bar List
19	Standard Pile Details
20	Excavation, Bar Supports & Spacers
21-23	Construction Traffic Control
24 & 25	Cross Sections

STATE OF KANSAS
SECONDARY ROAD SYSTEM
SEDGWICK COUNTY

KANSAS FEDERAL AID SECONDARY PROJECT 87S-428(II) PART I
1970 TRAFFIC CENSUS 5400 VEHICLES PER DAY
DESIGN SPEED 60 M.P.H.

PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
87S-428 (II)	1	25

PART I
BRIDGE



Sta. 1187+65.86 Const.
45'-6"-3856'-6"-45'-6" Cont.
R.C. Slab Spans (Haunched)
9°00' Skew Lt.
72'-0" Roadway

Sta. 1190+39.30 END Kansas
FAS Project 87S-428(II) Part I.

Sta. 1184+32.42 BEGIN Kansas
FAS Project 87S-428(II) Part I.

Note: Traffic to be carried thru construction.

CONVENTIONAL SIGNS

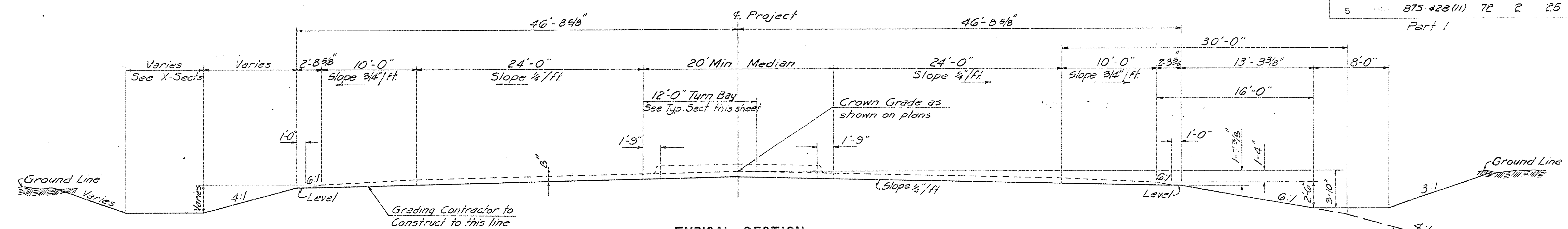
GUARD FENCE	BASE OR SURVEY LINE
UNFENCED PROPERTY	LEVEE
COUNTY LINE	CULVERTS
CITY VILLAGE OR BOROUGH	DROP INLETS
STATE OR NATIONAL LINE	PIPE LINES
TOWNSHIP, GRANT, OR SECTION LINE	POWER LINES
FENCE LINE	TELEPHONE LINES
RIGHT OF WAY LINE	TELEGRAPH LINES
TRAVELLED WAY	HEDGE
RAILROADS	TREES
RETAINING WALL	GRADE ELEVATION
CONSTRUCTION LIMITS	ROCK

GROSS LENGTH OF PROJECT	546.88	FT.
ADDITIONS	0	FT.
EXCEPTIONS	0	FT.
NET LENGTH OF PROJECT	546.88	FT. 0.104 MILES
NET LENGTH OF BRIDGES	546.88	FT. 0.104 MILES
NET LENGTH OF ROAD	0	FT. 0 MILES

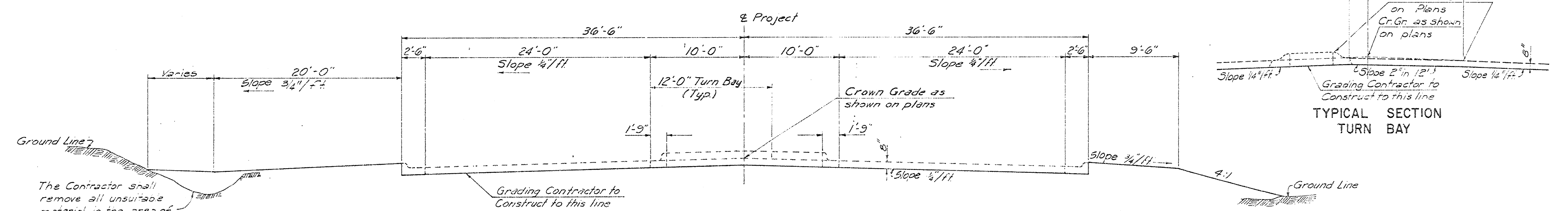
PLANS PREPARED BY:
PROFESSIONAL ENGINEERING CONSULTANTS
ENGINEERS
WICHITA, KANSAS

APPROVED:
[Signature]
COUNTY ENGINEER
DATE July 12 1972

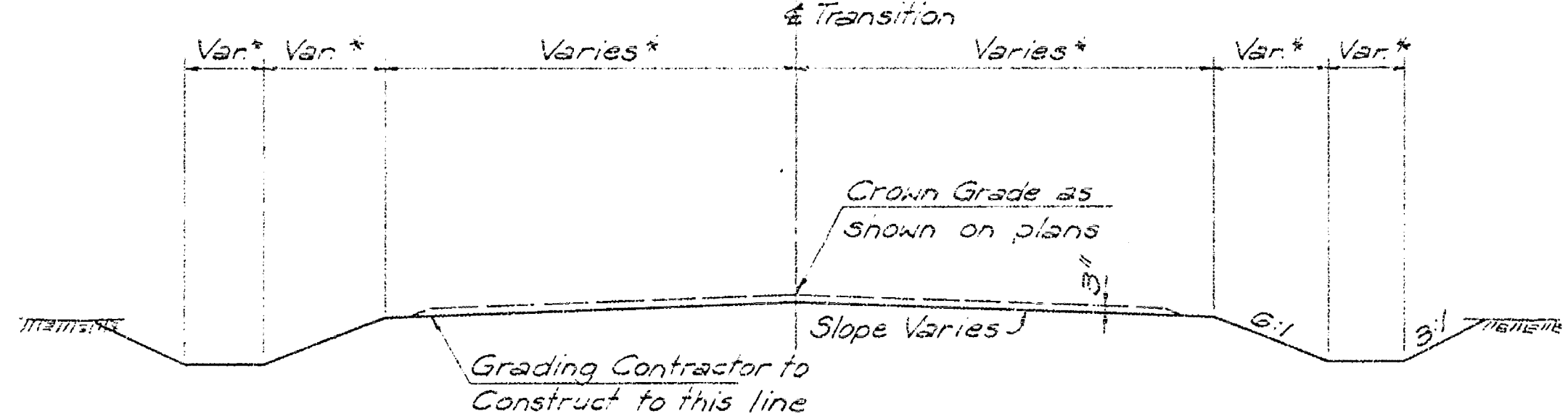
STATE HIGHWAY COMMISSION OF KANS.
RECOMMENDED FOR APPROVAL
ENGINEER OF SECONDARY ROADS
APPROVED: DATE: _____
STATE HIGHWAY ENGINEER



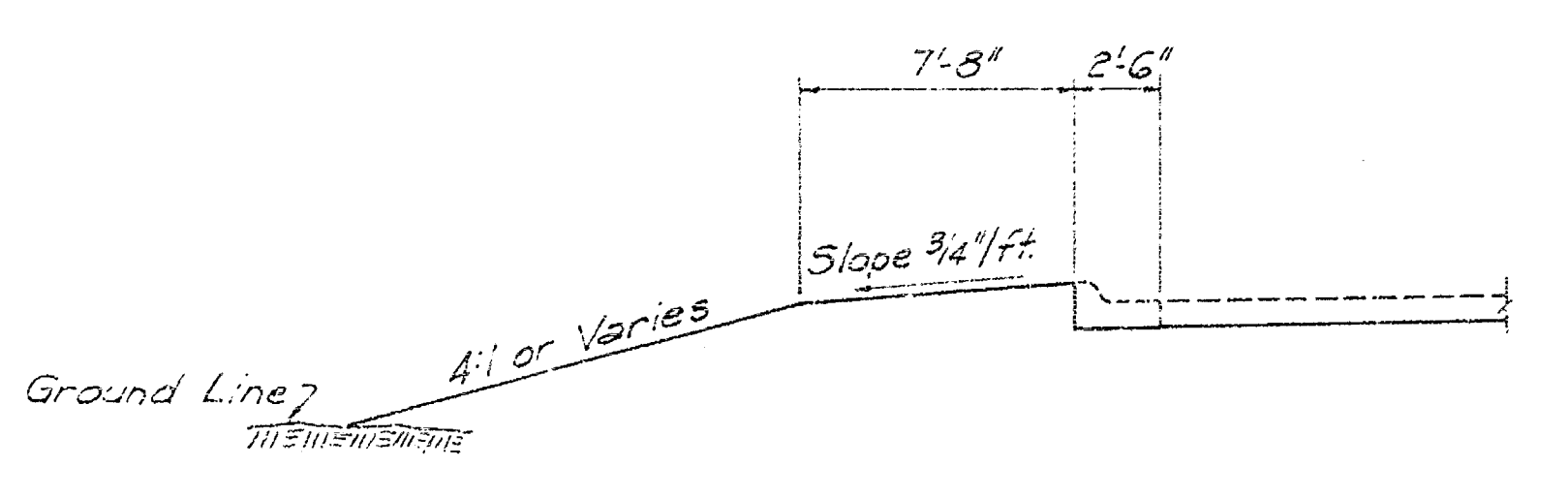
TYPICAL SECTION
Sta. 1160+36.84 to Sta. 1178+00



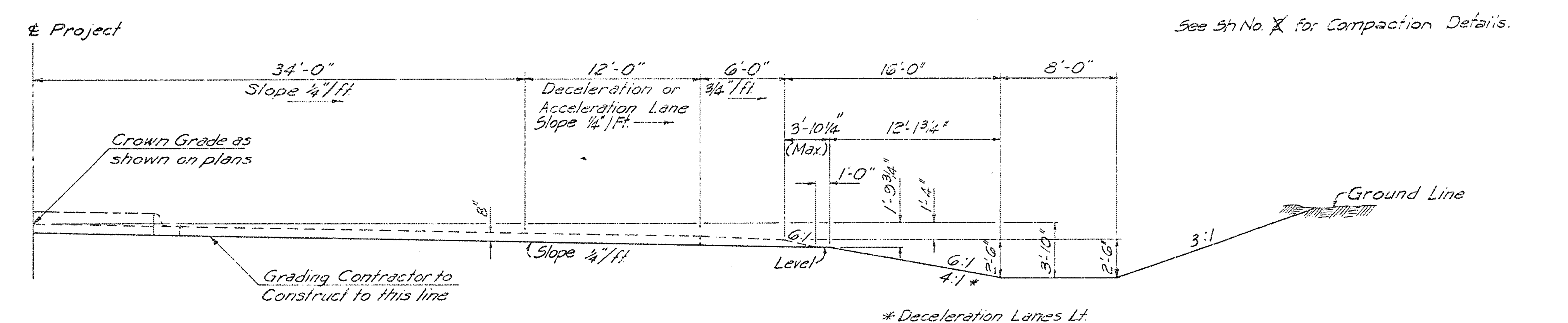
TYPICAL SECTION WITH CURB & GUTTER
Sta. 1178+00 to Sta. 1185+00
* Sta. 1130+30 to Sta. 1135+67.76
* Roadway and Median widths & slopes vary.



TRANSITION SECTION
Sta. 1155+50 to Sta. 1160+36.84



TYPICAL SHOULDER SECTION
Lt. Sta. 1133+00 to Sta. 1135+67.76



TYPICAL HALF SECTION WITH SPEED CHANGE LANE

See 3rd No. X for Compaction Details.

SEDGWICK COUNTY HIGHWAY DEPARTMENT G. C. McLURE, JR., P.E. COUNTY ENGINEER	
TYPICAL SECTIONS MAIN LINE	
SEDGWICK COUNTY PROJECT 875-428(11)	
PROFESSIONAL ENGINEERING CONSULTANTS	
Drawn by: G.G.	Check by: R.E.
Date: Mar 72	Date: 7-2-77

CONSTRUCTION SEQUENCE

TRAFFIC SHALL BE CARRIED THROUGH CONSTRUCTION ON BICKEL AVENUE.
CROSSROAD AND INLET PIPES WILL BE INSTALLED BEFORE THE BITUMINOUS BASE
COURSE (ROAD MIX) SUB-BASE IS PLACED.

PHASE I - GRADING OF LEFT LANES

TRAFFIC IS TO BE MAINTAINED ON THE EXISTING ROADWAY AND BRIDGE.
NO CONSTRUCTION SHALL BE ACCOMPLISHED BETWEEN STA. 1155+50 AND
STA. 1180+00 DURING PHASE 1.

ALL GRADING LEFT OF THE PROJECT CENTERLINE BETWEEN STA. 1160+00 AND STA. 1184+92.42 SHALL BE COMPLETED AS SHOWN ON THE TYPICAL SECTION PHASE I GRADING THIS SHEET.

ALL GRADING ON HOOVER ROAD AND THE HOOVER ROAD RELOCATION WILL BE COMPLETED. TRAFFIC WILL BE CARRIED THROUGH CONSTRUCTION ON THE EXISTING HOOVER ROAD ALIGNMENT.

UPON COMPLETION OF PHASE I GRADING THE BITUMINOUS BASE COURSE (ROAD MIX) WILL BE PLACED ON THE LEFT LANES AND THE HOOVER ROAD RELOCATION AS SHOWN ON THE PLANS.

TRAFFIC BETWEEN STA. 1190+39.30 AND STA. 1195+70 WILL BE ROUTED TO THE EXISTING TWO LANES RIGHT OF THE PROJECT CENTERLINE. PAVEMENT REMOVAL, GRADING AND PLACING OF BITUMINOUS BASE COURSE (ROAD MIX) SHALL BE ACCOMPLISHED ON THIS PORTION WITHOUT INTERIM DELAYS.

PHASE II - GRADING OF RIGHT LANES

TRAFFIC IS TO BE CARRIED ON THE BITUMINOUS BASE COURSE (ROAD MIX) LEFT OF CENTERLINE. IF DIRECTED BY THE ENGINEER A BITUMINOUS SEAL WILL BE PLACED ON THE BITUMINOUS BASE COURSE (ROAD MIX) BEFORE OPENING IT TO TRAFFIC. TRAFFIC WILL BE CARRIED ACROSS PHASE II CONSTRUCTION AT THE ZOO ENTRANCE STA. 1171+22.10 AND AT THE JUNCTION WITH WINDMILL ROAD STA. 1180+51.85.

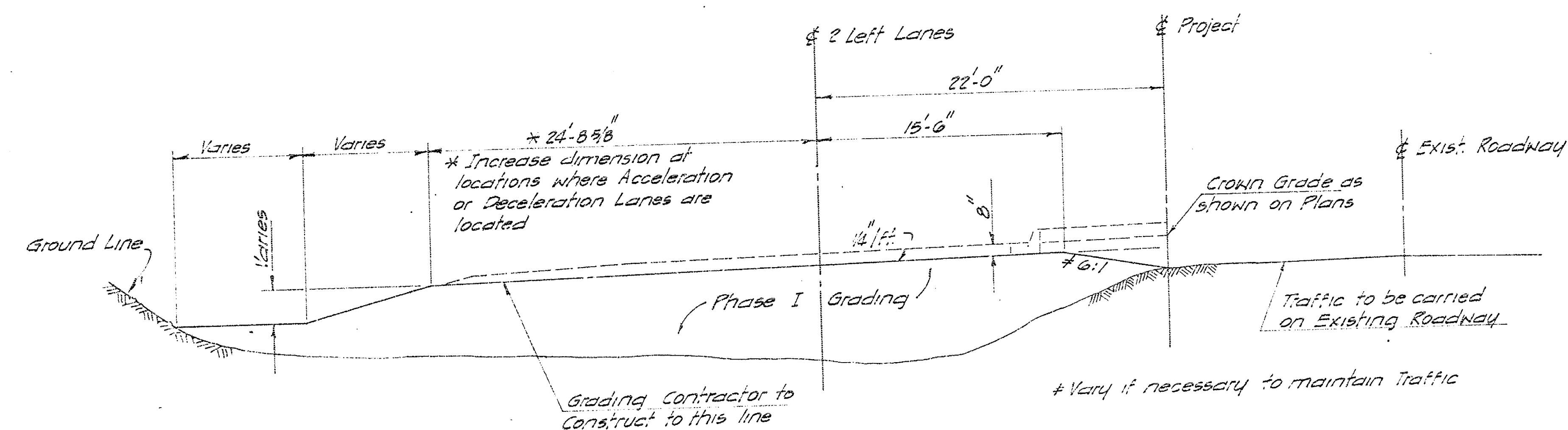
ALL GRADING BETWEEN STA. 1155+50 AND STA. 1160+00 IS TO BE COMPLETED.
TRAFFIC MAY BE ROUTED ONTO THE HOOVER ROAD RELOCATION IF NECESSARY.

ALL GRADING RIGHT OF THE PROJECT CENTERLINE BETWEEN STA. 1160+00 AND STA. 1192+76 IS TO BE COMPLETED AS SHOWN ON THE TYPICAL SECTION PHASE II GRADING THIS SHEET.

