

KENTUCKY BUREAU OF HIGHWAYS

JEFFERSON COUNTY

LOUISVILLE - LEXINGTON

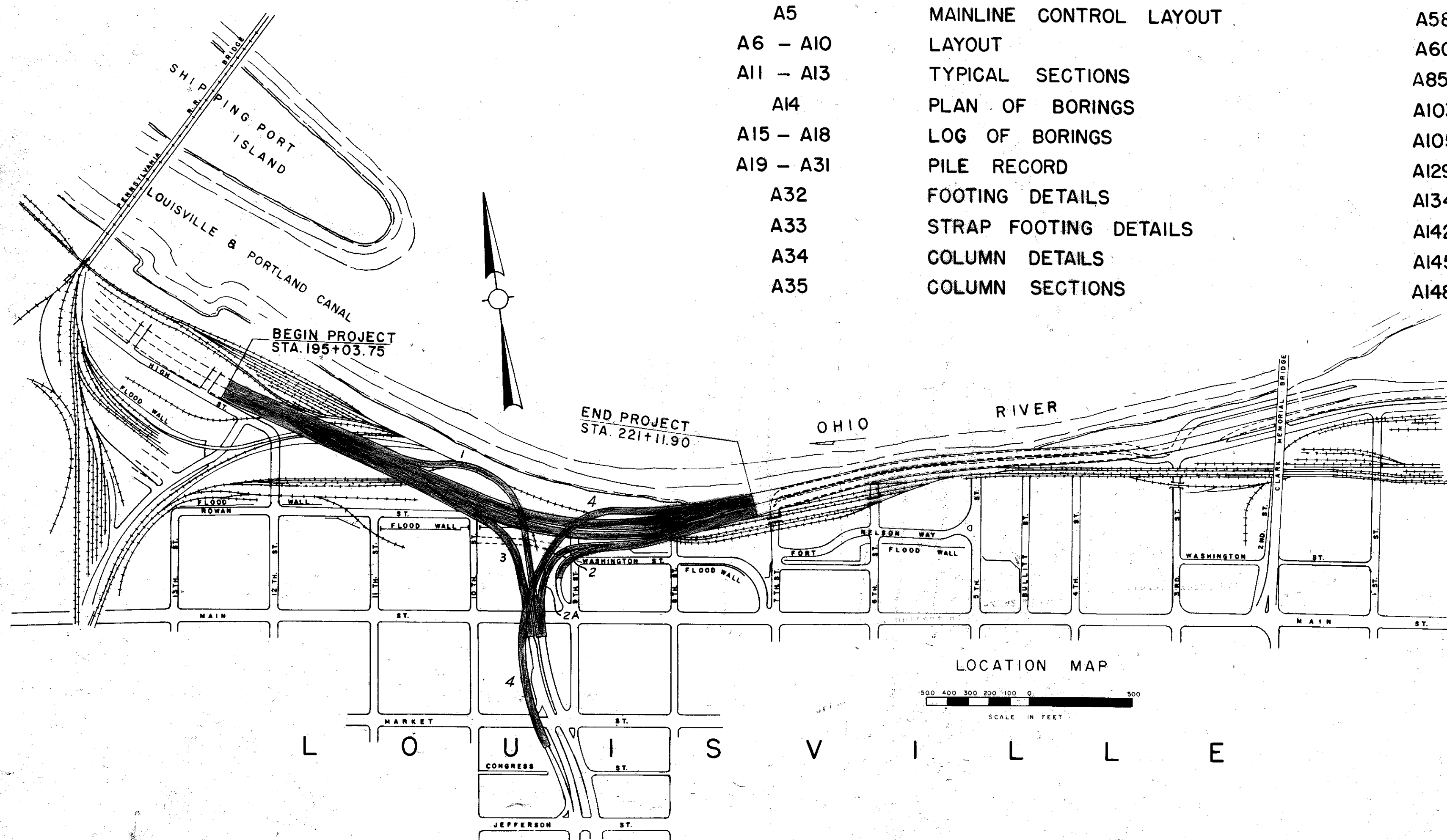
164-13TH STREET TO 7TH STREET

MAINLINE - SUBSTRUCTURE & STRUCTURAL STEEL

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NOTES:
For General Notes and Structural Steel Notes
see Sheets No. A2 - A3.
For Estimated Quantities and Bill of Incidental
Material see Sheet No. A2a.
For Lists of References, Special Provisions and
Special Notes see Sheet No. A2a.



Drawings for Entire Project to be
Divided as Follows:

Sheet Prefix	Drawing No.
A	18572
B	18573
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D	18575

A- Mainline - Substructure and
Structural Steel
B- Mainline - Deck
C- Ramp-Substructure and
Superstructure
D- Ramp Heating

NOTE: All of the Above Drawings
Shall be Worked Together.

*INCLUDES SHEET A2a AND
SHEET A46 HAS BEEN
DELETED.

SHEET A1 OF 150 *

COMMONWEALTH OF KENTUCKY	
BUREAU OF HIGHWAYS	
FRANKFORT	
COUNTY OF	
JEFFERSON	
164-13 TH ST. TO 7 TH ST.	
LOUISVILLE - LEXINGTON	
ROAD	
STATION 208+08	SP 56-273-III
CONSTRUCTION PROJECT NO.	P. E. PROJECT NO. 164-2(35)3
164-2(87)3	MAINTENANCE PROJECT NO.
	DRAWING NO.
	18572

TITLE SHEET

LETTING DATE

NOTE: Wherever in the plans and specifications, the reference "Department" is used, it shall be construed to mean "Bureau".

SPECIFICATIONS: The Kentucky Department of Highways Standard Specifications for Road for Road and Bridge Construction, current edition with revisions, shall apply to this project.

DESIGN LOAD: This bridge is designed HS20-44 live load as specified in 1969 AASHTO Specifications or alternate loading of two 24-kip axles spaced four feet apart, whichever produces the greater stress. Dead Load includes 20 Lbs/sq. ft. of roadway surface allowance for future wearing surface. This bridge is designed for a wind load based on a wind velocity of 84 m.p.h.

DESIGN STRESSES: For reinforced concrete use the following:	
Class A	Class AA
$f_s = 20,000$ psi	$f_s = 20,000$ psi
$f_c = 1,200$ psi	$f_c = 1,600$ psi for other than slab
$f'_c = 3,000$ psi	$f_c = 1,200$ psi for deck slabs
u (for embed.) = 200 psi	$f'_c = 4,000$ psi
u (for Σ o) = 240 psi (Pier Ftgs. only)	u (for embed.) = 200 psi
u (for Σ o) = 300 psi (All others)	u (for Σ o) = 300 psi
n = 10	n = 8

DESIGN STRESSES: For structural steel:

For A36 Steel	$f_s = 20,000$ psi
For A440 and A441 Steel	
3/4" thick and under	$f_s = 27,000$ psi
Over 3/4" to 1 1/2" incl.	$f_s = 25,000$ psi
Over 1 1/2" to 4" incl.	$f_s = 23,000$ psi
For A588 Steel	
4" thick and under	$f_s = 27,000$ psi
For A514 Steel	
Up to 2 1/2" incl.	$f_s = 53,000$ psi
Over 2 1/2" to 4" incl.	$f_s = 48,000$ psi

STRUCTURE EXCAVATION: Removal of concrete boulders and concrete or stone masonry retaining walls, etc. down to the bottom of footing within the limits of structure excavation shall be classified as "Structure Excavation Common" in lieu of Section 105 of the Standard Specifications.

FOUNDATION PILE LOADS: 12BP53 Steel piles are designed for a maximum axial load at 70 tons per pile. Options A thru F concrete piles are designed for 60 tons per pile downward and 15 tons per pile uplift. Piles under the end bents have a design axial thrust of 33.4 tons per pile and a horizontal shear of 2.1 tons.

TYPES OF PILES: The contractor shall use 12BP53 Steel piles Standard Drawing P212A current edition, or Options A thru F as called for in the plans. Options A thru F shall be one of the following types:

Option A - Standard 14" Reinforced Concrete Pile, Standard Drawing P2, current edition.

Option B - 14" Cast-in-Place Concrete Pipe Pile, Seamless Steel or Welded Pipe Shell, Standard Drawing P-20, current edition.

Option C - 14" Cast-in-Place Concrete Pile, Fluted Steel Shell, Standard Drawing P-21, current edition.

Option D - 14" Cast-in-Place Concrete Pile, Corrugated Steel Step-Taper Shell, Standard Drawing P-22, current edition.

Option E - Standard Precast Prestressed 14" Concrete Pile, Standard Drawing P-23, current edition.

Option F - 14" Cast-in-Place Concrete Pile, Corrugated Steel Step-Uniform Diameter Shell, Standard Drawing P-24, current edition.

NOTE: Options D&F shall not be used in End Bents.

PILING: All 12BP53 Steel piles shall be driven to refusal or to solid rock. Option A thru F piles shall be driven to a tip elevation and to a minimum driving resistance to be determined by the load tests. The estimated pile tip elevations shown in the Plans have been determined from the Log of Borings and Standard Penetration Tests which were made by methods believed to be reliable. This data is furnished for information only and no guarantee, as to the accuracy of the data or the interpretation of the soil exploration results, is given.

PILE LOAD TESTS: Pile load tests shall be made on Pile Options A thru F where indicated in the Plans and in accordance with Special Provision No. 31 prior to driving any other permanent piles of this type. The test load shall be 120 tons. The tip elevations shall be as shown on the plans or as directed by the Engineer. All test piles shall be located so as to be a part of the finished structure. The contractor shall remove the overburden around each test pile to the bottom of footing before driving the test piles. If failure occurs before the maximum test load is reached or because of excessive settlement under full test load as prescribed above, the test load shall be removed, the pile spliced if necessary, redriven and another loading test performed as directed by the Engineer.

TEST PILES FOR LENGTH: Test piles shall be driven where designated in the Plans to determine the length required. The Contractor shall remove the overburden around each test pile to the bottom of the footing before driving the test piles. All test piles shall be located so as to become a part of the finished structure.

DRIVING PILES AND EXCAVATING FOR FLOODWALL AND ADJACENT FOOTINGS: Where called for in the Plans piling shall be prebored to the specified elevation and in accordance with the Special Notes for "Driving Piles Under Floodwall Monoliths and Adjacent Footings". When excavating for these specified footings extreme care shall be excuted so as not to disturb the existing monoliths. Piles shall be driven prior to excavating below bottom of floodwall footing elevation. The excavated earth shall be used in backfilling and shall be compacted to its original density.

PILES FOR FOOTING 37WB, 38EB-66, 49EB-4, R1-13 AND R3-2: Those piles so designated on the plans shall be prebored to the specified elevation and in accordance with the Special Notes for "Driving Piles Under Floodwall Monoliths and Adjacent Footings".

PREBORING OF PILES: In various locals of the project difficulty in driving piles is predicted. Quantities for preboring for these piles are included in the Estimate of Quantities. Preboring shall be in accordance with the Special Notes for "Placing Piles thru Fill for the Riverside Parkway". The contractor should note that preboring does not relieve the Contractor from any damage to adjacent structures above or below ground due to driving piles. The exact location of all buried structures should be confirmed prior to preboring or driving piles. Any damage to existing structures is at the Contractor's expense.

COORDINATION WITH CONTRACTORS ON ADJACENT PROJECTS: In addition to the requirement of Article 1.5.6 of the Standard Specifications, this Contractor shall coordinate his work with that of Contractors on adjacent sections of this Project.

CONTROL OF THE WORK: In addition to the requirements of Article 1.5.9 of the Standard Specifications, subsequent to the Engineer's staking of the reference lines, centerlines or base lines for the various roadway elements of this Project, the Contractor shall stake out and verify the locations of each substructure unit for agreement with the positions shown in the Plans. Prior to fabrication of the structural steel, the Contractor shall again verify the locations of each substructure unit and the dimensions between centerlines of piers and between centerlines of columns to insure correct fit of the steelwork. In the event a discrepancy is found in any dimension, the Engineer shall be notified at once and no further work will be permitted until the discrepancy is corrected.

CONCRETE: Class "AA" Concrete is to be used for superstructure and for portions at end bent backwall and wingwalls above top of cap elevation. Class "A" Concrete for all other parts of the substructure, Floodwall monoliths and railroad crashwalls. Class "D" Concrete is to be used in proposed Pile Options A,B,C,D & F. Class "D" Modified is to be used in Pile Option E.

PLACING FILLS AT END BENTS: See Standard Drawing SF2, current edition.

CIRCULAR SECTION REINFORCED CONCRETE COLUMNS: This note modifies the requirement of Article 404.3.1-A and 403.3.8-A for pier columns of grade separation structures. The concrete shall be placed, finished and cured as specified in Article 404.3.1 except as required by the following:

(a) All forms for the circular section columns shall be made of metal or shall be plastic or plastic-lined so as to give the surface a true, smooth, cylindrical shape free from fins, joints and irregularities.

(b) The concrete shall be placed in, and carefully vibrated against, the forms to assure smooth surfaces without voids, honeycomb, air pockets or irregularities in the surface.

No extra payment will be made to the Contractor for the use of metal plastic or plastic-lined forms, nor for placing or finishing the concrete. The cost of furnishing the forms, placing the concrete, and finishing as specified shall be included in the unit price bid for Class "A" Concrete.

SLAB FORMS: Stay-in-place forms will not be permitted for the concrete bridge floors.

BEVELED EDGES: All exposed edges shall be beveled 7/8" unless otherwise shown.

STRUCTURAL STEEL: See Sheet A3 for "Structural Steel Notes".

PERMISSIBLE VARIATIONS: The lines of the finished concrete, except bridge floors shall not vary more than 1/4" in ten feet as measured from a straightedge, or vary from plan lines more than 0.1 percent of the distance between the extremities of the unit considered.

Any variations in excess of those permitted above will be, at the discretion of the Engineer, cause either for rejection or removal of the work as set out in Article 1.5.12 of the Specifications, or for a deduction from the monies due or which may become due the Contractor in an amount calculated by multiplying the volume of concrete in the portion of the structure in which such variation occurs by the unit bid price for concrete.

REINFORCEMENT: Dimensions shown from face of concrete to bars are clear distances. Spacing of bars is from center to center of bars.

SPIRAL REINFORCEMENT: Splices for spirals where desired by the Contractor shall be made with a minimum of one and one-half turns of spiral. No additional payment will be made for these splices, but the cost will be considered incidental to the cost of the developed length of spiral shown on the Plans. Spiral reinforcement shall meet the requirements of Section 641.5.0 of the Standard Specifications for one-half inch round steel wire, and Section 641.1.3 for 5/8 inch round plain bars.

GROUT: The cost of the grout under the sign support bases is to be included in the contract unit bid price bid for Class "AA" Concrete.

OVERHEAD SIGN SUPPORTS: The Overhead Sign Supports may be made of Aluminum or Galvanized Steel. Both materials may be used on this project at the discretion of the Contractor, however each individual overhead sign support shall be constructed of only one type material. Payment for the overhead sign supports shall be at the contract Lump Sum Bid for overhead sign supports and in addition to the overhead sign supports complete in place shall include the Z-bars and all hardware necessary for attaching the signs to the supports.

CONSTRUCTION IDENTIFICATION: The names of the Prime Contractor and the Subcontractor shall be imprinted in the concrete with one inch letters at a location designated by the Engineer. The Contractor shall furnish all plans, equipment and labor necessary to do the work for which no direct payment will be made.

MEMBRANE CURING COMPOUND: White pigmented curing compound shall be applied to the bridge deck in accordance with the Special Provision except that it shall only be applied to the bridge deck between the gutter lines.

LINSEED OIL PROTECTIVE COATING: Linseed Oil Protective Coating shall be applied in accordance with the Special Provision except that it shall only be applied to the bridge deck between the gutter lines.

HIGH-STRENGTH HANDRAIL: High-Strength Aluminum Handrail, in accordance with Standard Drawing H 117, current edition, shall be used.

END CAST CLOSURE PLUG AND CLOSURE PLATE: For details and Specifications for End Cast Closure Plug and Closure Plate See Standard Drawing H 115, current edition. Payment for furnishing and installing these items shall be included in the Contract Unit Price for Lin. Ft. of High Strength Handrail.

DRAIN PIPE: This note is in addition to the requirements of the Standard Specifications for pipe material. The drain pipe for the bridge floor drainage shall be:

Continuous weld or seamless steel pipe shall be standard weight, black pipe conforming with the applicable provisions of ASTM A53, current edition. It shall be weldable alloy steel containing a minimum of 0.75% copper and 1.5% nickel, by weight. It shall have the following minimum mechanical properties:

Tensile strength	50,000 psi
Yield strength	37,500 psi
Elongation in 2 inches	30 percent

The pipe shall be of the size shown on the Plans and shall be painted in accordance with the requirements for shop and field painting Structural Steel.

The drain pipe will be measured in lineal feet on the centerline of the pipe. This item will be paid for at the unit price bid per lineal foot, which price shall include and be full payment for furnishing and installing, complete in place and accepted, all materials including weld material and welding, brackets, pipe clamps and hangers, fittings, connections, hardware and tools, paint and painting, equipment and incidentals necessary to complete the work. The triangular drain trough detailed on the ramp portion of the project will be measured in lineal feet on the centerline of the trough and will be paid for at the unit price bid per lineal foot for DRAIN PIPE, which price shall be considered as payment in full as specified herein.

SHOP DETAIL DRAWING: Shop Detail Drawings for the Drain Pipe Details will be required. Three sets of the shop drawings will be submitted to the Engineer for approval.

BILL OF INCIDENTAL MATERIAL: The quantities shown in the Bill of Incidental Material are approximate only and the contractor is responsible for furnishing enough material to complete the work in accordance with the Plans and Specifications. The cost of these items is to be included in the unit price bid for Class "AA" Concrete.

PAINT: All structural steel shall be cleaned and painted in accordance with the Special Provision for Blast Cleaning and Painting Structural Steel, current edition.

CLEARANCE: All falsework, bracing or forms shall have a minimum vertical clearance of 22 feet above the top of the highest rail, and a minimum horizontal clearance of 8 feet measured perpendicular to the centerline of the nearest track.

SET-RETARDING ADMIXTURES FOR DECK CONCRETE: Except as noted in the plans the deck pours of all units shall be made in one continuous pour. An admixture conforming to the requirements of Special Provision No. 36-A shall be added to the concrete for the bridge deck slabs to delay the initial set of the concrete so as to permit the placement and finishing of concrete in all spans of a continuous unit in a single continuous operation. The admixture and its use shall conform to the Special Provisions. The amount of delay shall be dependent on the quantity of admixture and the quantity used shall be carefully determined on the basis of temperature, relative humidity, wind conditions, and required placing time. The retarding action shall delay the initial set in each span until after the next adjacent span in the same continuous unit has been placed. The Contractor shall secure the Engineer's approval of the quantities of admixture to be used for each placement.

ANCHOR BOLT HOLES: Holes of depth and dimensions shown shall be drilled for anchor bolts or dowels, after base plates are properly set, by the superstructure contractor who shall be responsible for keeping holes dry in freezing weather. After base plates are properly set, anchor bolt holes drilled, and anchor bolts are placed in drilled holes, molten lead shall be poured in holes and packed until holes are completely filled flush to top of base plates. The cost of drilling anchor bolt holes, furnishing lead, and filling holes with molten lead shall be incidental to and included in the lump sum bid for structural steel.

CONSTRUCTION NOTE: The contractor shall arrange the work so as not to interfere with any of the railroads in the area (Pennsylvania Central Transportation Company, Illinois Central Railroad Company and the Southern Railway System). The Contractor shall arrange with the respective railroad to provide flag protection at the Contractor's expense. For footings adjacent to the railroad the Contractor must provide adequate shoring to prevent settlement of the track and or bed. Plans for the shoring shall be submitted for approval to the Department of Highways and to the respective railroads, and no work shall be performed prior to approval by the Engineer and the respective railroad.

ELEVATIONS: All elevations are based on U.S.C. & G.S. 1929 (1950 Releveling) Datum.

DIMENSIONS: Dimensions shown on the Plans are horizontal and for a normal temperature of 60 degrees Fahrenheit with dead load on the structure. For the true length of the members the dimensions should be corrected for grade and or superelevations. Tapes used by the Contractor, including the Structural Steel fabricator and erector, shall have been calibrated correctly with the U.S. Bureau of Standards to insure correct fit to the steel work.

DAMAGE TO EXISTING SEWERS OR FLOODWALLS: If any sewer or floodwall is damaged due to the Contractor's operations, the damaged structure shall be repaired to its original condition at the Contractor's expense, subject to approval by the Metropolitan Sewer District or the U.S. Corps of Engineers, respectively.

CONCRETE FINISH: Exposed surfaces of substructure and superstructure shall be finished in accordance with Special Provision No. 99. In addition to the areas listed in Special Provision No. 99 required to receive an Approved Masonry Coating Finish, the following areas are to receive the same treatment: (1) Exposed portion of pier columns (2) Exposed portion of end bents below the bridge seats (3) Exposed portion of floodwall monoliths

COORDINATION OF WORK BETWEEN THE CONTRACTOR AND THE LOUISVILLE GAS AND ELECTRIC CO.: The contractor will coordinate his work with that of the Louisville Gas and Electric Company while they are performing their work in connection with this Project.

SHEET A2

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

FRANKFORT
COUNTY OF

JEFFERSON

I 64-13TH ST. TO 7TH ST.

LOUISVILLE - LEXINGTON

ROAD

STATION 208+08

P. E. PROJECT NO. I 64-2 (35) 3

CONSTRUCTION PROJECT NO.

MAINTENANCE PROJECT NO.

DRAWING NO.

18572

GENERAL NOTES

LETTING DATE

STRUCTURAL STEEL NOTES: These notes are modifications of and additions to Section 408 of the Standard Specifications. Division, Section and Article numbers and letters appearing herein refer to portions of the Standard Specifications bearing the same designation.

MATERIAL SPECIFICATIONS: The following ASTM Designations shall govern the materials furnished:

A27-71	Carbon Steel Castings, Grade 70-36
A36-70a	Structural Steel
A48-64(1971)	Gray Iron Castings Class 30A
A53-71a	Welded and Seamless Steel Pipe
A108-69	Cold-Finished Carbon Steel Bars and Shafting (Grade 1016 to 1030 inclusive)
A235-67	Carbon Steel Forging (Class G)
A237-67	Alloy Steel Forgings (Class A)
A242-70a	High-Strength Low Alloy Structural Steel
A307-68	Low Carbon Steel Bolts
A325-71a	High-Strength Bolts
A606-71	High-Strength Low Alloy Hot Rolled Steel Sheets and Strips(Type 2)
A440-70a	High-Strength Structural Steel
A441-70a	High-Strength Low-Alloy Structural Steel
A514-70	High-Yield-Strength Quenched & Tempered Alloy Steel Plate
A588-71	High-Strength Low-Alloy Structural Steel
B29-55	
(1971)	Sheet Lead and Pig Lead
A536-71	Ductile Iron Castings Grade 60-40-18
A276-71	Stainless and Heat-Resisting Steel Bars, and Shapes

HIGH STRENGTH LOW ALLOY STRUCTURAL STEEL: High Strength Low Alloy Structural Steel shall conform to ASTM Specification A588, current edition, for Grades A through G. When furnishing Grades A,B,C,F & G informational reporting shall indicate that Charpy V-notch test values of 15 foot-pounds are obtained. When furnishing Grades D and E acceptance approval will not be granted until adequate data has been supplied showing that the material produced under production control procedures fully meets the Charpy V-notch requirement of 15 foot-pounds at 40° Fahrenheit, mininum elongation requirements and weldability properties.

SHOP DETAIL DRAWINGS: The Contractor shall submit shop detail drawings of all structural steel to the Bridge Engineer for approval in accordance with the Specifications. After the fabrication is completed and accepted for shipment the Contractor shall furnish the Department one full set of linen or drafting film tracings of approved correct shop drawings, including the welding procedures. No direct payment will be made for the record tracings, but the cost shall be included in the lump sum bid for "Structural Steel".

Any material ordered or work done by the Contractor before the shop drawings, including the welding procedures, are approved shall be at his own risk. Qualification Tests of all welding procedures shall be completed by the Contractor and approved by the Engineer prior to the final approval of shop drawings and start of fabrication.

DESIGN: Shop welded construction is intended for all built-up members unless otherwise indicated. High Strength Bolts will be used for shop and field connection as shown on the Plans.

CONNECTIONS: Unless otherwise provided on the Plans all connections shall be 7/8" diameter high strength bolted connections. All high strength bolted connections are friction type, and shall be in accordance with Article 408.3.1-F of the Standard Specifications. Tightening of the bolts shall be done with properly calibrated wrenches. Connections for cross frames, diaphragms, longitudinal bracing, expansion joints, and other minor members may be punched or drilled full size without assembly, subject to the requirements of the Specifications for general reaming.

ADDITIONAL FIELD SPLICES: If additional field splices are permitted they shall be at the Contractor's expense, and shall be included in the lump sum bid for "Structural Steel".

WELDS: All welding shall conform to Specifications for Welded Highway and Railway Bridges, AWS D2.0-69 of the American Welding Society with modifications and additions as stated on the Plans and Standard drawing AWS3, current edition.

PROHIBITED FIELD WELDING: Except as noted on the Plans, no welding of any nature shall be performed on the load carrying members of the bridge without the written consent of the Director, Division of Bridges, or his authorized representative, and then only in the manner and at the locations designated in the authorization.

WELDING PROCEDURE: Qualification tests of all welding procedures shall be completed by the Contractor and approved by the Engineer prior to the final approval of the shop drawings and Weling Procedure and the start of fabrication.

CAMBER AND GIRDER WEB PLATES: Web plates shall be cut to provide for camber as indicated on the Plans. Provide for possible warpage due to extra heat in top flange by virtue of shear connector. Curved girders shall be fabricated to the curved alignment with webs bent to the radius shown on the Plans. Optional shop welded web plate splices for the girders may be made by the Contractor, and shall be located on shop details. Maintain a minimum distance of three feet (3') from any flange welded splice. Such splices will not be paid for, but the cost thereof shall be included in the lump sum price bid for "Structural Steel".

Girders which do not conform to plan camber and grade in the erected position shall be considered as requiring either an adjustment in depth of concrete haunch over the steel supporting members at no additional cost to the State, or a reworking of the girder camber to meet the plan grade and slab thickness at no additional cost to the State. However, in no case shall the shear connectors be allowed to penetrate the slab less than two inches.

GIRDER FLANGES: Prior to approval of the shop detail drawings, the Contractor may request permission from the Engineer to extend a thicker flange plate in the direction of a smaller to eliminate one or more butt welded flange splices. No extra payment will be made for the additional steel weight. Curved girder flange plates shall be cut to the curvature shown on the Plans, and shall not be curved by heat.

SHEAR CONNECTORS:
(a) Optional Types - The Contractor shall use one of the following options throughout this structure as called for in the plans.
Option 1 - 3/4" x 4" studs
Option 2 - 4" channel @ 5.4 lbs./ft.
If the Contractor wishes to use other than 3/4" x 4" stud shear connectors as shown in the Plans, the proposed arrangement shall be submitted for approval with the shop plans.

(b) Materials -
Option: 1 - The studs shall be headed steel bars complying with Grade 1015, ASTM A108 and qualified in accordance with AWS D2.0-69, Section 4, Part VI on Requirements for Stud Welding.
Option 2 - The channels shall comply with ASTM A36.

(c) Welding - The shear connectors shall be shop or field welded to the tops os the steel girders as shown in the Plans. Welding procedures shall conform to the applicable requirements of AWS including AWS D2.0-69, Section 4, Part VI Stud Welding.

(d) Detail drawings will be required for the shear connectors in accordance with Article 408.3.1-A of the Specifications.

(e) Lump Sum Bid for "Shear Connectors" shall be full payment for all shear connectors welding and welding materials, equipment, tools, labor, detail drawings, patent royalties, and materials and incidentals necessary to place shear connectors on the girders in accordance with the Plans.

PAYMENT FOR STRUCTURAL STEEL: The Lump Sum Bid for structural steel shall be full payment for all structural steel (except that for Expansion Joints), bolts, washers, steel pins, cast iron, lead plates, molten lead, welding and welding materials, floor drains, paint and all labor and materials necessary to erect the steel in accordance with the Plan & specifications. The approximate weight of structural steel shown in the Estimate of Quantities does not include overrun or weld material.

UNITS I THRU VII WESTBOUND AND I THRU VI EASTBOUND: Section 408.3.1-C of the Standard Specifications shall govern the reaming of field connections for all girders (G1,G2, etc.), floorbeams and 24WF stringers. Where called for in the Plans, all members are to be cambered for full dead load. 24WF Stringers do not have to be cambered, but any natural camber should be turned so as to conform with the vertical curve of the roadway. Floorbeams with a significant amount of deflection are cambered for full deadload. At Floorbeams-girder connections the ends are cambered such that under full deadload the girders will be vertical.

UNITS VIII WESTBOUND AND VII AND VIII EASTBOUND:

STRINGERS: The stringers are designed as continuous steel stringers for steel dead load and the weight of the concrete slab; and as continuous composite stringers in positive moment for live load and the weight of curbs, plinth, railing, future wearing surface, etc. Temporary supports or shoring will not be permitted under the stringers when taking top of steel elevations or when placing the concrete slab.

SHOP ASSEMBLING: General reaming of holes for each bolted splice and connection of the continuous stringers shall be required. Each continuous stringer unit shall be shop assembled with parts adjusted to line, elevation, camber and fit for drilling or reaming. For the splices and connections of the continuous stringers to the pier girders, the stringers and pier girders may be fully assembled in the shop or, alternatively, each continuous stringer may be assembled with templates equal to the pier girder web thickness between the end connections. A minimum of two spans of each continuous stringer shall be assembled for reaming and the splices and connections at each pier girder reamed successively until reaming is completed for a continuous unit.

Milled ends of the compression flange splice plates shall be brought to full bearing aganist the pier girder web or template before reaming is started.

The continuous stringers are designed as continuous for their dead load and shall be supported during reaming. Stringers shall remain assembled for inspection by the Department of Highways inspector and are to be match marked while assembled.

ERECTION AND FIELD ASSEMBLY: As soon as each stringer is erected between pier girders the top flange splices shall be pinned and bolted as required by Article 408.3.2-F. The milled end of the bottom flange splice plate shall be brought into full bearing against the pier girder web and immediately pinned and bolted as required for continuity of the spans.

UNITS AT RAMPS 1, 2, 2A, 3 AND 4:

STRINGERS: The longitudinal girders are designed as continuous steel stringers for steel dead load, concrete dead load, future wearing surface dead load, and live load plus impact. Temporary supports or shoring will not be permitted under the stringers when taking top of steel elevations or when placing the concrete slab.

CAMBER: Where called for in the plans, all members are to be cambered for full dead load. Pier girders and floor beams do not have to be cambered. Any natural camber in floor beams should be turned upward to reduce dead load deflection of the floor beams. At floor beam girder connections the end of the floor beams shall be cut so that the ends of the floor beams will be vertical for the given superelevation.

SHOP ASSEMBLING: Section 408.3.1-C of the Standard Specifications shall govern the reaming of field connections for all girders (G1,G2 etc.), pier girders and floor beams. Each continuous unit shall be shop assembled with parts adjusted to line, elevation, camber and fit for drilling or reaming, or, alternatively, for Unit R2-II, each continuous stringer may be assembled with templates equal to the pier girder web thickness between the end connections. In Unit R2-II, milled ends of the compression flange splice plates shall be brought to full bearing against the pier girder web or template before reaming is started. A minimum of two spans of each continuous stringer shall be assembled for reaming and the splices and connections at each pier girder reamed successively until reaming is completed for a continuous unit.

The continuous stringers are designed as continuous for their dead load and shall be thus supported during reaming. Stringers shall remain assembled for inspection by the Department of Highways inspector and are to be match marked while assembled.

ERECTION AND FIELD ASSEMBLY: In Unit R2-II, as soon as each stringer is erected between pier girders the top flange splice shall be pinned and bolted as required by Article 408.3.2-F and the milled end of the bottom flange splice plate shall be brought into full bearing against the pier girder web and immediately pinned and bolted as required for continuity of the spans.

NONDESTRUCTIVE TESTING: The third paragraph of Article 607 (c) of AWS 3, current edition, is revised as shown below. This revision applies only to longitudinal girders of Ramps 1, 2,2A,3 and 4.

All splices shall be tested except that on girder webs only 1/6 of the web depth, beginning at the points of maximum stress and 25 percent of the remainder of the web depth need be tested.

SHOP ASSEMBLY (ALL UNITS): In lieu of subpunching or subdrilling holes and reaming to full size with the parts assembled, electronic computer or numerical tape controlled drills may be used to drill holes full size. Holes drilled by this method shall be located within a tolerance whereby 85 percent of the holes in any contiguous group shall show no offset greater than 1/32 inch between adjacent thickness of metal. The Contractor shall submit to the Engineer for approval his proposed procedure for drilling the holes and assuring correct fit of the members. In the event that the Contractor drills the holes full-size by electronic computer or numerical tape controlled methods at least twenty-five (25) percent of the splices shall be assembled in the shop, to prove adequacy and accuracy of the method.

If the holes do not match, or if camber and alignment are not correct in any one assembly all spans shall be assembled and reamed, if necessary to secure correct fit.

Also in lieu of sub-punching or sub-drilling holes for the field bolted plate girder splices and reaming holes to full size while the girders are completely assembled in the shop, the field splice connection holes may be drilled full size in the solid material by inserting the drill through a pre-drilled splice plate or template in its final position in the connection (web-to-web and flange-to-flange). This work may be done immediately prior to and during the flange-to-web fitting operation with a minimum of three adjoining girder sections worked together. The joints shall be match-marked prior to disassembly. The Contractor shall submit complete details of his proposed method of drilling and control of the assembly to the Engineer for approval.

MEASUREMENT OF EXISTING STEEL:

The Contractor shall determine in the field the locations, elevations and details for connecting new structural steel at existing Piers 25 and 95. In the event that he finds discrepancies in any dimension from those shown in these plans, he shall notify the Engineer at once and shall not proceed with any work until the Engineer provides information. Any delay in the work and adjusting of such discrepancies shall not be a cause for additional payment.

DESIGNED BY: RHC	CHECKED BY: Block	DATE: 3-72	REVISION:
DETAILED BY: CBF	CHECKED BY: RHC F Block	DATE: 3-72	REVISION:
TRACED BY:		DATE: 3-72	REVISION:

STRUCTURAL STEEL NOTES

SHEET A3

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

FRANKFORT
COUNTY OF

JEFFERSON

I 64-13TH ST. TO 7TH ST.

LOUISVILLE- LEXINGTON
ROAD

SP 56-273-11L

STATION 208+08

P. E. PROJECT NO. I 64-2 (35) 3

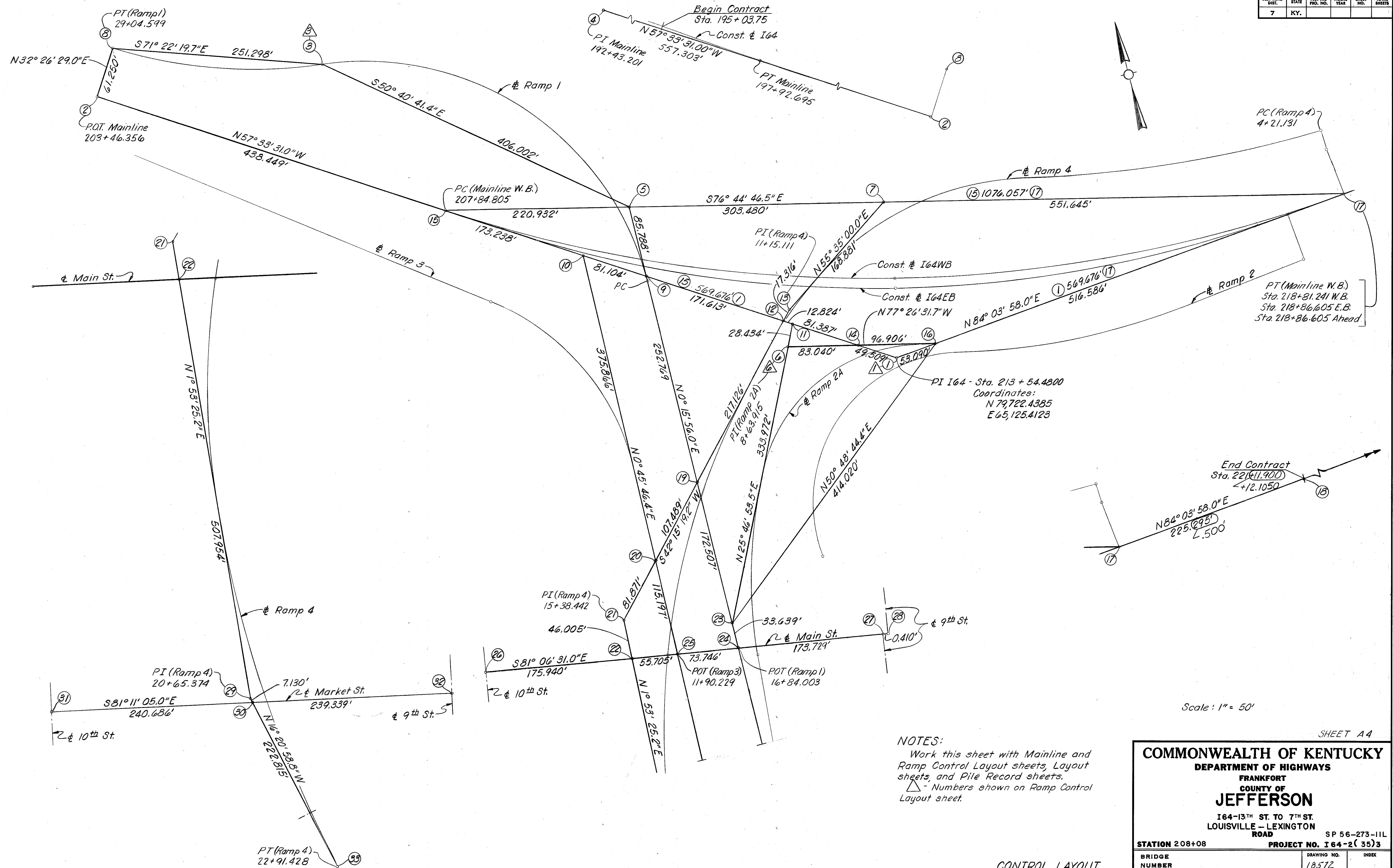
CONSTRUCTION PROJECT NO.

MAINTENANCE PROJECT NO.

DRAWING NO.

18572

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



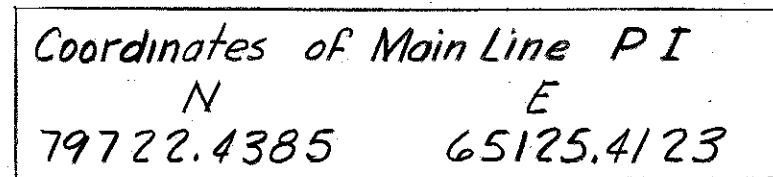
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DRAWN BY	DATE	REVISION	DATE	REVISION	DATE
CHECKED BY	DATE	REVISION	DATE	REVISION	DATE
DATE	DATE	DATE	DATE	DATE	DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 PROJECT NO. 164-2(35)3
 BRIDGE NUMBER
 DRAWING NO. 18572
 INDEX

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
DEFAYED BY	CHECKED BY	DATE	REVISED	DATE
TRACED BY	CHECKED BY	DATE	REVISED	DATE

Pier 49WB, Δ

4-75



Work this Sheet with LAYOUT and
Pile Record Sheets.
Angles given are between @ Pier and
Work Line.
* Indicates point also located off of
Ramp Work Line.
① Intersection @ Pier and Base Line. (Typical)

MAINLINE CONTROL LAYOUT

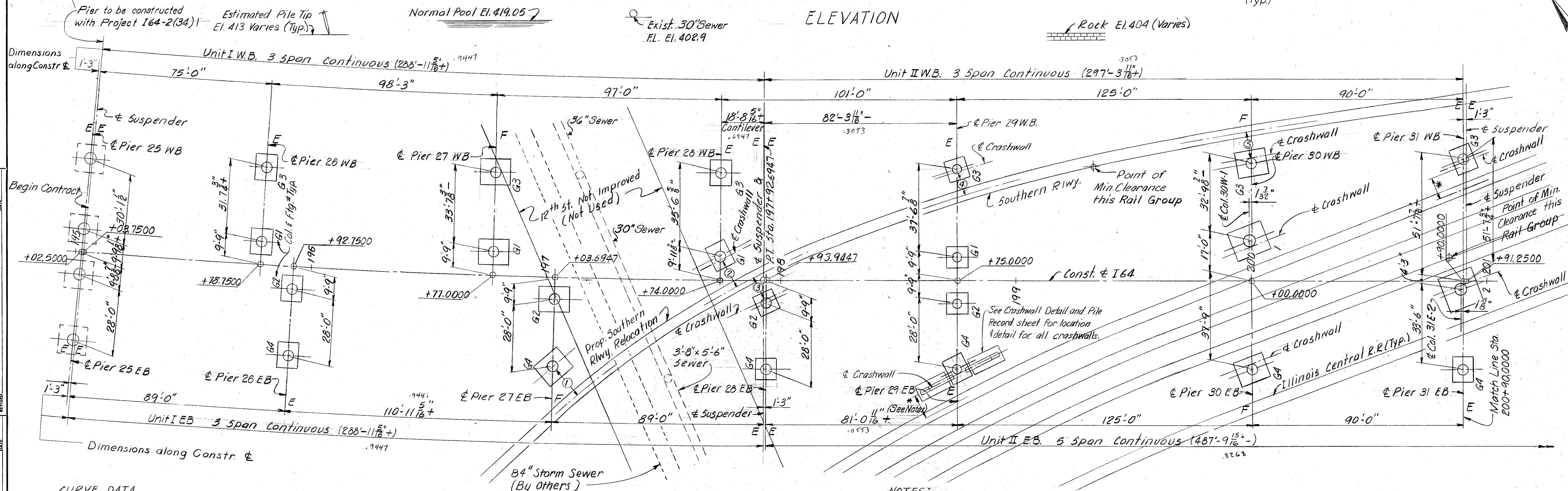
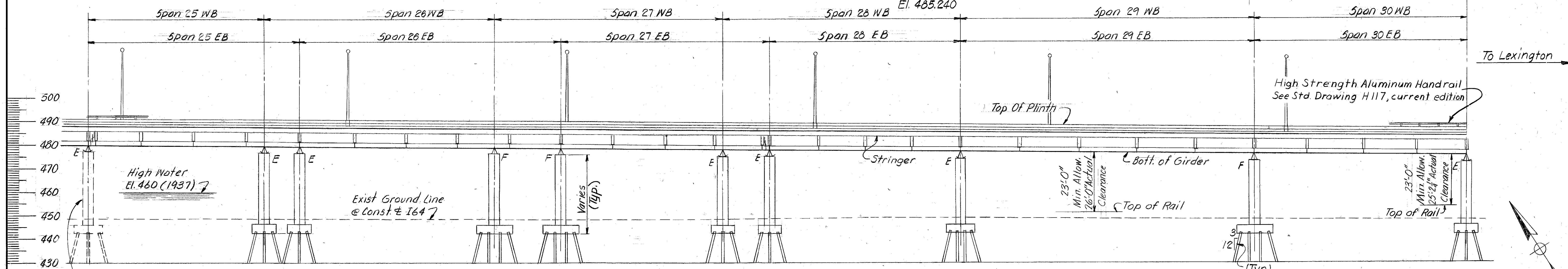
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
 I 64-13TH ST. TO 7TH ST.
 LOUISVILLE- LEXINGTON
ROAD
 SP 56-273-1111
STATION 208+08
P. E. PROJECT NO. 1 64-2 (35) 3
 CONSTRUCTION PROJECT NO. DRAWING NO. 18572

P.V.C. Sta. 195+00.0000
El. 488.880
-1.04%

Profile Grade I-64 EB & WB
P.V.C. Sta. 198+50.0000
El. 485.240

P.V.I. Sta. 200+50.0000
El. 483.160
400' VC.
-1.458%

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



CURVE DATA
MAIN LINE
D=1° 30' 00"
Δ=16° 36' 07"
R=3819.7186'
T=557.3029'
L=1106.7963'
E=40.4416'
P.I.=192+43.2013'

- Southern Railway Clearance
- 13.7' Clear
 - 12.3' Clear
 - 10.0' Clear
 - 10.0' Clear
 - 11.2' Clear

NOTES:
EB denotes Eastbound, WB denotes Westbound.

E denotes Expansion, F denotes Fixed.
Span lengths are measured along I-64 except as noted.
*8'-6" plus allowance for overhang and tilt on curves
(85' car - 60' between trucks and 14' high.)
Pier protection crashwalls required where face of column
is less than 12'-6" from track.
All piers normal or radial to I-64, except as noted.
Existing Railroad Tracks to be removed are not shown.

LAYOUT
STA. 195+02.50 to STA. 200+90.00

SHEET 16

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

SP 56-273-III
STATION 208+08
BRIDGE NUMBER
PROJECT NO. I 64-2(35)3
DRAWING NO.
18572
INDEX



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE — LEXINGTON
ROAD
SP 56 - 273-11L

STATION	PROJECT NO.	DRAWING NO.	INDEX
208+08	I 64-2(35)3	18572	

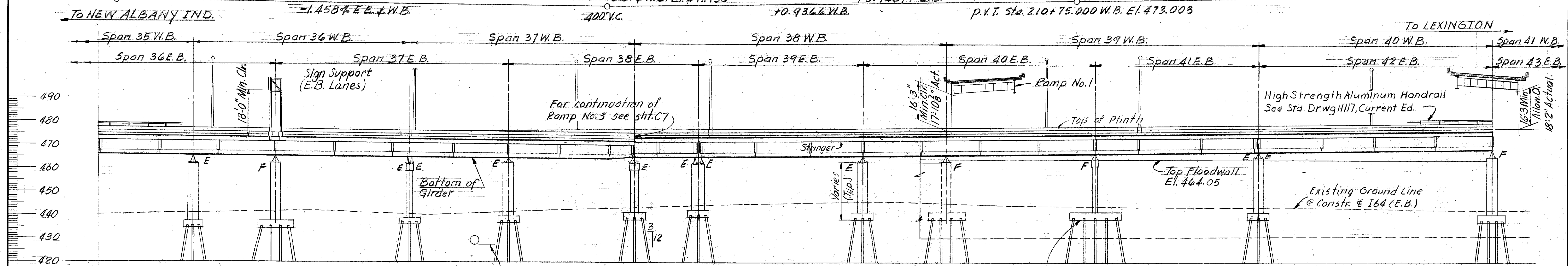
P.V.C. Sta. 206+75.000 E.B. & W.B. El. 474.044

P.V.I. Sta. 208+75.000 E.B. & W.B. El. 471.130

P.V.T. Sta. 210+75.000 E.B. El. 473.023

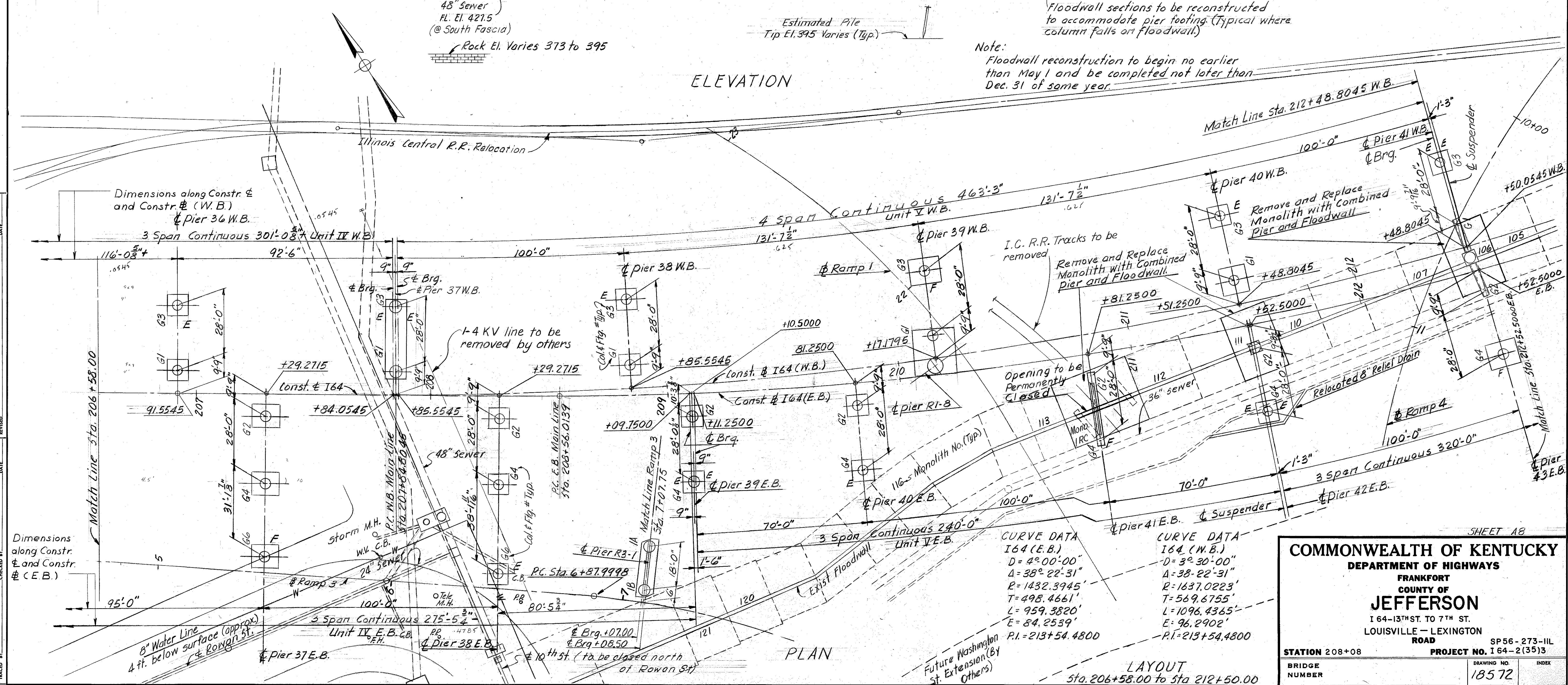
P.V.T. Sta. 210+75.000 W.B. El. 473.003

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



ELEVATION

Note:
Floodwall reconstruction to begin no earlier than May 1 and be completed not later than Dec. 31 of some year.



PLAN

CURVE DATA
I64 (E.B.)
D=4°00'00"
A=38°22'31"
R=1432.3945'
T=498.4661'
L=959.3820'
E=84.2559'
PI=213+54.4800

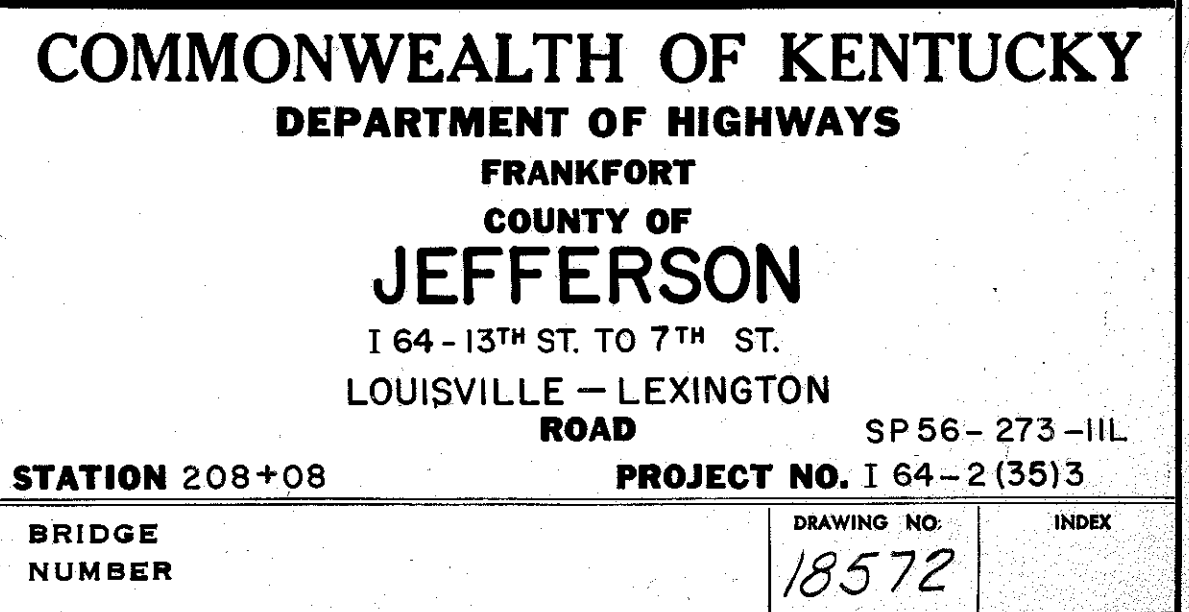
CURVE DATA
I64 (W.B.)
D=3°30'00"
A=38°22'31"
R=1637.0223'
T=569.6755'
L=1096.4365'
E=96.2902'
PI=213+54.4800

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

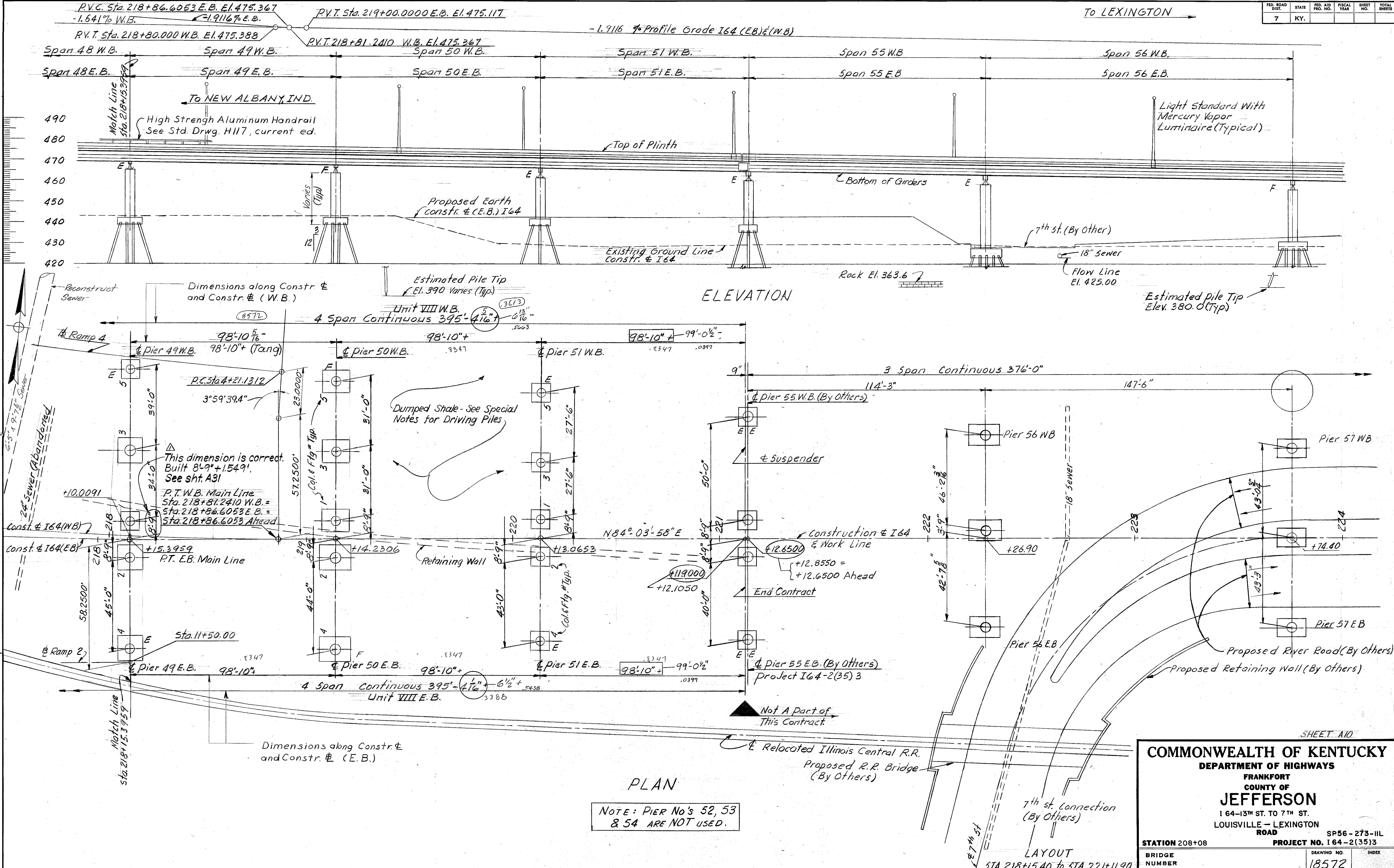
STATION 208+08
BRIDGE NUMBER

PROJECT NO. I 64-2(35)3
DRAWING NO.
18572

SP56-273-III
INDEX



DESIGNED BY: *McFarland* CHECKED BY: *RBS* DATE: *11/10/63*
DETAILED BY: *McFarland* CHECKED BY: *RBS* DATE: *11/10/63*
TRACED BY: *McFarland* CHECKED BY: *RBS* DATE: *11/10/63*

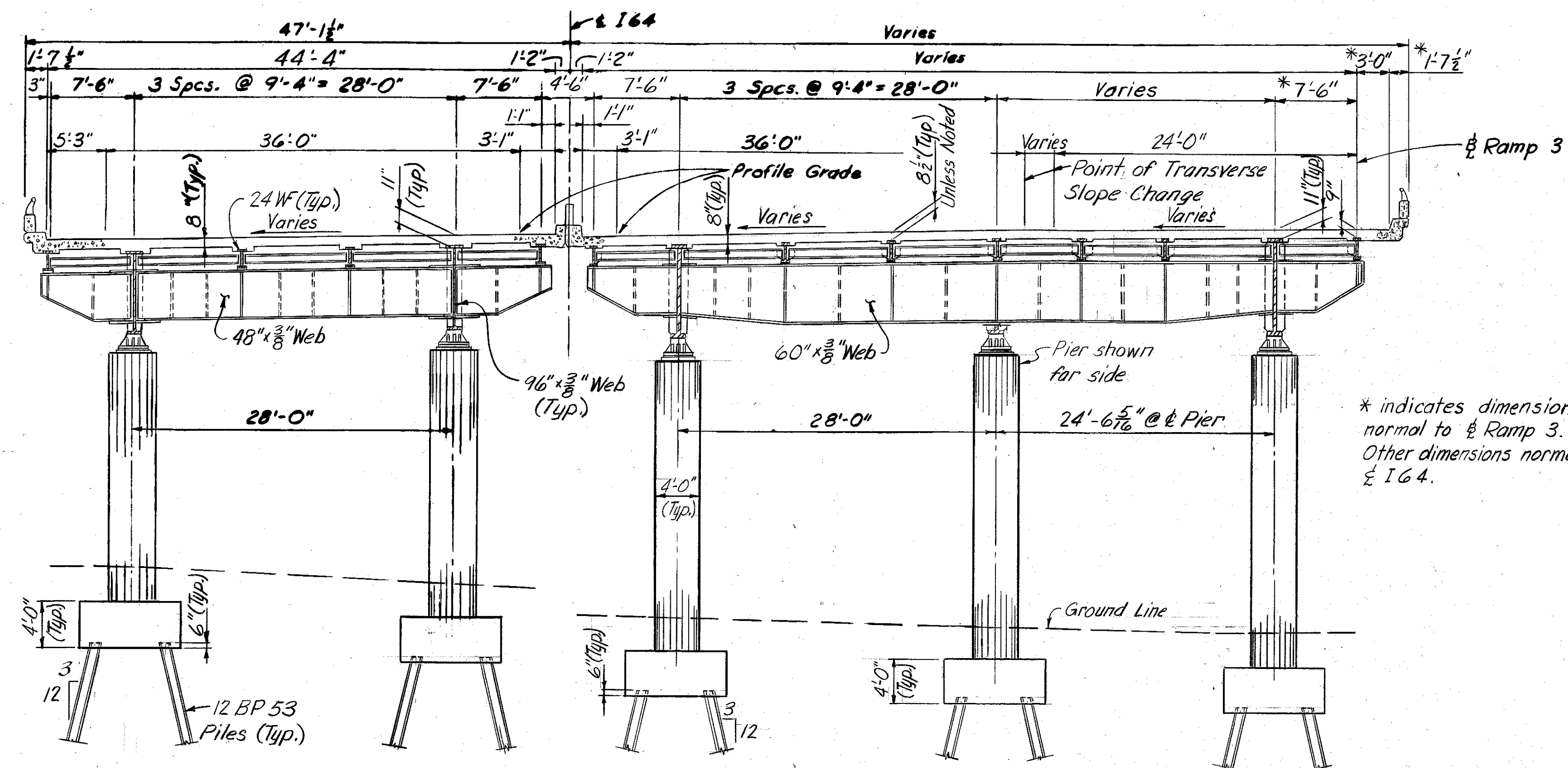


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

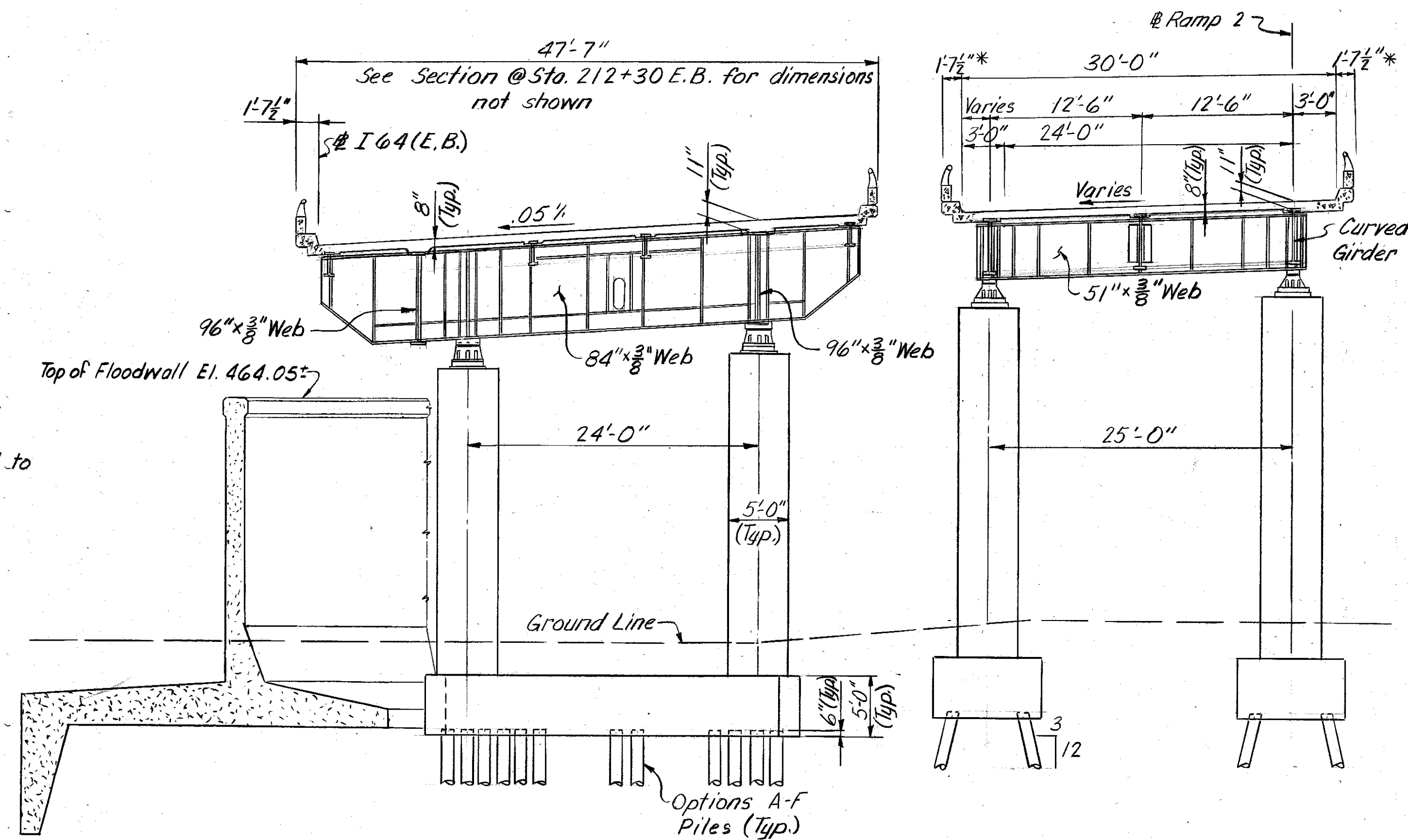
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BRIDGE NUMBER

PROJECT NO. I 64-2(35)3
DRAWING NO. 18572
INDEX

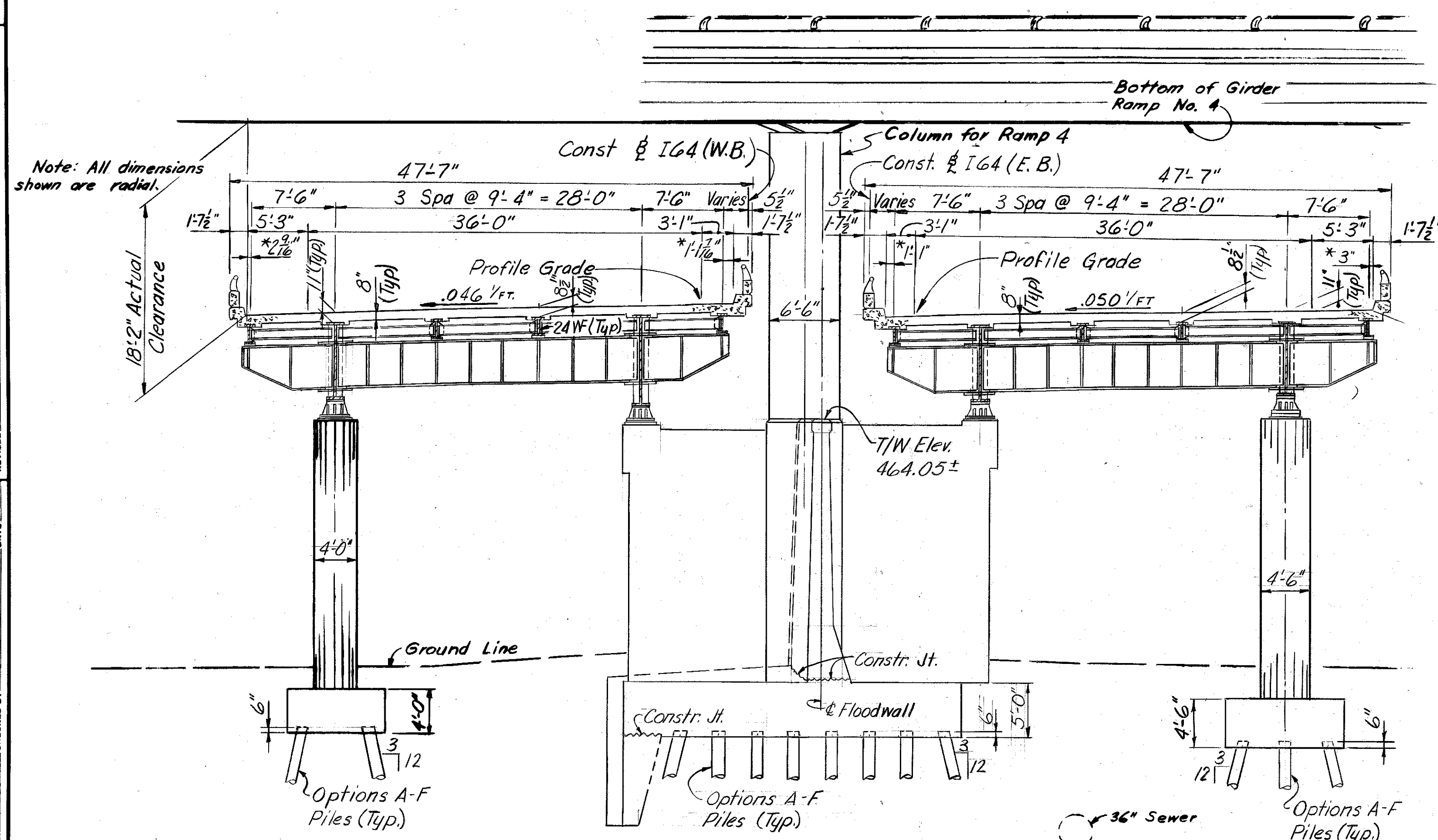
SP56-273-III



STA 206+30



STA 214+68 E.B.



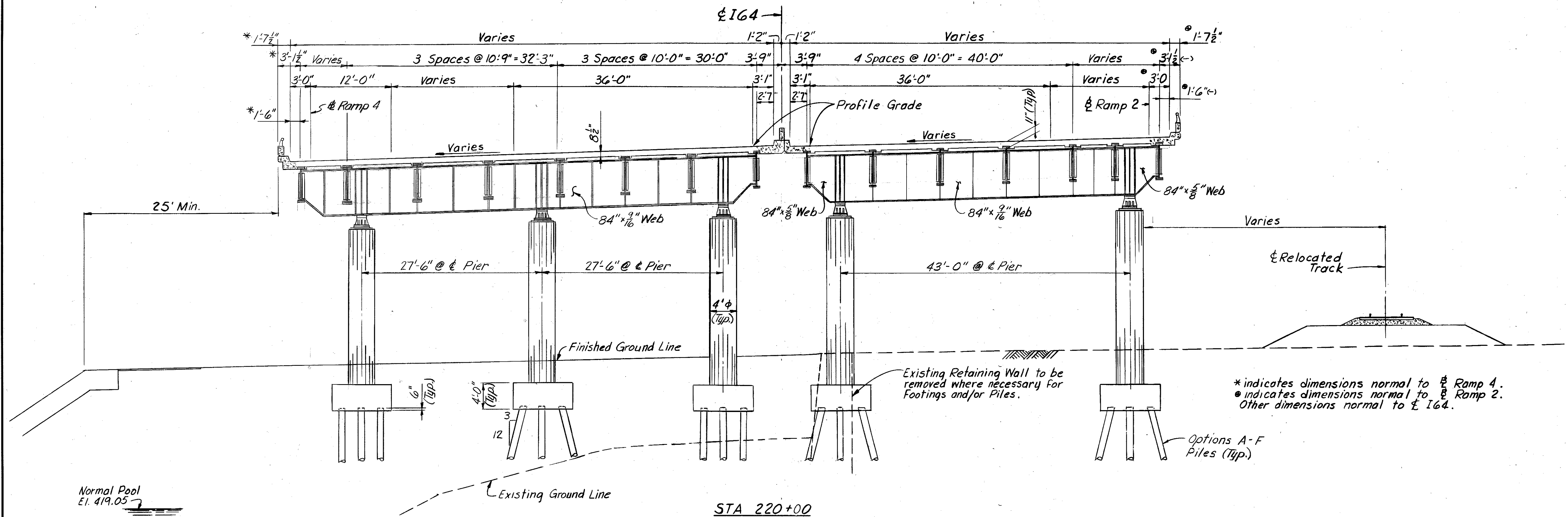
STA 212+30

TYPICAL SECTIONS

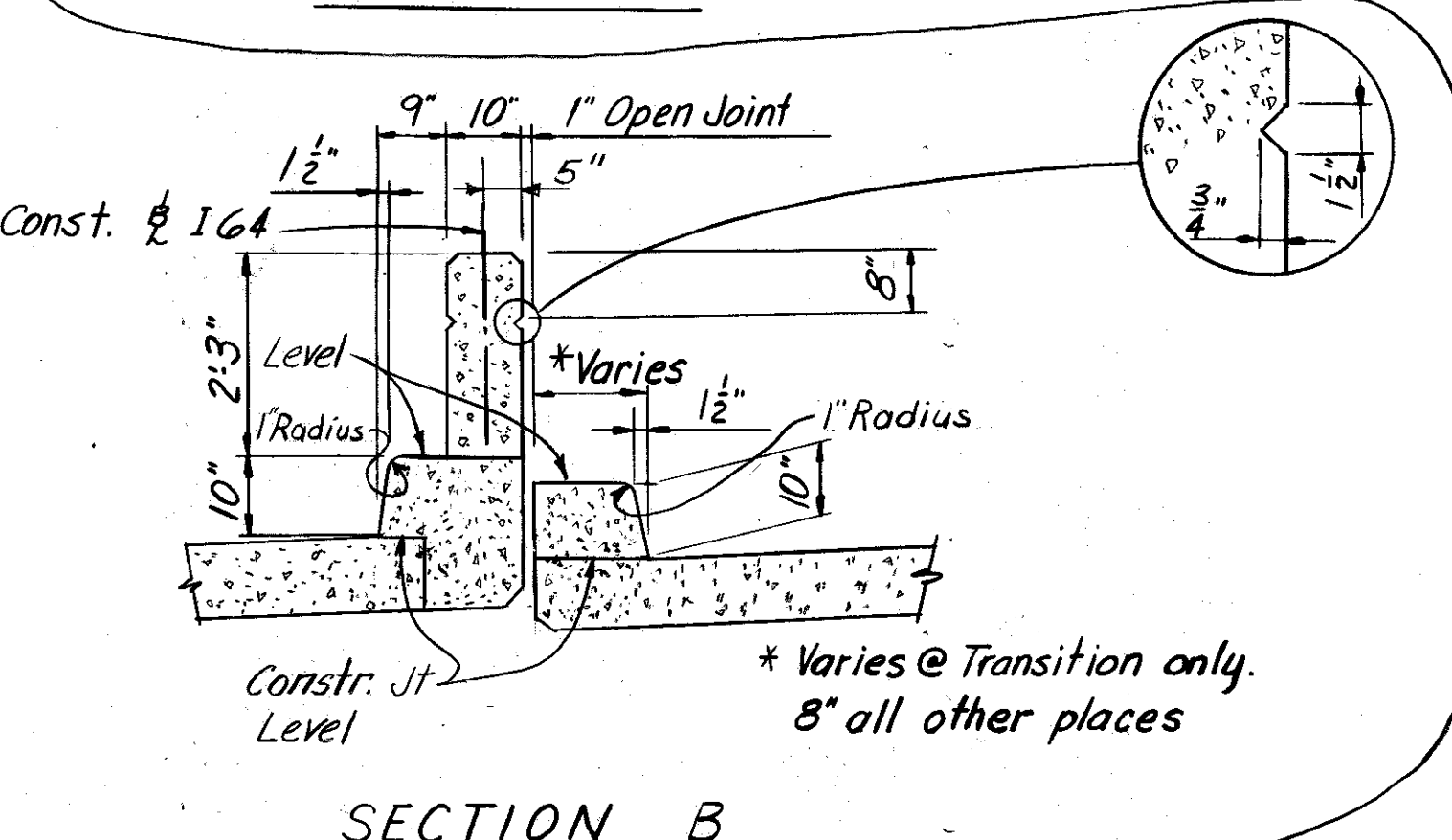
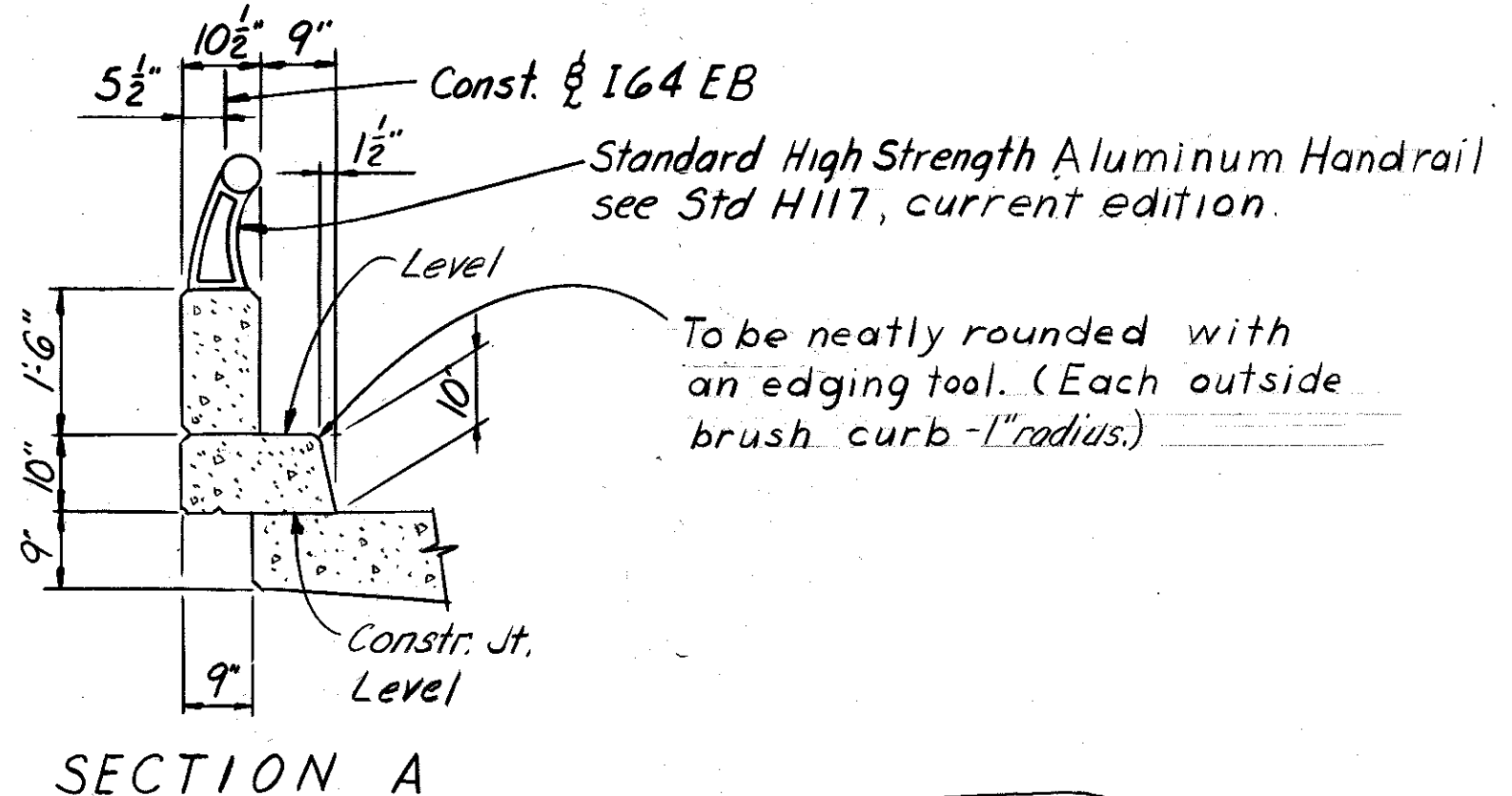
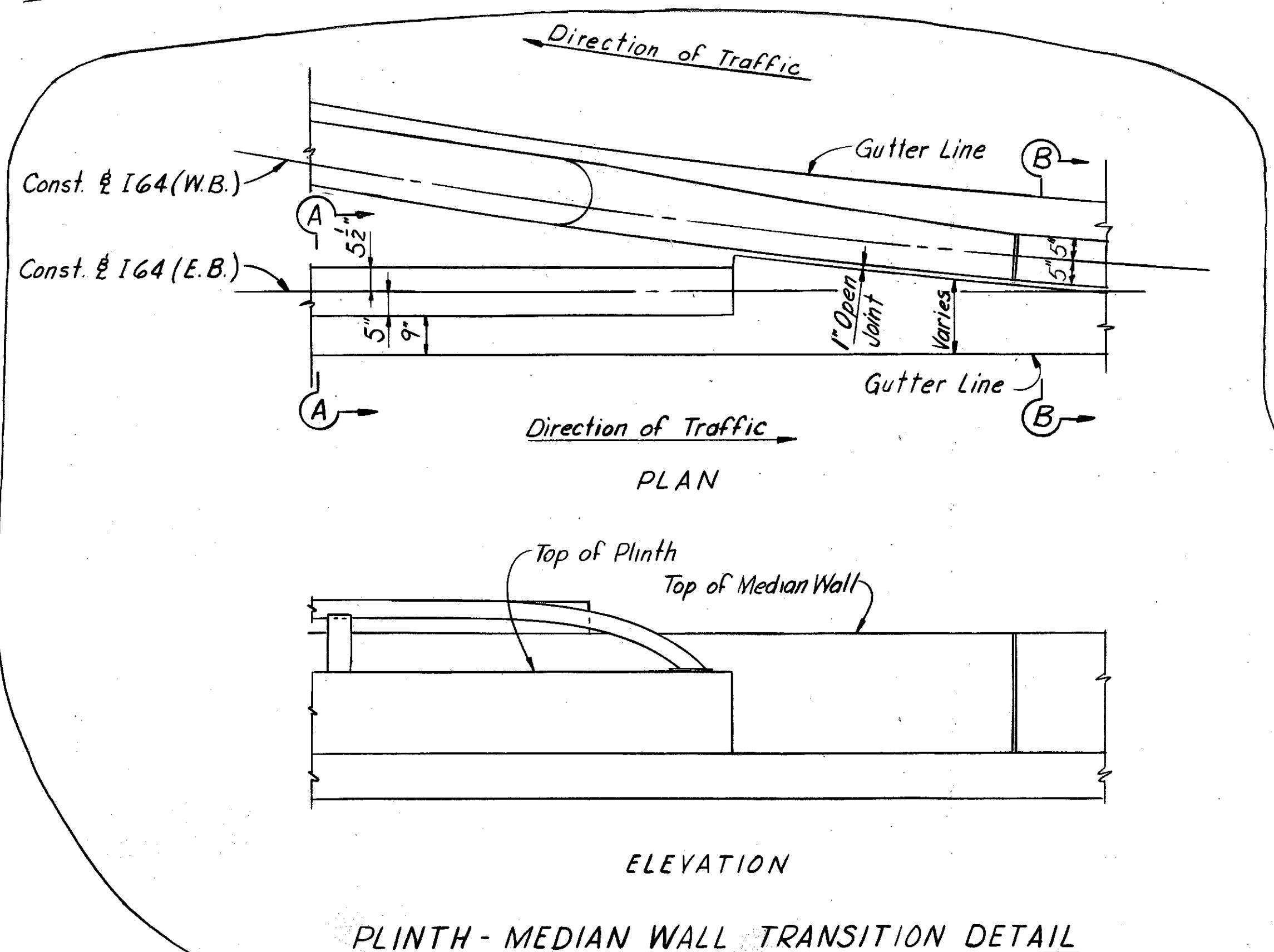
SHEET A/2

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST
 LOUISVILLE - LEXINGTON
 ROAD

STATION 208+08 PROJECT NO. 164-2(35)3
 BRIDGE NUMBER DRAWING INDEX
 NO 18512



* indicates dimensions normal to ∇ Ramp 4.
 • indicates dimensions normal to ∇ Ramp 2.
 Other dimensions normal to ∇ I64.