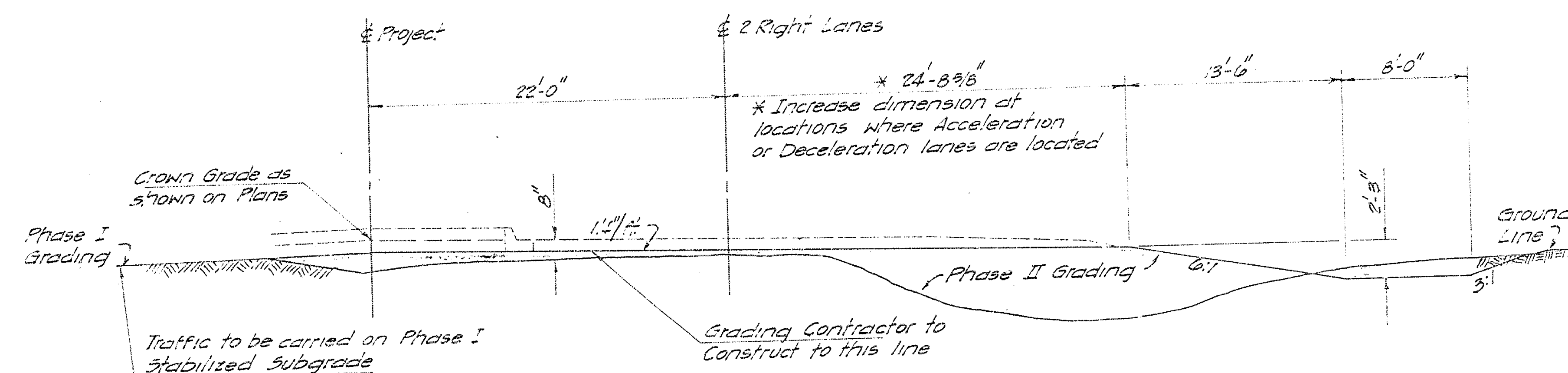
UPON COMPLETION OF PHASE II GRADING, THE BITUMINOUS BASE COURSE (ROAD MIX) WILL BE PLACED AS SHOWN ON THE PLANS.

PHASE III - SURFACING (PLANT MIX)

THE SEQUENCE OF SURFACING IS TO BE COORDINATED BETWEEN THE CONTRACTOR AND THE ENGINEER. TRAFFIC WILL BE CARRIED THROUGH CONSTRUCTION DURING PHASE III.



TYPICAL SECTION PHASE I GRADING



TYPICAL SECTION PHASE II GRADING

SEDGWICK COUNTY HIGHWAY DEPARTMENT
G. C. MCLURE, JR., P.E. COUNTY ENGINEER

CONSTRUCTION SEQUENCE

SEDGWICK COUNTY PROJECT 87S-428(II)

PROFESSIONAL ENGINEERING CONSULTANTS

70-1046
Downy E.E.
Mar. 72 7:237

RECEIVED

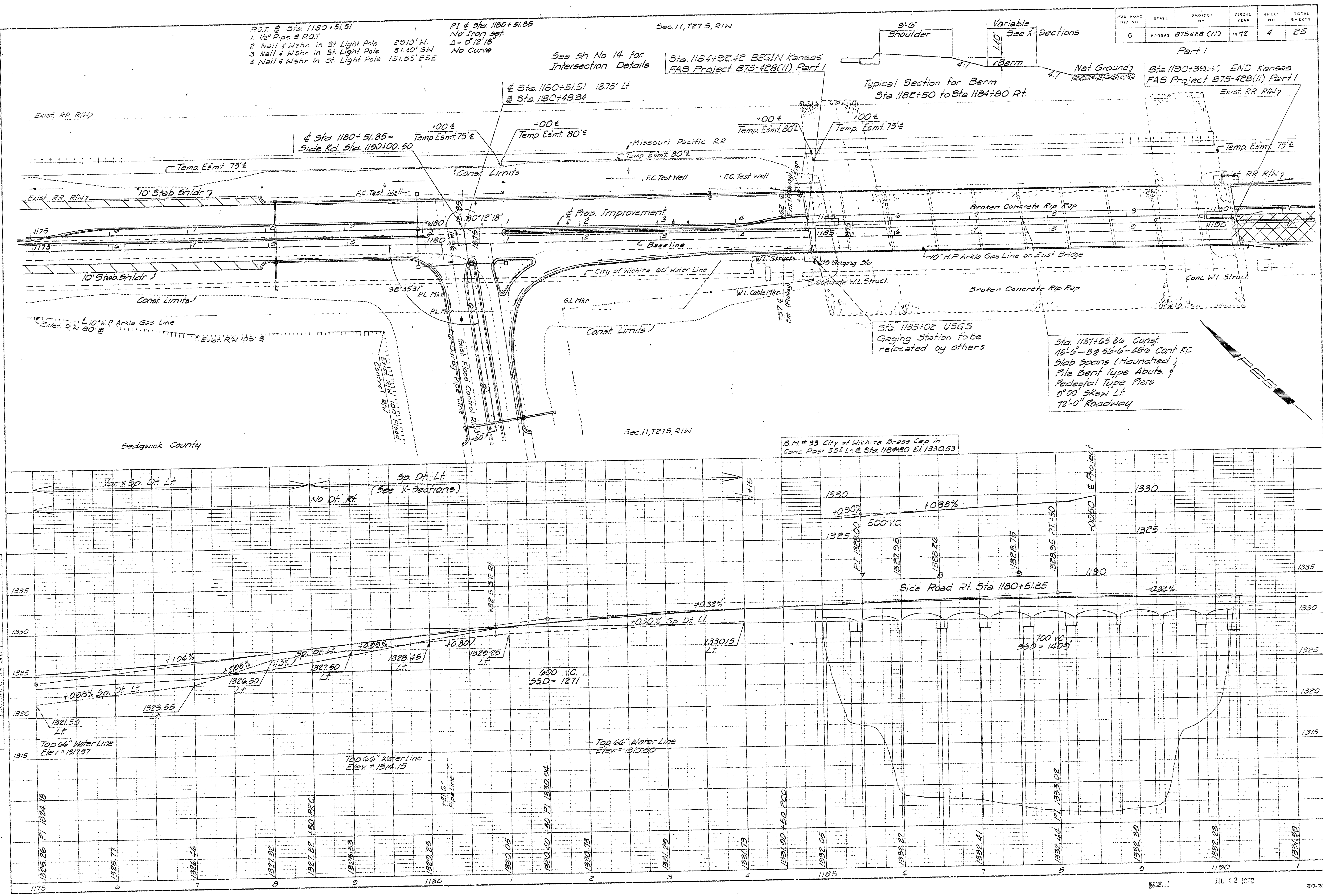
JUL 13 1972

JUL 13 1972

JUL 13 1972

PLM
NOTES:
1. ALL DIMENSIONS ARE IN FEET.
2. ALL ANGLES ARE IN DEGREES.
3. ALL CURVES ARE IN FEET.
4. ALL GRADES ARE IN PERCENT.
5. ALL ELEVATIONS ARE IN FEET.
6. ALL DISTANCES ARE IN FEET.
7. ALL BEARINGS ARE IN DEGREES.
8. ALL SLOPES ARE IN PERCENT.
9. ALL VERTICAL CURVES ARE IN FEET.
10. ALL HORIZONTAL CURVES ARE IN FEET.

PROFILE
NOTES:
1. ALL DIMENSIONS ARE IN FEET.
2. ALL ANGLES ARE IN DEGREES.
3. ALL CURVES ARE IN FEET.
4. ALL GRADES ARE IN PERCENT.
5. ALL ELEVATIONS ARE IN FEET.
6. ALL DISTANCES ARE IN FEET.
7. ALL BEARINGS ARE IN DEGREES.
8. ALL SLOPES ARE IN PERCENT.
9. ALL VERTICAL CURVES ARE IN FEET.
10. ALL HORIZONTAL CURVES ARE IN FEET.



JOB NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	KANSAS	875-428 (11)	1972	4	25

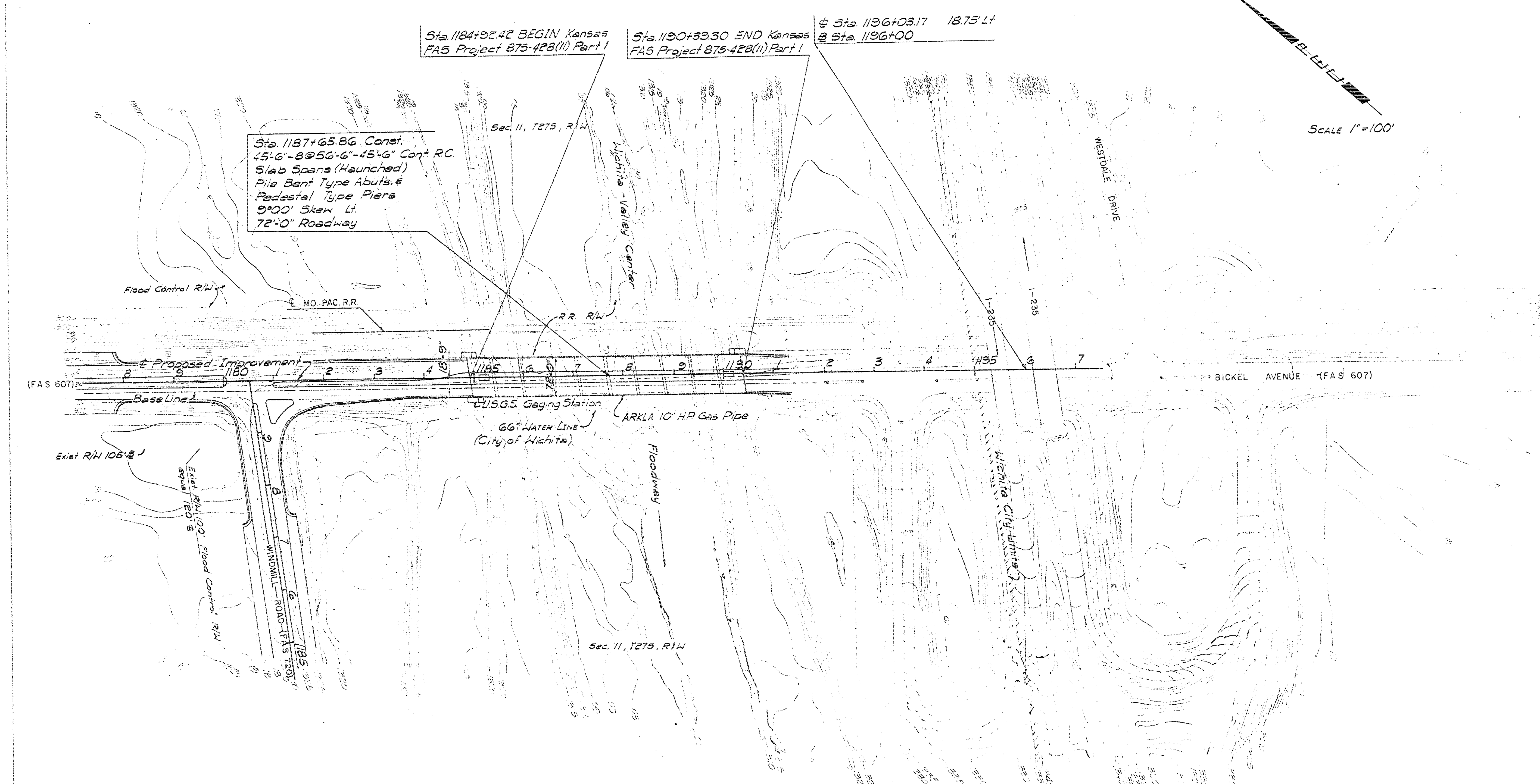
Part I
Sta 1180+39.57 END Kansas
FAS Project 875-428(11) Part I

Sta 1187+65.86 Const
15'-0" - 8'-0" 5'-6" - 4'-6" Cant RC
Slab spans (Haunched)
Pile Bent Type Abutts &
Pedestal Type Piers
9'-0" Skew Lt
12'-0" Roadway

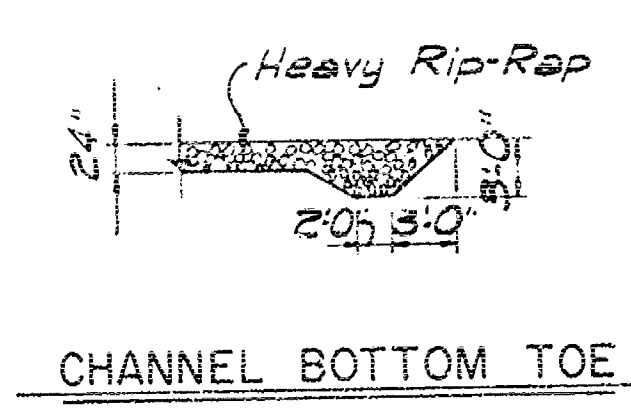
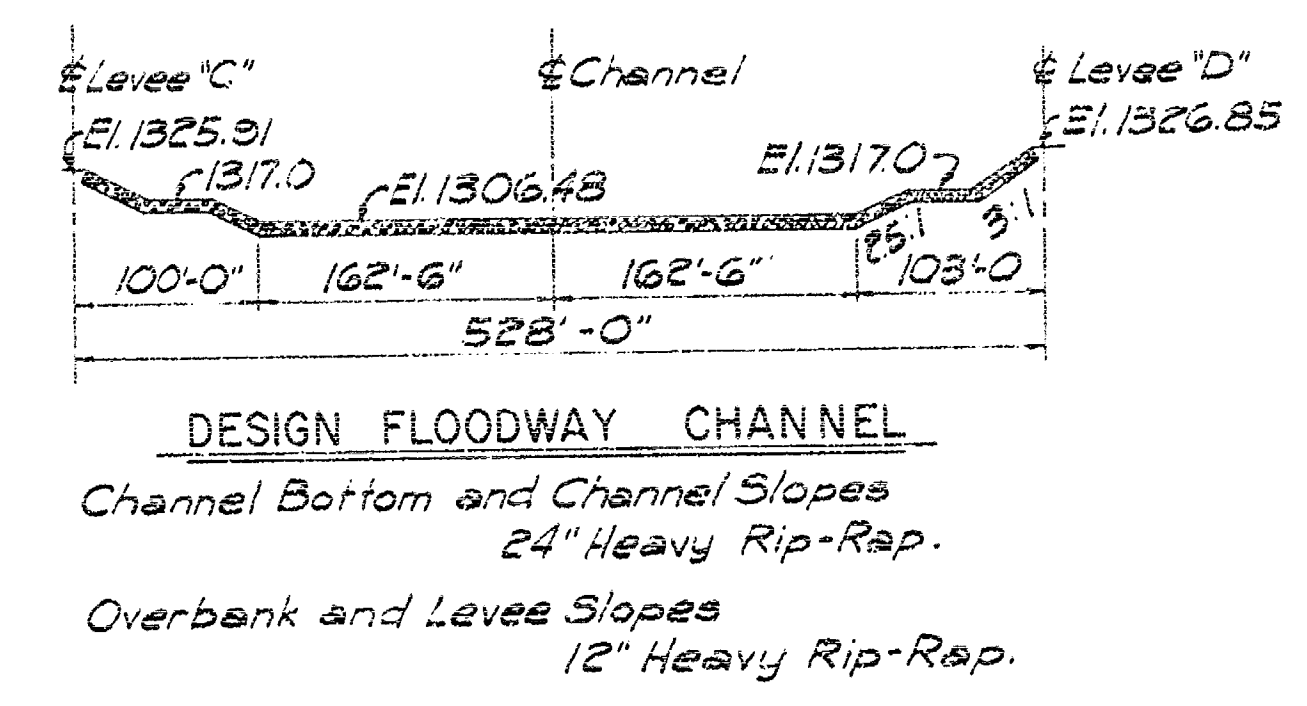
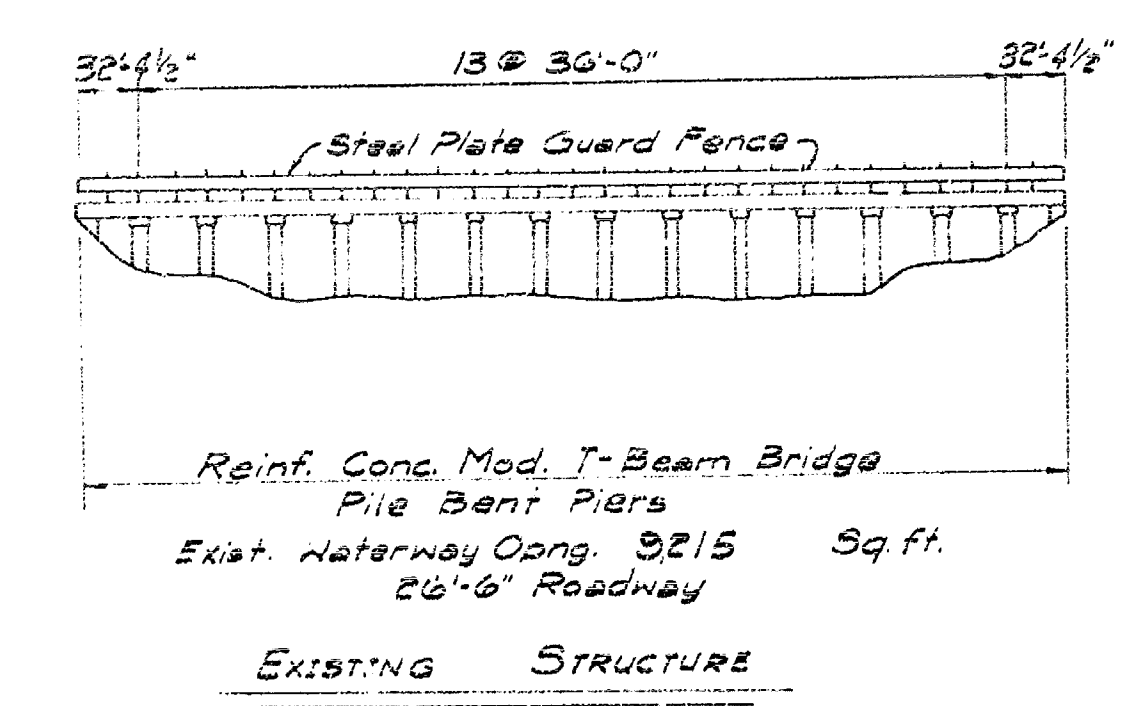
POT @ Sta. 1180+51.51
 1. 1/2" Pipe @ POT
 2. Nail & Washer in St. light Pole 29.10' W.
 3. Nail & Washer in St. light Pole 51.40' S.W.
 4. Nail & Washer in St. light Pole 131.85' E.S.E.

POT @ Sta. 1196+00
 1. Chisel Mark Thru (-) @ P.O.T.
 2. In Bickel St. Median
 3. Back of Curb @ break in median 170.70 S.E.
 4. Pier 41.40 S.
 5. Pier 36.20 E.

875-428(II) 12 5 25
 Part I



SCALE 1"=100'



SEDGWICK COUNTY HIGHWAY DEPARTMENT
 G.C. McLURE, JR., P.E. COUNTY ENGINEER
CONTOUR MAP
 BICKEL AVENUE BRIDGE
 OVER WICHITA-VALLEY CENTER FLOODWAY
 SEDGWICK COUNTY PROJECT 875-428(II)
 PROFESSIONAL ENGINEERING CONSULTANTS
 D.G. R.P.
 L.F. 7-12 11027

LOADING: HS20 - 44 A.A.S.H.O. SPECIFICATIONS OF 1969.

UNIT STRESS, $f'_c = 4,000$ P.S.I., $f_c = 1,600$ P.S.I., $f_s = 20,000$ P.S.I.

BRIDGE EXCAVATION. ELEVATION 1307.0 SHALL DESIGNATE THE EXCAVATION BOUNDARY PLANE OF CLASS I AND CLASS II EXCAVATION. CLASS I ABOVE THE PLANE, CLASS II BELOW. SEE BRIDGE EXCAVATION SHEET FOR LIMITS OF PAY EXCAVATION.

PILES. ALL PILES SHALL BE DRIVEN TO A PENETRATION INTO ROCK OR SHALE UNLESS IN THE OPINION OF THE ENGINEER SUCH PENETRATION CANNOT BE OBTAINED WITHOUT INJURY TO THE PILE. PILES SHALL BE DRIVEN TO A MINIMUM COMPUTED BEARING VALUE OF:

ABUTMENT - 39 TONS PER PILE
PIERS - 42 TONS PER PILE

RIPRAP. THE EXISTING RIPRAP REMOVED DUE TO THE EXCAVATION SHALL BE REPLACED TO THE ORIGINAL POSITION. SEE SHEET 5 FOR DESIGN FLOODWAY CHANNEL. NEW RIPRAP SHALL BE PLACED ON THE UPSTREAM SIDE OF PIERS 3, 4, 5, G AND 7. THE TOP OF THE NEW RIPRAP SHALL BE AT ELEVATION 1300.48. IT SHALL CONSIST OF 24" OF HEAVY CONCRETE RUBBLE RIPRAP, COMPARABLE IN SIZE TO THE EXISTING RIPRAP. A ROCK TOE SHALL BE CONSTRUCTED AT THE OUTER EDGE OF ALL NEW RIPRAP. SEE SHEET 5 FOR ROCK TOE DETAIL. THE EXISTING RIPRAP SHALL BE REMOVED. THE CONSTRUCTION SHALL USE MATERIAL FROM THE EXISTING BRIDGE AS RIPRAP. THIS ITEM WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE SUBSIDIARY TO CLASS II EXCAVATION.

REMOVAL OF EXISTING STRUCTURE. THE BRIDGE CONTRACTOR SHALL REMOVE THE EXISTING MODIFIED I-BEAM SPANS AND ABUTMENTS AND PIERS. THE BRIDGE CONTRACTOR SHALL NOTIFY THE WICHITA-VALENTINE CENTER FLOOD CONTROL, 104 SOUTH MAIN, WICHITA, KANSAS, PHONE 262-0611, PRIOR TO REMOVING THE EXISTING STRUCTURE. ALL CONCRETE HUBBLE, EXCEPT THAT USED BY THE BRIDGE CONTRACTOR FOR RIPRAP, SHALL BE STOCKPILED DOWNSTREAM WITHIN 1000 FEET OF THE EXISTING STRUCTURE AT A LOCATION TO BE DESIGNATED BY THE ENGINEER.

ALL EXISTING PILES, EXCEPT THOSE CONFLICTING WITH NEW CONSTRUCTION, SHALL BE CUT OFF ONE FOOT BELOW EXISTING RIPRAP. EXISTING PILES CONFLICTING WITH NEW CONSTRUCTION SHALL BE REMOVED.

TRAFFIC CONTROL: TRAFFIC WILL BE CARRIED THROUGH CONSTRUCTION ON THE EXISTING BRIDGE UNTIL THE LEFT ONE-HALF OF THE NEW BRIDGE IS COMPLETED, AT WHICH TIME TRAFFIC WILL BE DIVERTED TO THE NEW STRUCTURE. THE BRIDGE CONTRACTOR SHALL COMPLETE THE PERMANENT CURB AND METAL HANDRAIL FOR THE LEFT SIDE OF THE BRIDGE AND THE 3 FOOT SECTION OF MEDIAN AS SHOWN ON THE PLANS BEFORE THE LEFT ONE-HALF OF THE BRIDGE IS OPENED TO TRAFFIC. SEE SHEETS NOS. 21, 22 AND 23 FOR TRAFFIC CONTROL DURING CONSTRUCTION. SEE SHEET NO. 3 FOR ADDITIONAL CONSTRUCTION SEQUENCE INFORMATION.

U.S.G.S. GAGING STATION: THE U.S.G.S. GAGING STATION, RT. STA. 1185+02 IS TO BE RELOCATED BY OTHERS.

ENGINEERING GEOLOGY: THE SOUNDINGS SHOWN ON THESE PLANS ARE TAKEN FROM NOTES OBTAINED IN THE FIELD AND REPRESENT THE BEST INFORMATION AVAILABLE TO THE SEDGWICK COUNTY ENGINEERING DEPARTMENT. THE LOGS OF THESE SOUNDINGS ARE IN THE FILES OF THE SEDGWICK COUNTY ENGINEER AND ARE AVAILABLE FOR INSPECTION BY INTERESTED AND QUALIFIED BIDDERS

FALEWORK: FALEWORK SHALL BE IN PLACE IN ANY SPAN UNTIL THE CONCRETE IN THAT SPAN AND THE NEXT ADJACENT SPAN CONSTRUCTED LATEST SHALL HAVE ATTAINED ITS DESIGN STRENGTH. EXCEPT THAT FALEWORK SHALL REMAIN IN PLACE UNDER THE ENTIRE LEFT ONE HALF OF THE NEW BRIDGE UNTIL SUCH TIME AS THE ADJOINING RIGHT ONE-HALF SPAN HAS BEEN COMPLETED. THE FALEWORK SHALL BE REMOVED IN THE FOLLOWING SEQUENCE: THE CONTRACTOR MAY AT HIS OPTION, WHEN PILE BENTS AT NOT MORE THAN 15' 2" D. C. ARE ERECTED TO SUPPORT THE FALEWORK, ELECT TO REMOVE THE SLAB FORMS, WHEN THE CONCRETE THEREON OTHERWISE QUALIFIES, AND RESHORE THE COMPLETED WORK AT EACH BENT. THE RESHORING SHALL BEGIN IN PLACE ON THE LEFT-HALF OF THE STRUCTURE UNTIL THE CONCRETE IN THE ADJOINING RIGHT-HALF QUALIFIES FOR REMOVAL OF THE FALEWORK. THE CONTRACTOR SHALL OPTIONALLY ERECT THE FALEWORK IN THE SEQUENCE OF OPERATIONS SHALL BE APPROVED BY THE ENGINEER.

TEST PILES. (TWO) CONCRETE TEST PILES SHALL BE DRIVEN AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. TEST PILES SHALL REMAIN IN PLACE AS PERMANENT PILING.

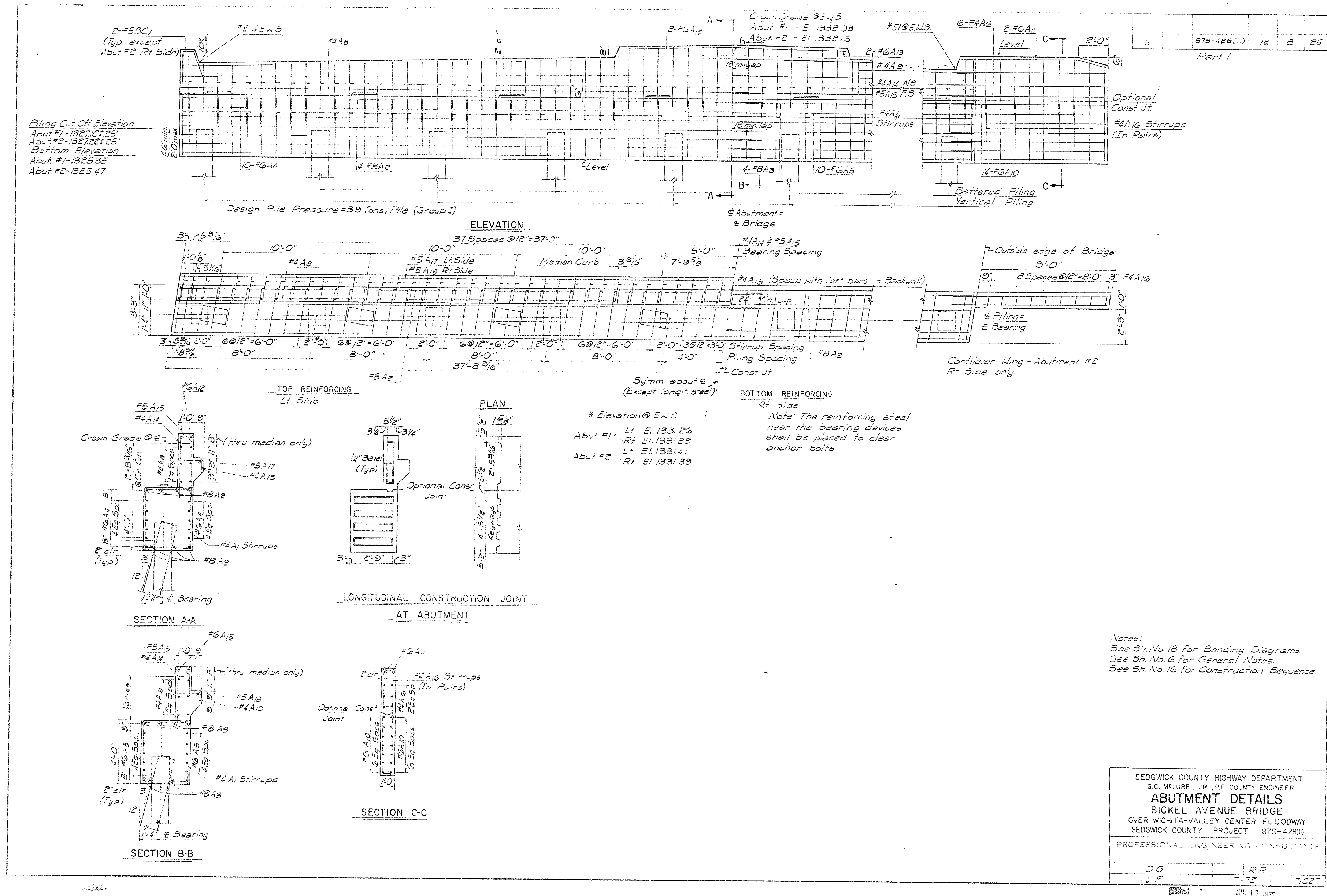
GRADING FOR STAIRS. THE BRIDGE CONTRACTOR SHALL DO THE NECESSARY GRADING TO CONSTRUCT THE STAIRS ADJACENT TO THE ABUTMENTS, AND WILL BE RESPONSIBLE FOR SUPPLYING ANY NECESSARY FILL MATERIAL. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR CLASS I EXCAVATION.

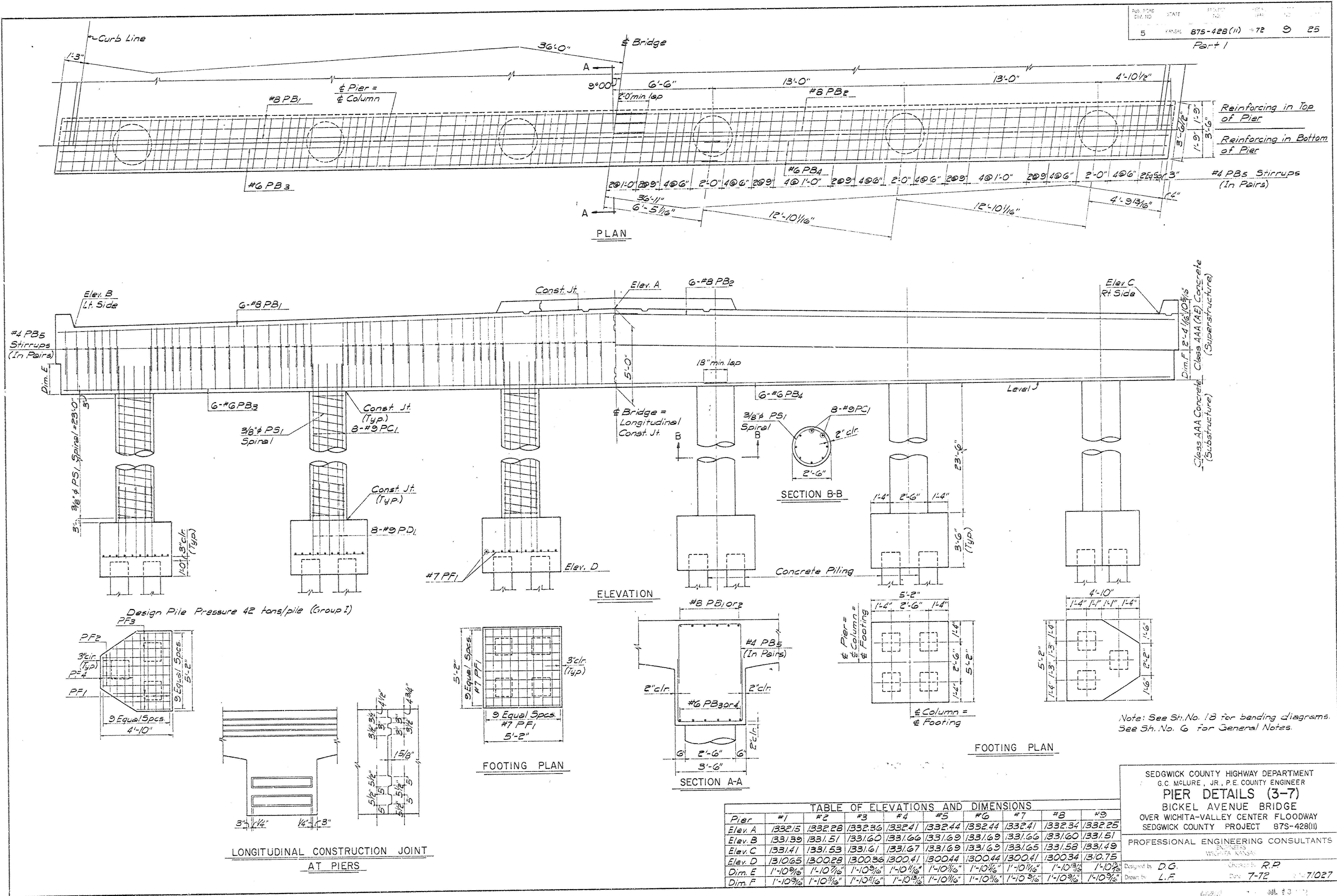
SUMMARY OF QUANTITIES																
Item	Excavation (Cu. Yds)		Concrete (Cu. Yds)		Steel (Lbs)	Bearing Devices (Lbs.)	Concrete Piles (Lin. Ft)	Concrete Test Piles (Lin. Ft)	2" Electrical Conduit Metallic Handrail Special (Lin. Ft)	Pipe Handrail (Lump Sum)	Linseed Oil Surf. Treat. Bridge (Sq Yds)	Removal of Exist. Structure (Lump Sum)	Field Office Exp & Lab (Type C) (Each)	Mobilization (Lump Sum)	Traffic Control (Lump Sum)	
	Class I	Class II	Class AAA	Class AA	Reinforcing	Structural										
Abut. #1	76	—	452	—	4525		2112	668	—							
Pier #1	102	—	48.0	—	12100		4512	1144	—							
Pier #2	37	100	53.6	—	14275		4512	882	46							
Pier #3	18	98	45.0	—	10155		—	880	—							
Pier #4	12	98	45.0	—	10155		—	924	—							
Pier #5	—	97	45.0	—	10155		—	980	—							
Pier #6	—	97	45.0	—	10155		—	968	—							
Pier #7	—	98	45.0	—	10155		—	968	—							
Pier #8	22	99	59.6	—	14275		4512	968	—							
Pier #9	100	—	48.0	—	12100		4512	1144	—							
Abut. #2	80	—	492	—	4005		2112	620	72							
Substr. Tot.	447	687	538.6	—	112955		22272	1056	118							
Superstr. Tot.	—	—	—	—	3166.2	4380	—	—	—	1460	2524	3397	—	—	—	—
Highway Shims & Grouting	300	—	—	—	125.3	7850										
Total	837	687	538.6	3291.5	722190	4380	22,272	710,156	118	1460	2524	Lump Sum	3397	Lump Sum	1	Lump Sum

Note: Only one of the following types of Piles shall be used on this structure: Prestressed 14", Pipe 12 3/4", Precast 16".