See Sht. B79 for Modifications to W.B. Median

TYPICAL SECTIONS

SHEET A13

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 I64-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD

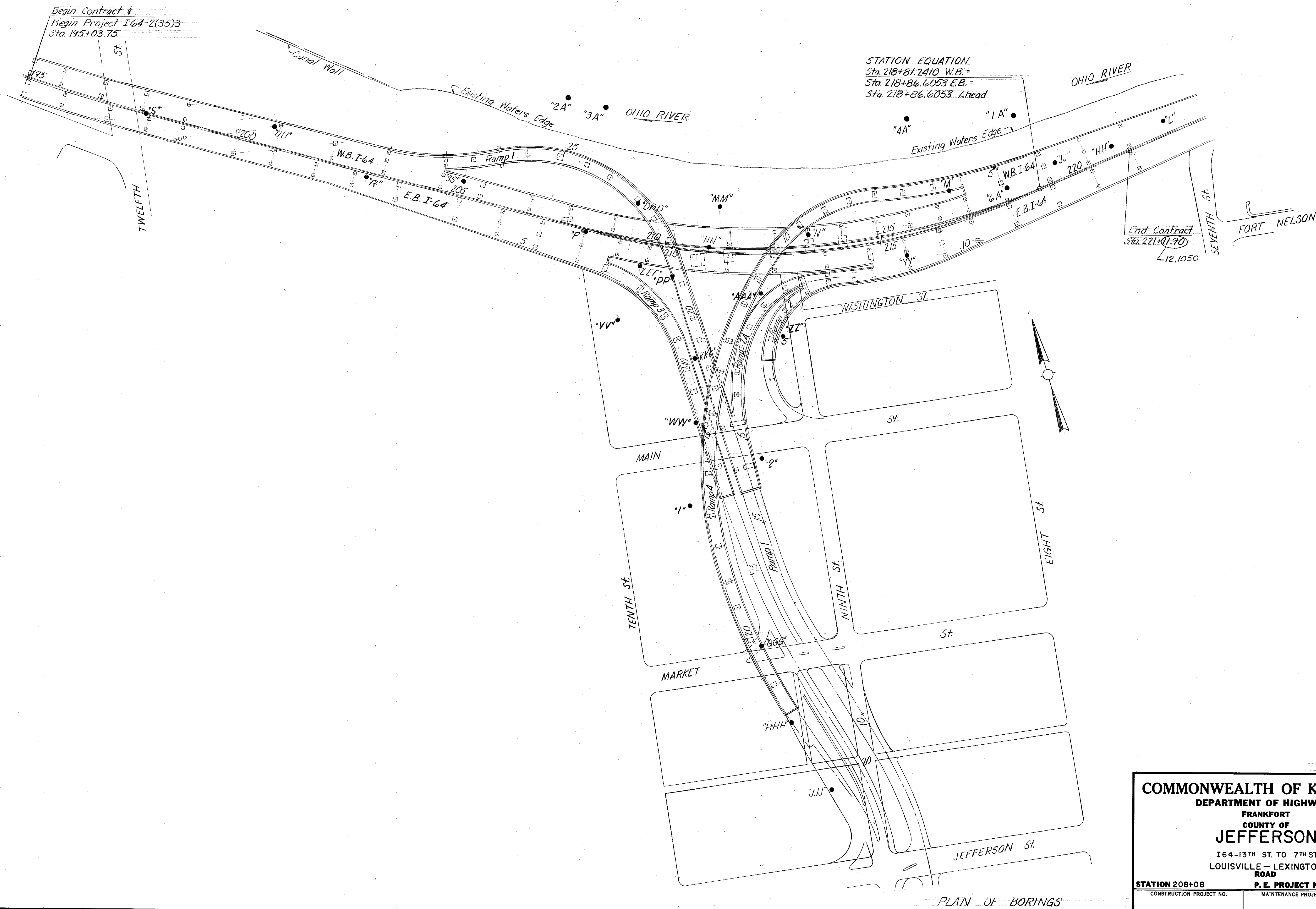
STATION 208+08 PROJECT NO. I 64-2(35) 3

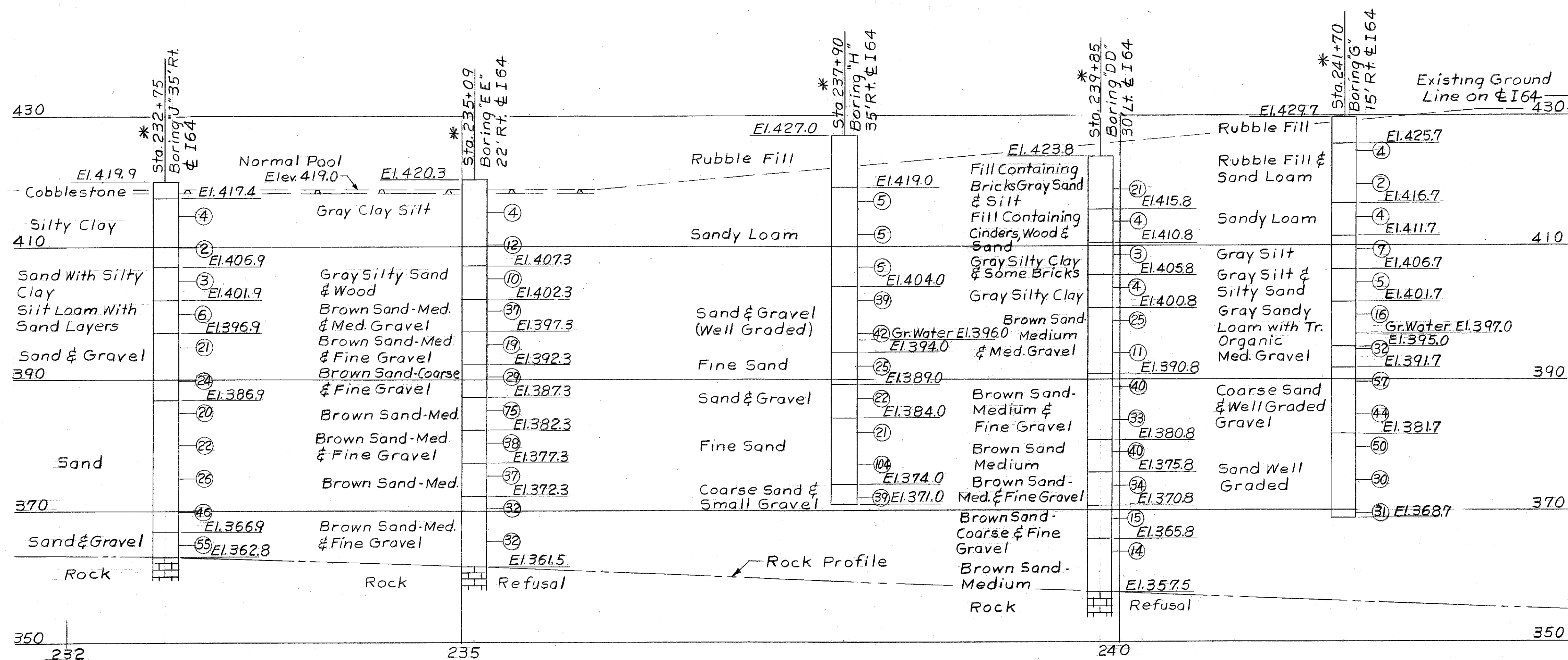
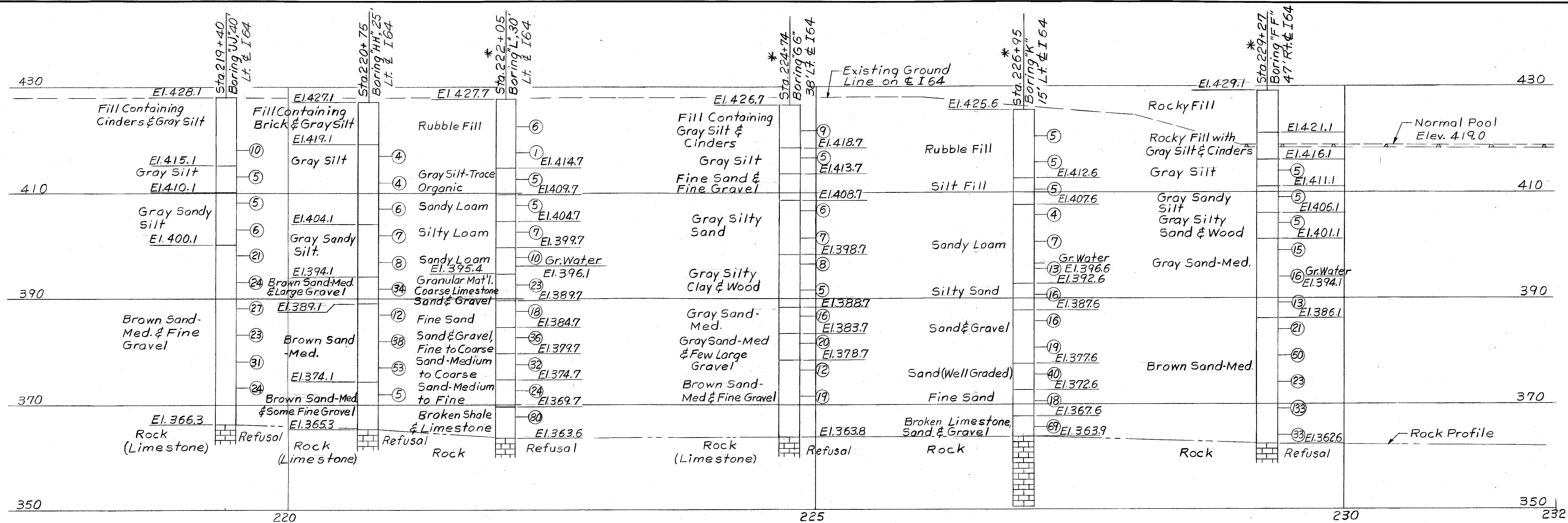
BRIDGE NUMBER	DRAWING NO. 1857Z	INDEX
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DESIGNED BY: W.B. Median
 CHECKED BY: [Signature]
 DATE: 4-75
 TRACED BY: [Signature]
 DATE: 5-67

LETTING DATE

DESIGNED BY	CHECKED BY	DATE	DESIGNED BY	CHECKED BY	DATE
TRACED BY	CHECKED BY	DATE	TRACED BY	CHECKED BY	DATE
Sta. End of Contract		8/28	DATE	8/14/73	DATE





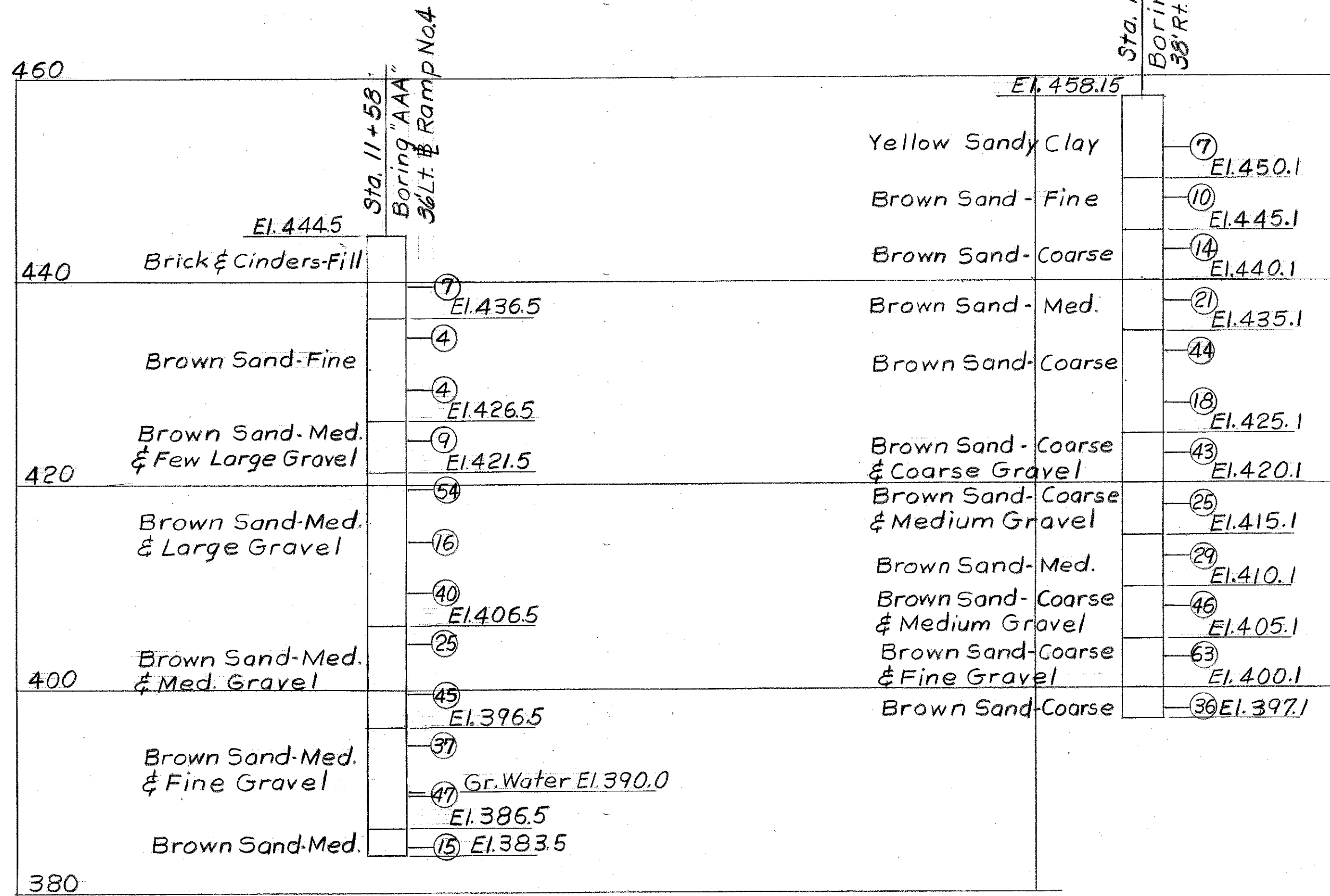
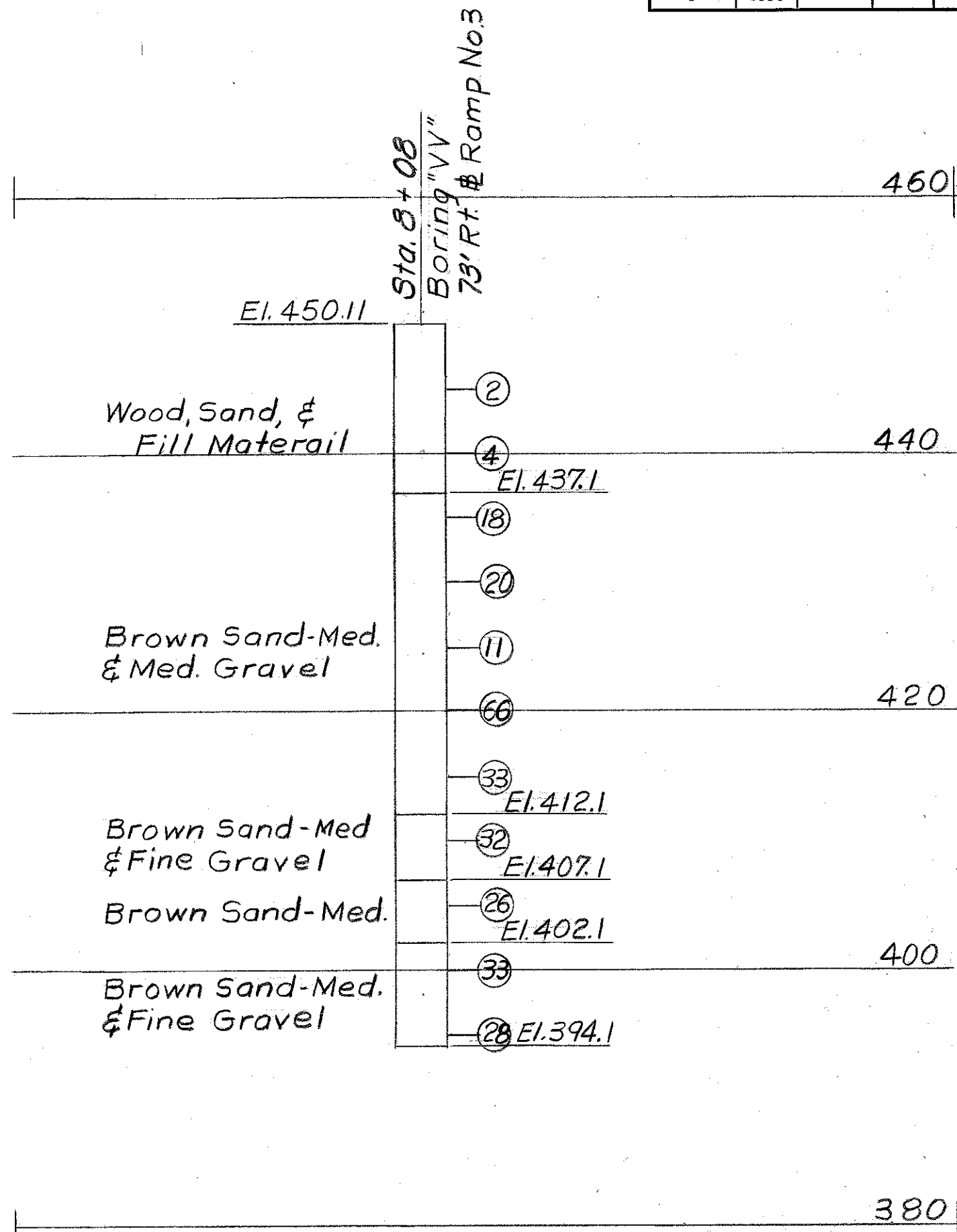
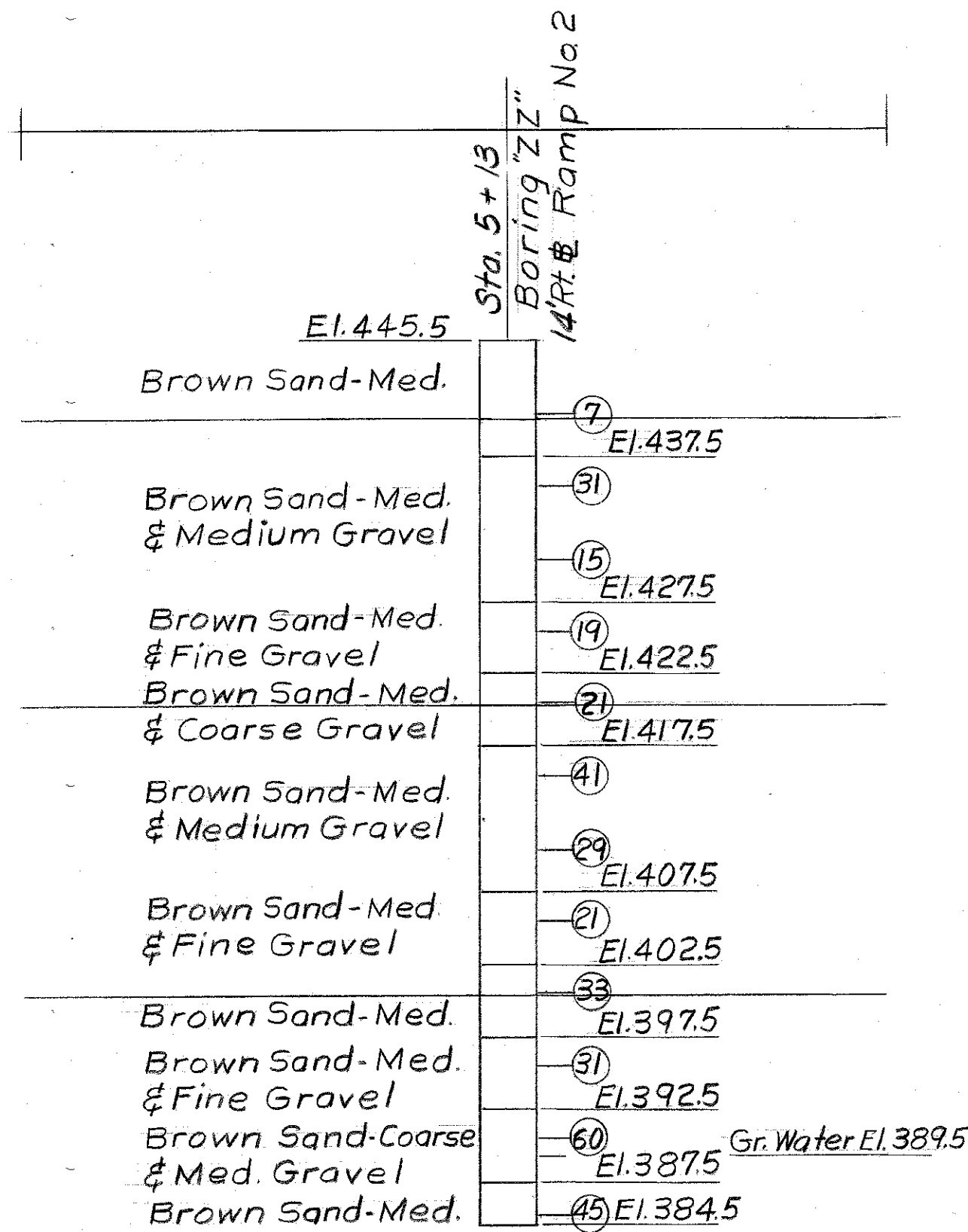
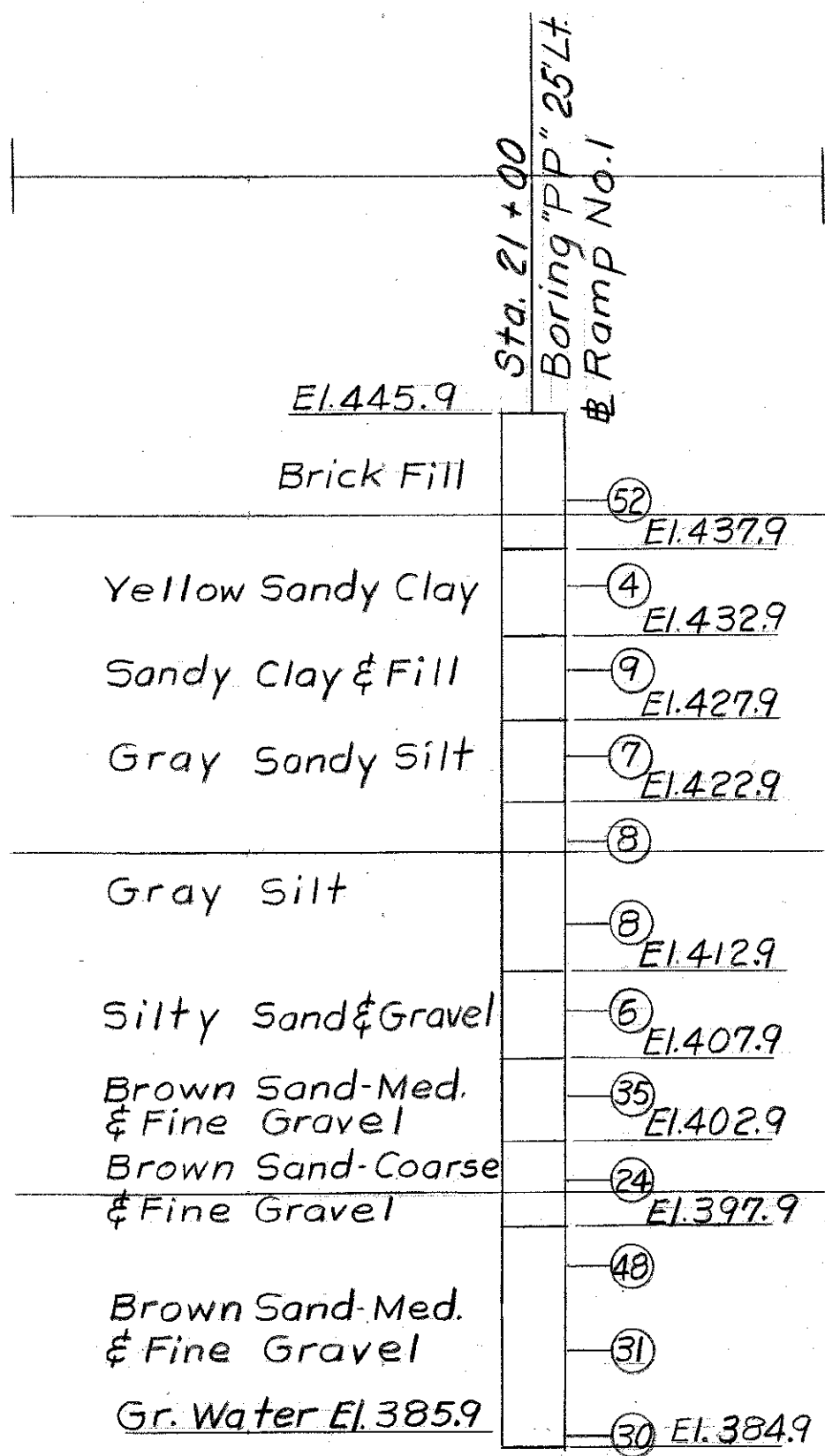
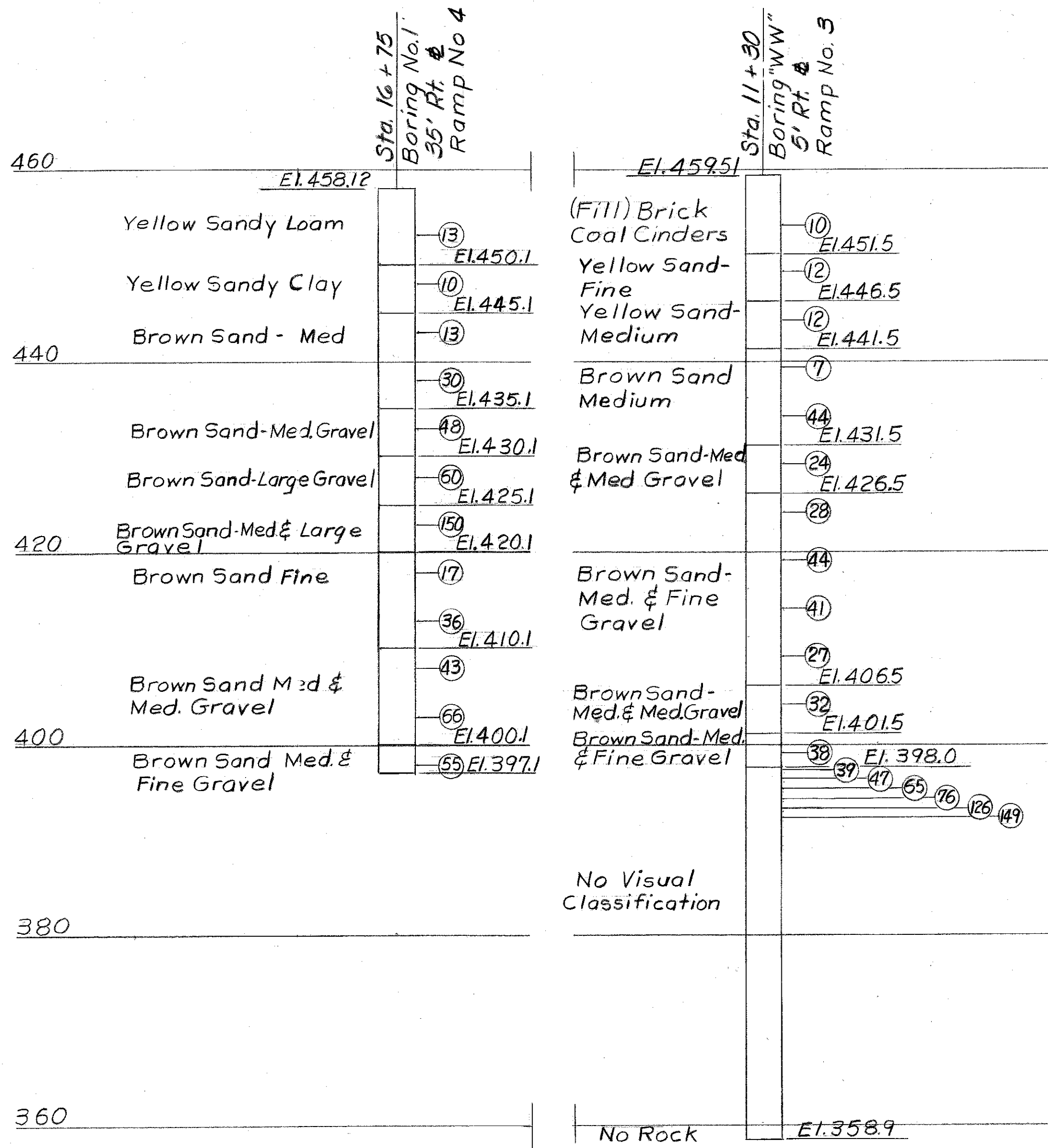
* Borings so noted are in contract for I64 - 7th St. to 2nd St.

SHEET A16

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
ROAD
 STATION 208+08 PROJECT NO. 164-2(35)3
 BRIDGE NUMBER DRAWING INDEX
 NO. 18572

LOG OF BORINGS

DESIGNED BY: MDC. & DAF
 CHECKED BY: R. L. COWLEY
 DATE: 5-24-54
 REVISIONS: 1
 DATE: 5-24-54
 HAZELT & ERDAL
 CONSULTING ENGINEERS
 FILE NO. 845

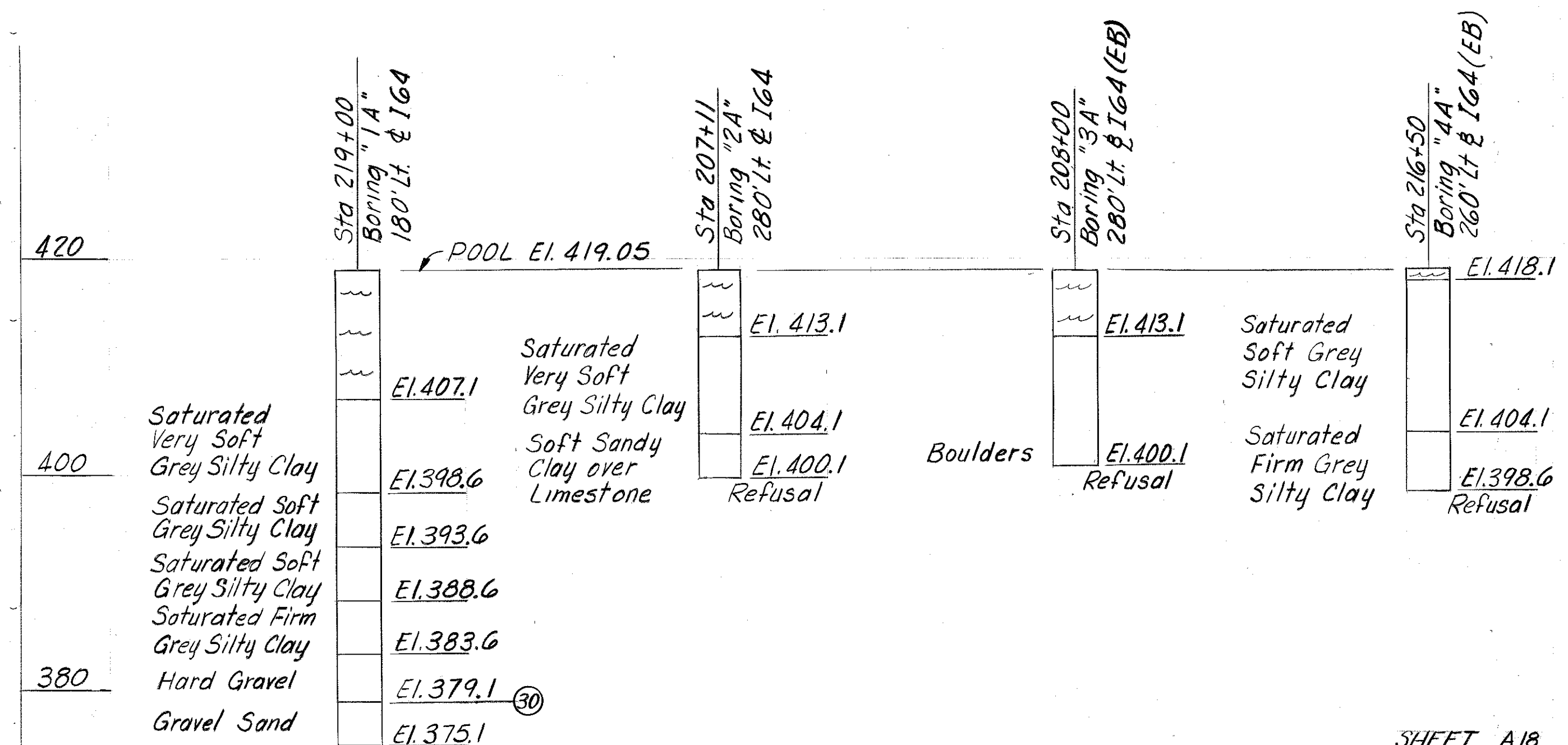
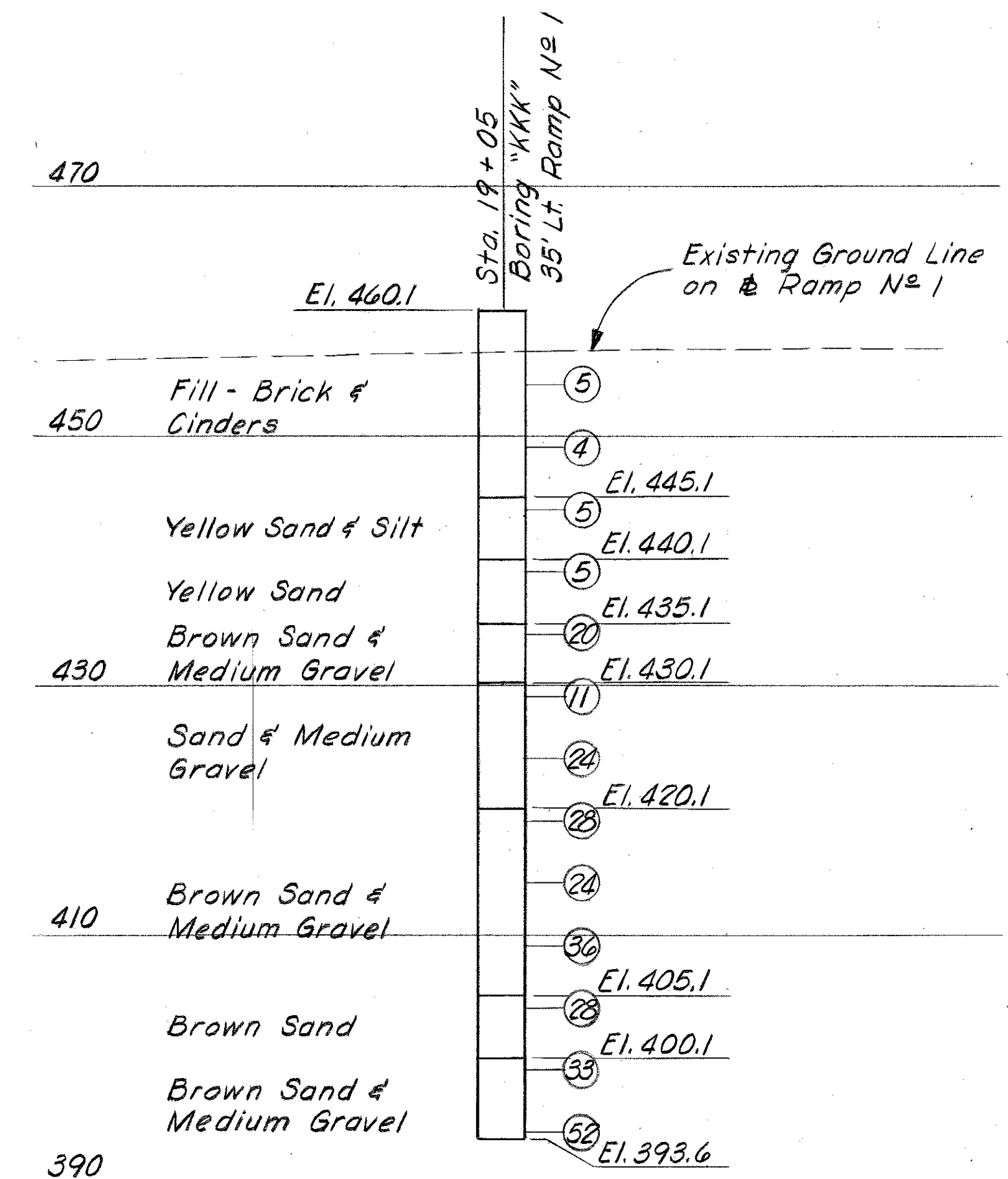
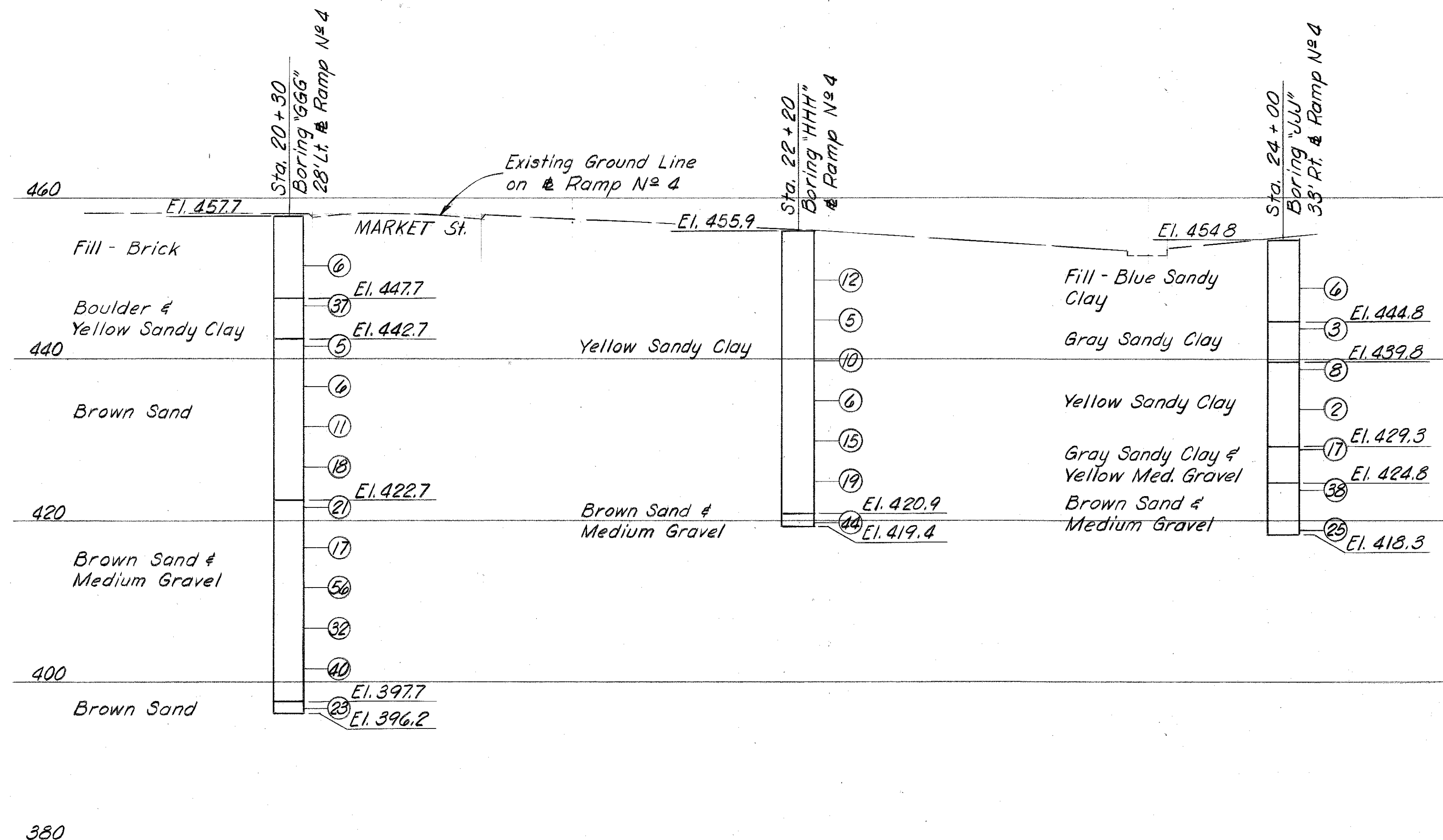
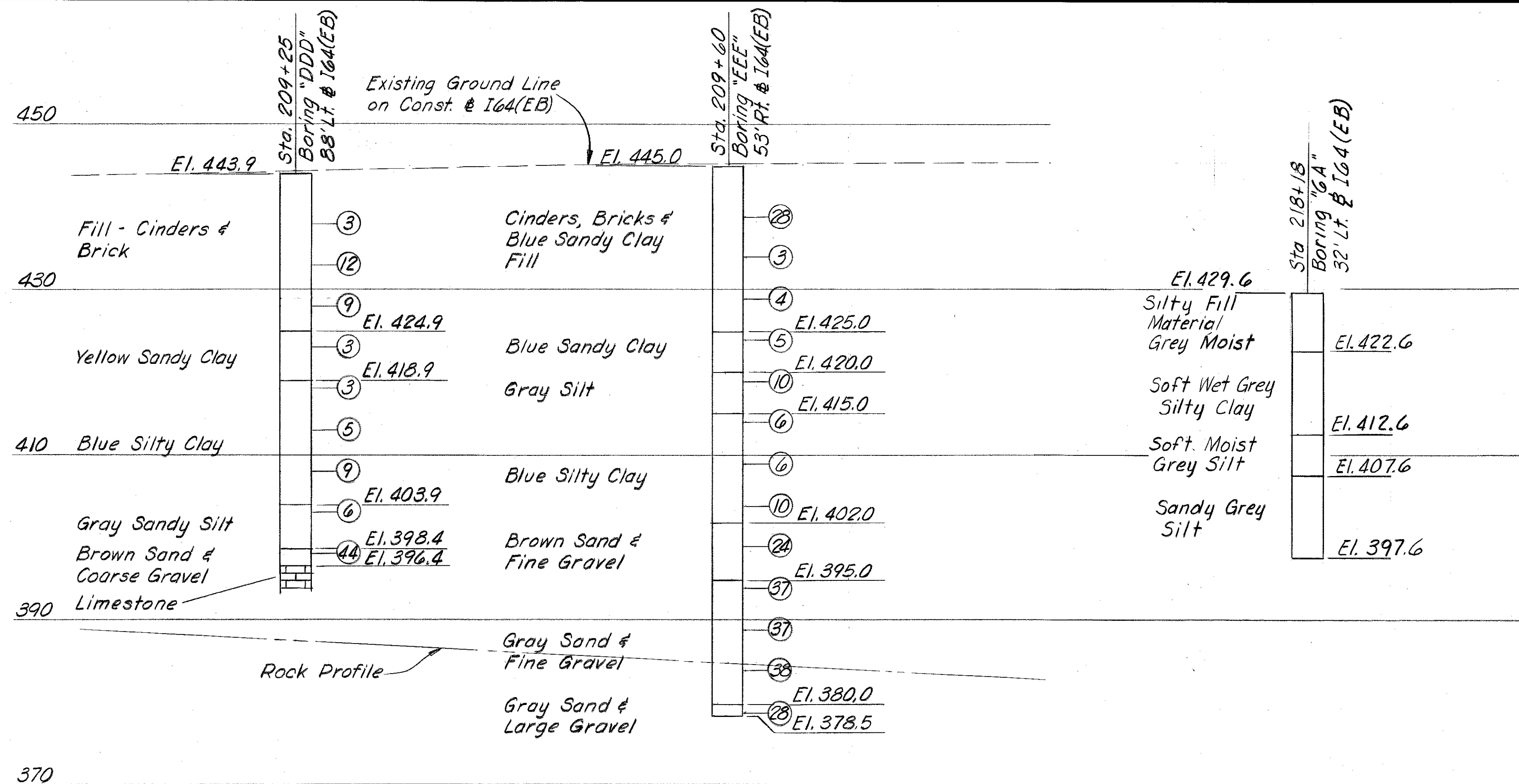


NOTE

Borings shown on this sheet were located by an original alignment that has been extensively revised, stations and offsets shown are for present alignment.

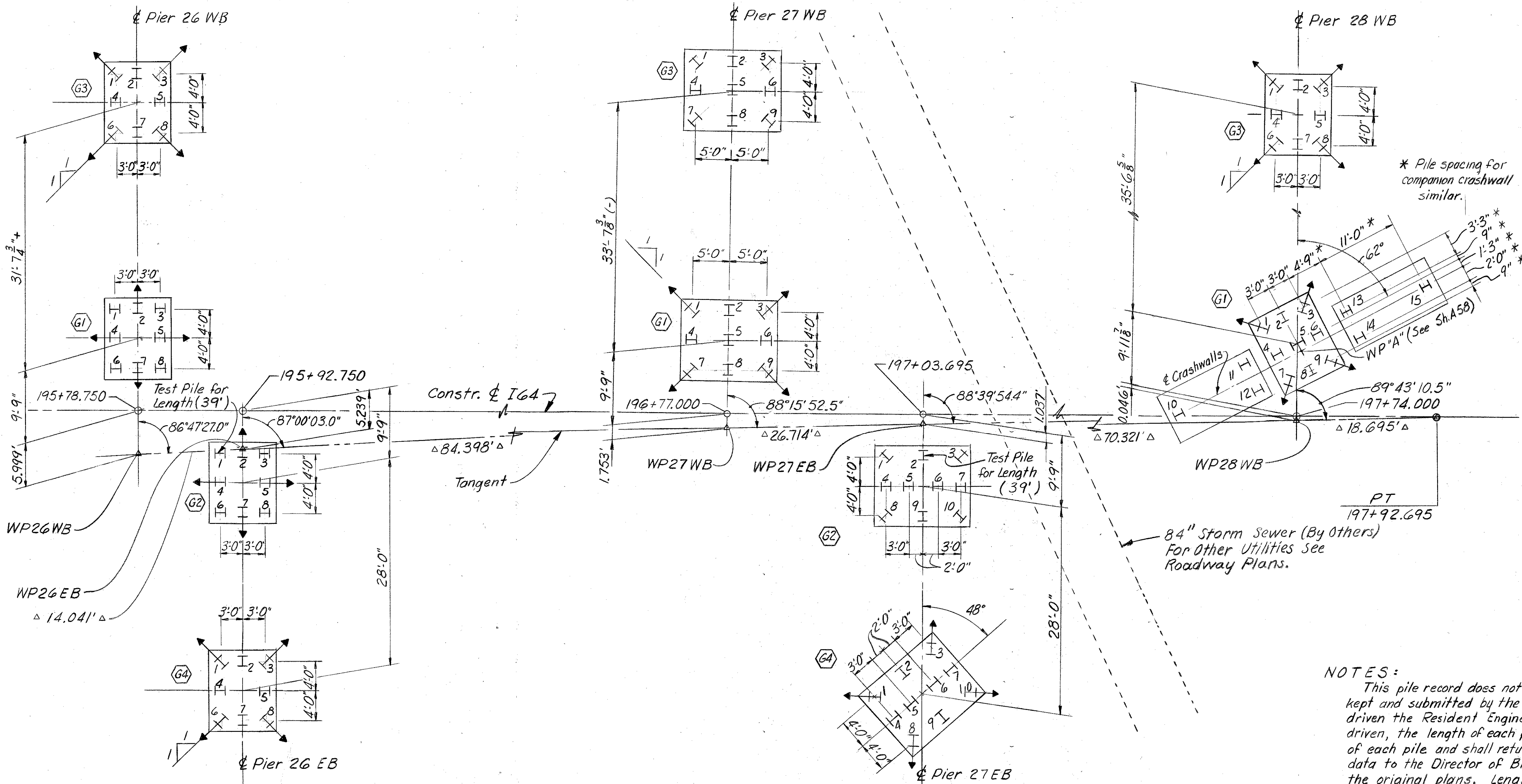
LETTING DATE

DESIGNED BY	CHECKED BY	DATE	REVISION	DATE	REVISION
ELW	CSF	4-15-71			
TRACED BY	CHECKED BY	DATE	REVISION	DATE	REVISION



LOG OF BORINGS

COMMONWEALTH OF KENTUCKY		
DEPARTMENT OF HIGHWAYS		
FRANKFORT		
COUNTY OF		
JEFFERSON		
164-13TH ST. TO 7TH ST.		
LOUISVILLE - LEXINGTON		
ROAD		
SP 56-273-III		
P. E. PROJECT NO. 164-2 (35) 3		
STATION 208+08		
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18572



Pile No.	Cutoff Elev.	Tip of Pile El. as Driven	Length of Pile in Place	Calc. Brg. Capacity Tons
Pier 27EB (G4)				
7	442.100			
8				
9				
10				
Pier 28WB (G3)				
1	441.789			
2				
3				
4				
5				
6				
7				
8				
Pier 28WB (G1)				
1	441.677			
2				
3				
4				
5				
6				
7				
8				
9				
10	445.427			
11				
12				
13				
14				
15				

NOTES:

This pile record does not replace other records of piles required to be kept and submitted by the Resident Engineer. After all piles have been driven the Resident Engineer shall record the tip-of-pile elevation as driven, the length of each pile in place, the calculated bearing capacity of each pile and shall return one blue print copy of this sheet with this data to the Director of Bridges so that the data may be recorded on the original plans. Length of piles in place shown hereon are the actual lengths of piles in the finished structure below cutoff elevation and are not necessarily pay items.

See Special Notes for Driving Piles under Floodwall Monoliths and Adjacent Footings.

All batter piles shown shall be driven on a batter of 3:12 from vertical. The length of Test Pile for Length is estimated.

Piles for Crashwalls are symmetrical about & Footing except as shown.

Footing Designation { (G3) indicates center of column and footing is under long. Girder 3. (G3) indicates center of column and footing is near long. Girder 3.

H indicates Piles, 12 BP 53
O indicates Piles, Options A thru F

H indicates batter in direction shown.

indicates horizontal direction of batter pile. Direction is typical for all piles as indicated.

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
Pier 26 WB (G3)				
1	441.934			
2				
3				
4				
5				
6				
7				
8				
Pier 26 WB (G1)				
1	442.224			
2				
3				
4				
5				
6				
7				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
Pier 26 EB (G2)				
8	442.224			
1	442.064			
2				
3				
4				
5				
6				
7				
8				
Pier 26 EB (G4)				
1	442.023			
2				
3				
4				
5				
6				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
Pier 27 WB (G4)				
7	442.023			
8	442.023			
1	441.832			
2				
3				
4				
5				
6				
7				
8				
9				
Pier 27 WB (G3)				
1	442.172			
2				
3				
4				

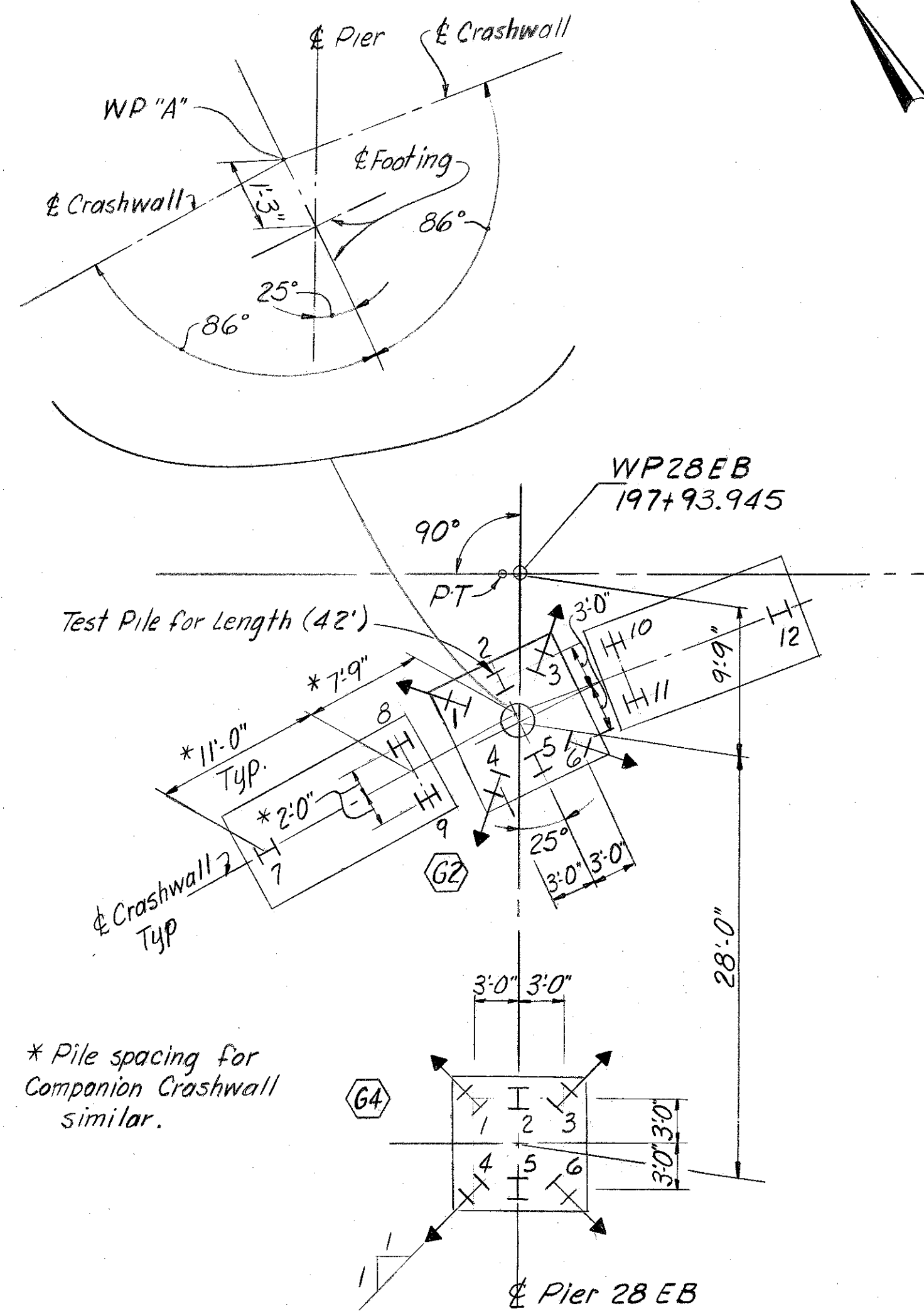
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
Pier 27WB (G1)				
5	442.172			
6				
7				
8				
9				
Pier 27EB (G2)				
1	442.140			
2				
3				
4				
5				
6				
7				
8				
9				
10				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in Place	Calc. Brg. Capacity Tons
Pier 27EB (G4)				
1	442.100			
2				
3				
4				
5				
6				

PILE RECORD

LETTING DATE

DESIGNED BY	DATE	REVISED	DATE
DETAILS BY	DATE	REVISED	DATE
CHECKED BY	DATE	REVISED	DATE
TRACED BY	DATE	REVISED	DATE



Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	442.342			
2				
3				
4				
5				
6				
7	446.092			
8				
9				
10				
11				
12				
1	443.036			
2				
3				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
4	443.036			
5				
6				
1	442.002			
2				
3				
4				
5				
6				
7				
8				
9				
10	445.252			
11				
12				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
13	445.252			
14				
15				
1	443.369			
2				
3				
4				
5				
6				
7				
8				
1	443.798			
2				
3				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
5	443.798			
6				
7				
8				
1	443.781			
2				
3				
4				
5				
6				
7				
8				
9				
10	447.031			
11	447.031			

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
12	447.031			
13				
14				
15				
1	440.560			
2				
3				
4				
5				
6				
7				
8				
9				
10	444.310			
11	444.310			

Pile No.	Cutoff Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
12	444.310			
13				
14				
15				
1	440.696			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17	444.946			
18				
19				
20				
21				
22				
1	443.097			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12	446.847			
13				
14				
15				
16				
17				

See Sheet A19 for Notes.

PILE RECORD

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

FRANKFORT

COUNTY OF

JEFFERSON

I 64-13TH ST. TO 7TH ST.

LOUISVILLE - LEXINGTON ROAD

STATION 208+08

CONSTRUCTION PROJECT NO.

P. E. PROJECT NO. I 64-2 (35) 3

MAINTENANCE PROJECT NO.

SP 56-273-11L

DRAWING NO.

18572

SHEET A20

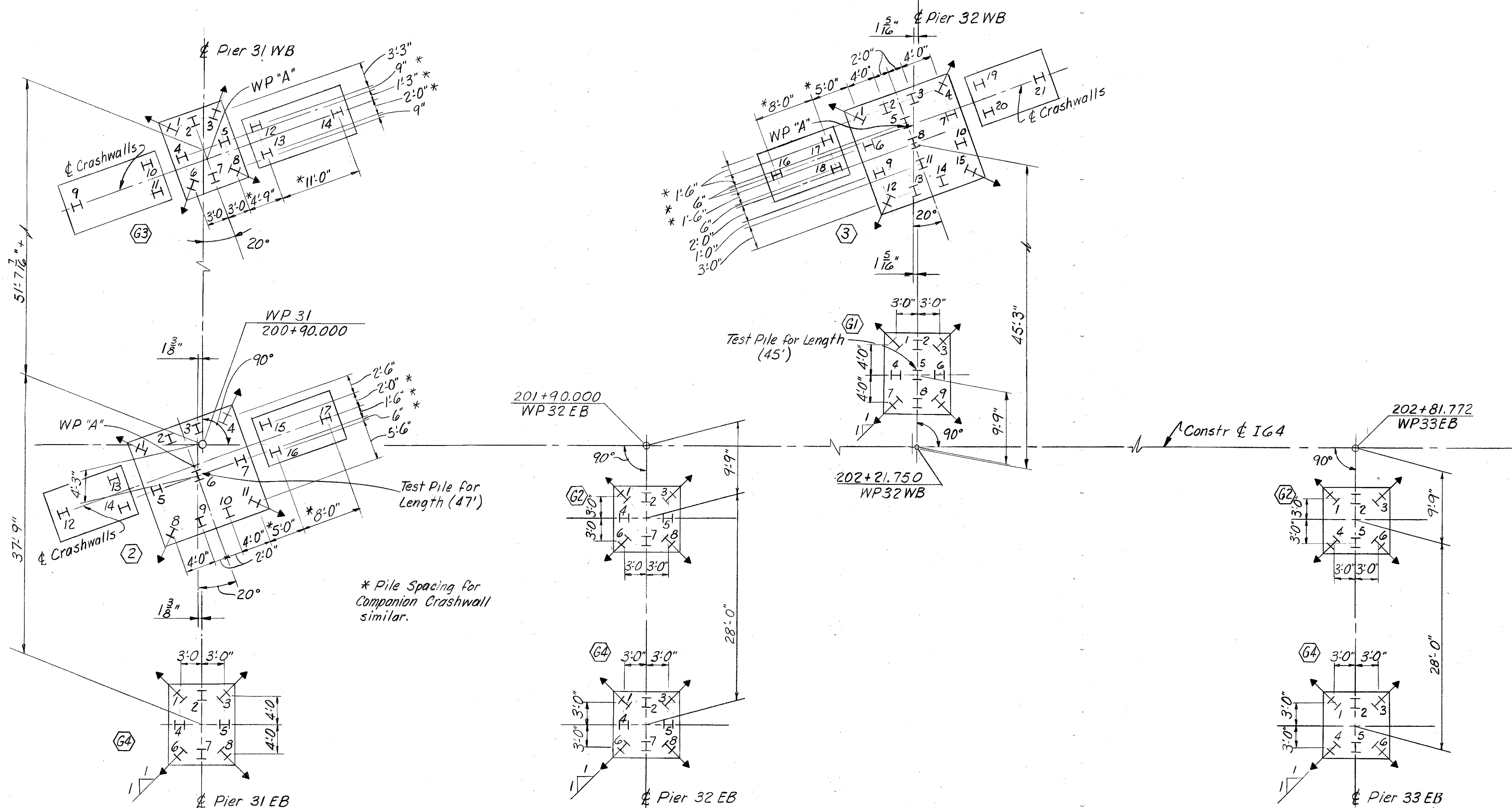
LETTING DATE

11 8P-20
6.64
Type 1

15x15-11P-20
5.4
Type 3

11 8P

DESIGNED BY	DATE	CHECKED BY	DATE	REVISION	DATE
BLACK	May 11	WHL			
TRACED BY	DATE	CHECKED BY	DATE	REVISION	DATE



Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	440.735			
2				
3				
4				
5				
6				
7				
8				
9	444.485			
10				
11				
12				
13				
14				
1	440.933			

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
2	440.933			
3				
4				
5				
6				
7				
8				
9				
10				
11				
12	445.183			
13				
14				
15				
16				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
17	445.183			
1	441.086			
2				
3				
4				
5				
6				
7				
8				
1	441.166			
2				
3				
4				
5				
6				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
7	441.166			
8	441.166			
1	440.643			
2				
3				
4				
5				
6				
7				
8				
1	439.345			
2				
3				
4				
5				

See Sheet 19A for Notes.

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in Place	Calc. Brg. capacity Tons
6	439.345			
7				
8				
9				
10				
11				
12				
13				
14				
15				
16	443.595			
17				
18				
19				
20				
21				
1	439.668			
2				
3				
4				
5				
6				
7				
8				
9				
1	438.919			
2				
3				
4				
5				
6				
1	438.116			
2				
3				
4				
5				
6				

SHEET A21

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
SP 56-273-11L
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. I 64-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

PILE RECORD

LETTING DATE

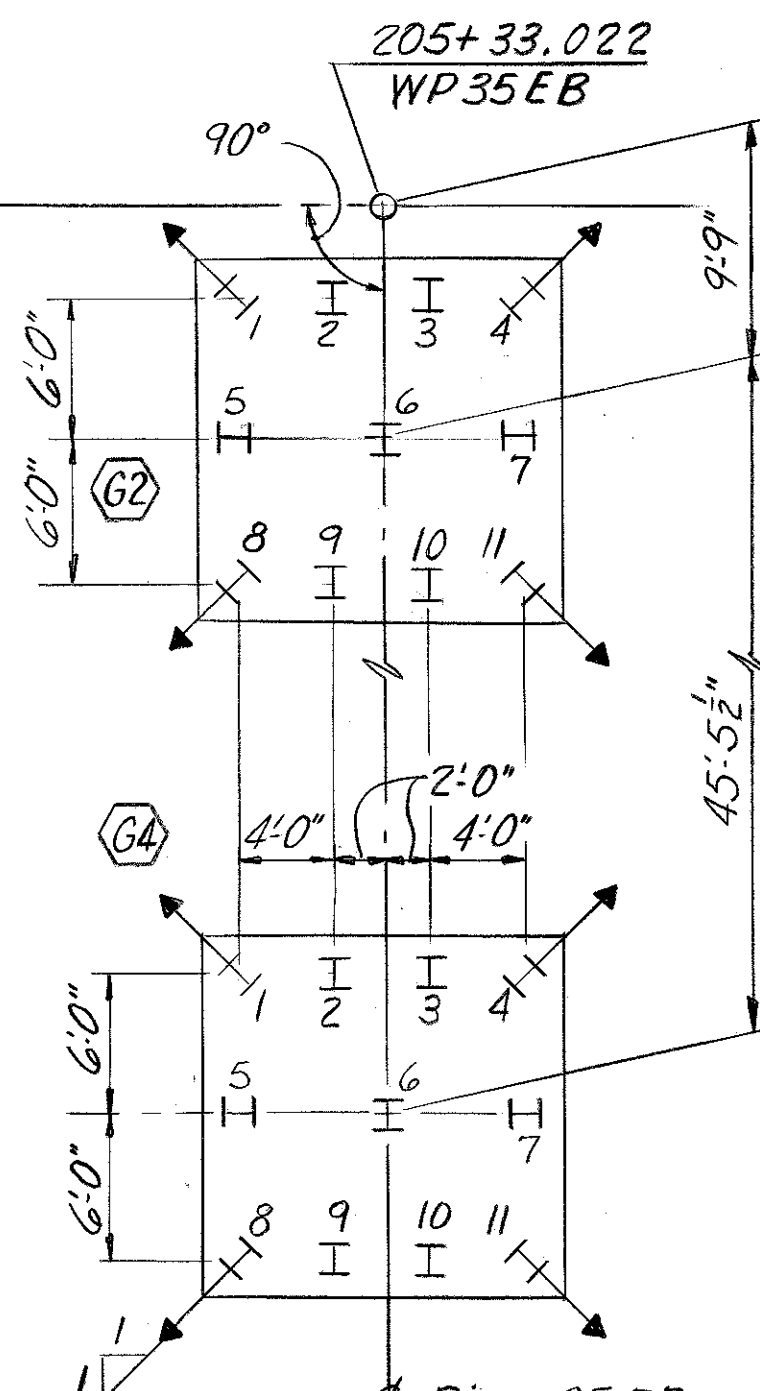
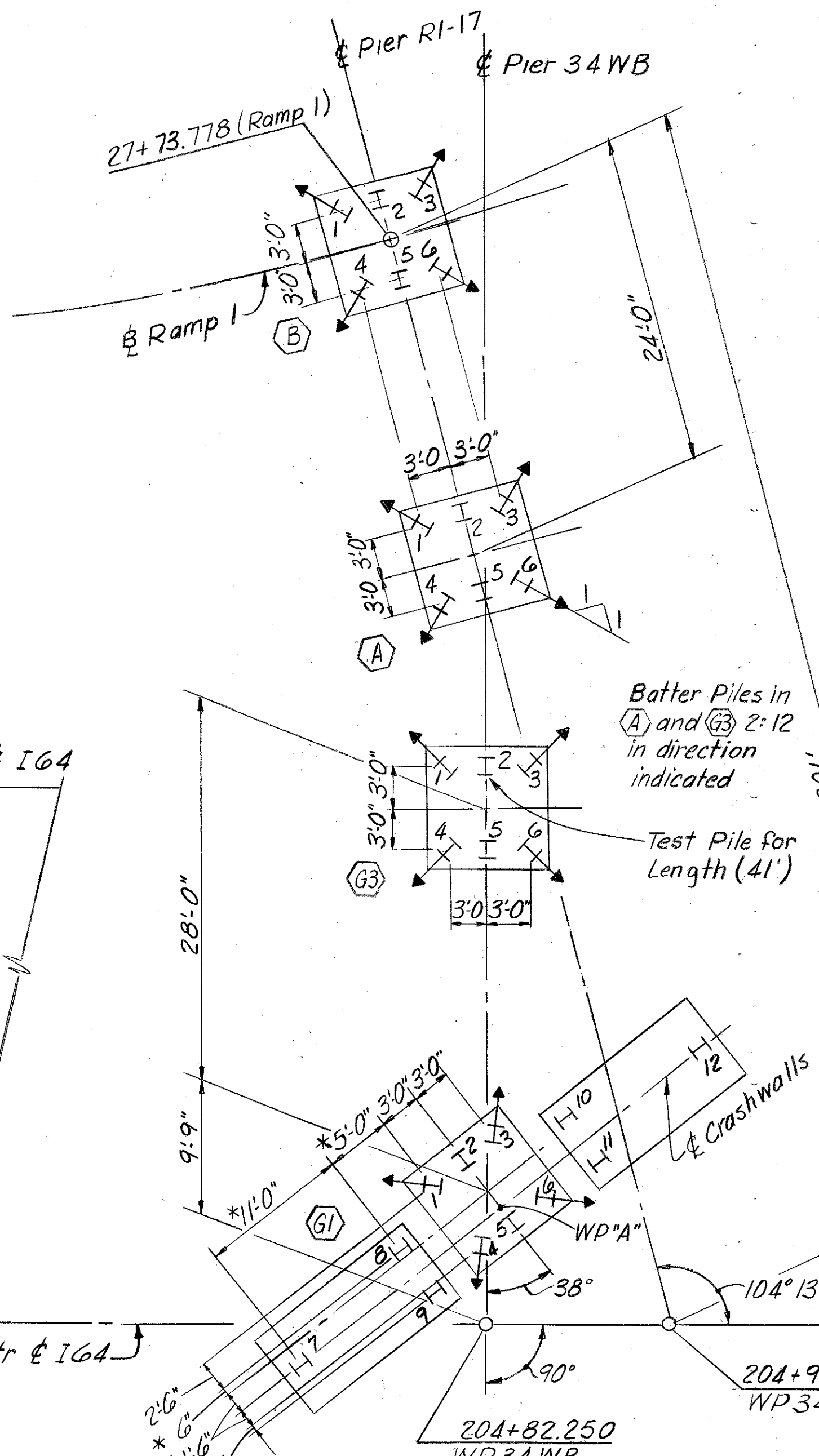
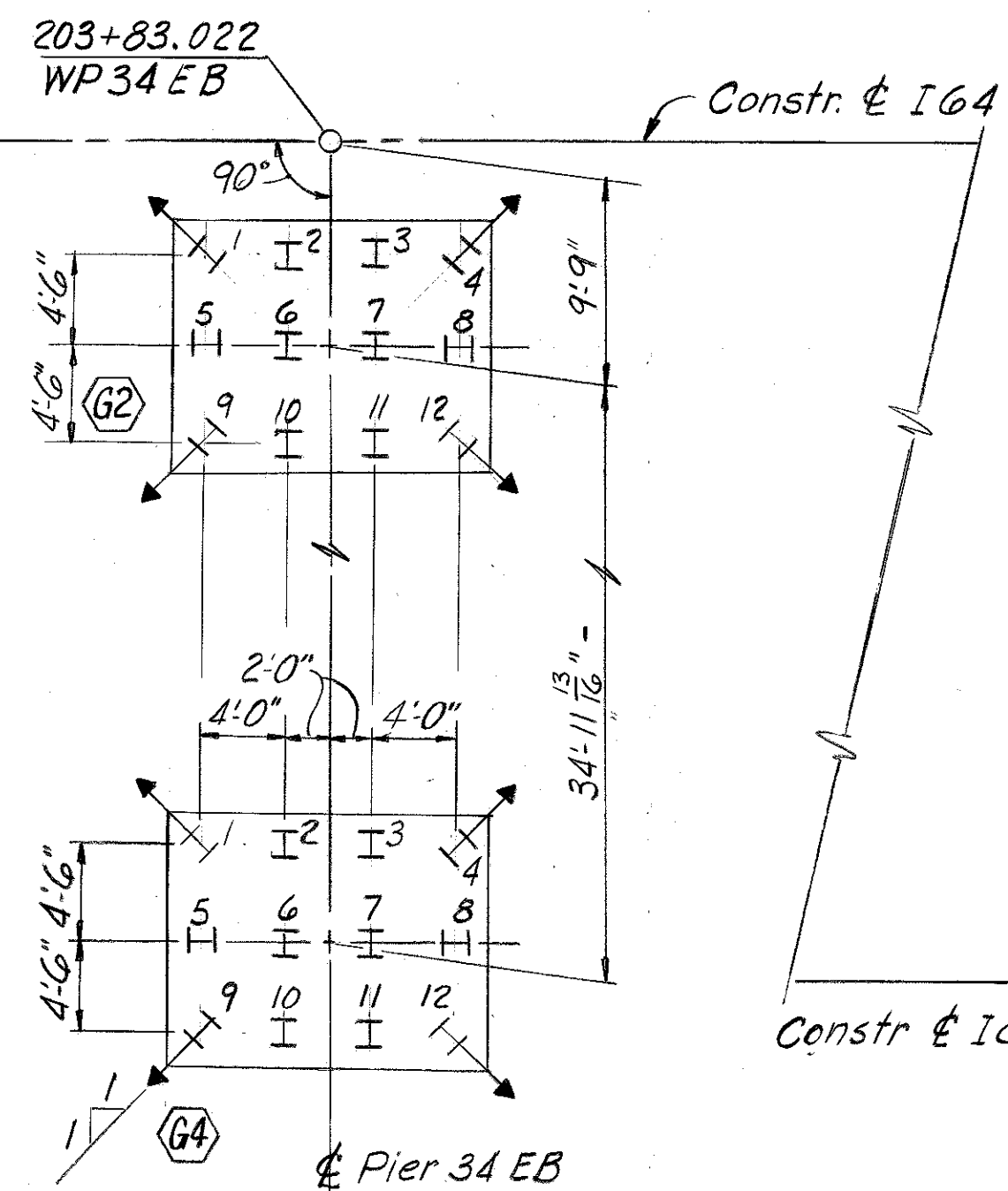
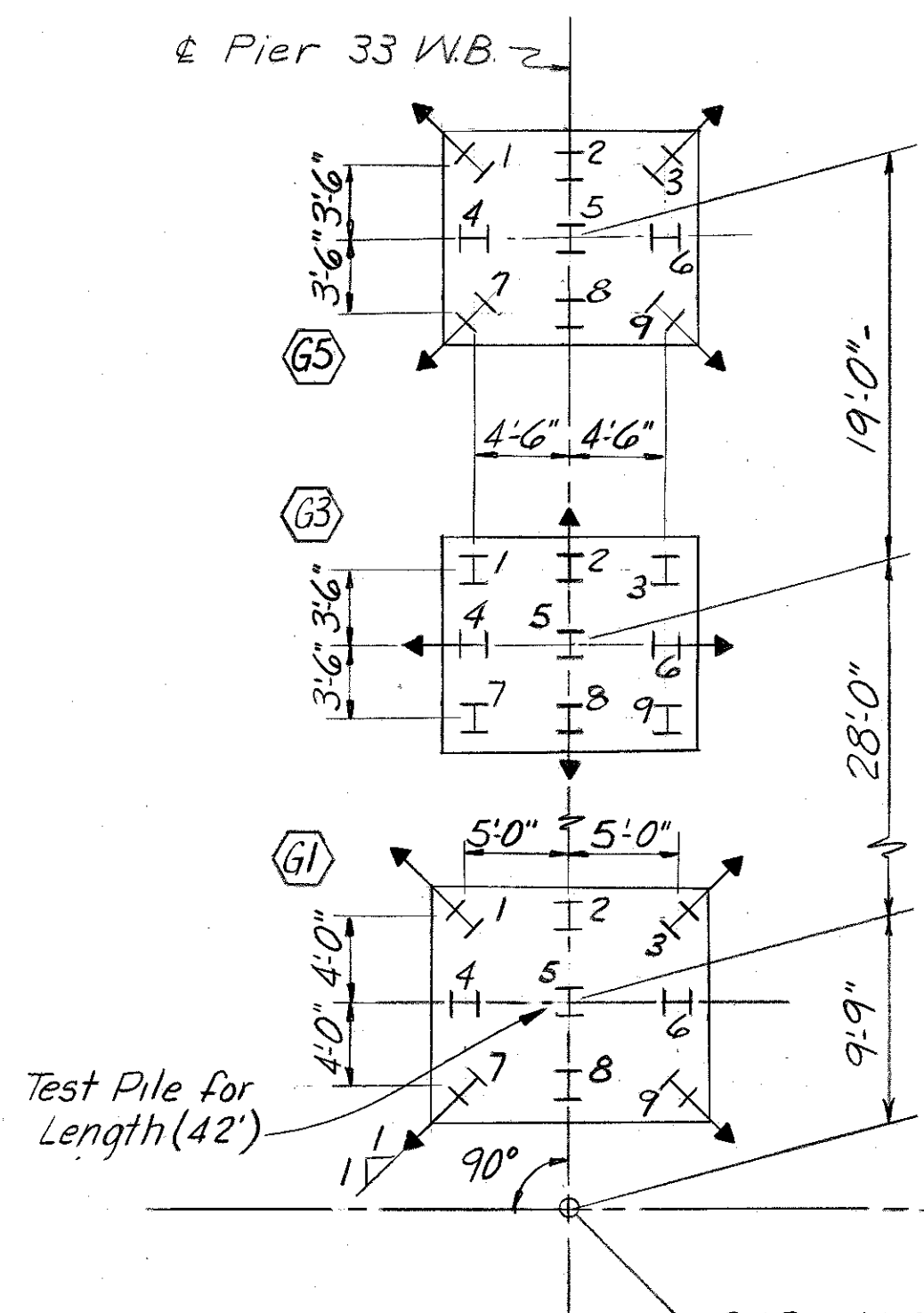
DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
BLACK	May 71				
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
RHC					
TRACED BY	DATE	TRACED BY	DATE	TRACED BY	DATE

Pier 33 WB (G5)					
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity	Tons
1	438.446				
2					
3					
4					
5					
6					
7					
8					
9					
1	438.258				
2					
3					
4					
5					
6					
7					
8					
9					
1	437.466				
2					
3					
4					
5					
6					
7					
8					
9					
1	436.303				
2					
3					

Pier 34 EB (G2)					
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity	Tons
4	436.303				
5					
6					
7					
8					
9					
10					
11					
12					
1	436.072				
2					
3					
4					
5					
6					

Pier 34 WB (G4)					
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity	Tons
7	436.072				
8					
9					
10					
11					
12					
1	437.000				
2					
3					
4					
5					
6					
1	436.534				
2					
3					

Pier 34 WB (G3)					
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity	Tons
4	436.534				
5					
6					
1	436.288				
2					
3					
4					
5					
6					
1	435.473				
2					
3					
4					
5					
6					



* Pile spacing for Companion Crashwall similar.

See Sheet A19 for Notes.

Pier 34 WB (G1)					
Pile No.	Cutoff Elev.	Tip of Pile El. as Driven	Length of Pile in Place	Calc. Brg. capacity	Tons
7	439.723				
8					
9					
10					
11					
12					
1	435.261				
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
1	434.679				
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

PILE RECORD

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

FRANKFORT

COUNTY OF

JEFFERSON

164-13TH ST. TO 7TH ST.

LOUISVILLE - LEXINGTON

ROAD

STATION 208+08

CONSTRUCTION PROJECT NO.

SP 56-273-11L

P. E. PROJECT NO. I 64-2 (35) 3

MAINTENANCE PROJECT NO.

DRAWING NO.

18572

LETTING DATE

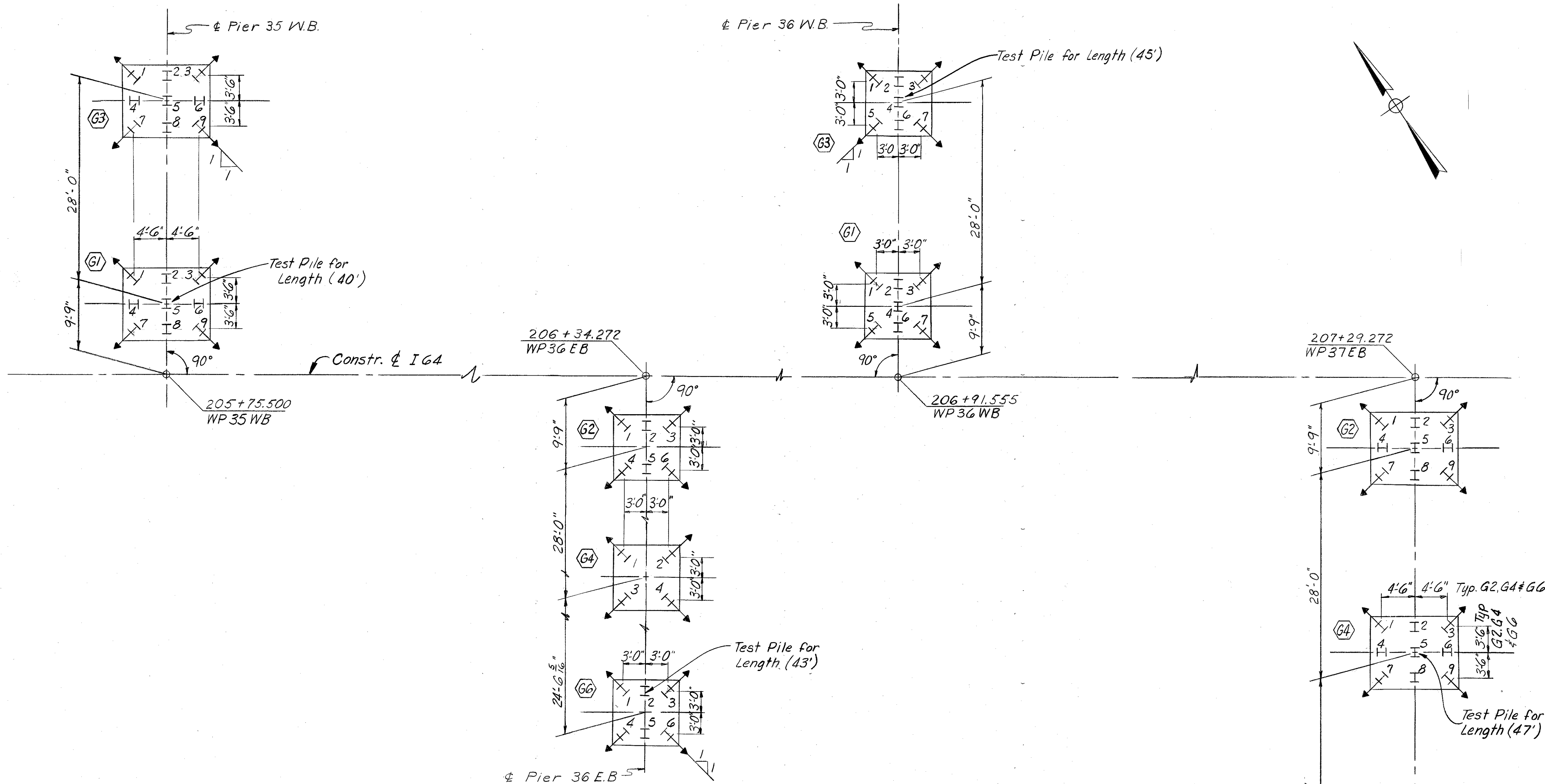
DESIGNED BY	DATE	REVISED	DATE	REVISED	DATE
TRACED BY	DATE	REVISED	DATE	REVISED	DATE
CHECKED BY	DATE	REVISED	DATE	REVISED	DATE
CHECKED BY	DATE	REVISED	DATE	REVISED	DATE

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
Pier 35 WB (G3)				
1	436.169			
2				
3				
4				
5				
6				
7				
8				
9				
Pier 35 WB (G1)				
1	435.143			
2				
3				
4				
5				
6				

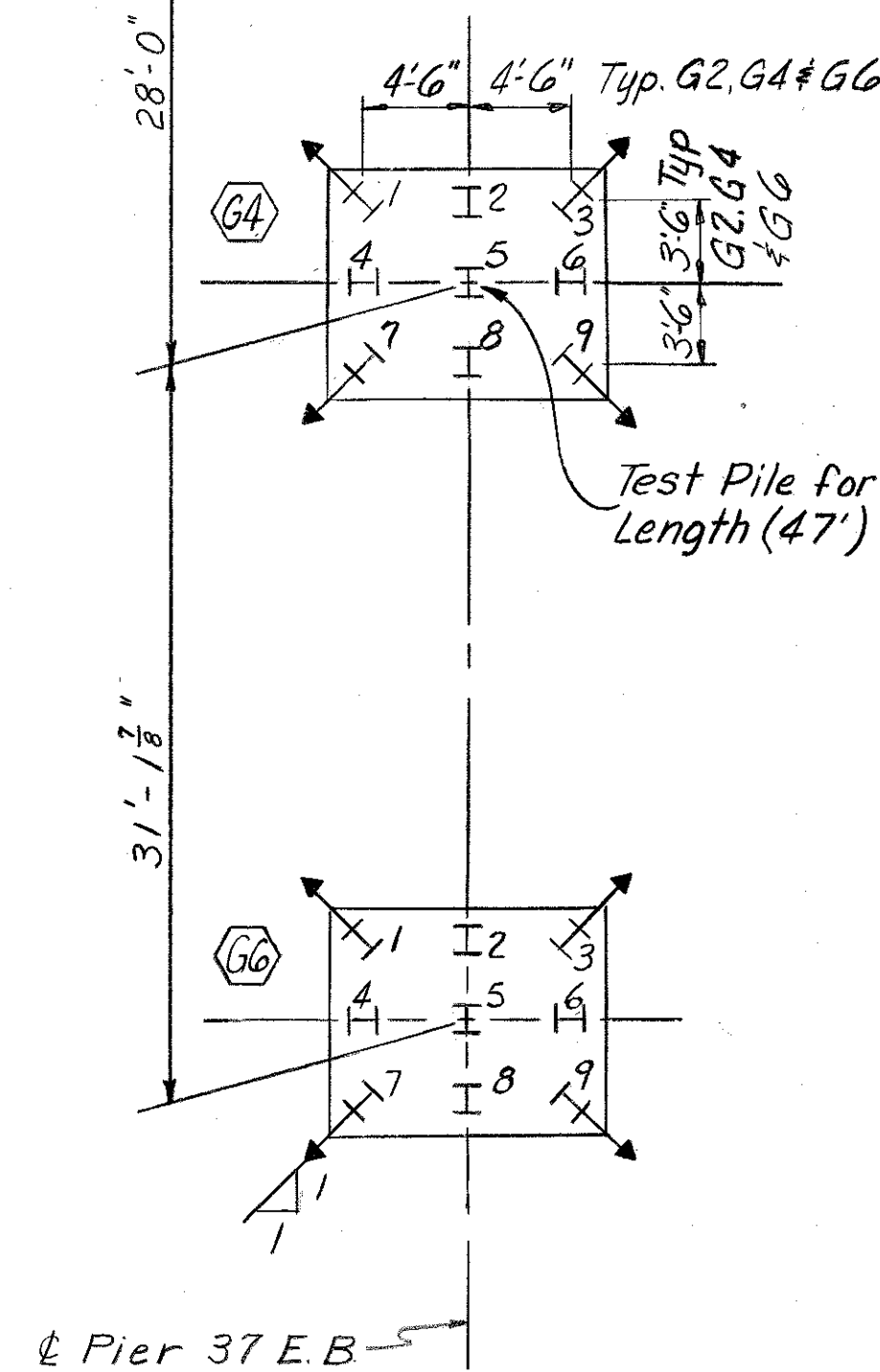
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
Pier 35 WB (G1)				
7	435.143			
8				
9				
Pier 36 EB (G2)				
1	434.803			
2				
3				
4				
5				
6				
Pier 36 EB (G4)				
1	434.295			
2				
3				
4				
5				
6				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
Pier 36 EB (G6)				
3	433.547			
4				
5				
6				
Pier 36 WB (G3)				
1	436.216			
2				
3				
4				
5				
6				
Pier 36 WB (G1)				
1	435.641			
2				
3				
4				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
Pier 36 WB (G1)				
5	435.641			
6				
7				
Pier 37 EB (G2)				
1	435.027			
2				
3				
4				
5				
6				
7				
8				
9				
Pier 37 EB (G4)				
1	433.526			
2				
3				



Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in Place	Calc. Brg. capacity Tons
Pier 37 EB (G4)				
4	433.526			
5				
6				
7				
8				
9				
Pier 37 EB (G6)				
1	431.612			
2				
3				
4				
5				
6				
7				
8				
9				



See Sheet A19 for Notes.

PILE RECORD

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

FRANKFORT

COUNTY OF

JEFFERSON

164-13TH ST. TO 7TH ST.

LOUISVILLE - LEXINGTON

ROAD

STATION 208+08

CONSTRUCTION PROJECT NO.

P. E. PROJECT NO. 164-2 (35) 3

MAINTENANCE PROJECT NO.

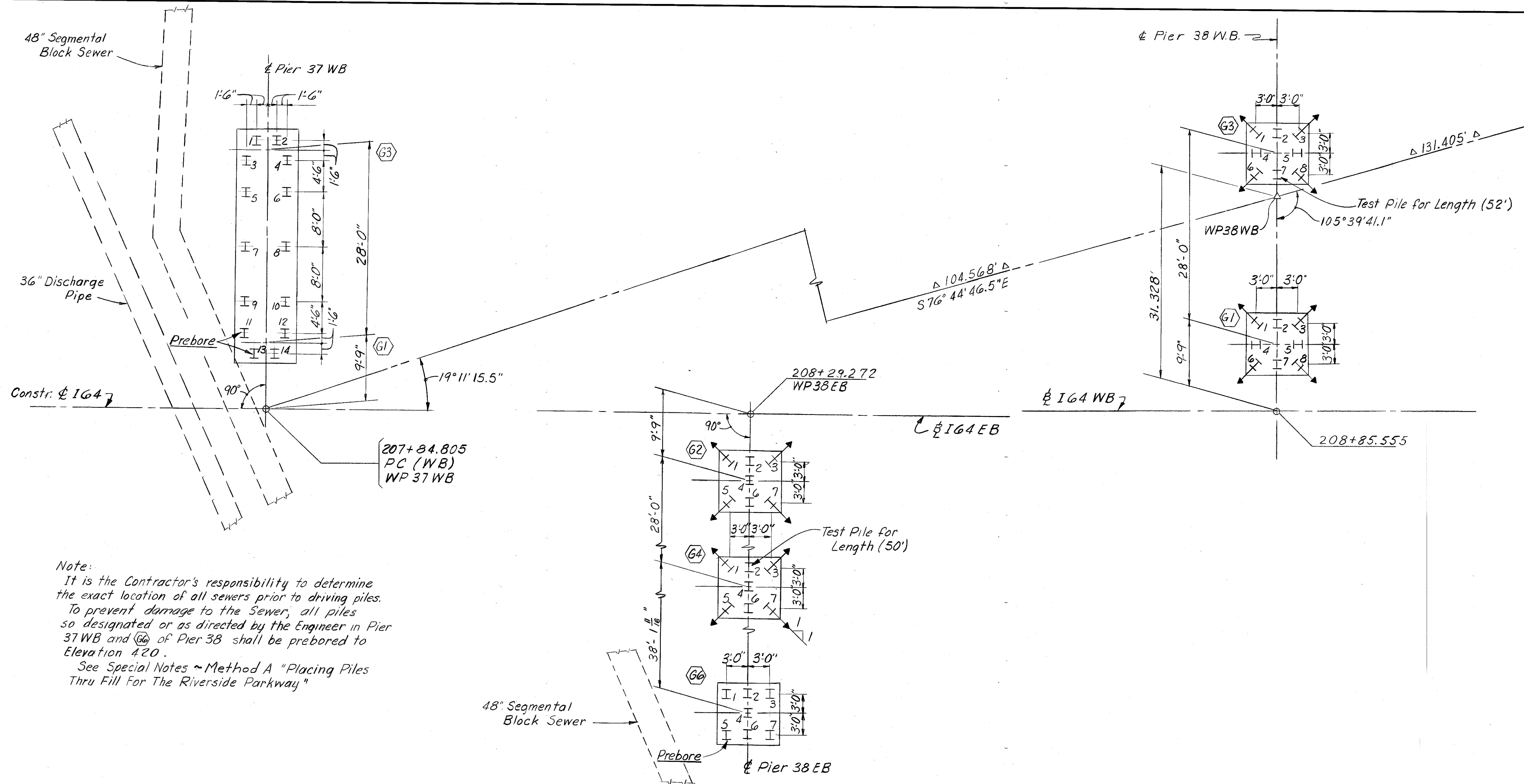
SP 56-273-11L

DRAWING NO.

18572

LETTING DATE.

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
TRACED BY	DATE	TRACED BY	DATE	TRACED BY	DATE



Note:
It is the Contractor's responsibility to determine the exact location of all sewers prior to driving piles. To prevent damage to the Sewer, all piles so designated or as directed by the Engineer in Pier 37 WB and (G6) of Pier 38 shall be prebored to Elevation 420.
See Special Notes ~ Method A "Placing Piles Thru Fill For The Riverside Parkway"

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	434.557			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	434.806			
2				
3				
4				
5				
6				
7				
1	433.106			
2				
3				
4				
5				
6				
7				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	431.555			
2				
3				
4				
5				
6				
7				
1	437.935			
2				
3				
4				
5				
6				
7				
8				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	437.954			
2				
3				
4				
5				
6				
7				
8				

See Sheet A19 for Notes.