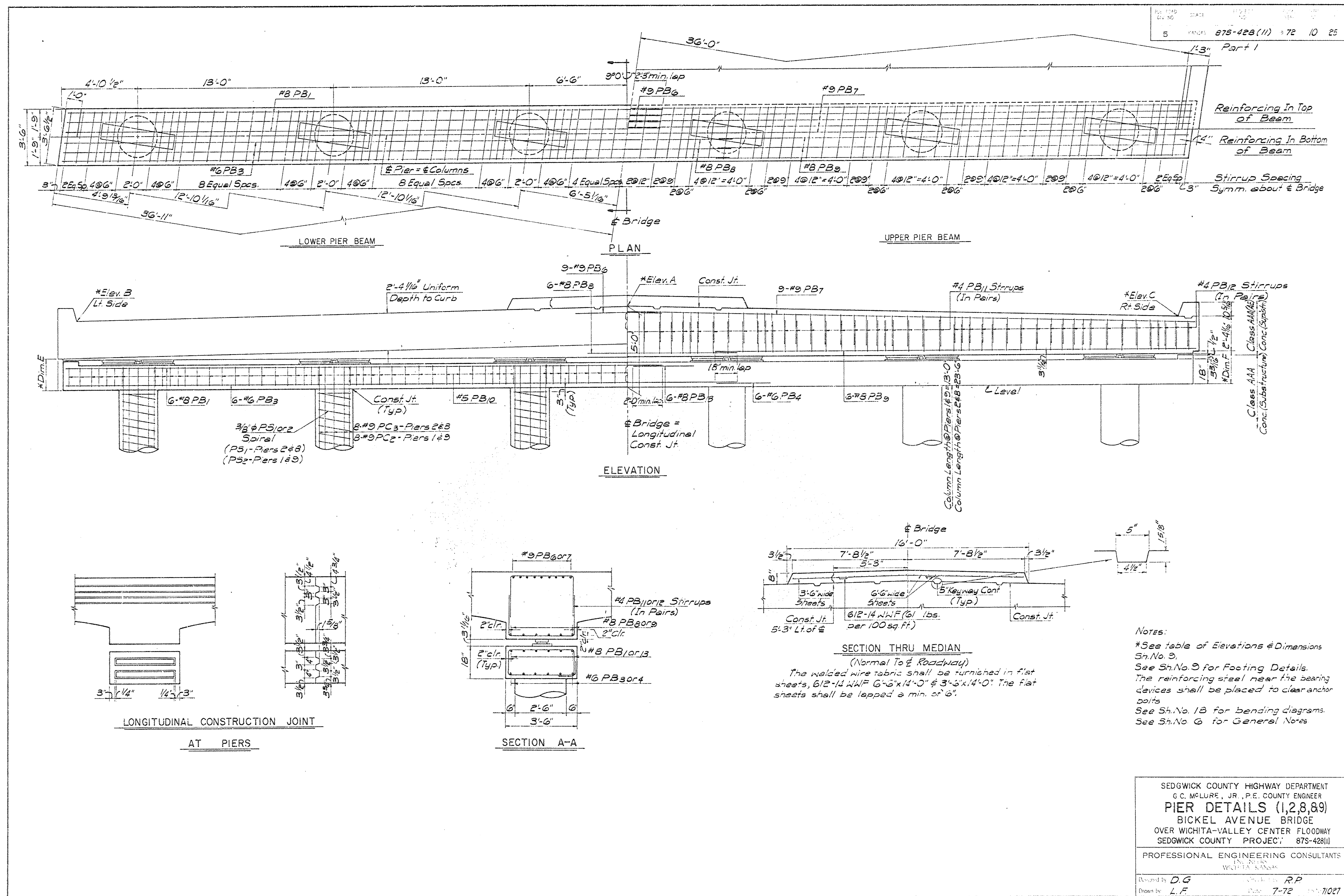
* Includes - 22 @ 40', 43 @ 42', 66 @ 44', 22 @ 45', 44 @ 52', 6 @ 66', 9 @ 68', & 4 @ 70'.

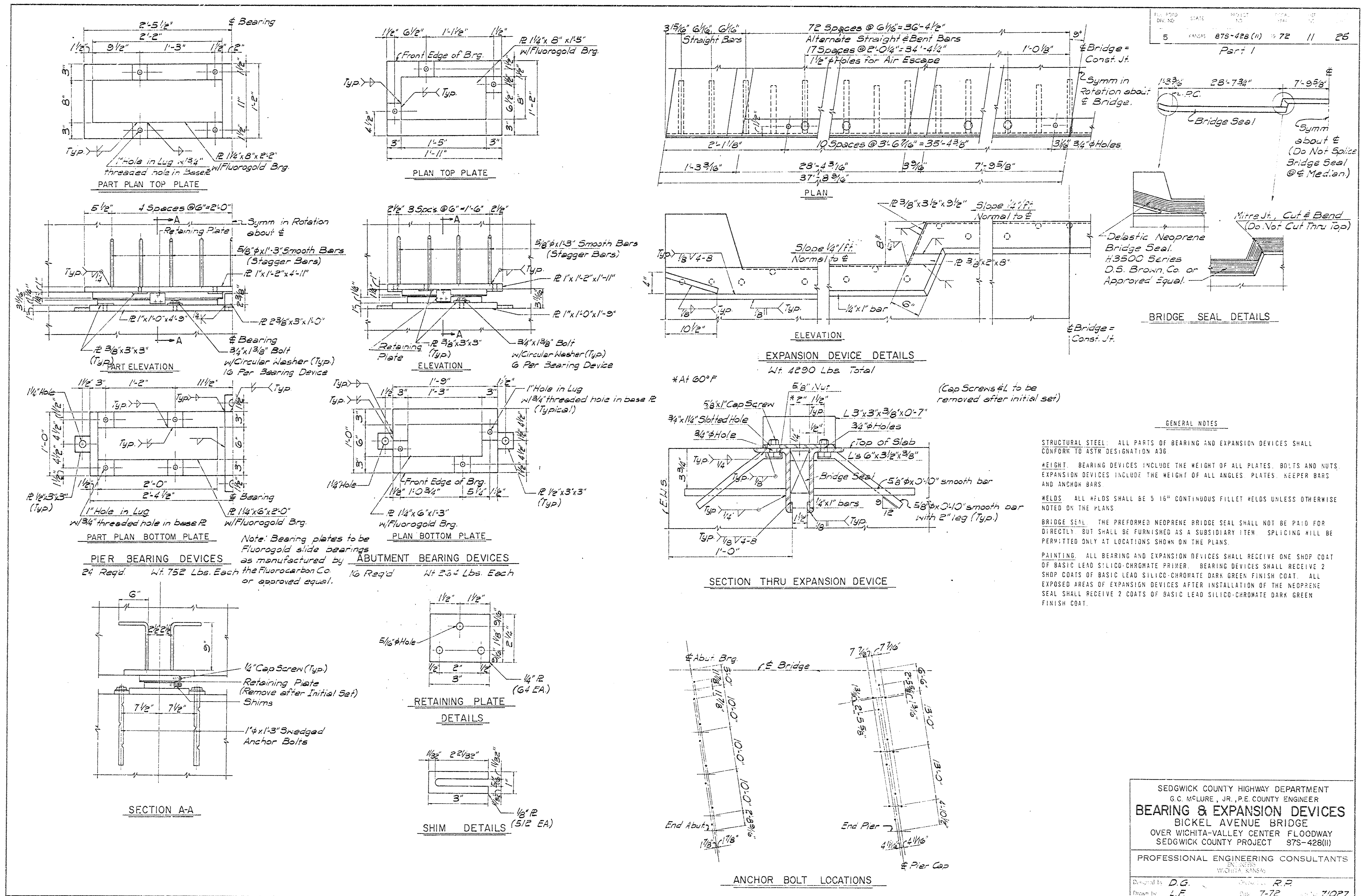






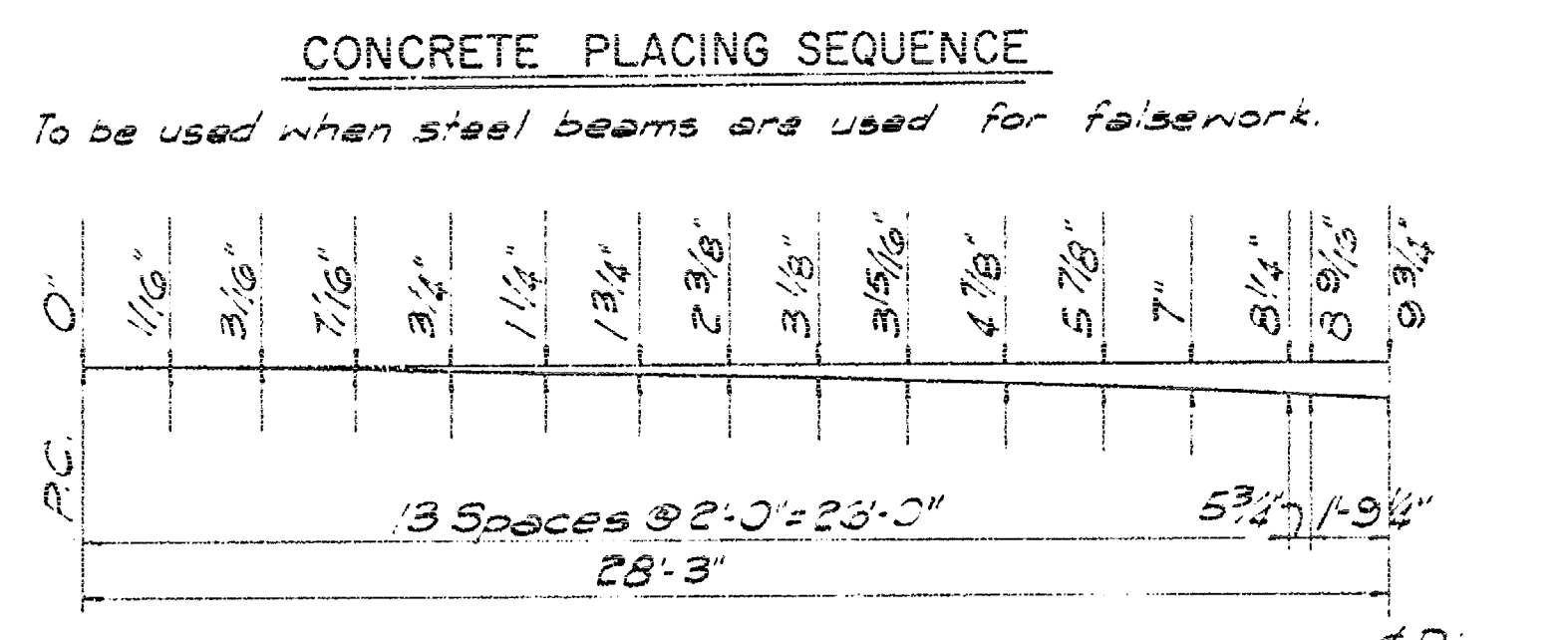
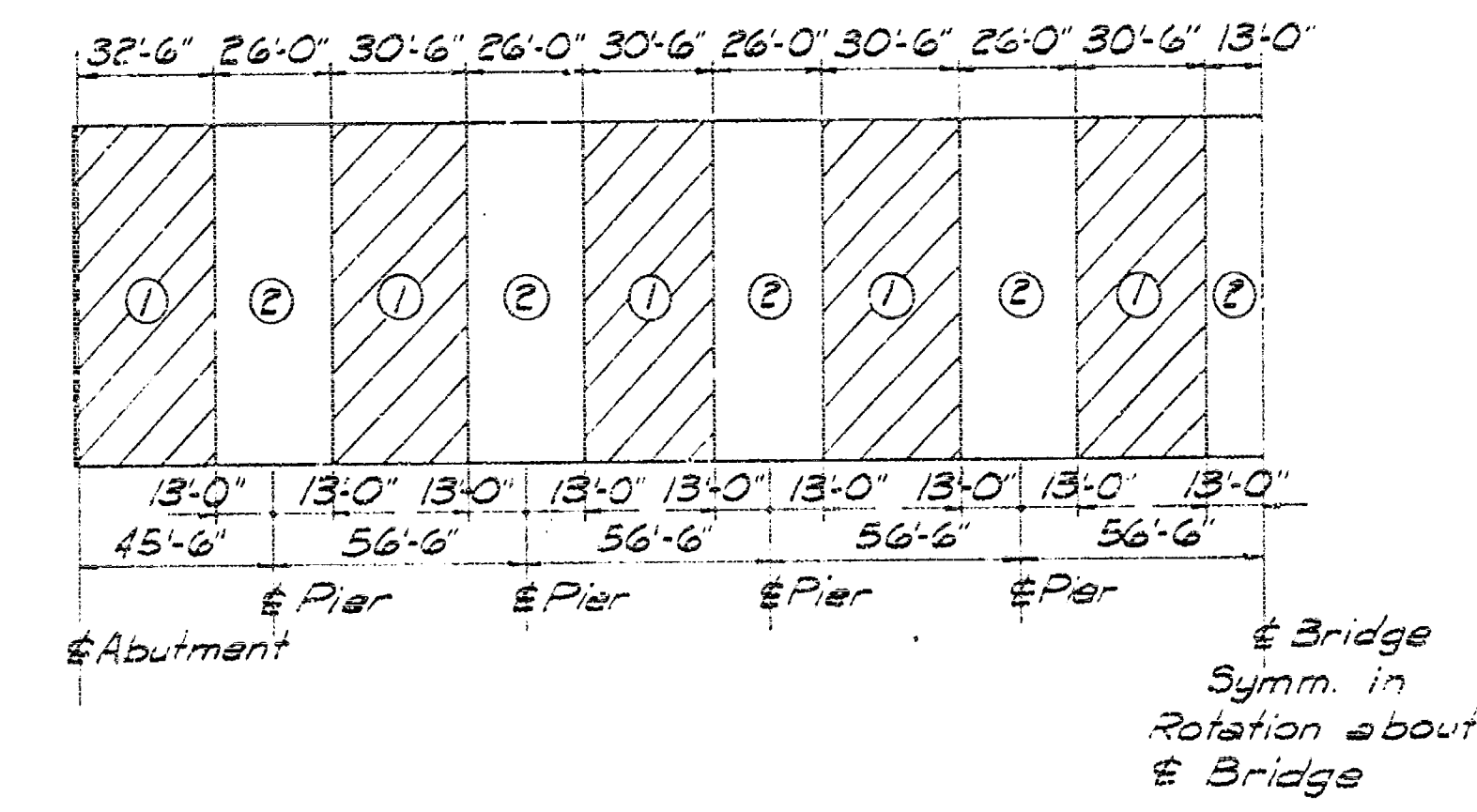
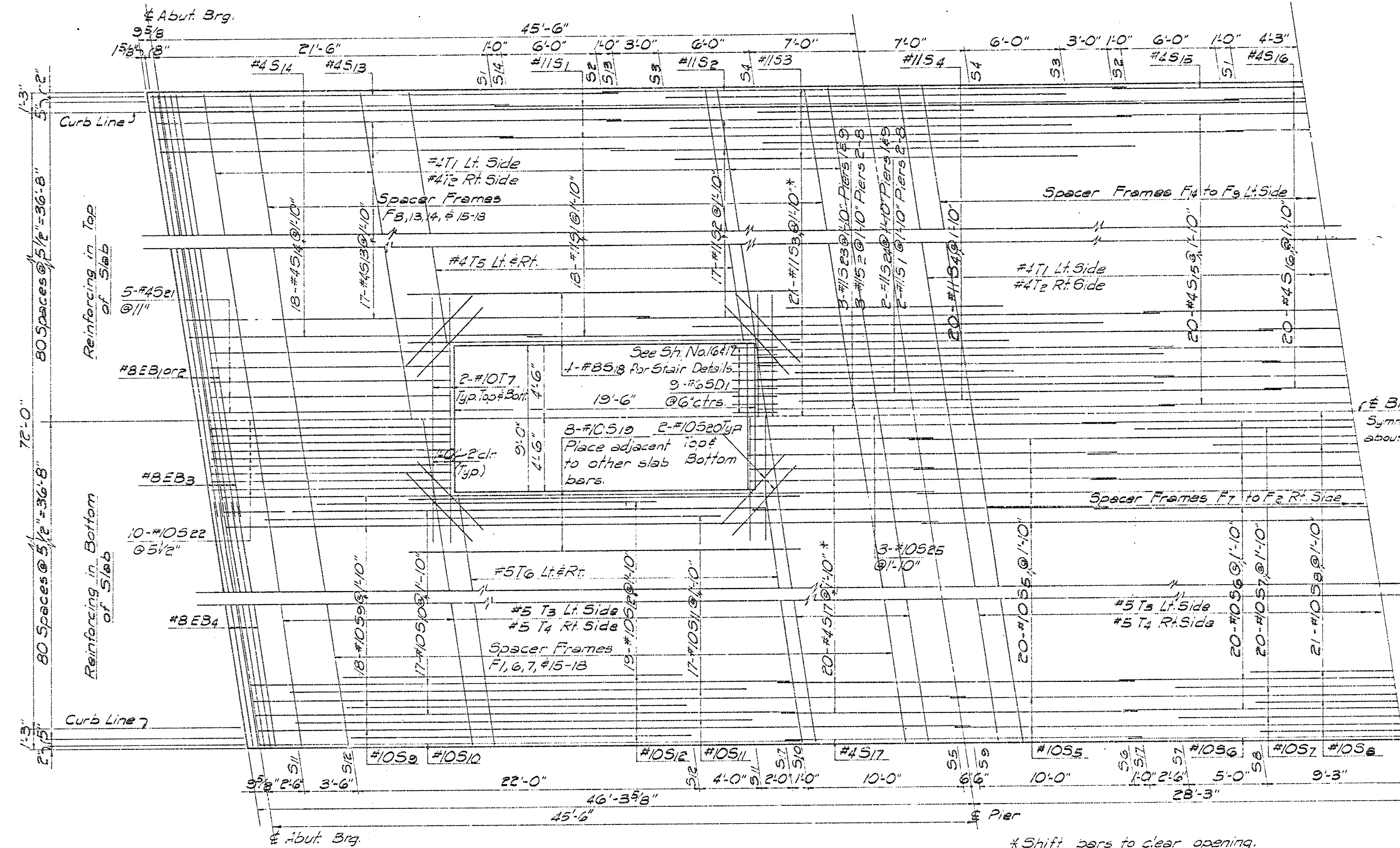
SEDGWICK COUNTY HIGHWAY DEPARTMENT
G.C. MCCLURE, JR., P.E. COUNTY ENGINEER
PIER DETAILS (3-7)
BICKEL AVENUE BRIDGE
OVER WICHITA-VALLEY CENTER FLOODWAY
SEDGWICK COUNTY PROJECT 875-428(II)
PROFESSIONAL ENGINEERING CONSULTANTS
WICHITA, KANSAS
Designed by D.C. Checked by R.P.
Drawn by L.F. Date 7-12-72