PILE RECORD

SHEET A24

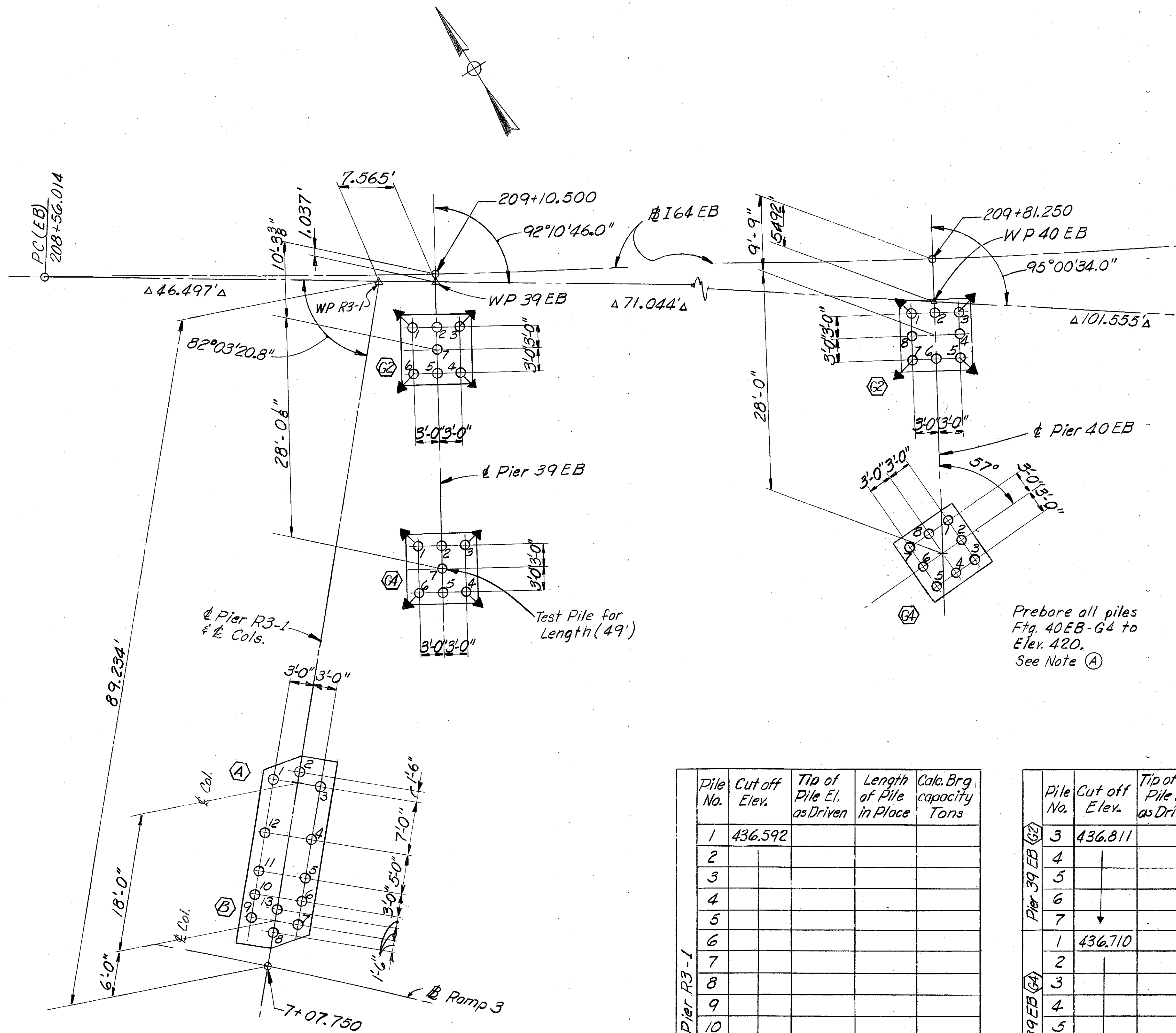
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I64-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.

P. E. PROJECT NO. I 64-2 (35) 3
MAINTENANCE PROJECT NO.

SP 56-273-III
DRAWING NO.
18572

LETTING DATE.

DESIGNED BY	CHCKD BY	DATE	REVISED	DATE	REVISED	DATE
RHC	RHC	May 77				
TRACED BY	CHCKD BY	DATE	REVISED	DATE	REVISED	DATE
RBS	RBS					



Prebore all piles
Ftg. 40EB-G4 to
Elev. 420.
See Note (A)

Prebore all piles in
Pier R3-1 to Elev. 420
See Note (A)

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in Place	Calc. Brg capacity Tons
1	436.592			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14	436.811			
15	436.811			

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in Place	Calc. Brg capacity Tons
1	436.811			
2				
3				
4				
5				
6				
7				
8				
9	436.710			
10				
11				
12				
13				
14	439.769			
15				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in Place	Calc. Brg capacity Tons
1	439.769			
2				
3				
4				
5				
6				
7				
8				
9	439.919			
10				
11				
12				
13				
14				
15				

See Sheet A19 for Notes.

PILE RECORD

SHEET A25

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.

SP 56-273-11L
P.E. PROJECT NO. 164-2(35)3
MAINTENANCE PROJECT NO.

DRAWING NO.
18572

LETTING DATE

DESIGNED BY	CHKD BY	REVISED	DATE
RHC	AK		May 11
DETAILS BY	CHKD BY	REVISED	DATE
RBS			
TRACED BY	CHKD BY	REVISED	DATE

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	437.959			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
1	437.970			
2				
3				
4				

LOAD TEST PILE

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
5	437.970			
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				

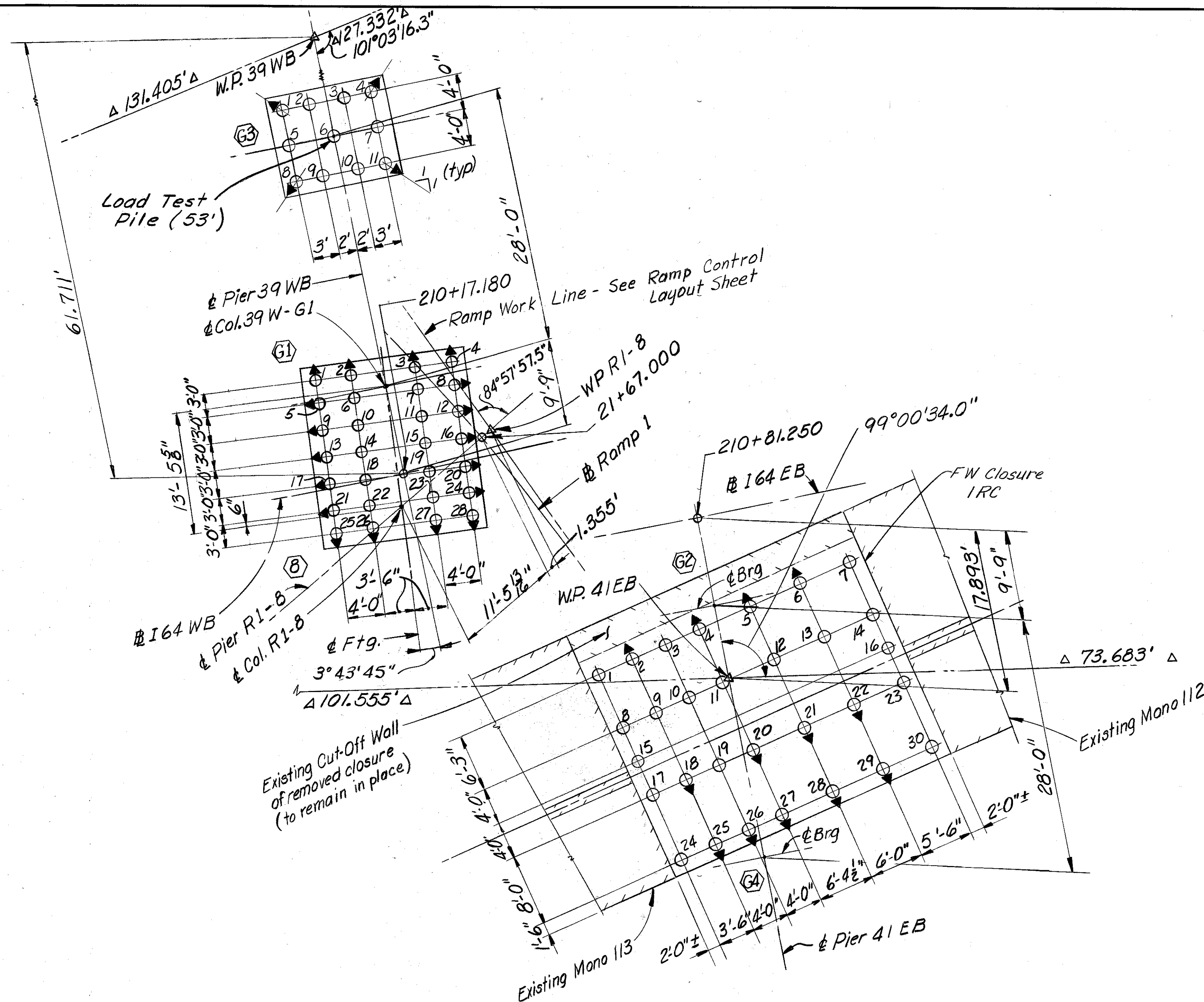
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
20	437.970			
21				
22				
23				
24				
25				
26				
27				
28				

Piles for Floodwall are to be located relative to the existing Floodwall. Supports for the M.L. Superstructure are to be located relative to WP41EB.

* Precise elevation depends on existing elevation of adjacent Monoliths. See Sh. A37 & A38

Prebore all piles under Pier 41EB to Elev. 410. See Note (A)

See Sheet A19 for Notes.



Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	436.9			
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				

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08
CONSTRUCTION PROJECT NO.

P. E. PROJECT NO. 164-2 (35) 3
MAINTENANCE PROJECT NO.

DRAWING NO.
18572

PILE RECORD

LETTING DATE

DESIGNED BY	DATE	REVISED	DATE	REVISED	DATE
TRH	May 71				
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
TRH	May 71	TRH	May 71	TRH	May 71
TRH	May 71	TRH	May 71	TRH	May 71

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	437.596			
2				
3				
4				
5				
6				
7				
8				
9				
1	437.576			
2				
3				
4				
5				
6				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
7	437.576			
8				
9				
10				
1	436.88			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
12	436.88			
13				
14				
15				
16				
17				
18				
1	437.764			
2				
3				
4				
5				
6				
7				
1	436.396			

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
2	436.396			
3				
4				
5				
6				
7				
1	435.40			
2				
3				
4				
5				
6				
7				
8				
9				

*Precise Elev. depends on existing elev. of adjacent monoliths. See Sheet A39-A41

**Substructure for 41WB-G1, 43EB-G4 & Pier R4-7.

See Sheet A19 for Notes.

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
10	435.40			
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				
1	437.316			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

SHEET A27

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

I 64-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD

SP 56-273-11L

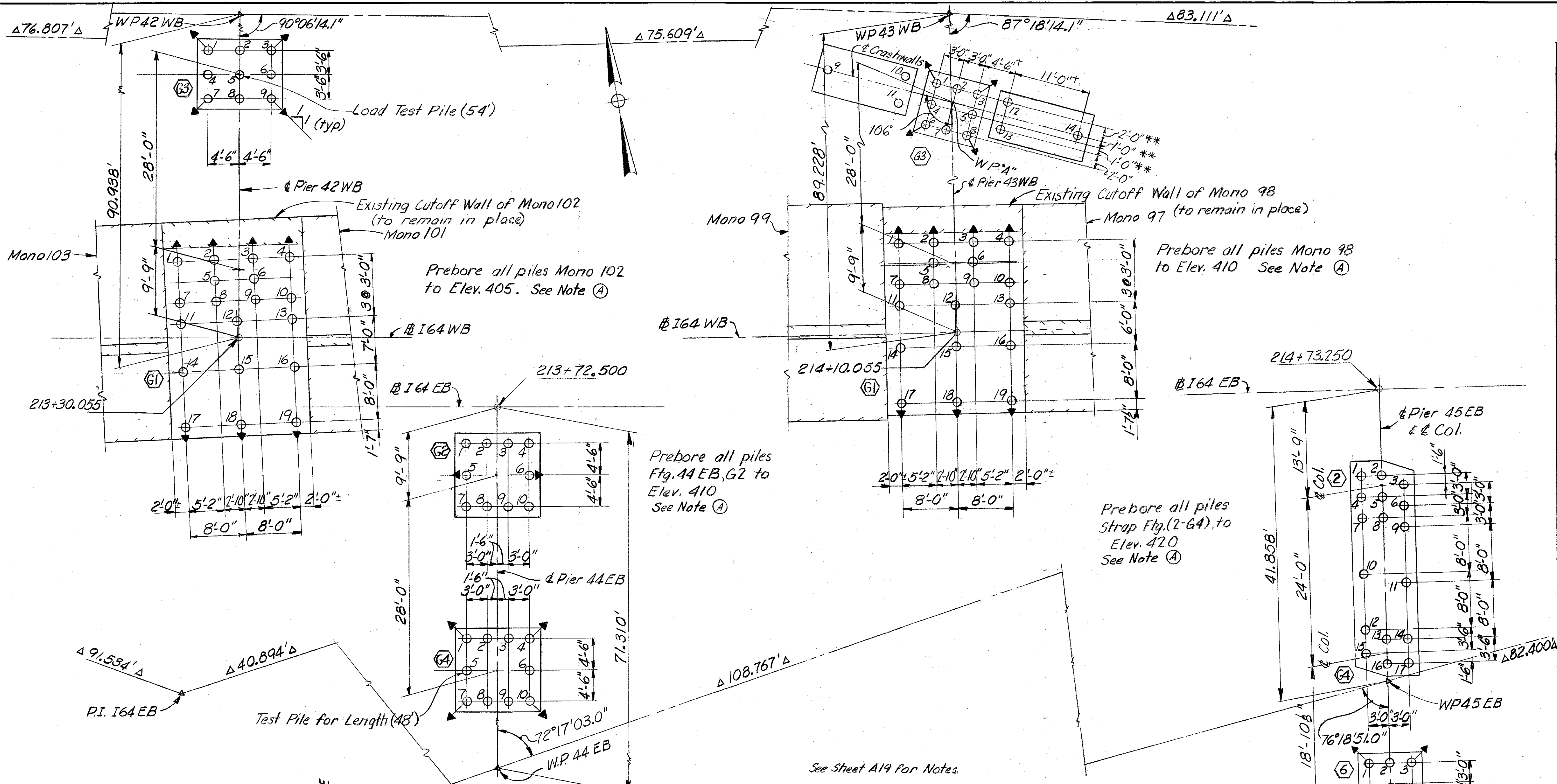
STATION 208+08
CONSTRUCTION PROJECT NO.

P.E. PROJECT NO. I 64-2 (35) 3
MAINTENANCE PROJECT NO.

DRAWING NO.
18572

PILE RECORD

DESIGNED BY: EHC
CHECKED BY: RHC
DATE: 4/27/71
REVISION: 1
DATE: 5/1/71
TRACED BY: RHC
CHECKED BY: RHC
DATE: 5/1/71
REVISION: 1
DATE: 5/1/71



Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	435.903			
2				
3				
4				
5				
6				
7				
8				
9				
1	436.38*			
2				
3				
4				
5				
6				
7				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
8	436.38*			
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
1	436.542			
2				
3				
4				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
5	436.542			
6				
7				
8				
9				
10				
1	436.191			
2				
3				
4				
5				
6				
7				
8				
9				
10				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	436.721			
2				
3				
4				
5				
6				
7				
8				
9	439.971			
10				
11				
12				
13				
14				
1	437.13*			
2				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
3	437.13*			
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
1	436.966			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
1	438.476			
2				
3				
4				
5				
6				
1	438.493			
2				
3				
4				
5				
6				

*Precise Elev. depends on existing elev. of adjacent monoliths.
(For details see monolith 98 & 102)
**Pile spacing for Companion Crashwall similar.
PILE RECORD.

LETTING DATE

DESIGNED BY: ABE L DBF CHECKED BY: RHC DATE: June 71
REVISION: 1 DATE: June 71
TRACED BY: ABE L DBF CHECKED BY: RHC DATE: June 71

Pier 44 WB (G1)				
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	437.598			
2				
3				
4				
5				
6				
7				
8				
9	440.848			
10				
11				
12				
13				
14				
1	437.310			
2				
3				
4				
5				
6				
7				
8				
9	440.560			
10				
11				
12				
13				
14				
1	437.222			
2				
3				
4				
5				
6				
7				

Pier 45 WB (G3)				
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
8	437.222			
9	437.222			
10	440.972			
11				
12				
13				
14				
15				
1	437.184			
2				
3				
4				
5				
6				
7				

Pier 46 EB (2)				
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
8	437.184			
9	437.184			
1	438.080			
2				
3				
4				
5				
6				
7				
8				
1	438.430			
2				
3				
4				
5				

Pier 47 EB (6)				
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
6	438.430			
7				
8				
9				
1	439.498			
2				
3				
4				
5				
6				
7				
8				
9				
1	437.162			
2	437.162			

Pier No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
3	437.162			
4				
5				
6				
7				
8				
9				
10				
11	440.912			
12				
13				
14				
15				
16				
1	437.295			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
1	438.461			
2				
3				
4				
5				
6				
7				
8				
9				
10				

PILE RECORD

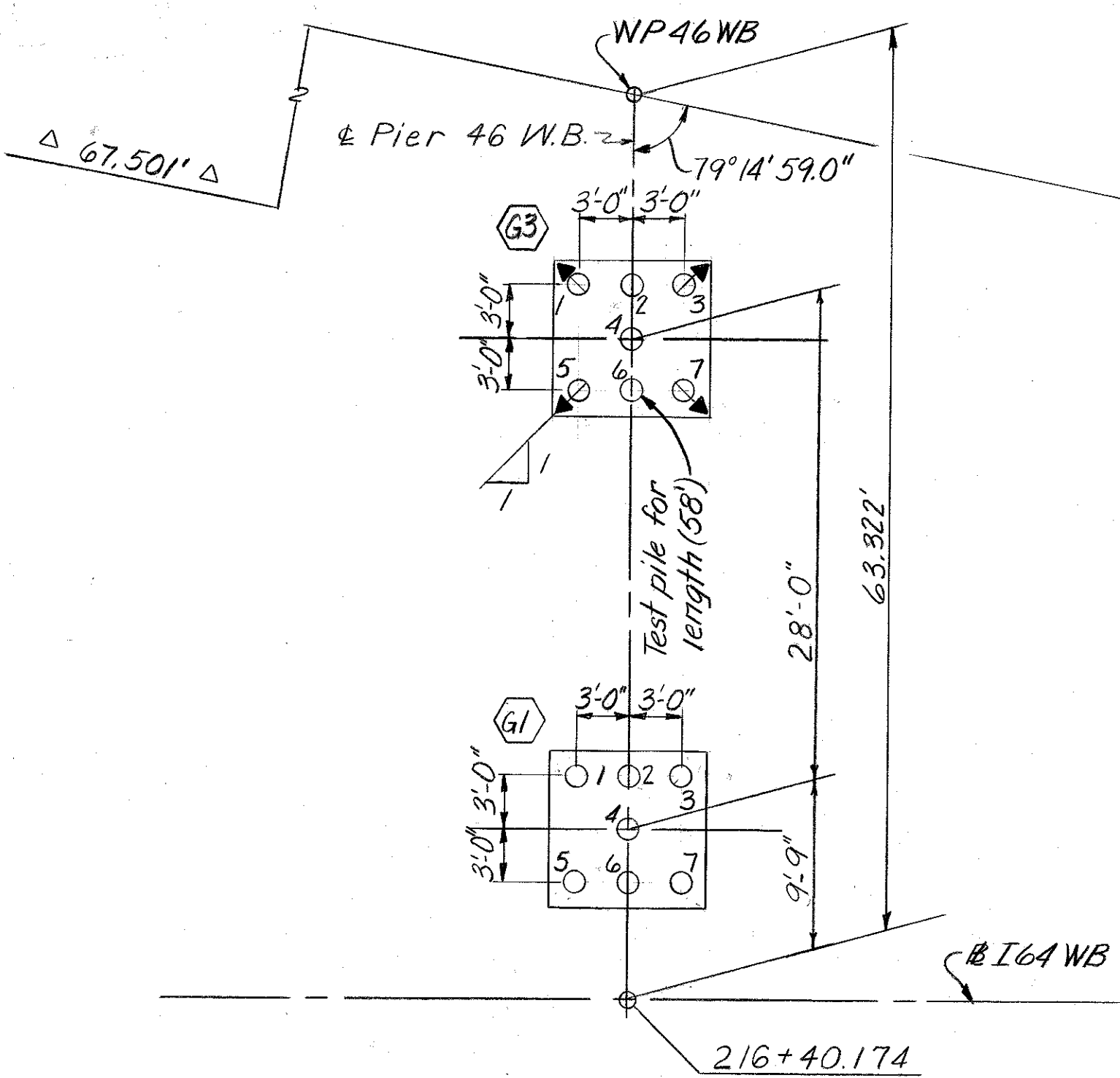
LETTING DATE

DESIGNED BY	DATE	REVISION	DATE
TRACED BY	DATE	REVISION	DATE
CHECKED BY	DATE	REVISION	DATE
CHECKED BY	DATE	REVISION	DATE

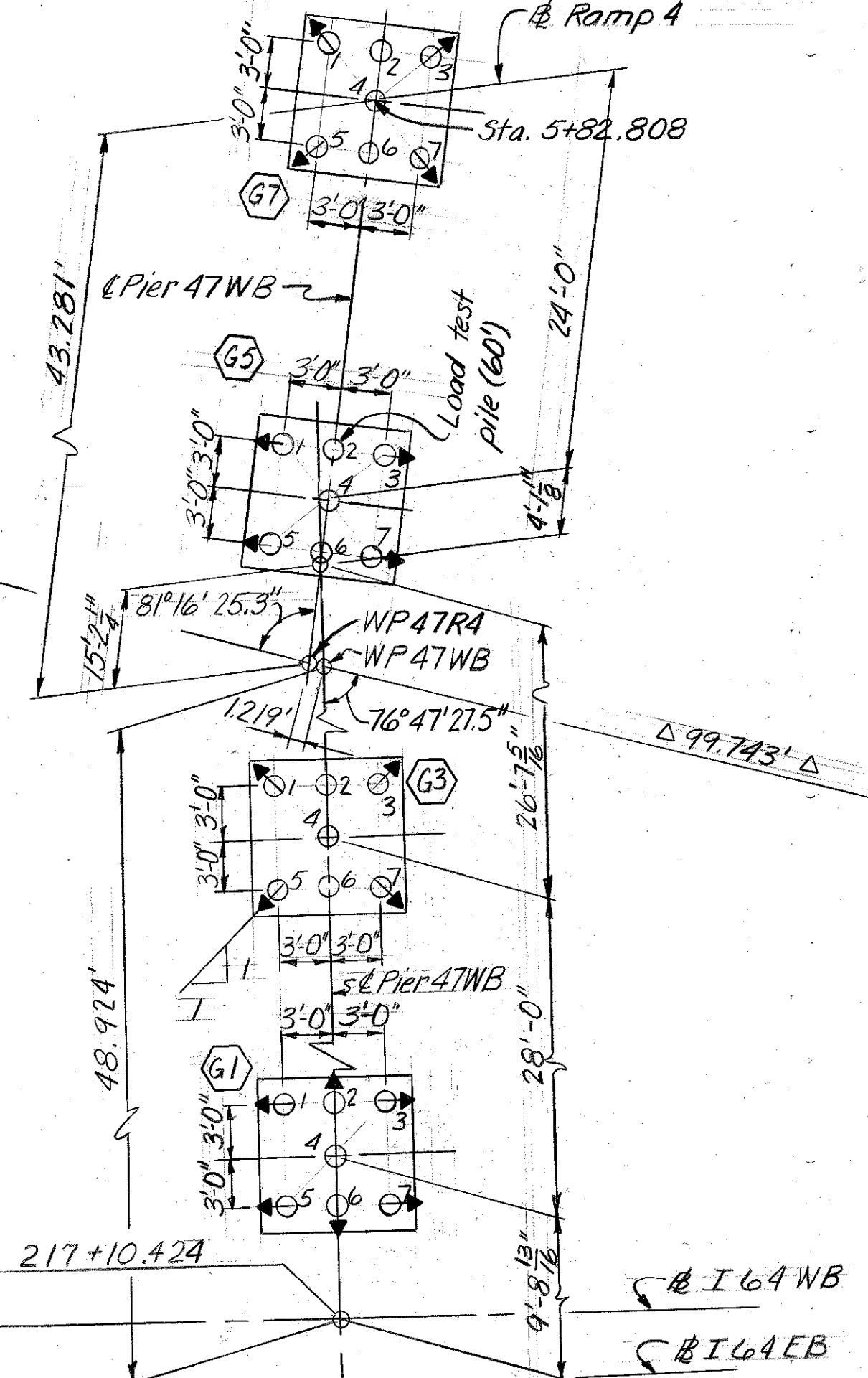
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	437.884			
2				
3				
4				
5				
6				
7				
1	437.847			
2				
3				
4				
5				
6				
7				
1	436.817			
2				
3				
4				
5				
6				
7				
1	436.759			
2				
3				
4				
5				
6				
7				

Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	435.305			
2				
3				
4				
5				
6				
7				
1	434.582			
2				
3				
4				
5				
6				
7				
1	437.409			
2				
3				
4				
5				
6				
7				
8				
9				

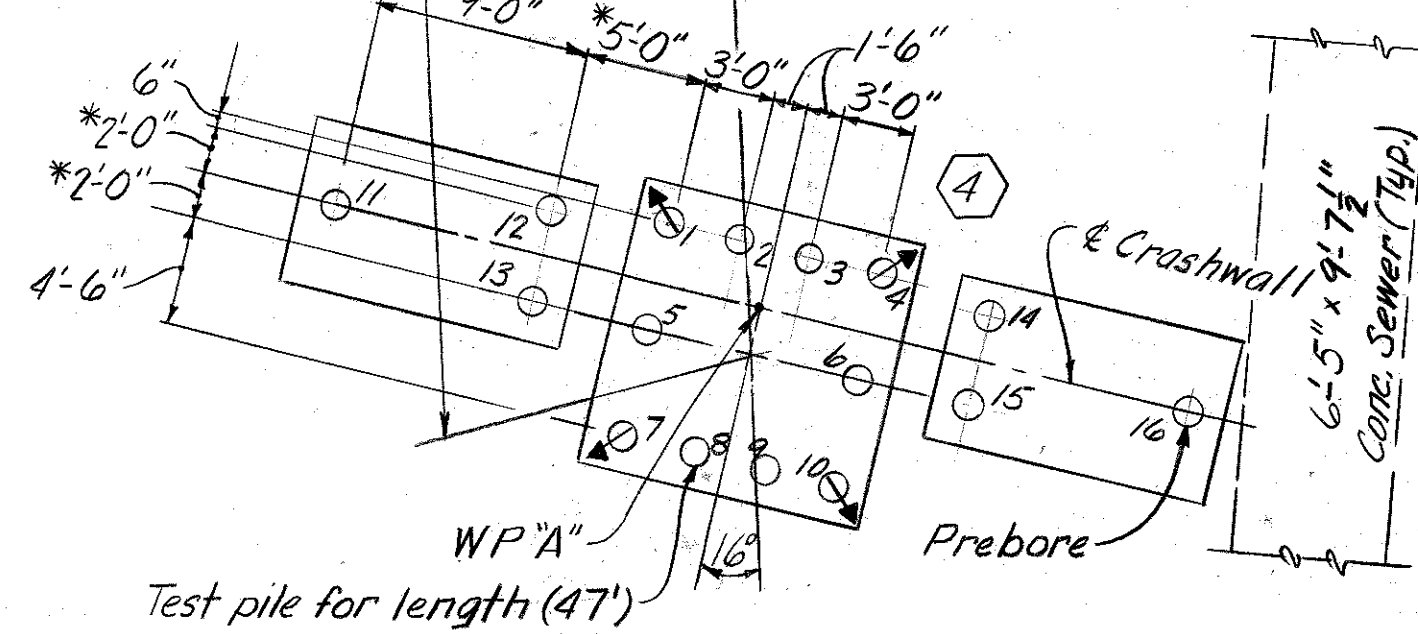
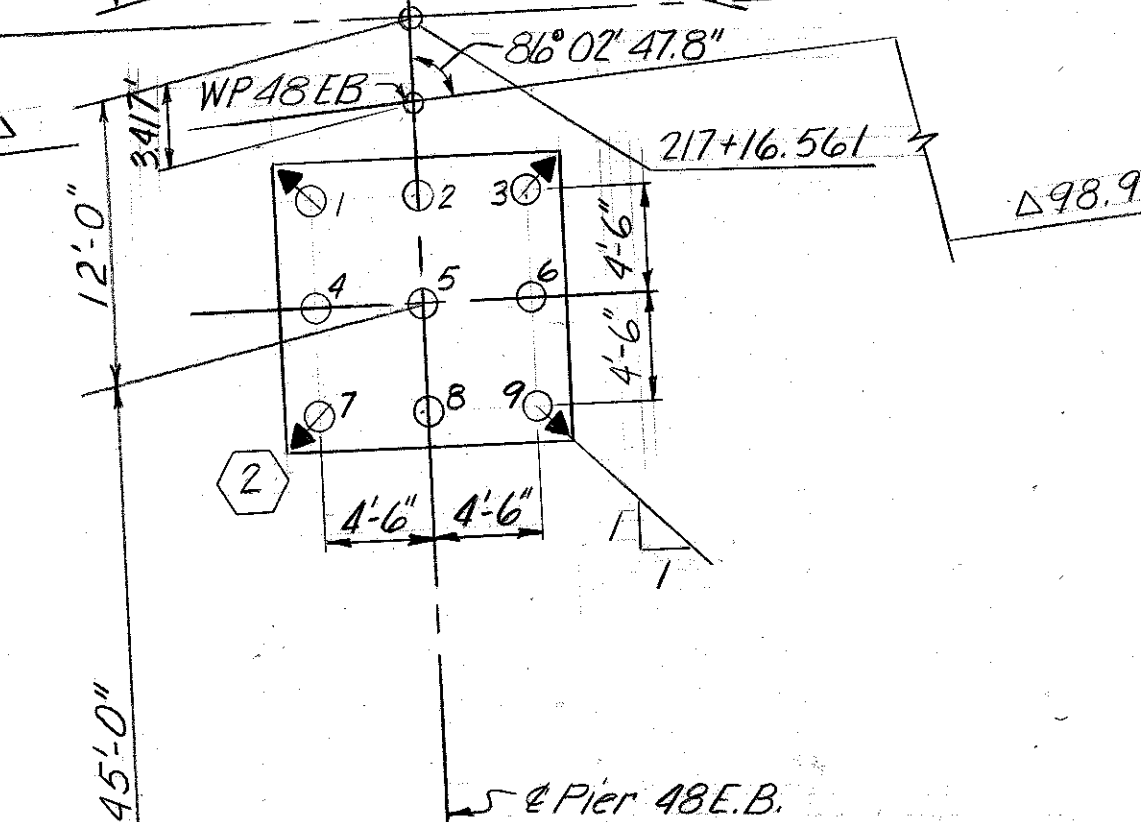
LOAD TEST PILE



Δ 68.128' Δ



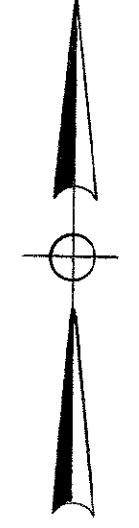
Δ 79.508' Δ



Notes:
It is the Contractors responsibility to determine the exact location of all sewers prior to driving piles.
To prevent damage to the sewer, pile No. 16, or others if directed by the Engineers, in fig. 4 of pier 48 EB shall be prebored to elevation 410.
See Special Notes - Method A "Placing Piles Thru Fill For The Riverside Parkway."
* Pile spacing for companion Crashwall similar.
For other utilities see Layout sheet.
See Sheet A19 for Notes.

6'-5" x 9'-7 1/2" Conc. Sewer (Typ.)

24" Sewer (Abandoned)



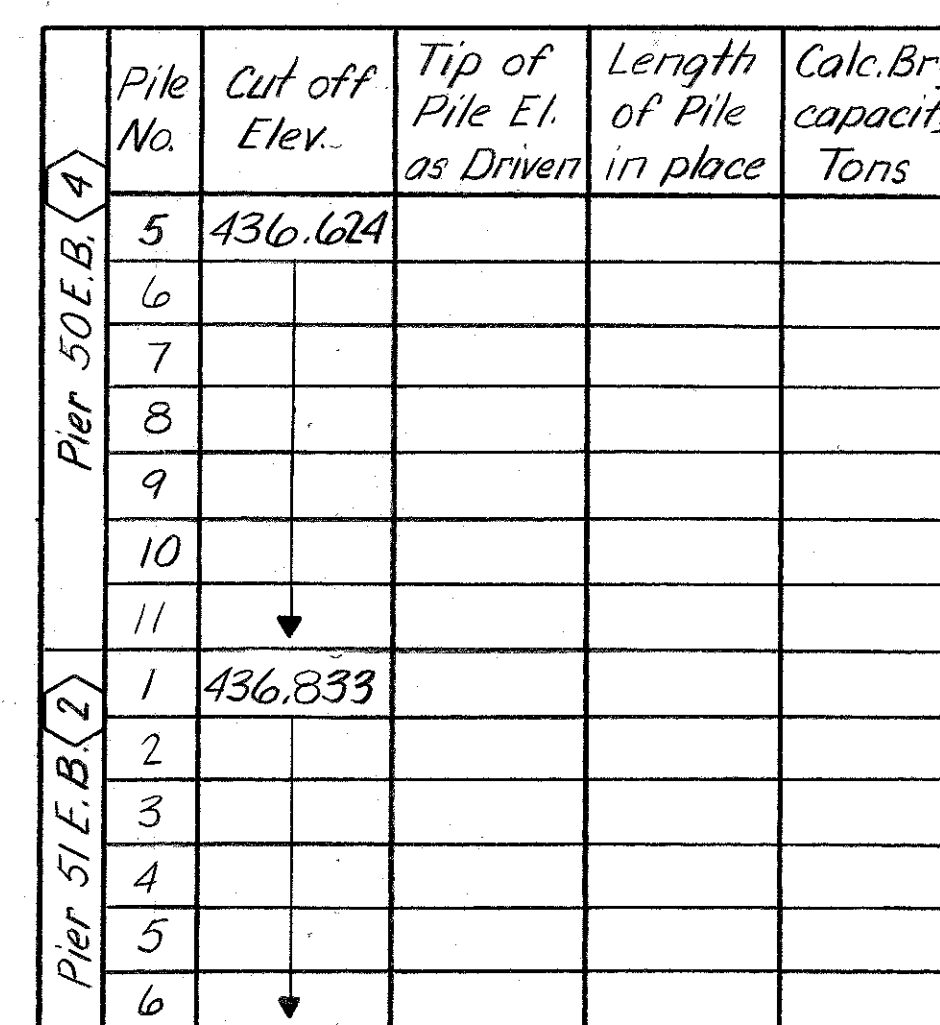
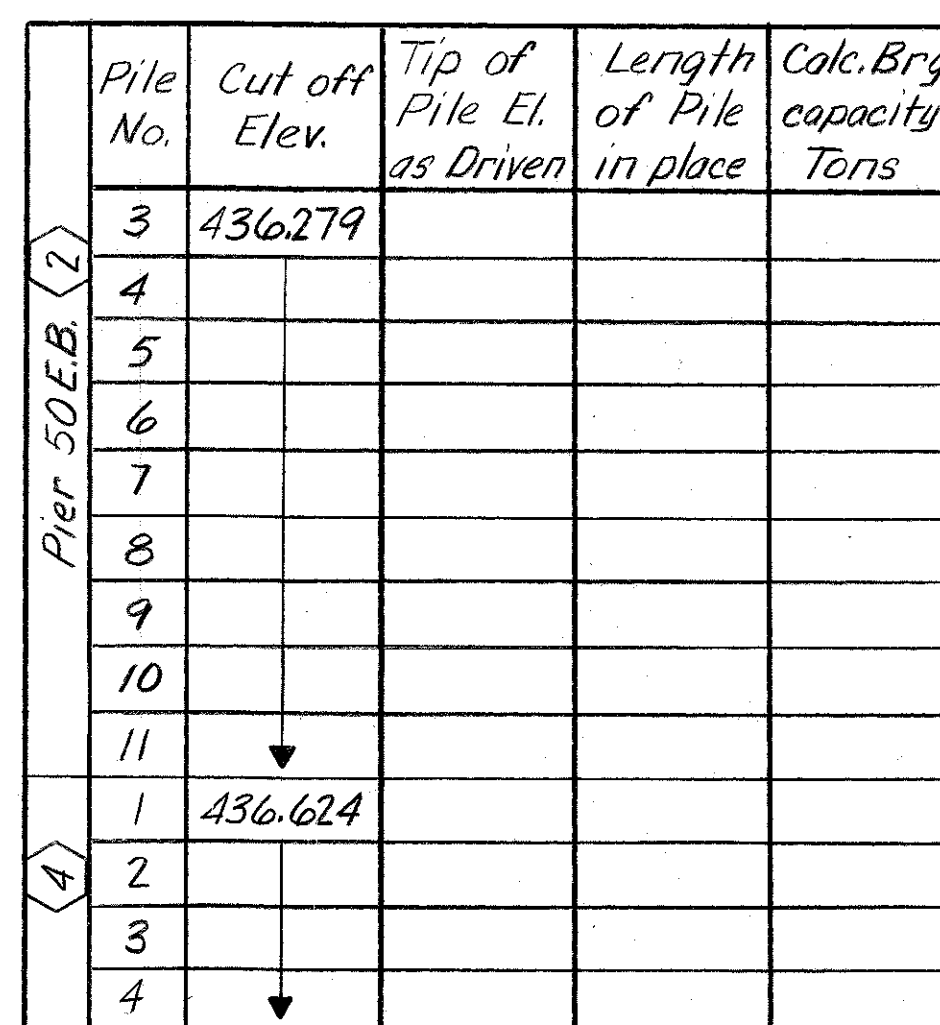
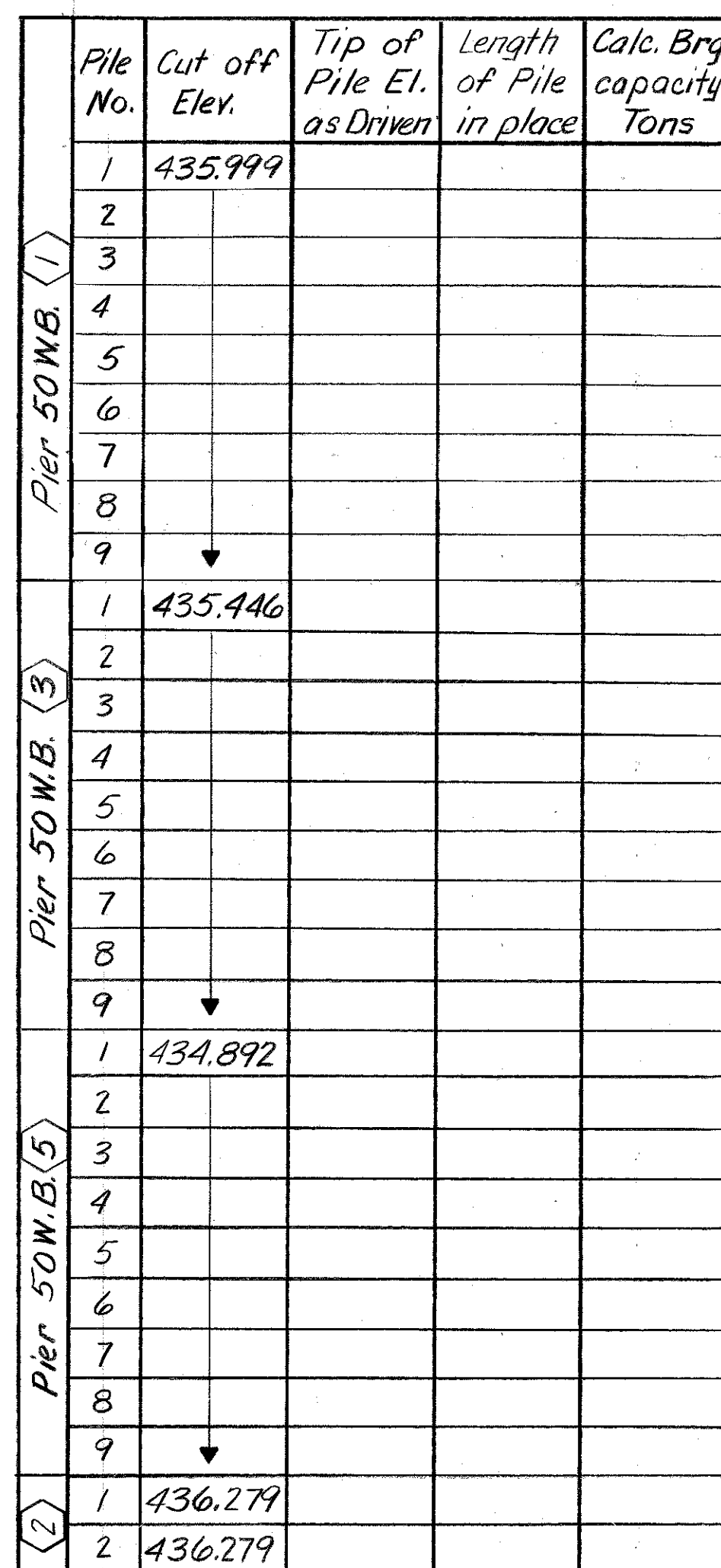
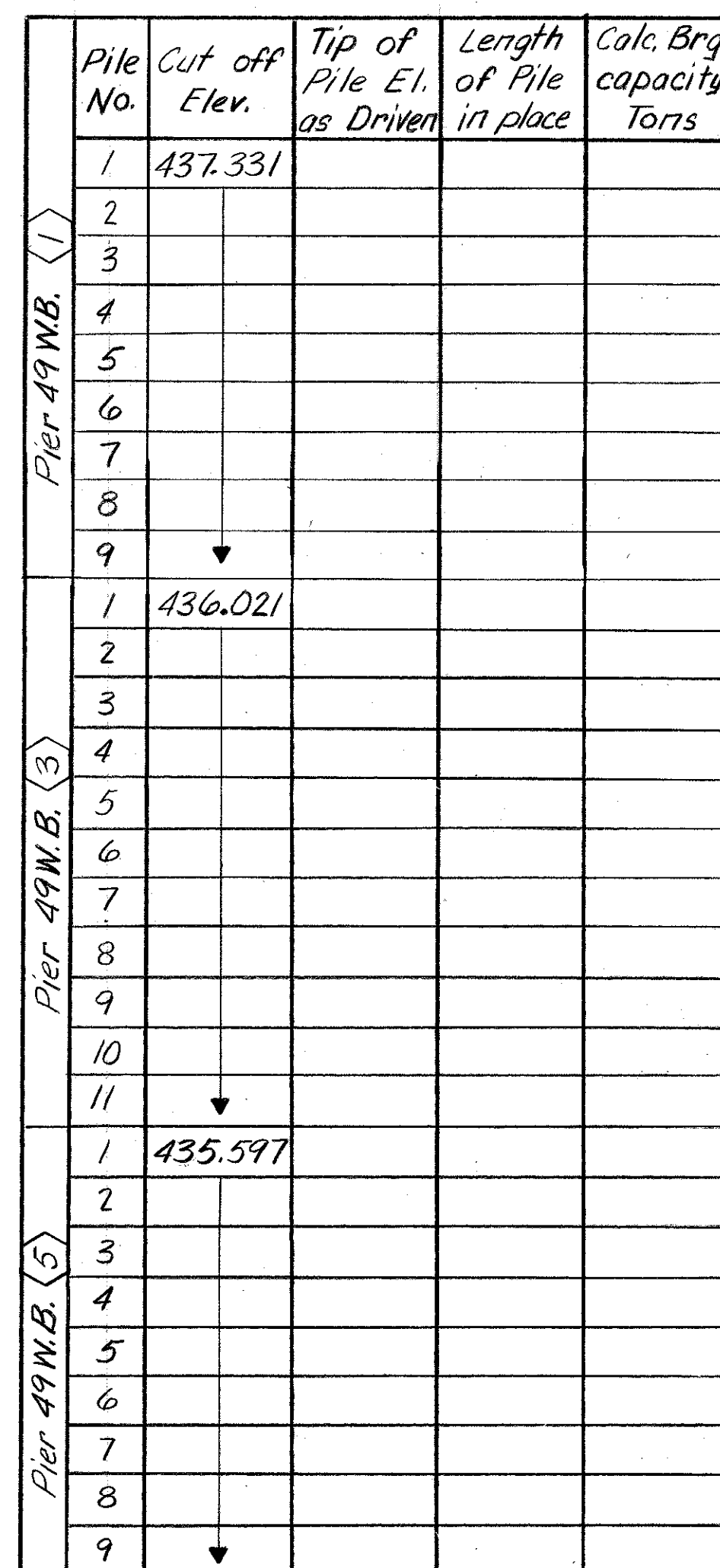
Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Brg. capacity Tons
1	437.407			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11	440.657			
12				
13				
14				
15				
16				
1	437.120			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
1	436.619			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. I 64-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

PILE RECORD

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
	<i>RHC</i>			
DETAILED BY	CHECKED BY	DATE	REVISED	DATE
<i>Shank</i>	<i>June 11</i>			
TRACED BY	CHECKED BY	DATE	REVISED	DATE

Pier 49 W.B. Δ **4-75**



	Pile No.	Cut off Elev.	Tip of Pile El. as Driven	Length of Pile in place	Calc. Br capacity Tons
2	7	436.833			
	8				
	9				
	1	437.552			
	2				
	3				
	4				
	5				
	6				
Pier 51 E.B.	7				
	8				
	9				
	1	436.720			
	2				
	3				
	4				
	5				
	6				
Pier 51 W.B. 1	7				
	8				
	1	436.201			
	2				
	3				
	4				
	5				
	6				
	7				
Pier 51 W.B. 3	8				
	1	435.411			
	2				
	3				
	4				
	5				
	6				
	7				
	8				
Pier 51 W.B. 5	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				

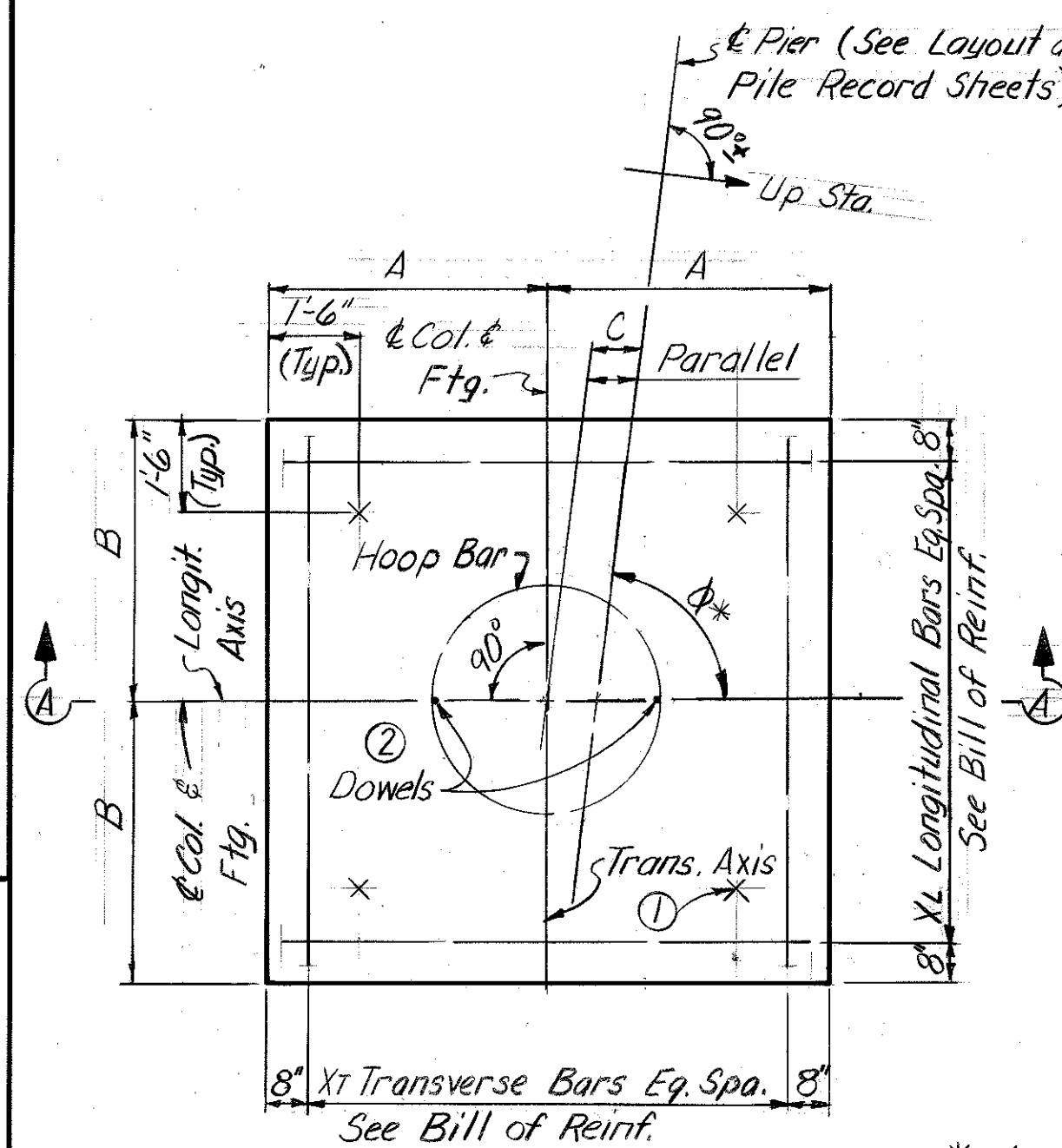
See Sheet A19 for Notes.

PILE RECORD

LETTING DATE

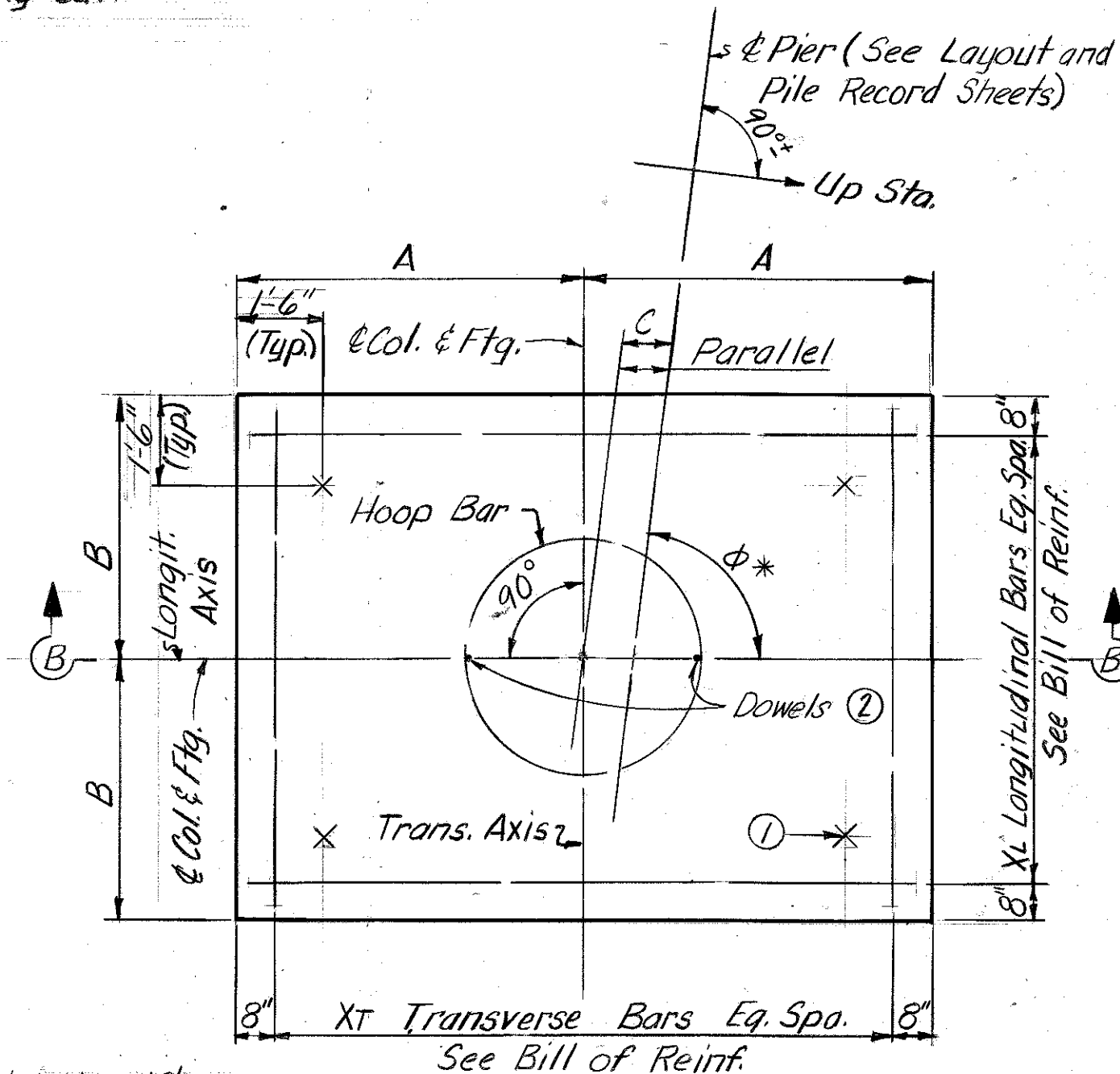
Note:

- Only corner piles shown. See Pile Record Sheet for Type & Location of others.
- For Location of dowels See Sheet A35 Place dowels in footing with lower end radially out.

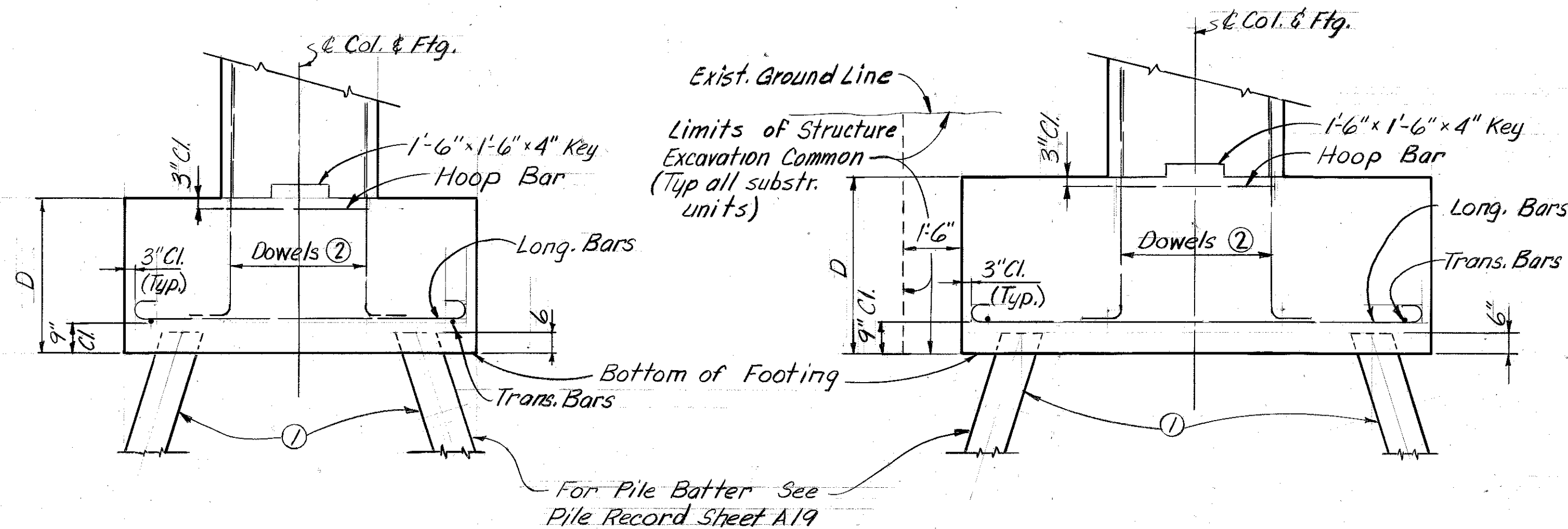


FOOTING PLAN ①
TYPE I
(Transverse Steel Bottom)

* Angle ϕ is always in the 1st Quadrant and measured between the ϕ Pier and Longitudinal Axis of the footing.



FOOTING PLAN ②
TYPE II
(Longitudinal Steel Bottom)



SECTION A-A

SECTION B-B

Footing No	Type	ϕ	Bott. Ftg. Elev.	A	B	C	D	Xr (Trans.)	Xl (Long.)	N ^o ②
26W-G1	I	90	441.724	4'-6"	5'-6"	0"	4'-6"	11	11	17
26W-G3	I		441.434	4'-6"	5'-6"	0"	4'-6"	11	11	17
26E-G2	I		441.564	4'-6"	5'-6"	0"	4'-6"	12	11	15
26E-G4	I		441.523	4'-6"	5'-6"	0"	4'-6"	12	11	15
27W-G1	II		441.672	6'-6"	5'-6"	0"	4'-6"	12	17	15
27W-G3	II		441.332	6'-6"	5'-6"	0"	4'-6"	12	17	15
27E-G2	II		441.640	6'-6"	5'-6"	0"	4'-6"	12	17	21
27E-G4	II	48	441.600	6'-6"	5'-6"	0"	4'-6"	12	17	21
28W-G1	I	62	441.177	4'-6"	5'-6"	0"	4'-6"	11	11	15
28W-G3	I	90	441.289	4'-6"	5'-6"	0"	4'-6"	11	11	15
28E-G2	I	65	441.842	4'-6"	4'-6"	0"	4'-6"	11	11	15
28E-G4	I	90	442.536	4'-6"	4'-6"	0"	4'-6"	11	11	15
29W-G1	I	90	442.869	4'-6"	4'-6"	0"	4'-6"	16	16	18
29W-G3	I	74	441.502	4'-6"	4'-6"	0"	4'-6"	15	15	18
29E-G2	I	90	443.298	4'-6"	4'-6"	0"	4'-6"	12	11	15
29E-G4	I	63	443.281	4'-6"	5'-6"	0"	4'-6"	13	11	15
30W-1	II	69	440.196	7'-6"	6'-6"	1 3/8"	5'-0"	18	24	31
30W-G3	II	80	440.060	6'-6"	5'-6"	0"	4'-6"	12	19	21
30E-G4	II	69	442.597	6'-6"	5'-6"	0"	4'-6"	14	18	28
31W-G3	I	70	440.235	4'-6"	5'-6"	0"	4'-6"	12	12	15
31E-2	I	70	440.433	7'-6"	7'-6"	1 3/8"	5'-0"	27	20	19
31E-G4	I	90	440.586	4'-6"	5'-6"	0"	4'-6"	12	12	15
32W-G1	I	90	439.168	4'-6"	5'-6"	0"	4'-6"	12	12	15
32W-3	I	70	438.845	7'-6"	7'-6"	1 3/8"	5'-0"	29	28	19
32E-G2	I	90	440.666	4'-6"	4'-6"	0"	4'-6"	11	11	12
32E-G4	I		440.143	4'-6"	4'-6"	0"	4'-6"	11	11	12
33W-G1	II		436.966	6'-6"	5'-6"	0"	4'-6"	12	20	21
33W-G3	II		437.758	6'-0"	5'-0"	0"	4'-6"	11	17	15
33W-G5	II		437.946	6'-0"	5'-0"	0"	4'-6"	11	17	15
33E-G2	I	90	438.419	4'-6"	4'-6"	0"	4'-6"	11	9	12
33E-G4	I	90	437.616	4'-6"	4'-6"	0"	4'-6"	11	9	12
34W-G1	I	52	434.973	4'-6"	4'-6"	0"	5'-0"	11	9	18
34W-G3	I	90	435.788	4'-6"	4'-6"	0"	5'-0"	11	9	18
R1-17A	I		436.034	4'-6"	4'-6"	0"	5'-0"	9	9	18
R1-17B	I		436.500	4'-6"	4'-6"	0"	5'-0"	9	9	18
34E-G2	II		435.803	7'-6"	6'-0"	0"	5'-0"	16	22	24
34E-G4	II		435.572	7'-6"	6'-0"	0"	5'-0"	16	22	29
35W-G1	II		434.643	6'-0"	5'-0"	0"	4'-6"	11	17	15
35W-G3	II		435.669	6'-0"	5'-0"	0"	4'-6"	11	17	15
35E-G2	I	90	434.761	7'-6"	7'-6"	0"	4'-6"	36	27	18
35E-G4	I	90	434.199	7'-6"	7'-6"	0"	4'-6"	36	27	18
36W-G1	I		435.141	4'-6"	4'-6"	0"	4'-6"	11	11	12
36W-G3	I		435.716	4'-6"	4'-6"	0"	4'-6"	11	11	12
36E-G2	I		434.303	4'-6"	4'-6"	0"	4'-6"	13	13	12
36E-G4	I		433.795	4'-6"	4'-6"	0"	4'-6"	9	9	12
36E-G6	I		433.047	4'-6"	4'-6"	0"	4'-6"	13	13	12
37E-G2	II		434.527	6'-0"	5'-0"	0"	4'-6"	11	17	15
37E-G4	II		433.026	6'-0"	5'-0"	0"	4'-6"	11	17	15
37E-G6	II		431.112	6'-0"	5'-0"	0"	4'-6"	11	17	15
38W-G1	I		437.435	4'-6"	4'-6"	0"	4'-6"	16	16	12
38W-G3	I	90	437.454	4'-6"	4'-6"	0"	4'-6"	15	14	12
38E-G2	I	90	434.306	4'-6"	4'-6"	0"	4'-6"	11	9	12
38E-G4	I		432.606	4'-6"	4'-6"	0"	4'-6"	11	9	12
38E-G6	I		431.055	4'-6"	4'-6"	0"	4'-6"	12	11	12
39W-G3	II		437.459	6'-6"	5'-6"	0"	4'-6"	13	15	15
39E-G2	I		436.311	4'-6"	4'-6"	0"	5'-0"	9	9	18
39E-G4	I		436.210	4'-6"	4'-6"	0"	5'-0"	9	9	18
40W-G1	I		437.076	6'-0"	6'-0"	0"	4'-6"	21	15	14
40W-G3	I		437.096	4'-6"	4'-6"	0"	4'-6"	11	9	12
40E-G2	I	90	439.269	4'-6"	4'-6"	0"	4'-6"	10	9	12

Footing No	Type	ϕ	Bott. Ftg. Elev.	A	B	C	D	Xr (Trans.)	Xl (Long.)	N ^o ②
40E-G4	I	57	439.419	4'-6"	4'-6"	0"	4'-6"	12	12	12
41W-G3	I	90	435.896	4'-6"	4'-6"	0"	4'-6"	10	9	12
42W-G3	II	90	435.403	6'-0"	5'-0"	0"	4'-6"	11	12	15
42E-G4	I	90	437.264	4'-6"	4'-6"	0"	4'-6"	13	8	12
43W-G3	I	106	436.221	4'-6"	4'-6"	0"	4'-6"	12	11	12
43E-G4	II	90	436.816	6'-6"	5'-6"	0"	4'-6"	14	16	17
44W-G1	I	108	437.098	4'-6"	4'-6"	0"	4'-6"	11	11	12
44W-G3	I	108	436.810	4'-6"	4'-6"	0"	4'-6"	11	11	12
44E-G2	I	90	436.042	6'-0"	6'-0"	0"	4'-6"	17	12	15
44E-G4	I	90	435.691	6'-0"	6'-0"	0"	4'-6"	17	12	15
45W-G1	II	112	436.722	6'-0"	5'-0"	0"	4'-6"	11	12	15
45W-G3	II	90	436.684	6'-0"	5'-0"	0"	4'-6"	11	12	15
45E-G6	I		437.976	4'-6"	4'-6"	0"	5'-0"	9	9	18
45E-G8	I		437.993	4'-6"	4'-6"	0"	5'-0"	9	9	18
46W-G1	I		437.384	4'-6"	4'-6"	0"	4'-6"	10	9	12
46W-G3	I		437.347	4'-6"	4'-6"	0"	4'-6"	10	9	12
46E-2	I		437.580	4'-6"	4'-6"	0"	4'-6"	11	9	12
46E-4	I	90	437.930	6'-0"	6'-0"	0"	4'-6"	17	16	12
46E-6	I	60	438.998	4'-6"	4'-6"	0"	4'-6"	10	9	12
47W-G1	I	90	436.317	4'-6"	4'-6"	0"	5'-0"	9	9	18
47W-G3	I	90	436.259	4'-6"	4'-6"	0"	5'-0"	9	9	18
47W-G5	I	90	434.805	4'-6"	4'-6"	0"	5'-0"	9	9	18
47W-G7	I	90	434.082	4'-6"	4'-6"	0"	5'-0"	9	9	18
47E-2	II	110	436.662	6'-6"	5'-6"	0"	4'-6"	12	15	15
47E-4	II	90	436.795	6'-6"	5'-6"	0"	4'-6"	14	15	15
47E-6	II	90	437.961	6'-6"	5'-6"	0"	4'-6"	12	15	15
48E-2	I	90	436.909	6'-0"	6'-0"	0"	4'-6"	17	16	16
48E-4	I	106	436.907	6'-0"	6'-0"	0"	4'-6"	18	14	16
49W-1	I	90	436.831	4'-6"	4'-6"	0"	4'-6"	10	9	12
49W-3	I	90	435.521	6'-0"	6'-0"	0"	5'-0"	15	11	18
49W-5	I	90	435.097	4'-6"	4'-6"	0"	4'-6"	11	10	12
49E-2	I		436.620	6'-0"	6'-0"	0"	4'-6"	17	12	15
49E-4	I		436.119	6'-0"	6'-0"	0"	4'-6"	17	12	15
50W-1	II		435.499	6'-6"	5'-6"	0"	4'-6"	12	17	15
50W-3	II		434.946	6'-6"	5'-6"	0"	4'-6"	12	17	15
50W-5	II		434.392	6'-6"	5'-6"	0"	4'-6"	12	17	15
50E-2	II		435.779	7'-6"	6'-0"	0"	5'-0"	13	18	18
50E-4	II		436.124	7'-6"	6'-0"	0"	5'-0"	13	18	18
51W-1	I		436.220	4'-6"	4'-6"	0"	4'-6"	13	13	12
51W-3	I		435.701	4'-6"	4'-6"	0"	4'-6"	13	13	12
51W-5	I		434.911	4'-6"	4'-6"	0"	4'-6"	11	11	12
51E-2	I		436.333	4'-6"	4'-6"	0"	4'-6"	10	10	12
51E-4	I	90	437.052	4'-6"	4'-6"	0"	4'-6"	10	10	12

SHEET A32

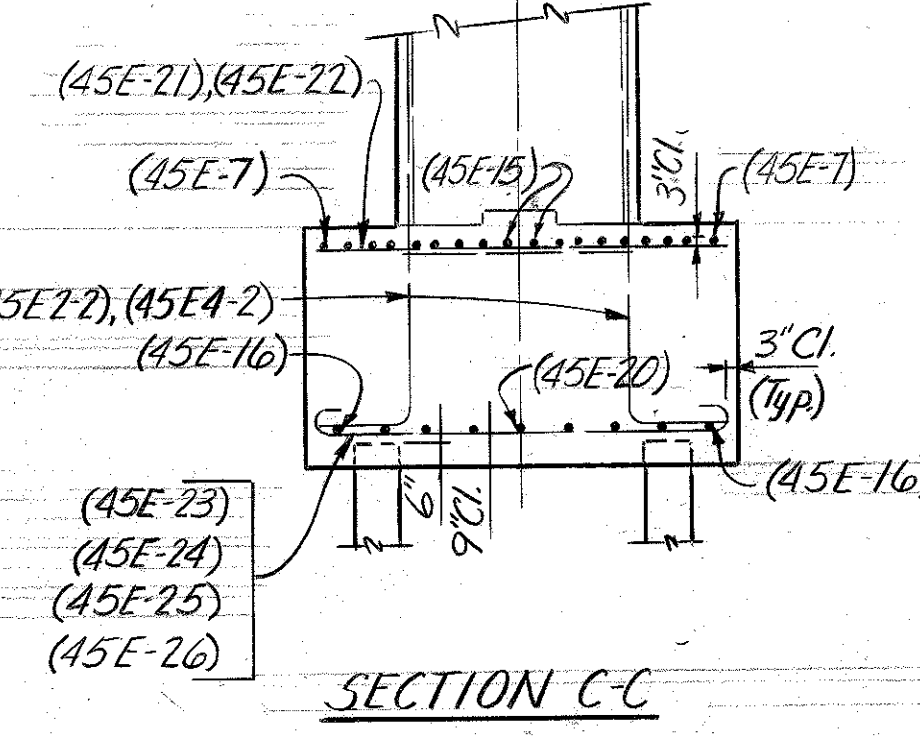
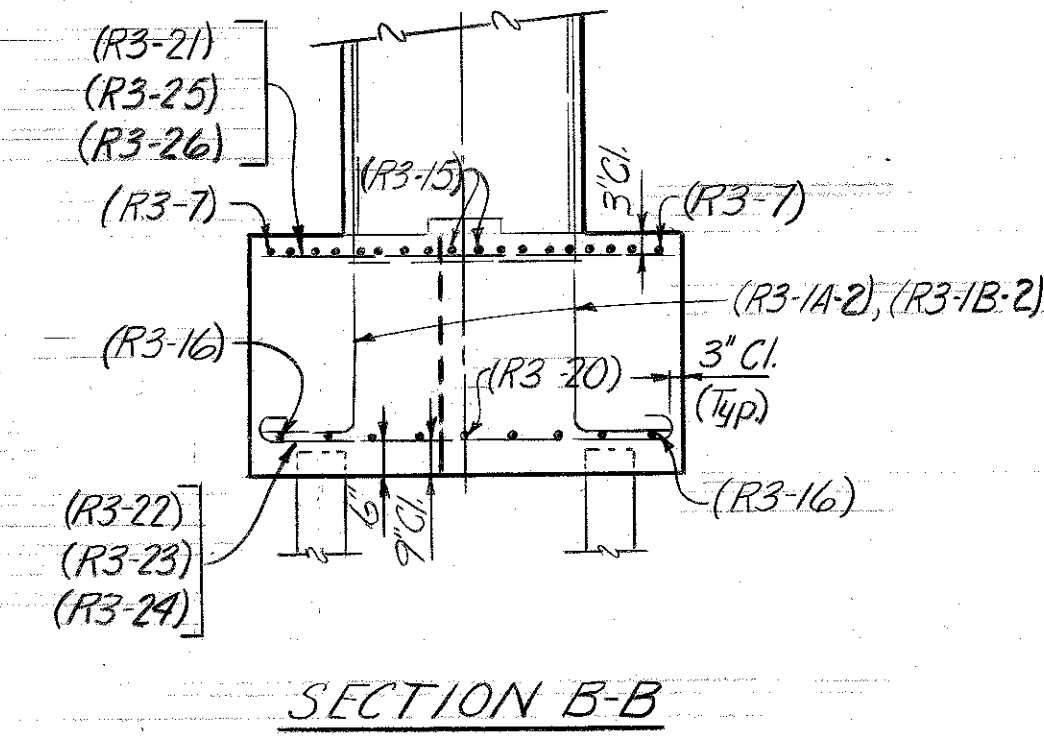
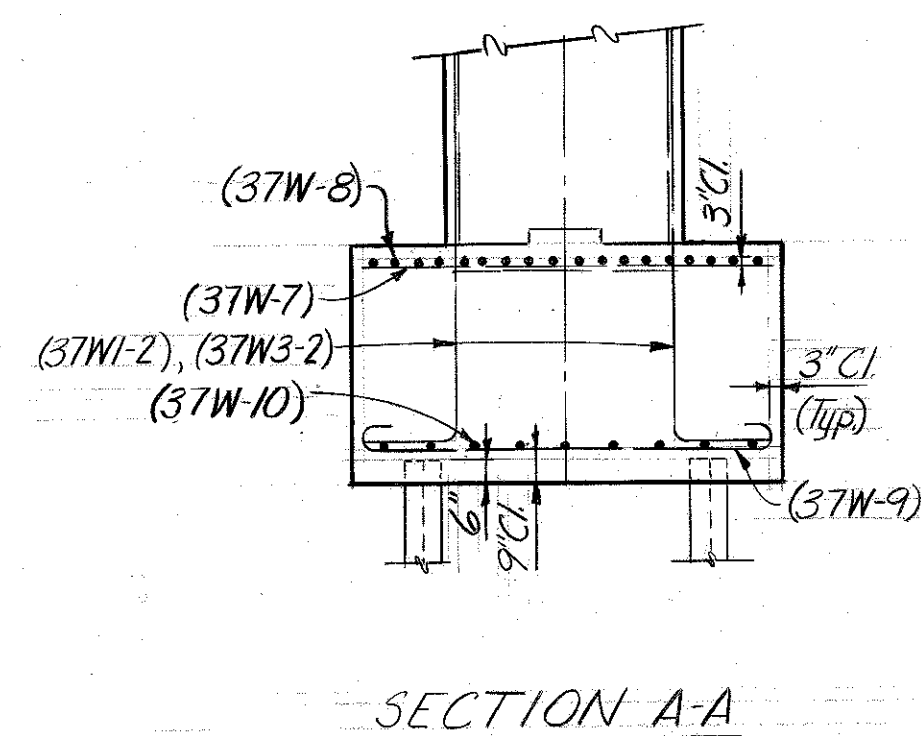
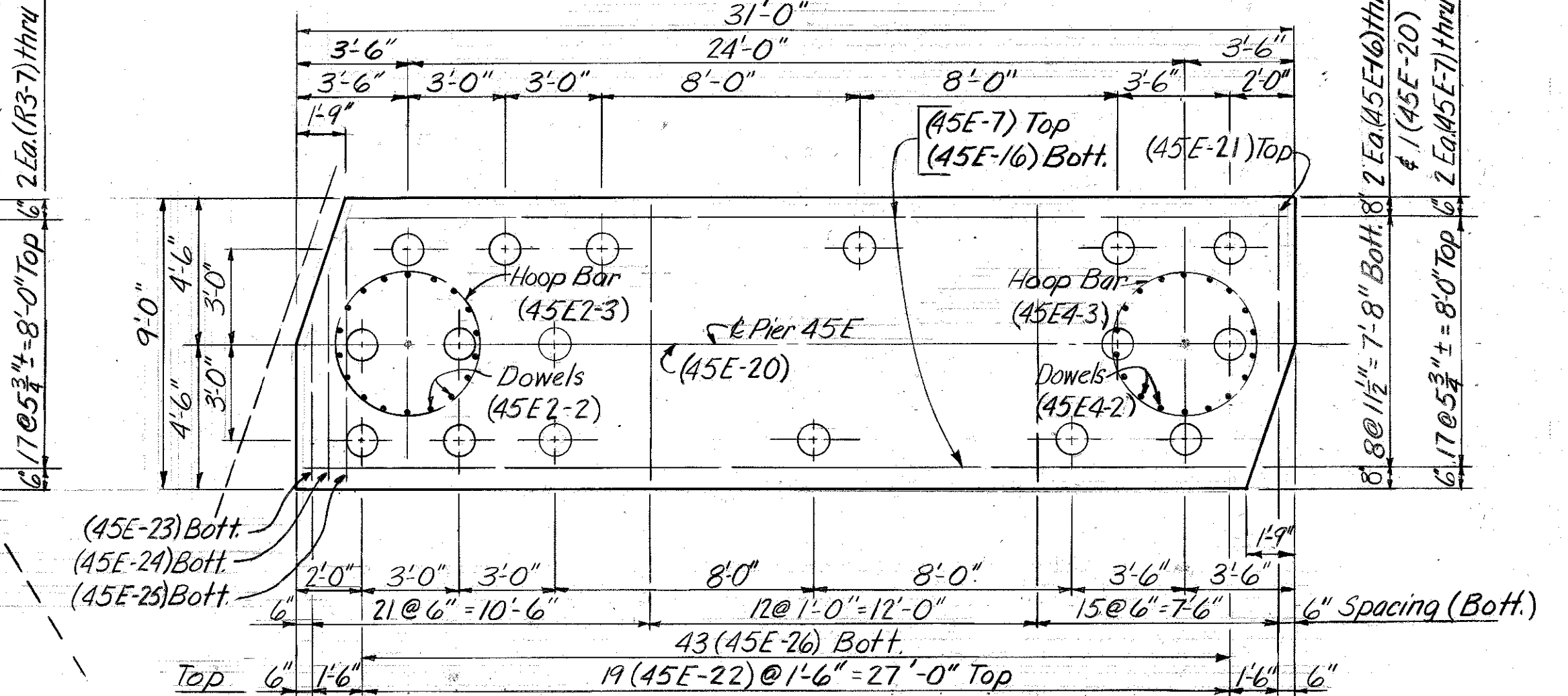
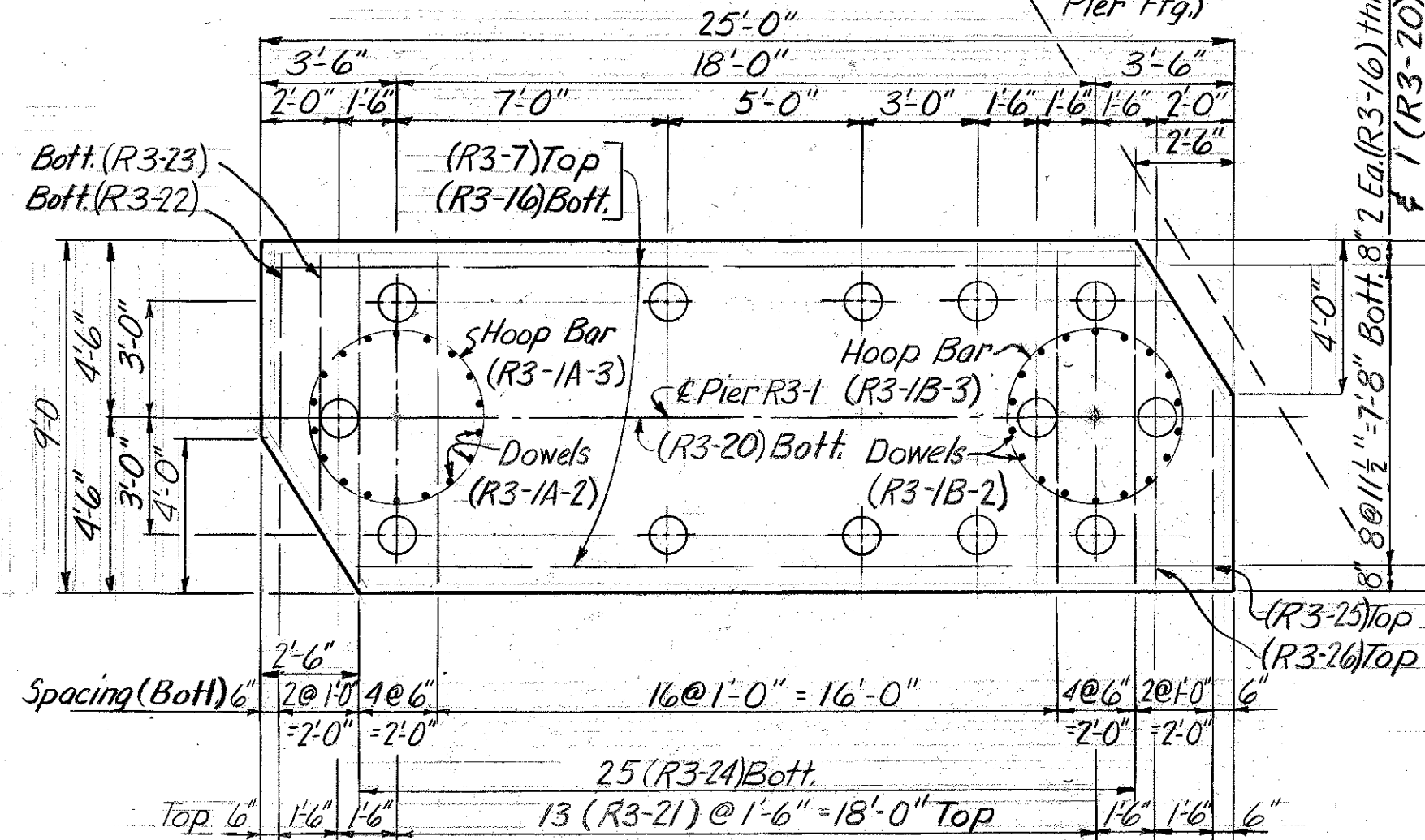
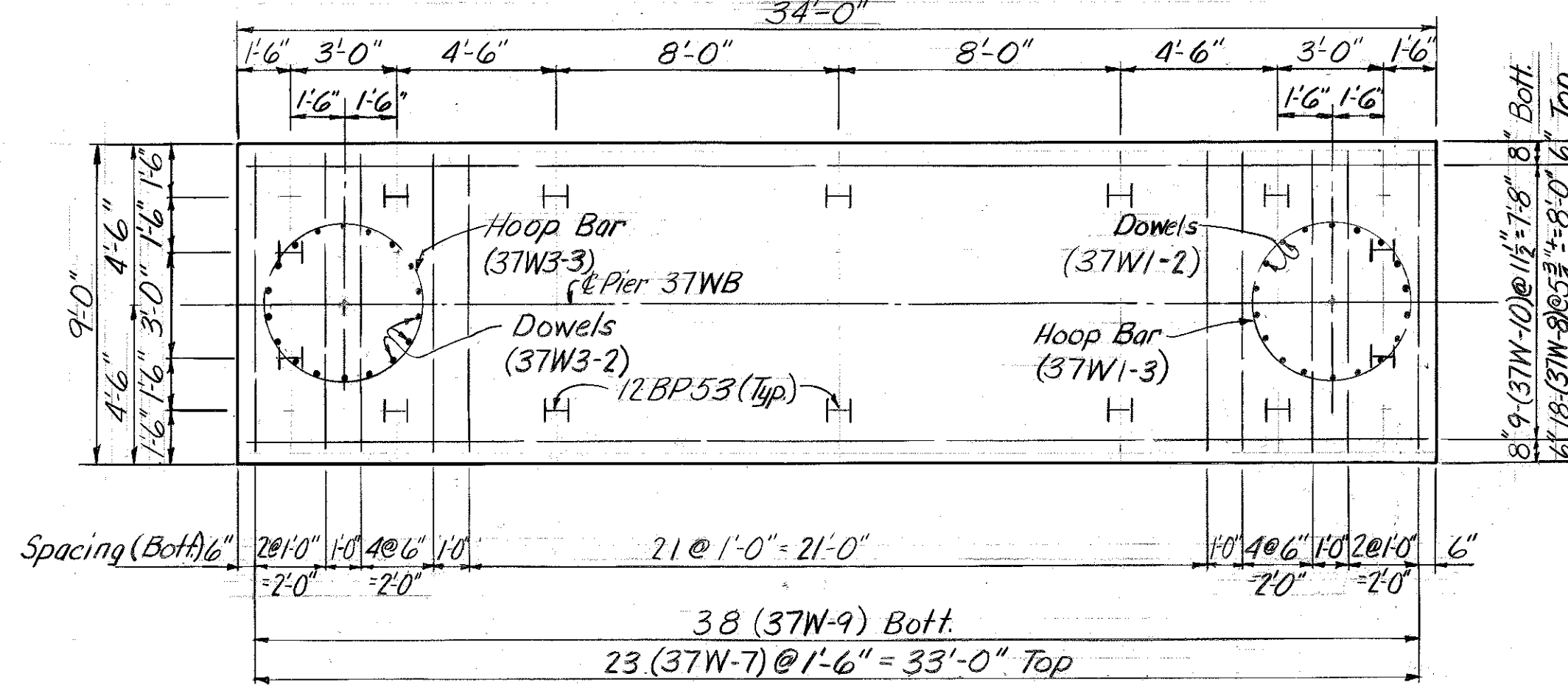
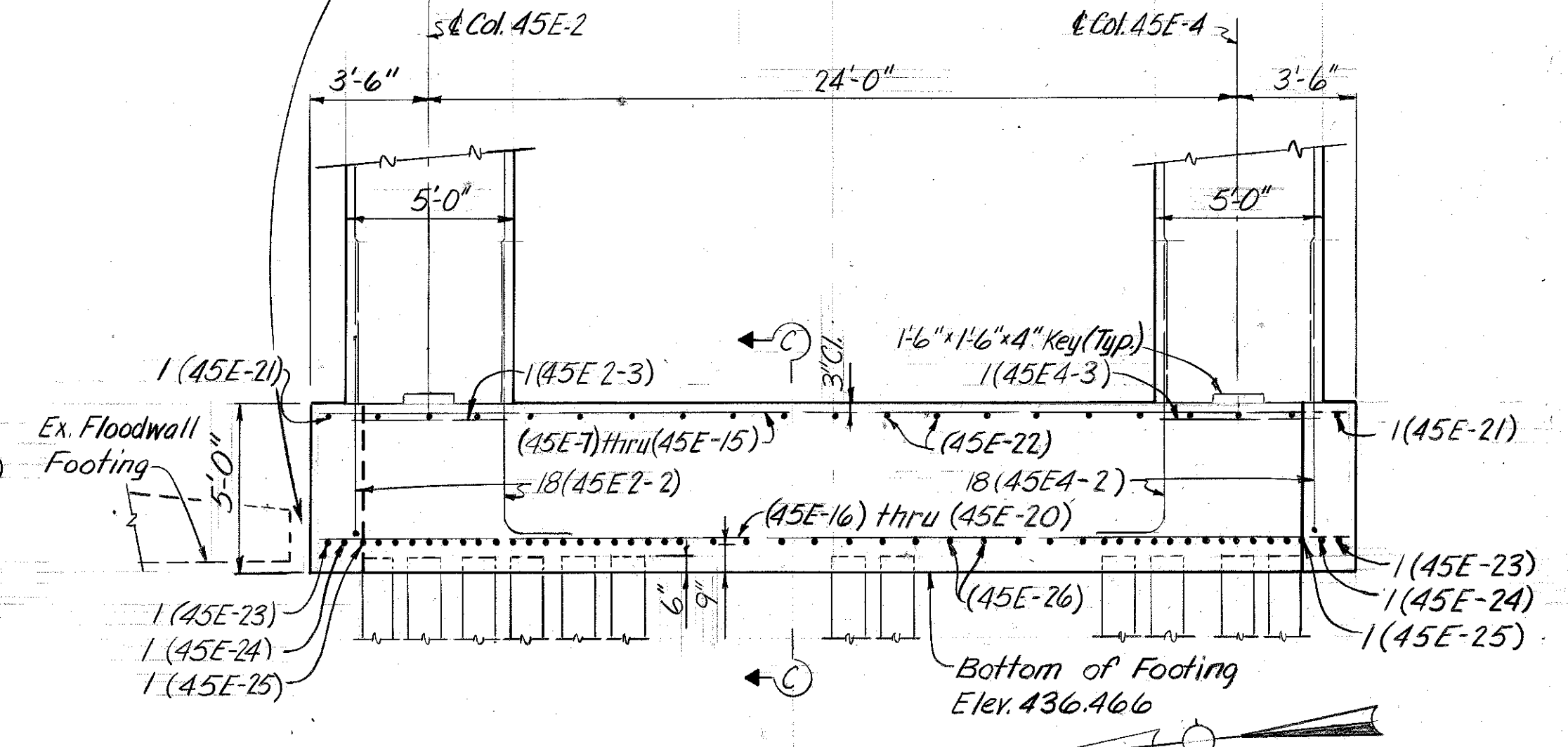
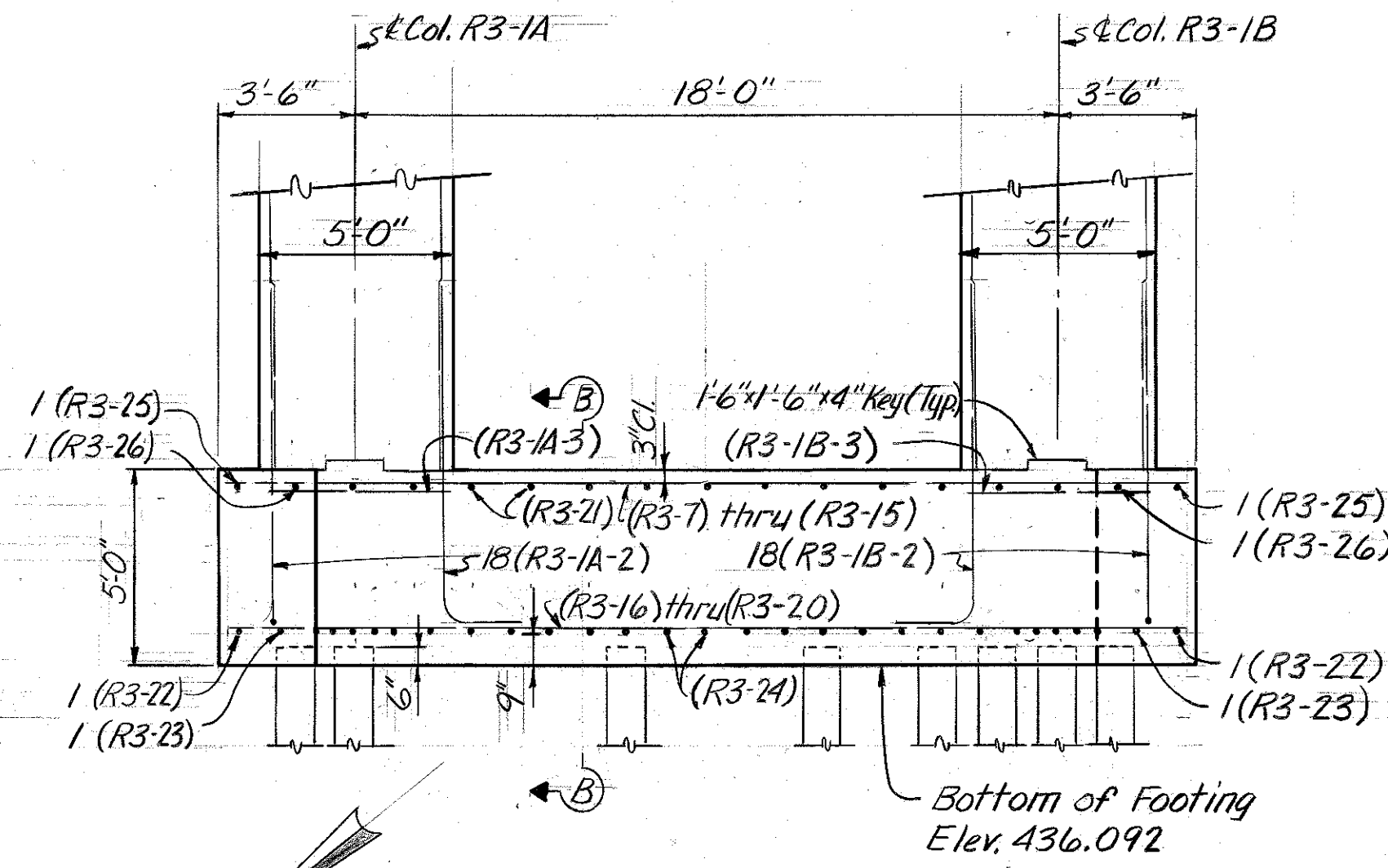
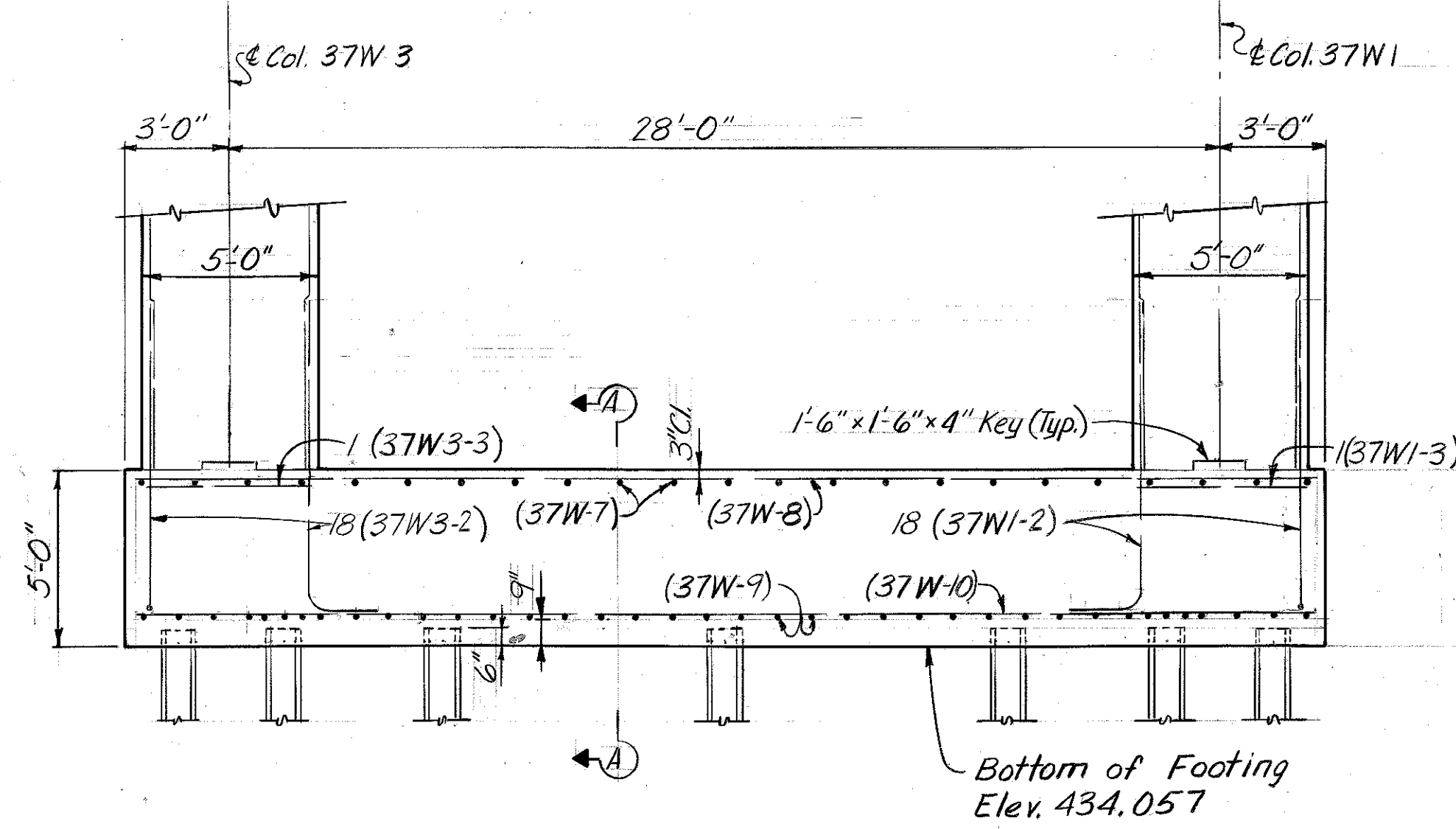
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. I 64-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

Work this Sheet with
Sheets A34 thru A36

SUBSTRUCTURE
FOOTING DETAILS

LETTING DATE.