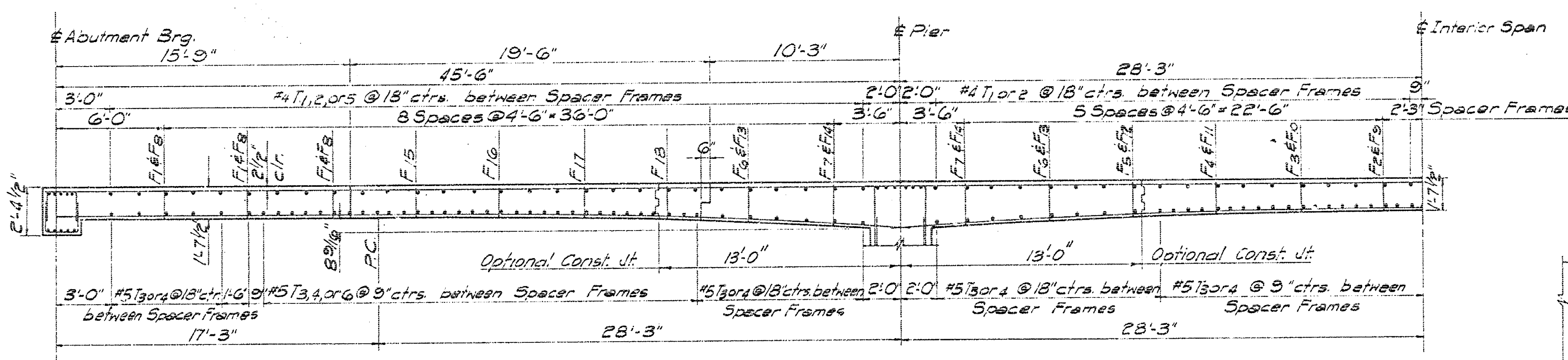
FILE NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
5	KANSAS	875-428(II)	72	11

Part 1

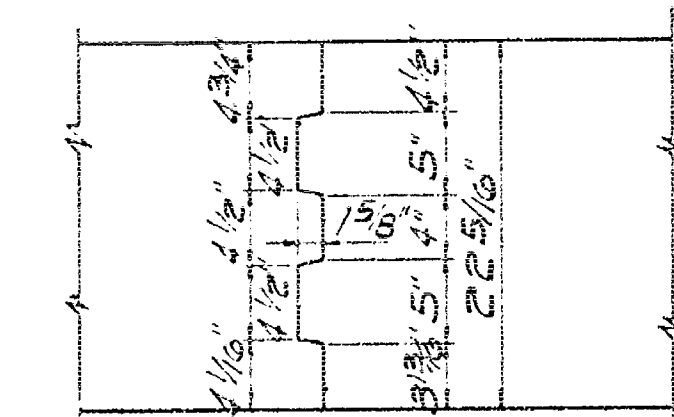


GENERAL NOTES
 LOADING: HS20 - 44 A.A.S.H.O. SPECIFICATIONS EDITION OF 1989.
 UNIT STRESSES: 1' = 4,000 P.S.I., 1" = 1,000 P.S.I., 1" = 20,000 P.S.I.
 CONCRETE: CLASS AAA CONCRETE SHALL BE USED IN THE ABUTMENTS, COLUMNS AND FOOTINGS. CLASS AA (AE) CONCRETE SHALL BE USED IN THE SUPERSTRUCTURE. BEVEL ALL EXPOSED EDGES WITH A 3/4" INCH TRIANGULAR MOLDING UNLESS OTHERWISE NOTED.
 REINFORCING STEEL: ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATIONS A615 GRADE 40. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS UNLESS OTHERWISE NOTED.
 FALSEWORK: SEE SHEET NO. 23 FOR GENERAL FALSEWORK NOTES.
 CONSTRUCTION JOINTS: CONSTRUCTION JOINTS UNLESS NOTED AS OPTIONAL SHALL BE AT THE LOCATIONS SHOWN. OPTIONAL CONSTRUCTION JOINTS, IF USED, SHALL BE MADE ONLY AT THE LOCATIONS SHOWN OR AS APPROVED BY THE ENGINEER.
 CAMBER: CAMBER SHALL BE PROVIDED AS SHOWN ON THE CAMBER DIAGRAM. ADDITIONAL CAMBER WILL BE REQUIRED IF LONG SPAN STEEL BEAMS ARE USED FOR FALSEWORK.

Note: See Sh. No. 13 for End Beam Details.



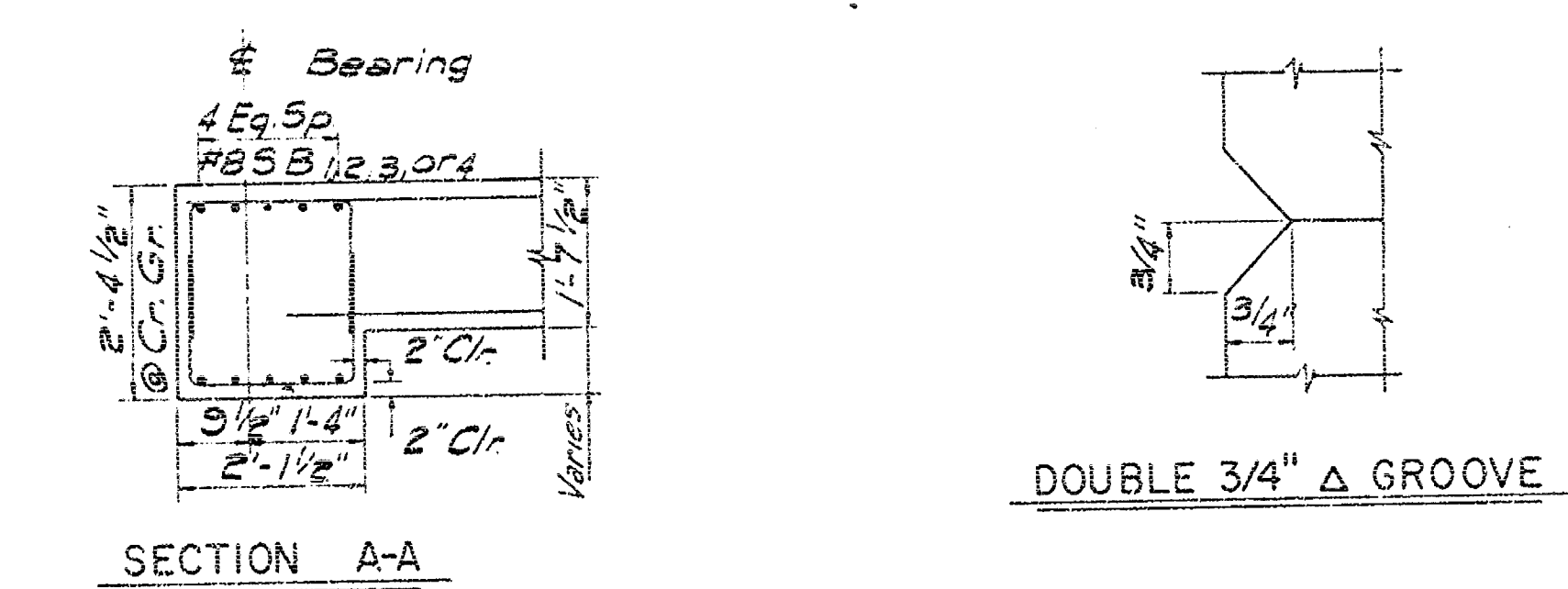
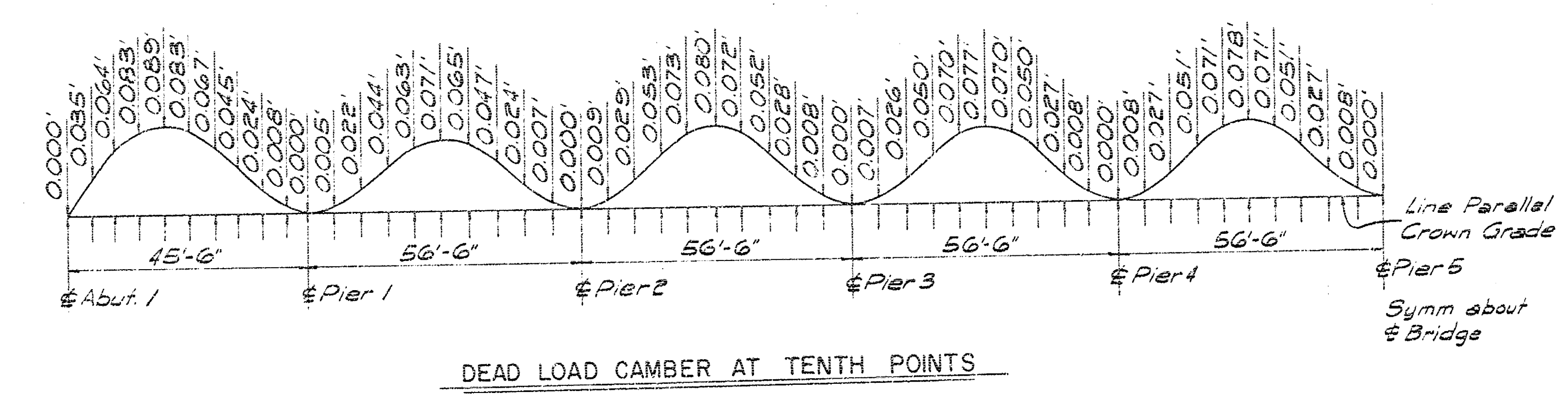
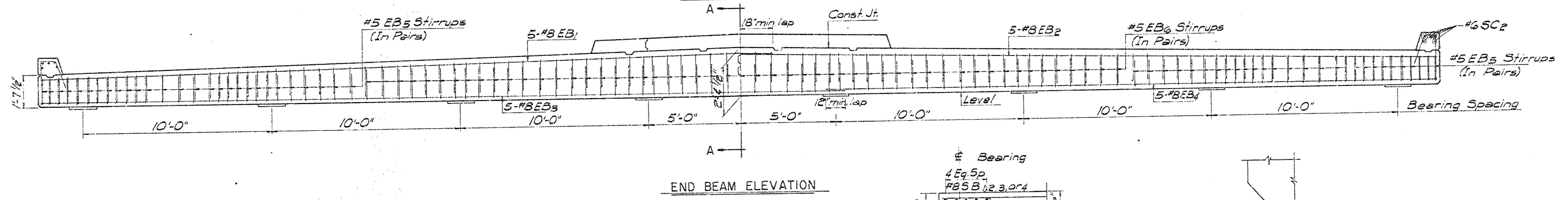
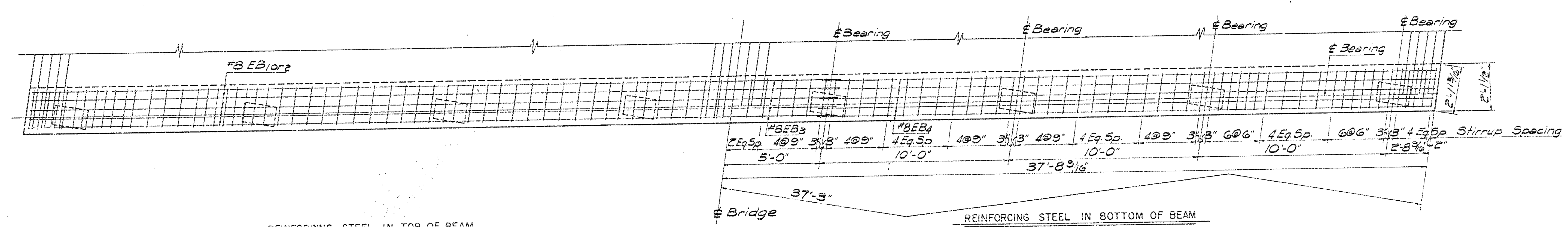
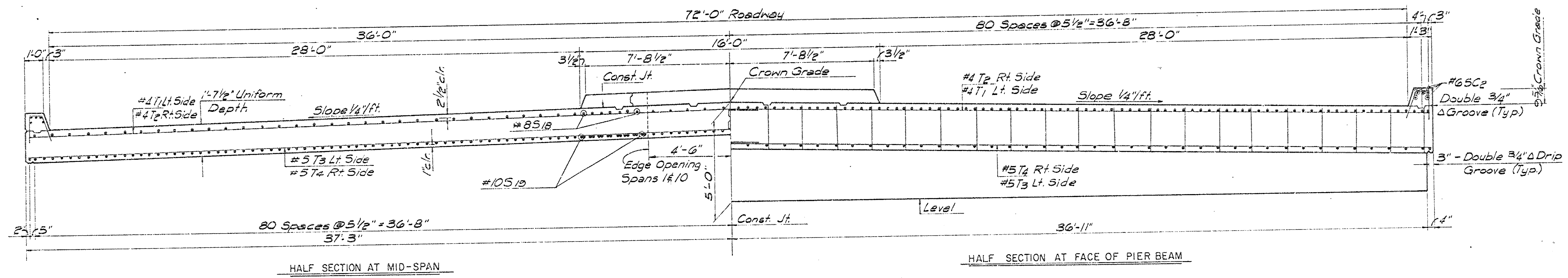
LONGITUDINAL SECTION AT CROWN GRADE



TYPICAL TRANSVERSE SLAB CONSTRUCTION JOINT

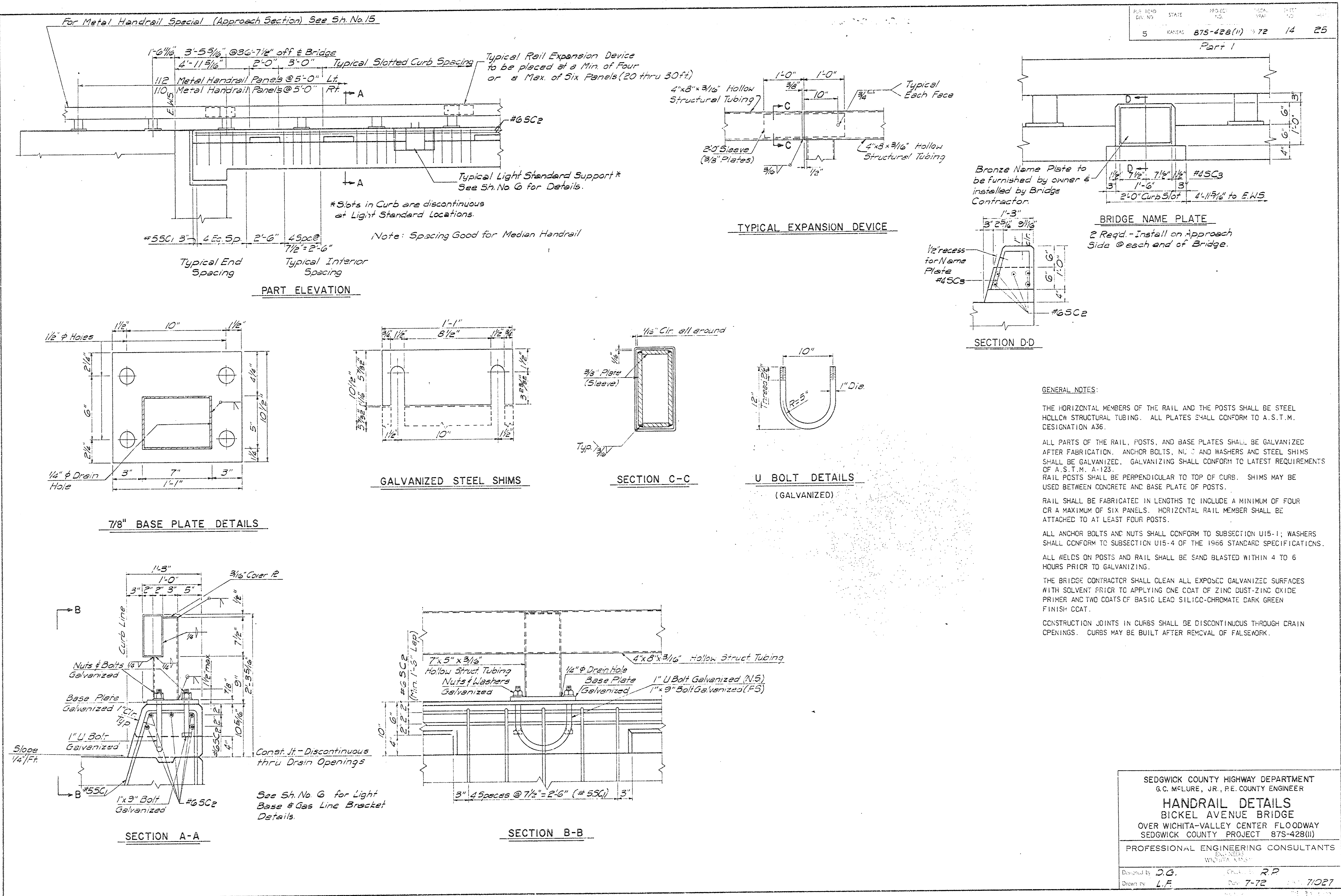
Note: See Sh. No. 18 for Bending Diagrams
 See Sh. No. 6 for Gas Line Bracket Details.

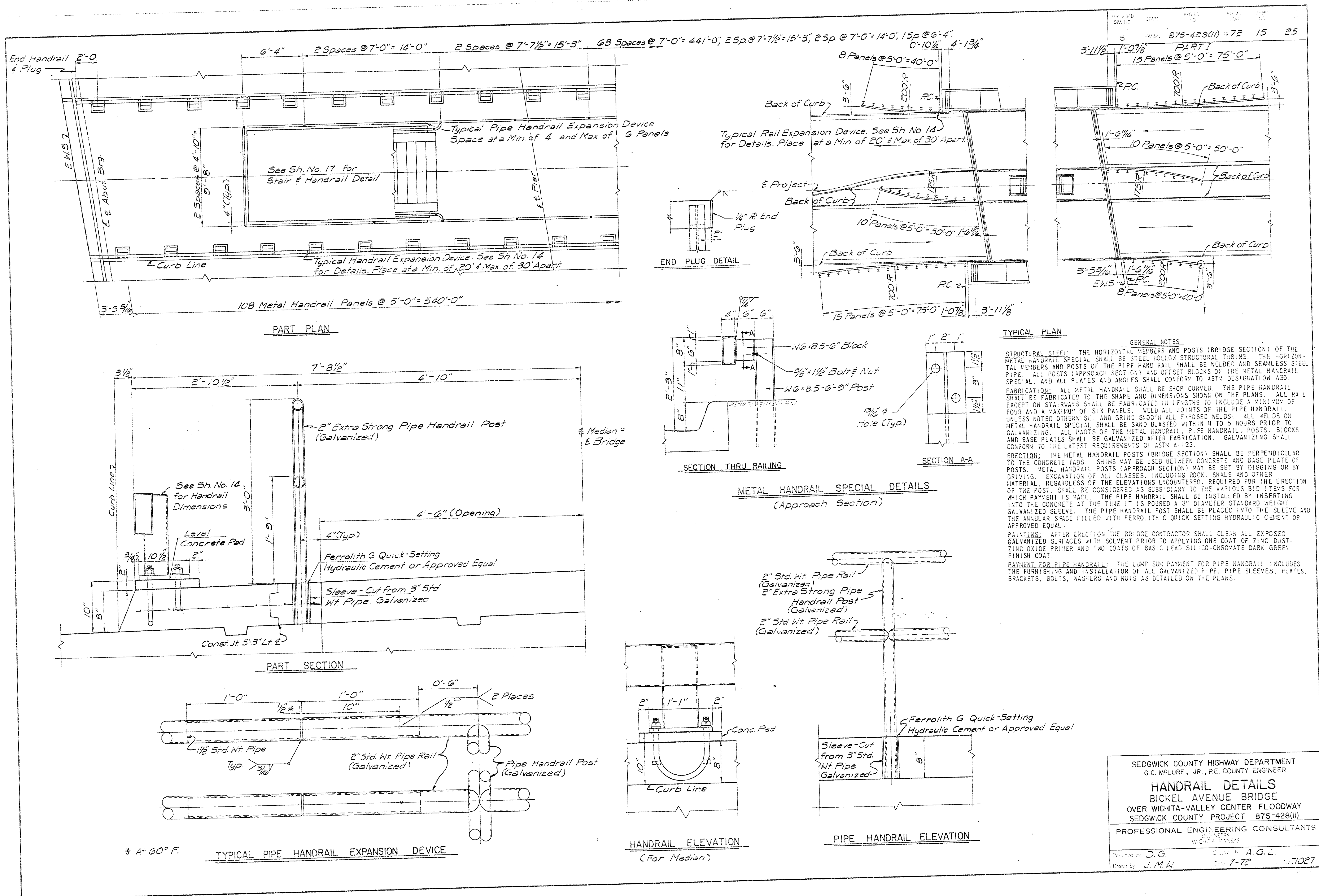
SEDGWICK COUNTY HIGHWAY DEPARTMENT
 G.C. MCLURE, JR., P.E. COUNTY ENGINEER
SUPERSTRUCTURE LAYOUT
 BICKEL AVENUE BRIDGE
 OVER WICHITA-VALLEY CENTER FLOODWAY
 SEDGWICK COUNTY PROJECT 875-428(11)
 PROFESSIONAL ENGINEERING CONSULTANTS
 D.G. MCLURE, JR.
 L.F. MCLURE, JR.
 7-72 7/027

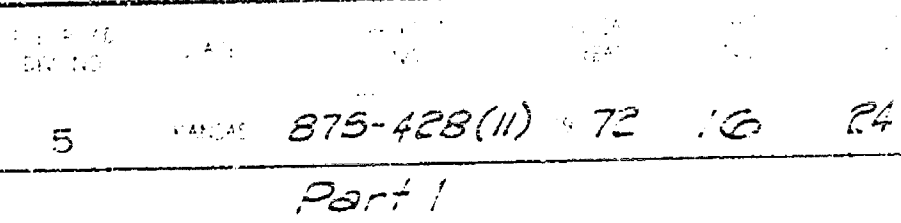


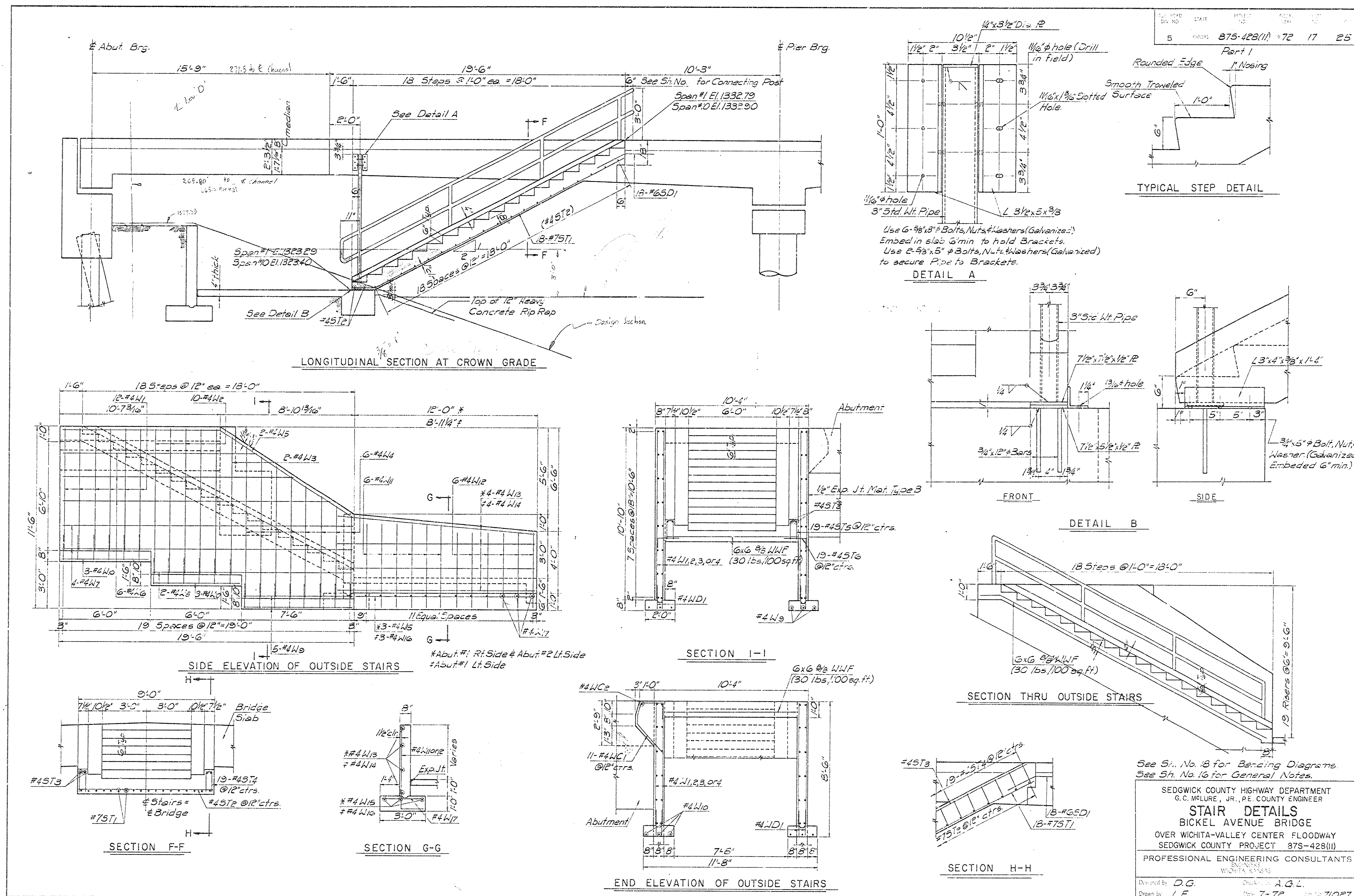
Note: See Sh. No. 13 for bending diagrams.
See Sh. No. 6 for General Notes.

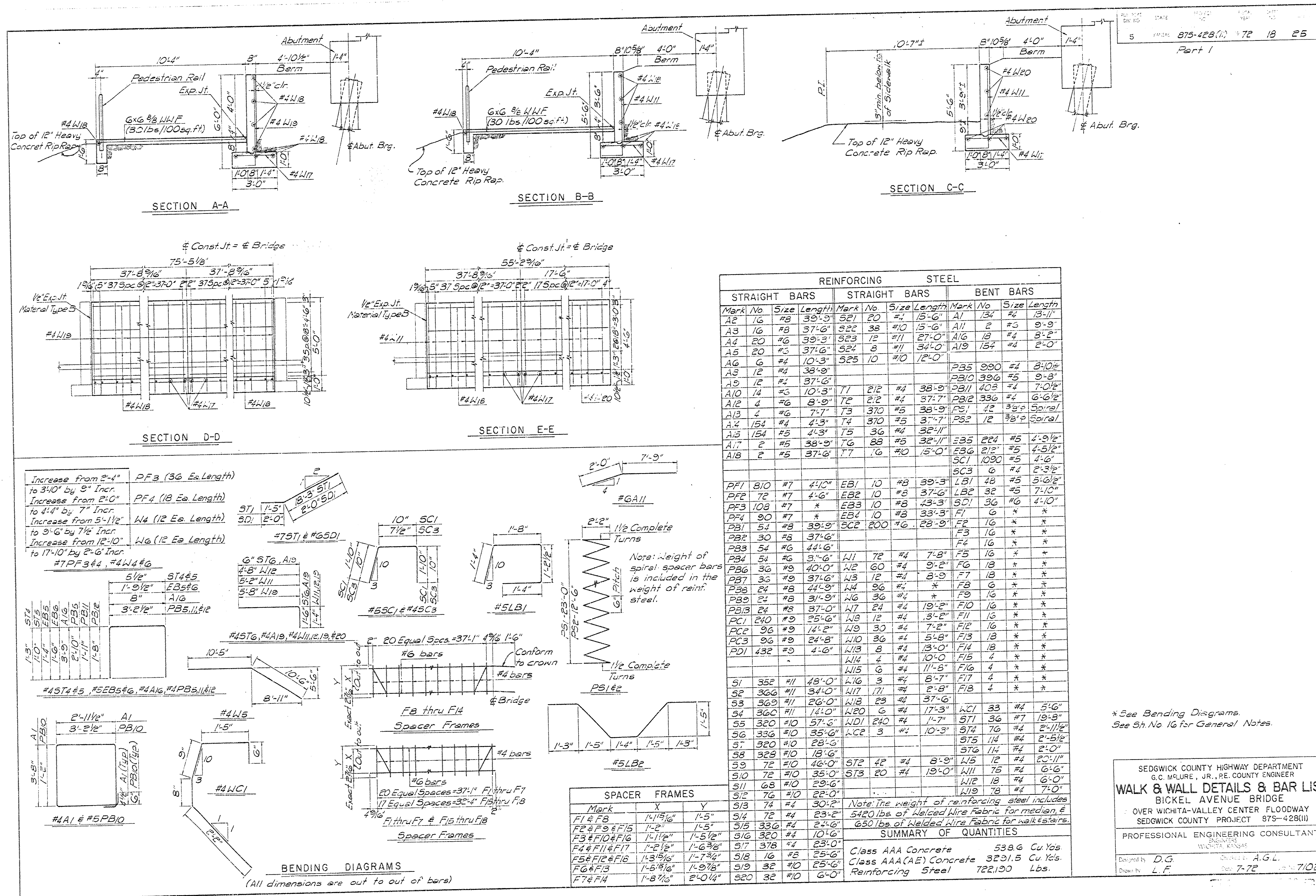
SEDGWICK COUNTY HIGHWAY DEPARTMENT
G. C. MCLURE, JR., P.E. COUNTY ENGINEER
SUPERSTRUCTURE DETAILS
BICKEL AVENUE BRIDGE
OVER WICHITA-VALLEY CENTER FLOODWAY
SEDGWICK COUNTY PROJECT 875-428(11)
PROFESSIONAL ENGINEERING CONSULTANTS
Designed by J.G. L.F. 7-72 7/027