After the footing has been poured and forms removed, fill area between Floodwall and Footing to an elev. equal to the bottom of Floodwall Footing with a concrete grout (Grout should fill all voids which may occur under Floodwall Footing incidental to Class "A" Concrete)



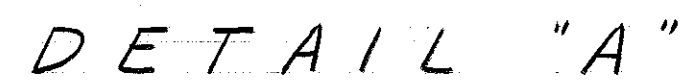
Notes:
(37W1-2), (37W3-2), (R3-1A-2), (R3-1B-2), (45E2-2), (45E4-2) dowel bars are to be placed with lower end radially out where possible.
For location of Dowels see Sheet A35
⊙ Indicates Piles, Option A thru F.
⊙ Indicates 12 BP53 Piles.
See Pile Record Sheet for location of Columns.

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FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. 164-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

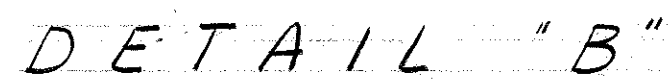
SUBSTRUCTURE
STRAP FOOTING DETAILS

SHEET A33

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
DETAILS BY	CHECKED BY	DATE	REVISED	DATE
ELW. 3-71	RHC	4-71		
TRACED BY	CHECKED BY	DATE	REVISED	DATE



Columns 42 W-G1 & 43 W-G1 are on Floodwall
Monoliths 102 & 98. See Sheet A35
for Dowel Details.



#4 Spiral equals size
W20 wire.



For Columns not shown see Floodwall
Monolith or Ramp Substructure Details.
① Turn radially outward where possible
(Lower end to rest on top of bottom
reinforcement in footing.)
For location of footing 39WB see Pile Record Sheet

Work this Sheet with Sheets A32 thru A36

SHEET A34

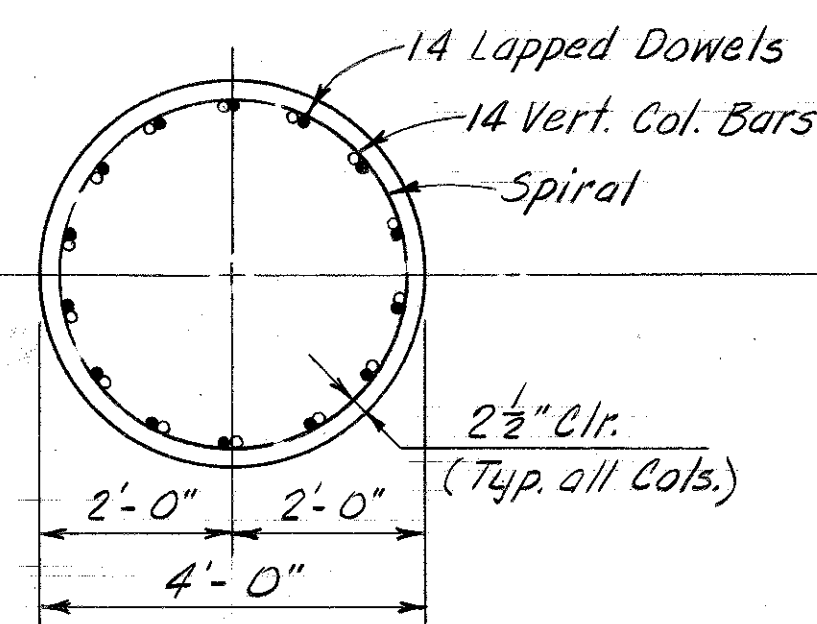
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE—LEXINGTON
ROAD **SP 56-273-11**

STATION 208+08		P. E. PROJECT NO. 164-2 (35) 3	
CONSTRUCTION PROJECT NO.		MAINTENANCE PROJECT NO.	DRAWING NO. 18572

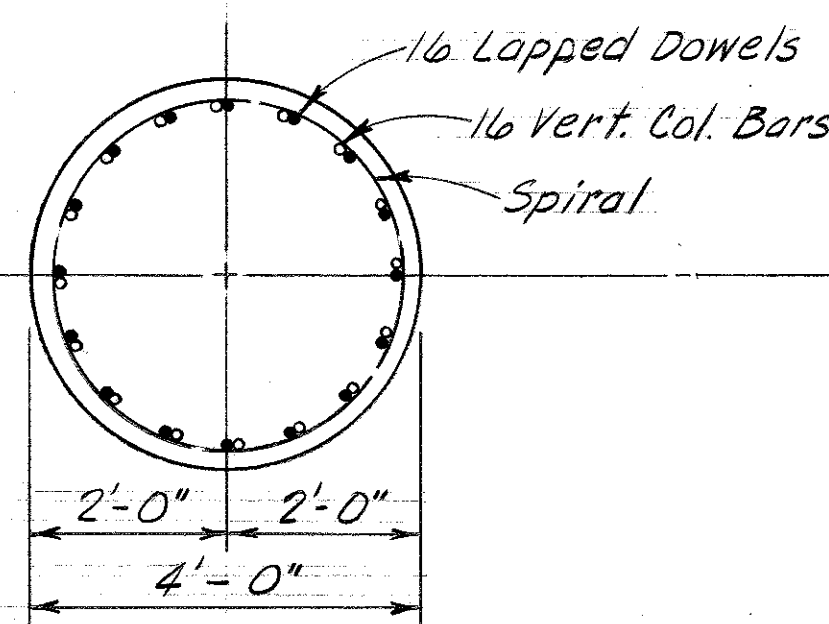
* Floodwall Ftg. Elev. may vary to fit existing condition, thus Col. Ht. may vary

SUBSTRUCTURE
COLUMN DETAILS

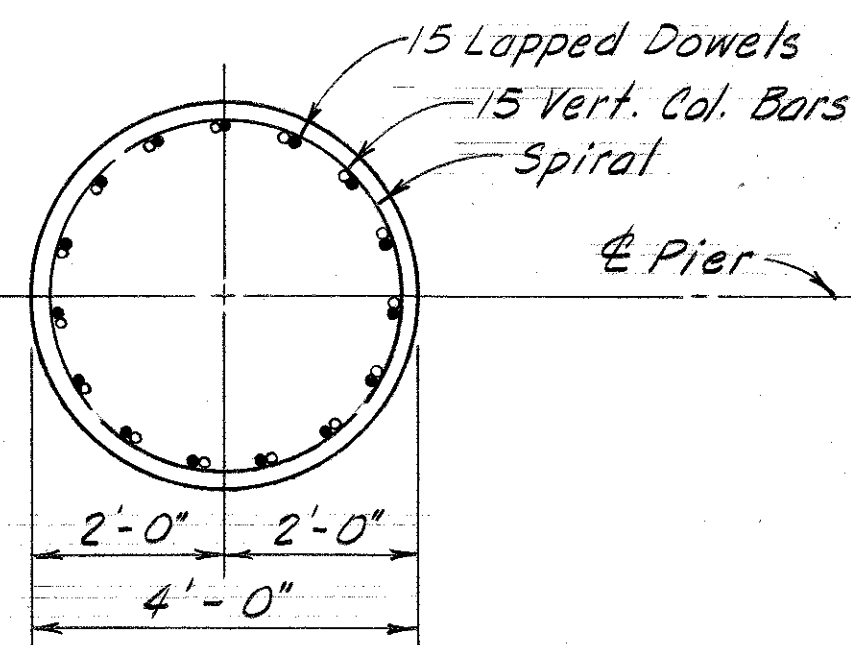
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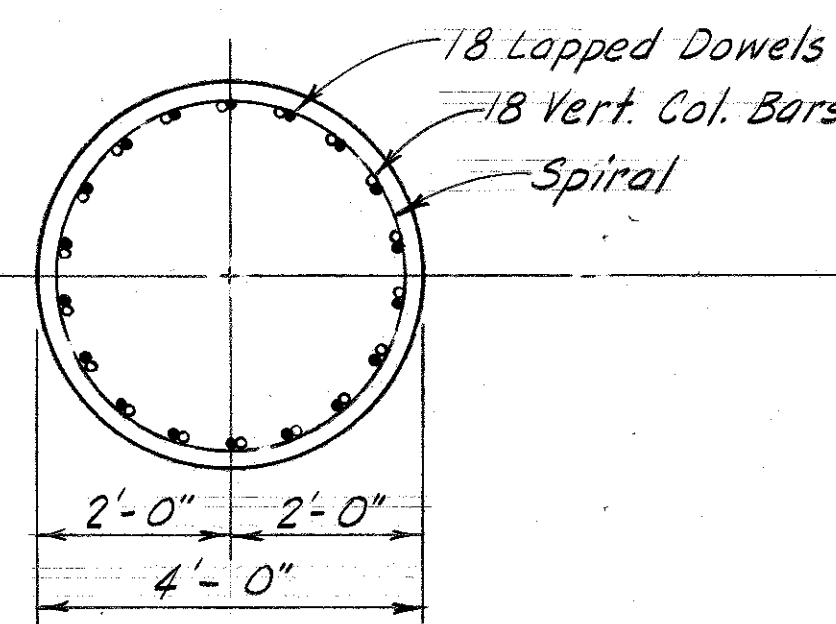
COLUMN SECTION
Column 40 W-G1



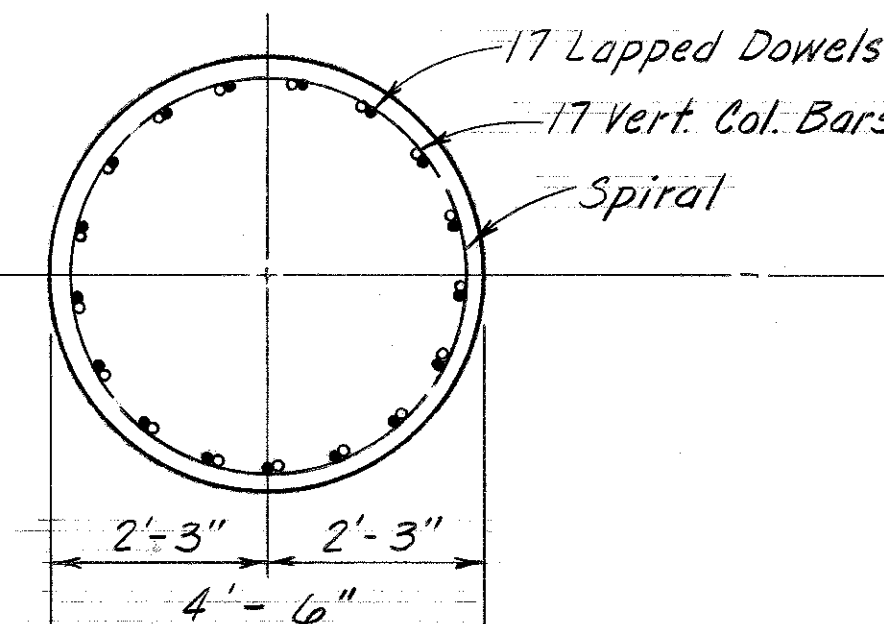
COLUMN SECTION
Columns 48 E-2 &
48 E-4



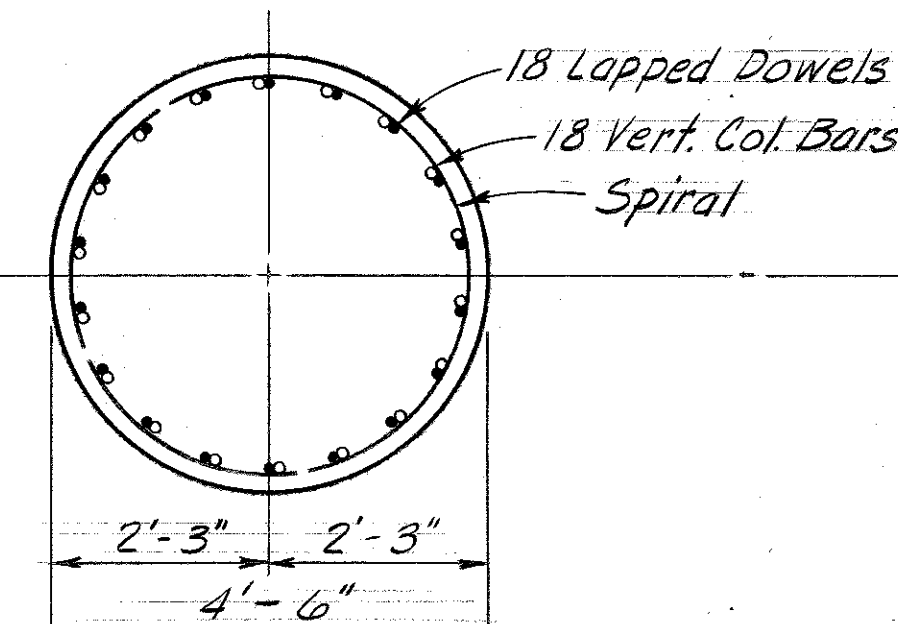
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29 E-G4



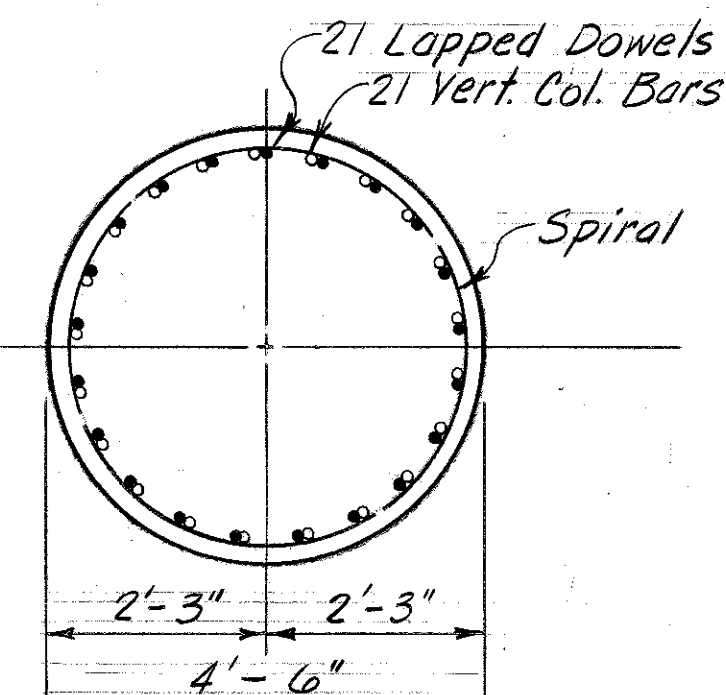
COLUMN SECTION
Columns 29 W-G1 &
29 W-G3



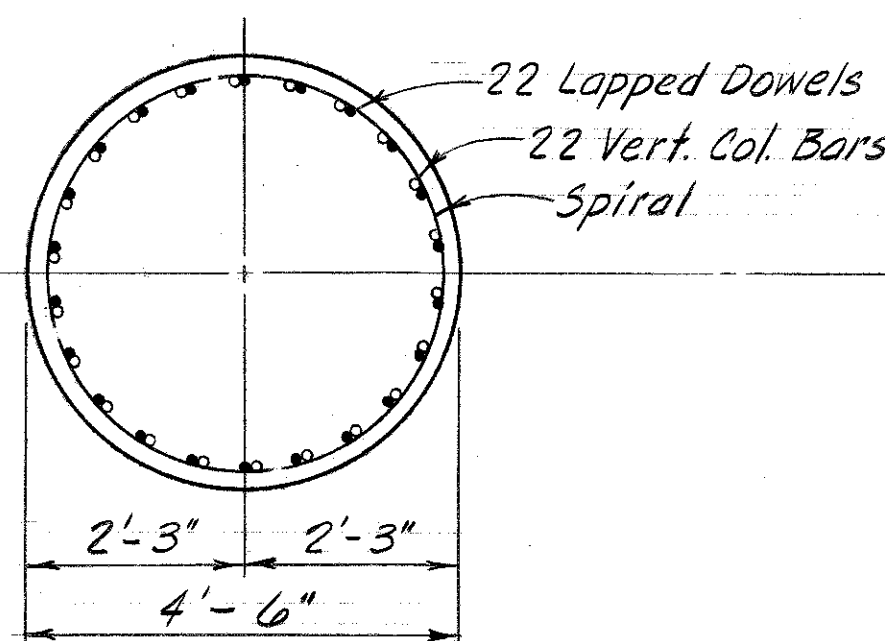
COLUMN SECTION
Columns 26 W-G1
26 W-G3
43 E-G4



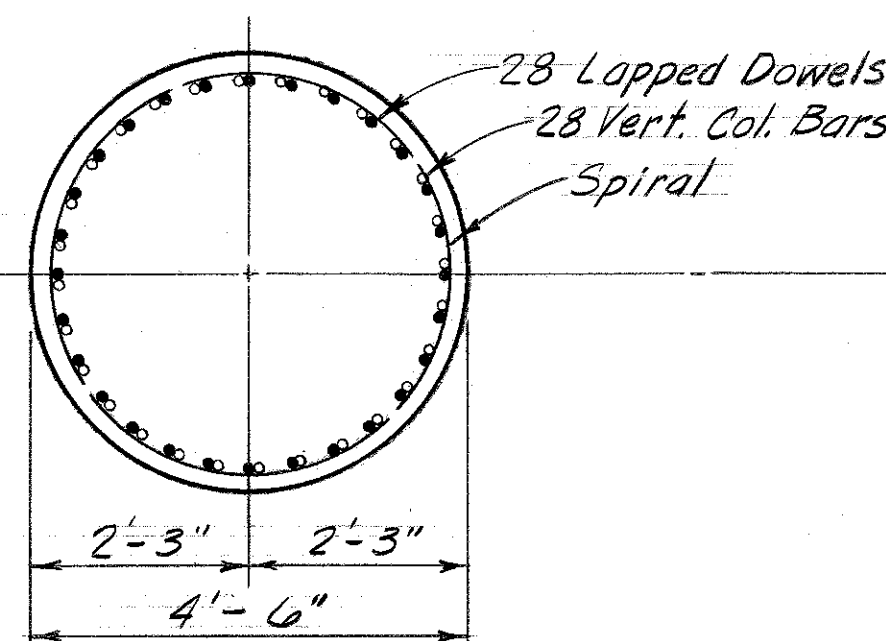
COLUMN SECTION
Columns 35 E-G2 &
35 E-G4



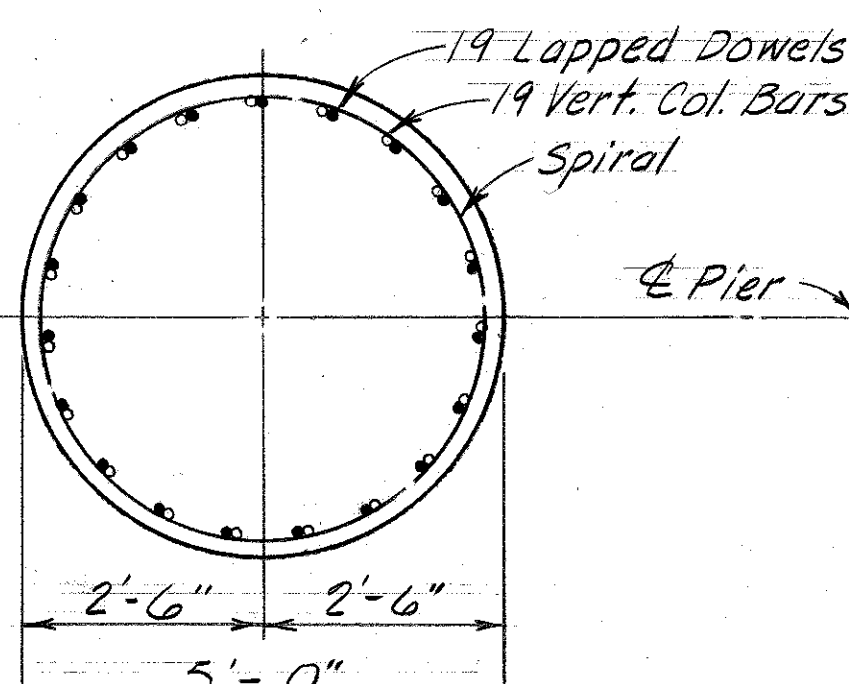
COLUMN SECTION
Columns 27 E-G2, 27 E-G4
30 W-G3 & 33 W-G1



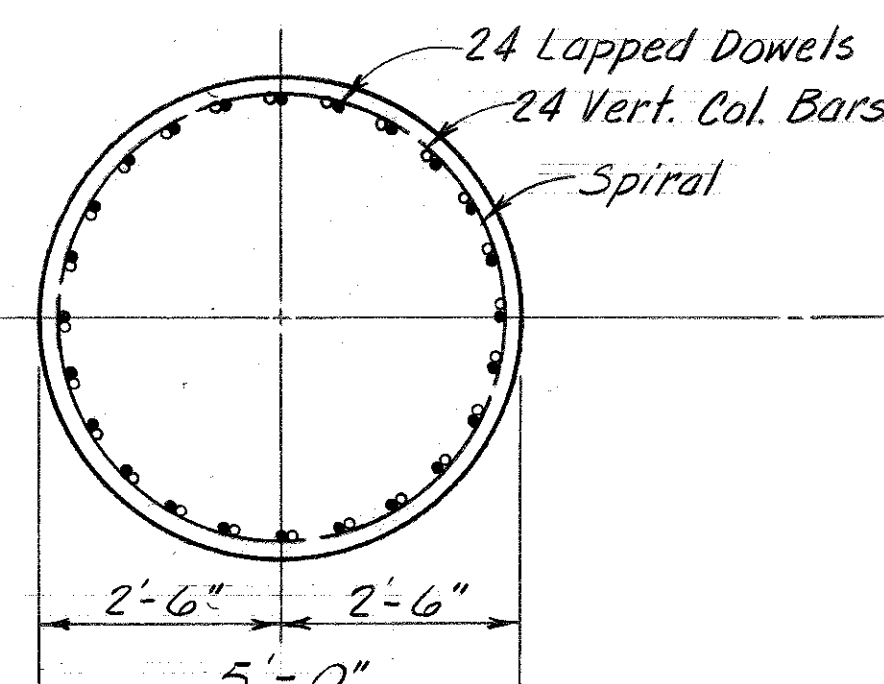
COLUMN SECTION
Column 39 W-G1



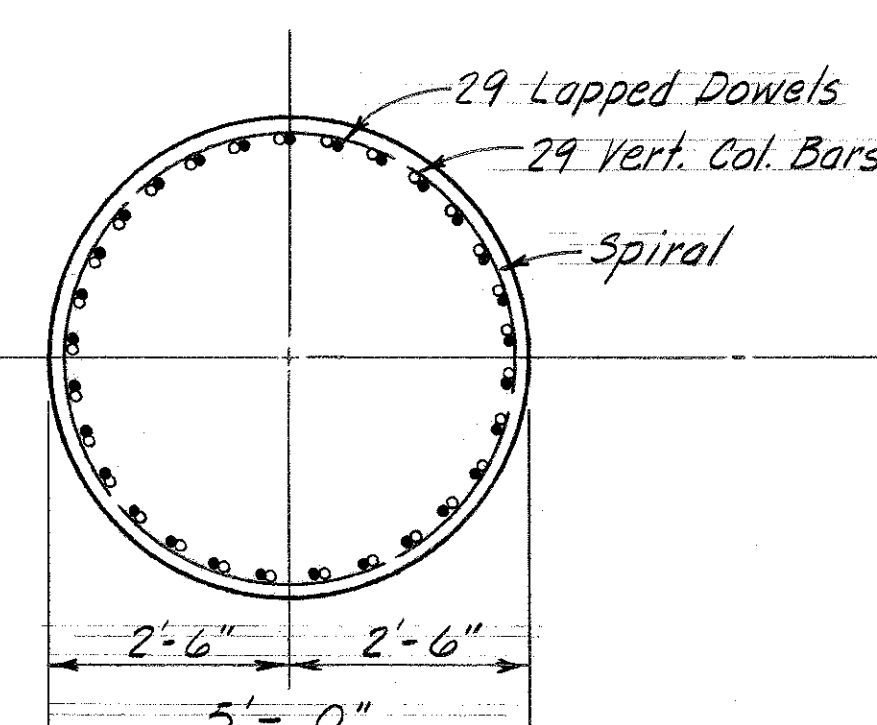
COLUMN SECTION
Column 30 E-G4



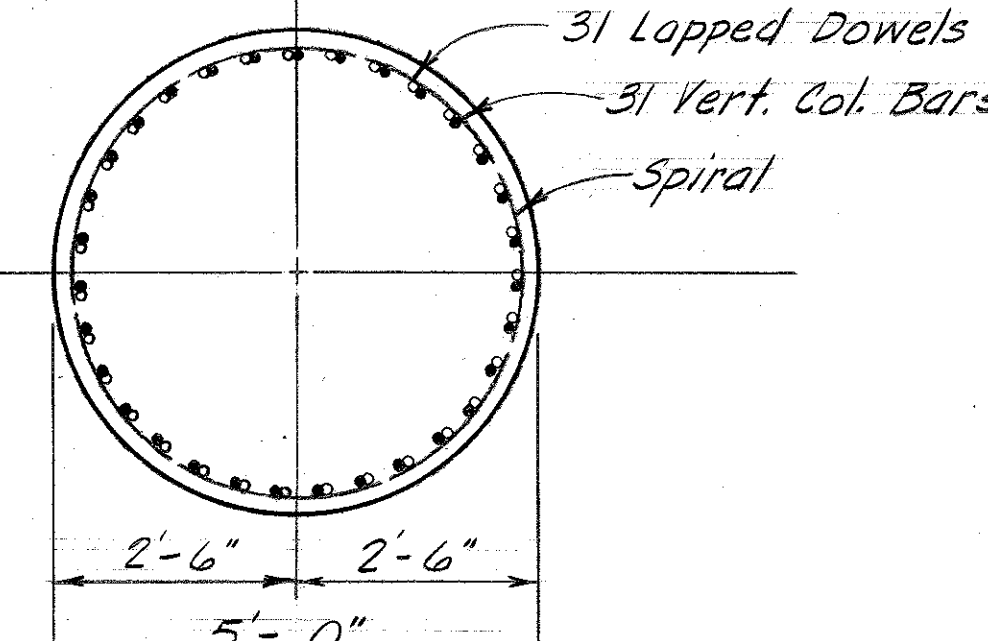
COLUMN SECTION
Columns 31 E-2 &
32 W-3



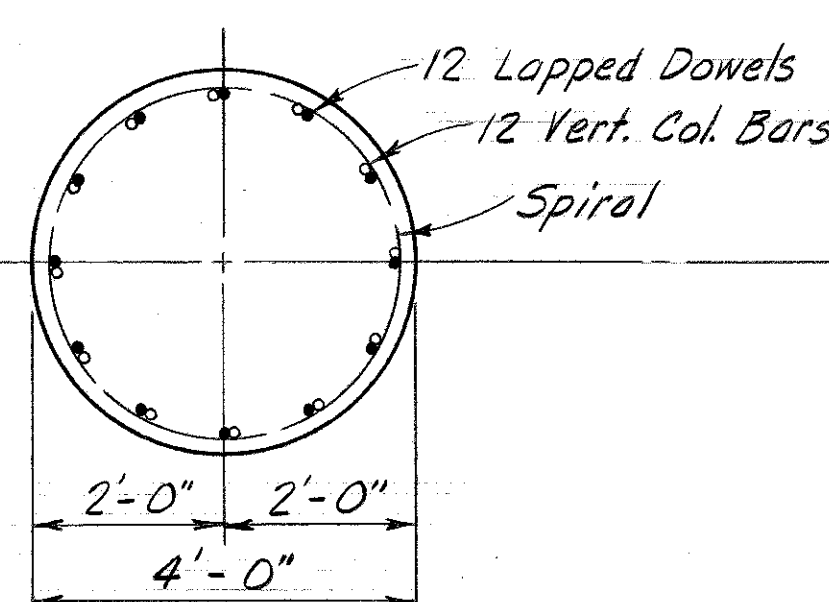
COLUMN SECTION
Column 34 E-G2



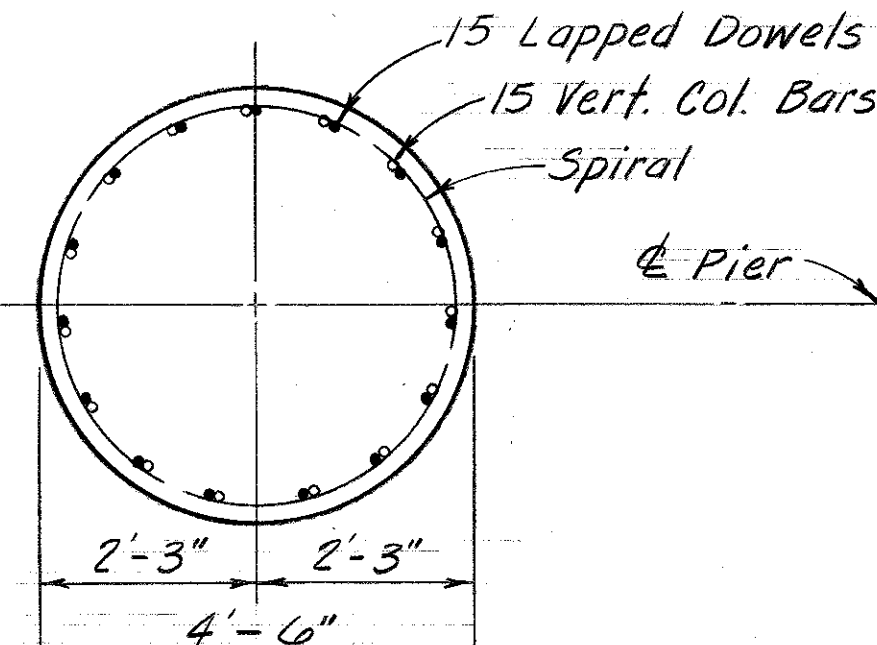
COLUMN SECTION
Column 34 E-G4



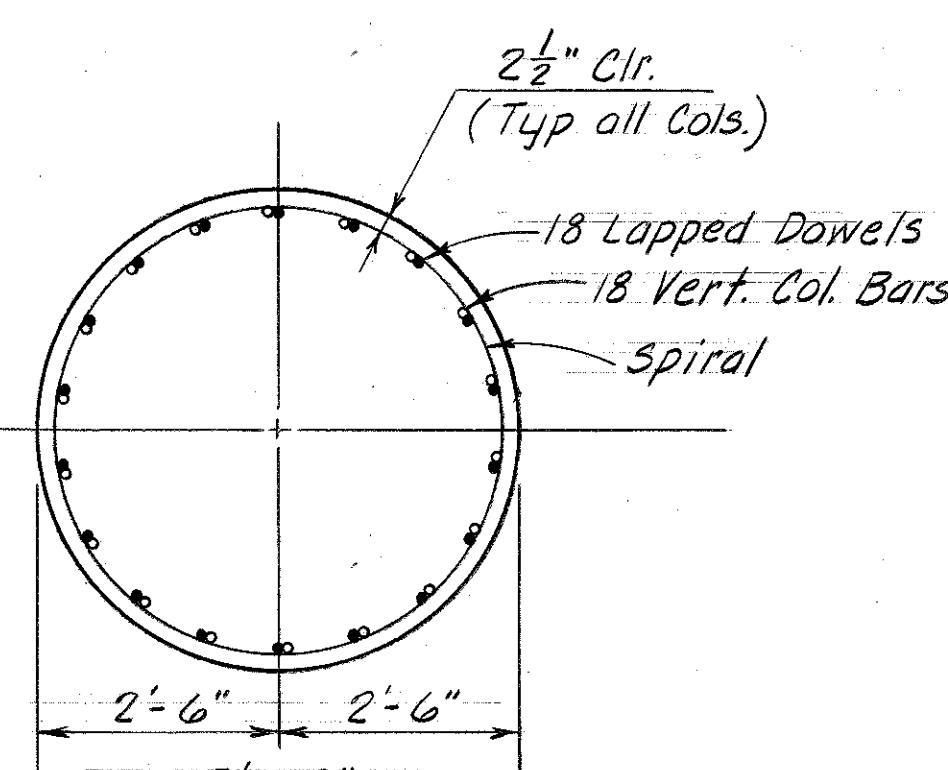
COLUMN SECTION
Column 30 W-1



COLUMN SECTION
Columns



COLUMN SECTION
Columns



COLUMN SECTION
Columns

32 E-G2	38 E-G4	46 W-G3
32 E-G4	40 W-G3	46 E-2
33 E-G2	40 E-G2	46 E-4
33 E-G4	41 W-G3	46 E-6
36 W-G1	42 E-G4	49 W-1
36 W-G3	43 W-G1	49 W-5
36 E-G2	44 W-G3	51 W-1
36 E-G4	45 W-G1	51 W-3
36 E-G6	46 W-G3	51 W-5
38 W-G1	47 W-G1	51 E-2
38 W-G3	48 W-G3	51 E-4
38 E-G2	49 W-G1	

26 E-G2	33 W-G3	44 E-G4
26 E-G4	35 W-G1	45 W-G1
27 W-G1	37 E-G2	47 E-4
27 W-G3	39 E-G4	47 E-6
28 W-G1	41 W-G3	49 E-2
28 W-G3	43 W-G1	49 E-4
28 E-G2	45 W-G3	50 W-1
28 E-G4	47 W-G1	50 W-3
31 W-G3	49 W-G3	50 W-5
31 E-G4		
32 W-G1		

34 W-G1	45 E-G4
34 W-G3	45 E-G6
R1-17A	45 E-G8
R1-17B	47 W-G1
37 W-G1	47 W-G3
37 W-G3	47 W-G5
R3-1A	47 W-G7
R3-1B	49 W-3
39 E-G2	50 E-2
39 E-G4	50 E-4
45 E-2	

NOTES:
Column Sections are cut just above top of footing to show vertical column bars and footing dowels.
Column Designation - Prefix denotes pier no., Suffix denotes column no. (29 W-G1 is Col. 1 in pier 29 westbound, or 31 E-2 is Col. 2 in pier 31 eastbound). The "Q" in the suffix indicates the column is under a longitudinal girder.
Work this sheet with Sheets A32 thru A36

SHEET A35

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P.E. PROJECT NO. 164-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

SUBSTRUCTURE
COLUMN SECTIONS

DESIGNED BY	CHECKED BY	DATE	REVIEWED	DATE
DETAILED BY <i>CBF</i>	CHECKED BY <i>RHC</i>	<i>4-7-71</i>	REVIEWED	DATE
TRACED BY	CHECKED BY	DATE	REVIEWED	DATE



Column	Det.	a	b	Nº Trans. Bars	Nº Long. Bars
36W-G1	A	$10\frac{1}{2}''$	9"	3	5
36W-G3	A	$10\frac{1}{2}''$	9"	3	5
36E-G2	A	$10\frac{1}{2}''$	9	3	5
36E-G4	A	$9\frac{1}{2}''$	9"	3	5
36E-G6	A	$10\frac{1}{2}''$	9"	3	5
37W-G1	F	-	$1'-0\frac{1}{2}''$	6	5
37W-G3	F	-	$1'-0\frac{1}{2}''$	6	5
37E-G2	D	$1'-0''$	$1'-0''$	5	5
37E-G4	D	$1'-0''$	$1'-0''$	5	5
37E-G6	D	$1'-1''$	$1'-1''$	5	5
38W-G1	C	$1'-0\frac{1}{2}''$	9"	5	5
38W-G3	C	$11\frac{1}{2}''$	9"	5	5
38E-G2	A	$10\frac{1}{2}''$	9"	3	5
38E-G4	A	$10\frac{1}{2}''$	9"	3	5
38E-G6	A	$10\frac{1}{2}''$	9"	3	5
39W-G1	D	$1'-2''$	$1'-2''$	5	5
39W-G3	D	$1'-2''$	$1'-2''$	5	5
R3-1A	F	-	$1'-0\frac{1}{2}''$	6	5
R3-1B	F	-	$1'-1\frac{1}{2}''$	6	5
39E-G2	E	6"	$1'-3''$	6	7
39E-G4	E	6"	$1'-3''$	6	7
40W-G1	C	$1'-0\frac{1}{2}''$	9"	5	5
40W-G3	C	$11\frac{1}{2}''$	9"	5	5
40E-G2	A	$9\frac{1}{2}''$	9"	3	5
40E-G4	A	$9\frac{1}{2}''$	9"	3	5
41W-G3	A	$10\frac{1}{2}''$	9"	3	5
42W-G1	D	$1'-0''$	$1'-0''$	5	5
42W-G3	D	$1'-0''$	$1'-0''$	5	5
42E-G4	A	$9\frac{1}{2}''$	9"	3	5
43W-G1	A	$9\frac{1}{2}''$	9"	3	5
43W-G3	A	$9\frac{1}{2}''$	9"	3	5
43E-G4	D	$1'-1''$	$1'-1''$	5	5
44W-G1	A	$9\frac{1}{2}''$	9"	3	5
44W-G3	A	$9\frac{1}{2}''$	9"	3	5
44E-G2	C	$11\frac{1}{2}''$	9"	5	5
44E-G4	C	$11\frac{1}{2}''$	9"	5	5
45W-G1	D	$1'-0''$	$1'-0''$	5	5
45W-G3	D	$1'-0''$	$1'-0''$	5	5
45E-2	F	-	$1'-2\frac{1}{2}''$	6	5
45E-G4	F	-	$1'-2\frac{1}{2}''$	6	5
45E-G6	F	-	$1'-2\frac{1}{2}''$	6	5
45E-G8	F	-	$1'-2\frac{1}{2}''$	6	5
46W-G1	A	$9\frac{1}{2}''$	9"	3	5

[illegible]

SHEET A36

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

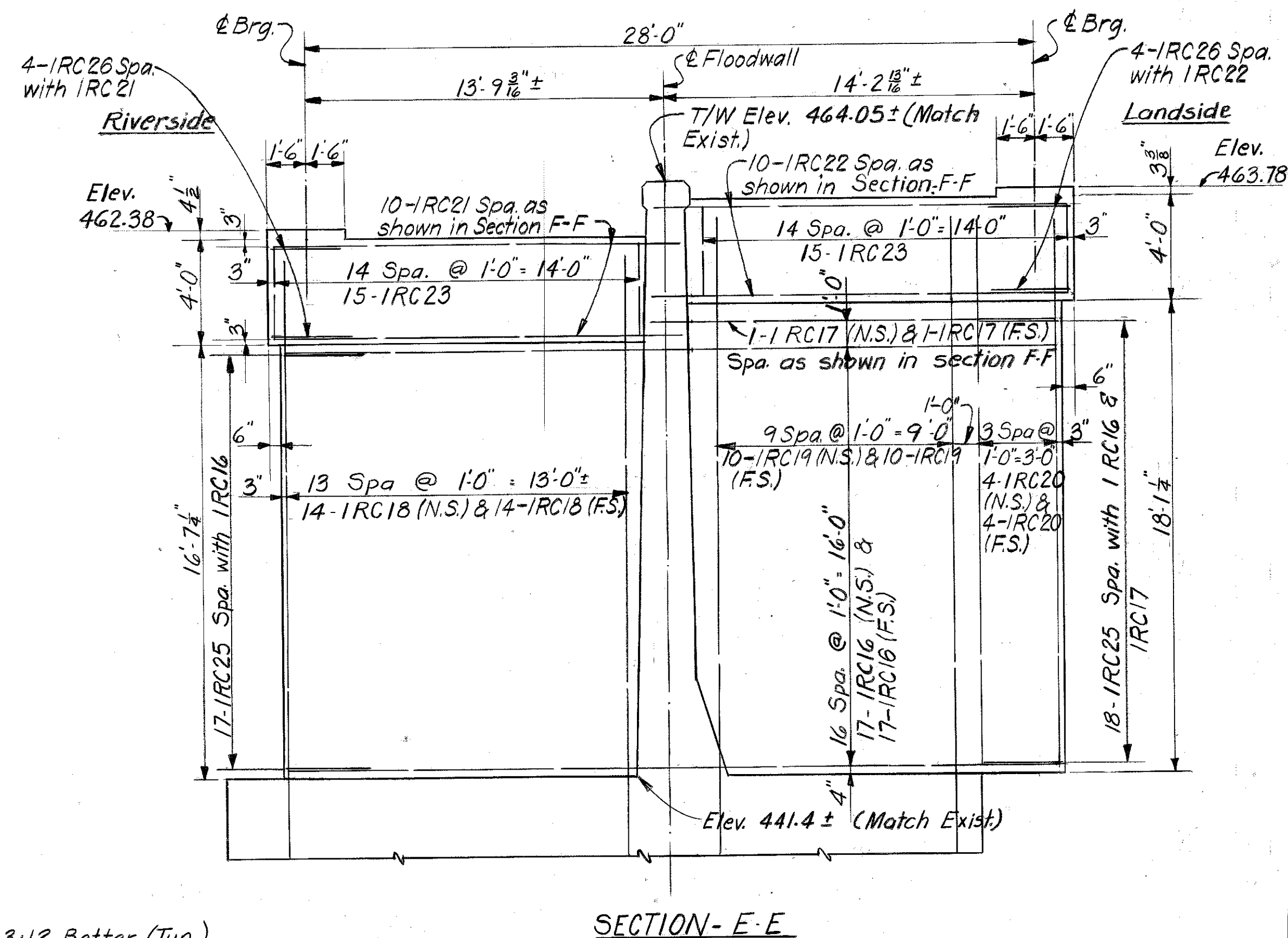
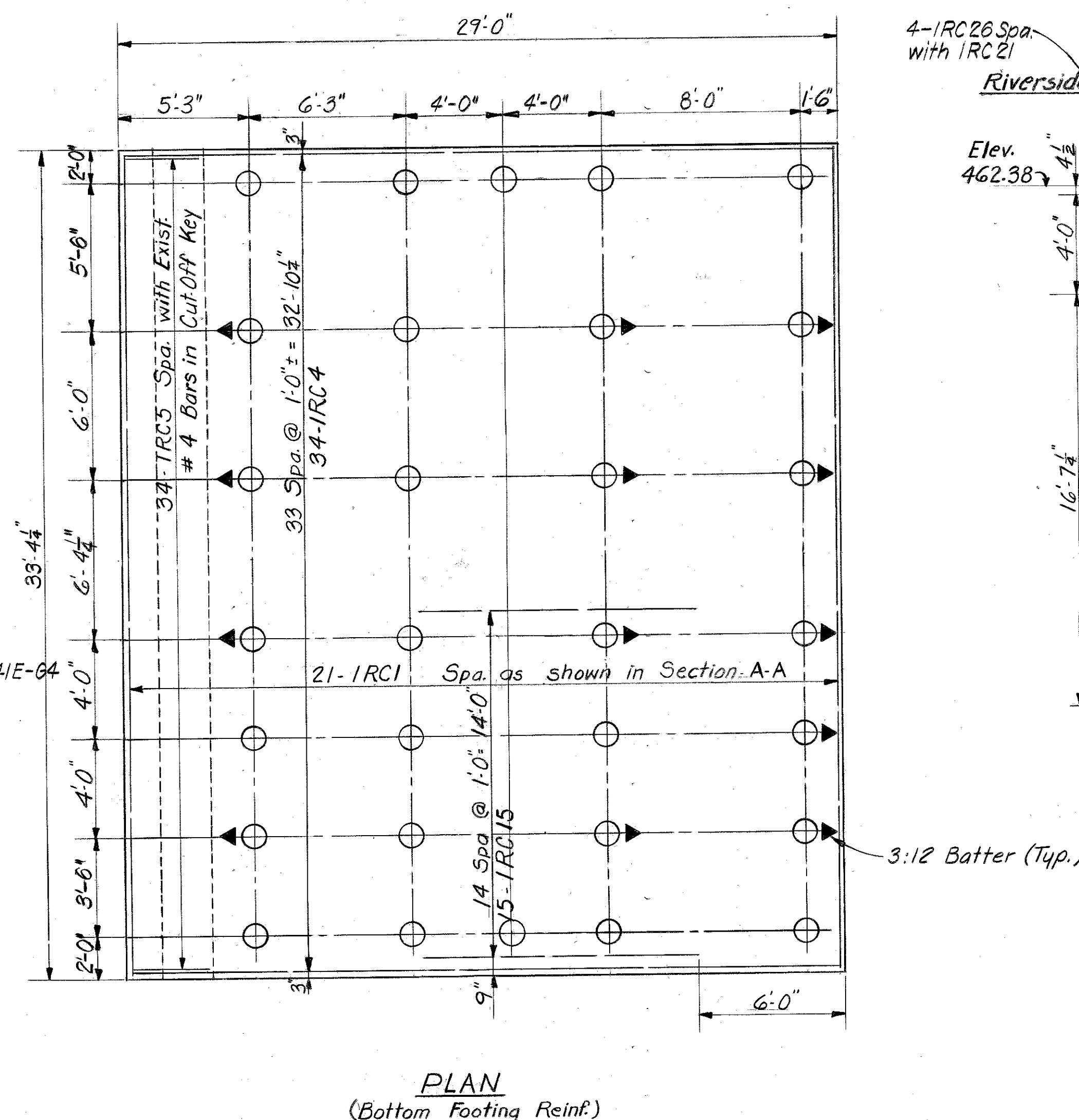
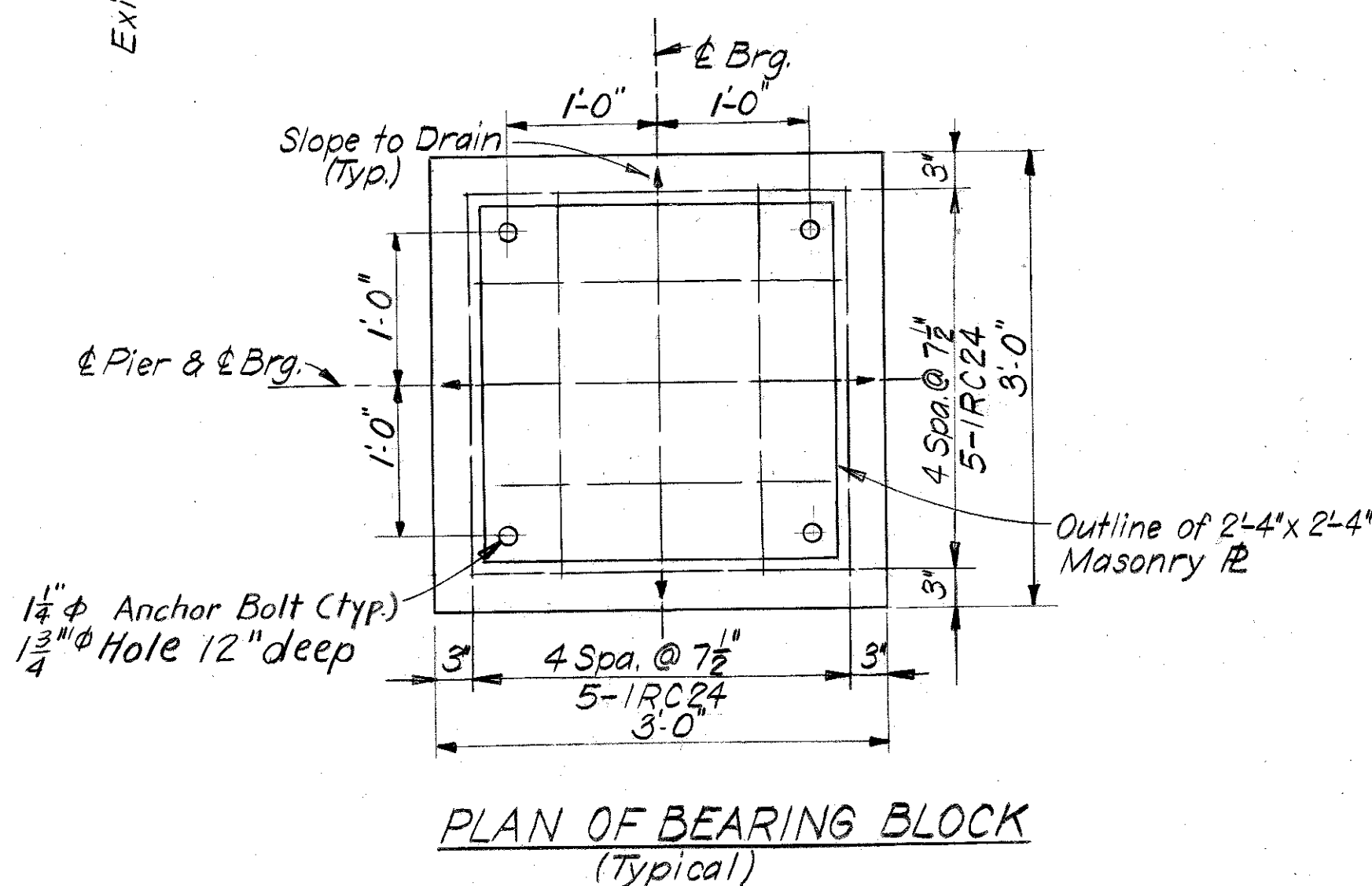
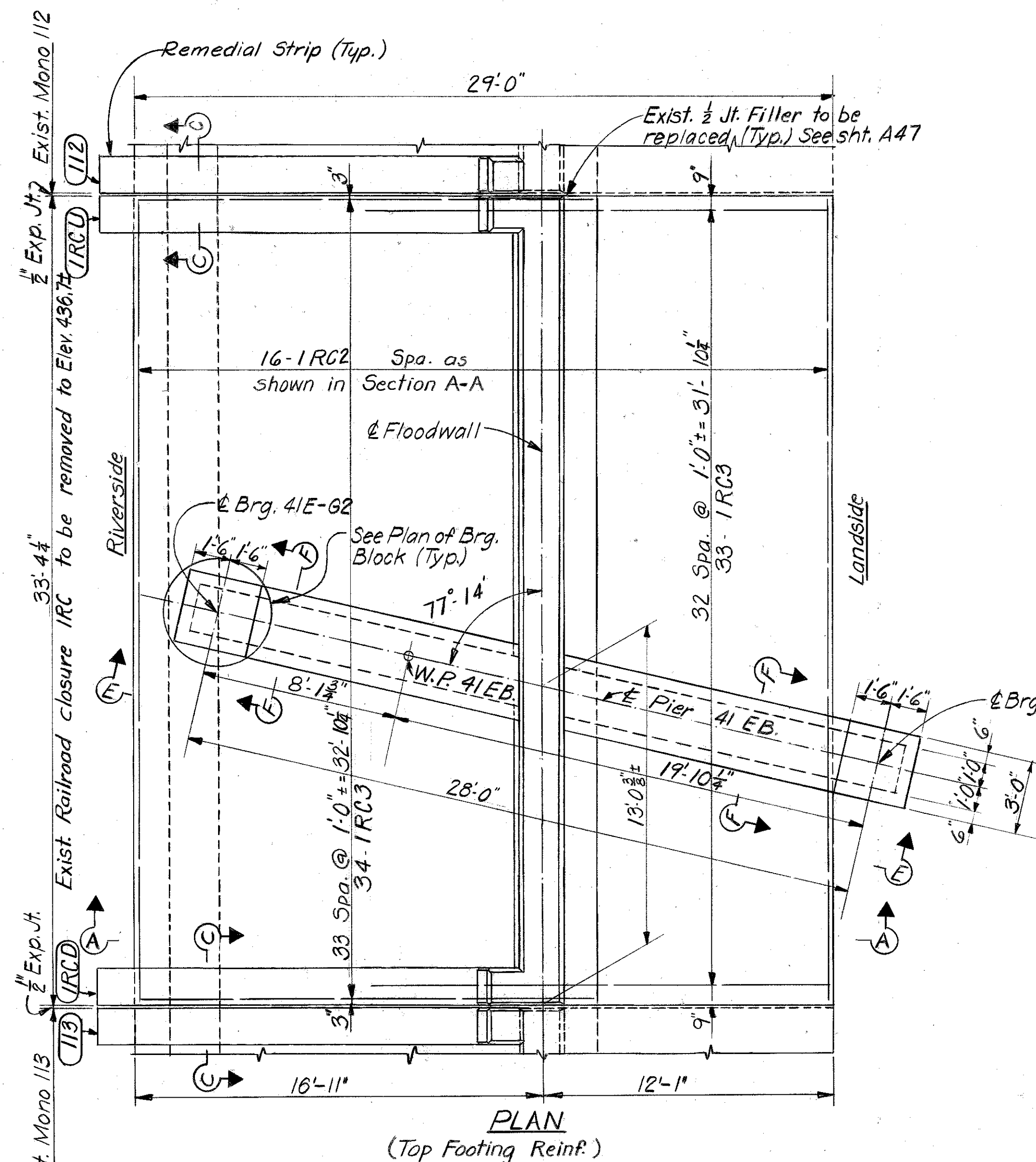
FRANKFORT COUNTY OF JEFFERSON

I 64-13TH ST. TO 7TH ST.
LOUISVILLE — LEXINGTON
ROAD

SP 56-273-11L

STATION 208+08	P. E. PROJECT NO. I 64-2 (35) 3
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.
	DRAWING NO. <i>18572</i>

DESIGNED BY	<i>RBS</i>	CHECKED BY	<i>PME</i>	DATE	<i>3-71</i>
DETAILS BY	<i>BMD</i>	CHECKED BY	<i>EB</i>	DATE	<i>4/71</i>
DESIGNED BY		CHECKED BY		DATE	
DETAILS BY		CHECKED BY		DATE	



NOTES FOR FLOODWALL MONOLITHS

1. R.S. Denotes Riverside.
 2. L.S. Denotes Landside.
 3. The clear distance from the face of concrete to the first layer of reinforcing is $2\frac{1}{2}$ " unless otherwise noted.
 4. Care shall be exercised in removing existing footing to prevent damage to the projection of existing reinforcement in Cut-Off Key.
 5. Existing reinforcement to be cleaned by sandblasting before pouring replacement footing. (Incidental to Class "A" Concrete)
 6. Floodwall reconstruction shall be commenced no earlier than May 1 and completed no later than December 31 of the same Year.
 7. Existing concrete dimensions and reinforcement shown for information only.
 8. Monolith numbers, dimensions and elevations shown are based on "As-Built" Plans for Louisville Flood Protection, section B, by U.S. Engineer office, Louisville Ky.
 9. Floodwall cope and remedial strips at top of floodwall are to be chamfered $2'$. All other exposed corners shall have the standard $\frac{3}{8}"$ chamfer.
 10. For details of Remedial Strips and for Sections B-B, C-C & D-D see sheet A44
 11. For Miscellaneous Details see sheet A47
 12. Vertical Reinforcement in Floodwalls, Pier Walls and Column Bases shall be embedded in the footing to the elevation of the bottom footing reinforcement.
 13. For Section A-A & F-F See Sh. A38.
 14. Where excavation occurs adjacent to Floodwall the excavated soil shall be replaced and compacted to its original state.
- SHEET A37
- COMMONWEALTH OF KENTUCKY**
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE — LEXINGTON
ROAD

SP 56-273-11L

SUBSTRUCTURE

RAILROAD CLOSURE IRC, PIER 41 E (G2 & G4)

SHEET A37

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

FRANKFORT
COUNTY OF
JEFFERSON

I 64-13TH ST. TO 7TH ST.
LOUISVILLE — LEXINGTON
ROAD

SP 56-273-11

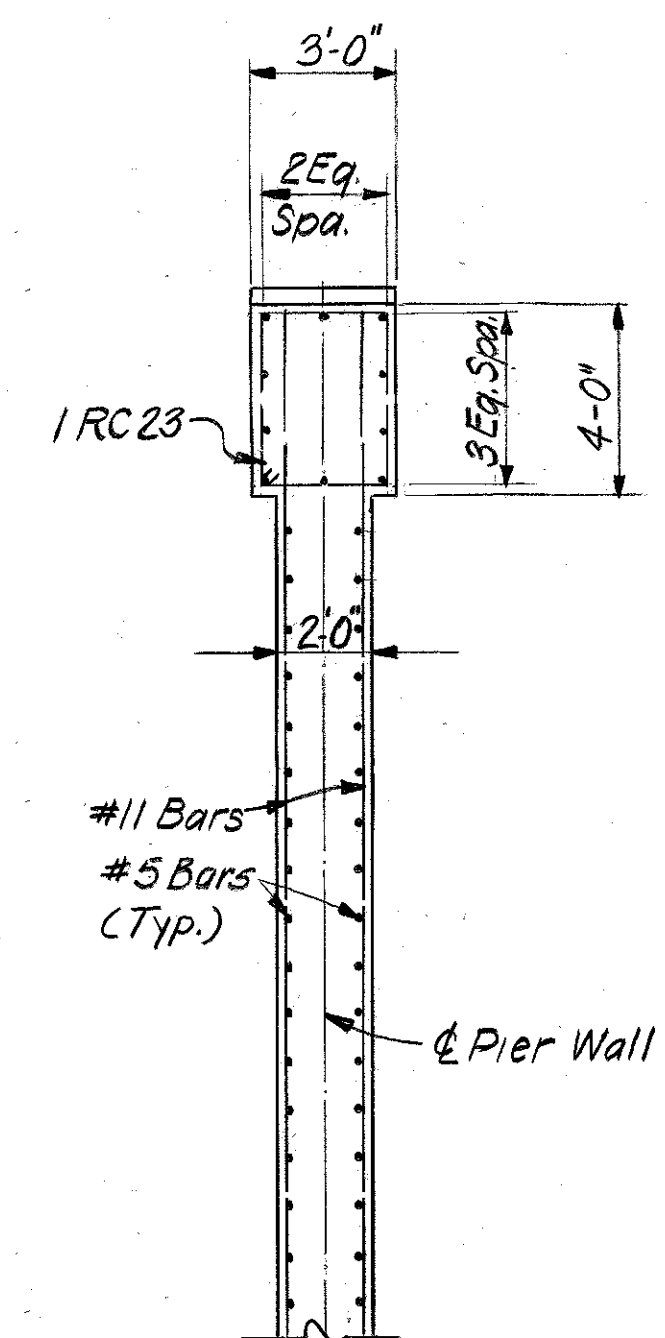
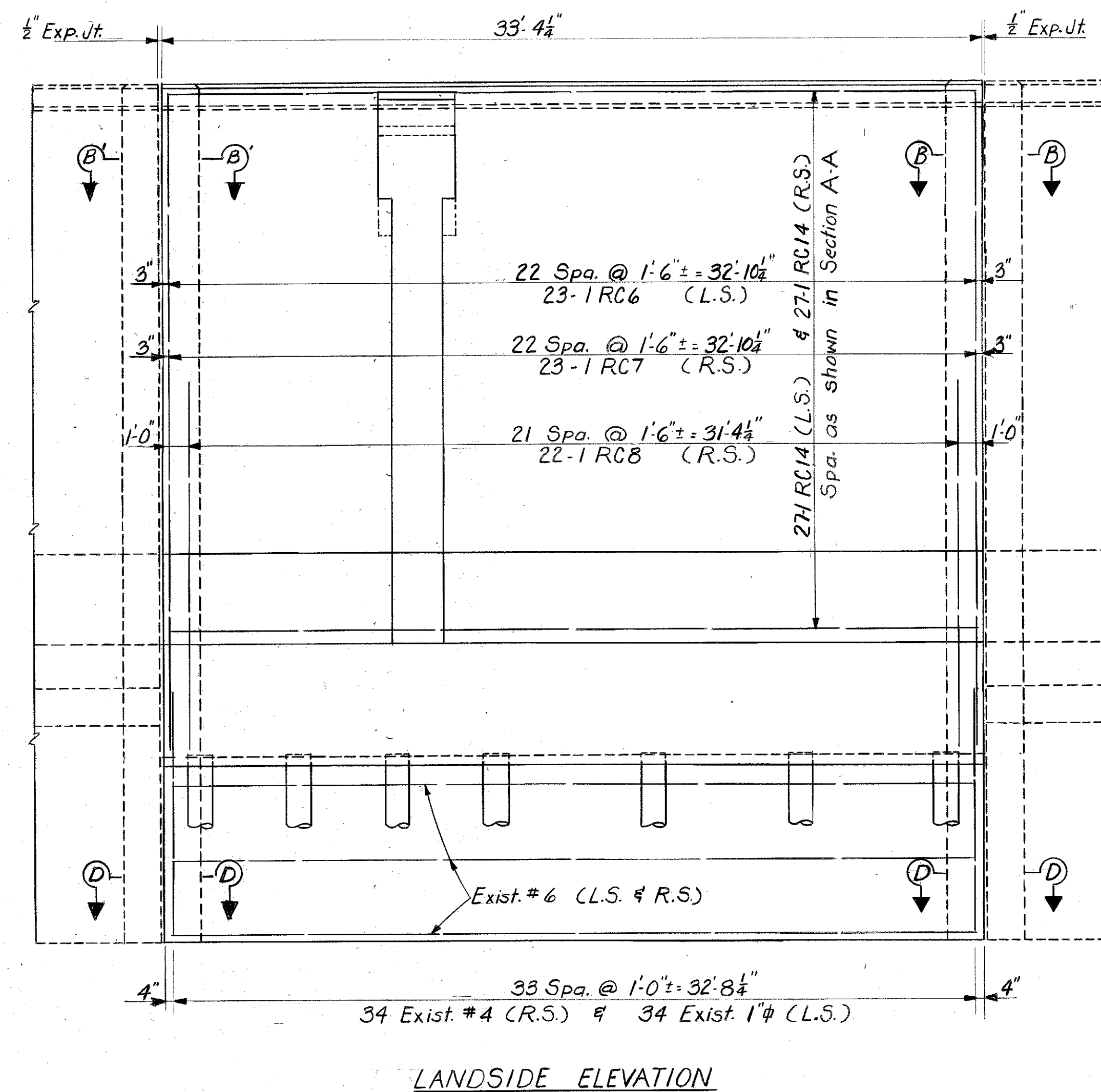
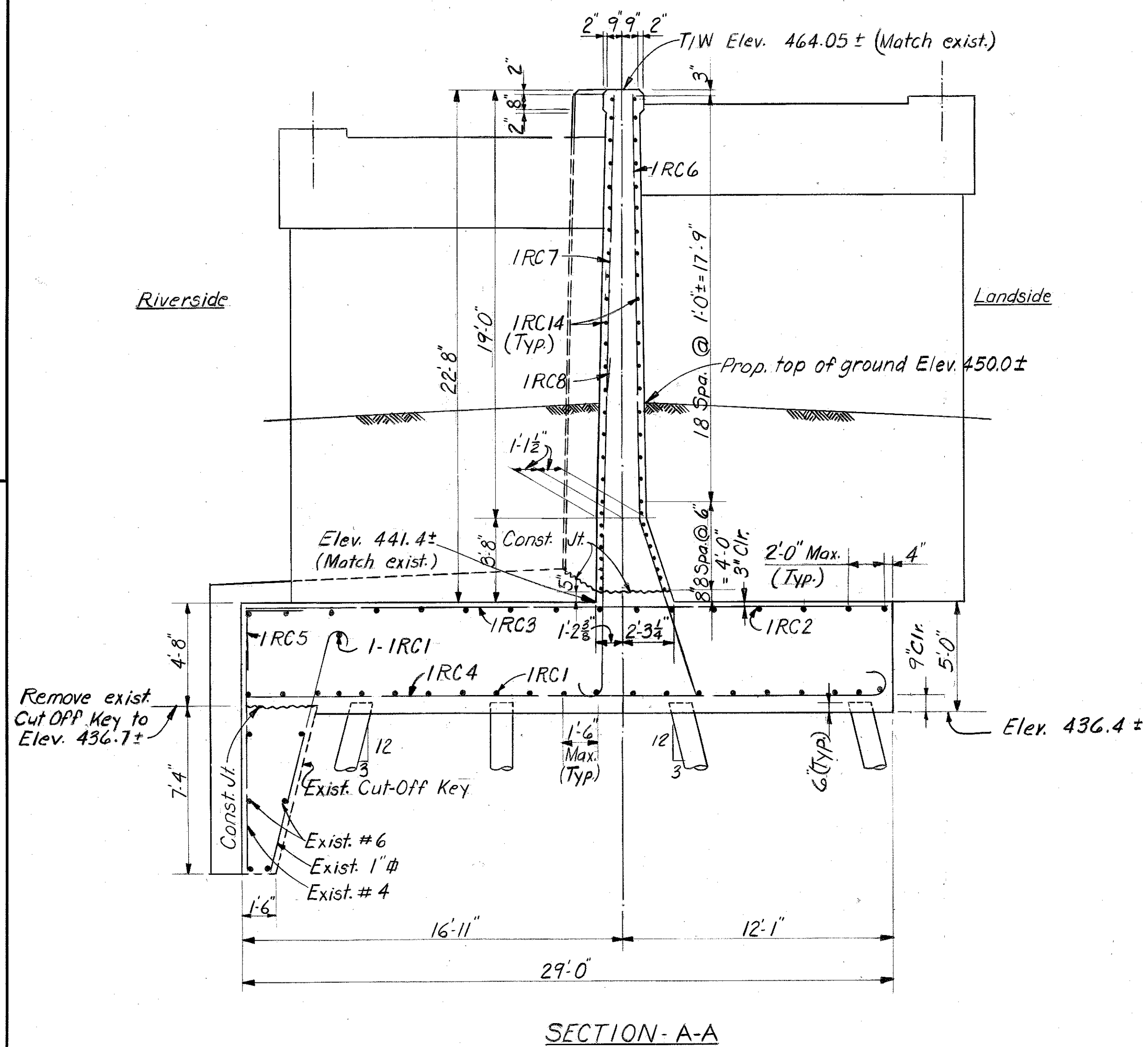
STATION 208+05

R E PROJECT NO 7

DRAFTING NO.

18572

DESIGNED BY <i>RBS</i>	CHECKED BY <i>PME</i>	DATE <i>3-71</i>	REVISED _____	DATE _____
DRAWN BY <i>BMD</i>	DETAILED BY <i>EB</i>	DATE <i>4/71</i>	REVISED _____	DATE _____
CHECKED BY _____	CHECKED BY _____	DATE _____	REVISED _____	DATE _____



SECTION-F.F

NOTE:
For Floodwall Monolith Notes See Sht. A37

SHEET A38

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

FRANKFORT COUNTY OF

JEFFERSON

I 64-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON

ROAD

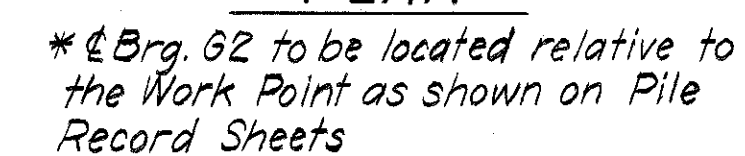
STATION 208+08

P. E. PROJECT NO. I 64-2 (35) 3

CONSTRUCTION PROJECT NO.	MANTENANCE PROJECT NO.	DRAWING NO.
		18572

SUBSTRUCTURE
RAILROAD CLOSURE IRC, PIER 41E (G2 & G4)

APPROVED BY: RBS	CHECKED BY: PME	DATE: 4-71	REVISED: _____	DATE: _____
REVIEWED BY: RBS	CHECKED BY: PME	DATE: 4-71	REVISED: _____	DATE: _____
TRACED BY: _____	CHECKED BY: _____	DATE: _____	REVISED: _____	DATE: _____



NOTE
See Sheet A37 for "Notes For Floodwall
Monoliths."



SUBSTRUCTURE
MONO III, PIER 42E(G2)

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

FRANKFORT COUNTY OF

JEFFERSON

I 64-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

SP 56-273-111

STATION 208+08

CONSTRUCTION PROJECT NO.

P. E. PROJECT NO. I 64-2 (35) 3

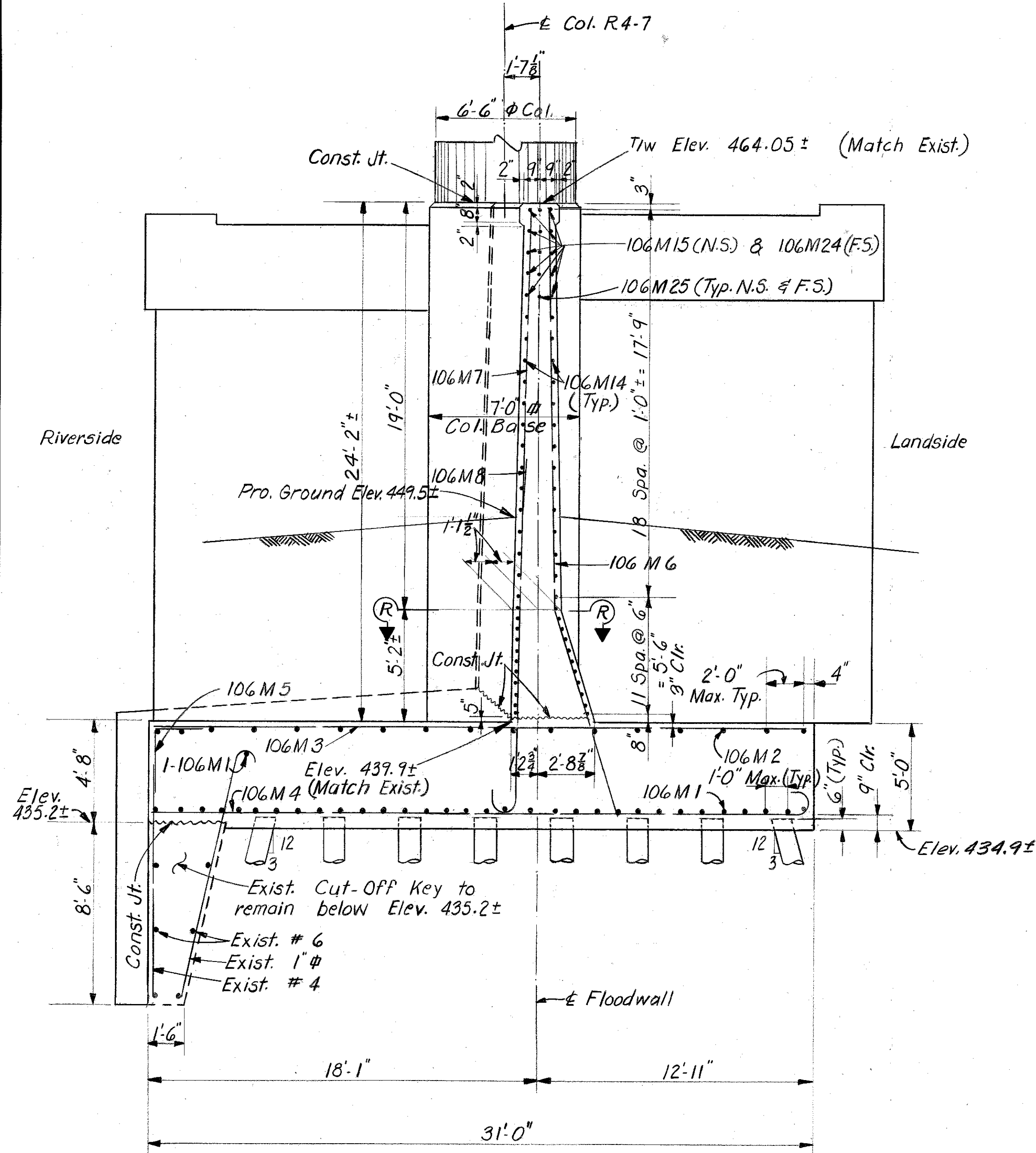
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DRAWING NO.

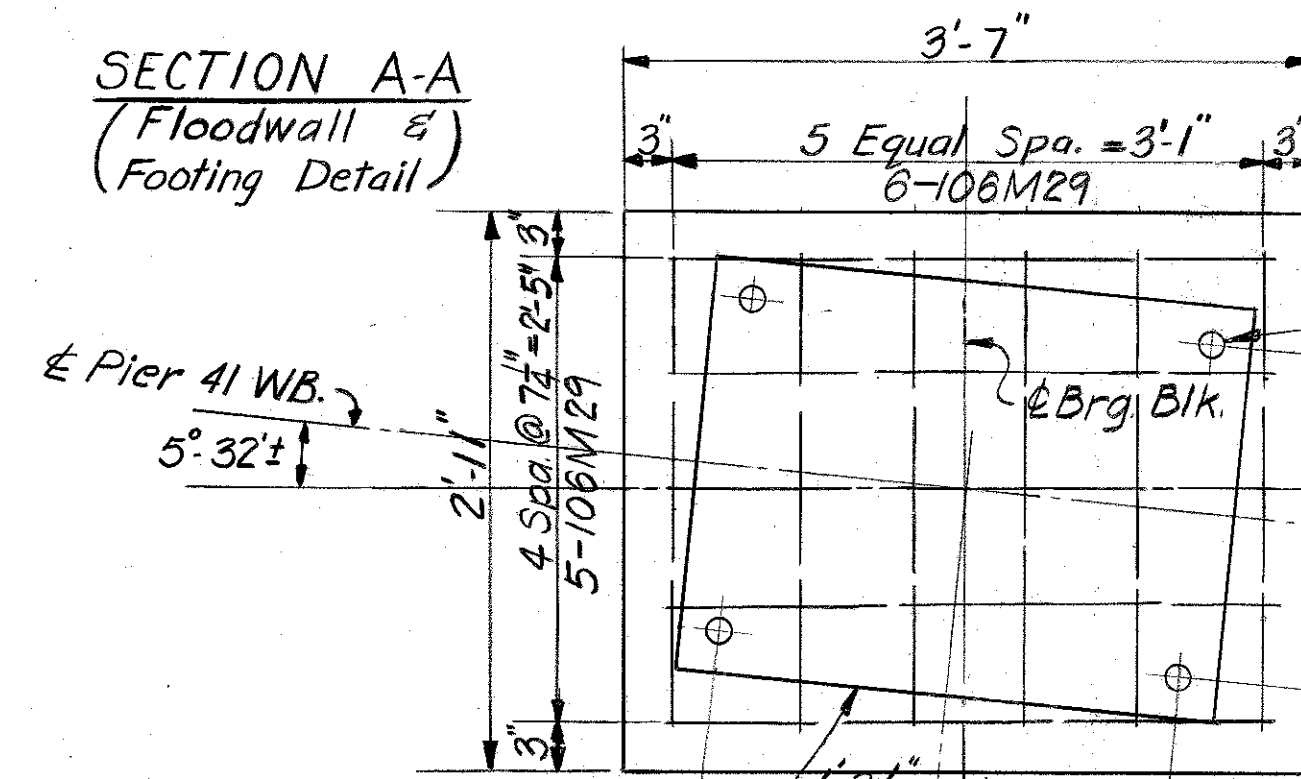
18572

LETTING DATE.

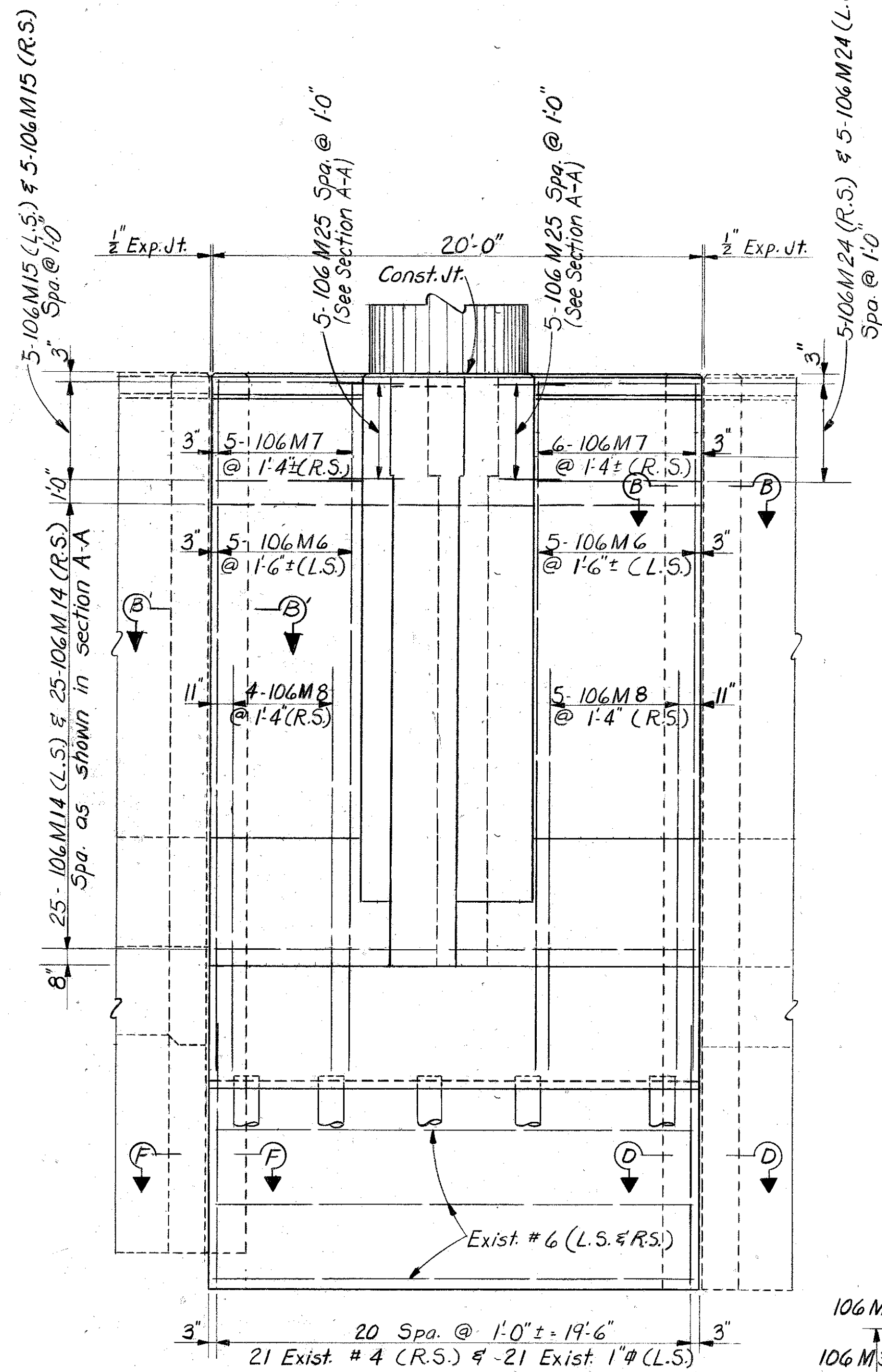
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BY	3-71				
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
BY	4-71	BY		BY	
TRACED BY		TRACED BY		TRACED BY	
BY		BY		BY	



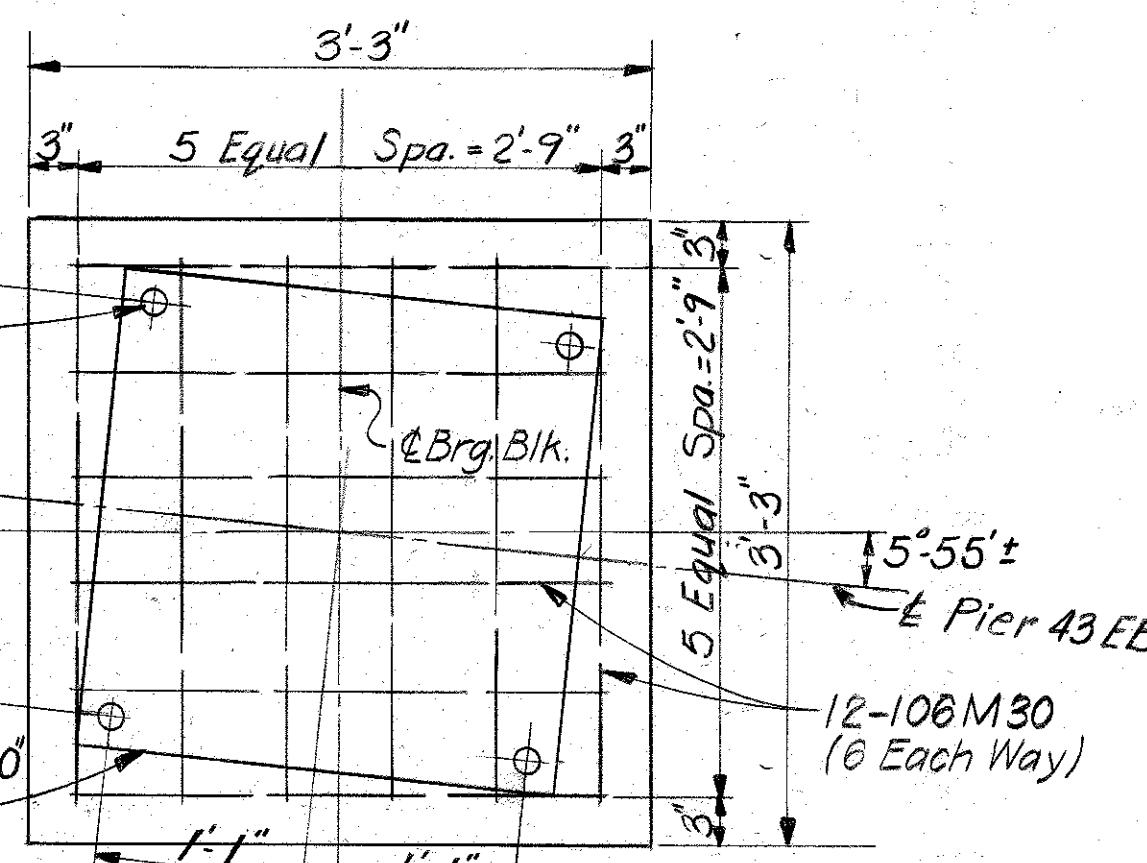
SECTION A-A
(Floodwall & Footing Detail)



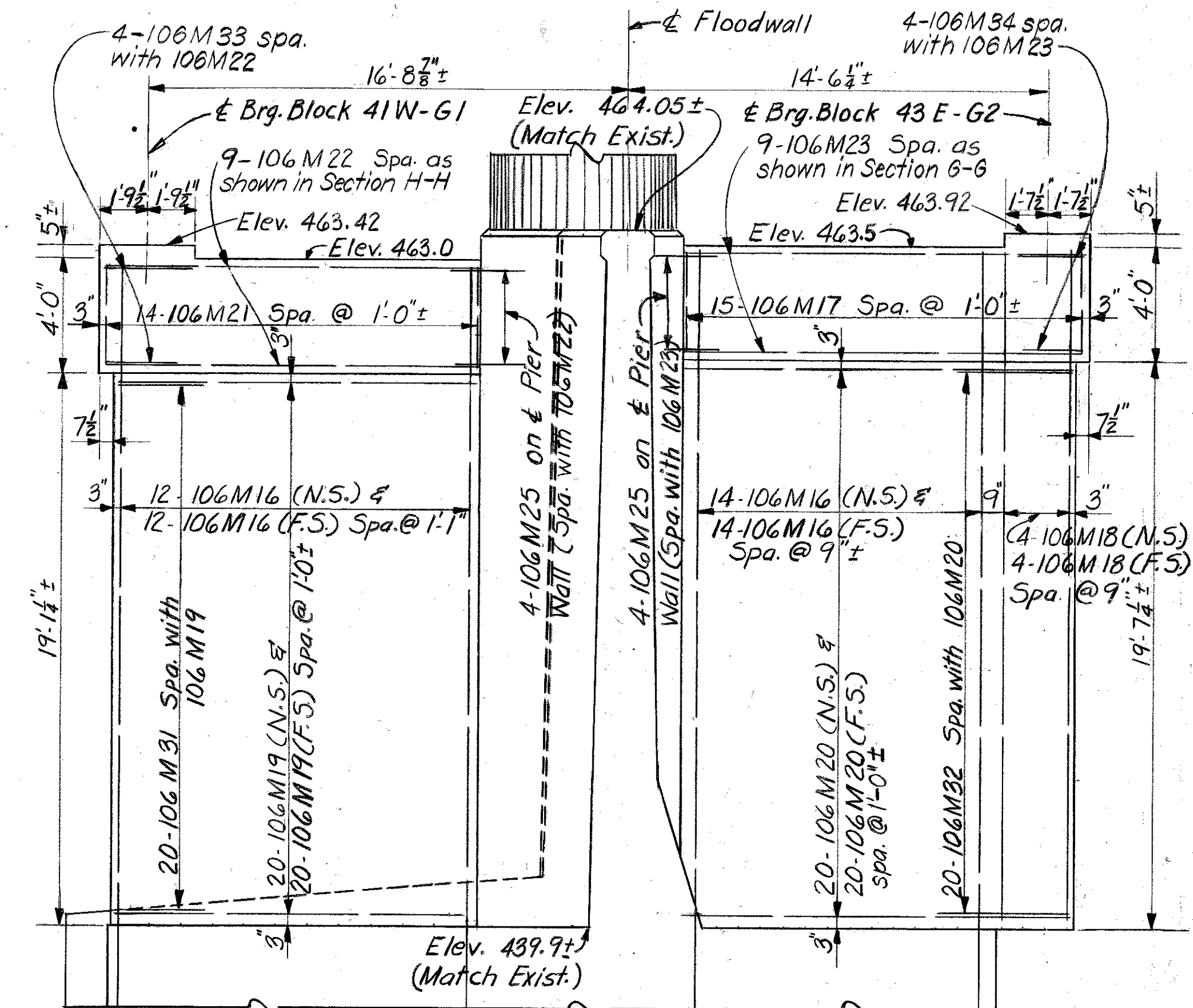
PLAN OF BEARING BLOCK 41W-G1



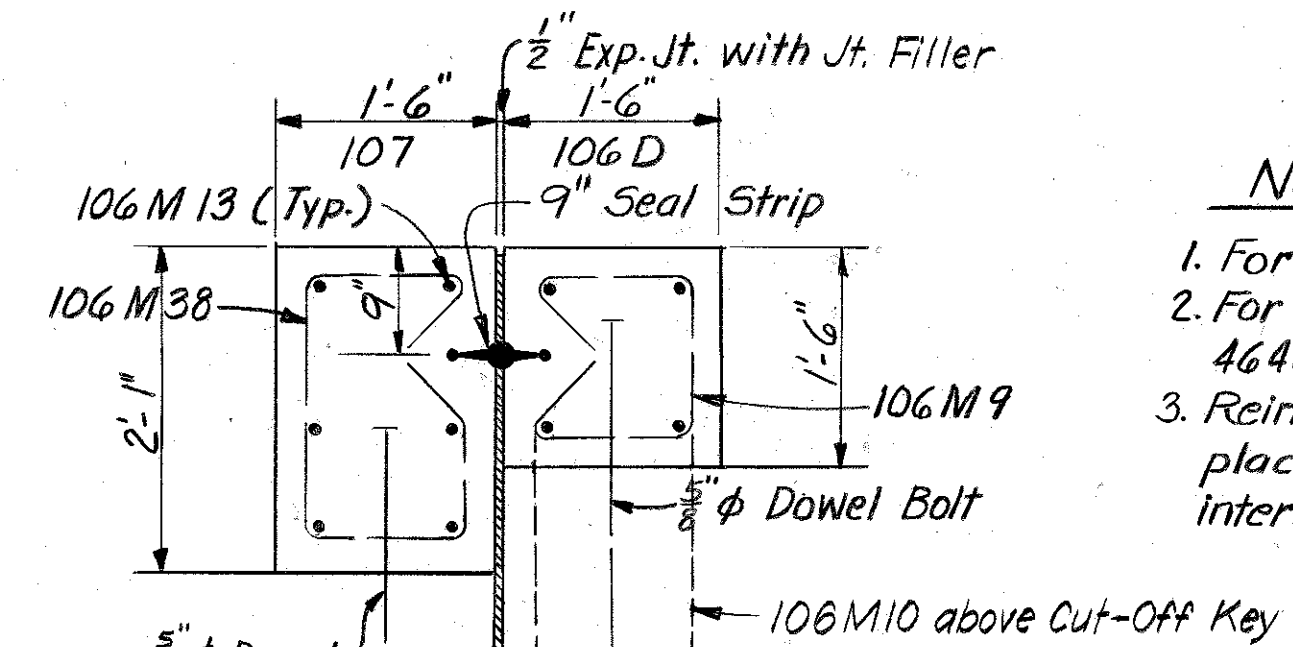
LANDSIDE ELEVATION



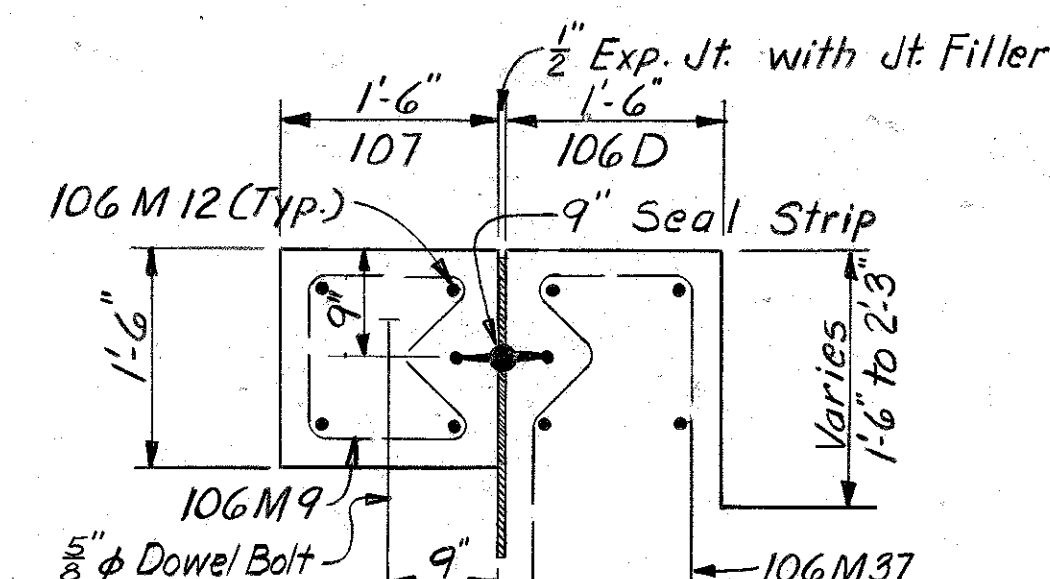
PLAN OF BEARING BLOCK 43E-G2



SECTION A-A
(Pier Wall Detail)



SECTION F-F



SECTION E-E

NOTES FOR MONO 106

1. For notes see sht. A37
2. For Details of Column R4-7 above Elev. 464.05 see sht. C26
3. Reinforcing Bars in Bearing Blocks to be placed exactly as shown so as not to interfere with drilling of Anchor Bolt Holes

For Plan and location of Section A-A see Sheet A41.

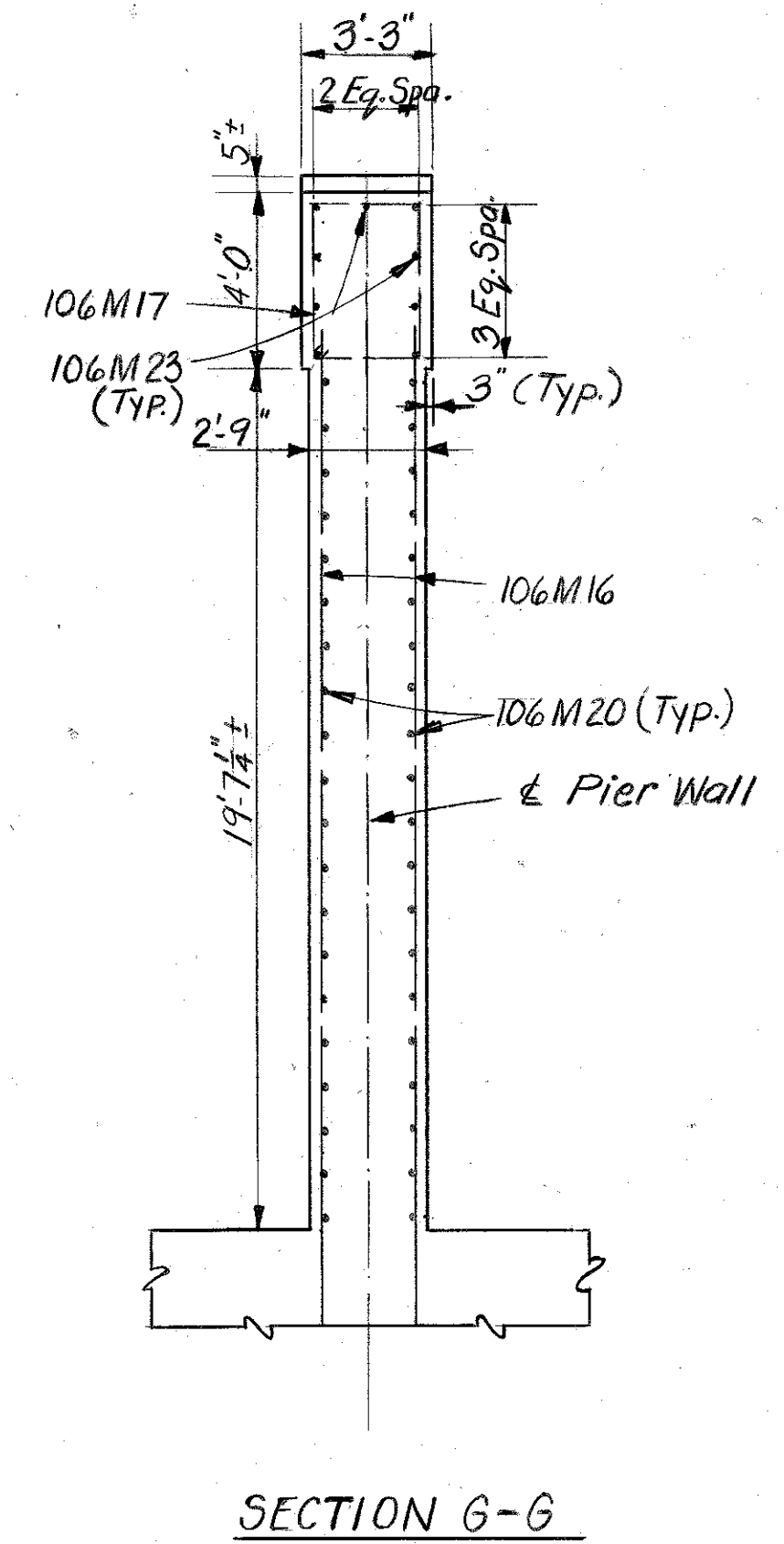
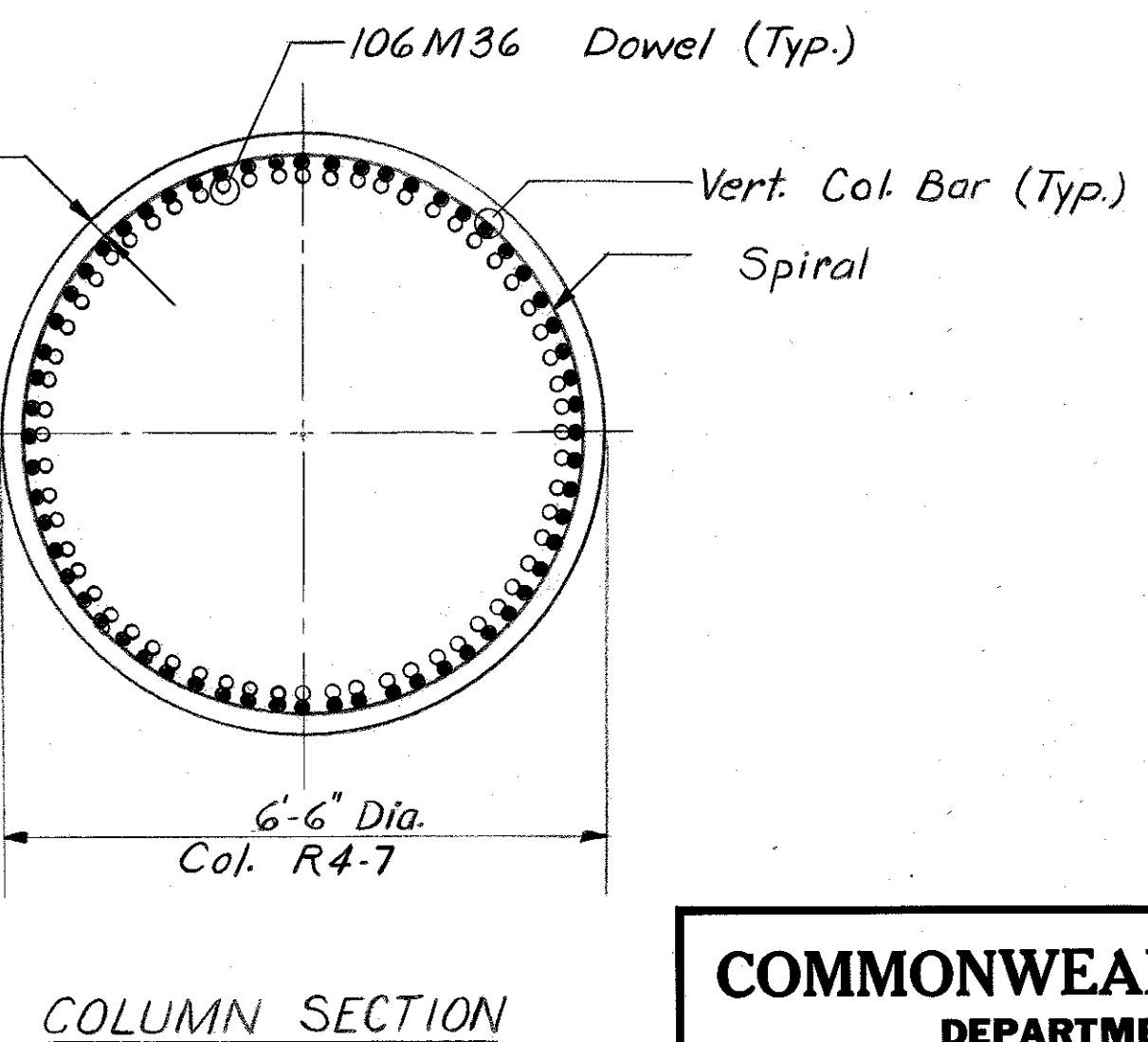
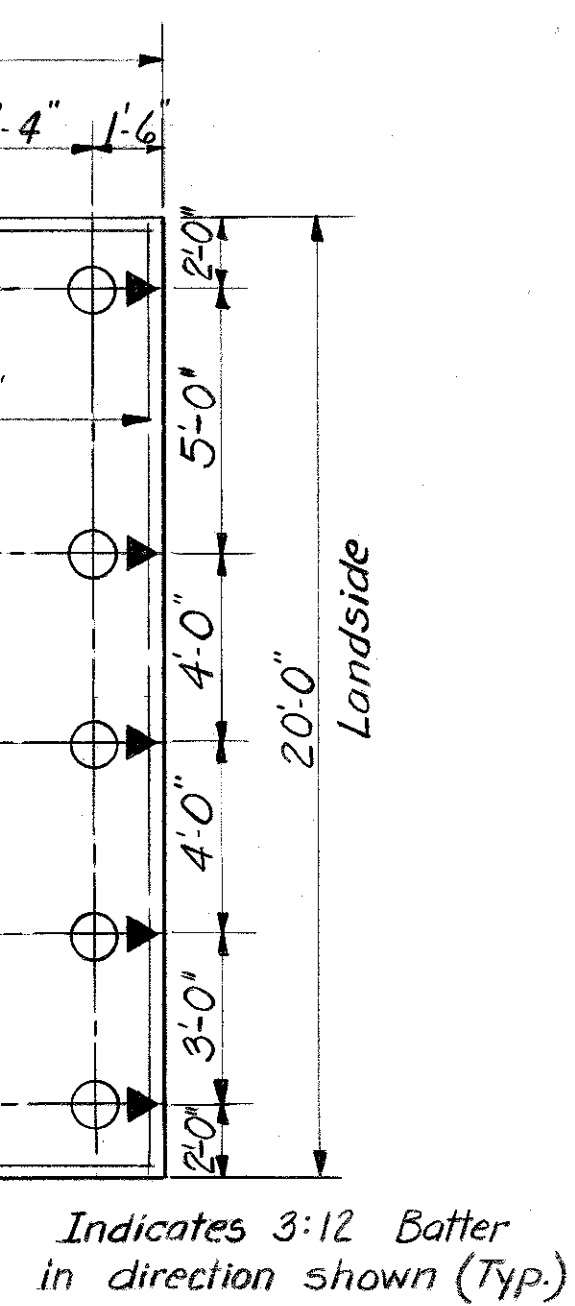
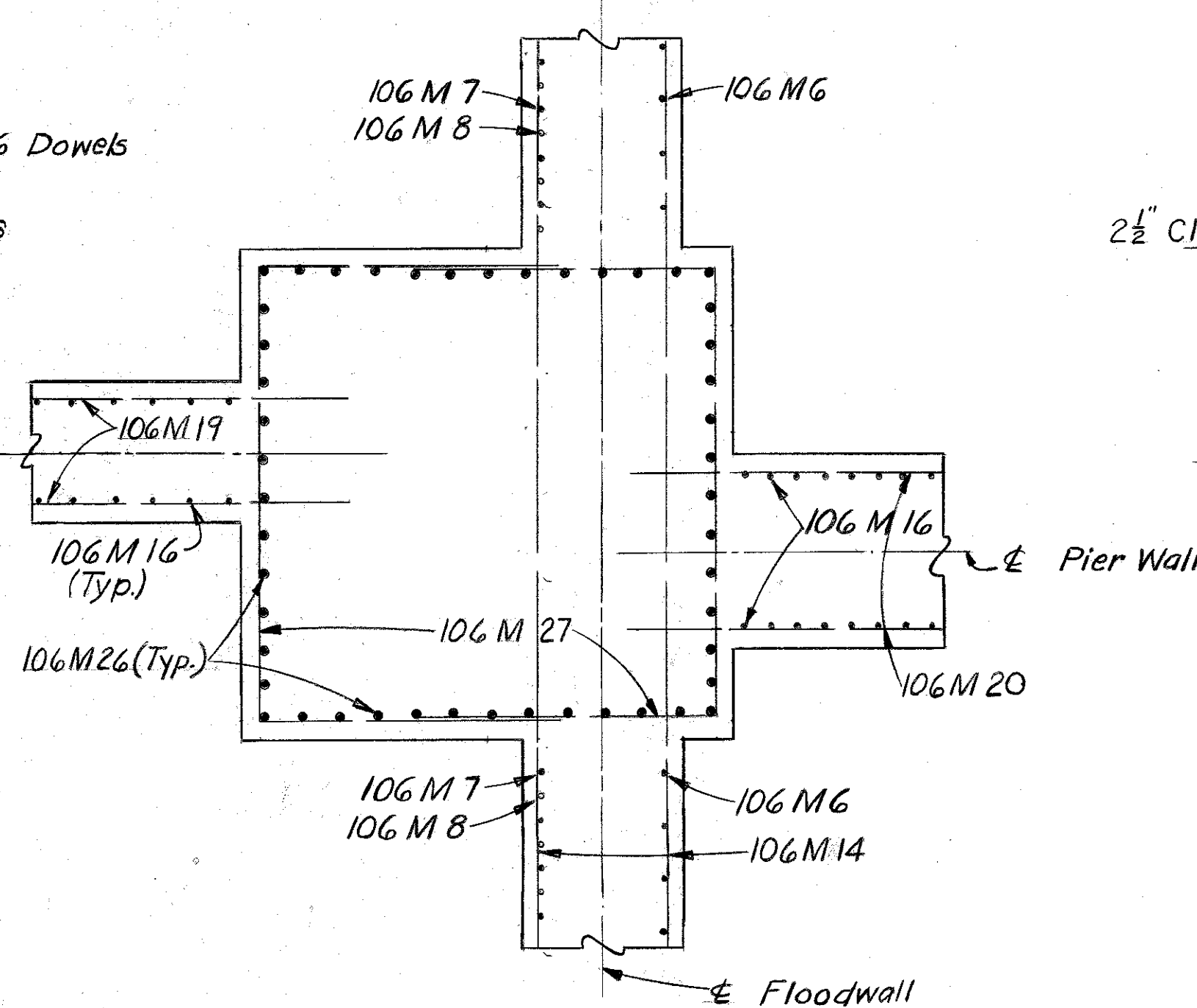
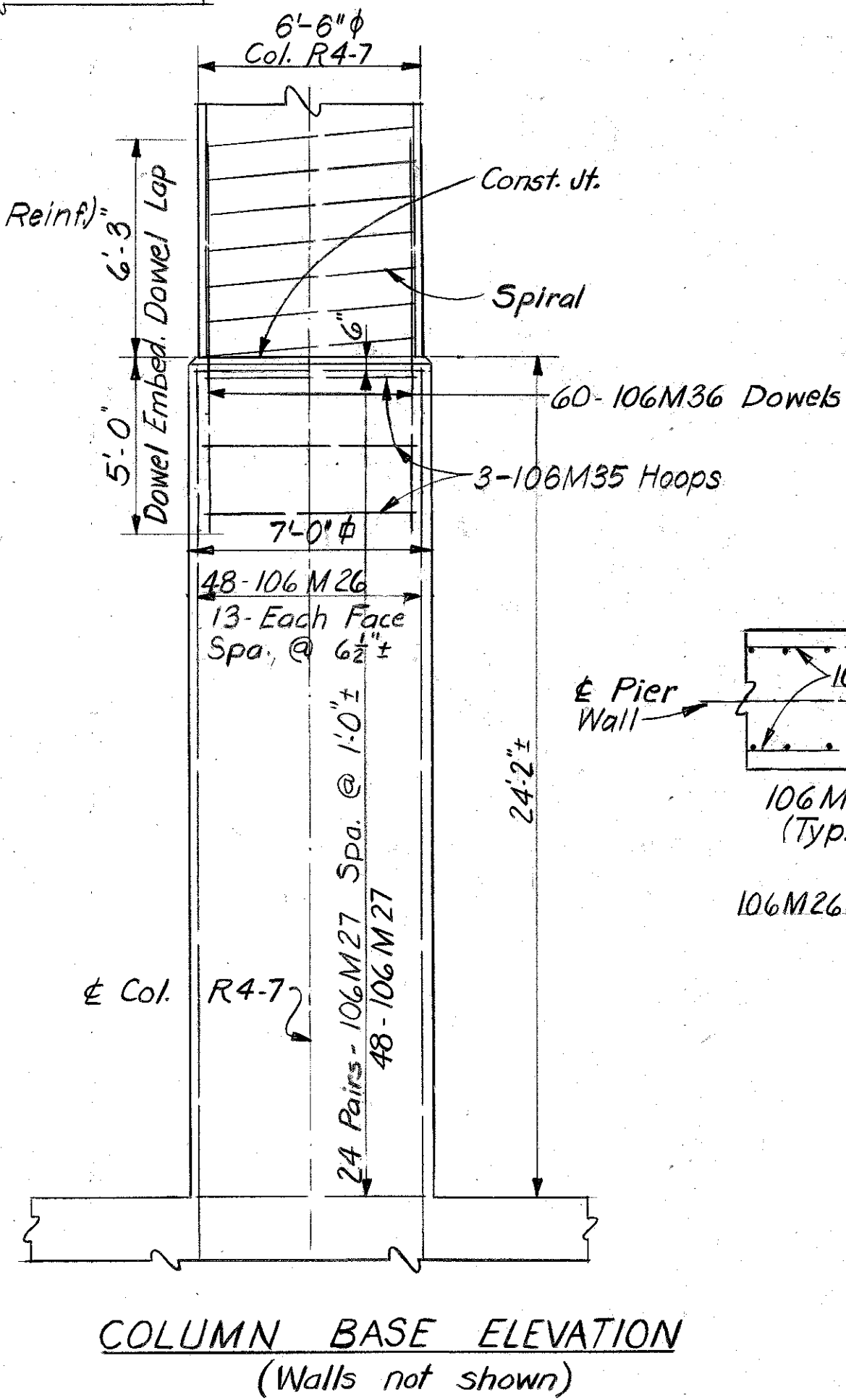
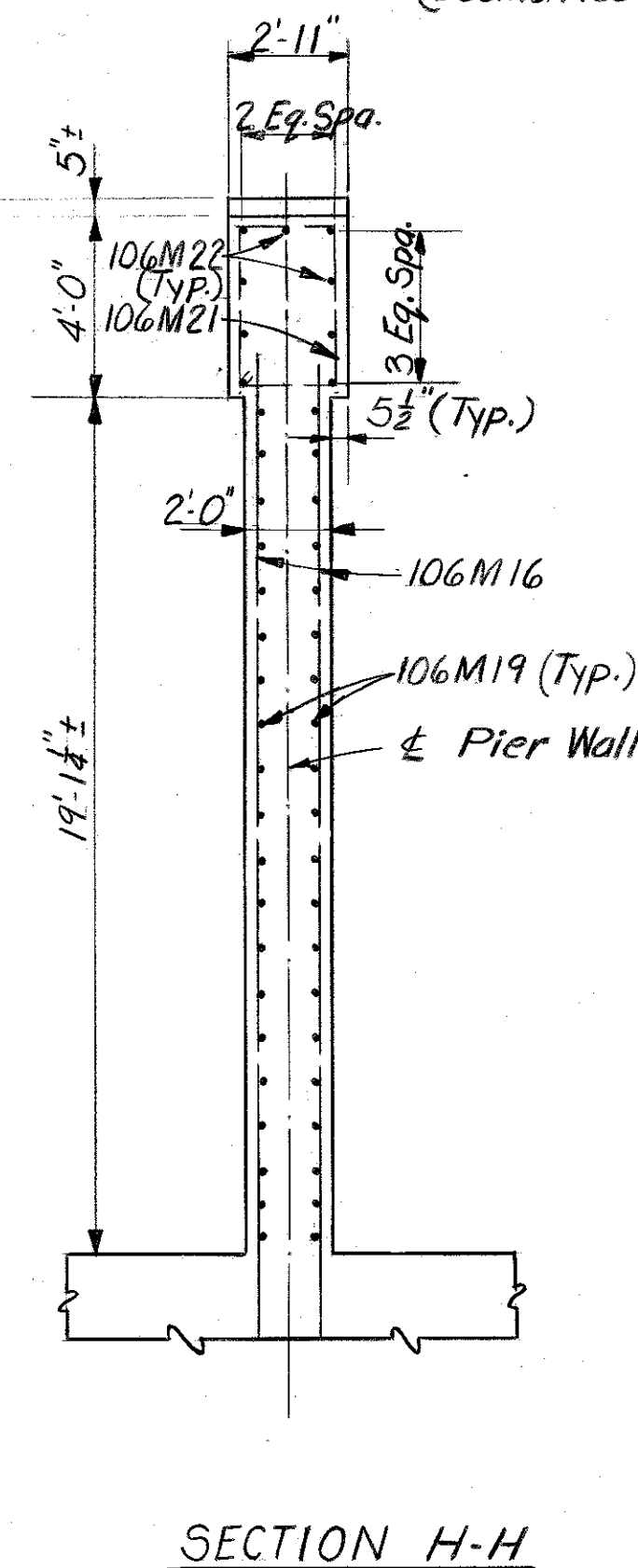
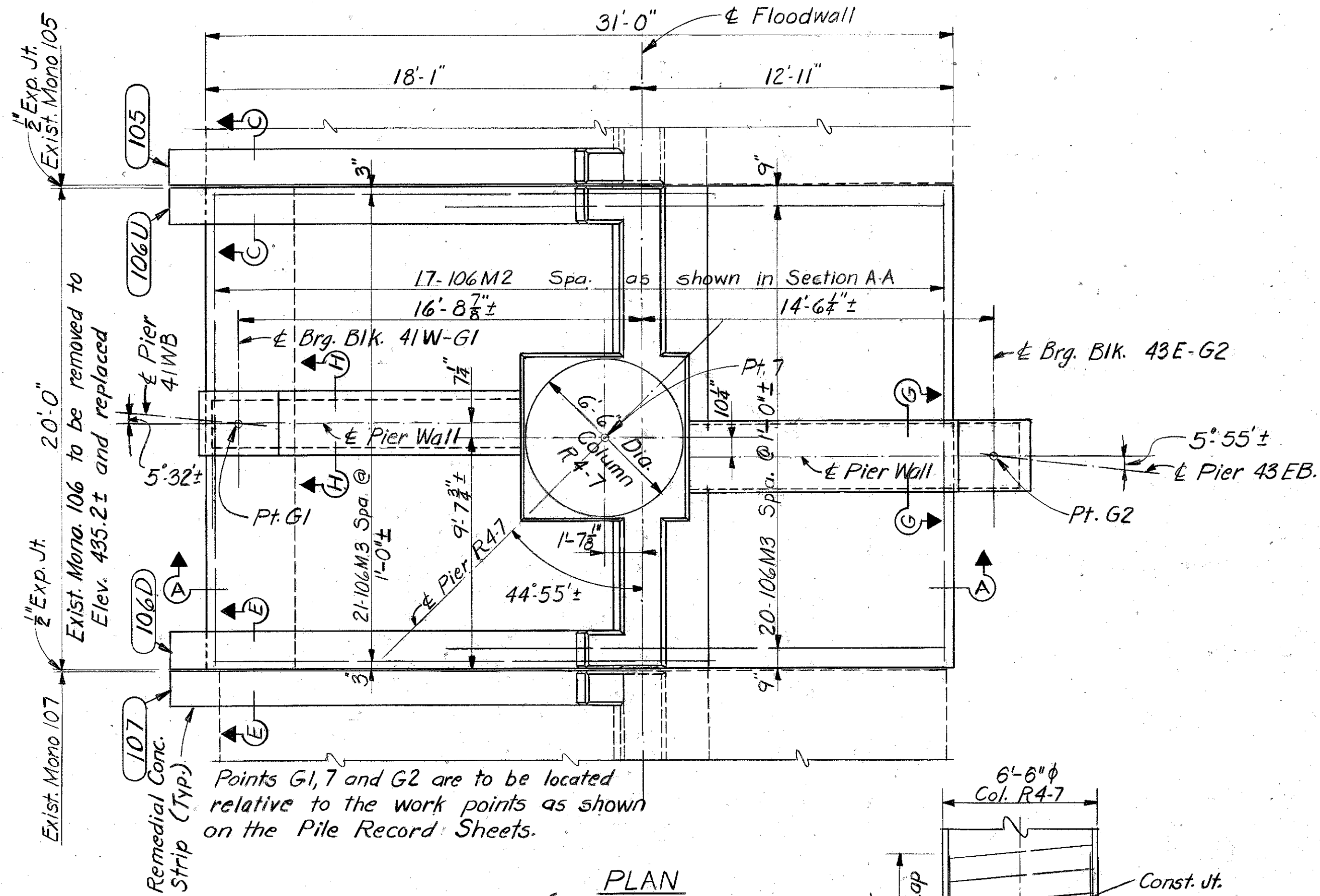
SHEET A40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO. 164-2 (35) 3
 MAINTENANCE PROJECT NO. 18572
 DRAWING NO. 18572

SUBSTRUCTURE-MONO 106-PIERS 41W(G1), 43E(G2) & R4-7

LETTING DATE

DESIGNED BY	DATE	CHECKED BY	DATE	REVISION	DATE
RBS	3-71	PME	4-71		
DETAILS BY	DATE	CHECKED BY	DATE	REVISION	DATE
BMD		PME			
TRACED BY	DATE	CHECKED BY	DATE	REVISION	DATE

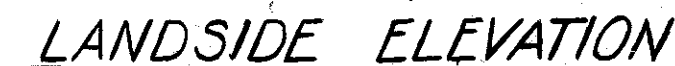


SUBSTRUCTURE-MONO 106-PIERS 41W(G1), 43E(G2) & R4-7

COMMONWEALTH OF KENTUCKY		
DEPARTMENT OF HIGHWAYS		
FRANKFORT		
COUNTY OF		
JEFFERSON		
I 64-13TH ST. TO 7TH ST.		
LOUISVILLE - LEXINGTON		
ROAD		
STATION 208+08	P. E. PROJECT NO. I 64-2 (35) 3	SP 56-273-11L
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18572

SHEET A41

DESIGNED BY	<i>PME</i>	CHECKED BY	<i>RBS</i>	DATE	<i>3-71</i>	REVISED		DATE	
DETAILED BY	<i>EB</i>	CHECKED BY	<i>RBS</i>	DATE	<i>4/28/71</i>	REVISED		DATE	
TRACED BY		CHECKED BY		DATE		REVISED		DATE	

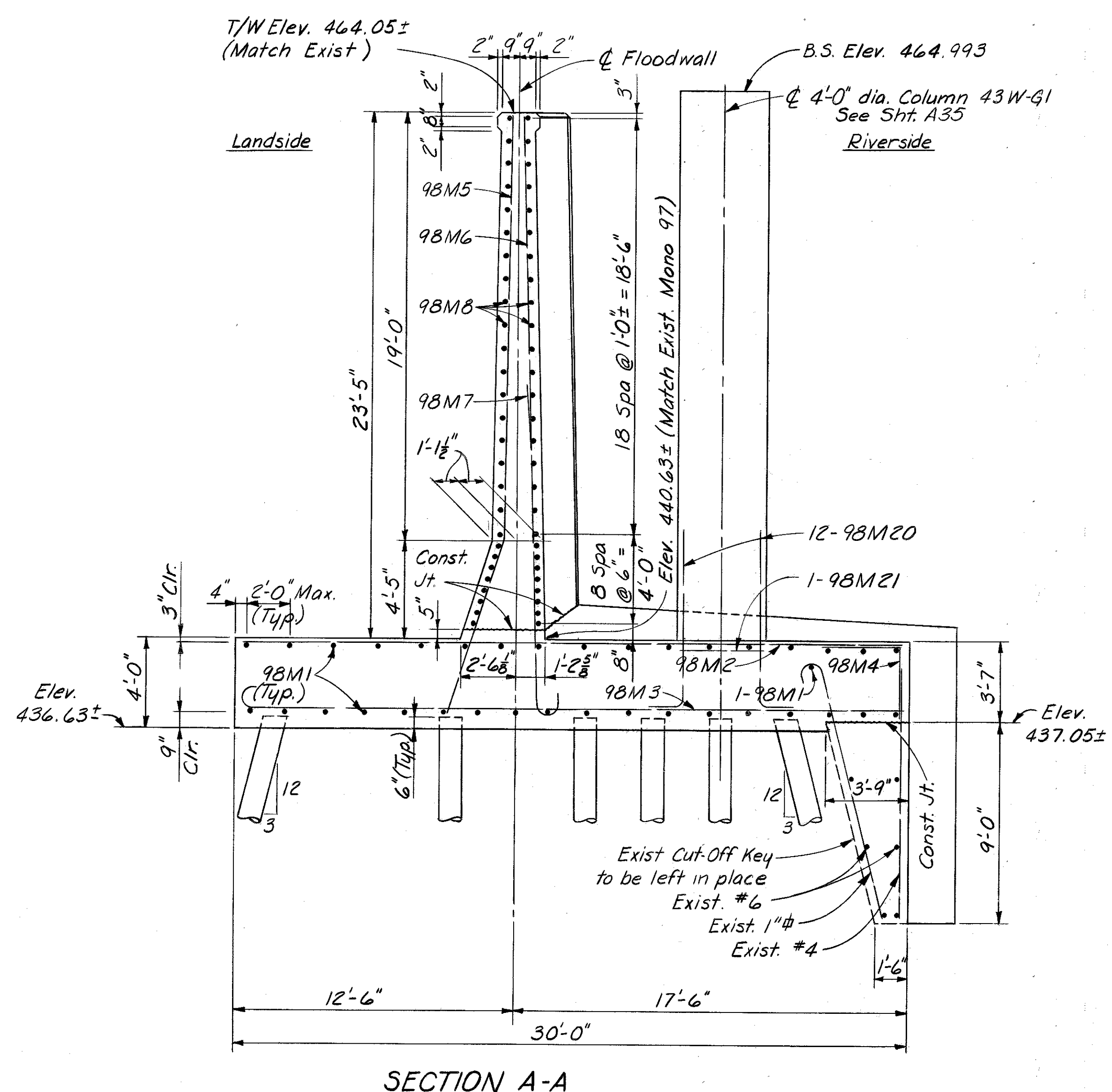
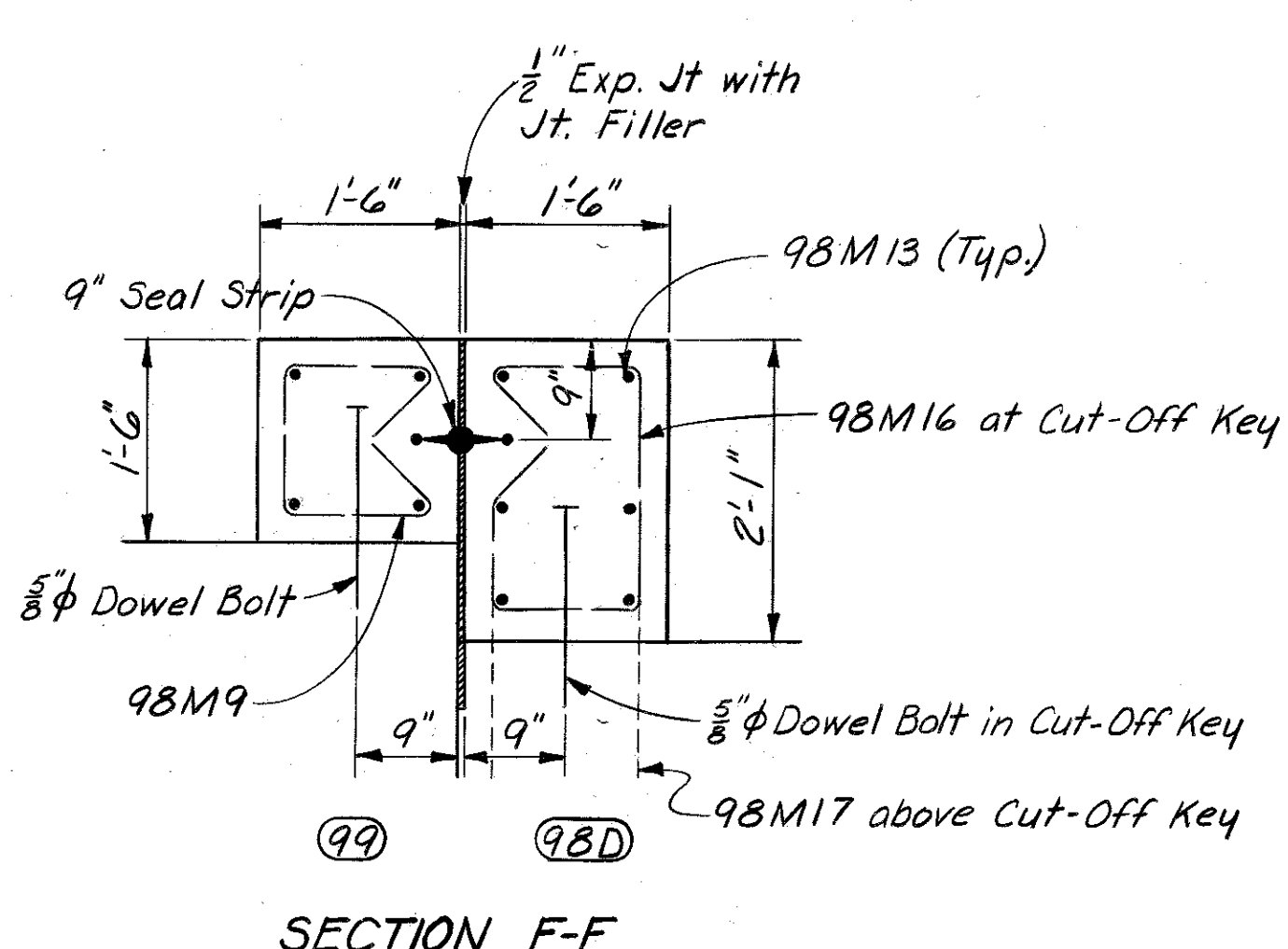
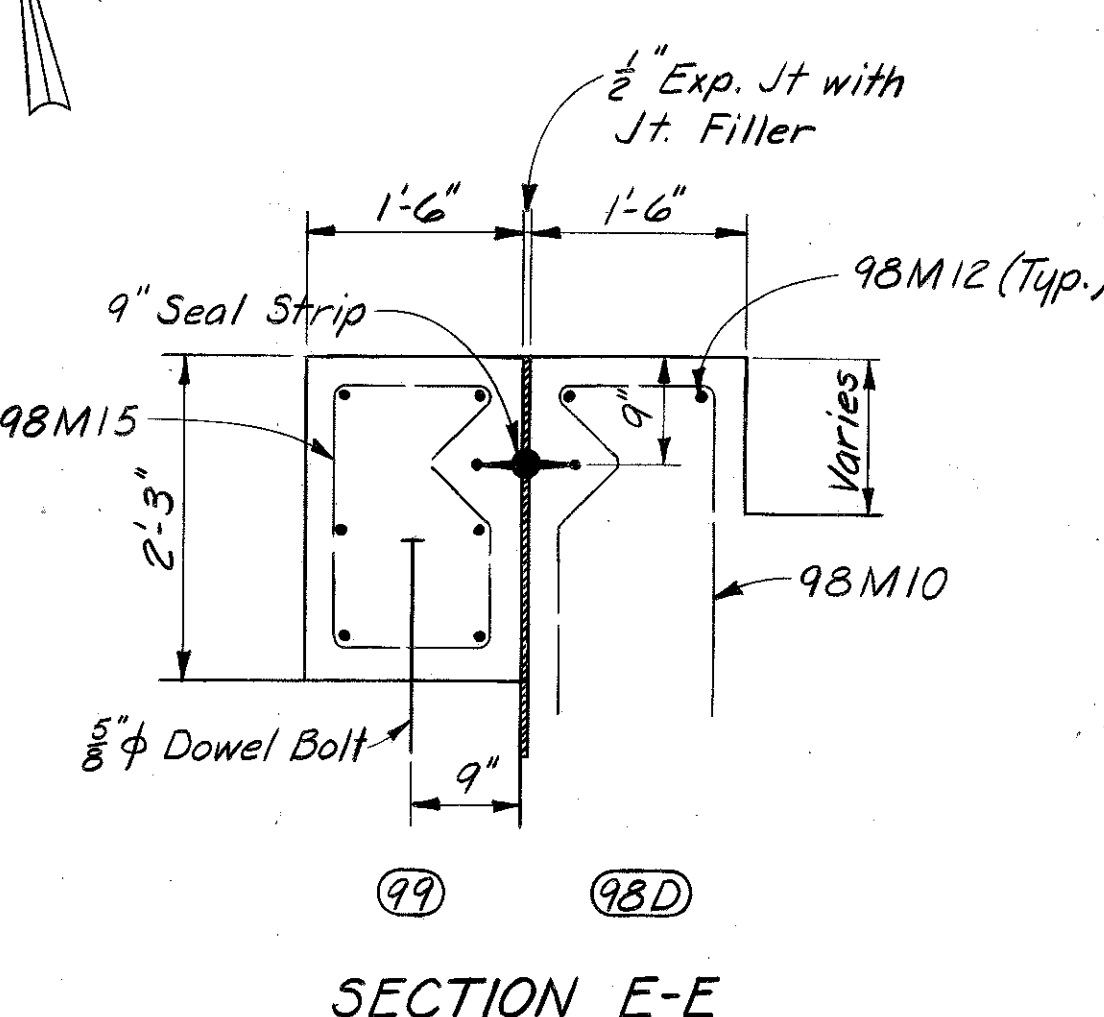
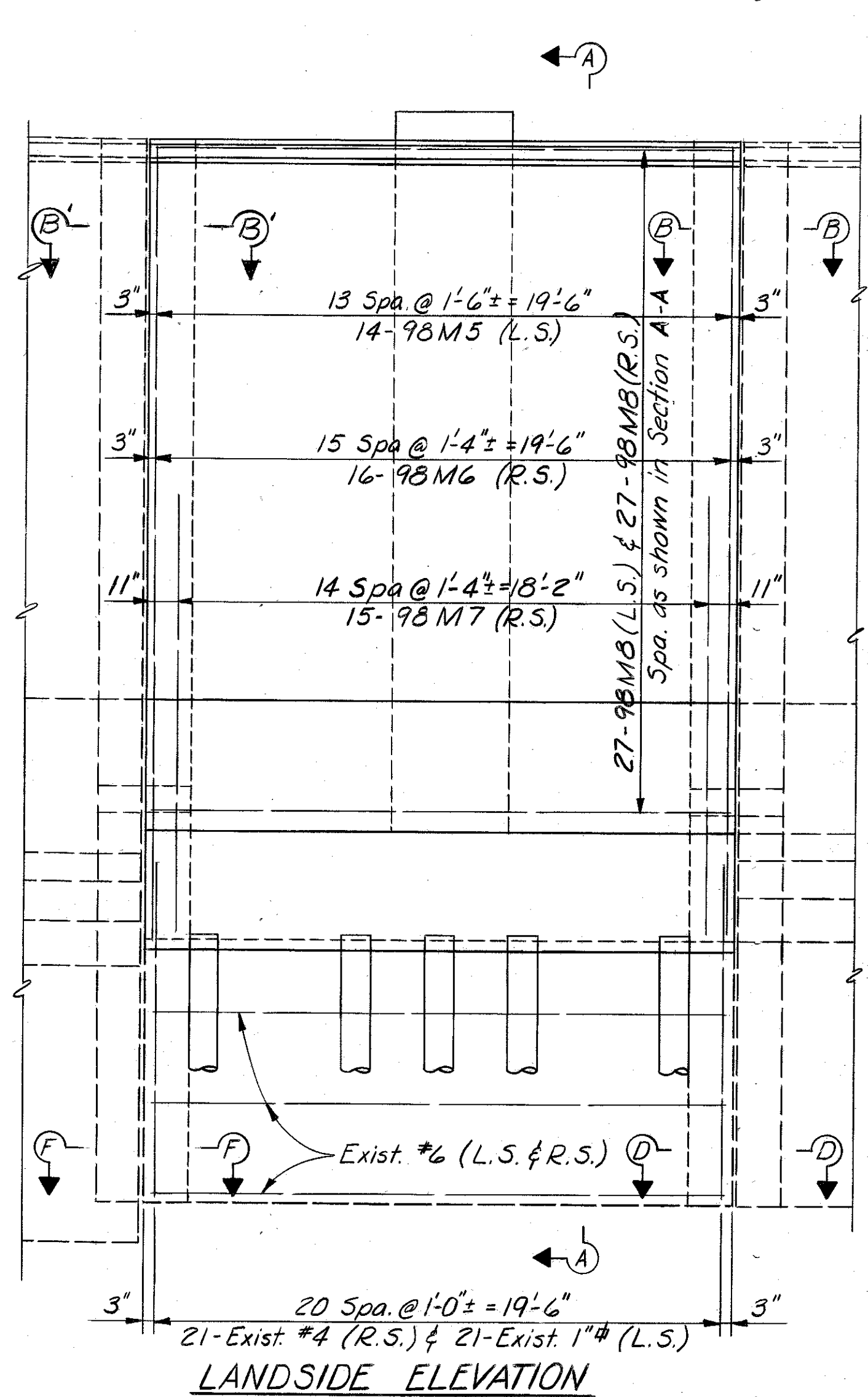
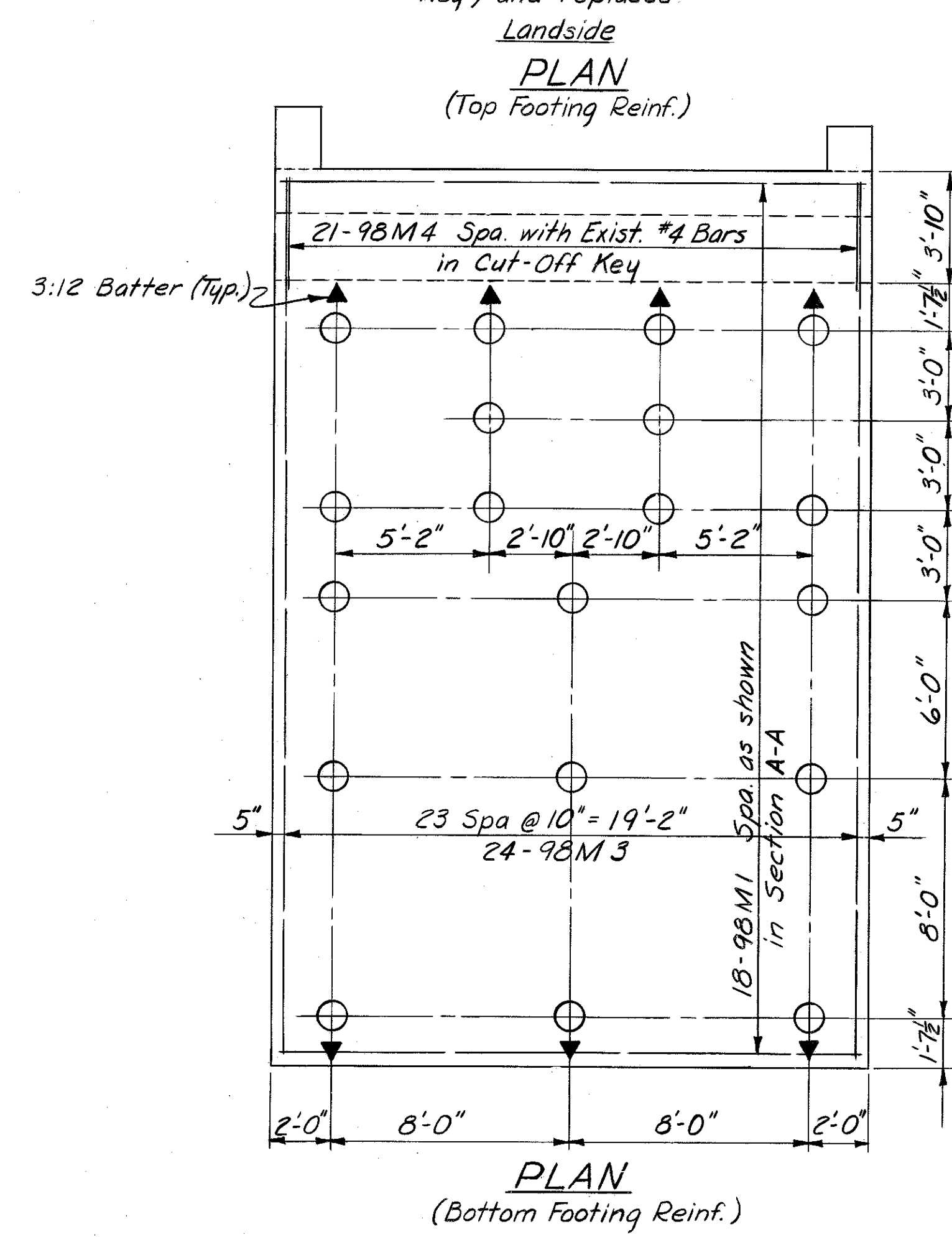
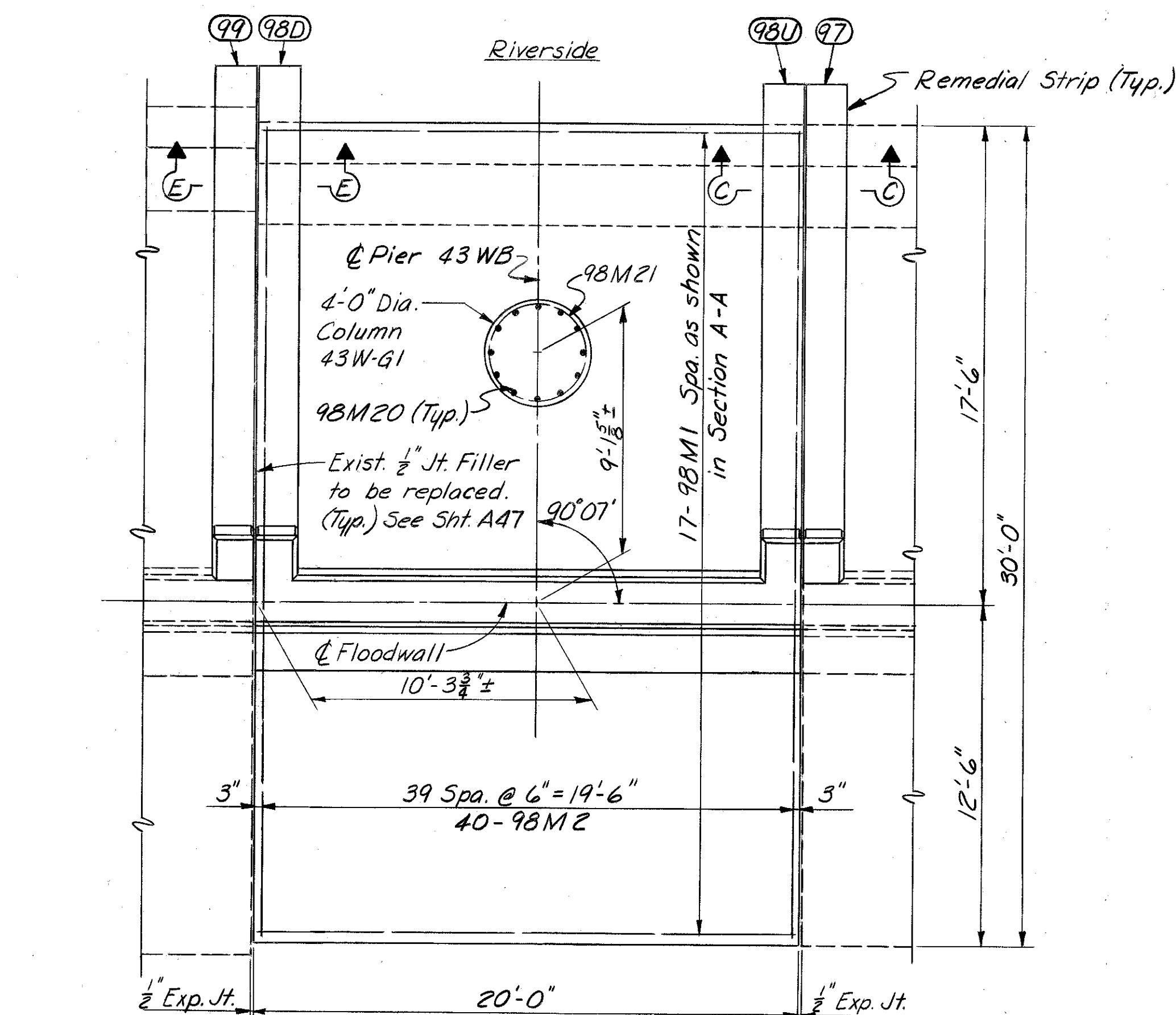


SHEET A 42

SUBSTRUCTURE
MONO 102, PIER 42 WB (G1)

LETTING DATE.

DESIGNED BY	DATE	REVISED	DATE	REVISED	DATE
TRACED BY	DATE	REVISED	DATE	REVISED	DATE
CHECKED BY	DATE	REVISED	DATE	REVISED	DATE
APPROVED BY	DATE	REVISED	DATE	REVISED	DATE



NOTE:
For Floodwall Monolith Notes See Sht. A37
Column to be located relative to Work Point.
See File Record Sheet.

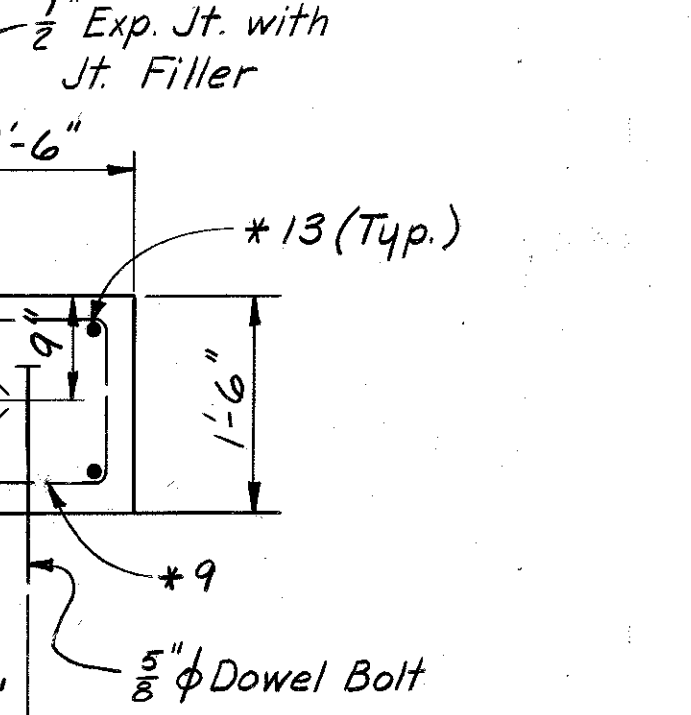
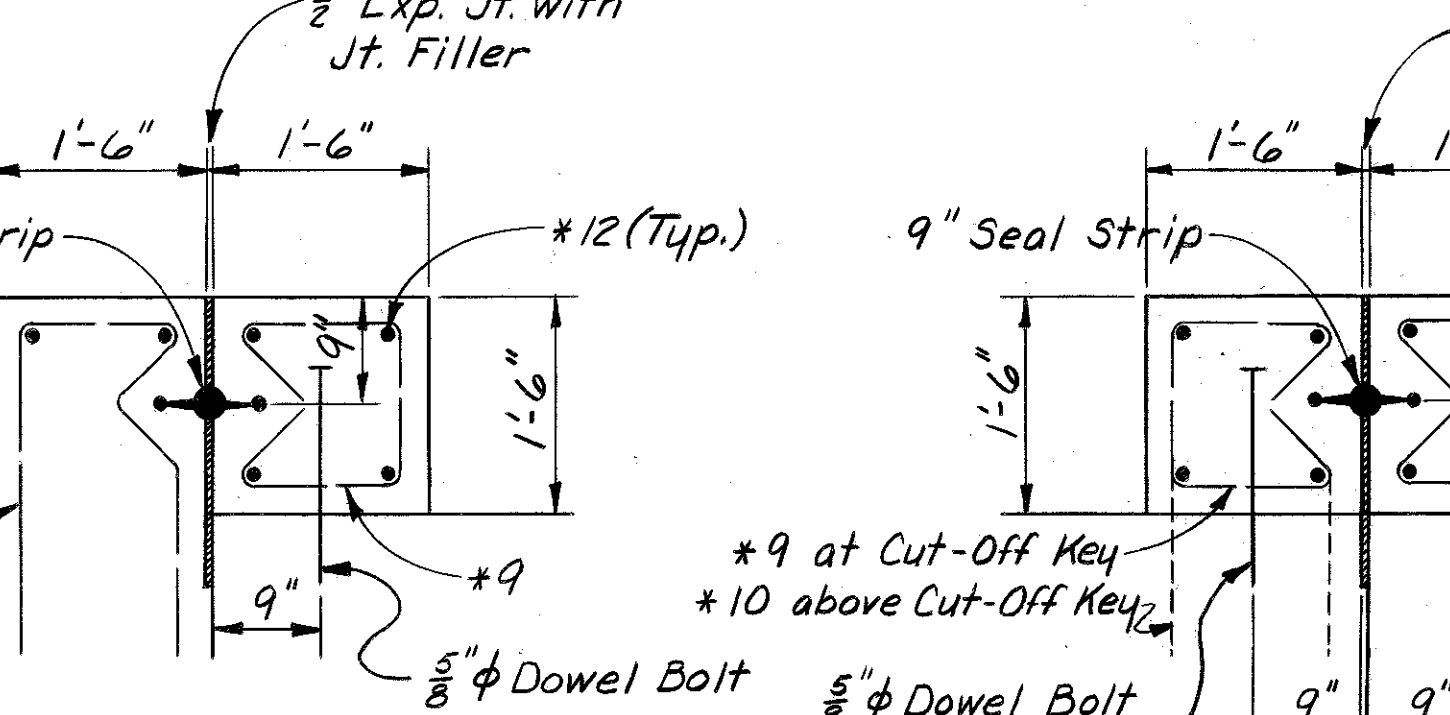
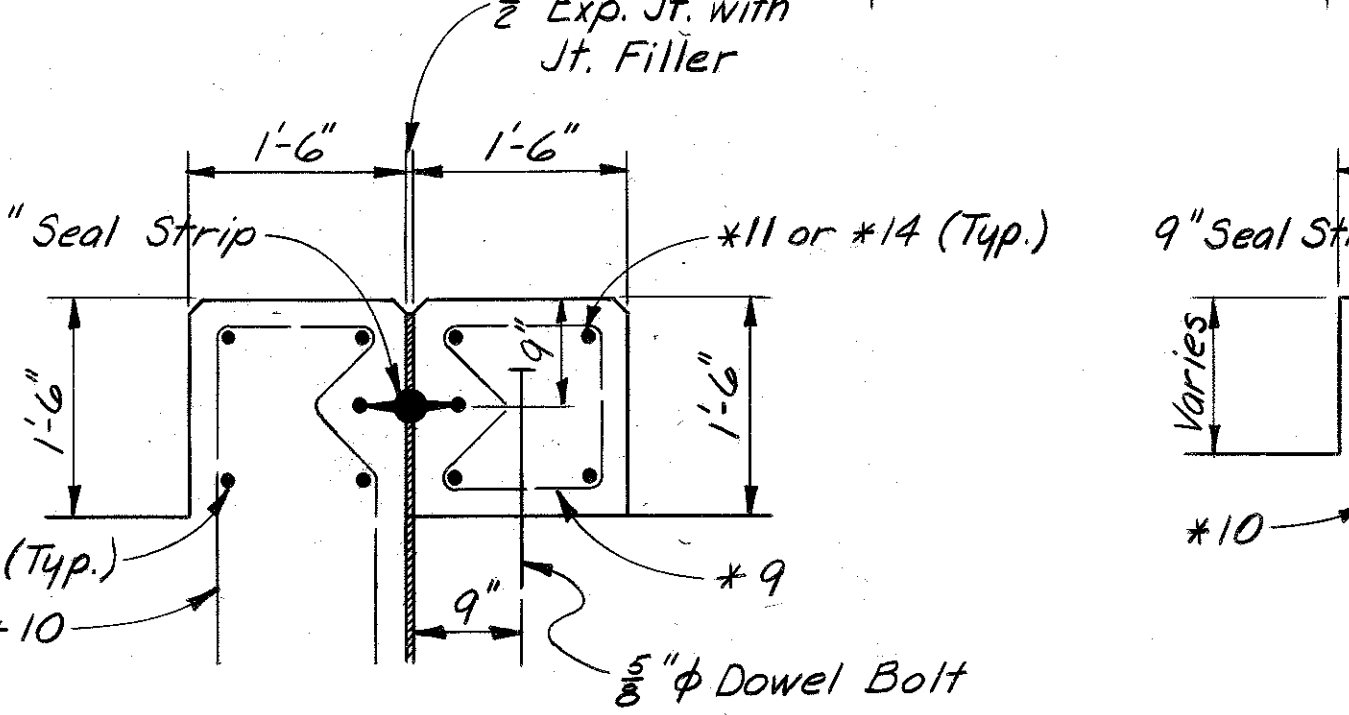
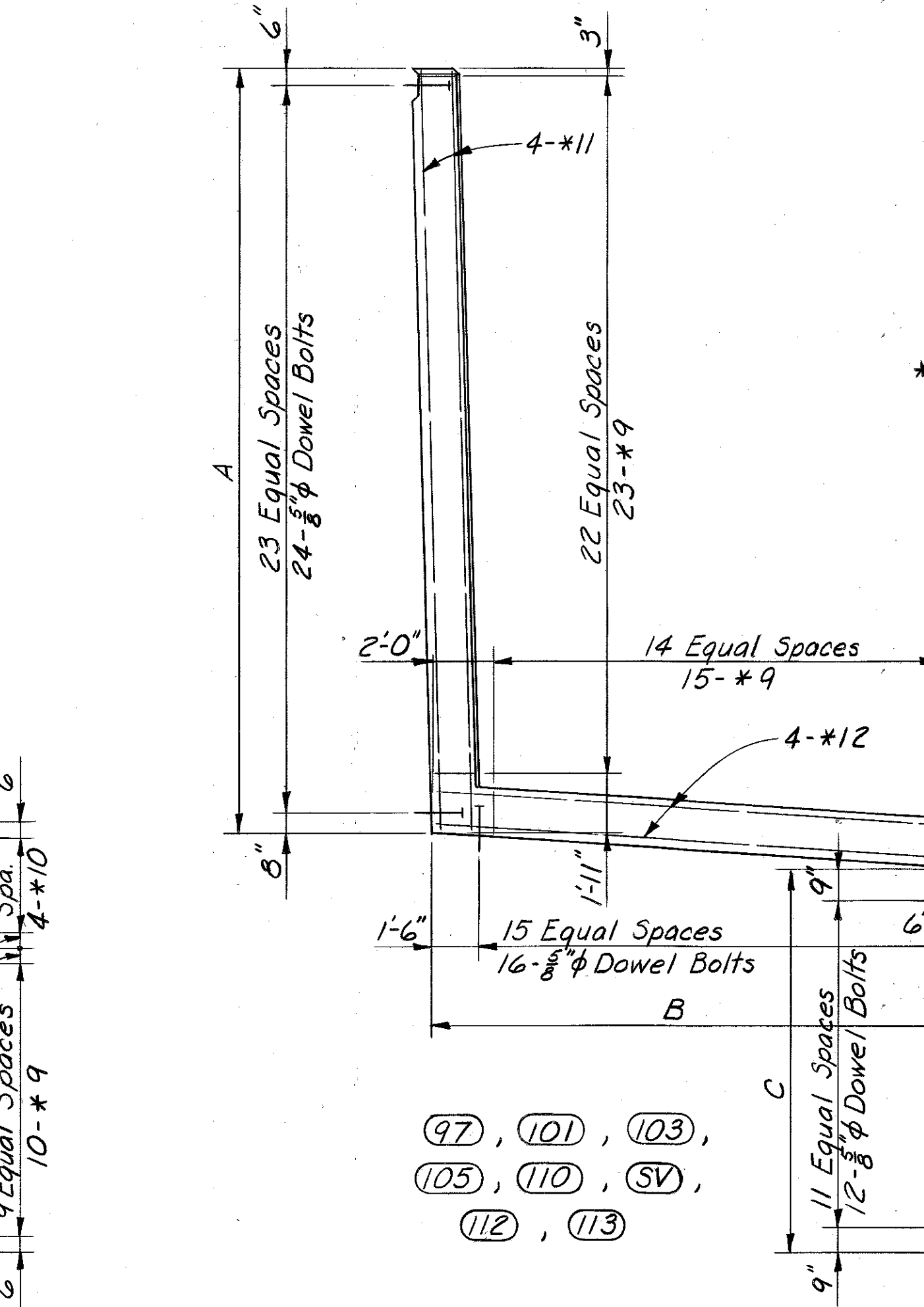
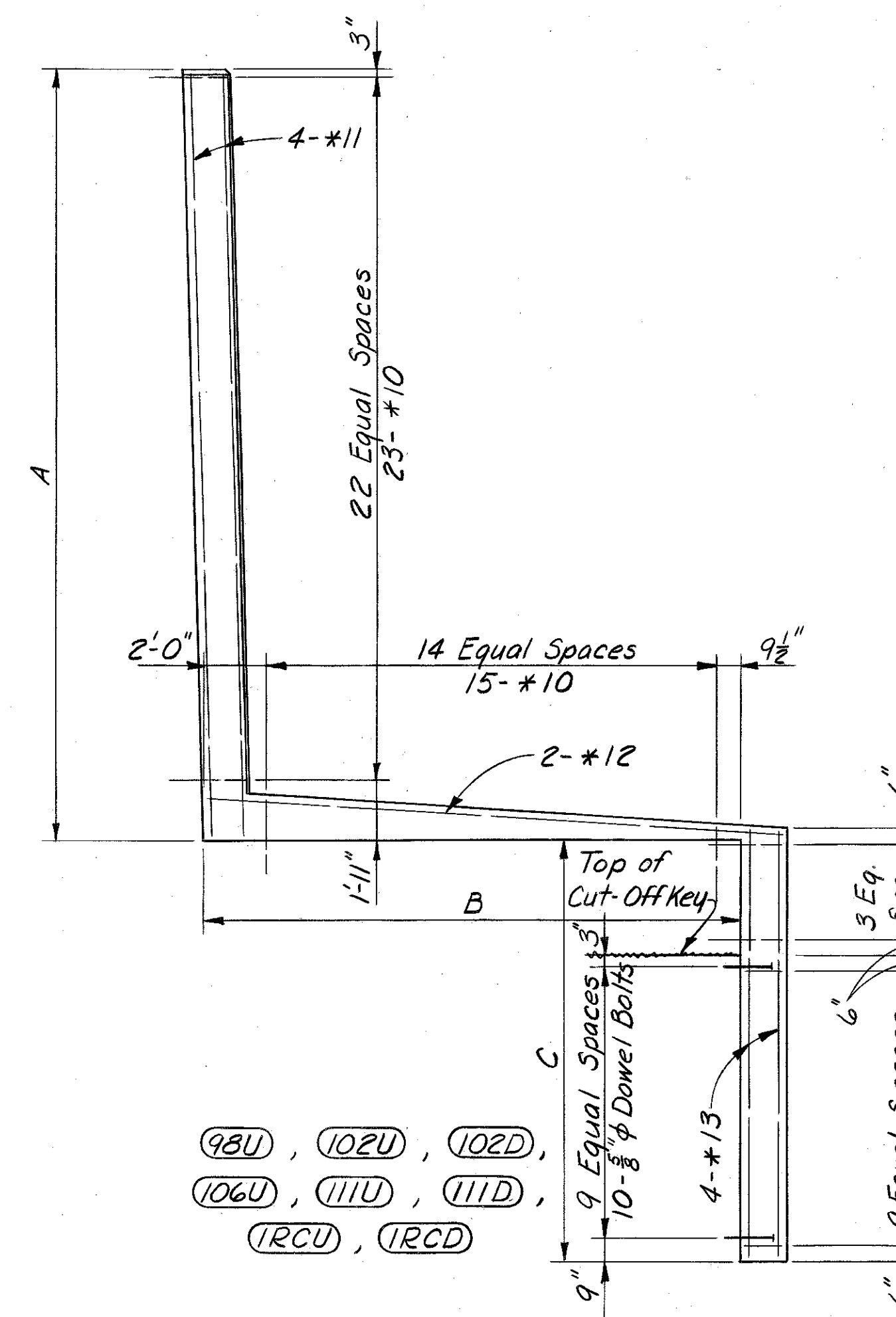
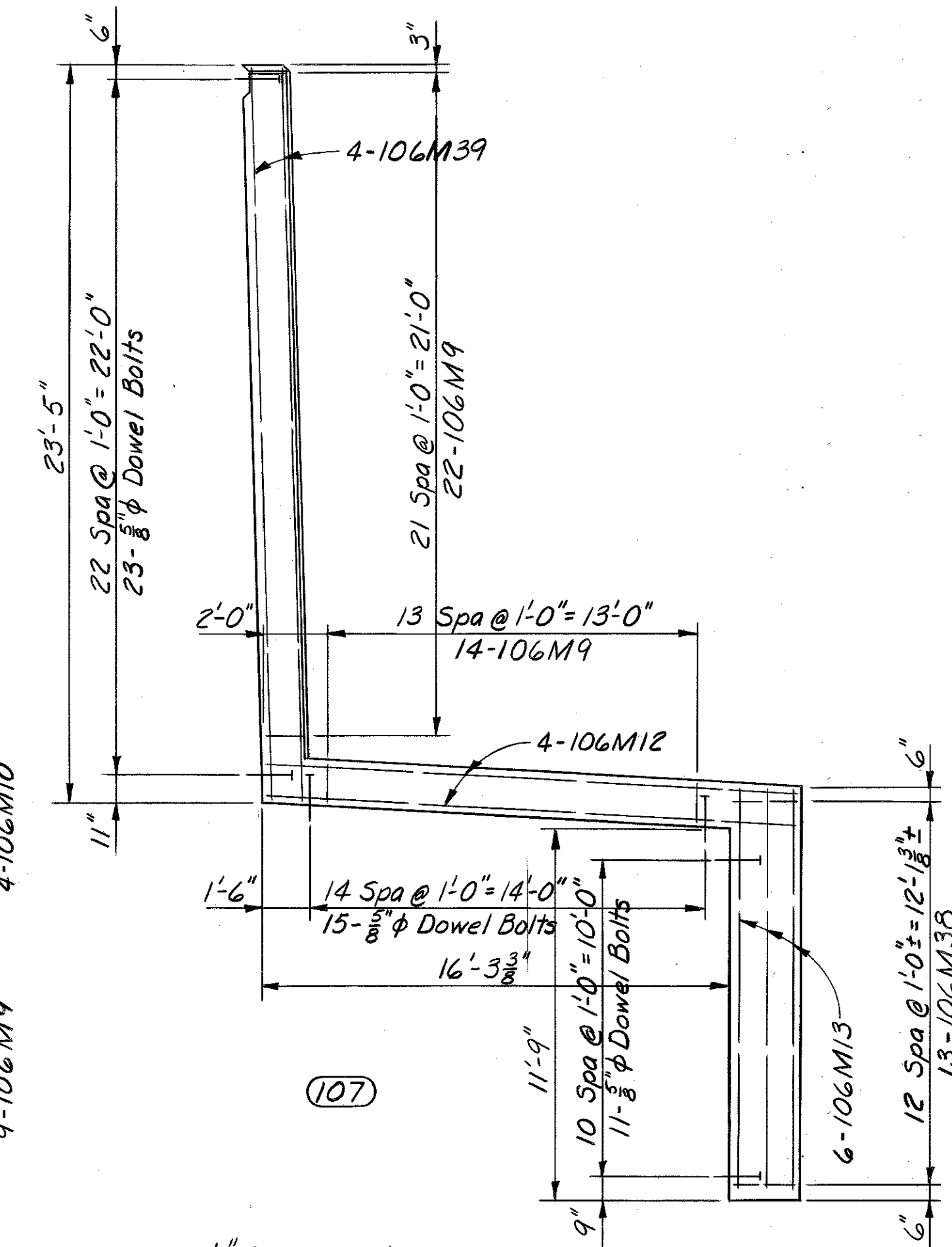
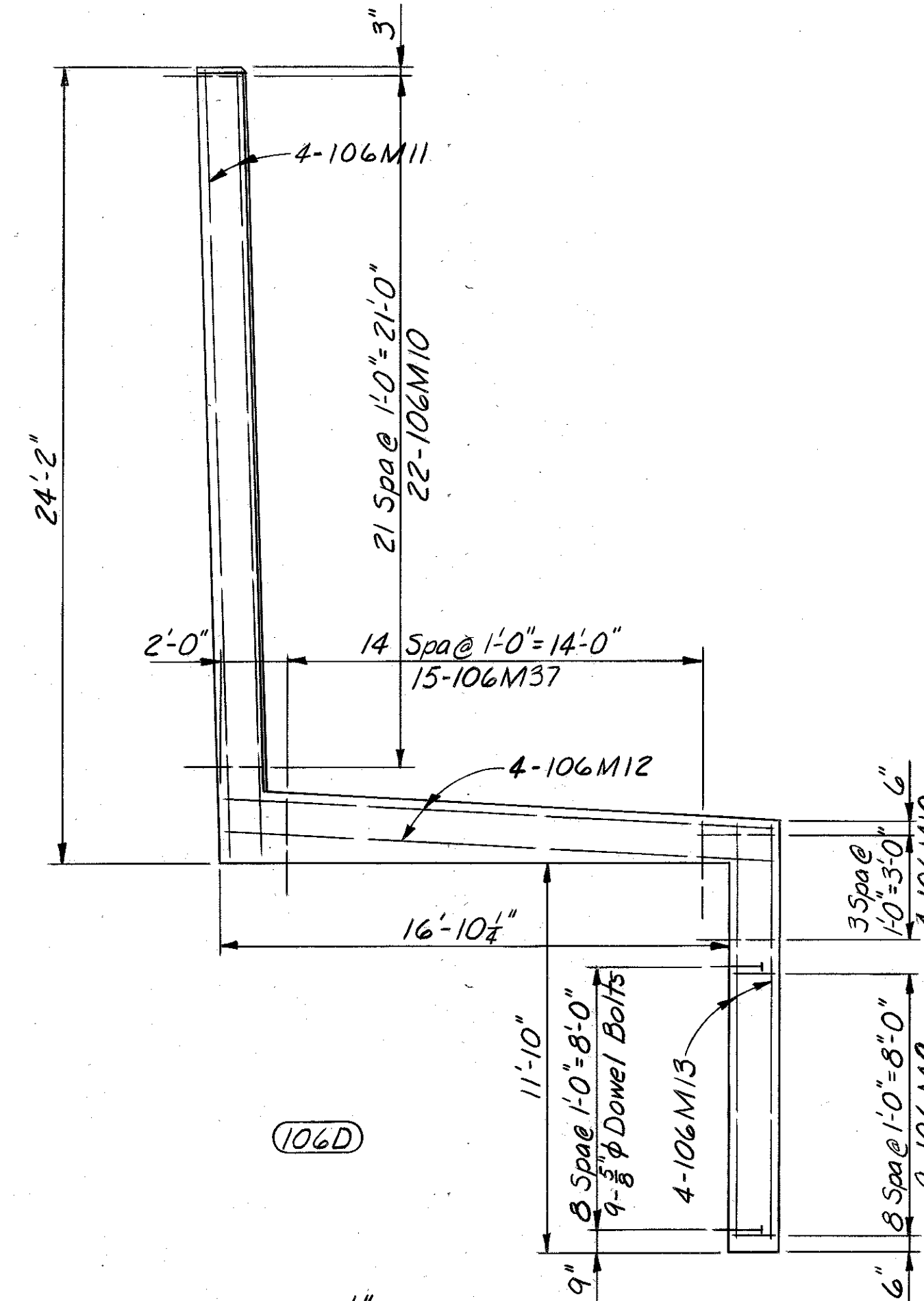
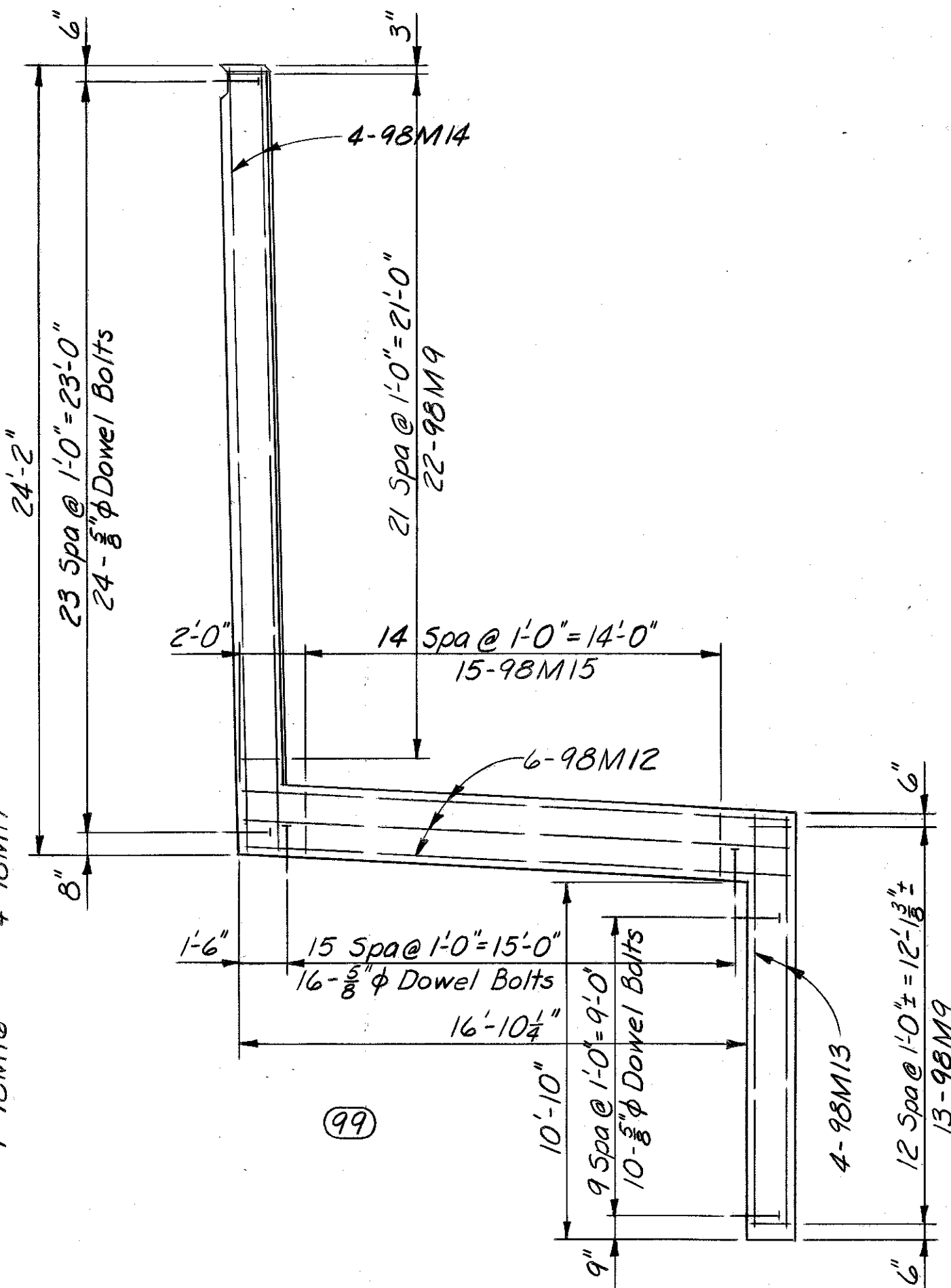
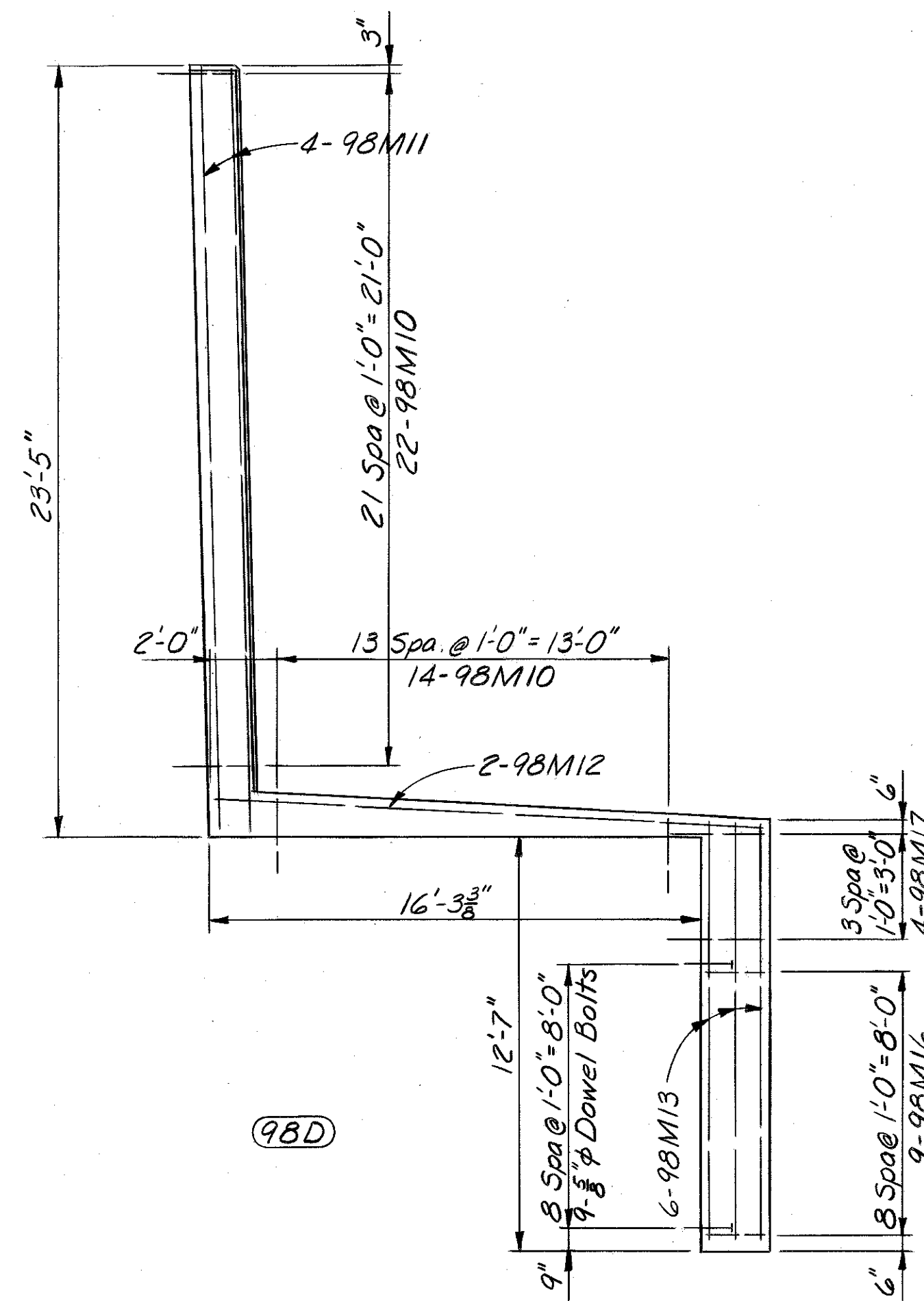
SUBSTRUCTURE
MONO 98, PIER 43WB (G1)

SHEET A43

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
SP 56-273-11L
STATION 208+08
P. E. PROJECT NO. 164-2 (35) 3
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
18572

LETTING DATE

DESIGNED BY	DATE	CHECKED BY	DATE
EB	4/27/71	7235	
TRACED BY	DATE	REVISION	DATE



SECTION B-B
(Sect. B-B Oppo. Hand)

SECTION C-C

SECTION D-D

NOTE:
For Floodwall Monolith Notes See Sht. A37
* = Prefix to bar no. (*9 = 98M9)

MONO.	STRIP	*	A	B	C
98	97	98M	23'-5"	16'-3 3/8"	11'-9"
	98U				12'-7"
102	101, 103	102M	24'-2"	16'-10 1/4"	12'-2"
	102U, 102D				13'-2"
106	105	106M	24'-2"	16'-10 1/4"	12'-2"
	106U				13'-2"
111	110, SV	111M	22'-8"	15'-8 5/8"	11'-4"
	111U, 111D				12'-0"
1RC	112, 113	1RC	22'-8"	15'-8 5/8"	11'-4"
	1RCU, 1RCD				12'-0"

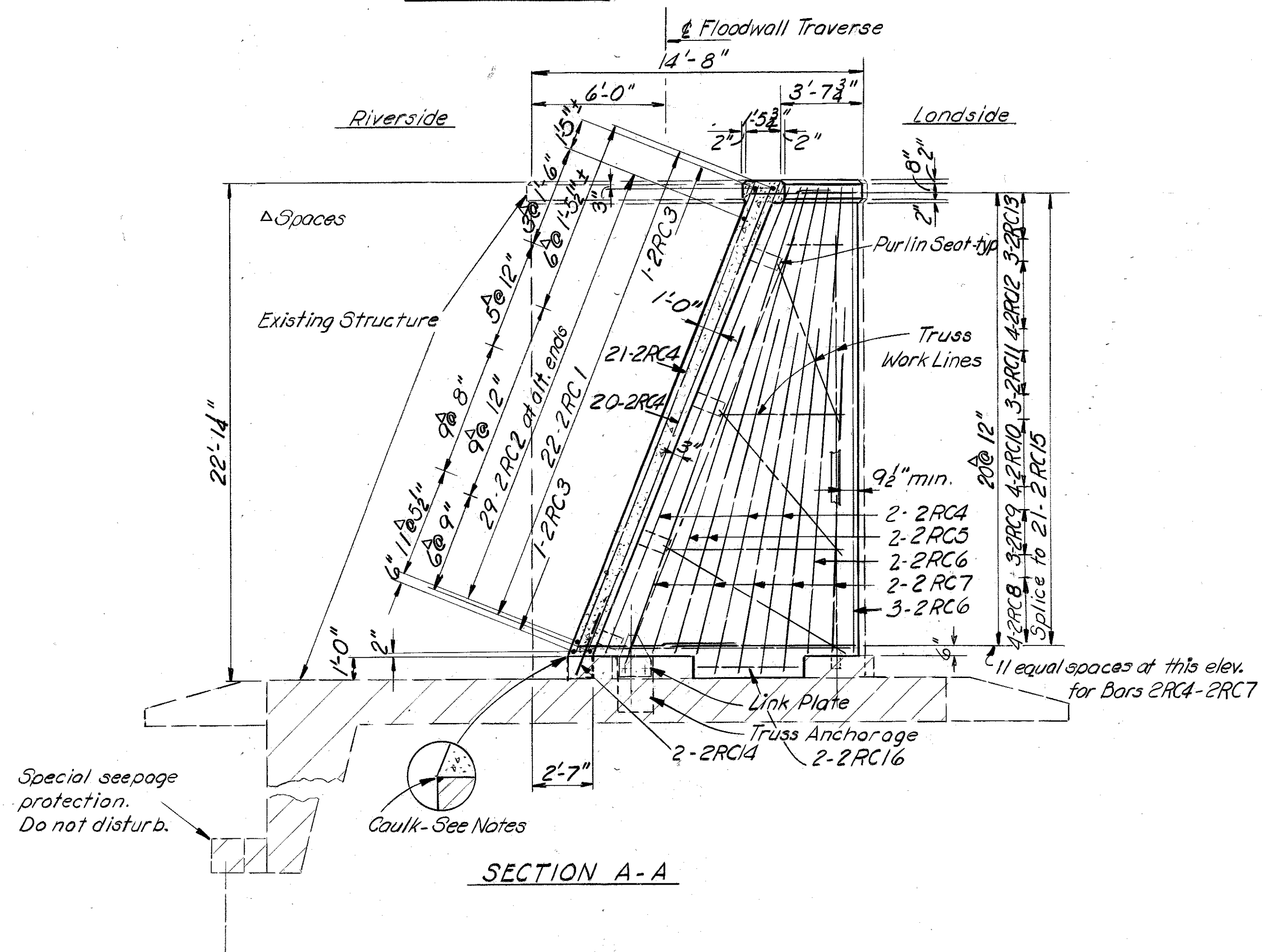
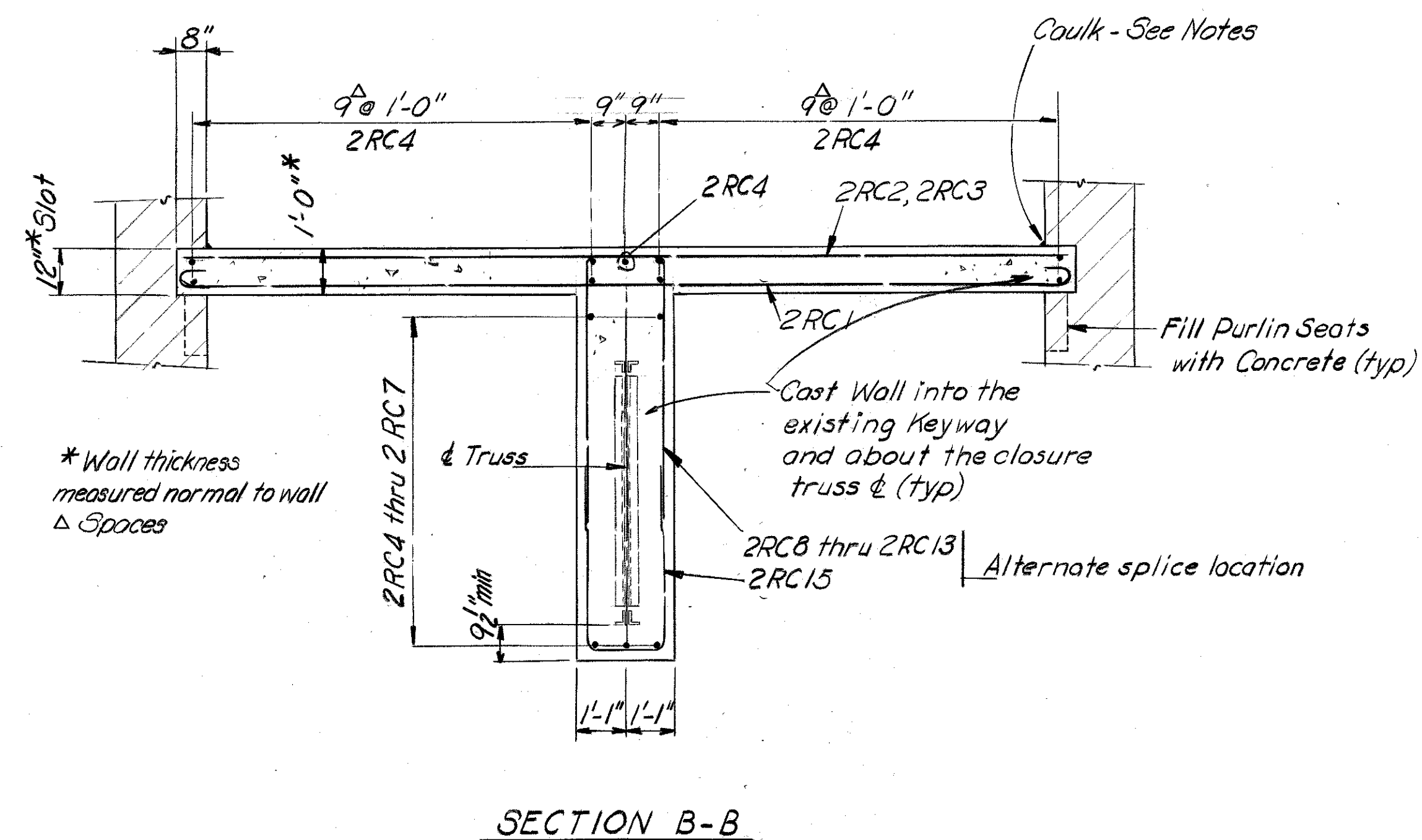
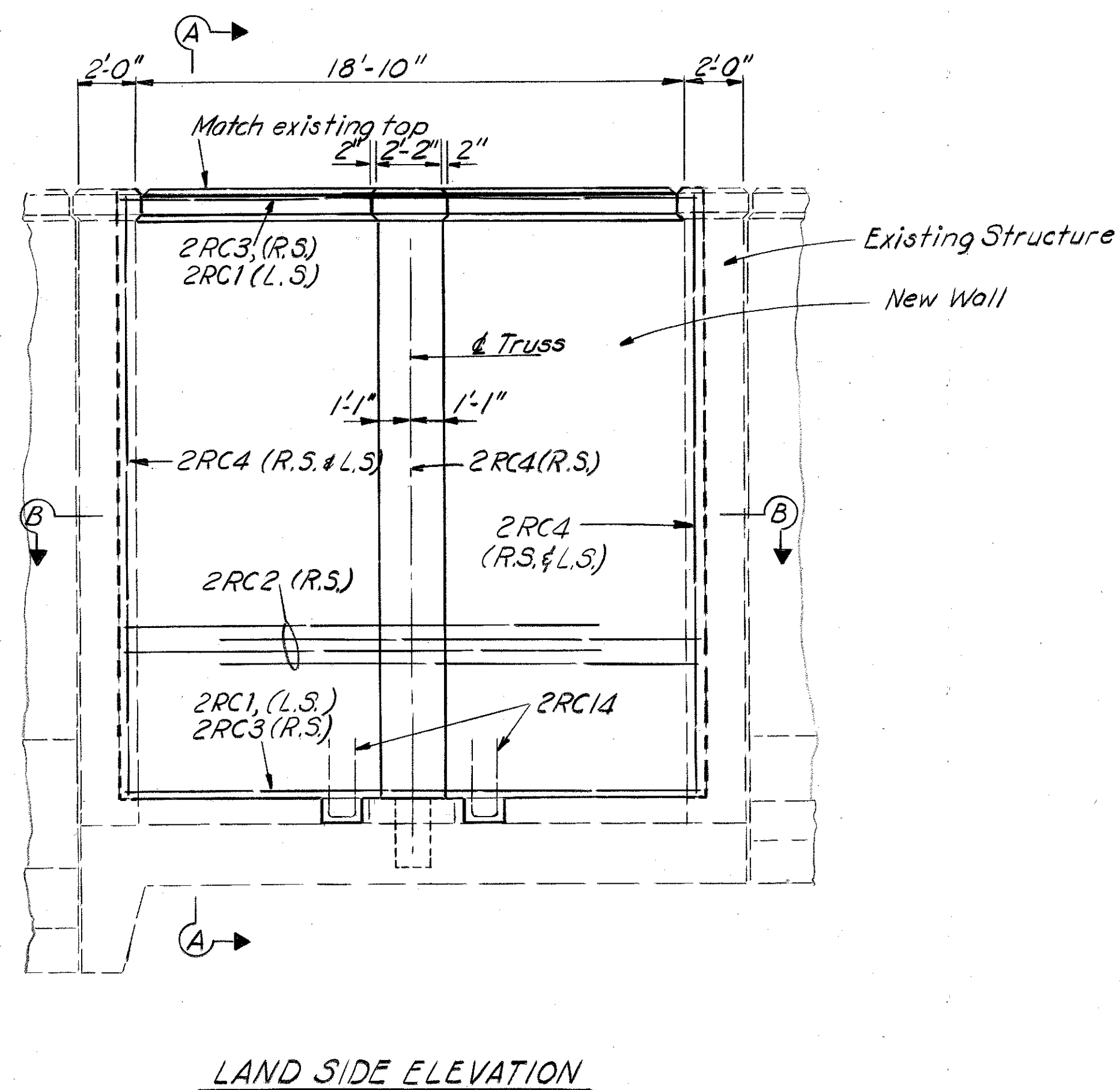
SUBSTRUCTURE
FLOODWALL REMEDIAL STRIPS

SHEET A44

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

SP 56-273-11L
P. E. PROJECT NO. I 64-2 (35) 3

DESIGNED BY <u>RBS</u>	CHECKED BY <u>RHC</u>	DATE <u>9-72</u>	REVISED _____	DATE _____
DETAILED BY <u>RBS</u>	CHECKED BY <u>RHC</u>	DATE <u>9-72</u>	REVISED _____	DATE _____
TRAINED BY _____	CHECKED BY _____	DATE _____	REVISED _____	DATE _____



Notes
See Floodwall Monolith Notes on Sheet A 37.
The existing aluminum truss is stored in the gate storage vault at the site.
The Contractor shall erect the truss as shown under the supervision of the City Engineer of Louisville or his representative.
Since the embedded truss is aluminum, extreme care must be taken to see that the concrete used does not contain any trace of calcium chloride, also no reinforcement or tie steel may be placed closer than six inches to the truss.
Sandblast the existing concrete surfaces and wet them thoroughly before placing the new concrete.
The truss shall be erected according to the appropriate instructions. It is imperative that the link plate is correctly assembled to the truss anchorage and the truss to the link plate. The truss is the center support in this closure.
The joints on the river side shall be caulked with an approved silicone-rubber compound. If there is no chamfer along the bottom, make one $\frac{3}{4}$ " $\frac{1}{2}$ " in the new concrete. Caulking is incidental to Concrete, Class "A."