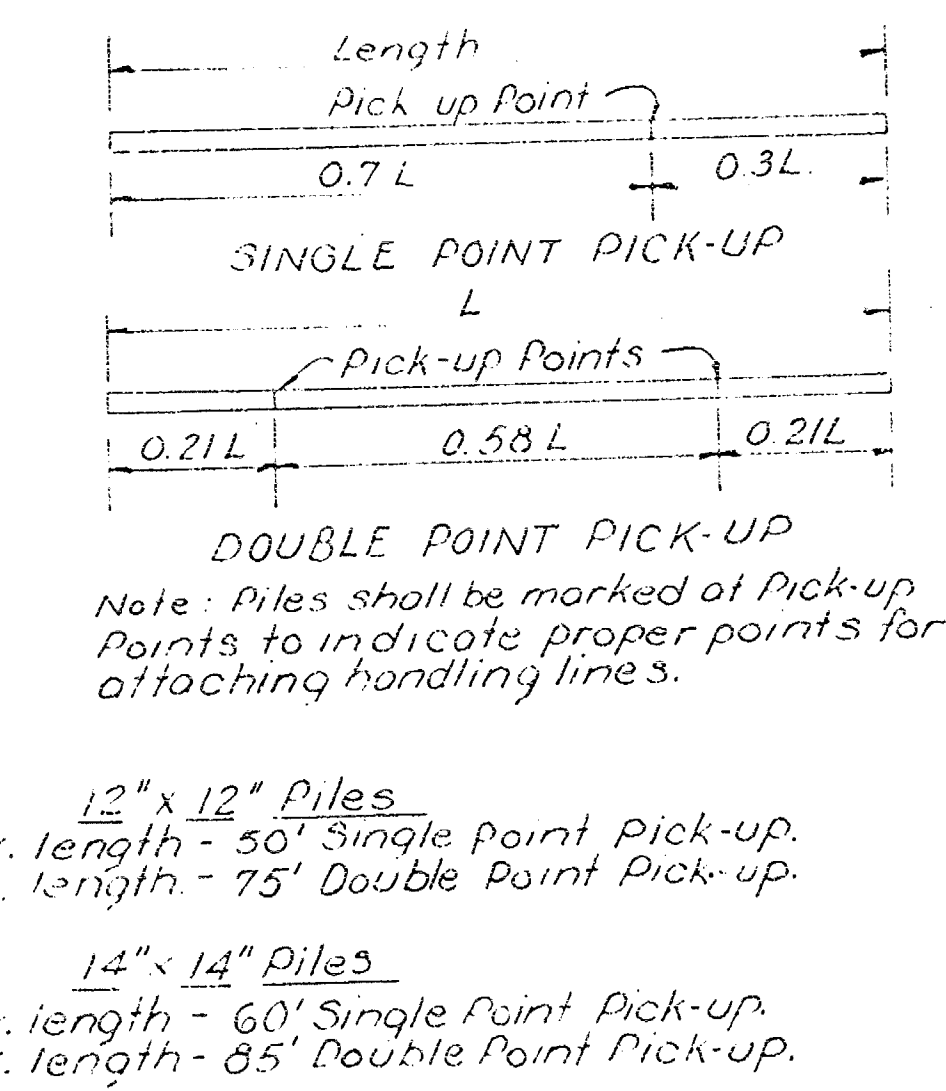
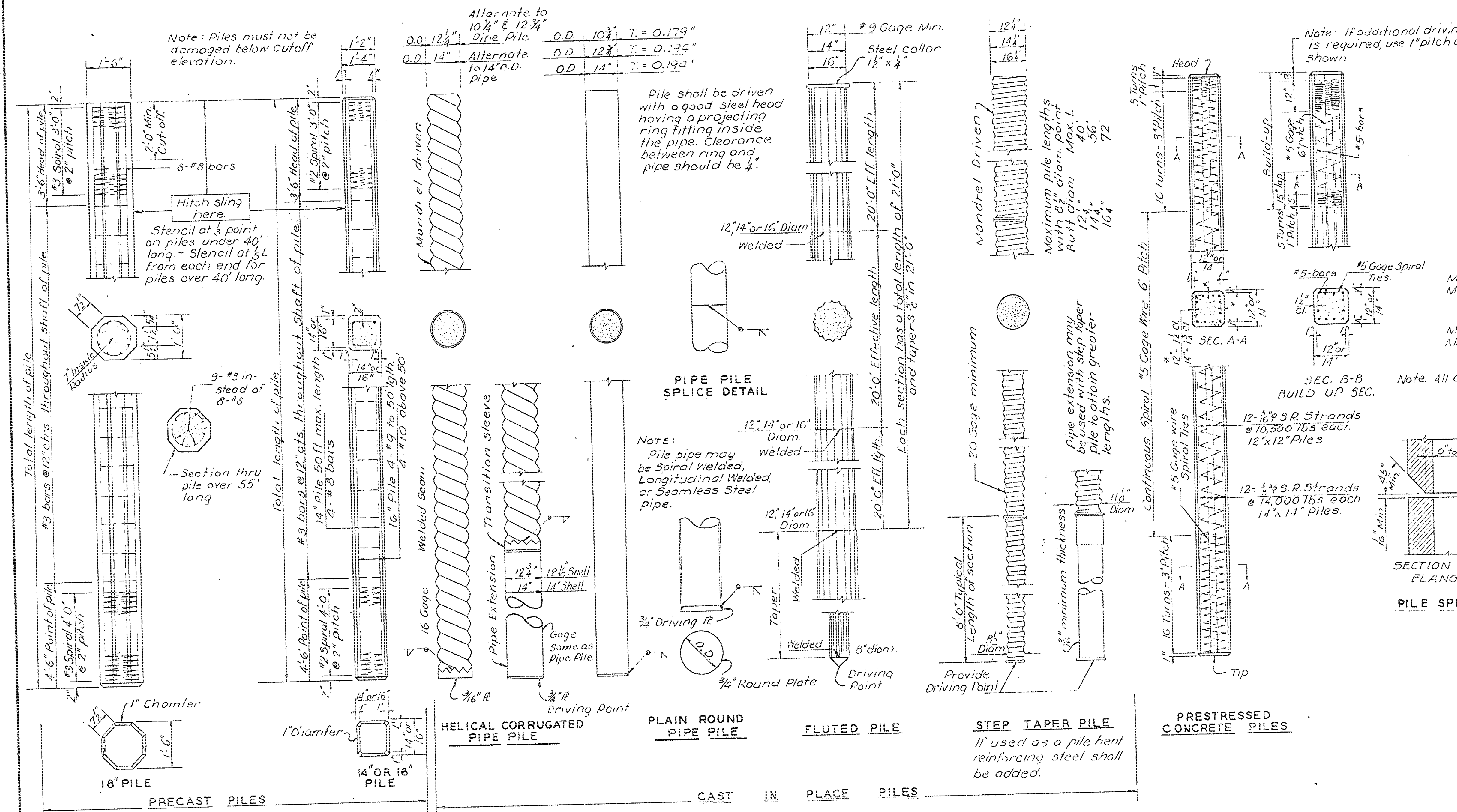












FOR INFORMATION ONLY

PILES					
STEEL PILE	EQUIVALENT CONCRETE PILE	STEEL PILE	EQUIVALENT CONCRETE PILE	STEEL PILE	EQUIVALENT CONCRETE PILE
10BP42	14"	10 3/4"	12"	12 1/2"	12"
12BP53	16"	12 3/4"	14"	14 1/2"	14"
14BP73	18"	14 3/4"	16"	16 1/2"	16"

* Helical Corrugated Pipe Shell.

CONCRETE PILES					
PIPE PILE	EQUIVALENT CONCRETE PILE	PIPE PILE	EQUIVALENT CONCRETE PILE	PIPE PILE	EQUIVALENT CONCRETE PILE
10 3/4"	12"	12 1/2"	12"	12 1/2"	12"
12 3/4"	14"	14 1/2"	14"	14 1/2"	14"
14 3/4"	16"	16 1/2"	16"	16 1/2"	16"

GENERAL NOTES

- Specifications.** Standard Specifications for State Road and Bridge Construction as currently used by the State Highway Commission of Kansas (Ed. 1966).
- DELETED**
- Concrete.** All concrete for Precast and Cast-in-place shall be Class A Concrete. $f'_c = 3,000$ p.s.i. See Article G1-7(a) Standard Specs. Concrete for Prestressed Concrete piles shall be Class AAA Concrete. $f'_c = 4,000$ p.s.i. See Article G1-7(b) Standard Specs.
- Reinforcement.** Reinforcing bars shall be new billet steel of intermediate grade without exception. Hoops and spirals may be either plain or deformed bars.

- Precast Piles.** Precast piles shall conform to the requirements of Article G1-7(a). Standard Specifications.
- Cast-in-Place Shells.** Steel Shells for Cast-in-place Concrete Piles shall conform to the requirements of Section U-7. Standard Specifications. All piles driven without mandrel use gages or thicknesses shown above, except fluted pile use No. 9 gage minimum. Piles driven with mandrel shall be of sufficient strength and thickness to withstand driving without injury and to resist harmful distortion and/or buckling due to soil pressure after the mandrel is removed. Improperly driven, broken or otherwise defective shells shall be removed and replaced or otherwise corrected to the satisfaction of the Engineer by removal and replacement, or the driving of an additional pile at no extra cost. The Contractor shall maintain on the job at all times prior to and during the filling of the shells, a light suitable for visual inspection of the pile.

- Steel Pile.** Steel Pile shall conform to requirements of Sub-section U5-8 Standard Specifications.
- Pile Points.** Pile points shall conform to the dimensions shown and requirements of Article U7-2(c) Standard Specifications. Pile points shall be mill welded to pile.
- Welding.** All field welding shall meet the requirements of Sub-section G1-6 Standard Specifications.
- Point.** All point shall comply with Subsection Q3-8 Standard Specifications. Or as specified on the plans.
- Test Piles.** Test Piles shall be driven where called for on the Bridge plans. All test piles shall be located so that they will become part of the Bridge Pile system.

- Splices.** Splices for Steel Piles and Shell Piling shall be in accordance with details shown on this sheet and shall comply with Subsection G1-6 Std Specs. Precast Concrete Pile splices shall comply with Subarticle G1-7(d)(1). Std. Specifications. Prestressed Concrete Pile splices shall be made in accordance with the manufacturers recommendations, subject to the approval of the Engineer.
- Driving Formula.** Driving Formula shall conform to Subarticle G1-4(d)(3).
- Mill Test Reports.** Steel Piles test reports shall comply with Art. U5-8(c) Standard Specifications. Steel Shells test reports for cast-in-place piles shall comply with Subsection U7-4 Std. Specs.
- Payment.** Payment for all piles shall comply with Subsec. G1-9. Std. Specifications.

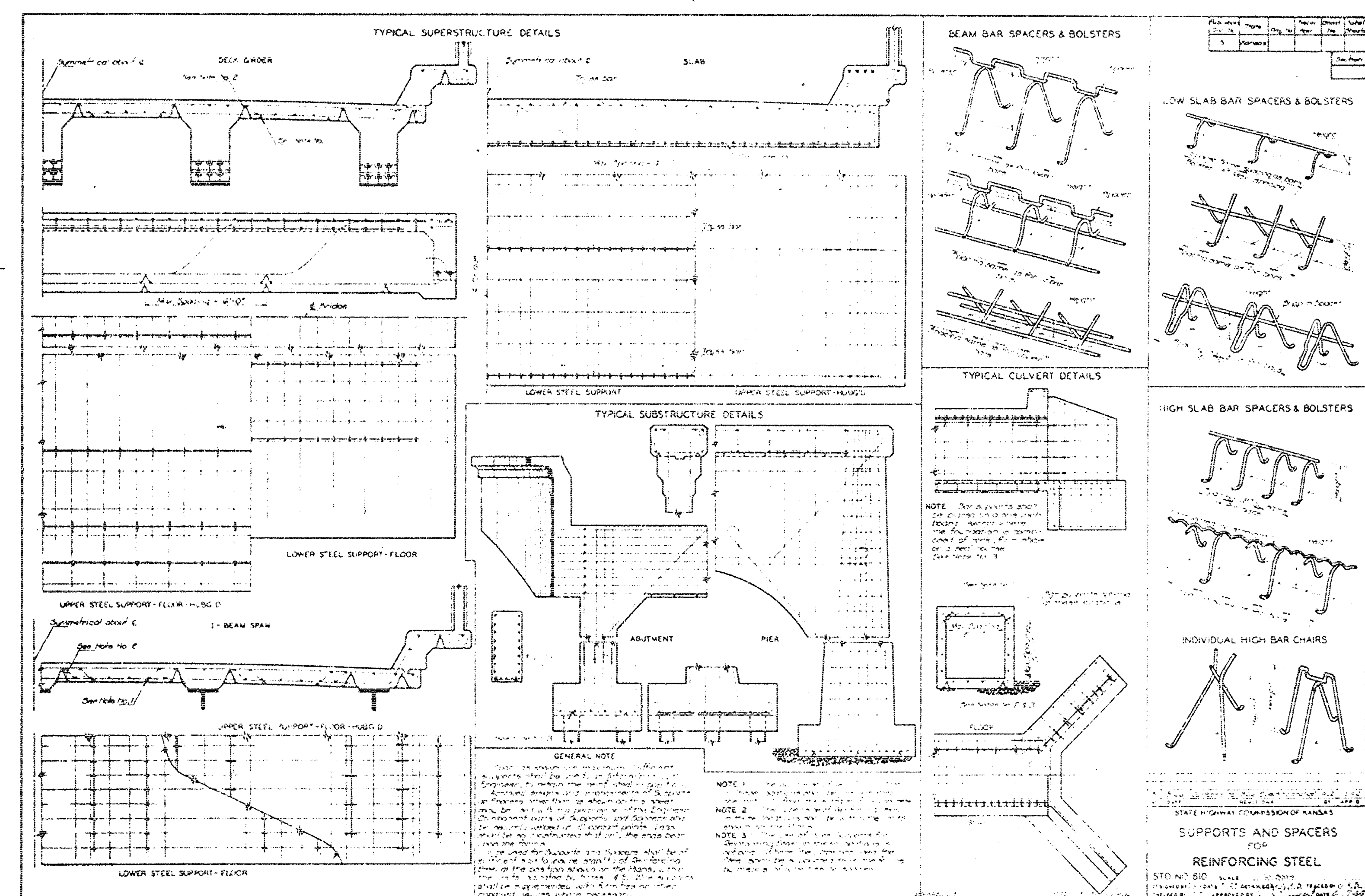
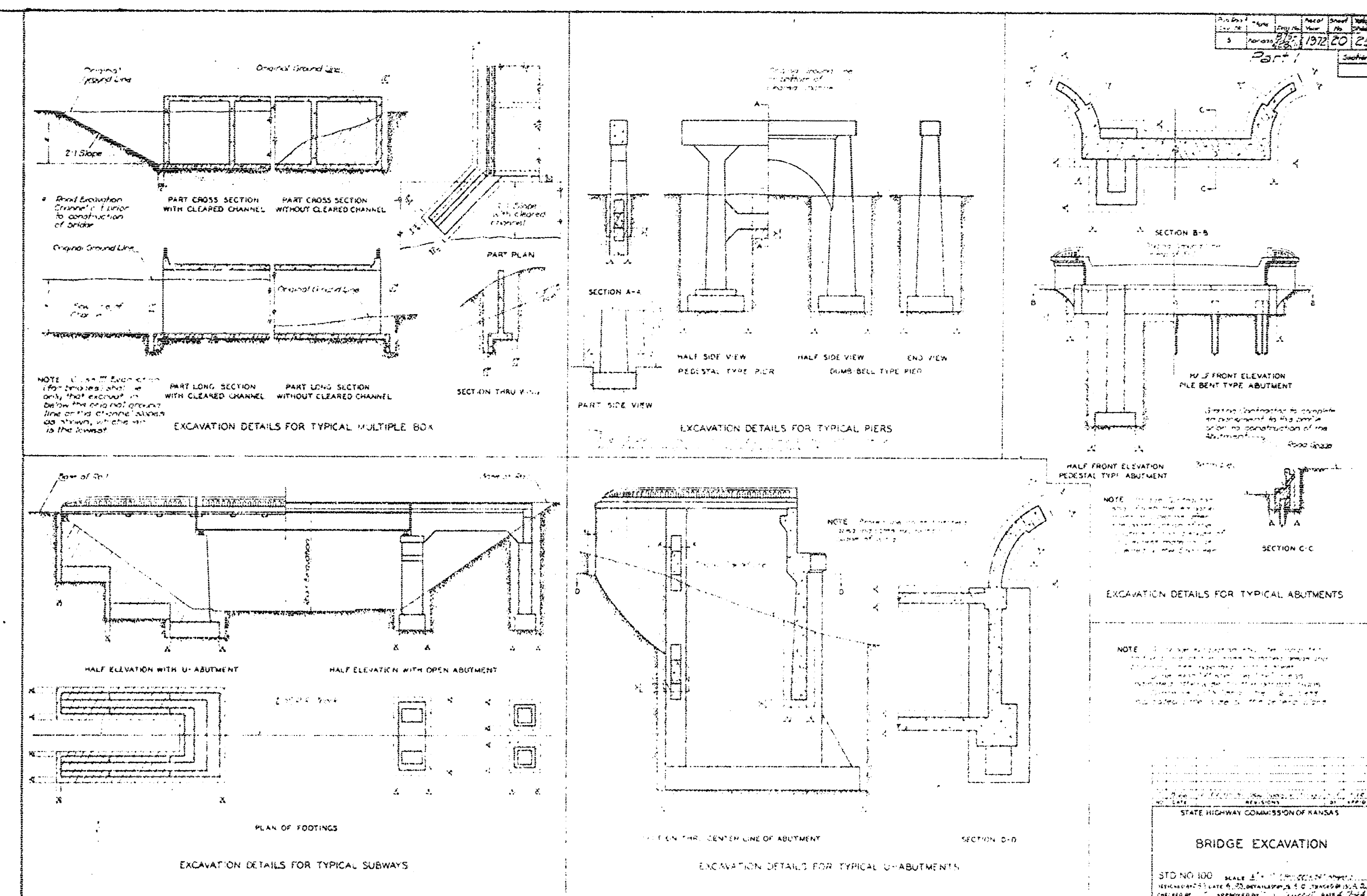
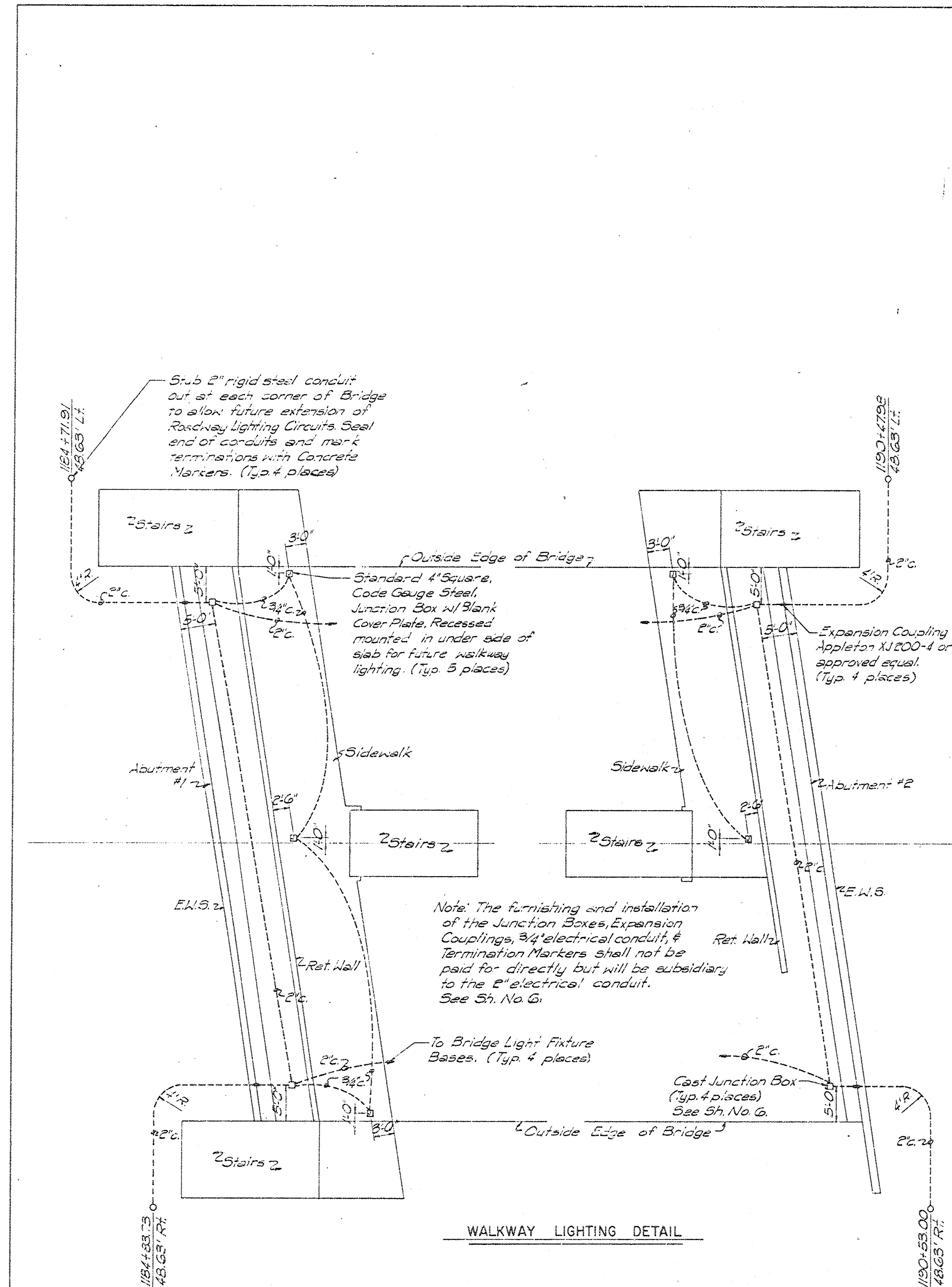
NO.	DATE	REVISIONS	BY	CHKD.
1	8-26-64	Revise Entire Gen. Note	J.C.L.	B.E.W.
2	6-8-64	Add Longitudinal Welds to Steel	J.C.L.	T.A.C.
3	5-2-64	Revise Driving Formula Note	J.C.L.	T.A.C.
4	5-27-64	Revise Pipe Pile General Note	J.C.L.	T.A.C.
5	1-29-64	Remove Note in Prestressed Concrete	J.C.L.	T.A.C.