SHEET A45

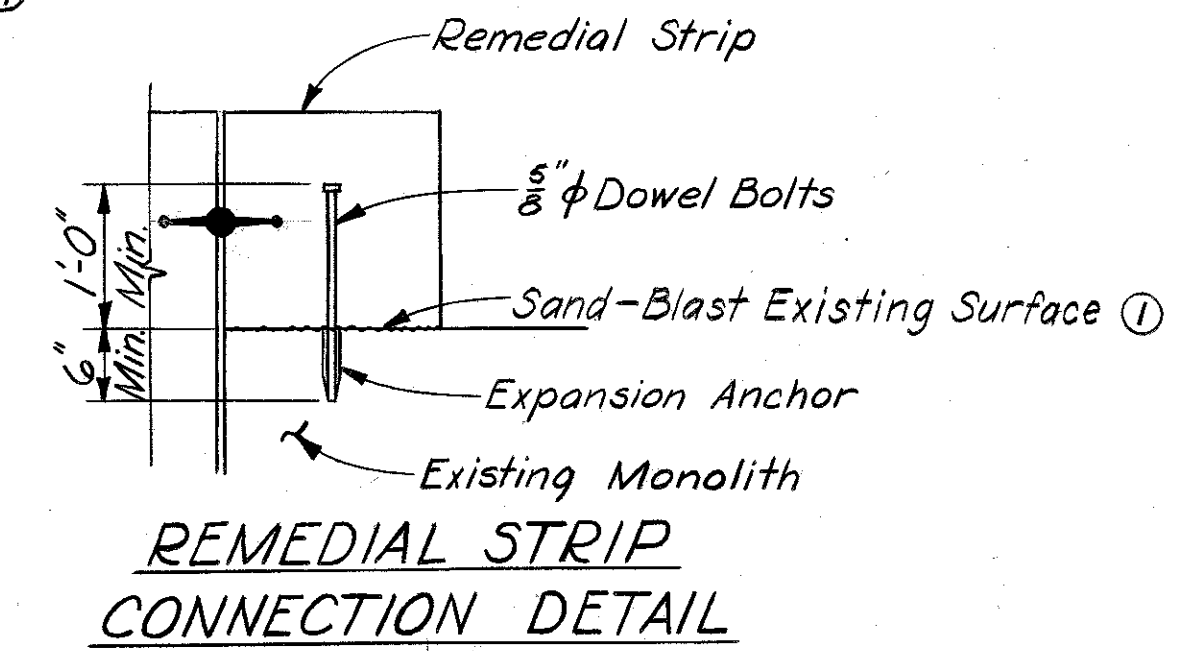
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON

STATION 208+08		P. E. PROJECT NO. 164-2(35)3
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO. 18572

SUBSTRUCTURE
RAILROAD CLOSURE 2RC

DESIGNED BY	<u>EB</u>	CHECKED BY	DATE	REVISED	DATE
DRAWN BY		CHECKED BY	<u>7-71</u>	REVISED	DATE
CHECKED BY		CHECKED BY		REVISED	DATE



- * Includes removing soil directly above existing footing.
- ** Conc. & Reinf. for Col. R4-7 is listed in Ramp Quantities.
- ① $\frac{1}{2}$ " Premoulded Exp. Joint Filler, Copper Seal Strip, & "Bituminous Mastic, Sandblasting existing surfaces and exposed reinforcement, and Paint are incidental to Class "A" Concrete.
- † Dimensions and Materials to be approved by U. S. Corps of Engineers.

LETTING DATE.

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BILL OF REINFORCEMENT - COL/FTG. UNITS

Mark	Type	Size	No. Req.	Length		Location	a	
				Ft.	In.		Ft.	In.
26W1-1	Str.	11	17	30	7	Col.-Vertical		
" -2	22	11	17	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	423	5	Col. Spiral (33.25 Turns)*	4	1
" -5	(1)	8	11	12	8	Ftg. Trans.	10	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

26W3-1	Str.	11	17	30	1	Col.-Vertical		
" -2	22	11	17	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	417	1	Col. Spiral (32.75 Turns)*	4	1
" -5	(1)	8	11	12	8	Ftg. Trans.	10	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

26E2-1	Str.	11	15	30	10	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	426	7	Col. Spiral (33.50 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

26E4-1	Str.	11	15	31	7	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	436	2	Col. Spiral (34.25 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

27W1-1	Str.	11	15	29	7	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	410	8	Col. Spiral (32.25 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	8	17	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar - Trans.	2	4
" -8	(1A)	4	5	4	0	" - Long.	2	4

27W3-1	Str.	11	15	29	1	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	404	4	Col. Spiral (31.75 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	8	17	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar - Trans.	2	4
" -8	(1A)	4	5	4	0	" - Long.	2	4

Mark	Type	Size	No. Req.	Length		Location	a	
				Ft.	In.		Ft.	In.
27E2-1	Str.	10	21	29	7	Col.-Vertical		
" -2	22	11	21	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	410	8	Col. Spiral (32.25 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	8	17	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar - Trans.	2	4
" -8	(1A)	4	5	4	0	" - Long.	2	4

27E4-1	Str.	10	21	30	4	Col.-Vertical		
" -2	22	11	21	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	420	3	Col. Spiral (33.00 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	8	17	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar - Trans.	2	4
" -8	(1A)	4	5	4	0	" - Long.	2	4

28W1-1	Str.	11	15	29	1	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	404	4	Col. Spiral (31.75 Turns)*	4	1
" -5	(1)	8	11	12	8	Ftg. Trans.	10	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

28W3-1	Str.	11	15	28	1	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	391	7	Col. Spiral (30.75 Turns)*	4	1
" -5	(1)	8	11	12	8	Ftg. Trans.	10	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

28E2-1	Str.	11	15	28	7	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	397	11	Col. Spiral (31.25 Turns)*	4	1
" -5	(1)	6	11	10	0	Ftg. Trans.	8	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	3	8	" - Long.	2	0

28E4-1	Str.	11	15	28	7	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	397	11	Col. Spiral (31.25 Turns)*	4	1
" -5	(1)	6	11	10	0	Ftg. Trans.	8	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	3	8	" - Long.	2	0

Mark	Type	Size	No. Req.	Length		Location	a	
				Ft.	In.		Ft.	In.
29W1-1	Str.	9	18	26	8	Col.-Vertical		
" -2	22	11	18	9	0	Ftg. & Col. (Dowel)	7	1
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	329	5	Col. Spiral (29.50 Turns)*	3	7
" -5	(1)	6	16	10	0	Ftg. Trans.	8	6
" -6	(1)	6	16	10	0	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar - Trans.	3	0
" -8	(1A)	4	5	4	0	" - Long.	2	4

29W3-1	Str.	9	18	26	8	Col.-Vertical		
" -2	22	11	18	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	337	10	Col. Spiral (30.25 Turns)*	3	7
" -5	(1)	6	15	10	0	Ftg. Trans.	8	6
" -6	(1)	6	15	10	0	Ftg. Long.	8	6
" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar - Trans.	2	6
" -8	(1A)	4	5	4	2	" - Long.	2	6

29E2-1	Str.	11	15	26	7	Col.-Vertical		
" -2	22	11	15	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	326	8	Col. Spiral (29.25 Turns)*	3	7
" -5	(1)	7	12	10	3	Ftg. Trans.	8	6
" -6	(1)	7	11	10	3	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar - Trans.	3	0
" -8	(1A)	4	5	4	0	" - Long.	2	4

29E4-1	Str.	11	15	27	1	Col.-Vertical		
" -2	22	11	15	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	332	3	Col. Spiral (29.75 Turns)*	3	7
" -5	(1)	8	13	12	8	Ftg. Trans.	10	6
" -6	(1)	7	11	10	3	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

30W1-1	Str.	9	31	25	8	Col.-Vertical		
" -2	22	11	31	11	6	Ftg. & Col. (Dowel)	9	7
" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
" -4	T5	4	1	429	0	Col. Spiral (30.00 Turns)*	4	7
" -5	(1)	8	18	14	8	Ftg. Trans.	12	6
" -6	(1)	8	24	16	8	Ftg. Long.	14	6
" -7	(1A)	4	5	5	0	Mas. R. Brg. Bar - Trans.	3	4
" -8	(1A)	4	5	5	0	" - Long.	3	4

* No. of turns @ 12" pitch plus 1 1/2 turns at each end required for the column.
Size 4 Spiral equals size W20 wire.
For Bar Bending Details see Sheet A56.

SUBSTRUCTURE
BILL OF REINFORCEMENT

LETTING DATE.

DESIGNED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 TRACED BY: _____ DATE: _____
 REVISIONS: _____
 DATE: _____

BILL OF REINFORCEMENT - COL./FTG. UNITS

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. 30W-G3	30W3-1	Str.	10	21	27	1	Col.-Vertical		
	" -2	22	11	21	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	378	10	Col. Spiral (29.75 Turns) *	4	1
	" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
	" -6	(1)	8	19	14	8	Ftg. Long.	12	6
	" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar - Trans.	2	6
	" -8	(1A)	4	5	4	2	" - Long.	2	6

Col./Ftg. 30E-G4	30E4-1	Str.	11	28	25	10	Col.-Vertical		
	" -2	22	11	28	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	362	11	Col. Spiral (28.50 Turns) *	4	1
	" -5	(1)	8	14	12	8	Ftg. Trans.	10	6
	" -6	(1)	8	18	14	8	Ftg. Long.	12	6
	" -7	(1A)	4	5	4	4	Mas. R. Brg. Bar - Trans.	2	8
	" -8	(1A)	4	5	4	4	" - Long.	2	8

Col./Ftg. 31W-G3	31W3-1	Str.	11	15	25	10	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	362	11	Col. Spiral (28.50 Turns) *	4	1
	" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
	" -6	(1)	6	12	10	0	Ftg. Long.	8	6
	" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar - Trans.	3	0
	" -8	(1A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 31E-2	31E2-1	Str.	11	19	25	7	Col.-Vertical		
	" -2	22	11	19	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	404	0	Col. Spiral (28.25 Turns) *	4	7
	" -5	(1)	8	27	16	8	Ftg. Trans.	14	6
	" -6	(1)	8	20	16	8	Ftg. Long.	14	6
	" -7	(1A)	4	5	5	0	Mas. R. Brg. Bar - Trans.	3	4
	" -8	(1A)	4	5	4	4	" - Long.	2	8

Col./Ftg. 31E-G4	31E4-1	Str.	11	15	26	10	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	375	8	Col. Spiral (29.50 Turns) *	4	1
	" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
	" -6	(1)	6	12	10	0	Ftg. Long.	8	6
	" -7	(1A)	4	5	4	4	Mas. R. Brg. Bar - Trans.	2	8
	" -8	(1A)	4	5	3	8	" - Long.	2	0

Col./Ftg. 32W-G1	32W1-1	Str.	11	15	25	7	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	359	9	Col. Spiral (28.25 Turns) *	4	1
	" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
	" -6	(1)	6	12	10	0	Ftg. Long.	8	6
	" -7	(1A)	4	5	5	0	Mas. R. Brg. Bar - Trans.	3	4
	" -8	(1A)	4	5	4	4	" - Long.	2	8

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. 32W-3	32W3-1	Str.	11	19	24	10	Col.-Vertical		
	" -2	22	11	19	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	393	3	Col. Spiral (27.50 Turns) *	4	7
	" -5	(1)	8	29	16	8	Ftg. Trans.	14	6
	" -6	(1)	8	28	16	8	Ftg. Long.	14	6
	" -7	(1A)	4	5	4	6	Mas. R. Brg. Bar - Trans.	2	10
	" -8	(1A)	4	2	3	6	" - Trans.	1	10
	" -9	(1A)	4	5	5	2	Mas. R. Brg. Bar - Long.	3	6
	" -10	(1A)	4	2	4	2	" - Long.	2	6

Col./Ftg. 32E-G2	32E2-1	Str.	11	12	25	4	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	312	8	Col. Spiral (28.00 Turns) *	3	7
	" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
	" -6	(1)	7	11	10	3	Ftg. Long.	8	6
	" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar - Trans.	3	0
	" -8	(1A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 32E-G4	32E4-1	Str.	11	12	26	4	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	323	10	Col. Spiral (29.00 Turns) *	3	7
	" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
	" -6	(1)	7	11	10	3	Ftg. Long.	8	6
	" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
	" -8	(1A)	4	5	3	10	" - Long.	2	2

Col./Ftg. 33W-G1	33W1-1	Str.	10	21	26	1	Col.-Vertical		
	" -2	22	11	21	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	366	1	Col. Spiral (28.75 Turns) *	4	1
	" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
	" -6	(1)	8	20	14	8	Ftg. Long.	12	6
	" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar - Trans.	2	6
	" -8	(1A)	4	5	4	2	" - Long.	2	6

Col./Ftg. 33W-G3	33W3-1	Str.	11	15	24	10	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	350	2	Col. Spiral (27.50 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	17	13	8	Ftg. Long.	11	6
	" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar - Trans.	2	4
	" -8	(1A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 33W-G5	33W5-1	Str.	11	15	24	4	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	343	10	Col. Spiral (27.00 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	17	13	8	Ftg. Long.	11	6
	" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar - Trans.	2	6
	" -8	(1A)	4	5	4	2	" - Long.	2	6

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. 33E-G2	33E2-1	Str.	11	12	26	4	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	323	10	Col. Spiral (29.00 Turns) *	3	7
	" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
	" -8	(1A)	4	5	3	10	" - Long.	2	2

Col./Ftg. 33E-G4	33E4-1	Str.	11	12	27	7	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	337	10	Col. Spiral (30.25 Turns) *	3	7
	" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
	" -8	(1A)	4	5	3	10	" - Long.	2	2

Col./Ftg. 34W-G1	34W1-1	Str.	11	18	25	10	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	407	7	Col. Spiral (28.50 Turns) *	4	7
	" -5	(1)	6	11	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(1A)	4	6	4	6	Mas. R. Brg. Bar - Trans.	2	10
	" -8	(1A)	4	5	4	6	" - Long.	2	10

Col./Ftg. 34W-G3	34W3-1	Str.	11	18	24	7	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	389	8	Col. Spiral (27.25 Turns) *	4	7
	" -5	(1)	6	11	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(1A)	4	6	4	6	Mas. R. Brg. Bar - Trans.	2	10
	" -8	(1A)	4	5	4	6	" - Long.	2	10

Col./Ftg. R1-17A	1R17A-1	Str.	11	18	26	10	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	421	10	Col. Spiral (29.50 Turns) *	4	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(1A)	4	6	4	4	Mas. R. Brg. Bar - Trans.	2	8
	" -8	(1A)	4	5	4	4	" - Long.	2	8

LETTING DATE.

DESIGNED BY: _____ CHECKED BY: _____ DATE: _____
 TRACED BY: _____ CHECKED BY: _____ DATE: _____
 REVISION: _____ DATE: _____
 REVISION: _____ DATE: _____

BILL OF REINFORCEMENT - COL./FTG. UNITS

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. RI-17B	IR17B-1	Str.	11	18	25	4	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	400	5	Col. Spiral (28.00 Turns) *	4	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	6	4	8	Mas. R Brg. Bar -Trans.	3	0
	" -8	(17A)	4	5	4	8	" -Long.	3	0

Col./Ftg. 34E-G2	34E2-1	Str.	10	24	26	4	Col.-Vertical		
	" -2	22	11	24	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	414	9	Col. Spiral (29.00 Turns) *	4	7
	" -5	(1)	8	16	13	8	Ftg. Trans.	11	6
	" -6	(1)	8	22	16	8	Ftg. Long.	14	6
	" -7	(17A)	4	5	4	6	Mas. R Brg. Bar -Trans.	2	10
	" -8	(17A)	4	5	4	6	" -Long.	2	10

Col./Ftg. 34E-G4	34E4-1	Str.	9	29	26	8	Col.-Vertical		
	" -2	22	11	29	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	425	5	Col. Spiral (29.75 Turns) *	4	7
	" -5	(1)	8	16	13	8	Ftg. Trans.	11	6
	" -6	(1)	8	22	16	8	Ftg. Long.	14	6
	" -7	(17A)	4	5	4	6	Mas. R Brg. Bar -Trans.	2	10
	" -8	(17A)	4	5	4	6	" -Long.	2	10

Col./Ftg. 35W-G1	35W1-1	Str.	11	15	25	1	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	353	4	Col. Spiral (27.75 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	17	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	0	Mas. R Brg. Bar -Trans.	2	4
	" -8	(17A)	4	5	4	0	" -Long.	2	4

Col./Ftg. 35W-G3	35W3-1	Str.	11	15	23	7	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	334	3	Col. Spiral (26.25 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	17	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	0	Mas. R Brg. Bar -Trans.	2	4
	" -8	(17A)	4	5	4	0	" -Long.	2	4

Col./Ftg. 35E-G2	35E2-1	Str.	11	18	25	4	Col.-Vertical		
	" -2	22	11	18	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	356	7	Col. Spiral (28.00 Turns) *	4	1
	" -5	(1)	8	36	16	8	Ftg. Trans.	14	6
	" -6	(1)	8	27	16	8	Ftg. Long.	14	6
	" -7	(17A)	4	5	4	6	Mas. R Brg. Bar -Trans.	2	10
	" -8	(17A)	4	2	3	4	" -Trans.	1	8
	" -9	(17A)	4	5	4	8	Mas. R Brg. Bar -Long.	3	0
	" -10	(17A)	4	2	3	8	" -Long.	2	0

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. 35E-G4	35E4-1	Str.	11	18	26	7	Col.-Vertical		
	" -2	22	11	18	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	372	6	Col. Spiral (29.25 Turns) *	4	1
	" -5	(1)	8	36	16	8	Ftg. Trans.	14	6
	" -6	(1)	8	27	16	8	Ftg. Long.	14	6
	" -7	(17A)	4	5	4	6	Mas. R Brg. Bar -Trans.	2	10
	" -8	(17A)	4	2	3	4	" -Trans.	1	8
	" -9	(17A)	4	5	4	8	Mas. R Brg. Bar -Long.	3	0
	" -10	(17A)	4	2	3	8	" -Long.	2	0

Col./Ftg. 36W-G1	36W1-1	Str.	11	12	23	4	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	290	4	Col. Spiral (26.00 Turns) *	3	7
	" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
	" -6	(1)	6	11	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	3	4	6	Mas. R Brg. Bar -Trans.	2	10
	" -8	(17A)	4	5	3	10	" -Long.	2	2

Col./Ftg. 36W-G3	36W3-1	Str.	11	12	21	10	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	273	7	Col. Spiral (24.50 Turns) *	3	7
	" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
	" -6	(1)	6	11	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	3	4	6	Mas. R Brg. Bar -Trans.	2	10
	" -8	(17A)	4	5	3	10	" -Long.	2	2

Col./Ftg. 36E-G2	36E2-1	Str.	11	12	25	4	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	312	8	Col. Spiral (28.00 Turns) *	3	7
	" -5	(1)	7	13	10	3	Ftg. Trans.	8	6
	" -6	(1)	6	13	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	3	4	6	Mas. R Brg. Bar -Trans.	2	10
	" -8	(17A)	4	5	3	10	" -Long.	2	2

Col./Ftg. 36E-G4	36E4-1	Str.	11	12	26	7	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	326	8	Col. Spiral (29.25 Turns) *	3	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	3	4	4	Mas. R Brg. Bar -Trans.	2	8
	" -8	(17A)	4	5	3	8	" -Long.	2	0

Col./Ftg. 36E-G6	36E6-1	Str.	11	12	27	4	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	335	1	Col. Spiral (30.00 Turns) *	3	7
	" -5	(1)	7	13	10	3	Ftg. Trans.	8	6
	" -6	(1)	6	13	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	3	4	6	Mas. R Brg. Bar -Trans.	2	10
	" -8	(17A)	4	5	3	10	" -Long.	2	2

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. 37E-G2	37E2-1	Str.	11	15	23	4	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	331	1	Col. Spiral (26.00 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	17	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	0	Mas. R Brg. Bar -Trans.	2	4
	" -8	(17A)	4	5	4	0	" -Long.	2	4

Col./Ftg. 37E-G4	37E4-1	Str.	11	15	25	10	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	362	11	Col. Spiral (28.50 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	17	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	0	Mas. R Brg. Bar -Trans.	2	4
	" -8	(17A)	4	5	4	0	" -Long.	2	4

Col./Ftg. 37E-G6	37E6-1	Str.	11	15	27	4	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	382	0	Col. Spiral (30.00 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	17	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	2	Mas. R Brg. Bar -Trans.	2	6
	" -8	(17A)	4	5	4	2	" -Long.	2	6

Col./Ftg. 38W-G1	38W1-1	Str.	11	12	19	4	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	245	8	Col. Spiral (22.00 Turns) *	3	7
	" -5	(1)	6	16	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	16	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	5	4	2	Mas. R Brg. Bar -Trans.	2	6
	" -8	(17A)	4	5	4	2	" -Long.	2	6

Col./Ftg. 38W-G3	38W3-1	Str.	11	12	18	1	Col. -Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	231	8	Col. Spiral (20.75 Turns) *	3	7
	" -5	①	6	15	10	0	Ftg. Trans.	8	6
	" -6	①	6	14	10	0	Ftg. Long.	8	6
	" -7	⑩A	4	5	4	8	Mas. & Brg. Bar -Trans	3	0
	" -8	⑩A	4	5	4	0	" -Long	2	4

LETTING DATE.

DESIGNED BY: DATE: 5-71
 CHECKED BY: DATE: 12-71
 TRACED BY: DATE: 12-71

DESIGNED BY: DATE: 5-71
 CHECKED BY: DATE: 12-71
 TRACED BY: DATE: 12-71

BILL OF REINFORCEMENT - COL./FTG. UNITS

Mark	Type	Size	No. Req.	Length		Location	a	
				Ft.	In.		Ft.	In.
38E2-1	Str.	11	12	23	4	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	290	4	Col. Spiral (26.00 Turns) *	3	7
" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
" -6	(1)	6	9	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

38E4-1	Str.	11	12	26	4	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	323	10	Col. Spiral (29.00 Turns) *	3	7
" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
" -6	(1)	6	9	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

38E6-1	Str.	11	12	27	1	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	332	3	Col. Spiral (29.75 Turns) *	3	7
" -5	(1)	7	12	10	3	Ftg. Trans.	8	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

39W3-1	Str.	11	15	17	10	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	261	0	Col. Spiral (20.50 Turns) *	4	1
" -5	(1)	8	13	12	8	Ftg. Trans.	10	6
" -6	(1)	8	15	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	4	4	" - Long.	2	8

39E2-1	Str.	11	18	20	4	Col.-Vertical		
" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
" -4	T5	4	1	328	11	Col. Spiral (23.00 Turns) *	4	7
" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
" -6	(1)	6	9	10	0	Ftg. Long.	8	6
" -7	(1A)	4	6	5	0	Mas. R. Brg. Bar - Trans.	3	4
" -8	(1A)	4	7	4	8	" - Long.	3	0

39E4-1	Str.	11	18	21	10	Col.-Vertical		
" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
" -4	T5	4	1	350	4	Col. Spiral (24.50 Turns) *	4	7
" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
" -6	(1)	6	9	10	0	Ftg. Long.	8	6
" -7	(1A)	4	6	5	0	Mas. R. Brg. Bar - Trans.	3	4
" -8	(1A)	4	7	4	8	" - Long.	3	0

Mark	Type	Size	No. Req.	Length		Location	a	
				Ft.	In.		Ft.	In.
40W1-1	Str.	11	14	21	1	Col.-Vertical		
" -2	22	11	14	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	265	3	Col. Spiral (23.75 Turns) *	3	7
" -5	(1)	8	21	13	8	Ftg. Trans.	11	6
" -6	(1)	8	15	13	8	Ftg. Long.	11	6
" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar - Trans.	2	6
" -8	(1A)	4	5	4	2	" - Long.	2	6

40W3-1	Str.	11	12	19	10	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	251	3	Col. Spiral (22.50 Turns) *	3	7
" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
" -6	(1)	7	9	10	3	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar - Trans.	3	0
" -8	(1A)	4	5	4	0	" - Long.	2	4

40E2-1	Str.	11	12	18	4	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	234	6	Col. Spiral (21.00 Turns) *	3	7
" -5	(1)	7	10	10	3	Ftg. Trans.	8	6
" -6	(1)	7	9	10	3	Ftg. Long.	8	6
" -7	(1A)	4	3	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	3	8	" - Long.	2	0

40E4-1	Str.	11	12	19	7	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	248	6	Col. Spiral (22.25 Turns) *	3	7
" -5	(1)	6	12	10	0	Ftg. Trans.	8	6
" -6	(1)	6	12	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	3	8	" - Long.	2	0

41W3-1	Str.	11	12	22	1	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	276	5	Col. Spiral (24.75 Turns) *	3	7
" -5	(1)	7	10	10	3	Ftg. Trans.	8	6
" -6	(1)	6	9	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	6	Mas. R. Brg. Bar - Trans.	2	10
" -8	(1A)	4	5	3	10	" - Long.	2	2

42W3-1	Str.	11	15	22	10	Col.-Vertical		
" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	324	8	Col. Spiral (25.50 Turns) *	4	1
" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
" -6	(1)	8	12	13	8	Ftg. Long.	11	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar - Trans.	2	4
" -8	(1A)	4	5	4	0	" - Long.	2	4

Mark	Type	Size	No. Req.	Length		Location	a	
				Ft.	In.		Ft.	In.
42E4-1	Str.	11	12	23	1	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	287	7	Col. Spiral (25.75 Turns) *	3	7
" -5	(1)	6	13	10	0	Ftg. Trans.	8	6
" -6	(1)	6	8	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	3	8	" - Long.	2	0

43W3-1	Str.	11	12	23	4	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	290	4	Col. Spiral (26.00 Turns) *	3	7
" -5	(1)	6	12	10	0	Ftg. Trans.	8	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	3	8	" - Long.	2	0

43E4-1	Str.	11	17	23	10	Col.-Vertical		
" -2	22	11	17	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	337	5	Col. Spiral (26.50 Turns) *	4	1
" -5	(1)	8	14	12	8	Ftg. Trans.	10	6
" -6	(1)	8	16	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar - Trans.	2	6
" -8	(1A)	4	5	4	2	" - Long.	2	6

44W1-1	Str.	11	12	25	10	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	318	3	Col. Spiral (28.50 Turns) *	3	7
" -5	(1)	6	11	10	0	Ftg. Trans.	8	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	3	8	" - Long.	2	0

44W3-1	Str.	11	12	24	10	Col.-Vertical		
" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	307	1	Col. Spiral (27.50 Turns) *	3	7
" -5	(1)	6	11	10	0	Ftg. Trans.	8	6
" -6	(1)	6	11	10	0	Ftg. Long.	8	6
" -7	(1A)	4	3	4	4	Mas. R. Brg. Bar - Trans.	2	8
" -8	(1A)	4	5	3	8	" - Long.	2	0

* No. of turns @ 12" pitch plus
 1 1/2 turns at each end required
 for the column.
 Size 4 Spiral equals size
 W20 wire.

SUBSTRUCTURE
 BILL OF REINFORCEMENT

SHEET A51

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO. 164-2 (35) 3
 MAINTENANCE PROJECT NO. 18572
 DRAWING NO. 18572

LETTING DATE.

BILL OF REINFORCEMENT - COL./FTG. UNITS

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. 44E-G2	44E2-1	Str.	11	15	24	4	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	343	10	Col. Spiral (27.00 Turns) *	4	1
	" -5	(1)	8	17	13	8	Ftg. Trans.	11	6
	" -6	(1)	8	12	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	8	Mas. R Brg. Bar - Trans.	3	0
	" -8	(17A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 44E-G4	44E4-1	Str.	11	15	26	1	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	366	1	Col. Spiral (28.75 Turns) *	4	1
	" -5	(1)	8	17	13	8	Ftg. Trans.	11	6
	" -6	(1)	8	12	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	8	Mas. R Brg. Bar - Trans.	3	0
	" -8	(17A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 45W-G1	45W1-1	Str.	11	15	26	1	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	366	1	Col. Spiral (28.75 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	12	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	0	Mas. R Brg. Bar - Trans.	2	4
	" -8	(17A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 45W-G3	45W3-1	Str.	11	15	24	10	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	350	2	Col. Spiral (27.50 Turns) *	4	1
	" -5	(1)	8	11	11	8	Ftg. Trans.	9	6
	" -6	(1)	8	12	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	0	Mas. R Brg. Bar - Trans.	2	4
	" -8	(17A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 45E-G6	45E6-1	Str.	11	18	28	7	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	446	11	Col. Spiral (31.25 Turns) *	4	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	6	4	6	Mas. R Brg. Bar - Trans.	2	10
	" -8	(17A)	4	5	4	6	" - Long.	2	10

Col./Ftg. 45E-G8	45E8-1	Str.	11	18	29	4	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	457	8	Col. Spiral (32.00 Turns) *	4	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	6	4	6	Mas. R Brg. Bar - Trans.	2	10
	" -8	(17A)	4	5	4	6	" - Long.	2	10

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. 46W-G1	46W1-1	Str.	11	12	26	1	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	321	1	Col. Spiral (28.75 Turns) *	3	7
	" -5	(1)	7	10	10	3	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	3	4	4	Mas. R Brg. Bar - Trans.	2	8
	" -8	(17A)	4	5	3	8	" - Long.	2	0

Col./Ftg. 46W-G3	46W3-1	Str.	11	12	24	10	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	307	1	Col. Spiral (27.50 Turns) *	3	7
	" -5	(1)	7	10	10	3	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	3	4	4	Mas. R Brg. Bar - Trans.	2	8
	" -8	(17A)	4	5	3	8	" - Long.	2	0

Col./Ftg. 46E-2	46E2-1	Str.	11	12	25	7	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	315	6	Col. Spiral (28.25 Turns) *	3	7
	" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
	" -6	(1)	7	9	10	3	Ftg. Long.	8	6
	" -7	(17A)	4	5	4	8	Mas. R Brg. Bar - Trans.	3	0
	" -8	(17A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 46E-4	46E4-1	Str.	11	12	26	10	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	329	5	Col. Spiral (29.50 Turns) *	3	7
	" -5	(1)	8	17	13	8	Ftg. Trans.	11	6
	" -6	(1)	8	16	13	8	Ftg. Long.	11	6
	" -7	(17A)	4	5	4	8	Mas. R Brg. Bar - Trans.	3	0
	" -8	(17A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 46E-6	46E6-1	Str.	11	12	27	1	Col.-Vertical		
	" -2	22	11	12	9	9	Ftg. & Col. (Dowel)	7	10
	" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
	" -4	T5	4	1	332	3	Col. Spiral (29.75 Turns) *	3	7
	" -5	(1)	7	10	10	3	Ftg. Trans.	8	6
	" -6	(1)	7	9	10	3	Ftg. Long.	8	6
	" -7	(17A)	4	5	4	8	Mas. R Brg. Bar - Trans.	3	0
	" -8	(17A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 47W-G1	47W1-1	Str.	11	18	26	1	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	411	2	Col. Spiral (28.75 Turns) *	4	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	6	4	6	Mas. R Brg. Bar - Trans.	2	10
	" -8	(17A)	4	5	4	6	" - Long.	2	10

	Mark	Type	Size	No. Req.	Length		Location	a	
					Ft.	In.		Ft.	In.
Col./Ftg. 47W-G3	47W3-1	Str.	11	18	24	10	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	393	3	Col. Spiral (27.50 Turns) *	4	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	6	4	6	Mas. R Brg. Bar - Trans.	2	10
	" -8	(17A)	4	5	4	6	" - Long.	2	10

Col./Ftg. 47W-G5	47W5-1	Str.	11	18	29	4	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	457	8	Col. Spiral (32.00 Turns) *	4	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	6	4	8	Mas. R Brg. Bar - Trans.	3	0
	" -8	(17A)	4	5	4	8	" - Long.	3	0

Col./Ftg. 47W-G7	47W7-1	Str.	11	18	29	4	Col.-Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
	" -4	T5	4	1	457	8	Col. Spiral (32.00 Turns) *	4	7
	" -5	(1)	6	9	10	0	Ftg. Trans.	8	6
	" -6	(1)	6	9	10	0	Ftg. Long.	8	6
	" -7	(17A)	4	6	4	6	Mas. R Brg. Bar - Trans.	2	10
	" -8	(17A)	4	5	4	6	" - Long.	2	10

Col./Ftg. 47E-2	47E2-1	Str.	11	15	26	1	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	366	1	Col. Spiral (28.75 Turns) *	4	1
	" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
	" -6	(1)	8	15	14	8	Ftg. Long.	12	6
	" -7	(17A)	4	5	4	0	Mas. R Brg. Bar - Trans.	2	4
	" -8	(17A)	4	5	4	0	" - Long.	2	4

Col./Ftg. 47E-4	47E4-1	Str.	11	15	27	7	Col.-Vertical		
	" -2	22	11	15	10	3	Ftg. & Col. (Dowel)	8	4
	" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
	" -4	T5	4	1	385	2	Col. Spiral (30.25 Turns) *	4	1
	" -5	(1)	8	14	12	8	Ftg. Trans.	10	6
	" -6	(1)	8	15	14	8	Ftg. Long.	12	6
	" -7	(17A)	4	5	4	2	Mas. R Brg. Bar - Trans.	2	6
	" -8	(17A)	4	5	4	2	" - Long.	2	6

* No. of turns @ 12" pitch plus
1 1/2 turns at each end required
for the column.
Size 4 Spiral equals size
W20 wire.

SUBSTRUCTURE
BILL OF REINFORCEMENT

SHEET A52

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE -

LETTING DATE.

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BILL OF REINFORCEMENT - COL./FTG. UNITS

Mark	Type	Size	No. Req.	Length		Location	a.	
				Ft.	In.		Ft.	In.
47E6-1	Str.	11	15	28	1	Col.-Vertical		
" -2	T2	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	391	7	Col. Spiral (30.75 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	8	15	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar-Trans.	2	4
" -8	(1A)	4	5	4	0	" -Long.	2	4

48E2-1	Str.	10	16	26	7	Col.-Vertical		
" -2	T2	11	16	9	3	Ftg. & Col. (Dowel)	7	4
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	326	8	Col. Spiral (29.25 Turns)*	3	7
" -5	(1)	8	17	13	8	Ftg. Trans.	11	6
" -6	(1)	8	16	13	8	Ftg. Long.	11	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar-Trans.	3	0
" -8	(1A)	4	5	4	0	" -Long.	2	4

48E4-1	Str.	10	16	28	10	Col.-Vertical		
" -2	T2	11	16	9	3	Ftg. & Col. (Dowel)	7	4
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	351	10	Col. Spiral (31.50 Turns)*	3	7
" -5	(1)	8	18	13	8	Ftg. Trans.	11	6
" -6	(1)	8	14	13	8	Ftg. Long.	11	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar-Trans.	3	0
" -8	(1A)	4	5	4	0	" -Long.	2	4

49W1-1	Str.	11	12	24	10	Col.-Vertical		
" -2	T2	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	307	1	Col. Spiral (27.50 Turns)*	3	7
" -5	(1)	7	10	10	3	Ftg. Trans.	8	6
" -6	(1)	7	9	10	3	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar-Trans.	3	0
" -8	(1A)	4	5	4	0	" -Long.	2	4

49W3-1	Str.	11	18	23	1	Col.-Vertical		
" -2	T2	11	18	10	9	Ftg. & Col. (Dowel)	8	10
" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
" -4	T5	4	1	368	3	Col. Spiral (25.75 Turns)*	4	7
" -5	(1)	8	15	13	8	Ftg. Trans.	11	6
" -6	(1)	8	11	13	8	Ftg. Long.	11	6
" -7	(1A)	4	5	5	0	Mas. R. Brg. Bar-Trans.	3	4
" -8	(1A)	4	5	4	4	" -Long.	2	8

49W5-1	Str.	11	12	23	4	Col.-Vertical		
" -2	T2	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	290	4	Col. Spiral (26.00 Turns)*	3	7
" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
" -6	(1)	7	10	10	3	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar-Trans.	3	0
" -8	(1A)	4	5	4	0	" -Long.	2	4

Mark	Type	Size	No. Req.	Length		Location	a.	
				Ft.	In.		Ft.	In.
49E2-1	Str.	11	15	24	10	Col.-Vertical		
" -2	T2	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	350	2	Col. Spiral (27.50 Turns)*	4	1
" -5	(1)	8	17	13	8	Ftg. Trans.	11	6
" -6	(1)	8	12	13	8	Ftg. Long.	11	6
" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar-Trans.	2	6
" -8	(1A)	4	5	4	2	" -Long.	2	6

49E4-1	Str.	11	15	27	7	Col.-Vertical		
" -2	T2	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	385	2	Col. Spiral (30.25 Turns)*	4	1
" -5	(1)	8	17	13	8	Ftg. Trans.	11	6
" -6	(1)	8	12	13	8	Ftg. Long.	11	6
" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar-Trans.	2	6
" -8	(1A)	4	5	4	2	" -Long.	2	6

50W1-1	Str.	11	15	24	4	Col.-Vertical		
" -2	T2	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	343	10	Col. Spiral (27.00 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	8	17	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar-Trans.	2	4
" -8	(1A)	4	5	4	0	" -Long.	2	4

50W3-1	Str.	11	15	23	7	Col.-Vertical		
" -2	T2	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	334	3	Col. Spiral (26.25 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	8	17	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar-Trans.	2	4
" -8	(1A)	4	5	4	0	" -Long.	2	4

50W5-1	Str.	11	15	22	10	Col.-Vertical		
" -2	T2	11	15	10	3	Ftg. & Col. (Dowel)	8	4
" -3	T3	5	1	14	10	Ftg. Hoop	4	1 1/4
" -4	T5	4	1	324	8	Col. Spiral (25.50 Turns)*	4	1
" -5	(1)	8	12	12	8	Ftg. Trans.	10	6
" -6	(1)	8	17	14	8	Ftg. Long.	12	6
" -7	(1A)	4	5	4	0	Mas. R. Brg. Bar-Trans.	2	4
" -8	(1A)	4	5	4	0	" -Long.	2	4

50E2-1	Str.	11	18	23	10	Col.-Vertical		
" -2	T2	11	18	10	9	Ftg. & Col. (Dowel)	8	10
" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
" -4	T5	4	1	379	0	Col. Spiral (26.50 Turns)*	4	7
" -5	(1)	8	13	13	8	Ftg. Trans.	11	6
" -6	(1)	8	18	16	8	Ftg. Long.	14	6
" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar-Trans.	2	6
" -8	(1A)	4	5	4	2	" -Long.	2	6

Mark	Type	Size	No. Req.	Length		Location	a.	
				Ft.	In.		Ft.	In.
50E4-1	Str.	11	18	25	1	Col.-Vertical		
" -2	T2	11	18	10	9	Ftg. & Col. (Dowel)	8	10
" -3	T3	5	1	16	5	Ftg. Hoop	4	7 1/4
" -4	T5	4	1	396	10	Col. Spiral (27.75 Turns)*	4	7
" -5	(1)	8	13	13	8	Ftg. Trans.	11	6
" -6	(1)	8	18	16	8	Ftg. Long.	14	6
" -7	(1A)	4	5	4	2	Mas. R. Brg. Bar-Trans.	2	6
" -8	(1A)	4	5	4	2	" -Long.	2	6

51W1-1	Str.	11	12	22	1	Col.-Vertical		
" -2	T2	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	276	5	Col. Spiral (24.75 Turns)*	3	7
" -5	(1)	7	13	10	3	Ftg. Trans.	8	6
" -6	(1)	7	13	10	3	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar-Trans.	3	0
" -8	(1A)	4	5	4	0	" -Long.	2	4

51W3-1	Str.	11	12	21	10	Col.-Vertical		
" -2	T2	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	273	7	Col. Spiral (24.50 Turns)*	3	7
" -5	(1)	6	13	10	0	Ftg. Trans.	8	6
" -6	(1)	6	13	10	0	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar-Trans.	3	0
" -8	(1A)	4	5	4	0	" -Long.	2	4

51W5-1	Str.	11	12	21	10	Col.-Vertical		
" -2	T2	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	273	7	Col. Spiral (24.50 Turns)*	3	7
" -5	(1)	7	11	10	3	Ftg. Trans.	8	6
" -6	(1)	7	11	10	3	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar-Trans.	3	0
" -8	(1A)	4	5	4	0	" -Long.	2	4

51E2-1	Str.	11	12	22	1	Col.-Vertical		
" -2	T2	11	12	9	9	Ftg. & Col. (Dowel)	7	10
" -3	T3	5	1	13	3	Ftg. Hoop	3	7 1/4
" -4	T5	4	1	276	5	Col. Spiral (24.75 Turns)*	3	7
" -5	(1)	7	10	10	3	Ftg. Trans.	8	6
" -6	(1)	7	10	10	3	Ftg. Long.	8	6
" -7	(1A)	4	5	4	8	Mas. R. Brg. Bar-Trans.	3	0
" -8	(1A)	4	5	4	0	" -Long.	2	4

* No. of turns @ 12" pitch plus
1/2 turns at each end required
for the column.
Size 4 Spiral equals size
W20 wire.

SUBSTRUCTURE
BILL OF REINFORCEMENT

SHEET A53

DESIGNED BY _____	CHECKED BY _____	DATE _____	REVISED _____	DATE _____
DETAILED BY <u>CBF</u>	CHECKED BY <u>B. L.</u>	DATE <u>5-71</u>	REVISED _____	DATE _____
TRACED BY _____	CHECKED BY _____	DATE _____	REVISED _____	DATE _____

Col./Strap Ftg. 37W	37W1 -1	Str.	11	18	22	7	Col. - Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	73	5	1	16	5	Ftg. Hoop	4	7 1/2
	" -4	T5	4	1	361	1	Col. Spiral (25.25 Turns) *	4	7
	" -5	(1A)	4	6	4	2	Mas. R Brg. Bar - Trans.	2	6
	" -6	(1A)	4	5	4	2	" - Long.	2	6
	37W3 -1	Str.	11	18	21	3	Col. - Vertical		
	" -2	22	11	18	10	9	Ftg. & Col. (Dowel)	8	10
	" -3	73	5	1	16	5	Ftg. Hoop	4	7 1/2
	" -4	T5	4	1	343	2	Col. Spiral (24.00 Turns) *	4	7
	" -5	(1A)	4	6	4	2	Mas. R Brg. Bar - Trans.	2	6
	" -6	(1A)	4	5	4	2	" - Long.	2	6
	37W -7	Str.	4	23	8	7	Ftg. - Top		
	" -8	Str.	8	18	33	6	Ftg. - Top		
	" -9	(1)	6	38	10	0	Ftg. - Bottom	8	6
" -10	Str.	6	9	33	6	Ftg. - Bottom			

Col. Strap Fltg. 45E

45E2-1	Str.	11	18	25	10	Col. - Vertical		
" -2	22	11	18	10	9	Fltg. & Col. (Dowel)	8	10
" -3	T3	5	1	16	5	Fltg. Hoop	4	7 1/4
" -4	T5	4	1	407	7	Col. Spiral (28.50 Turns)*	4	7
" -5	(1A)	4	6	4	6	Mas. R. Brq. Bar - Trans.	2	10
" -6	(1A)	4	5	4	6	" - Long.	2	10
45E4-1	Str.	11	18	27	1	Col. - Vertical		
" -2	22	11	18	10	9	Fltg. & Col. (Dowel)	8	10
" -3	T3	5	1	16	5	Fltg. Hoop	4	7 1/4
" -4	T5	4	1	425	5	Col. Spiral (29.75 Turns)*	4	7
" -5	(1A)	4	6	4	6	Mas. R. Brq. Bar - Trans.	2	10
" -6	(1A)	4	5	4	6	" - Long.	2	10
45E - 7	Str.	8	2	28	11	Fltg. Top		
" -8	Str.	8	2	29	1	Fltg. Top		
" -9	Str.	8	2	29	4	Fltg. Top		
" -10	Str.	8	2	29	6	Fltg. Top		
" -11	Str.	8	2	29	8	Fltg. Top		
" -12	Str.	8	2	29	10	Fltg. Top		
" -13	Str.	8	2	30	0	Fltg. Top		
" -14	Str.	8	2	30	3	Fltg. Top		
" -15	Str.	8	2	30	5	Fltg. Top		
" -16	Str.	6	2	29	0	Fltg. Bottom		
" -17	Str.	6	2	29	4	Fltg. Bottom		
" -18	Str.	6	2	29	9	Fltg. Bottom		
" -19	Str.	6	2	30	1	Fltg. Bottom		
" -20	Str.	6	1	30	6	Fltg. Bottom		
" -21	Str.	4	2	5	3	Fltg. Top		
" -22	Str.	4	19	8	6	Fltg. Top		
" -23	Str.	6	2	5	3	Fltg. Bottom		
" -24	(1)	6	2	8	0	Fltg. Bottom	6	6
" -25	(1)	6	2	9	3	Fltg. Bottom	7	9
" -26	(1)	6	43	10	0	Fltg. Bottom	8	6

* No. of turns @ 12" pitch plus
1 1/2 turns at each end required
for the column.
Size 4 Spiral equals size
W20 wire.

SUBSTRUCTURE
BILL OF REINFORCEMENT

LETTING DATE.

BILL OF REINFORCEMENT - MONOLITH UNITS

Mark	Type	Size	No. Req.	Length		Location	a		b		c	
				Ft.	In.		Ft.	In.	Ft.	In.	Ft.	In.
111M-1	29	11	22	29	11	Ftg. Bott.	28	6				
" -2	Str.	6	19	19	6	Ftg.						
" -3	Str.	8	40	20	0	Ftg. Top						
" -4	21	5	11	27	0	Wall	18	9	8	3	2	4½
" -5	29	11	11	28	1	Wall	26	8				
" -6	29	11	11	16	4	Wall	14	11				
" -7	Str.	5	52	19	6	Wall						
" -8	T2	4	22	15	5	Pedestal	3	7	3	9		
" -9	59	4	124	4	3	Rem. Strip						
" -10	62	4	84	6	2	Rem. Strip	2	5	1	6½		
" -11	Str.	4	16	22	5	Rem. Strip						
" -12	Str.	4	12	16	6	Rem. Strip						
" -13	Str.	4	16	12	1	Rem. Strip						
" -14	Str.	11	8	25	9	Pedestal						
" -15	Str.	11	8	26	8	Pedestal						
" -16	17	4	1	7	11	Pedestal	3	7	2	2		
" -17	Str.	5	2	8	11	Pedestal						
" -18	Str.	5	2	7	3	Pedestal						
" -19	22A	4	21	6	0	Ftg.	3	0	3	0		
" -20	17	4	4	6	1	Pedestal	3	8	1	3		
" -21	17	4	5	5	11	Pedestal	3	6	1	3		

98M-1	Str.	6	36	19	6	Ftg.						
" -2	Str.	8	40	29	6	Ftg. Top						
" -3	29	10	24	30	10	Ftg. Bott.	29	6				
" -4	22A	4	21	6	0	Ftg.	3	0	3	0		
" -5	21	5	14	26	10	Wall	18	9	8	0½	2	5
" -6	29	11	16	27	10	Wall	26	5				
" -7	29	11	15	16	1	Wall	14	8				
" -8	Str.	5	54	19	7	Wall						
" -9	59	4	72	4	3	Rem. Strip						
" -10	62	4	78	6	2	Rem. Strip	2	5	1	6½		
" -11	Str.	4	12	23	0	Rem. Strip						
" -12	Str.	4	14	17	11	Rem. Strip						
" -13	Str.	4	18	12	8	Rem. Strip						
" -14	Str.	4	4	23	9	Rem. Strip						
" -15	64	4	15	6	1	Rem. Strip	0	11½	1	10		
" -16	64	4	9	5	9	Rem. Strip	0	9½	1	8		
" -17	62	4	4	7	8	Rem. Strip	3	2	2	3½		
" -20	22	11	12	9	9	Ftg. & Col. Dowel	7	10				
" -21	T3	5	1	13	3	Ftg. Hoop	3	7½				
" -22	Str.	11	12	24	3	Col. Vertical						
" -23	T5	4	1	301	6	Col. Spiral (27.00 Turns)*	3	7				
" -24	17A	4	3	4	4	Mas. & Brg. Bar - Trans.	2	8				
" -25	17A	4	5	3	8	Mas. & Brg. Bar - Long.	2	0				

Mark	Type	Size	No. Req.	Length		Location	a		b		c	
				Ft.	In.		Ft.	In.	Ft.	In.	Ft.	In.
102M-1	Str.	6	36	19	6	Ftg.						
" -2	Str.	8	40	30	6	Ftg. Top						
" -3	29	10	24	31	10	Ftg. Bott.	30	6				
" -4	22A	4	21	6	0	Ftg.	3	0	3	0		
" -5	21	5	14	27	7	Wall	18	9	8	10	2	7½
" -6	29	11	16	16	10	Wall	15	5				
" -7	29	11	15	28	7	Wall	27	2				
" -8	Str.	5	60	19	7	Wall						
" -9	59	4	122	4	3	Rem. Strip						
" -10	62	4	84	6	2	Rem. Strip	2	5	1	6½		
" -11	Str.	4	16	23	9	Rem. Strip						
" -12	Str.	4	12	17	11	Rem. Strip						
" -13	Str.	4	16	13	3	Rem. Strip						
" -14	T3	5	1	14	10	Ftg. Hoop	4	1¼				
" -15	22	11	15	9	9	Ftg. & Col. Dowel	7	10				
" -16	Str.	11	15	24	1	Col. Vertical						
" -17	T5	4	1	343	10	Col. Spiral (27.00 Turns)*	4	1				
" -18	17A	4	5	4	0	Mas. & Brg. Bar - Trans.	2	4				
" -19	17A	4	5	4	0	Mas. & Brg. Bar - Long.	2	4				

2RC-1	1	6	22	21	4	Wall	19	10				
" -2	Str.	6	29	14	0	Wall						
" -3	Str.	6	2	19	10	Wall						
" -4	Str.	4	47	22	2	Wall						
" -5	Str.	4	4	21	8	Wall						
" -6	Str.	4	5	20	9	Wall						
" -7	Str.	4	10	15	6	Wall						
" -8	17	4	4	20	8	Wall	1	9	9	6		
" -9	17	4	3	17	6	Wall	1	9	7	11		
" -10	17	4	4	15	2	Wall	1	9	6	9		
" -11	17	4	3	12	0	Wall	1	9	5	2		
" -12	17	4	4	9	6	Wall	1	9	3	11		
" -13	17	4	3	6	4	Wall	1	9	2	4		
" -14	17	6	2	6	11	Wall	1	0	3	0		
" -15	17	4	21	10	8	Wall	1	9	4	6		
" -16	Str.	4	2	4	9	Wall						

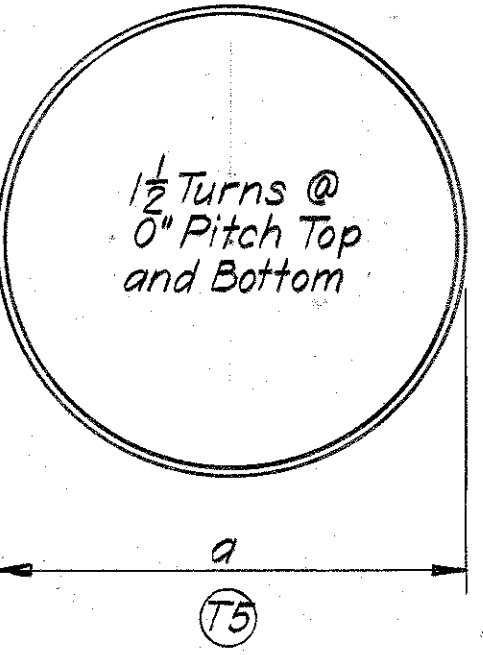
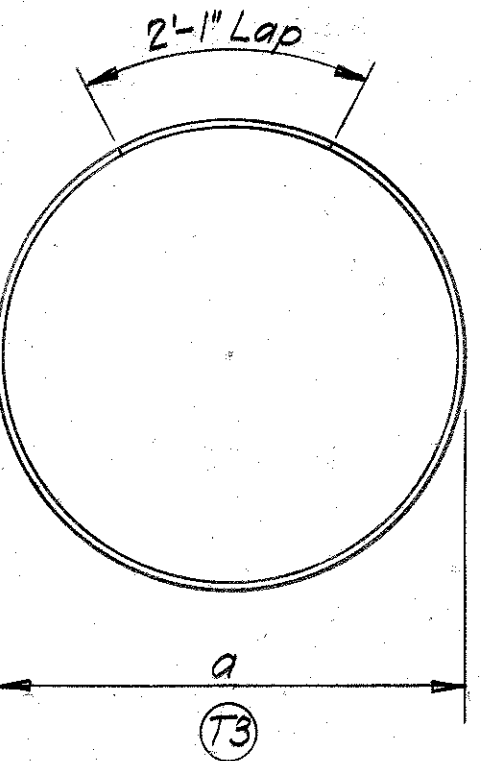
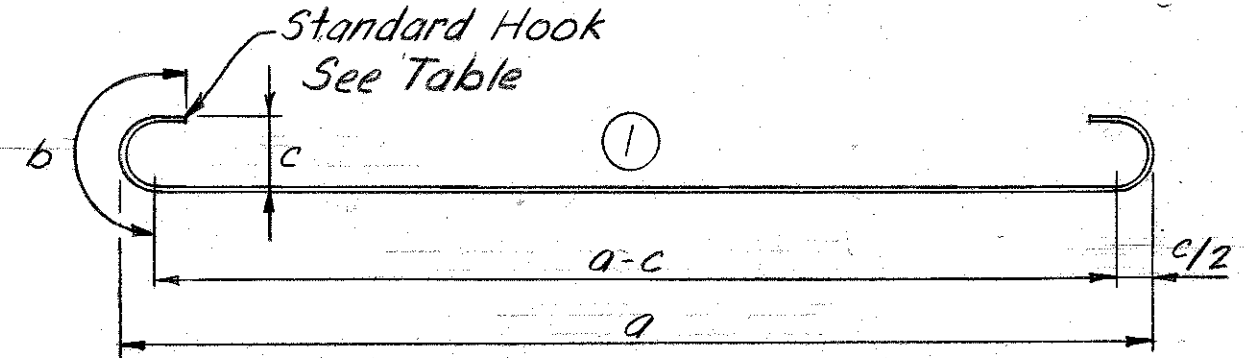
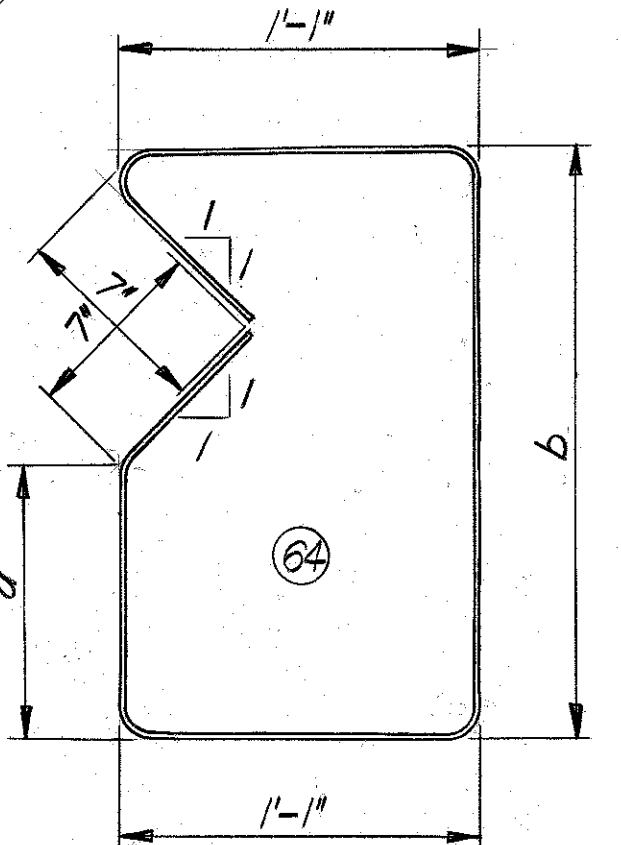
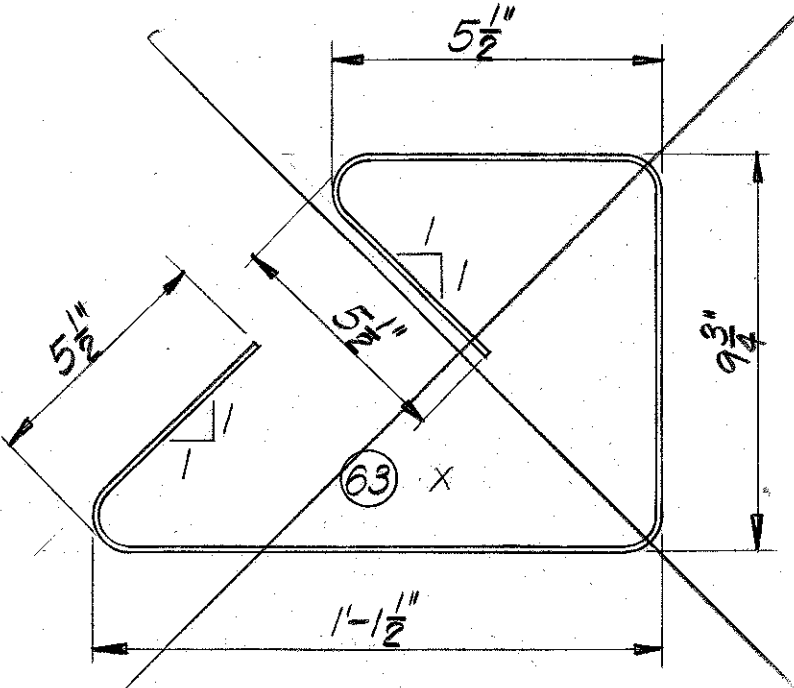
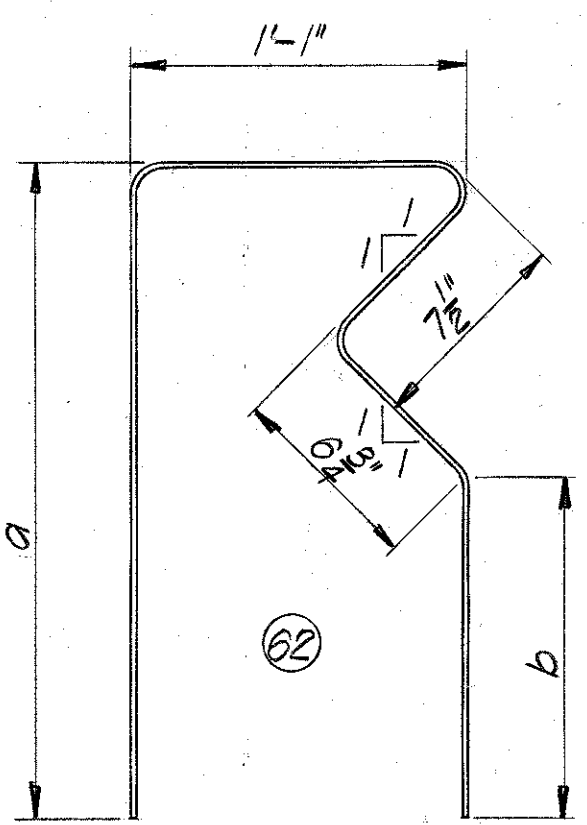
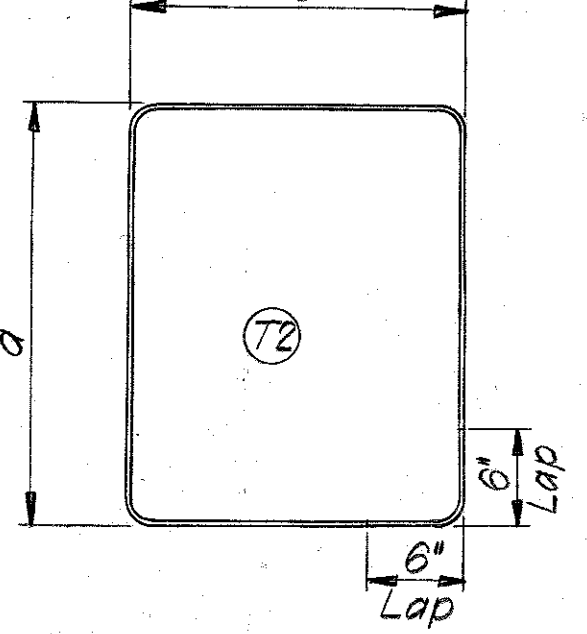
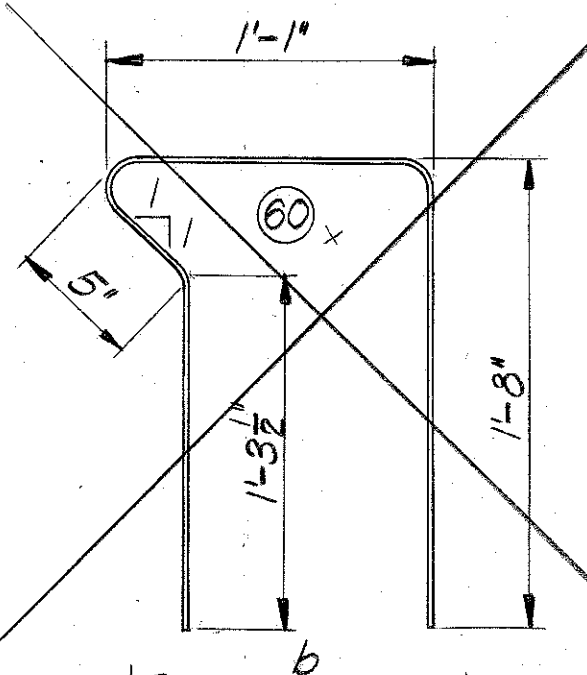
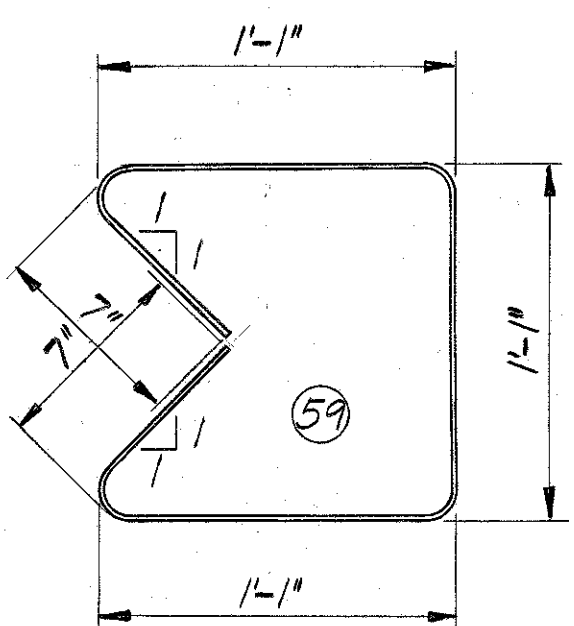
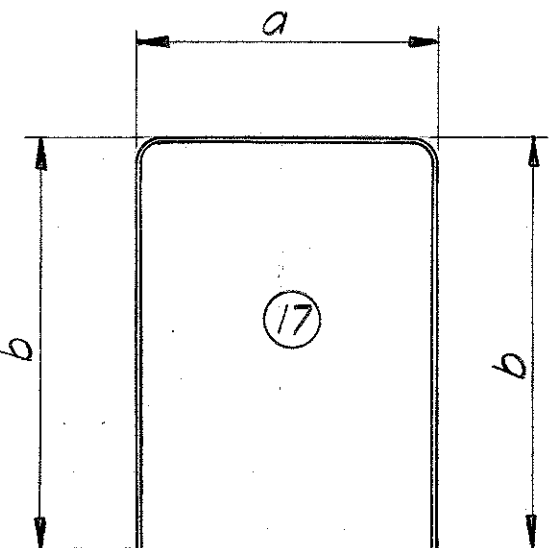
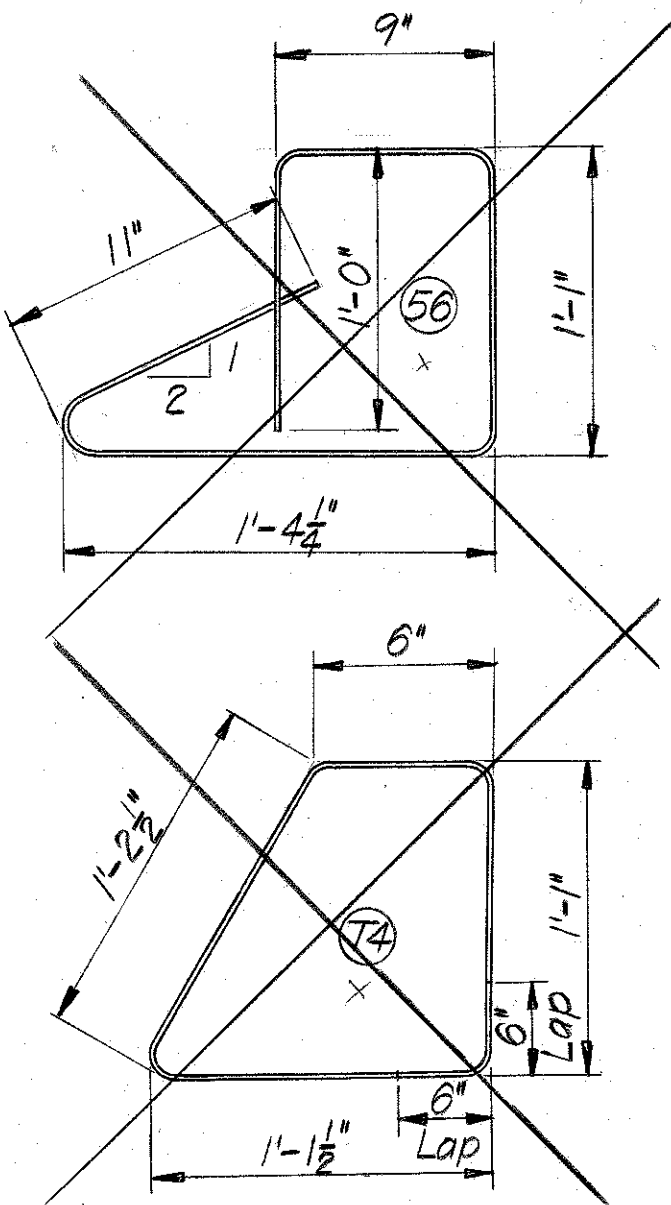
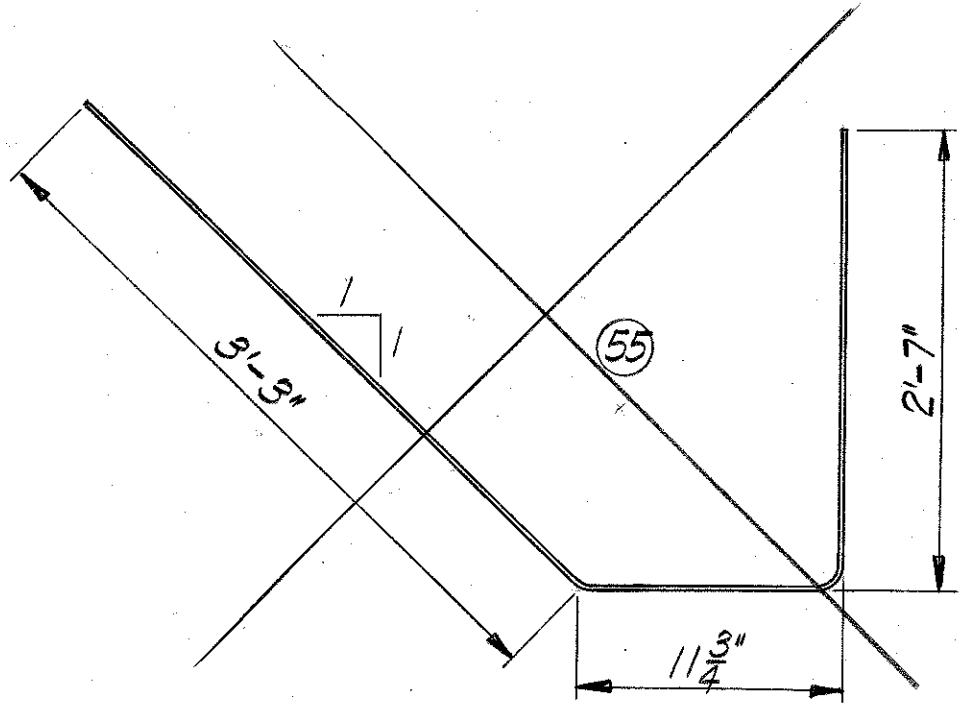
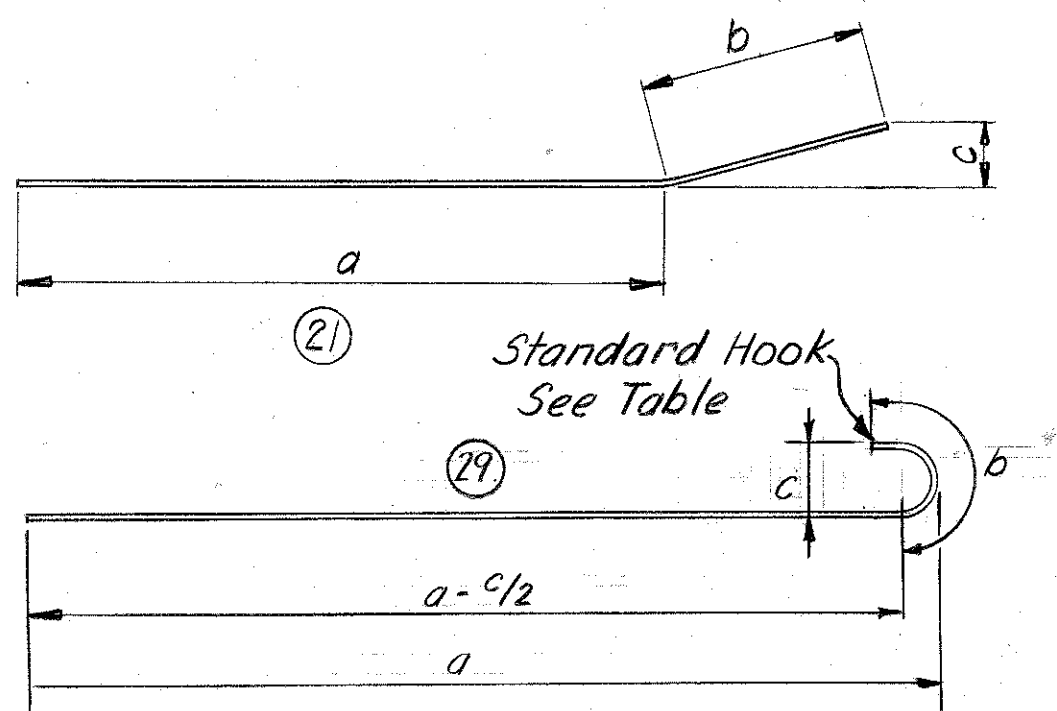
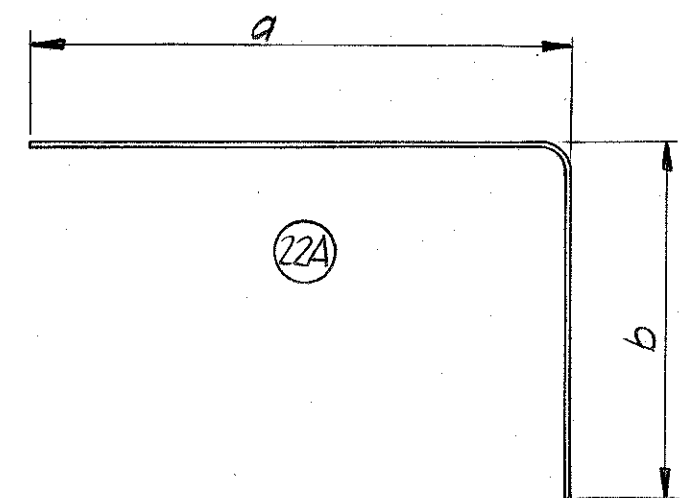
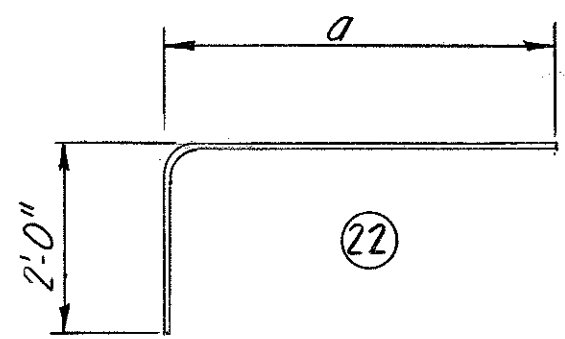
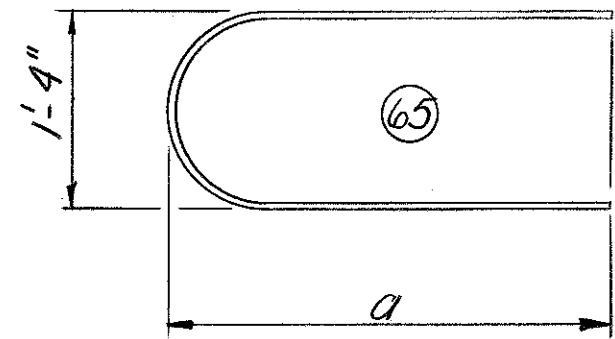
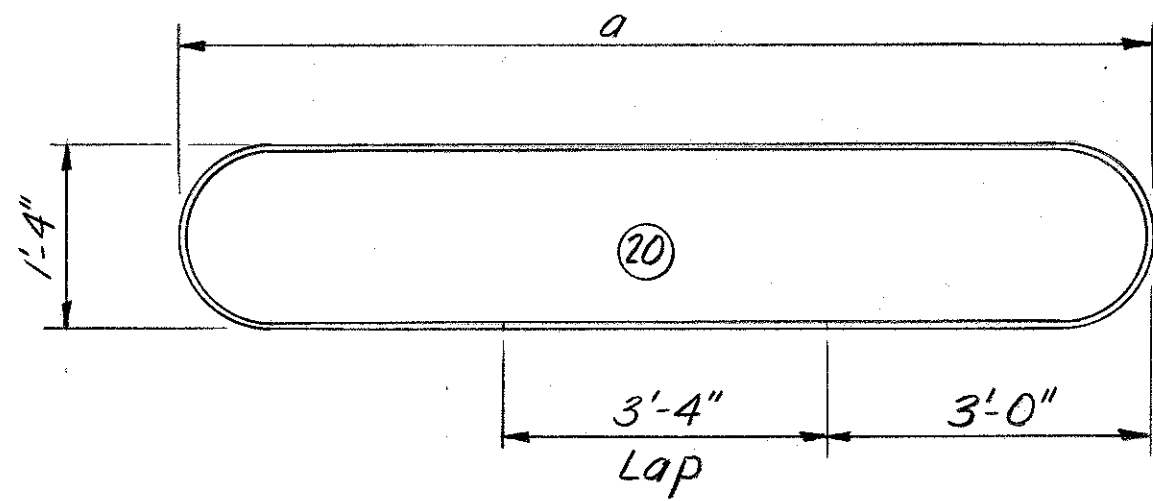
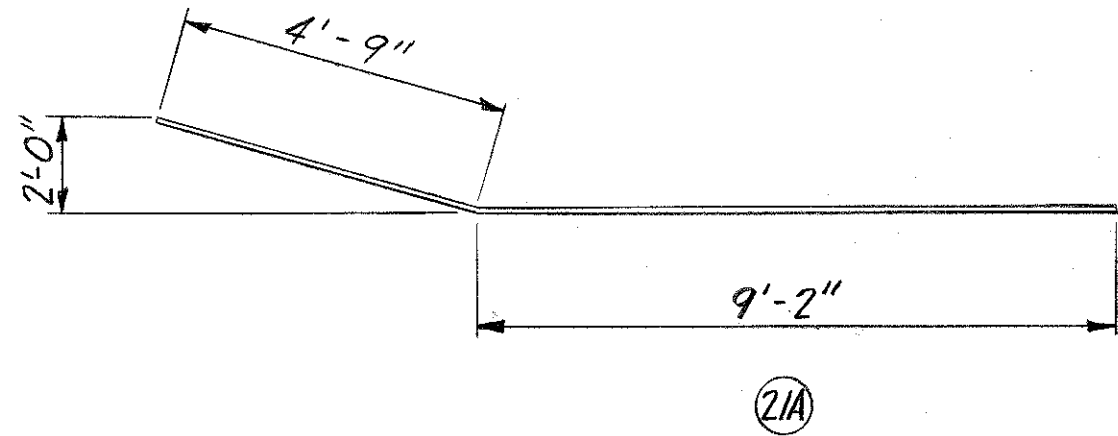
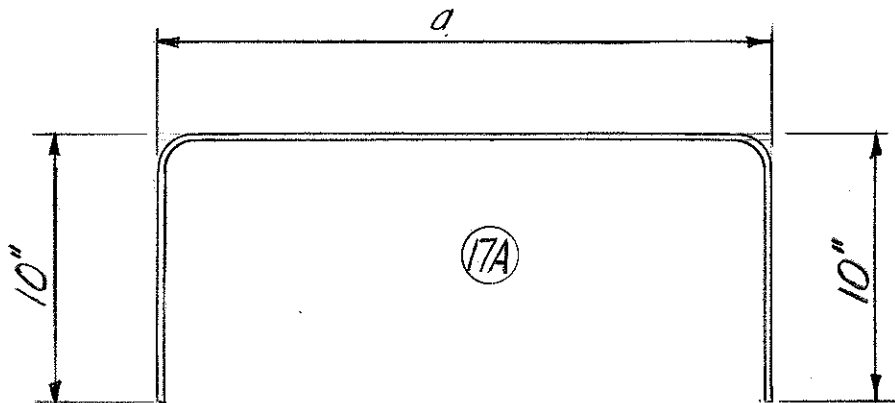
Mark	Type	Size	No. Req.	Length		Location	a		b		c	
				Ft.	In.		Ft.	In.	Ft.	In.	Ft.	In.
106M-1	Str.	11	33	19	6	Ftg. Bott.						
" -2	Str.	6	17	19	6	Ftg. Top						
" -3	Str.	8	41	20	8	Ftg. Top						
" -4	29	11	21	31	9	Ftg. Bott.	30	4				
" -5	22A	4	21	6	0	Ftg.	3	0	3	0		
" -6	21	5	10	28	9	Floodwall Stern	18	9	10	0	2	9
" -7	29	11	11	29	7	Floodwall Stern	28	2				
" -8	29	11	9	17	7	Floodwall Stern	16	2				
" -9	59	4	107	4	3	Rem. Strip						
" -10	62	4	68	6	2	Rem. Strip	2	5	1	6½		
" -11	Str.	4	16	23	11	Rem. Strip						
" -12	Str.	4	14	17	6	Rem. Strip						
" -13	Str.	4	18	12	6	Rem. Strip						
" -14	Str.	5	50	19	6	Floodwall Stern						
" -15	Str.	5	10	6	0	Floodwall Stern						
" -16	Str.	11	52	25	0	G1 & G2 Wall						
" -17	T2	4	15	13	7	G2 Cap	2	10	3	7		
" -18	Str.	11	8	20	8	G2 Cap						
" -19	Str.	5	40	14	6	G1 Wall						
" -20	Str.	5	40	15	3	G2 Wall						
" -21	T2	4	14	12	11	G1 Cap	2	6	3	7		
" -22	Str.	5	9	13	0	G1 Cap						
" -23	Str.	5	9	13	10	G2 Cap						
" -24	Str.	5	10	7	0	Floodwall Stern						
" -25	Str.	6	18	2	6	Dowels						
" -26	Str.	11	48	28	2	Col. Base						
" -27	17	4	48	14	8	Col. Base	6	7	4	1		
" -28	17	4	6	5	9	Brg. Blk. G1	2	6	1	8		
" -29	17	4	5	6	5	Brg. Blk. G1	3	2	1	8		
" -30	17	4	12	6	1	Brg. Blk. G2	2	10	1	8		
" -31	17	5	20	5	5	G1 Wall	1	4¼	2	1		
" -32	17	5	20	6	2	G2 Wall	2	1¼	2	1		
" -33	17	5	4	6	6	G1 Cap	2	5	2	1		
" -34	17	5	4	6	9	G2 Cap	2	8	2	1		
" -35	T3	5	3	20	2	Ftg. Hoop	5	10½				
" -36	Str.	11	60	11	3	Col. Dowel						
" -37	62	4	15	7	8	Rem. Strip Mono. 106D	3	2	2	3½		
" -38	64	4	13	5	9	Rem. Strip Mono. 107	0	11¼	1	8		
" -39	Str.	4	4	23	2	Rem. Strip Mono. 107						

*No. of turns @12" pitch plus
1½ turns at each end required
for the column.
Size 4 Spiral equals size
W20 wire.

SUBSTRUCTURE
BILL OF REINFORCEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P.E. PROJECT NO. I 64-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

STANDARD HOOK TABLE		
Bar Size	Length "b"	Standard "c"
# 4	8"	4"
# 5	10"	5"
# 6	12"	6"
# 7	1'-2"	7"
# 8	1'-6"	8"
# 9	1'-8"	11 $\frac{1}{2}$ "
# 10	1'-10"	1'-0 $\frac{3}{4}$ "
# 11	2'-0"	1'-2 $\frac{1}{4}$ "



SHEET A56

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD

STATION 208+08
BRIDGE NUMBER

PROJECT NO. I 64-2(35)3
DRAWING NO. 18572
INDEX

SUBSTRUCTURE
BAR BENDING DETAILS

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE
DETAILS BY	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE
TRACED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE
CHECKED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE
DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE

DESIGNED BY
PME

LETTING DATE.

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
BY	11/11/11				
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
BY		BY		BY	
TRACED BY		TRACED BY		TRACED BY	

ESTIMATE OF QUANTITIES **

FOOTING NUMBER	Concrete Class "A" Cu.Yds.	Steel Reinf. Lbs.	Piles 12 BP 53 Lin. Ft.		Piles Options A thru F Lin. Ft.		Structure Excavation Common Cu.Yds.	Placing Piles Thru Fill		
								Method A Under Floodwall		
								Preboring		Method B
								Cat. A	Cat. B	
			Furn.	Driven	Furn.	Driven		Lin. Ft.	Lin. Ft.	Cu. Yds.
26W-G1	34.6	4546	232	232			41			
26W-G3	34.3	4496	232	232			41			
26E-G2	34.8	4167	242	242			41			
26E-G4	35.2	4234	232	232			44			
27W-G1	41.4	4563	261	261			53			
27W-G3	41.1	4519	261	261			55			
27E-G2	41.4	5149	300	300			57			
27E-G4	41.8	5223	290	290			60			
28W-G1	33.7	3979	256	256			43			
28W-G3	33.1	3891	288	288			40			
28E-G2	30.4	3728	202	202			37			
28E-G4	30.4	3728	198	198			35			
29W-G1	24.6	3236	288	288			32			
29W-G3	24.9	3282	315	315			35			
29E-G2	24.5	3638	306	306			32			
29E-G4	27.4	3863	333	333			40			
30W-1	56.1	6709	602	602			81			
30W-G3	39.9	4981	324	324			59			
30E-G4	39.2	6833	429	429			56			
31W-G3	31.8	3749	296	296			44			
31E-2	60.4	6077	417	417			90			
31E-G4	32.4	3829	296	296			44			
32W-G1	31.7	3729	325	325			44			
32W-3	59.9	6451	510	510			89			
32E-G2	23.9	2949	288	288			32			
32E-G4	24.3	3013	280	280			33			
33W-G1	39.3	4922	298	298			53			
33W-G3	34.7	4035	297	297			47			
33W-G5	34.4	3992	297	297			51			
33E-G2	24.3	2918	204	204			33			
33E-G4	24.9	3007	198	198			32			
34W-G1	33.9	4122	180	180			40			
34W-G3	33.0	3990	196	196			37			
R1-17A	34.6	4195	186	186			37			
R1-17B	33.5	4040	192	192			37	* 60	* 60	* 30
34E-G2	52.6	5914	372	372			71			* 815
34E-G4	53.2	6103	372	372			70			
35W-G1	34.9	4057	280	280			47			
35W-G3	34.0	3925	279	279			46			
35E-G2	52.5	6500	330	330			77			
35E-G4	53.3	6630	330	330			77			
36W-G1	22.9	2735	245	245			33			
36W-G3	22.2	2628	255	255			33			
36E-G2	23.9	2897	192	192			32			
36E-G4	24.5	2840	128	128			33			
36E-G6	24.8	3091	208	208			33			
37W	88.8	9580	504	504			125			28
37E-G2	33.8	3903	315	315			47			
37E-G4	35.3	4123	343	343			46			
37E-G6	36.2	4257	333	333			47			
38W-G1	21.1	2541	336	336			33			
38W-G3	20.5	2408	346	346			32			
38E-G2	22.9	2705	280	280			32			
38E-G4	24.3	2918	290	290			33			
38E-G6	24.7	3023	280	280			32			11
39W-G1	81.1	14413			1204	1204	133			
39W-G3	34.4	3484			483	483	55			
R3-1	74.4	9113			533	533	84			209

ESTIMATE OF QUANTITIES **

FOOTING NUMBER	Concrete Class "A" Cu.Yds.	Steel Reinf. Lbs.	Piles 12 BP 53 Lin. Ft.		Piles Options A thru F Lin. Ft.		Structure Excavation Common Cu.Yds.	Placing Piles Thru Fill		
								Method A Under Floodwall		
								Preboring		Method B
								Cat. A	Cat. B	
			Furn.	Driven	Furn.	Driven		Lin. Ft.	Lin. Ft.	Cu. Yds.
39E-G2	29.9	3522			273	273	38			
39E-G4	31.0	3679			283	283	37			
40W-G1	31.2	3826			440	440	50			271
40W-G3	21.3	2516			406	406	32			
40E-G2	20.6	2380			336	336	32			
40E-G4	21.2	2431			336	336	33			155
41W-G3	22.4	2595			308	308	33			
42W-G3	33.6	3676			406	406	48			
42E-G4	22.8	2636			276	276	33			
43W-G3	22.9	2683			360	360	35			
43E-G4	38.0	4447			407	407	53			
44W-G1	24.1	2846			376	376	35			177
44W-G3	23.7	2775			386	386	35			
44E-G2	38.4	4088			380	380	53			261
44E-G4	39.5	4243			390	390	55			
45W-G1	35.4	3963			423	423	49			
45W-G3	34.7	3852			423	423	47			
45E	89.0	10429			663	663	102			281
45E-G6	35.9	4381			228	228	37			
45E-G8	36.5	4460			238	238	38			
46W-G1	24.2	2879			336	336	33			
46W-G3	23.7	2790			346	346	32			
46E-2	24.0	2925			344	344	34			
46E-4	33.9	3799			342	342	51			
46E-6	24.7	3011			306	306	32			217
47W-G1	34.1	4118			322	322	37			
47W-G3	33.2	3986			322	322	38			
47W-G5	36.5	4461			360	360	38			
47W-G7	36.5	4460			343	343	38			
47E-2	39.3	4176			420	420	57			
47E-4	40.2	4377			407	407	58			
47E-6	40.5	4352			320	320	53			
48E-2	33.8	4082			378	378	52			
48E-4	34.8	4217			380	380	54			
49W-1	23.6	2851			423	423	32			
49W-3	43.6	4479			561	561	59			
49W-5	22.9	2786			460	460	32			
49E-2	38.7	4131			462	462	55			
49E-4	40.4	4374			472	472	59			
50W-1	38.3	4100			414	414	53	* 90	* 18	* 54
50W-3	37.8	4033			450	450	53	* 108	* 18	* 68
50W-5	37.4	3967			460	460	54	* 135	* 18	* 145
50E-2	50.8	4881			473	473	70	* 220	* 22	* 110
50E-4	51.7	5012			494	494	70			* 1598
51W-1	22.4	2802			386	386	32	* 80	* 16	* 61
51W-3	22.2	2630			408	408	32	* 96	* 16	* 80
51W-5	22.2	2700			400	400	33	* 120	* 16	* 152
51E-2	22.4	2676			423	423	34	* 180	* 18	* 90
51E-4	22.5	2694			423	423	32			* 1378
TOTAL	3730.5	442,748	16,069	16,069	21,193	21,193	5058	1089	202	2400
										9852

* Quantities shown are speculative. Footings other than these shown may contain these quantities. See Special Notes for the method of payment.

** For combined footing & monolith quantities, see Sheet A47. For R.R. Crashwall quantities at footings see Sheet A58.

SHEET A57

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08

P. E. PROJECT NO. 164-2(35)3

CONSTRUCTION PROJECT NO.

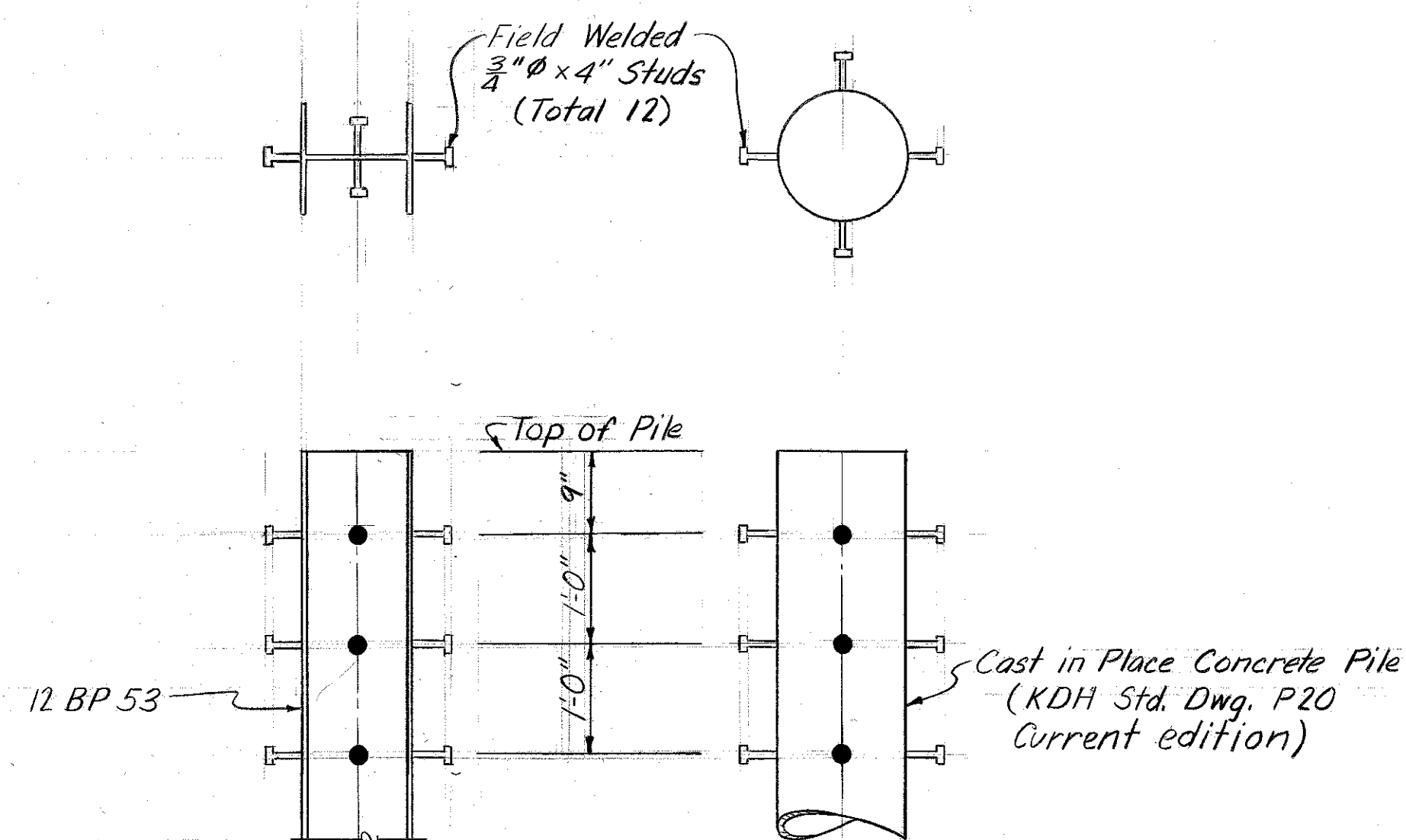
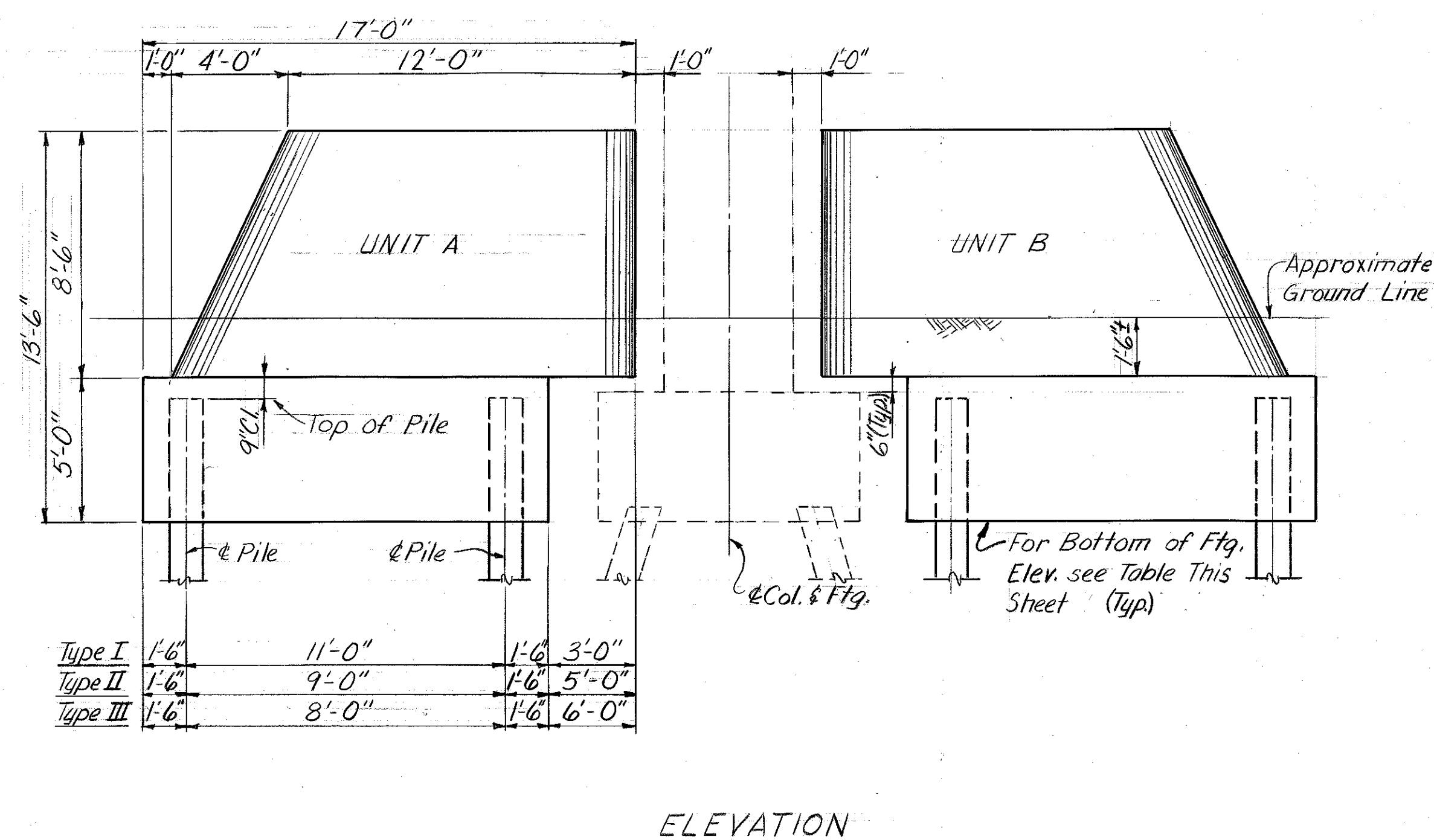
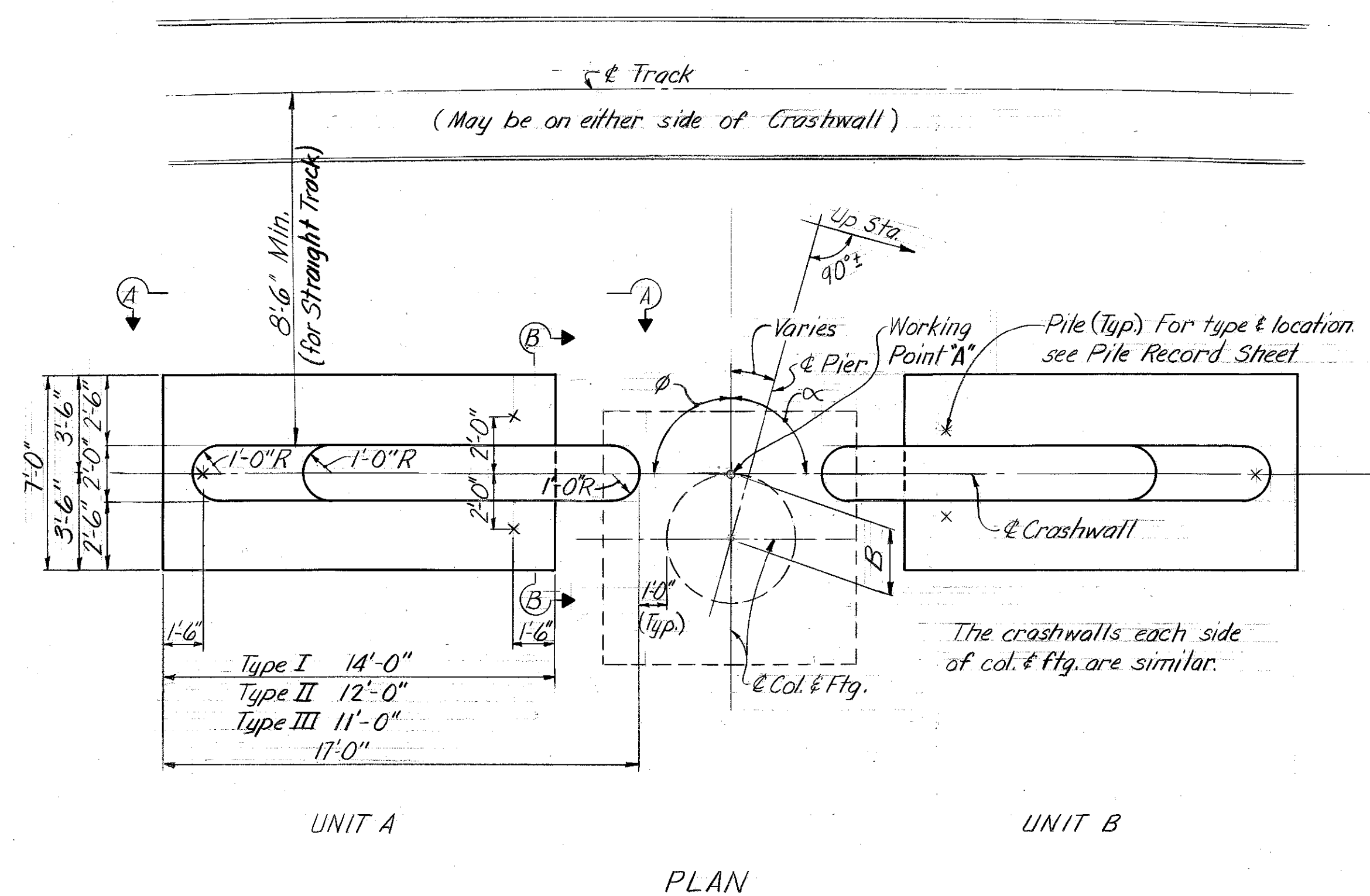
MAINTENANCE PROJECT NO.

DRAWING NO.

18572

SUBSTRUCTURE
FOOTING &
COLUMN
ESTIMATE OF
QUANTITIES

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
	CHECKED BY <u>ELW</u>	DATE <u>5-71</u>	REVISED	DATE
DRAWN BY	CHECKED BY	DATE	REVISED	DATE
	CHECKED BY	DATE	REVISED	DATE



PILE ANCHORAGE DETAILS
(For Type of Pile see Pile Record Sheets)
For Type other than that shown, see Note ②

ESTIMATE of QUANTITIES - 1 WALL*					
ITEM (A)	UNIT	AMOUNT			TOTAL
		I	II	III	ALL UNITS
Concrete Class A	Cu. Yd.	26.7	24.1	22.8	858.4
Steel Reinforcement	Lbs.	4999	4484	4226	160,173
Piles, Steel BP12 @ 53 Furnished	Lin. Ft.	117±	117±	117±	2574
Piles, Steel BP12 @ 53 Driven	Lin. Ft.	117±	117±	117±	2574
Piles, Options A thru F Furnished	Lin. Ft.	144±	144±	144±	1728
Piles, Options A thru F Driven	Lin. Ft.	144±	144±	144±	1728
Structure Excavation, Common	Cu. Yd.	40±	35±	32±	1262

* These quantities are included in the totals on Sheet No. A3

‡ Based on average unit.

① Category: C Prebored Piles:

44W-61	133 Lin. Ft.
48E-4	27 Lin. Ft.
Total	160 Lin. Ft.

NOTES:

- ① Location crashwall & relative to the face of column varies. See layout and pile record sheet for exact location for any specific crashwall.
- ② For piles other than those shown an equivalent anchorage must be provided and approved by the Engineer. The cost of anchorage (all types) shall be incidental to price per lineal ft. of piles furnished.
- ③ See pile record sheet for type of pile.

Work this Sheet with Sheet No. A 59

Footing No.	Type	Boitt. C.W Ftg. Elev	φ	α	B
28W-G1	I	441.177	90°	90°	*1'-3"
28E-G2	I	441.842	94°	94°	1'-3"
29W-G3	I	441.002	90°	90°	*1'-0"
29E-G4	I	442.781	↑	↑	*2'-0"
30W-1	III	440.696			*2'-6"
30W-G3	II	440.060			2'-3"
30E-G4	II	442.597			2'-3"
31W-G3	I	440.235			*1'-3"
31E-2	III	440.933			1'-6"
32W-3	III	439.345			2'-6"
34W-G1	I	435.473			*1'-6"
43W-G3	I	435.721			1'-0"
44W-G1	I	436.598			2'-0"
44W-G3	I	436.310			*2'-0"
45W-G1	II	436.722			*1'-3"
47E-2	II	436.662	↓	↓	*2'-3"
48E-4	II	436.407	90°	90°	2'-0"

*Crashwall & R.R. on opposite side from that shown in "Plan" this sheet. See Layout sheets for general location.

SHEET A58

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE—LEXINGTON

ROAD SP 56-273-11L

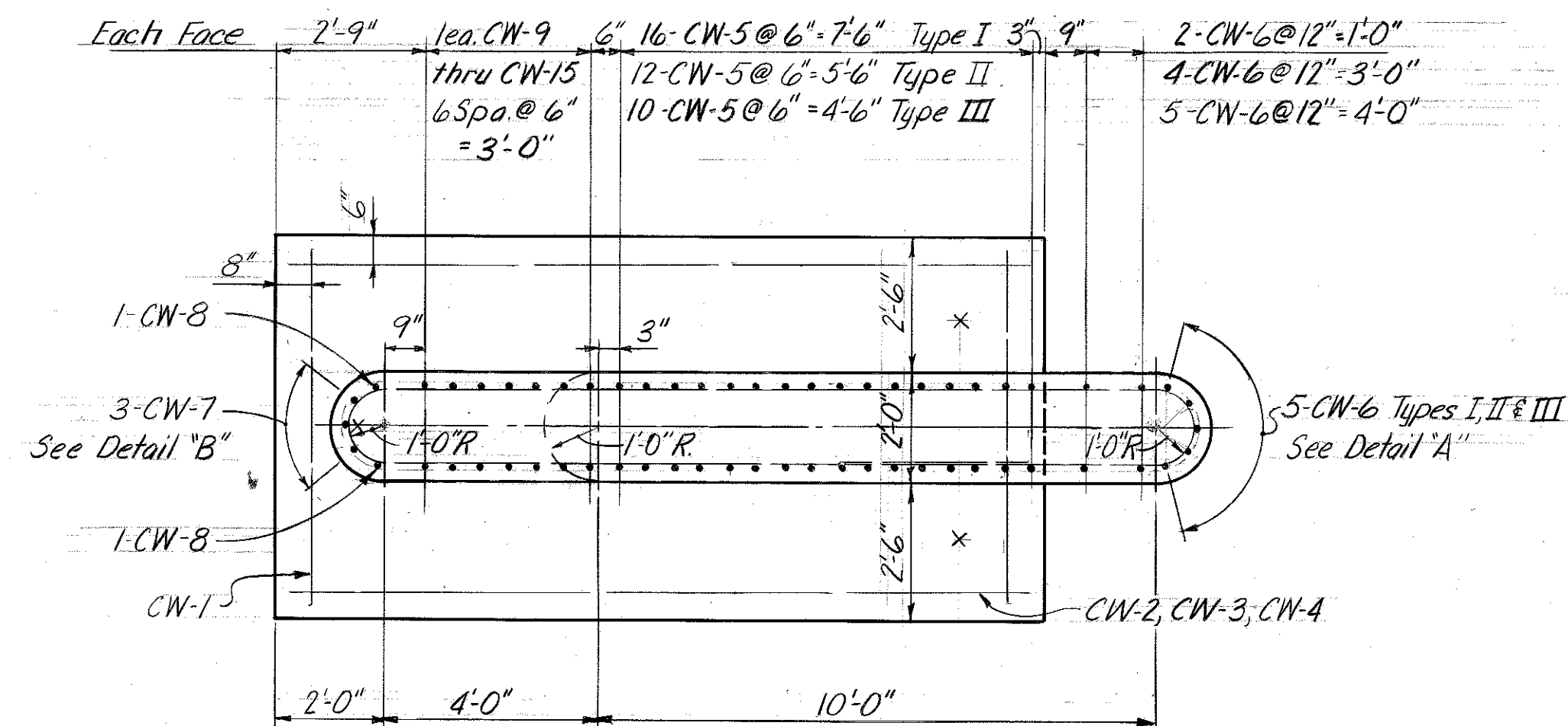
STATION 208+08			P. E. PROJECT NO. I 64-2 (35) 3
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.	

18572

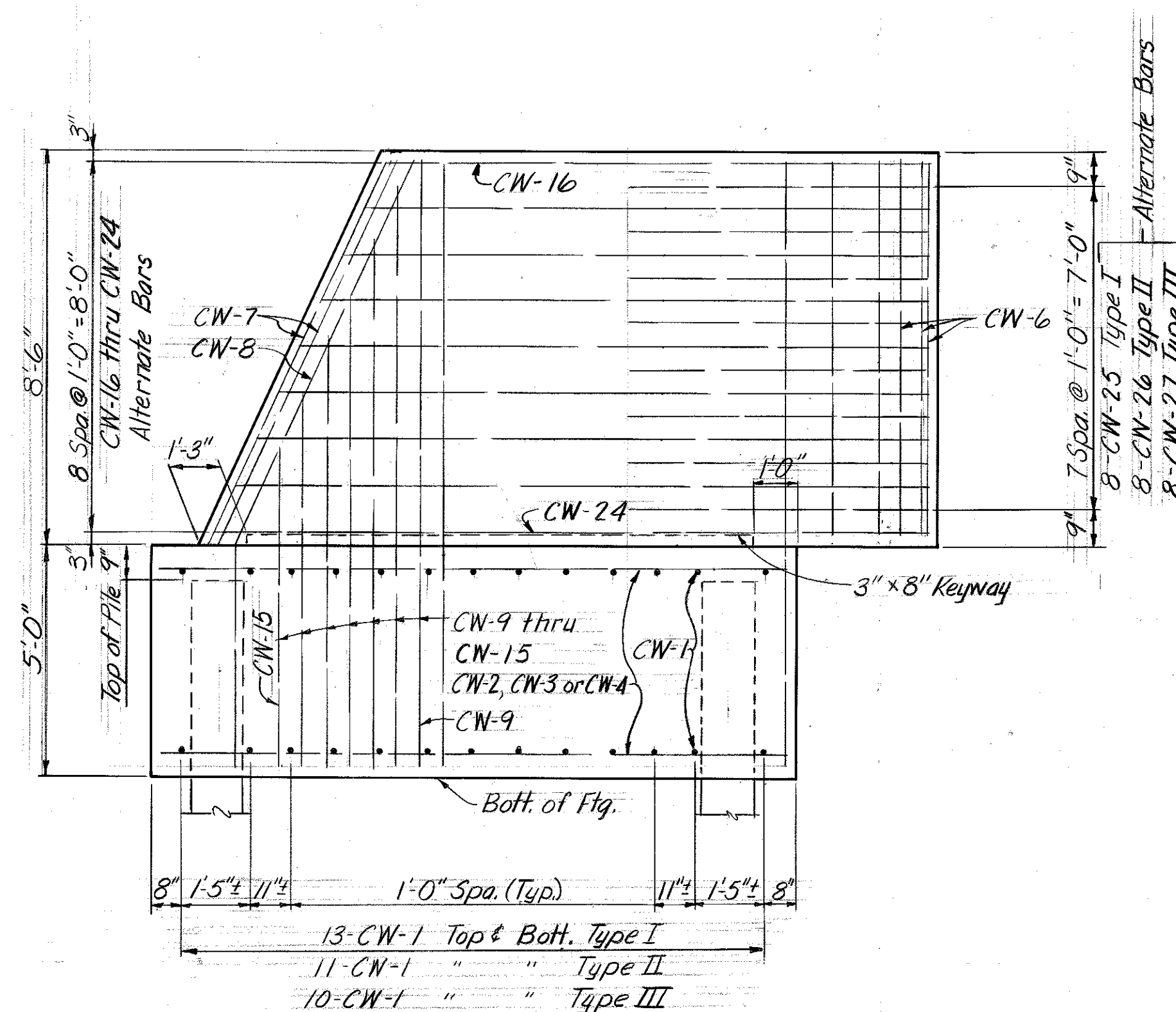
SUBSTRUCTURE
R.R. CRASHWALL

LETTING DATE

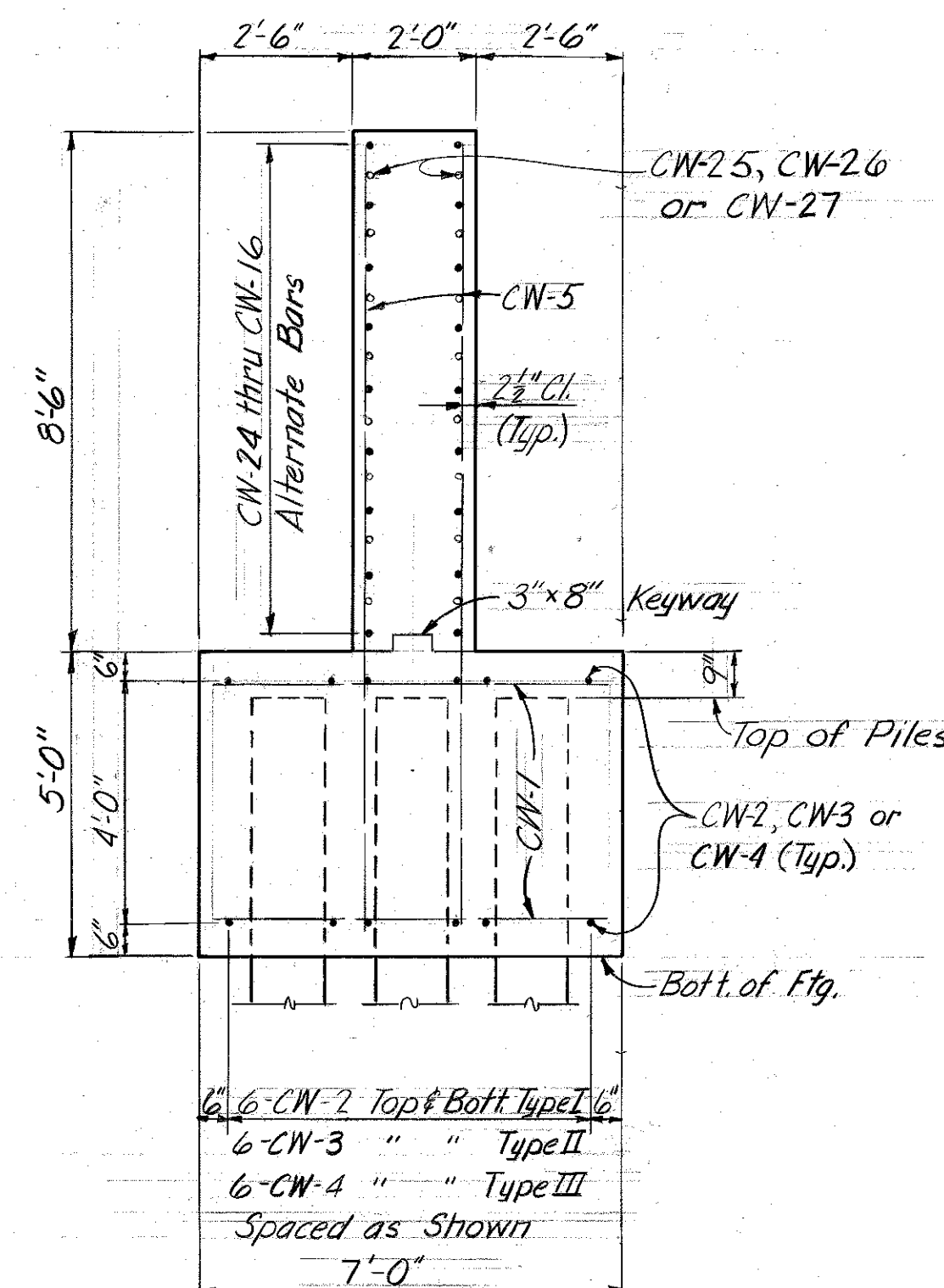
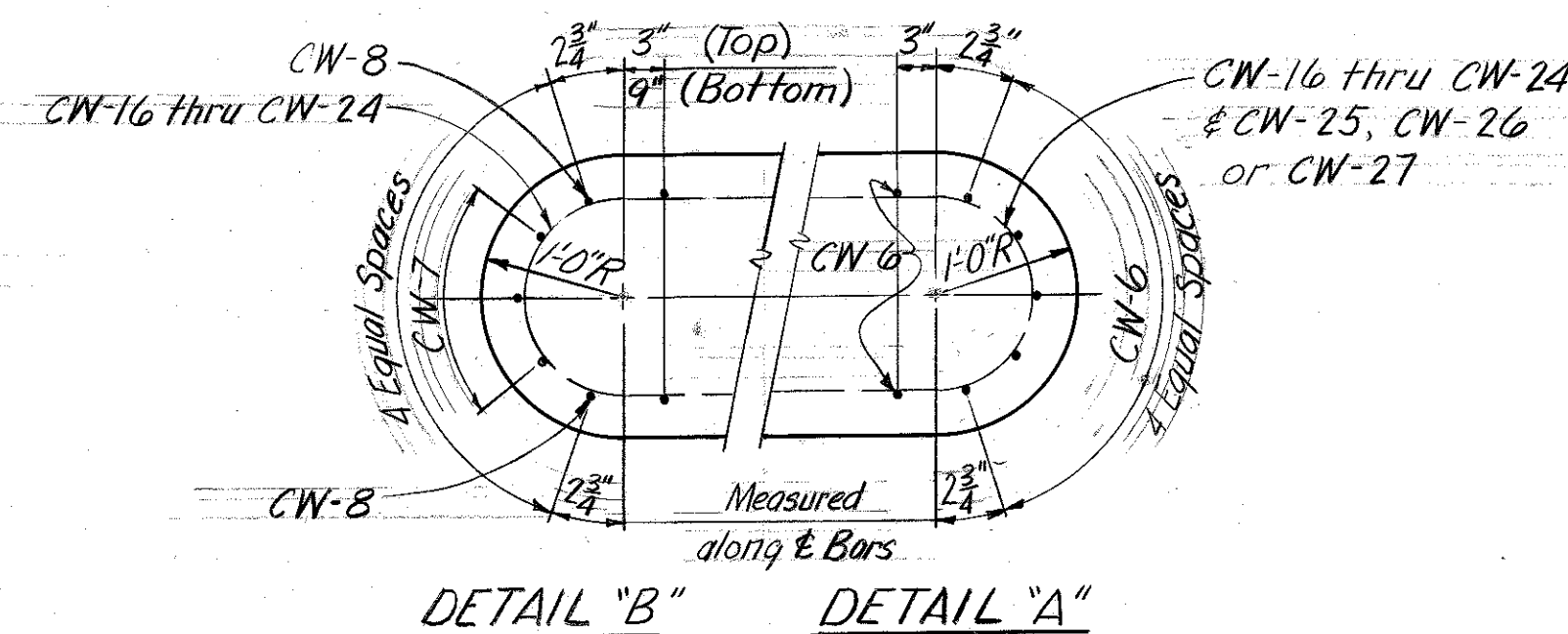
DESIGNED BY	CHEKED BY	DATE	REVISD.	DATE
TRACED BY	CHEKED BY	DATE	REVISD.	DATE
DETAILD BY	CHEKED BY	DATE	REVISD.	DATE
DATE	DATE	DATE	DATE	DATE



FOOTING PLAN
(Typ. Except as Noted)
UNIT A SHOWN



ELEVATION A-A
(Typ. Except as Noted)



SECTION B-B

NOTE:
Work this Sheet with Sheet No. A58

CRASHWALL DATA

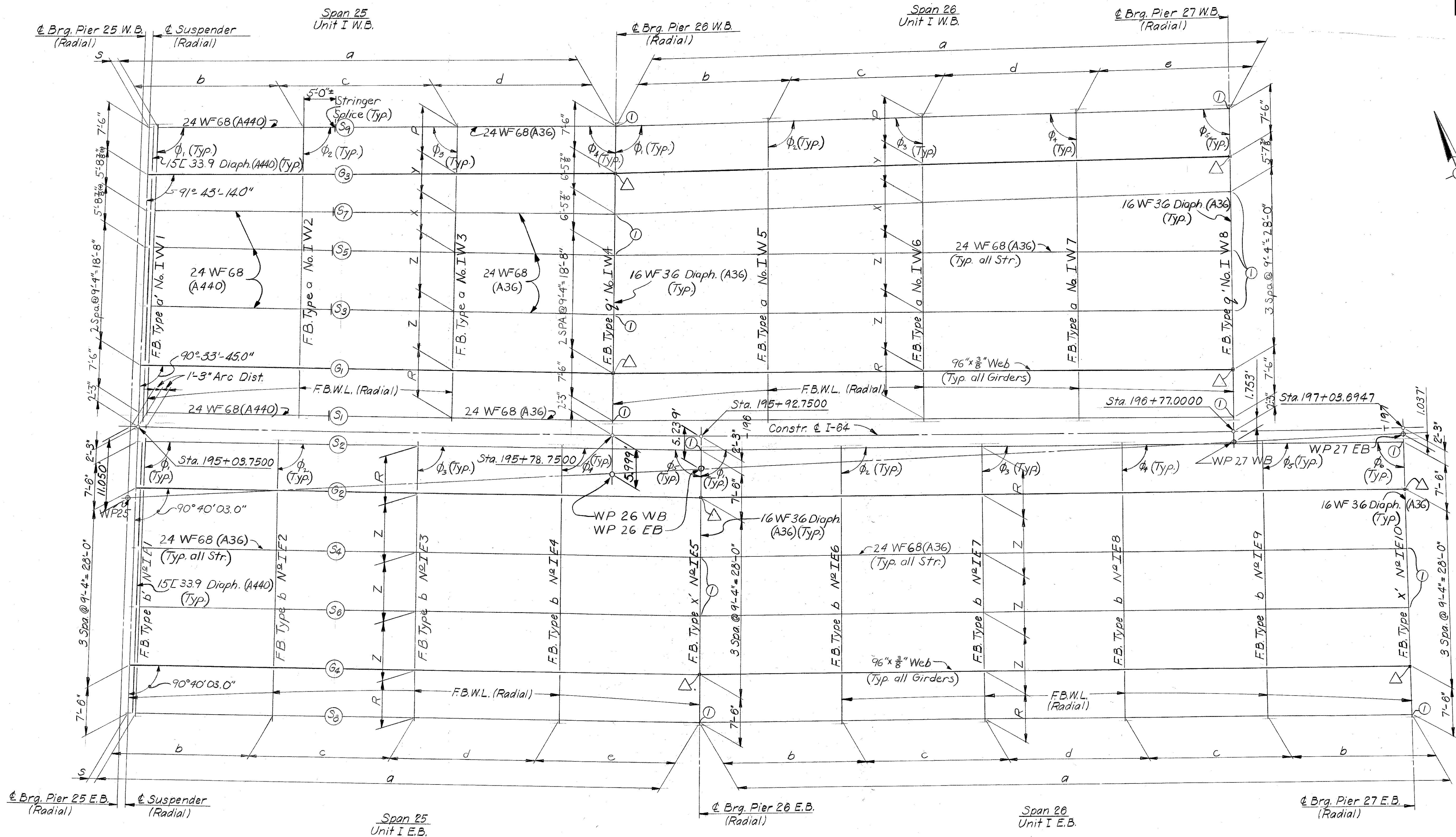
Mark	Type	Size	Total No. Req.	Length		No. Req. Per Unit			Location	a	
				Ft.	In.	I	II	III		Ft.	In.
CW-1	Str.	8	808	6	6	26	22	20	Ftg.		
CW-2	Str.	8	216	13	6	12			Ftg.		
CW-3	Str.	8	120	11	6		12		Ftg.		
CW-4	Str.	8	72	10	6		12		Ftg.		
CW-5	Str.	11	936	13	0	32	24	20	Ftg. & Stem		
CW-6	Str.	8	382	8	0	9	13	15	Stem		
CW-7	Str.	6	102	9	2	3	3	3	Stem		
CW-8	ZIA	11	68	13	11	2	2	2	Stem		
CW-9	Str.	10	68	12	10	2	2	2	Ftg. & Stem		
CW-10	Str.	10	68	12	6	2	2	2	Ftg. & Stem		
CW-11	Str.	9	68	11	4	2	2	2	Ftg. & Stem		
CW-12	Str.	9	68	10	2	2	2	2	Ftg. & Stem		
CW-13	Str.	8	68	9	1	2	2	2	Ftg. & Stem		
CW-14	Str.	8	68	7	11	2	2	2	Ftg. & Stem		
CW-15	Str.	8	68	6	9	2	2	2	Ftg. & Stem		
CW-16	20	8	34	27	8	1	1	1	Stem	11	5
CW-17	20	8	34	28	8	1	1	1	Stem	11	11
CW-18	20	8	34	29	6	1	1	1	Stem	12	4
CW-19	20	8	34	30	6	1	1	1	Stem	12	10
CW-20	20	8	34	31	6	1	1	1	Stem	13	4
CW-21	20	8	34	32	6	1	1	1	Stem	13	10
CW-22	20	8	34	33	4	1	1	1	Stem	14	3
CW-23	20	8	34	34	4	1	1	1	Stem	14	9
CW-24	20	8	34	35	4	1	1	1	Stem	15	3
CW-25	65	8	144	12	11	8			Stem	6	1
CW-26	65	8	80	16	11		8		Stem	8	1
CW-27	65	8	48	18	11			8	Stem	9	1

* Two Units Required per Footing.
9 Type I Footings Req'd.
5 Type II " "
3 Type III " "
** For type details see Sh. A56

SHEET A59

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. I 64-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

SUBSTRUCTURE
R.R. CRASHWALL



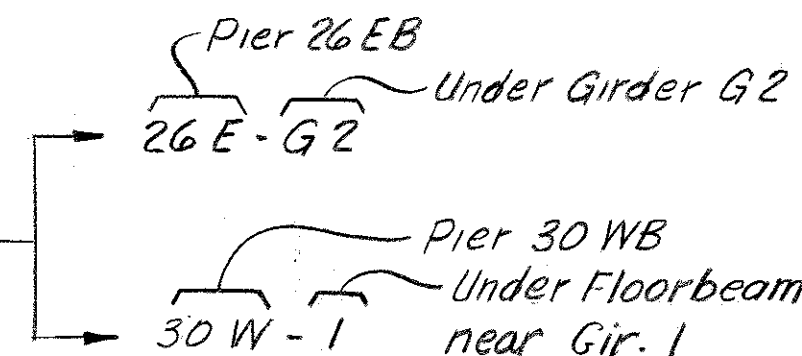
FRAMING NOTES

FBWL denotes Floor Beam Working Line.
All dimensions shown are horizontal and shall be corrected for grade where applicable.
Stringer splices may be located at the 0.2± or 0.8± point of any stringer span. For detail see Sheet A115.
For location of Stringer ends at Expansion Dams see Expansion Dam Details.
See Girder Details for splice locations.

△ indicates Bearing location.

Example Bearing Designation

For rolled beam stringers only
A441 Steel may be substituted for A440 and
A440 Steel may be substituted for A36 at the contractor's option and expense.



NOTE:

This Contractor shall field drill holes in the existing steel of the adjacent projects at Piers 25 and 55 to match the Expansion Joints furnished on this contract.

For location of WP's, see Sheet A5.
For dimensions and angles see Sheet A63
① Bend 24WF Stringer. See detail Sheet A114

FRAMING
STRUCTURAL STEEL

SHEET A60

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

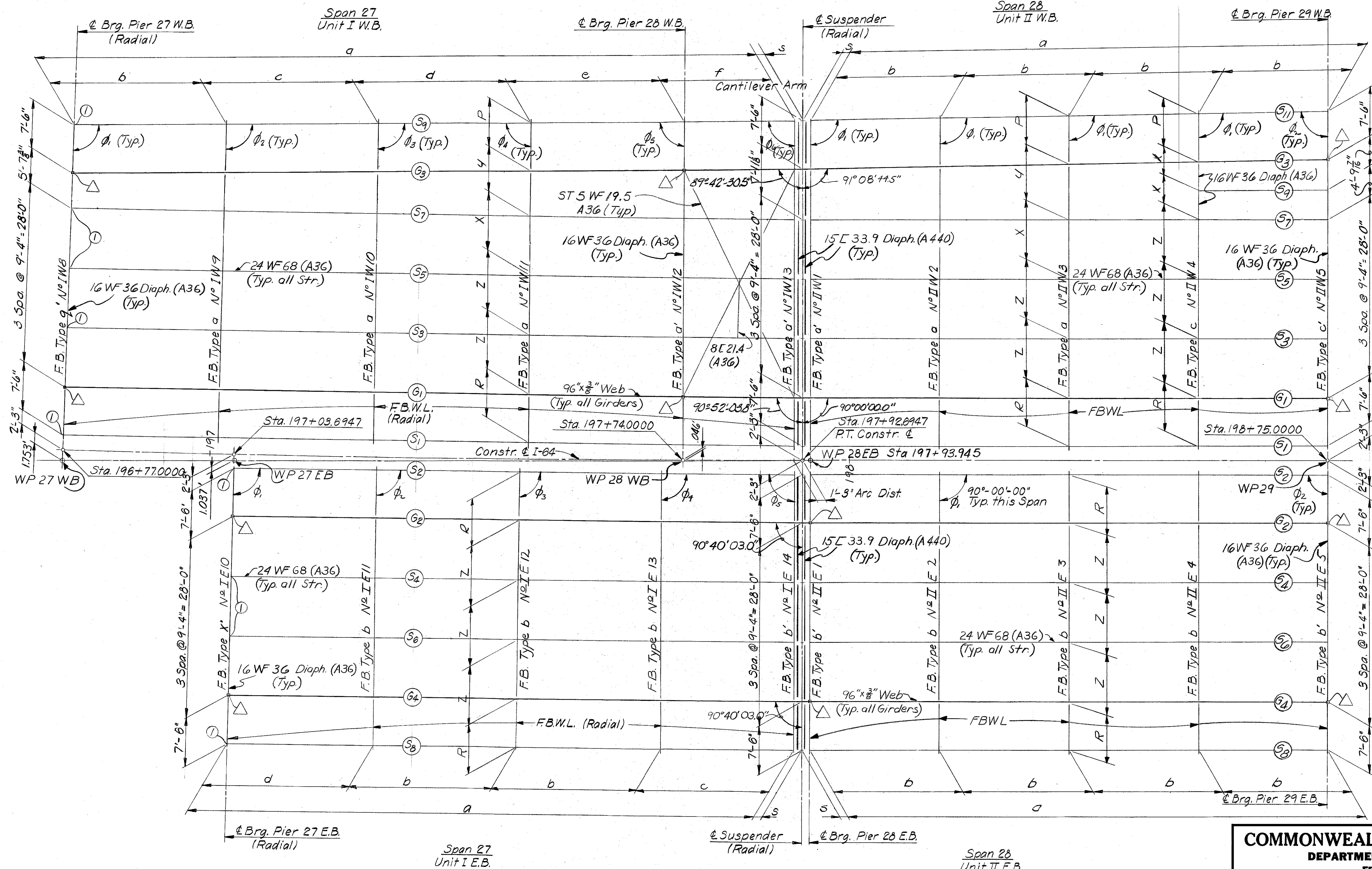
164-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD

STATION 208+08

PROJECT NO. 164-2(35)3

BRIDGE
NUMBER

DRAWING NO.
18572

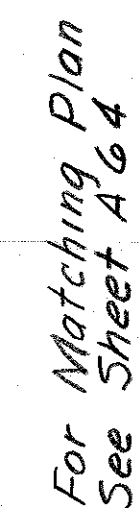


For Framing Notes see Sheet A60
 For dimensions and angles see Sheet A63
 ① Bend 24WF Stringer. See detail Sheet A114

FRAMING
 STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS FRANKFORT COUNTY OF JEFFERSON 164-13TH ST. TO 7TH ST. LOUISVILLE - LEXINGTON ROAD SP 56-273-11L	
STATION 208+08	PROJECT NO. 164-2(35)3
BRIDGE NUMBER	DRAWING NO. 18572
INDEX	

DESIGNED BY _____	CHECKED BY _____	DATE _____	REVISD _____	DATE _____
DETAILED BY <u>AIR & JFK</u>	CHECKED BY <u>BS/ack</u>	DATE <u>11-10</u>	REVISD _____	DATE _____
TRACED BY _____	CHECKED BY _____	DATE _____	REVISD _____	DATE _____



BRIDGE NUMBER	DRAWING NO. 18572	INDEX
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FRAMING STRUCTURAL STEEL

LETTING DATE

DESIGNED BY	DATE	REVISION	DATE
11-10	11-10		
CHECKED BY	DATE	REVISION	DATE
11-10	11-10		
TRACED BY	DATE	REVISION	DATE

Dimensions - Span 25

Beam	a	b	c	d	e	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5
<i>S₉</i>	72.834	23.462	24.689	24.683	—	1.235	91° 42' 14.8"	91° 20' 52.3"	89° 01' 37.8"	89° 24' 07.8"	—
<i>G₃</i>	72.979	23.508	24.738	24.733	—	1.237	91° 42' 06.5"	91° 20' 44.0"	89° 01' 46.0"	89° 24' 16.0"	—
<i>S₇</i>	73.086	23.540	24.774	24.772	—	1.239	91° 07' 18.8"	90° 45' 56.3"	89° 36' 33.7"	89° 59' 03.7"	—
<i>S₅</i>	73.200	23.573	24.813	24.814	—	1.241	90° 32' 37.5"	90° 11' 15.0"	90° 11' 15.0"	90° 33' 45.0"	—
<i>S₃</i>	73.380	23.631	24.874	24.875	—	1.244	↑	↑	↑	↑	—
<i>G₁</i>	73.560	23.689	24.935	24.936	—	1.247	↑	↑	↑	↑	—
<i>S₁</i>	73.706	23.736	24.985	24.985	—	1.249	90° 32' 37.5"	90° 11' 15.0"	90° 11' 15.0"	90° 33' 45.0"	—
<i>S₂</i>	87.799	21.012	22.262	22.262	22.263	1.251	90° 38' 55.5"	90° 20' 01.5"	90° 00' 00.0"	89° 39' 58.5"	90° 40' 03.0"
<i>G₂</i>	87.972	21.054	22.306	22.306	22.306	1.253	↑	↑	↑	↑	↑
<i>S₄</i>	88.187	21.106	22.360	22.360	22.361	1.256	↑	↑	↑	↑	↑
<i>S₆</i>	88.401	21.157	22.414	22.414	22.416	1.259	↑	↑	↑	↑	↑
<i>G₄</i>	88.616	21.208	22.469	22.469	22.470	1.262	↑	↑	↑	↑	↑
<i>S₈</i>	88.787	21.249	22.512	22.512	22.514	1.265	90° 38' 55.5"	90° 20' 01.5"	90° 00' 00.0"	89° 39' 58.5"	90° 40' 03.0"

Dimensions - Span 27

Beam	a	b	c	d	e	f	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5	ϕ_6
<i>S₉</i>	112.905	23.937	23.928	23.921	23.916	17.203	1.233	92° 01' 45.3"	91° 39' 55.8"	91° 18' 06.3"	89° 03' 43.2"	89° 25' 32.7"	89° 41' 14.7"
<i>G₃</i>	113.131	23.985	23.976	23.969	23.964	17.237	1.235	92° 01' 37.0"	91° 39' 47.5"	91° 17' 58.0"	89° 03' 51.5"	89° 25' 41.0"	89° 41' 23.0"
<i>S₇</i>	113.309	24.011	24.008	24.008	24.009	17.273	1.238	90° 52' 03.8"	90° 30' 14.3"	90° 08' 24.8"	90° 13' 24.7"	90° 35' 14.2"	90° 50' 56.3"
<i>S₅</i>	113.589	24.070	24.068	24.067	24.068	17.316	1.241	↑	↑	↑	↑	↑	↑
<i>S₃</i>	113.869	24.130	24.127	24.126	24.127	17.359	1.244	↑	↑	↑	↑	↑	↑
<i>G₁</i>	114.148	24.189	24.186	24.185	24.187	17.401	1.247	↑	↑	↑	↑	↑	↑
<i>S₁</i>	114.373	24.236	24.234	24.234	24.234	17.435	1.249	90° 52' 03.8"	90° 30' 14.3"	90° 08' 24.8"	90° 13' 24.7"	90° 35' 14.2"	90° 50' 56.3"
<i>S₂</i>	87.799	22.262	21.012	22.263	—	—	1.251	90° 40' 03.00"	90° 20' 01.5"	90° 00' 00.0"	89° 39' 58.5"	90° 38' 55.5"	—
<i>G₂</i>	87.972	22.306	21.054	22.307	—	—	1.253	↑	↑	↑	↑	↑	—
<i>S₄</i>	88.187	22.360	21.105	22.361	—	—	1.256	↑	↑	↑	↑	↑	—
<i>S₆</i>	88.401	22.414	21.157	22.416	—	—	1.259	↑	↑	↑	↑	↑	—
<i>G₄</i>	88.616	22.469	21.208	22.470	—	—	1.262	↑	↑	↑	↑	↑	—
<i>S₈</i>	88.787	22.512	21.249	22.514	—	—	1.265	90° 40' 03.00"	90° 20' 01.5"	90° 00' 00.0"	89° 39' 58.5"	90° 38' 55.5"	—

Floorbeam Dimensions Span 25

Floorbeam No	R	Z	X & Y	P
IW1	7.500	9.333	5.752	7.502
IW2	7.499	↑	5.990	7.501
IW3	7.499	↓	6.240	7.501
IW4	7.500	↑	6.490	7.502
IE1 - IE5	7.500	9.333	—	—

Floorbeam Dimensions Span 26

Floorbeam No	R	Z	X	Y	P
IW4	7.500	9.333	6.490	6.490	7.502
IW5	7.500	↑	7.201	6.270	7.500
IW6	7.499	↑	7.911	6.050	7.501
IW7	7.499	↓	8.622	5.831	7.501
IW8	7.500	↓	9.333	5.612	7.502
IE5 - IE10	7.500	9.333	—	—	—

Floorbeam Dimensions Span 27

Floorbeam No	R	Z & X	Y	P
IW9	7.500	9.332	6.097	7.501
IW10	↑	9.332	6.582	7.500
IW11	↓	9.332	7.067	↑
IW12	↓	9.333	7.552	↓
IW13	7.500	9.333	7.901	7.500
IE10 - IE14	7.500	9.333	—	—

Floorbeam Dimensions Span 28

Floorbeam No	R	Z	X	Y	P
IW1	7.500	9.333	9.333	7.951	7.502
IW2	7.500	9.333	9.333	8.356	7.502
IW3	↑	↑	9.333	8.762	↑
IW4	↓	↓	4.584	—	↓
IW5	7.500	9.333	4.786	—	7.502
IE1 - IE5	7.500	9.333	—	—	—

Dimensions - Span 26

Beam	a	b	c	d	e	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5	ϕ_6
<i>S₉</i>	96.984	24.256	24.248	24.242	24.238	91° 53' 57.8"	91° 31' 45.5"	88° 50' 20.9"	89° 12' 27.3"	89° 34' 33.7"	—
<i>G₃</i>	97.177	24.304	24.297	24.290	24.286	91° 53' 43.5"	91° 31' 37.2"	88° 50' 29.2"	89° 12' 35.6"	89° 34' 42.0"	—
<i>S₇</i>	97.354	24.353	24.343	24.332	24.326	92° 24' 36.6"	92° 02' 30.2"	88° 19' 36.2"	88° 41' 42.6"	89° 03' 48.9"	—
<i>S₅</i>	97.516	24.380	24.379	24.377	24.380	90° 44' 12.8"	90° 22' 06.4"	90° 00' 00.0"	90° 22' 06.4"	90° 44' 12.8"	—
<i>S₃</i>	97.756	24.440	24.438	24.438	24.440	↑	↑	↑	↑	↑	—
<i>G₁</i>	97.997	24.500	24.499	24.498	24.500	↑	↑	↑	↑	↑	—
<i>S₁</i>	98.189	24.548	24.547	24.546	24.548	90° 44' 12.8"	90° 22' 06.4"	90° 00' 00.0"	90° 22' 06.4"	90° 44' 12.8"	—
<i>S₂</i>	111.006	22.202	22.201	22.200	—	90° 49' 55.5"	90° 29' 57.3"	90° 09' 59.1"	89° 50' 00.9"	89° 30' 02.7"	90° 49' 55.5"
<i>G₂</i>	111.224	22.246	22.244	22.244	—	↑	↑	↑	↑	↑	↑
<i>S₄</i>	111.495	22.301	22.298	22.297	—	↑	↑	↑	↑	↑	↑
<i>S₆</i>	111.766	22.354	22.353	22.352	—	↑	↑	↑	↑	↑	↑
<i>G₄</i>	112.038	22.409	22.407	22.406	—	↑	↑	↑	↑	↑	↑
<i>S₈</i>	112.255	22.453	22.450	22.449	—	90° 49' 55.5"	90° 29' 57.3"	90° 09' 59.1"	89° 50' 00.9"	89° 30' 02.7"	90° 49' 55.5"

Dimensions - Span 28

Beam	a	b	s	ϕ_1	ϕ_2
<i>S₁₁</i>	81.071	20.268	1.250	91° 08' 44.5"	88° 51' 15.5"
<i>G₃</i>	81.071	20.268	1.250	91° 08' 44.5"	88° 51' 15.5"
<i>S₉</i>	—	20.266	—	90° 34' 22.6"	89° 25' 37.4"
<i>S₇</i>	81.055	20.264	1.250	90° 00' 00.0"	90° 00' 00.0"
<i>S₅</i>	↑	↑	↑	↑	↑
<i>S₃</i>	↑	↑	↑	↑	↑
<i>G₁</i>	↑	↑	↑	↑	↑
<i>S₁</i>	81.055	20.264	1.250	90° 00' 00.0"	90° 00' 00.0"
<i>S₂</i>	81.055	20.264	1.250	90° 00' 00.0"	90° 00' 00.0"
<i>G₂</i>	↑	↑	↑	↑	↑
<i>S₄</i>	↑	↑	↑	↑	↑
<i>S₆</i>	↑	↑	↑	↑	↑
<i>G₄</i>	↑	↑	↑	↑	↑
<i>S₈</i>	81.055	20.264	1.250	90° 00' 00.0"	90° 00' 00.0"

Dimensions - Span 29

Beam	a	b	ϕ_1	ϕ_2
<i>S₁₁</i>	125.025	25.005	91° 08' 44.5"	88° 51' 15.5"
<i>G₃</i>	125.025	25.005	91° 08' 44.5"	88° 51' 15.5"
<i>S₉</i>	125.006	25.001	90° 34' 22.6"	89° 25' 37.4"
<i>S₇</i>	125.000	25.000	90° 00' 00.0"	90° 00' 00.0"
<i>S₅</i>	↑	↑	↑	↑
<i>S₃</i>	↑	↑	↑	↑
<i>G₁</i>	↑	↑	↑	↑
<i>S₁</i>	125.000	25.000	90° 00' 00.0"	90° 00' 00.0"
<i>S₂</i>	125.000	25.000	90° 00' 00.0"	90° 00' 00.0"
<i>G₂</i>	↑	↑	↑	↑
<i>S₄</i>	↑	↑	↑	↑
<i>S₆</i>	↑	↑	↑	↑
<i>G₄</i>	↑	↑	↑	↑
<i>S₈</i>	125.000	25.000	90° 00' 00.0"	90° 00' 00.0"

Dimensions - Span 30

Beam	a	b	s	ϕ_1	ϕ_2
<i>S₁₁</i>	90.018	22.505	1.250	91° 08' 44.5"	88° 51' 15.5"
<i>G₃</i>	90.018	22.505	1.250	91° 08' 44.5"	88° 51' 15.5"
<i>S₉</i>	90.004	22.501	1.250	90° 34' 22.6"	89° 25' 37.4"
<i>S₇</i>	90.000	22.500	1.250	90° 00' 00.0"	90° 00' 00.0"
<i>S₅</i>	↑	↑	↑	↑	↑
<i>S₃</i>	↑	↑	↑	↑	↑
<i>G₁</i>	↑	↑	↑	↑	↑
<i>S₁</i>	90.000	22.500	1.250	90° 00' 00.0"	90° 00' 00.0"
<i>S₂</i>	90.000	22.500	—	90° 00' 00.0"	90° 00' 00.0"
<i>G₂</i>	↑	↑	—	↑	↑
<i>S₄</i>	↑	↑	—	↑	↑
<i>S₆</i>	↑	↑	—	↑	↑
<i>G₄</i>	↑	↑	—	↑	↑
<i>S₈</i>	90.000	22.500	—	90° 00' 00.0"	90° 00' 00.0"

Floorbeam Dimensions - Span 29

Floorbeam No	R	Z	X	P
IW6	7.500	9.333	5.036	7.502
IW7	↑	↑	5.286	↑
IW8	↓	↓	5.536	↓
IW9	↓	↓	5.786	↓
IW10	7.500	9.333	6.036	7.502
IE5 - IE10	7.500	9.333	—	—

Floorbeam Dimensions - Span 30

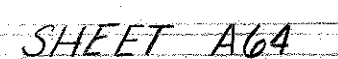
Floorbeam No	R	Z	X	P
IW11	7.500	9.333	6.261	7.502
IW12	↑	↑	6.486	↑
IW13	↓	↓	6.711	↓
IW14	7.500	9.333	6.936	7.502
IE10 - IE14	7.500	9.333	—	—

FRAMING
STRUCTURAL STEEL

SHEET A63

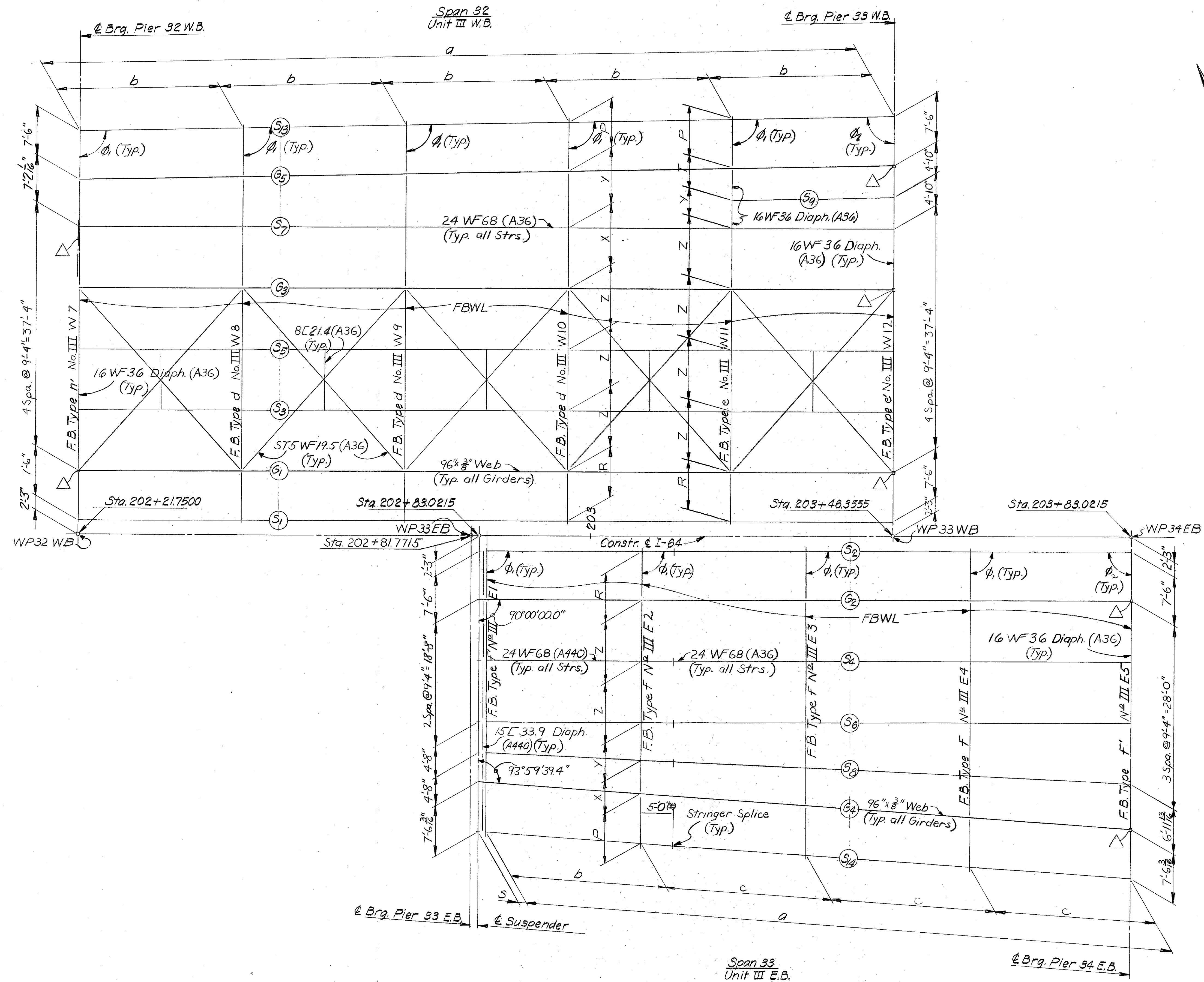
COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
DETAILED BY	ALR: JFk	DATE	REVISED	DATE
TRACED BY	CHECKED BY	DATE	REVISED	DATE



FRAMING STRUCTURAL STEEL

87

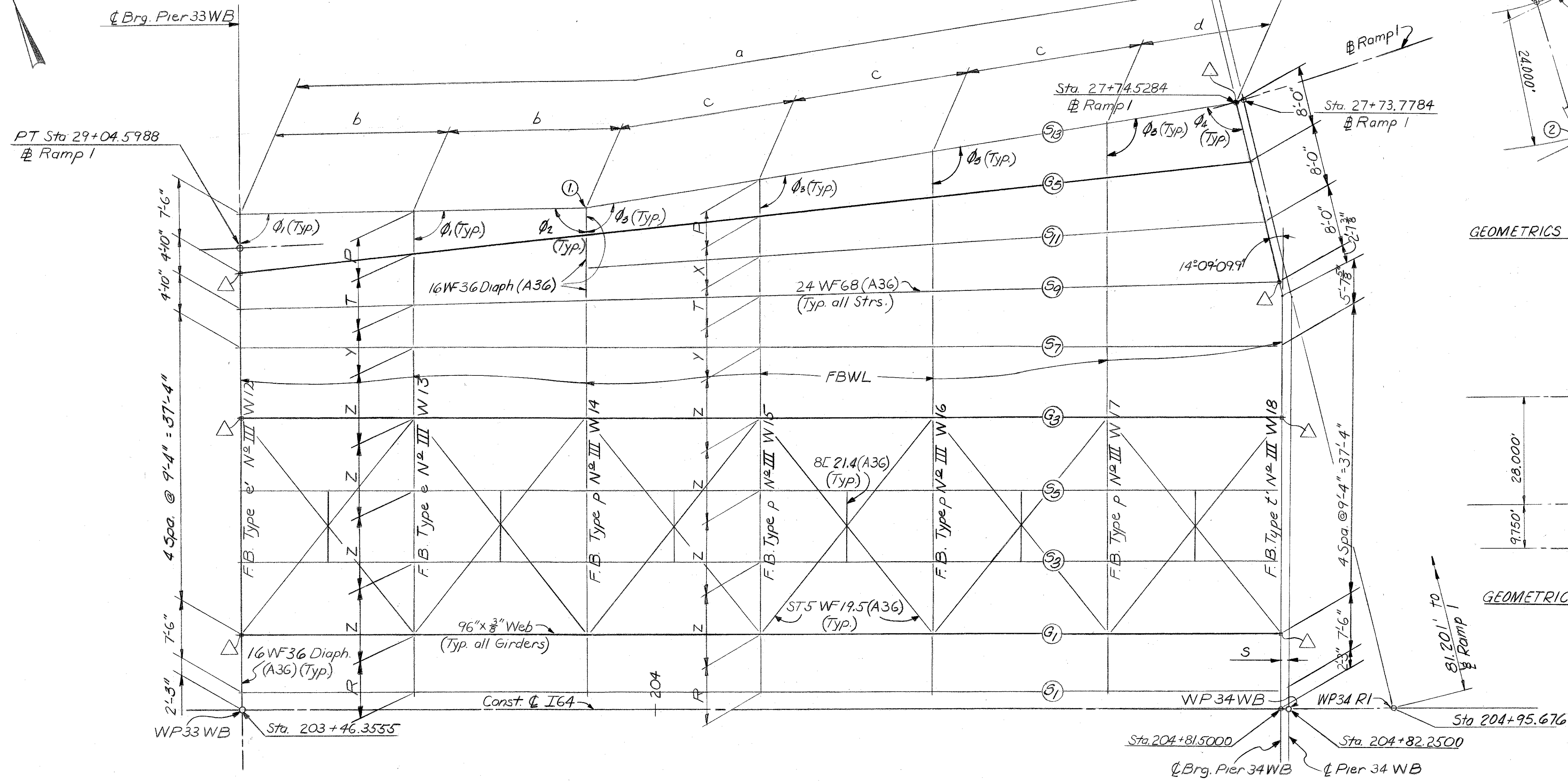
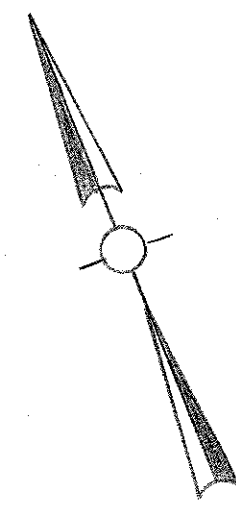


For Unit III E.B.
Cont'd. - See Sheet A67.

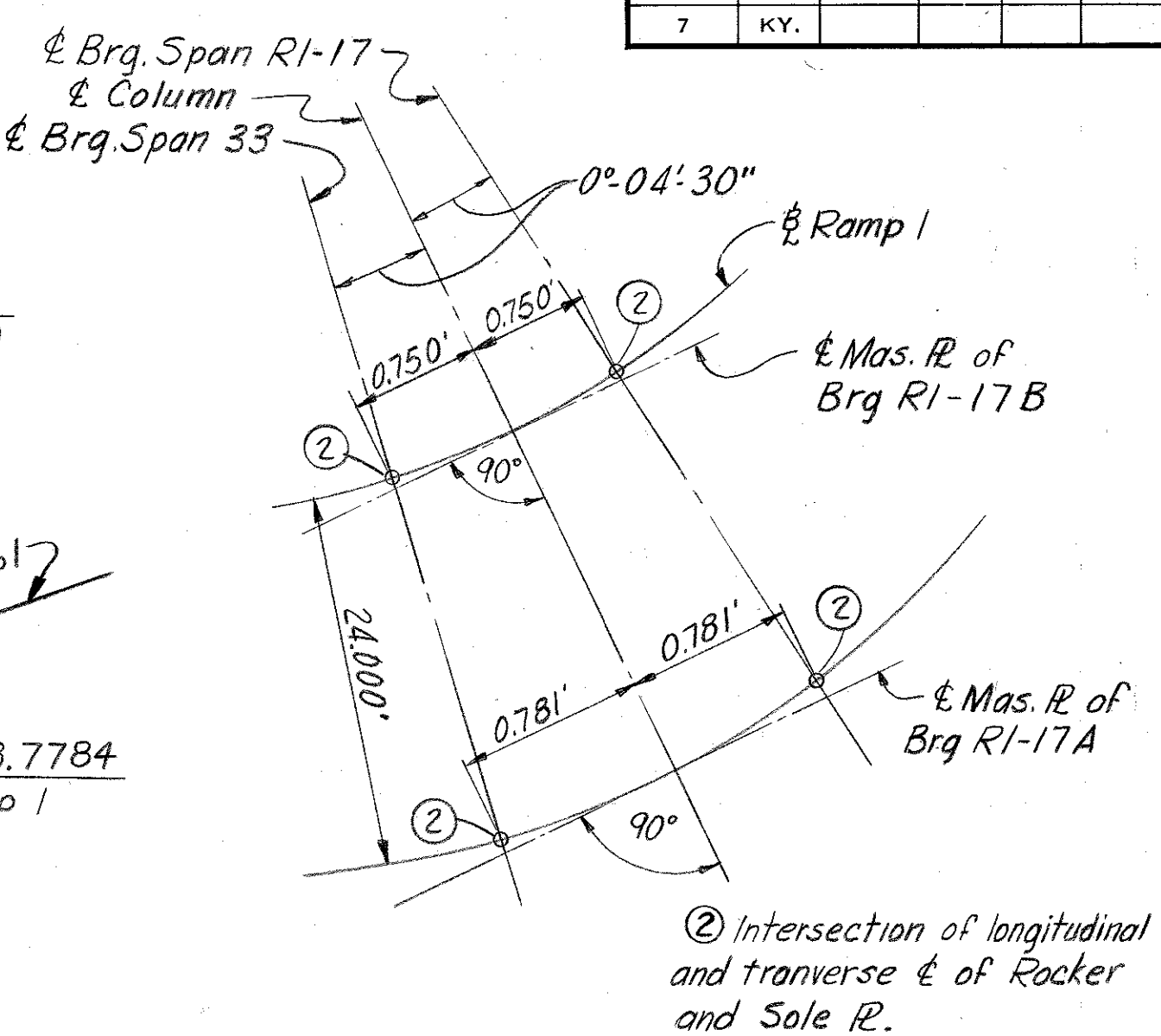
For Framing Notes see Sheet A60
For dimensions and angles see Sheet A70

SHEET A65

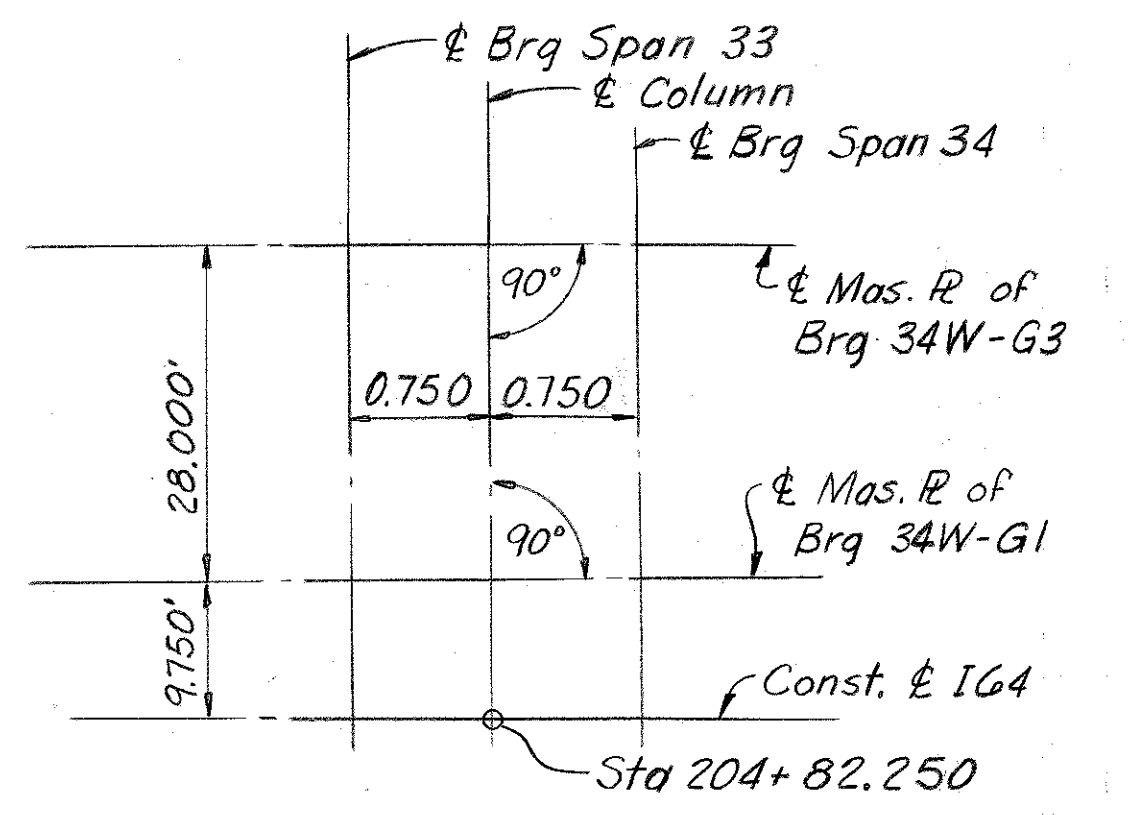
FED. ROAD DIST.	STATE	FED. AID YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



Span 33
Unit III WB



GEOMETRICS FOR BEARINGS RI-A & RI-B



GEOMETRICS FOR BEARINGS 34W-G1 & G3

For Framing Notes see Sheet A60
For dimensions and angles see Sheet A70
① Bend 24 WF68 Stringer. See detail Sheet A114

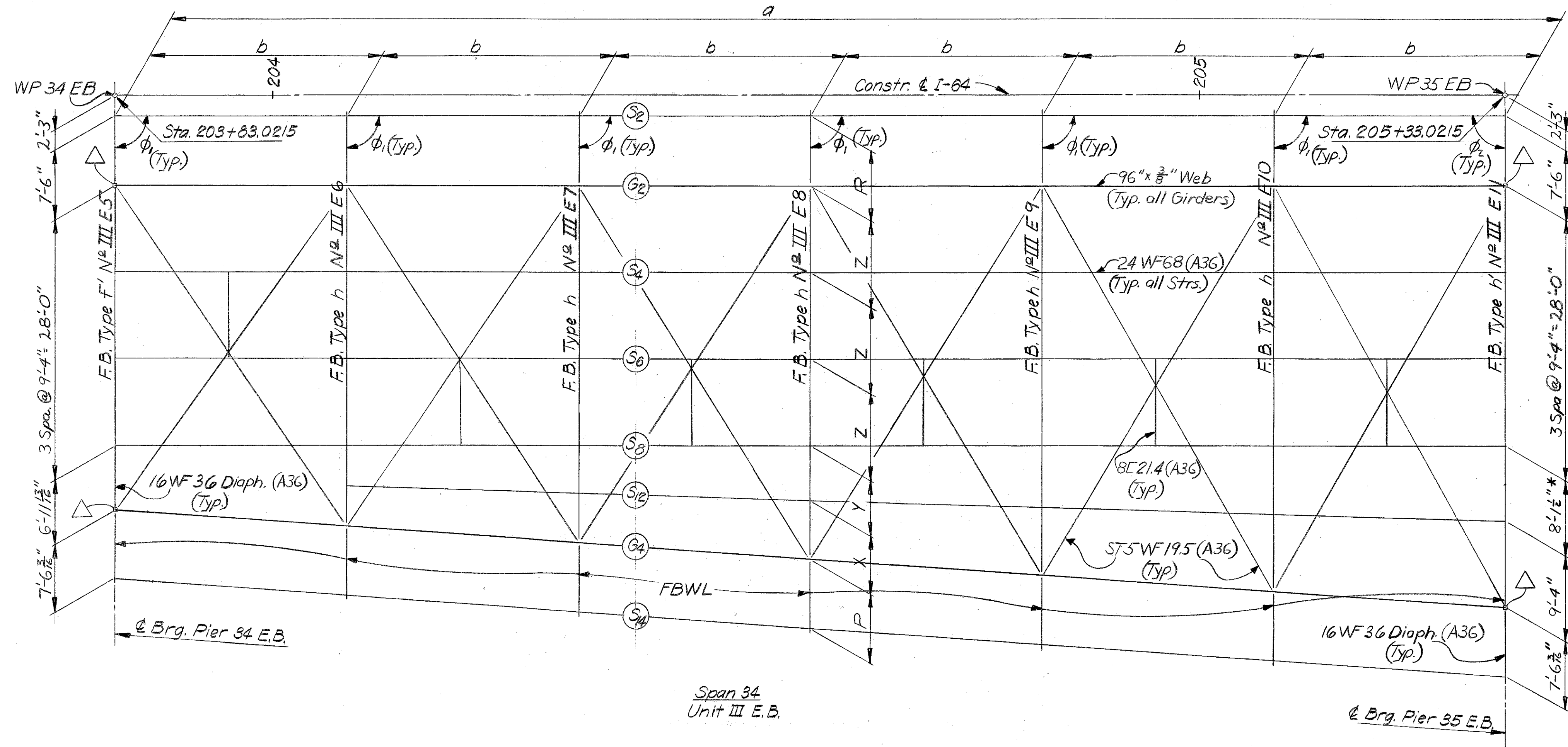
FRAMING
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST
LOUISVILLE - LEXINGTON
ROAD
SP 56-273-III
STATION 208+08
PROJECT NO. 164-2(35) 3

BRIDGE
NUMBER
18572

DRAWING NO.
INDEX

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



* See following Sheet
for dimension &
Unit III E.B. Cont'd.