STATE HIGHWAY COMMISSION OF KANSAS

STANDARD PILE DETAILS

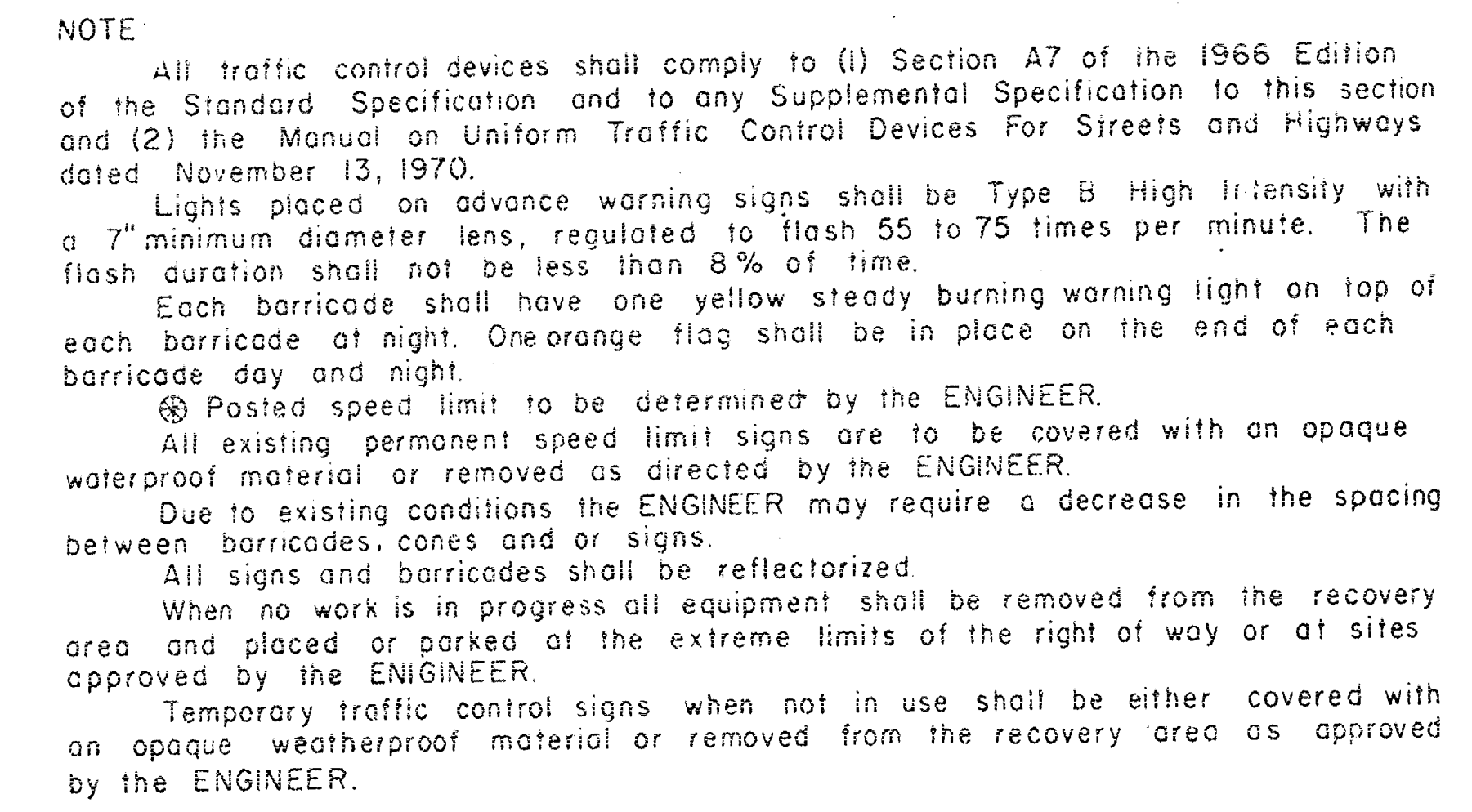
STD. NO. 102

SHEET NO. 19 OF 25 SCALE: AS SHOWN
 DESIGNED: [] CHECKED: [] QUANTITIES: [] TRACED: []
 DRAWN: []



FHWA REG	STATE	PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
7	KANSAS	875-428(11)	1972	21	25

Part 1



* See Sh.No 23 for construction traffic control devices and locations through ROUGH AREA CONSTRUCTION ZONE.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
NO										DATE										REVISIONS										BY										APP																																																											

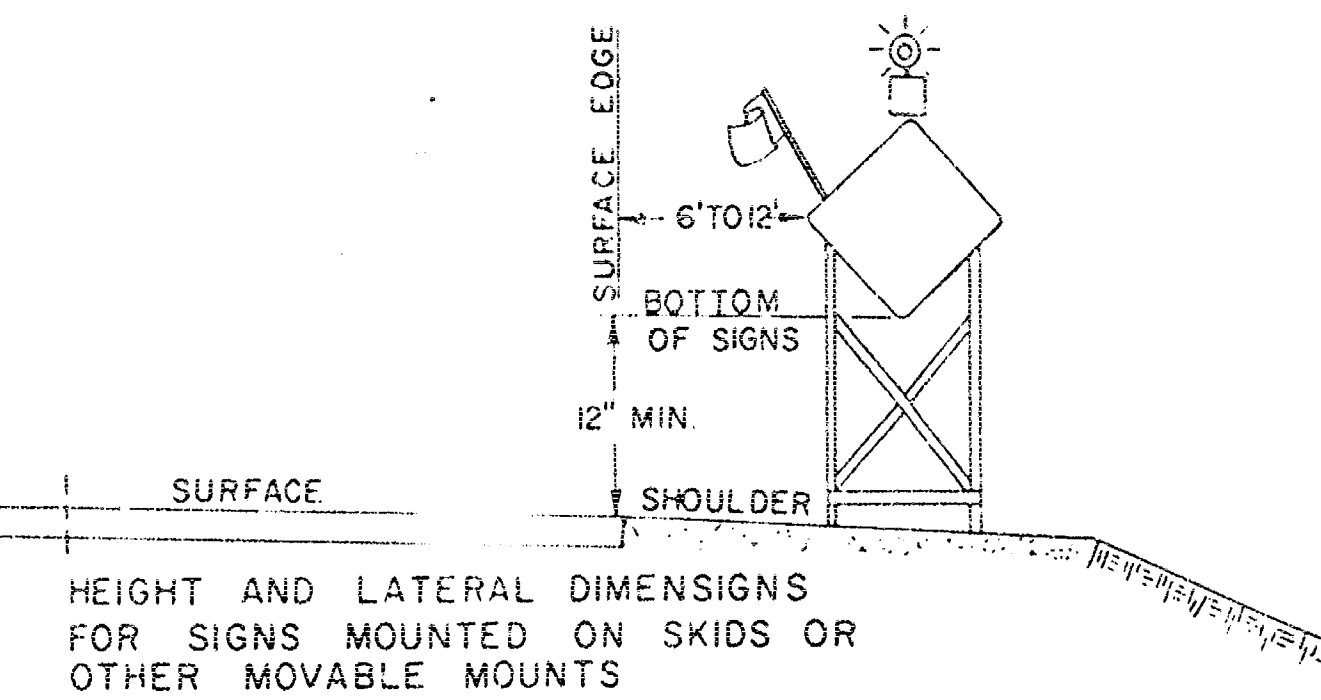
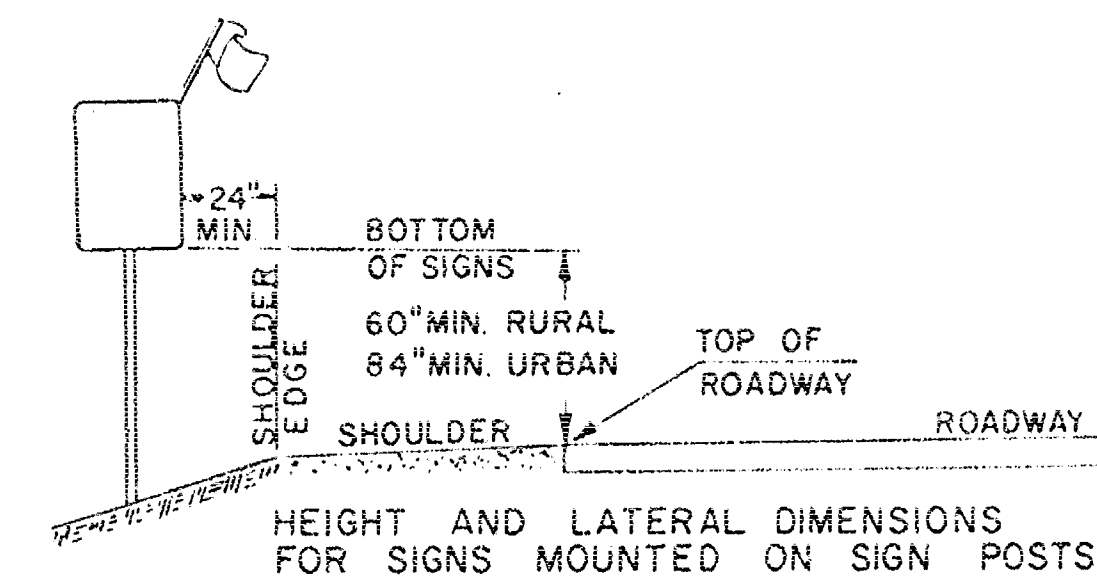
STATE HIGHWAY COMMISSION OF KANSAS
CONSTRUCTION TRAFFIC
CONTROL DEVICES AND LOCATIONS
FOR A MULTI-LANE HIGHWAY

STD. 745-
SHEET NO. 1 OF 2
DESIGNED BY _____ APP'D _____
DRAWN BY _____ QUANTITIES _____
DESIGN CK. _____ DETAIL CK. _____ QUAN CK. _____

Sheet 1 of 2
TRAFFIC CK. _____
THANKS CK. _____

FHWA REG.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	875-428 (11)	1972	22	25

Part 1

[illegible]

1955-1956 1957-1958 1959-1960 1961-1962 1963-1964 1965-1966 1967-1968 1969-1970 1971-1972 1973-1974 1975-1976 1977-1978 1979-1980 1981-1982 1983-1984 1985-1986 1987-1988 1989-1990 1991-1992 1993-1994 1995-1996 1997-1998 1999-2000 2001-2002 2003-2004 2005-2006 2007-2008 2009-2010 2011-2012 2013-2014 2015-2016 2017-2018 2019-2020 2021-2022 2023-2024 2025-2026 2027-2028 2029-2030 2031-2032 2033-2034 2035-2036 2037-2038 2039-2040 2041-2042 2043-2044 2045-2046 2047-2048 2049-2050 2051-2052 2053-2054 2055-2056 2057-2058 2059-2060 2061-2062 2063-2064 2065-2066 2067-2068 2069-2070 2071-2072 2073-2074 2075-2076 2077-2078 2079-2080 2081-2082 2083-2084 2085-2086 2087-2088 2089-2090 2091-2092 2093-2094 2095-2096 2097-2098 2099-2100 2101-2102 2103-2104 2105-2106 2107-2108 2109-2110 2111-2112 2113-2114 2115-2116 2117-2118 2119-2120 2121-2122 2123-2124 2125-2126 2127-2128 2129-2130 2131-2132 2133-2134 2135-2136 2137-2138 2139-2140 2141-2142 2143-2144 2145-2146 2147-2148 2149-2150 2151-2152 2153-2154 2155-2156 2157-2158 2159-2160 2161-2162 2163-2164 2165-2166 2167-2168 2169-2170 2171-2172 2173-2174 2175-2176 2177-2178 2179-2180 2181-2182 2183-2184 2185-2186 2187-2188 2189-2190 2191-2192 2193-2194 2195-2196 2197-2198 2199-2200 2201-2202 2203-2204 2205-2206 2207-2208 2209-2210 2211-2212 2213-2214 2215-2216 2217-2218 2219-2220 2221-2222 2223-2224 2225-2226 2227-2228 2229-2230 2231-2232 2233-2234 2235-2236 2237-2238 2239-2240 2241-2242 2243-2244 2245-2246 2247-2248 2249-2250 2251-2252 2253-2254 2255-2256 2257-2258 2259-2260 2261-2262 2263-2264 2265-2266 2267-2268 2269-2270 2271-2272 2273-2274 2275-2276 2277-2278 2279-2280 2281-2282 2283-2284 2285-2286 2287-2288 2289-2290 2291-2292 2293-2294 2295-2296 2297-2298 2299-2300 2301-2302 2303-2304 2305-2306 2307-2308 2309-2310 2311-2312 2313-2314 2315-2316 2317-2318 2319-2320 2321-2322 2323-2324 2325-2326 2327-2328 2329-2330 2331-2332 2333-2334 2335-2336 2337-2338 2339-2340 2341-2342 2343-2344 2345-2346 2347-2348 2349-2350 2351-2352 2353-2354 2355-2356 2357-2358 2359-2360 2361-2362 2363-2364 2365-2366 2367-2368 2369-2370 2371-2372 2373-2374 2375-2376 2377-2378 2379-2380 2381-2382 2383-2384 2385-2386 2387-2388 2389-2390 2391-2392 2393-2394 2395-2396 2397-2398 2399-2400 2401-2402 2403-2404 2405-2406 2407-2408 2409-2410 2411-2412 2413-2414 2415-2416 2417-2418 2419-2420 2421-2422 2423-2424 2425-2426 2427-2428 2429-2430 2431-2432 2433-2434 2435-2436 2437-2438 2439-2440 2441-2442 2443-2444 2445-2446 2447-2448 2449-2450 2451-2452 2453-2454 2455-2456 2457-2458 2459-2460 2461-2462 2463-2464 2465-2466 2467-2468 2469-2470 2471-2472 2473-2474 2475-2476 2477-2478 2479-2480 2481-2482 2483-2484 2485-2486 2487-2488 2489-2490 2491-2492 2493-2494 2495-2496 2497-2498 2499-2500 2501-2502 2503-2504 2505-2506 2507-2508 2509-2510 2511-2512 2513-2514 2515-2516 2517-2518 2519-2520 2521-2522 2523-2524 2525-2526 2527-2528 2529-2530 2531-2532 2533-2534 2535-2536 2537-2538 2539-2540 2541-2542 2543-2544 2545-2546 2547-2548 2549-2550 2551-2552 2553-2554 2555-2556 2557-2558 2559-2560 2561-2562 2563-2564 2565-2566 2567-2568 2569-2570 2571-2572 2573-2574 2575-2576 2577-2578 2579-2580 2581-2582 2583-2584 2585-2586 2587-2588 2589-2590 2591-2592 2593-2594 2595-2596 2597-2598 2599-2600 2601-2602 2603-2604 2605-2606 2607-2608 2609-2610 2611-2612 2613-2614 2615-2616 2617-2618 2619-2620 2621-2622 2623-2624 2625-2626 2627-2628 2629-2630 2631-2632 2633-2634 2635-2636 2637-2638 2639-2640 2641-2642 2643-2644 2645-2646 2647-2648 2649-2650 2651-2652 2653-2654 2655-2656 2657-2658 2659-2660 2661-2662 2663-2664 2665-2666 2667-2668 2669-2670 2671-2672 2673-2674 2675-2676 2677-2678 2679-2680 2681-2682 2683-2684 2685-2686 2687-2688 2689-2690 2691-2692 2693-2694 2695-2696 2697-2698 2699-2700 2701-2702 2703-2704 2705-2706 2707-2708 2709-2710 2711-2712 2713-2714 2715-2716 2717-2718 2719-2720 2721-2722 2723-2724 2725-2726 2727-2728 2729-2730 2731-2732 2733-2734 2735-2736 2737-2738 2739-2740 2741-2742 2743-2744 2745-2746 2747-2748 2749-2750 2751-2752 2753-2754 2755-2756 2757-2758 2759-2760 2761-2762 2763-2764 2765-2766 2767-2768 2769-2770 2771-2772 2773