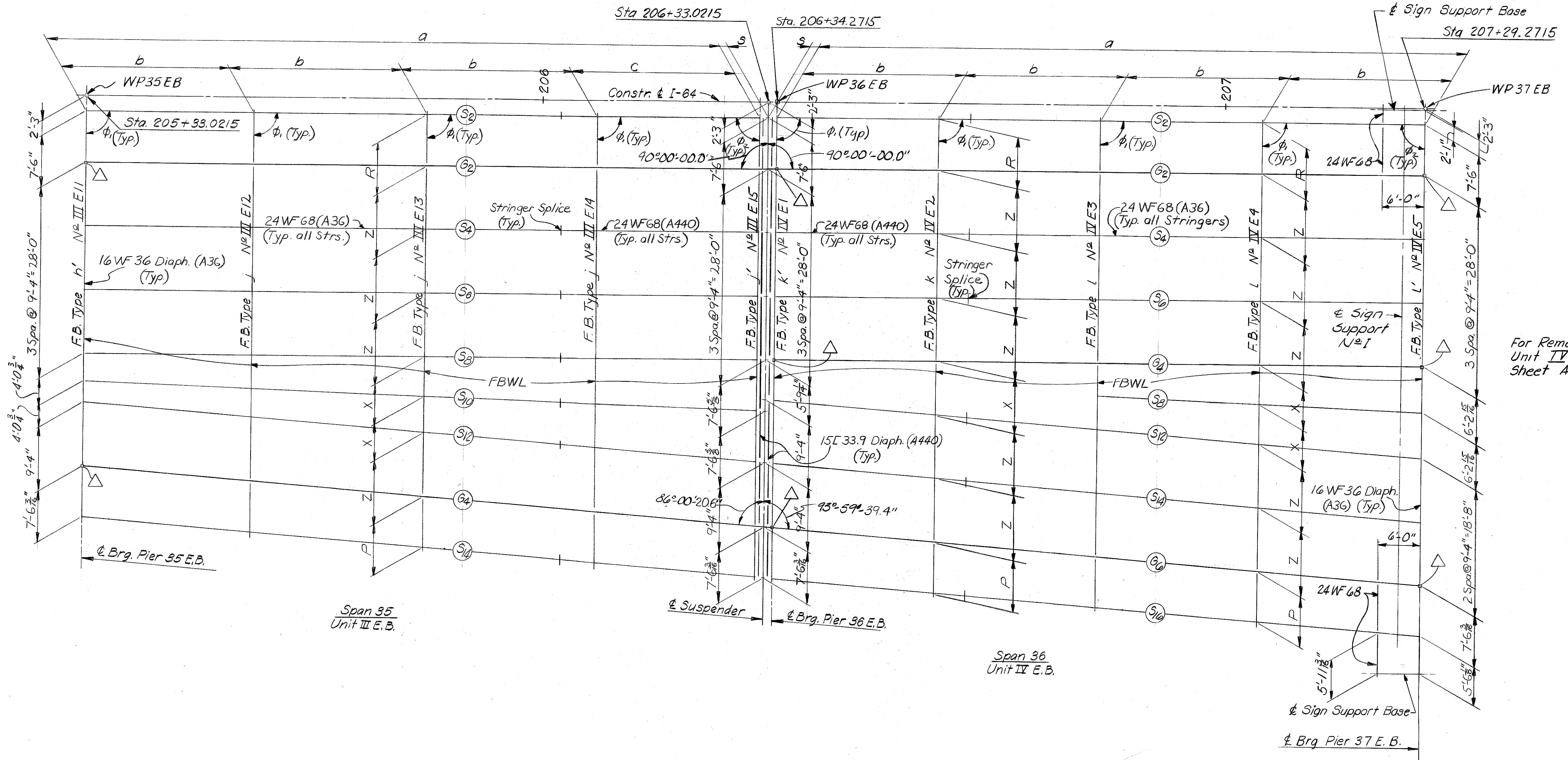
For Framing Notes see Sheet A60
For dimensions and angles see sheet A70

FRAMING
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
STATION 208+08

PROJECT NO. 164-2(35)3
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18572
INDEX

DESIGNED BY	DATE	REVISION	DATE
TRACED BY	DATE	REVISION	DATE
CHECKED BY	DATE	REVISION	DATE
CHECKED BY	DATE	REVISION	DATE



For Remainder of Unit IV E.B. See Sheet A71.

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
TRACED BY	DATE	REVISION	DATE	REVISION	DATE
CHECKED BY	DATE	REVISION	DATE	REVISION	DATE
CHECKED BY	DATE	REVISION	DATE	REVISION	DATE

FRAMING
STRUCTURAL STEEL

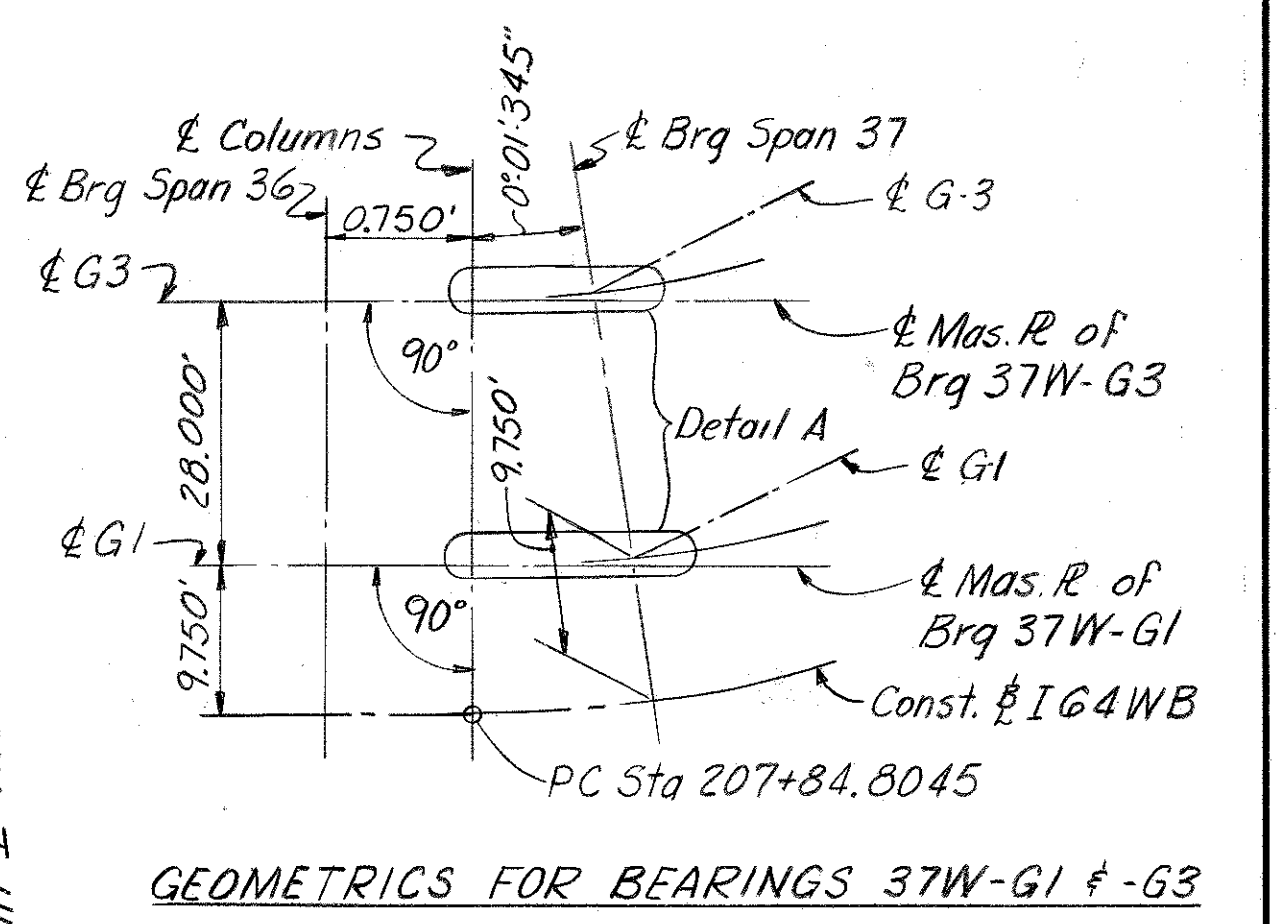
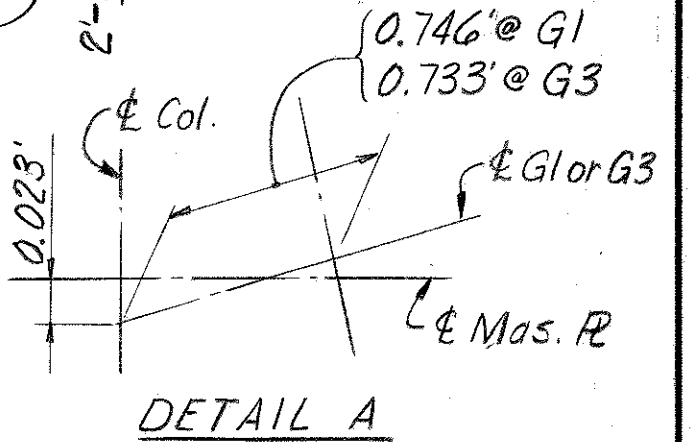
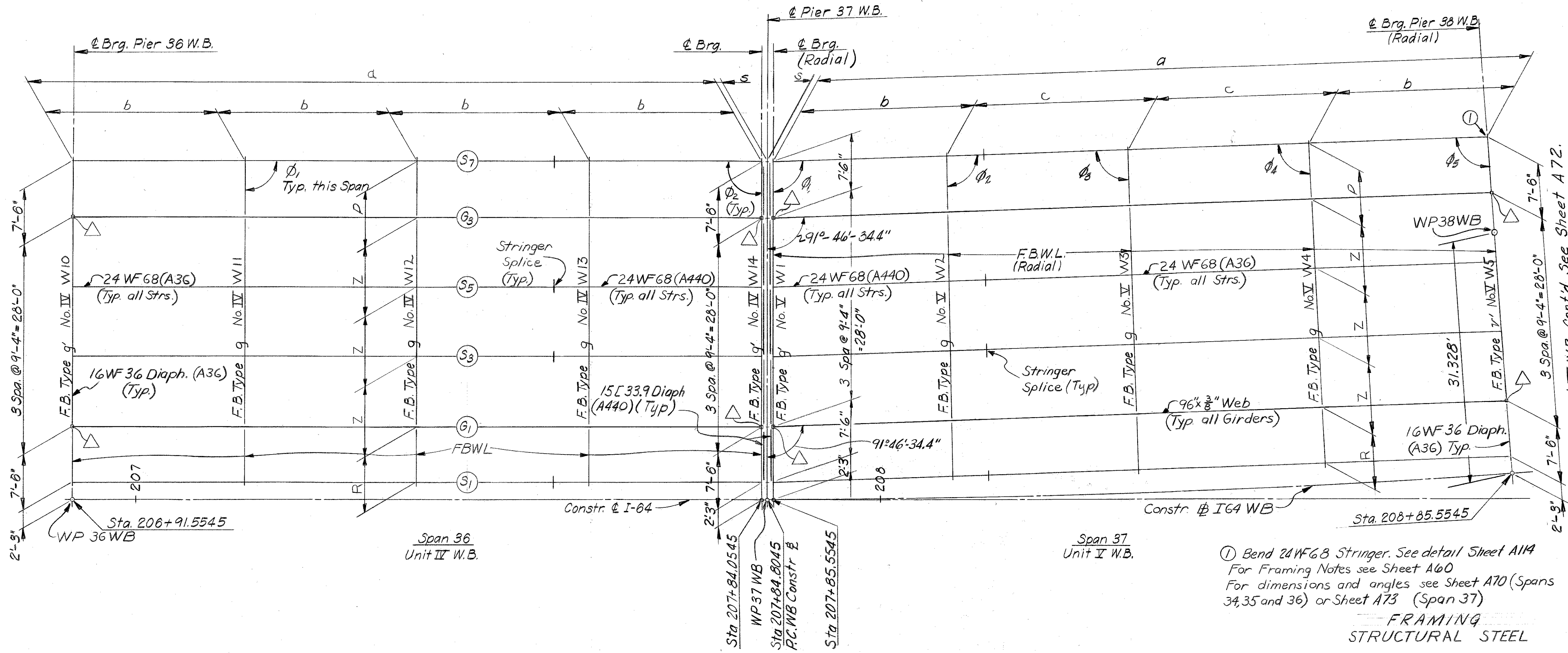
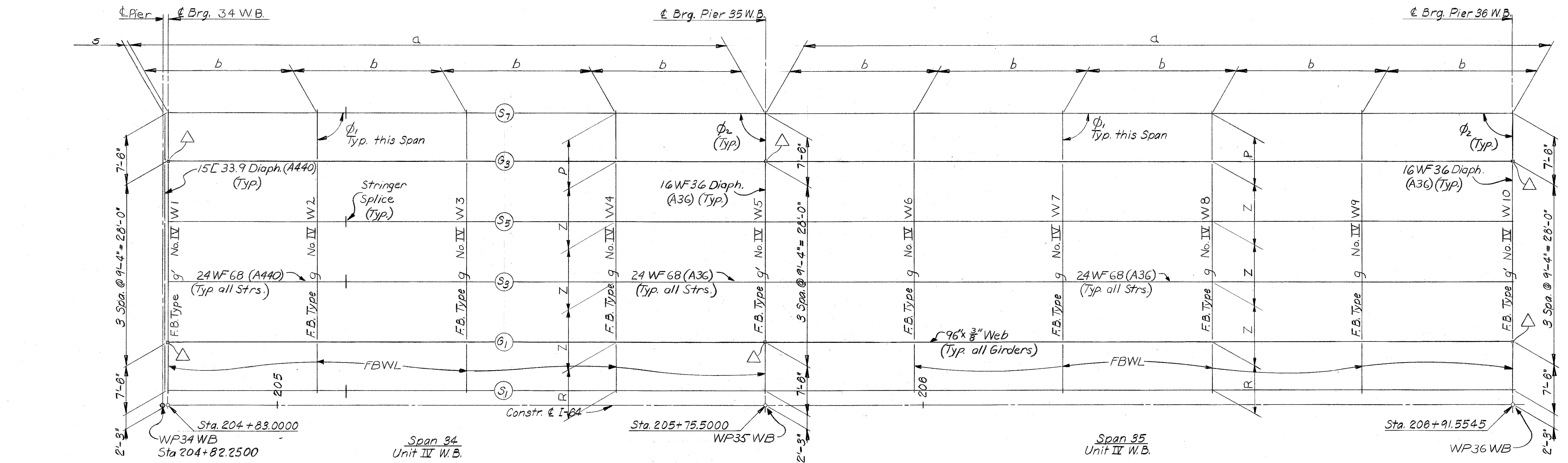
SHEET A68

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08 PROJECT NO. I 64-2(35)3

BRIDGE NUMBER 18572

SP 56-273-III



SHEET A69

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08
BRIDGE NUMBER

PROJECT NO. 164-2(35)3
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INDEX

① Bend 24WF68 Stringer. See detail Sheet A114
For Framing Notes see Sheet A60
For dimensions and angles see Sheet A70 (Spans 34, 35 and 36) or Sheet A73 (Span 37)
—FRAMING
STRUCTURAL STEEL

LETTING DATE

Dimensions - Span 31

Beam	a	b	c	ϕ_1	ϕ_2
<i>S₁₃</i>	129.276	21.546	1.250	91°08'44.5"	88°51'15.5"
<i>G₅</i>	129.276	21.546	↑	91°08'44.5"	88°51'15.5"
<i>S₇</i>	129.272	21.545	↑	91°02'49.3"	88°51'10.7"
<i>G₃</i>	129.250	21.542	↑	90°00'00.0"	90°00'00.0"
<i>S₅</i>	↑	↑	↑	↑	↑
<i>S₃</i>	↑	↑	↑	↑	↑
<i>G₁</i>	↑	↑	↑	↑	↑
<i>S₁</i>	129.250	21.542	1.250	90°00'00.0"	90°00'00.0"
<i>S₂</i>	100.000	25.000	—	90°00'00.0"	90°00'00.0"
<i>G₂</i>	↑	↑	—	↑	↑
<i>S₄</i>	↑	↑	—	↑	↑
<i>S₆</i>	↑	↑	—	↑	↑
<i>G₄</i>	↑	↑	—	↑	↑
<i>S₈</i>	100.000	25.000	—	90°00'00.0"	90°00'00.0"

Dimensions - Span 32

Beam	a	b	c	ϕ_1	ϕ_2
<i>S₁₃</i>	124.630	24.926	—	91°08'44.5"	88°51'15.5"
<i>G₅</i>	124.630	24.926	—	91°08'44.5"	88°51'15.5"
<i>S₉</i>	—	24.929	—	91°25'18.4"	88°34'41.6"
<i>S₇</i>	124.606	24.921	—	90°00'00.0"	90°00'00.0"
<i>G₃</i>	124.606	24.921	—	↑	↑
<i>S₅</i>	↑	↑	—	↑	↑
<i>S₃</i>	↑	↑	—	↑	↑
<i>G₁</i>	↑	↑	—	↑	↑
<i>S₁</i>	124.606	24.921	—	90°00'00.0"	90°00'00.0"
<i>S₂</i>	91.772	22.943	1.250	90°00'00.0"	90°00'00.0"
<i>G₂</i>	↑	↑	↑	↑	↑
<i>S₄</i>	↑	↑	↑	↑	↑
<i>S₆</i>	↑	↑	↑	↑	↑
<i>G₄</i>	↑	↑	↑	↑	↑
<i>S₈</i>	91.772	22.943	1.250	90°00'00.0"	90°00'00.0"

Dimensions - Span 33

Beam	a	b	c	d	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4
<i>S₁₃</i>	129.710	22.529	22.811	16.220	—	91°08'44.5"	88°51'15.5"	99°05'24.2"	95°03'43.7"
<i>G₅</i>	131.343	22.653	22.654	18.075	—	96°01'39.2"	83°52'20.8"	96°01'39.2"	98°01'30.7"
<i>S₁₁</i>	—	—	22.572	19.969	—	—	—	93°43'42.3"	100°25'27.6"
<i>S₉</i>	134.546	22.531	22.531	21.891	—	91°25'18.4"	88°34'41.6"	91°25'18.4"	102°43'51.5"
<i>S₇</i>	135.145	22.524	22.524	22.524	0.750	90°00'00.0"	90°00'00.0"	90°00'00.0"	90°00'00.0"
<i>G₃</i>	↑	↑	↑	↑	↑	↑	↑	↑	↑
<i>S₅</i>	↑	↑	↑	↑	↑	↑	↑	↑	↑
<i>S₃</i>	↑	↑	↑	↑	↑	↑	↑	↑	↑
<i>G₁</i>	↑	↑	↑	↑	↑	↑	↑	↑	↑
<i>S₁</i>	135.145	22.524	22.524	22.524	0.750	90°00'00.0"	90°00'00.0"	90°00'00.0"	90°00'00.0"
<i>S₂</i>	98.750	23.750	25.000	—	1.250	90°00'00.0"	90°00'00.0"	—	—
<i>G₂</i>	↑	↑	↑	—	↑	↑	↑	—	—
<i>S₄</i>	↑	↑	↑	—	↑	↑	↑	—	—
<i>S₆</i>	98.750	23.750	25.000	—	1.250	90°00'00.0"	90°00'00.0"	—	—
<i>S₈</i>	98.858	23.777	25.027	—	1.251	87°19'40.6"	92°40'19.4"	—	—
<i>G₄</i>	98.991	23.808	25.061	—	1.253	86°00'20.6"	93°59'39.4"	—	—
<i>S₁₄</i>	98.991	23.808	25.061	—	1.253	86°00'20.6"	93°59'39.4"	—	—

Floorbeam Dimension - Span 31

Floorbeam N ^o	R	Z	K	Y	P
III W1	7.500	9.333	6.971	6.951	7.501
III W2	↑	↑	7.365	6.988	↑
III W3	↑	↑	7.758	7.026	↑
III W4	↑	↑	8.152	7.063	↑
III W5	↑	↑	8.546	7.099	↑
III W6	↑	↑	8.939	7.137	↑
III W7	7.500	9.333	9.333	7.174	7.501
II E14-II E18	7.500	9.333	—	—	—

Floorbeam Dimensions - Span 32

Floorbeam N ^o	R	X & Z	Y	T	P
III W8	7.500	9.333	7.672	—	7.502
III W9	↑	↑	8.171	—	7.501
III W10	↑	↑	8.669	—	7.502
III W11	↑	↑	4.215	4.953	7.501
III W12	7.500	9.333	4.833	4.833	7.502
II E18-II E22	7.500	9.333	—	—	—

Floorbeam Dimensions - Span 33

Floorbeam N ^o	R	Z	Y	T	X	P
III W13	7.500	9.333	5.392	6.692	—	5.534
III W14	↑	↑	5.951	4.276	4.275	3.567
III W15	↑	↑	6.510	5.185	5.225	4.753
III W16	↑	↑	7.069	6.093	6.177	5.938
III W17	↑	↑	7.628	7.002	7.127	7.124
III W18	↑	↑	8.251*	8.000	8.000	8.000
III E1	7.500	9.333	4.724	—	4.696	7.518
III E2	↑	↑	5.833	—	5.246	↑
III E3	↑	↑	6.999	—	5.825	↑
III E4	↑	↑	8.166	—	6.404	↑
III E5	7.500	9.333	9.333	—	6.983	7.518

Floorbeam Dimensions - Span 36

Floorbeam N ^o	P	R	Z	K
IV W11-IV W14	7.500	7.500	9.333	—
IV E1	7.519	↑	9.333	5.860
IV E2	7.519	↑	↑	7.518
IV E3	7.519	↑	↑	4.589
IV E4	7.518	↑	↑	5.417
IV E5	7.518	7.500	9.333	6.247

* along & Brg.(developed)

Dimensions - Span 34

Beam	a	b	c	ϕ_1	ϕ_2
<i>S₁</i>	92.500	23.125	0.750	90°00'00.0"	90°00'00.0"
<i>G₃</i>	↑	↑	↑	↑	↑
<i>S₅</i>	↑	↑	↑	↑	↑
<i>S₃</i>	↑	↑	↑	↑	↑
<i>G₁</i>	↑	↑	↑	↑	↑
<i>S₁</i>	92.500	23.125	0.750	90°00'00.0"	90°00'00.0"
<i>S₂</i>	150.000	25.000	—	90°00'00.0"	90°00'00.0"
<i>G₂</i>	↑	↑	—	↑	↑
<i>S₄</i>	↑	↑	—	↑	↑
<i>S₆</i>	↑	↑	—	↑	↑
<i>S₈</i>	150.000	25.000	—	90°00'00.0"	90°00'00.0"
<i>S₁₂</i>	—	25.011	—	88°16'38.8"	91°43'21.2"
<i>G₄</i>	150.365	25.061	—	86°00'20.6"	93°59'39.4"
<i>S₁₄</i>	150.365	25.061	—	86°00'20.6"	93°59'39.4"

Dimensions - Span 35

Beam	a	b	c	s	ϕ_1	ϕ_2
<i>S₁</i>	116.055	23.211	—	—	90°00'00.0"	90°00'00.0"
<i>G₃</i>	↑	↑	—	—	↑	↑
<i>S₅</i>	↑	↑	—	—	↑	↑
<i>S₃</i>	↑	↑	—	—	↑	↑
<i>G₁</i>	↑	↑	—	—	↑	↑
<i>S₁</i>	116.055	23.211	—	—	90°00'00.0"	90°00'00.0"
<i>S₂</i>	98.750	25.000	23.750	1.250	90°00'00.0"	90°00'00.0"
<i>G₂</i>	↑	↑	↑	↑	↑	↑
<i>S₄</i>	↑	↑	↑	↑	↑	↑
<i>S₆</i>	↑	↑	↑	↑	↑	↑
<i>S₈</i>	98.750	25.000	23.750	1.250	90°00'00.0"	90°00'00.0"
<i>S₁₀</i>	98.810	25.015	23.765	1.251	88°00'02.2"	91°59'57.8"
<i>S₁₂</i>	98.991	25.061	23.808	1.253	86°00'20.6"	93°59'39.4"
<i>G₄</i>	↑	↑	↑	↑	↑	↑
<i>S₁₄</i>	98.991	25.061	23.808	1.253	86°00'20.6"	93°59'39.4"

Dimensions - Span 36

Beam	a	b	c	ϕ_1	ϕ_2
<i>S₁</i>	92.500	23.125	0.750	90°00'00.0"	90°00'00.0"
<i>G₃</i>	↑	↑	↑	↑	↑
<i>S₅</i>	↑	↑	↑	↑	↑
<i>S₃</i>	↑	↑	↑	↑	↑
<i>G₁</i>	↑	↑	↑	↑	↑
<i>S₁</i>	92.500	23.125	0.750	90°00'00.0"	90°00'00.0"
<i>S₂</i>	95.000	23.750	1.250	90°00'00.0"	90°00'00.0"
<i>G₂</i>	↑	↑	↑	↑	↑
<i>S₄</i>	↑	↑	↑	↑	↑
<i>S₆</i>	↑	↑	↑	↑	↑
<i>G₄</i>	95.000	23.750	1.250	90°00'00.0"	90°00'00.0"
<i>S₈</i>	—	23.765	—	88°00'01.5"	91°59'58.5"
<i>S₁₂</i>	95.231	23.808	1.253	86°00'20.6"	93°59'39.4"
<i>S₁₄</i>	↑	↑	↑	↑	↑
<i>G₆</i>	↑	↑	↑	↑	↑
<i>S₁₆</i>	95.231	23.808	1.253	86°00'20.6"	93°59'39.4"

Floorbeam Dimensions - Span 34

Floorbeam N ^o	R	Z	K	Y	P
IV W1-IV W5	7.500	9.333	—	—	7.500
III E6	↑	↑	4.365	4.364	7.518
III E7	↑	↑	5.358	5.116	↑
III E8	↑	↑	6.353	5.867	↑
III E9	↑	↑	7.347	6.619	↑
III E10	7.500	9.333	8.340	7.371	7.518

Floorbeam Dimensions - Span 35

Floorbeam N ^o	R	Z	K	P
IV W5-IV W10	7.500	9.333	—	7.500
III E11	↑	↑	4.062	7.518
III E12	↑	↑	4.935	↑
III E13	↑	↑	5.807	↑
III E14	↑	↑	6.680	↑
III E15	7.500	9.333	7.510	7.518

SHEET A70

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

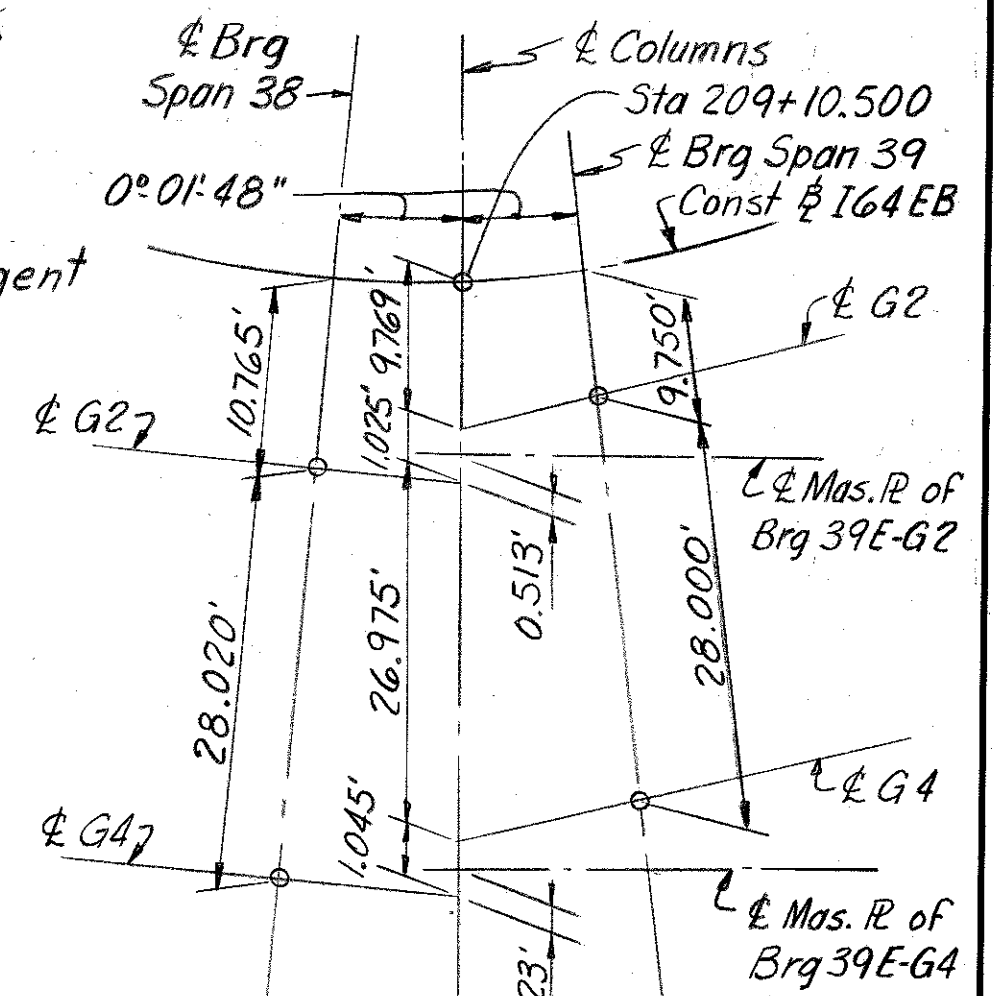
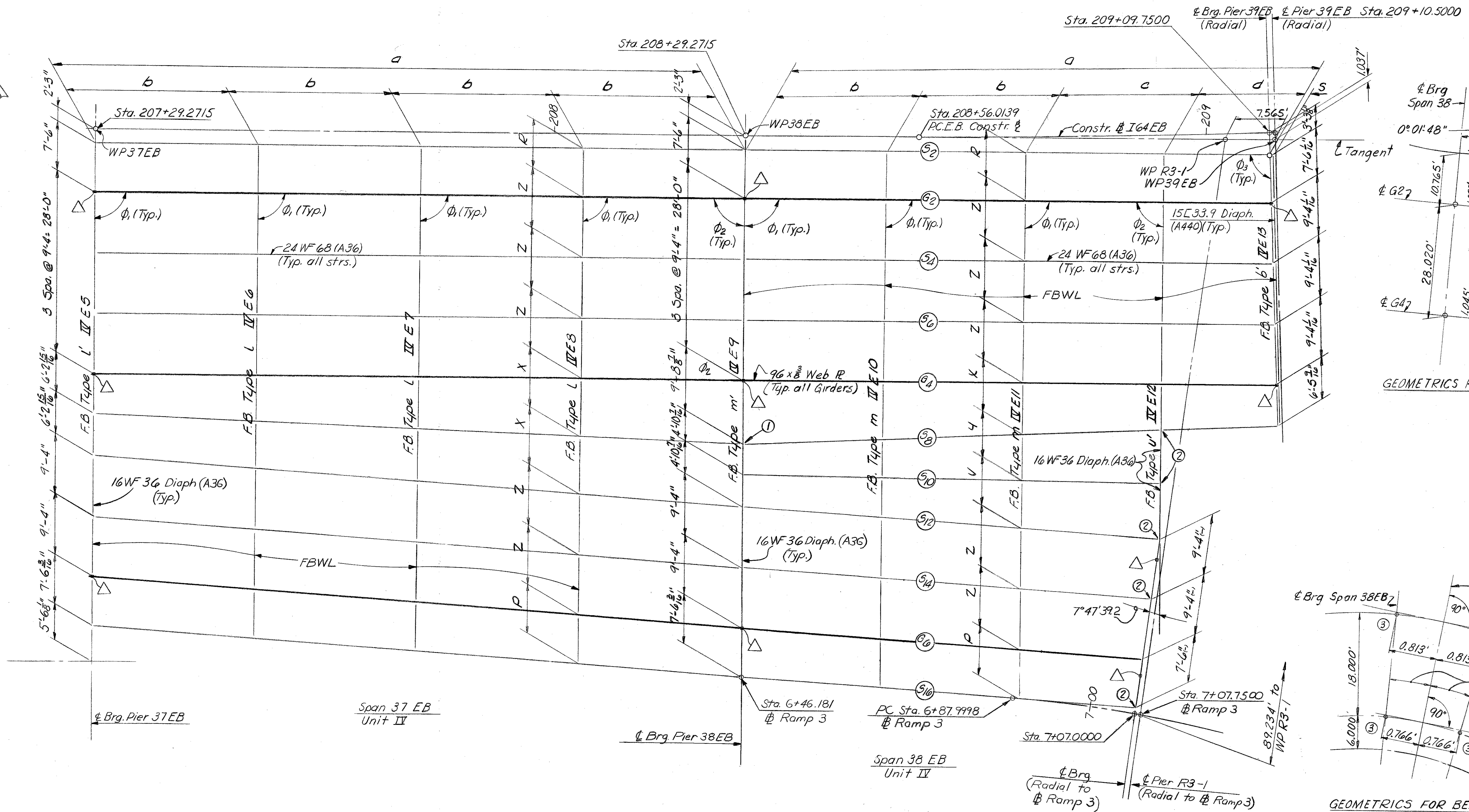
164-13TH ST. TO 7TH ST.
LOUISVILLE—LEXINGTON
ROAD

STATION 208+08 SP 56-273-III
CONSTRUCTION PROJECT NO. P. E. PROJECT NO. 164-2 (35) 3
MAINTENANCE PROJECT NO. DRAWING NO.

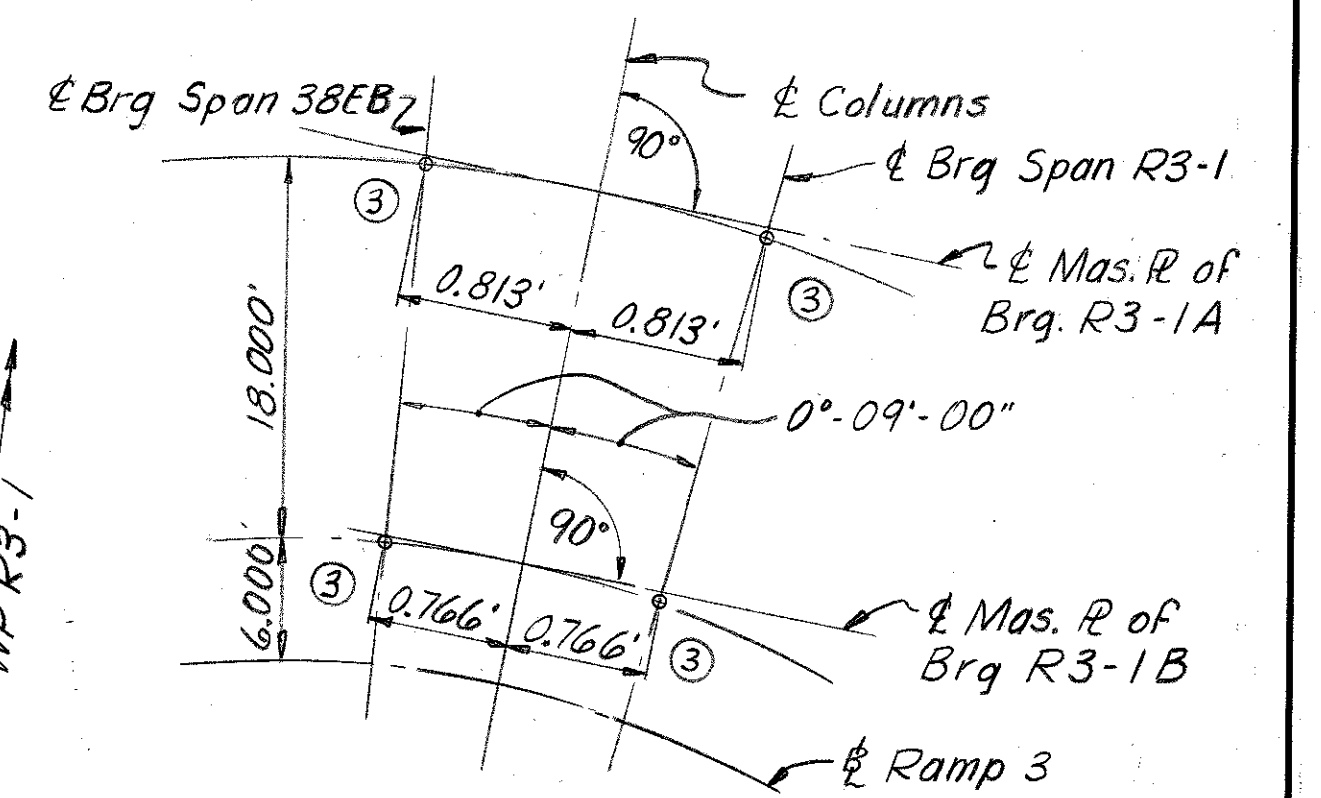
18572

FRAMING
STRUCTURAL STEEL

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



GEOMETRICS FOR BEARINGS 39E-G2+G4



GEOMETRICS FOR BEARINGS R3-1A & 1B

③ Intersection of longitudinal and transverse & of Rocker and Sole R.

SHEET A71

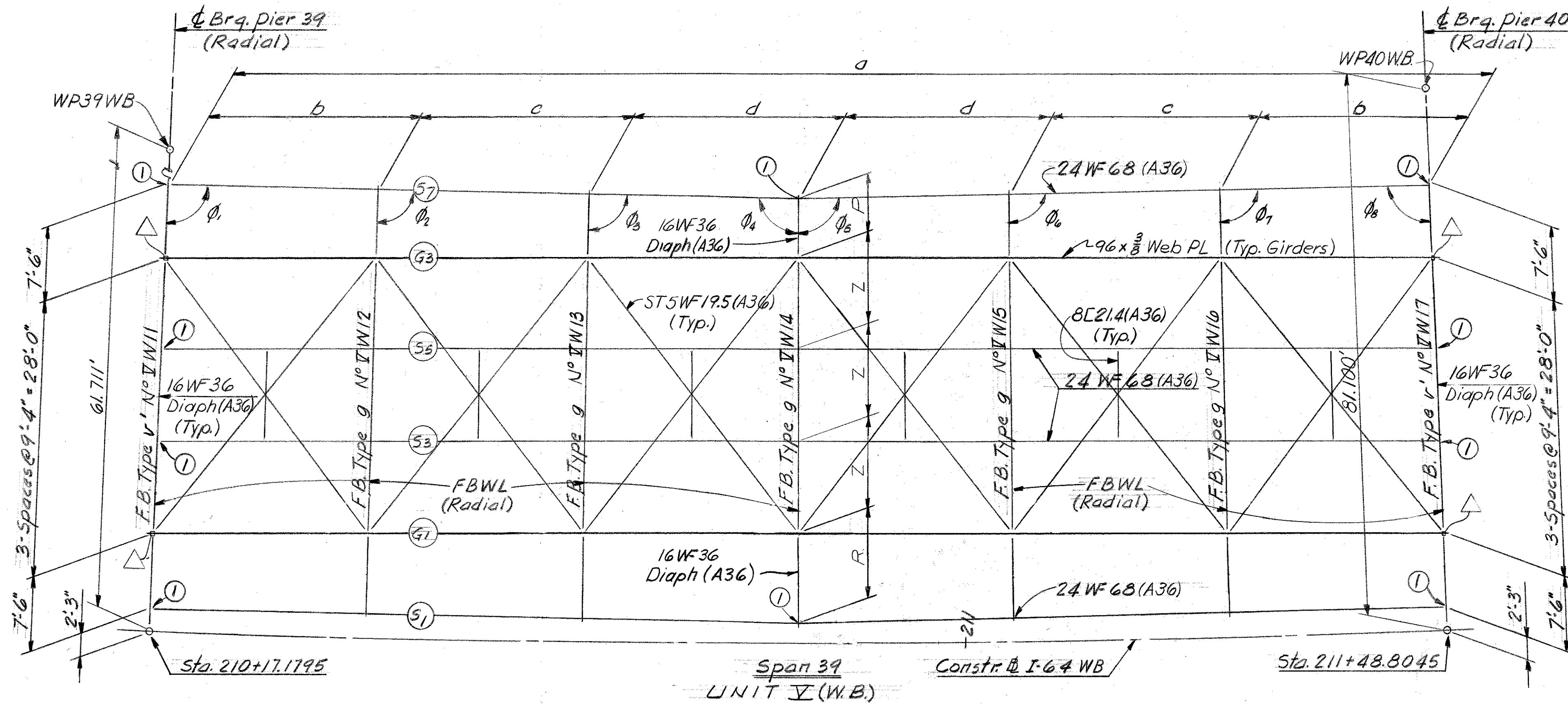
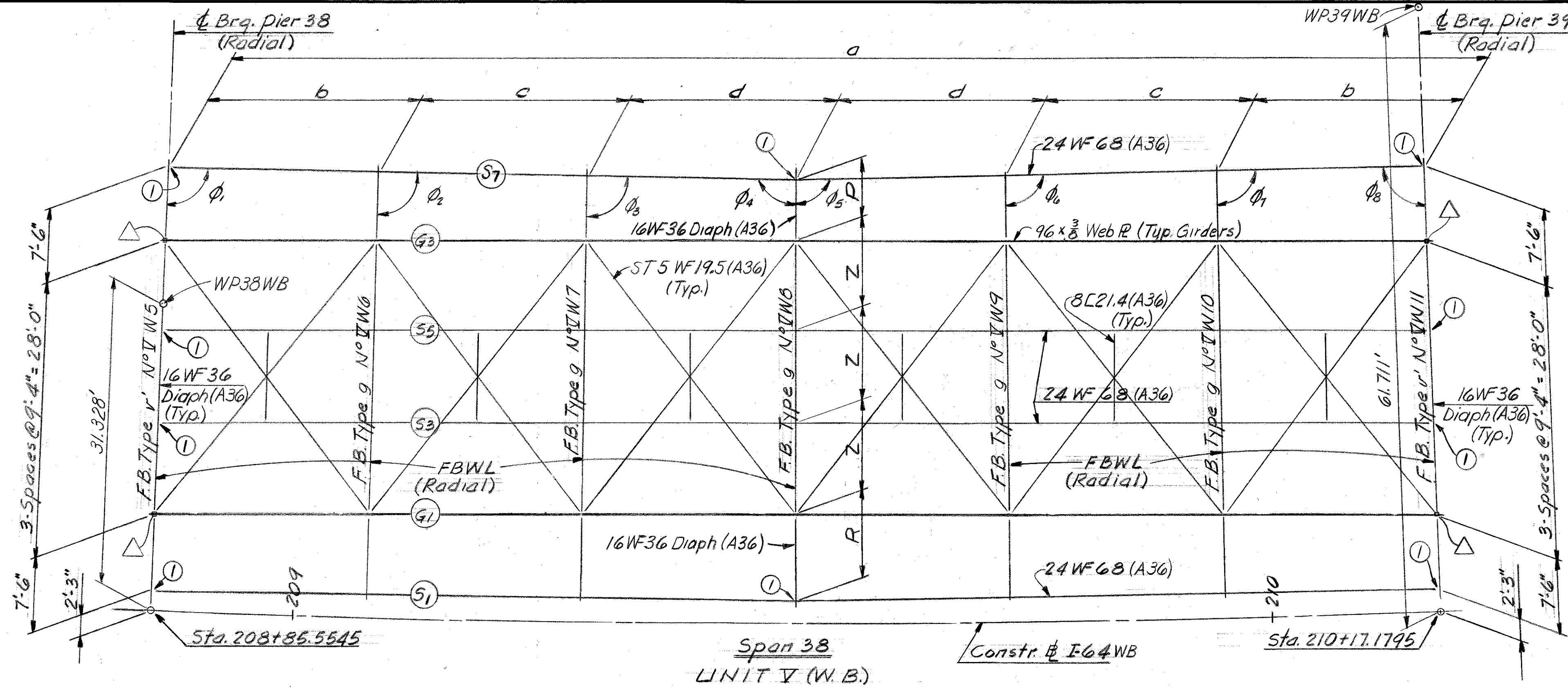
COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS FRANKFORT COUNTY OF JEFFERSON 164-13TH ST. TO 7TH ST. LOUISVILLE-LEXINGTON ROAD		SP 56-273-11L STATION 208+08 PROJECT NO. 1 64-2(35)3
BRIDGE NUMBER 18572	DRAWING NO. 18572	INDEX

For Framing Notes see Sheet A60
 For dimensions and angles see Sheet A73
 ① Bend 24 WF 68 Stringer. See Detail, Sheet A114
 ② For Stringer to Floorbeam connection details see Sheet A126

FRAMING
 STRUCTURAL STEEL

DESIGNED BY	CHECKED BY	DATE
AIK	AIK	11-10
TRACED BY	CHECKED BY	DATE

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



For Unit I WB Cont'd, See Sheet A75

For Framing Notes see Sheet A60
For dimensions and angles see Sheet A73
① Bend 24 WF 68 Stringer. See Detail, Sheet A114

SHEET A72

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08

PROJECT NO. I 64-2(35) 3

BRIDGE
NUMBER

DRAWING NO.
18572

INDEX

FRAMING
STRUCTURAL STEEL

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
TRACED BY	DATE	TRACED BY	DATE	TRACED BY	DATE

DESIGNED BY	AUR	CHECKED BY	BLE	DATE	1-70
DRAWN BY		CHECKED BY		DATE	
TRACED BY		CHECKED BY		DATE	
REVIEWED		CHECKED BY		DATE	

	Beam	a	b	c	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5
West Bound	S ₇	97.221	24.311	24.300	0.730	91°44'59.9"	90°52'29.9"	90°00'00.1"	90°52'30.1"	91°45'00.1"
	G ₃	97.679	24.425	24.414	0.733	↑	↑	↑	↑	↑
	S ₅	98.249	24.568	24.556	0.737		↑	↑		↑
	S ₃	98.819	24.710	24.699	0.742		↑	↑		↑
	G ₁	99.389	24.853	24.841	0.746	↓	↓	↓	↓	↓
	S ₁	99.897	24.968	24.956	0.750	91°44'59.9"	90°52'29.9"	90°00'00.1"	90°52'30.1"	91°45'00.1"
East Bound	S ₂	100.000	25.000	—	—	90°00'00.0"	90°00'00.0"	—	—	—
	G ₂	↑	↑	—	—	↑	↑	—	—	—
	S ₄	↑	↑	—	—	↑	↑	—	—	—
	S ₆	↓	↓	—	—	↓	↓	—	—	—
	G ₄	100.000	25.000	—	—	90°00'00.0"	90°00'00.0"	—	—	—
	S ₈	100.061	25.015	—	—	88°00'02.2"	91°59'57.8"	—	—	—
	S ₁₂	100.244	25.061	—	—	86°00'20.6"	93°59'39.4"	—	—	—
	S ₁₄	↑	↑	—	—	↑	↑	—	—	—
	G ₆	↑	↑	—	—	↑	↑	—	—	—
	S ₁₆	100.244	25.061	—	—	86°00'20.6"	93°59'39.4"	—	—	—

Floorbeam №	R	Z	X	P
IVW1	7.500	9.333	—	7.500
IVW2 & IVW4	7.498	9.330	—	7.498
IVW3	7.497	9.329	—	7.497
IVW5	7.500	9.333	—	7.500
IVE6	↑	↑	7.120	7.518
IVE7			7.992	
IVE8	↓	↓	8.865	↑

	Beam	a	b	c	d or s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5	ϕ_6	ϕ_7	ϕ_8
West Bound	S ₇	12.7979*	21.331	21.327	21.331	91°09'06.2"	90°23'02.0"	89°36'57.9"	91°09'06.2"	91°09'06.2"	90°23'02.0"	89°36'57.9"	91°09'06.2"
	G ₃	12.8555	21.439	21.423	21.416	92°18'12.3"	91°32'08.2"	90°46'04.1"	90°00'00"	90°00'00"	89°13'55.8"	88°27'51.7"	92°18'12.4"
	S ₅	12.9305	21.564	21.548	21.541	92°18'12.3"	91°32'08.2"	90°46'04.1"	90°00'00"	90°00'00"	89°13'55.8"	88°27'57.7"	92°18'12.4"
	S ₃	130.056	21.689	21.673	21.666	92°18'12.3"	91°32'08.2"	90°46'04.1"	90°00'00"	90°00'00"	89°13'55.8"	88°27'51.7"	92°18'12.4"
	G ₁	130.806	21.814	21.798	21.791	92°18'12.3"	91°32'08.2"	90°46'04.1"	90°00'00"	90°00'00"	89°13'55.8"	88°27'51.7"	92°18'12.4"
	S ₁	131.435*	21.907	21.903	21.908	91°09'06.2"	90°23'02.0"	89°36'57.9"	91°09'06.2"	91°09'06.2"	90°23'02.0"	89°36'57.9"	91°09'06.2"
East Bound	S ₂	70.103	23.369	23.364	0.751	91°24'00.0"	90°28'00.0"	89°32'00.0"	91°24'00.0"	—	—	—	—
	G ₂	70.469	23.492	23.486	0.155	↑	↑	↑	↑	—	—	—	—
	S ₄	70.926	23.644	23.638	0.760	↑	↑	↑	↑	—	—	—	—
	S ₆	71.382	23.796	23.790	0.765	↑	↑	↑	↑	—	—	—	—
	G ₄	71.838	23.948	23.942	0.770	↓	↓	↓	↓	—	—	—	—
	S ₈	72.204	24.070	24.064	0.774	91°24'00.0"	90°28'00.0"	89°32'00.0"	91°24'00.0"	—	—	—	—

Floorbeam No.	R	Z	P
<u>IVW12</u>	7.937	9.329	7.068
<u>IVW13</u>	8.375	9.327	6.637
<u>IVW14</u>	8.815	9.326	6.208
<u>IVW15</u>	8.375	9.327	6.637
<u>IVW16</u>	7.937	9.329	7.068
<u>IVW17</u>	7.500	9.333	7.500
<u>VE1 & VE4</u>	7.500	9.333	—
<u>VE2 & VE3</u>	7.998	9.331	—

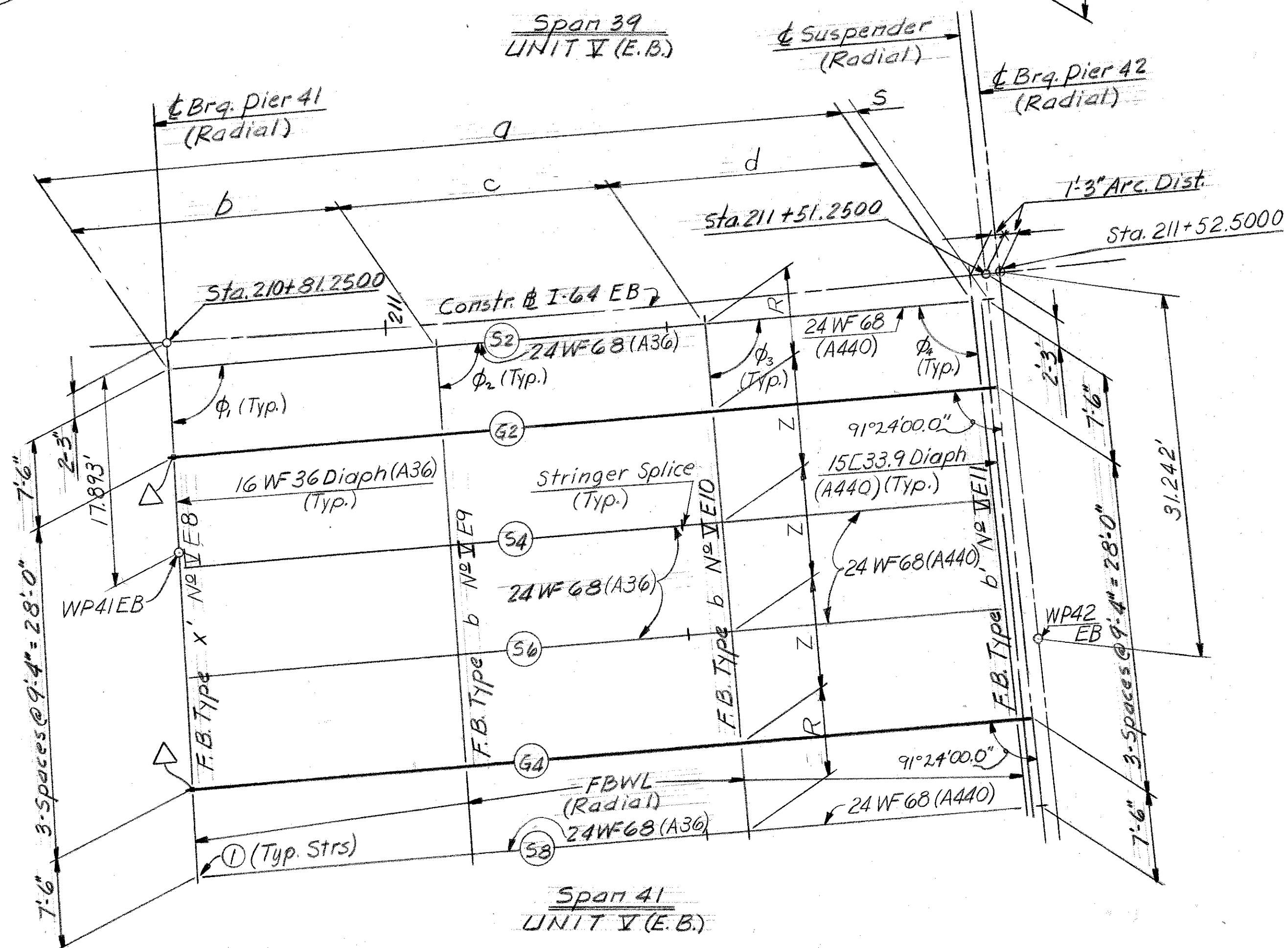
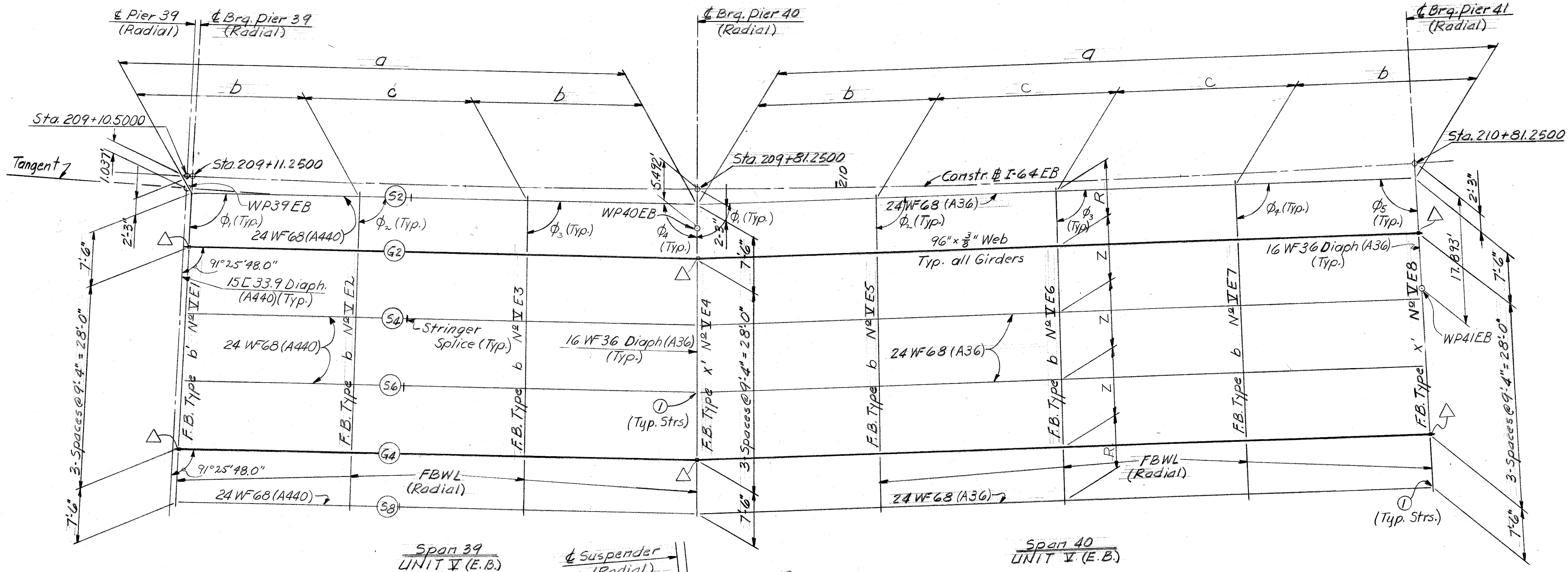
	Beam	a	b	c	d	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5	ϕ_6	ϕ_7	ϕ_8
West Bound	S ₇	127.979*	21.331	21.327	21.331	—	91°09'06.2"	90°23'02.0	89°36'57.9"	91°09'06.2"	91°09'06.2"	90°23'02.0"	89°36'57.9"	91°09'06.2"
	G ₃	128.555	21.439	21.423	21.416	—	92°18'12.3"	91°32'08.2"	90°46'04.1"	90°00'00"	90°00'00"	89°13'55.8"	88°27'51.7"	92°18'12.4"
	S ₅	129.305	21.564	21.548	21.541	—	92°18'12.3"	91°32'08.2"	90°46'04.1"	90°00'00"	90°00'00"	89°13'55.8"	88°27'51.7"	92°18'12.4"
	S ₃	130.056	21.689	21.673	21.666	—	92°18'12.3"	91°32'08.2"	90°46'04.1"	90°00'00"	90°00'00"	89°13'55.8"	88°27'51.7"	92°18'12.4"
	G ₁	130.806	21.814	21.798	21.791	—	92°18'12.3"	91°32'08.2"	90°46'04.1"	90°00'00"	90°00'00"	89°13'55.8"	88°27'51.7"	92°18'12.4"
	S ₁	131.435*	21.907	21.903	21.908	—	91°09'06.2"	90°23'02.0"	89°36'57.9"	91°09'06.2"	91°09'06.2"	90°23'02.0"	89°36'57.9"	91°09'06.2"
East Bound	S ₂	80.588	21.416	21.416	16.339	0.752	90°00'00.0"	90°00'00.0"	92°08'58.0"	—	—	—	—	—
	G ₂	80.870	↑	↑	16.621	0.756	↑	↑	↑	—	—	—	—	—
	S ₄	81.220	↓	↓	16.971	0.761	↓	↓	↓	—	—	—	—	—
	S ₆	81.570	↓	↓	17.321	0.766	↓	↓	↓	—	—	—	—	—
	G ₄	81.920	21.416	21.416	17.671	0.771	90°00'00.0"	90°00'00.0"	92°08'58.0"	—	—	—	—	—
	S ₈	82.228	21.433	21.433	17.929	0.774	92°17'04.0"	87°42'54.0"	89°51'54.0"	—	—	—	—	—
	S ₁₀		21.419	21.419	—	—	89°03'54.2"	90°56'05.8"	—	—	—	—	—	—
	S ₁₂		21.468	21.468	—	—	86°00'20.6"	86°12'00.2"	—	—	—	—	—	—
	S ₁₄		21.468	20.200	—	—	86°00'20.6"	86°12'00.2"	—	—	—	—	—	—
	G ₆		21.468	18.731	—	—	86°00'20.6"	86°12'00.2"	—	—	—	—	—	—
	S ₁₆		21.468	17.912	—	—	86°00'20.6"	86°12'00.2"	—	—	—	—	—	—

Floorbeam №	R	Z	X	Y	V	P
IVW6	7.937	9.329	—	—		7.068
IVW7	8.375	9.327	—	—		6.637
IVW8	8.815	9.326	—	—		6.208
IVW9	8.375	9.327	—	—		6.637
IVW10	7.937	9.329	—	—		7.068
IVW11	7.500	9.333	—	—		7.500
IVE9	7.500	9.333	9.738	4.869	4.869	7.518
IVE10	↑	↑	8.884	6.073	6.015	7.518
IVE11	↓	↓	8.029	7.277	7.161	7.518
IVE12	7.500	9.333	7.175	8.480	8.307	7.498
IVE13	7.505	9.340	6.465	—	—	—

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE — LEXINGTON
ROAD
SP 56-273-11L
STATION 208+08
P. E. PROJECT NO. 164-2 (35) 3

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18572

FRAMING STRUCTURAL STEEL



For Framing Notes see Sheet A60
 For dimensions and angles see
 Sheet A73 (for Span 39) and A78
 (for Spans 40 & 41).
 ① Bend 24 WF68 Stringers. See detail
 Sheet A114
 For Bearing Geometrics at Pier 39EB
 see Sheet A71

FRAMING
 STRUCTURAL STEEL

SHEET A74

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD

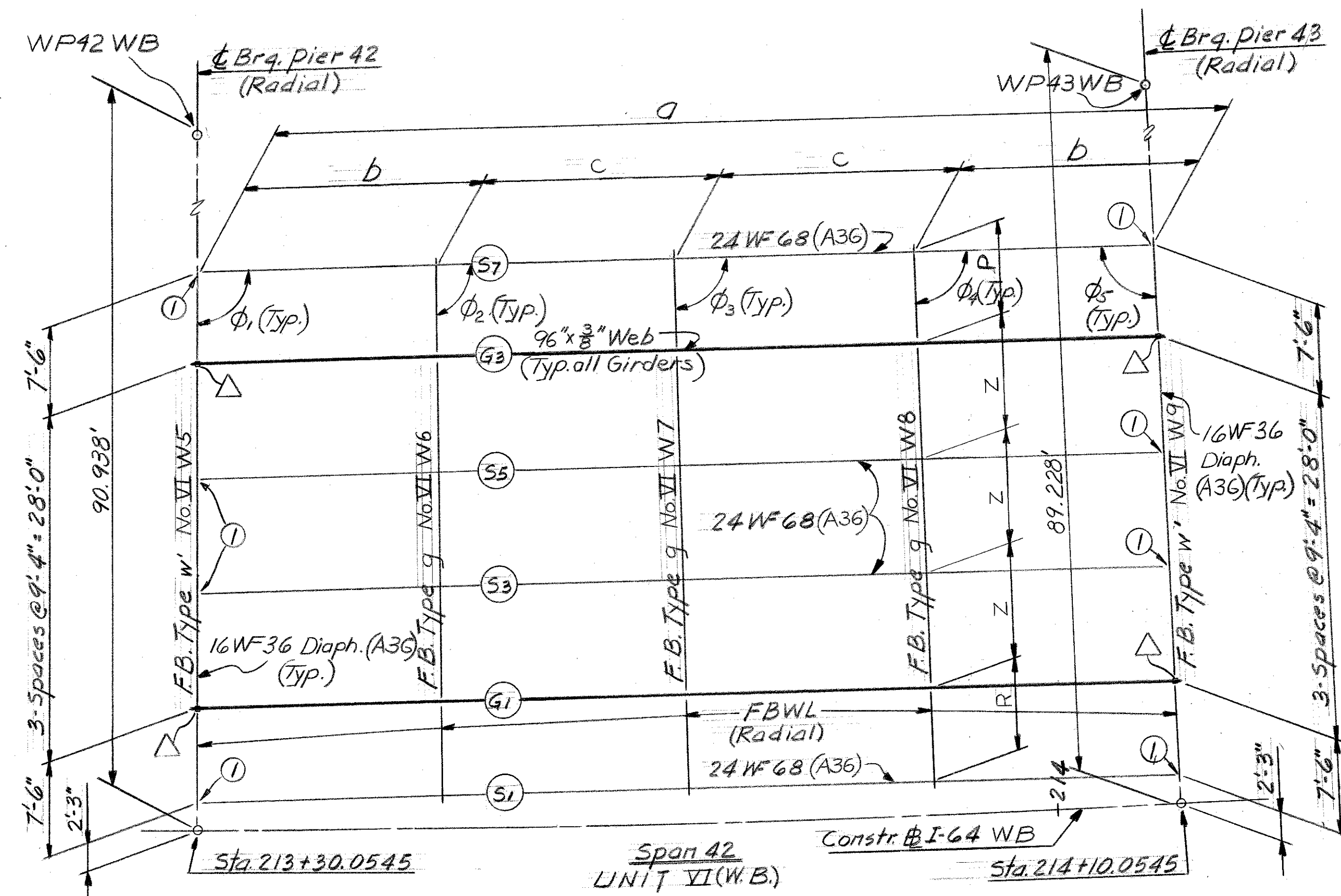
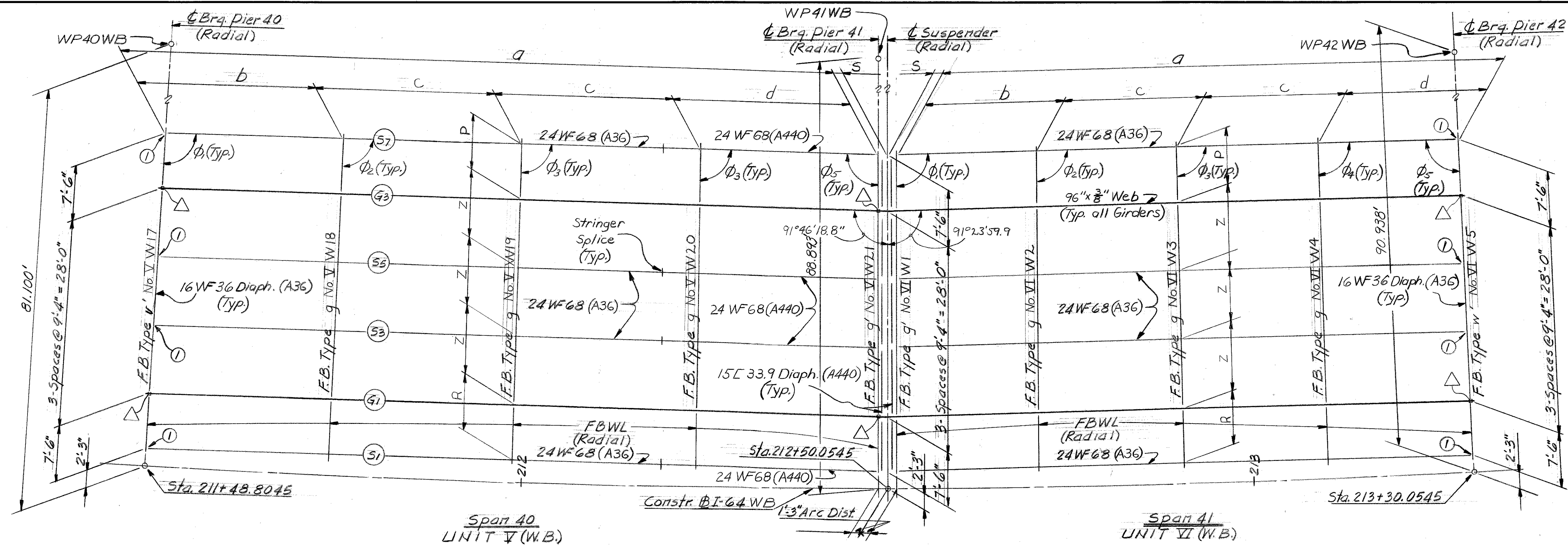
SP 56-273-11L

STATION 208+08 PROJECT NO. I 64-2 (35) 3

BRIDGE NUMBER	DRAWING NO. 18572	INDEX
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DESIGNED BY: AIR JFK
 CHECKED BY: B. L. L.
 DATE: 11-70
 REVISIONS: 1
 DATE: 11-70

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



For Unit VII WB Cont'd,
See Sheet A77.

For Framing Notes see Sheet A60
For dimensions and angles see Sheet A78
① Bend 24WF68 Stringers. See detail, Sheet A114

SHEET A75

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08

SP 56-273-11L
PROJECT NO. 164-2(35)3

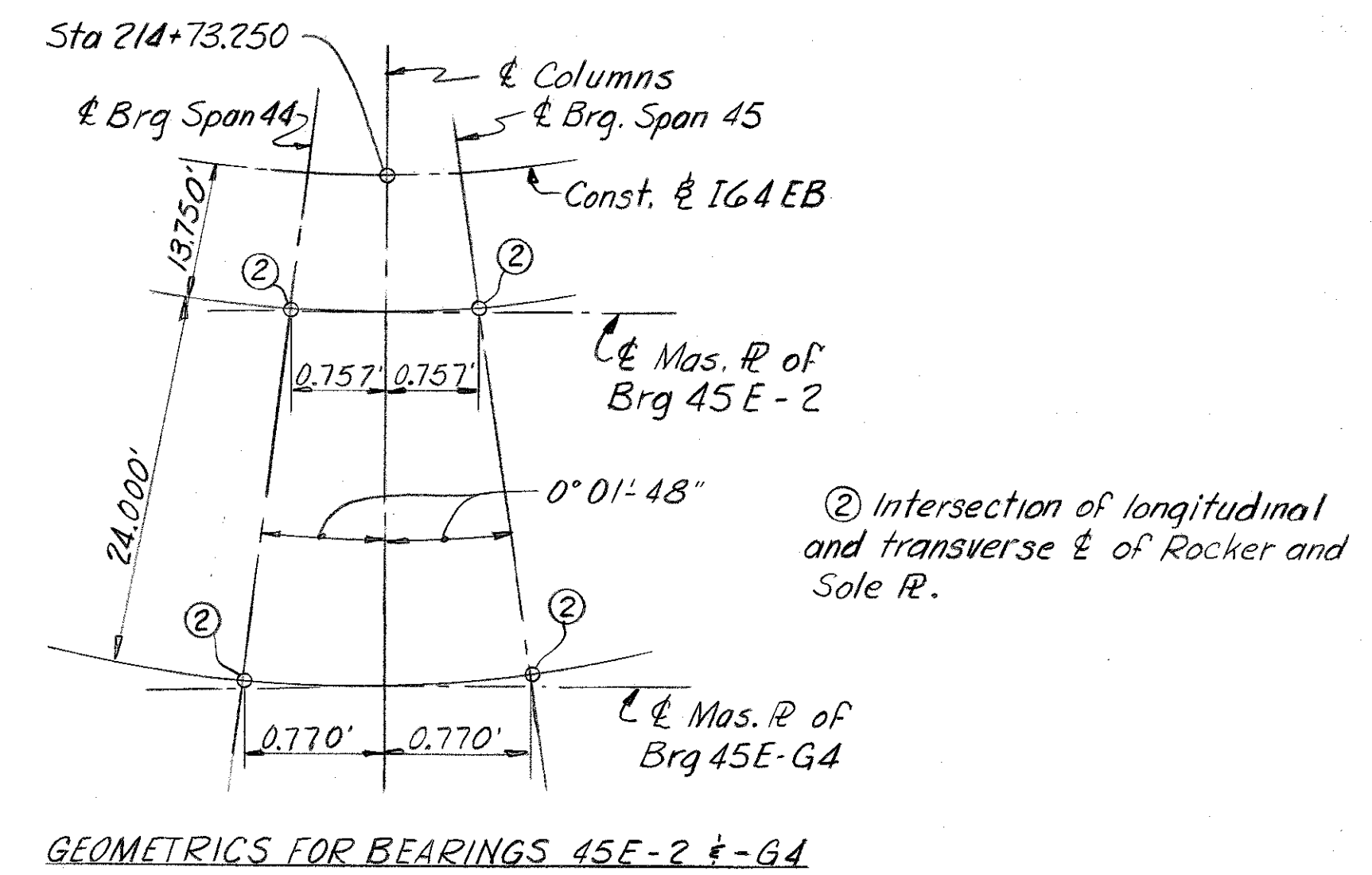
BRIDGE
NUMBER

DRAWING NO.
18572
INDEX

FRAMING
STRUCTURAL STEEL

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
TRACED BY	DATE	TRACED BY	DATE	TRACED BY	DATE

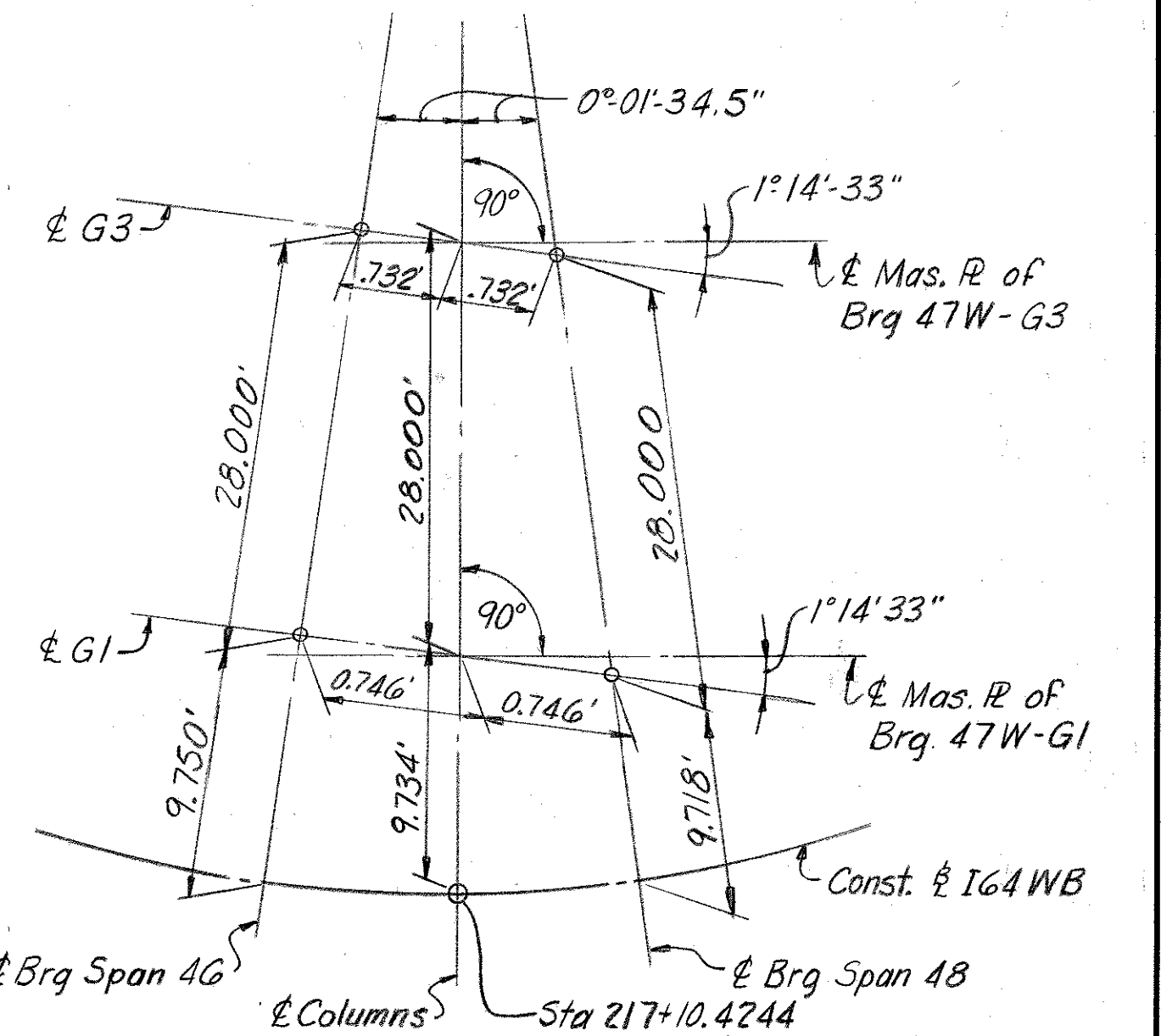
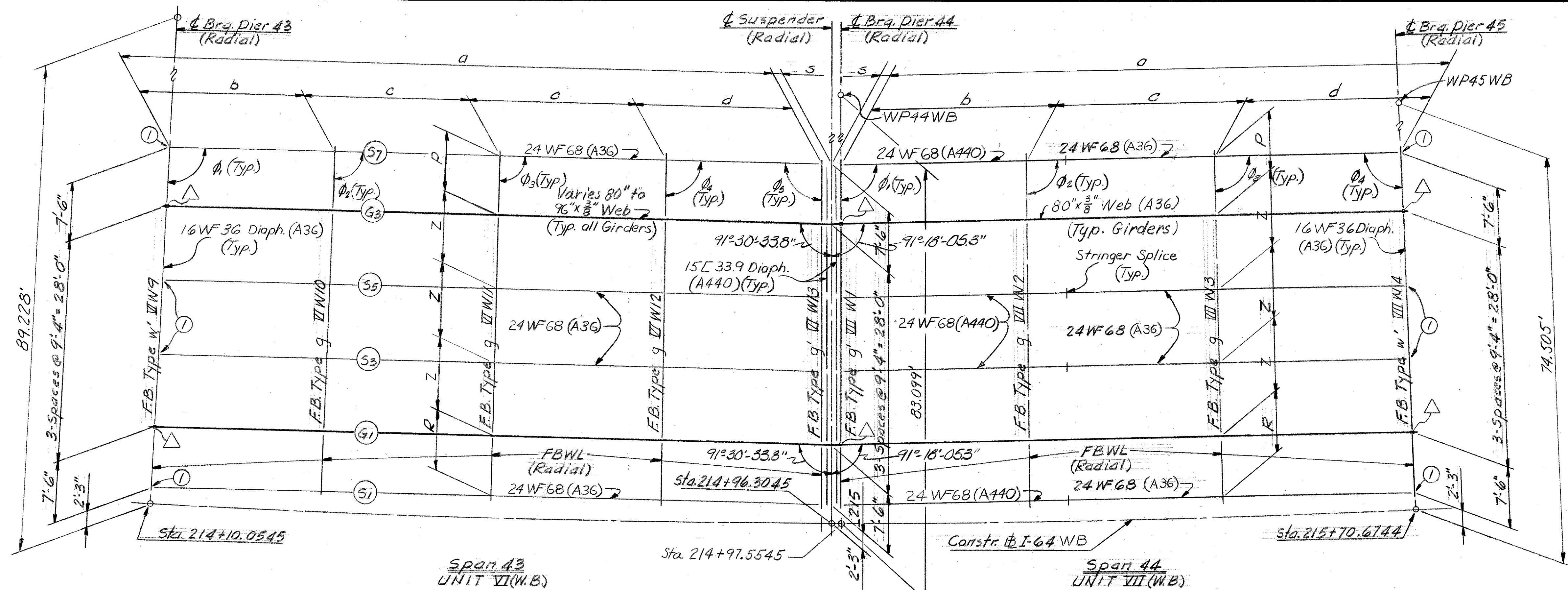
DESIGNED BY	CHECKED BY	DATE	REVISED
DETAILED BY	CHECKED BY	DATE	REVISED
TRACED BY	CHECKED BY	DATE	REVISED



FRAMING STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE — LEXINGTON
ROAD
SP 56-273-IIL
STATION 208408
PROJECT NO. I 64-2(35) 3

BRIDGE NUMBER	DRAWING NO.	INDEX
	18572	



GEOMETRICS FOR BEARINGS 47W-G1 & -G3
See Sheet A82 for Ramp 4 Geometrics

For Framing Notes see Sheet A60
For dimensions and angles see Sheet A78 (Spans 43 & 44)
and Sheet A84 (Spans 45 & 46)
① Bend 24 WF 68 Stringer. See detail, Sheet A114

SHEET A 77

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF JEFFERSON
 164-13TH ST TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 BRIDGE NUMBER
 PROJECT NO. 164-2(35)3
 DRAWING NO. 18572
 INDEX

FRAMING
STRUCTURAL STEEL

DESIGNED BY: JLFK & AIR
 CHECKED BY: JLFK & AIR
 DATE: 11-70
 REVISIONS: 1
 DATE: 11-70

LETTING DATE

DESIGNED BY: ALR CHECKED BY: ALR DATE: 11-10
 REVISION: 1 DATE: 11-10
 REVISION: 2 DATE: 11-10
 REVISION: 3 DATE: 11-10

Dimensions - Span 40

Beam	a	b	c	d	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5
<i>West Bound</i>										
S ₁	97.220	24.615	24.603	23.399	1.216	91°46'18.7"	90°53'09.3"	89°59'59.9"	89°06'50.6"	91°43'41.3"
G ₃	97.677	24.731	24.718	23.509	1.222	↑	↑	↑	↑	↑
S ₅	98.248	24.876	24.863	23.645	1.229	↑	↑	↑	↑	↑
S ₃	98.818	25.020	25.007	23.783	1.236	↑	↑	↑	↑	↑
G ₁	99.388	25.164	25.151	23.921	1.243	↓	↓	↓	↓	↓
S ₁	99.845	25.280	25.267	24.030	1.249	91°46'18.7"	90°53'09.3"	89°59'59.9"	89°06'50.6"	91°43'41.3"
<i>East Bound</i>										
S ₂	100.137	25.042	25.027	-	-	92°00'00.0"	91°00'00.0"	90°00'00.0"	89°00'00.0"	92°00'00.0"
G ₂	100.660	25.173	25.157	-	-	↑	↑	↑	↑	↑
S ₄	101.312	25.336	25.320	-	-	↑	↑	↑	↑	↑
S ₆	101.963	25.499	25.483	-	-	↑	↑	↑	↑	↑
G ₄	102.615	25.661	25.646	-	-	↓	↓	↓	↓	↓
S ₈	103.138	25.792	25.777	-	-	92°00'00.0"	91°00'00.0"	90°00'00.0"	89°00'00.0"	92°00'00.0"

Floorbeam Dimension - Span 40

Floorbeam N ^o	R & P	Z
IIW18 & IW20	7.497	9.330
IIW19	7.496	9.329
IIW21	7.500	9.333
IE5 & IE7	7.497	9.329
IE6	7.495	9.328
IE8	7.500	9.333

Dimensions - Span 42

Beam	a	b	c	d	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5
<i>West Bound</i>										
S ₁	77.781	19.449	19.442	-	-	91°23'59.9"	90°41'59.9"	89°59'59.9"	89°17'59.9"	91°24'00.1"
G ₃	78.147	19.539	19.534	-	-	↑	↑	↑	↑	↑
S ₅	78.603	19.653	19.648	-	-	↑	↑	↑	↑	↑
S ₃	79.060	19.768	19.762	-	-	↑	↑	↑	↑	↑
G ₁	79.516	19.882	19.876	-	-	↓	↓	↓	↓	↓
S ₁	79.882	19.973	19.968	-	-	91°23'59.9"	90°41'59.9"	89°59'59.9"	89°17'59.9"	91°24'00.1"
<i>East Bound</i>										
S ₂	100.135	24.101	25.340	25.355	1.253	91°58'30.0"	91°00'45.1"	90°00'00.0"	88°59'15.1"	92°01'30.0"
G ₂	100.659	24.228	25.472	25.488	1.259	↑	↑	↑	↑	↑
S ₄	101.311	24.385	25.637	25.653	1.267	↑	↑	↑	↑	↑
S ₆	101.961	24.540	25.802	25.818	1.276	↑	↑	↑	↑	↑
G ₄	102.613	24.697	25.967	25.983	1.284	↓	↓	↓	↓	↓
S ₈	103.137	24.825	26.099	26.115	1.290	91°58'30.0"	91°00'45.1"	90°00'00.0"	88°59'15.1"	92°01'30.0"

Floorbeam Dimensions - Span 42

Floorbeam N ^o	R & P	Z
IIW6 & IIW8	7.498	9.331
IIW7	7.498	9.330
IIW9	7.500	9.333
IE1	7.500	9.333
IE2 & IE4	7.496	9.328
IE3	7.495	9.328
IE5	7.500	9.333

Floorbeam Dimensions - Span 44

Floorbeam N ^o	R & P	Z
IIW1 & IIW4	7.500	9.333
IIW2 & IIW3	7.498	9.331
IE1 & IE3	7.497	9.328
IE12	7.495	9.328
IE14	7.500	9.333

Dimensions - Span 44

Beam	a	b	c	d	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5
<i>West Bound</i>										
S ₁	71.092	22.888	24.100	24.104	1.216	91°15'27.8"	90°26'01.7"	89°33'58.2"	91°18'05.4"	-
G ₃	71.428	22.997	24.213	24.218	1.221	↑	↑	↑	↑	-
S ₅	71.844	23.131	24.354	24.359	1.229	↑	↑	↑	↑	-
S ₃	72.261	23.265	24.496	24.500	1.236	↑	↑	↑	↑	-
G ₁	72.678	23.399	24.637	24.642	1.243	↓	↓	↓	↓	-
S ₁	73.012	23.506	24.751	24.755	1.249	91°15'27.8"	90°26'01.7"	89°33'58.2"	91°18'05.4"	-
<i>East Bound</i>										
S ₂	100.137	25.041	25.027	-	0.751	92°00'00.0"	91°00'00.0"	90°00'00.0"	89°00'00.0"	92°00'00.0"
G ₂	100.660	25.173	25.157	-	0.755	↑	↑	↑	↑	↑
S ₄	101.312	25.336	25.320	-	0.760	↑	↑	↑	↑	↑
S ₆	101.963	25.498	25.483	-	0.765	↑	↑	↑	↑	↑
G ₄	102.615	25.662	25.646	-	0.770	↓	↓	↓	↓	↓
S ₈	103.138	25.792	25.777	-	0.774	92°00'00.0"	91°00'00.0"	90°00'00.0"	89°00'00.0"	92°00'00.0"

Dimensions - Span 41

Beam	a	b	c	d	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5
<i>West Bound</i>										
S ₁	76.565	18.233	19.442	19.448	1.216	91°21'22.4"	90°41'59.9"	89°59'59.9"	89°17'59.9"	91°24'00.1"
G ₃	76.925	18.317	19.534	19.540	1.222	↑	↑	↑	↑	↑
S ₅	77.374	18.424	19.648	19.654	1.229	↑	↑	↑	↑	↑
S ₃	77.824	18.532	19.762	19.768	1.236	↑	↑	↑	↑	↑
G ₁	78.273	18.639	19.876	19.882	1.243	↓	↓	↓	↓	↓
S ₁	78.633	18.724	19.968	19.973	1.249	91°21'22.4"	90°41'59.9"	89°59'59.9"	89°17'59.9"	91°24'00.1"
<i>East Bound</i>										
S ₂	68.851	23.369	23.365	22.117	1.252	91°24'00.0"	90°28'00.0"	89°32'00.0"	91°21'00.0"	-
G ₂	69.210	23.491	23.486	22.233	1.259	↑	↑	↑	↑	-
S ₄	69.659	23.644	23.638	22.377	1.267	↑	↑	↑	↑	-
S ₆	70.107	23.797	23.790	22.520	1.275	↑	↑	↑	↑	-
G ₄	70.555	23.948	23.943	22.664	1.283	↓	↓	↓	↓	-
S ₈	70.914	24.070	24.064	22.780	1.290	91°24'00.0"	90°28'00.0"	89°32'00.0"	91°21'00.0"	-

Floorbeam Dimensions - Span 41

Floorbeam N ^o	R & P	Z
IIW1	7.500	9.333
IIW2 & IIW4	7.498	9.331
IIW3	7.498	9.330
IIW5	7.500	9.333
IE9 & IE10	7.498	9.331
IE11	7.500	9.333

Dimensions - Span 43

Beam	a	b	c	d	s	ϕ_1	ϕ_2	ϕ_3	ϕ_4	ϕ_5	ϕ_6
<i>West Bound</i>											
S ₁	82.640	20.968	20.960	19.751	1.216	91°30'33.7"	90°45'16.8"	90°00'00.0"	89°14'43.1"	91°27'56.3"	-
G ₃	83.029	21.067	21.059	19.844	1.222	↑	↑	↑	↑	↑	-
S ₅	83.514	21.189	21.182	19.960	1.229	↑	↑	↑	↑	↑	-
S ₃	83.999	21.314	21.304	20.076	1.236	↑	↑	↑	↑	↑	-
G ₁	84.483	21.436	21.427	20.192	1.243	↓	↓	↓	↓	↓	-
S ₁	84.872	21.535	21.526	20.285	1.249	91°30'33.7"	90°45'16.8"	90°00'00.0"	89°14'43.1"	91°27'56.3"	-
<i>East Bound</i>											
S ₂	120.153	24.044	24.024	24.017	-	92°24'00.0"	91°26'24.0"	90°28'48.0"	89°31'12.0"	88°33'36.0"	92°24'00.0"
G ₂	120.781	24.169	24.150	24.143	-	↑	↑	↑	↑	↑	↑
S ₄	121.563	24.326	24.306	24.299	-	↑	↑	↑	↑	↑	↑
S ₆	122.345	24.483	24.462	24.455	-	↑	↑	↑	↑	↑	↑
G ₄	123.127	24.640	24.618	24.611	-	↓	↓	↓	↓	↓	↓
S ₈	123.755	24.765	24.744	24.737	-	92°24'00.0"	91°26'24.0"	90°28'48.0"	89°31'12.0"	88°33'36.0"	92°24'00.0"

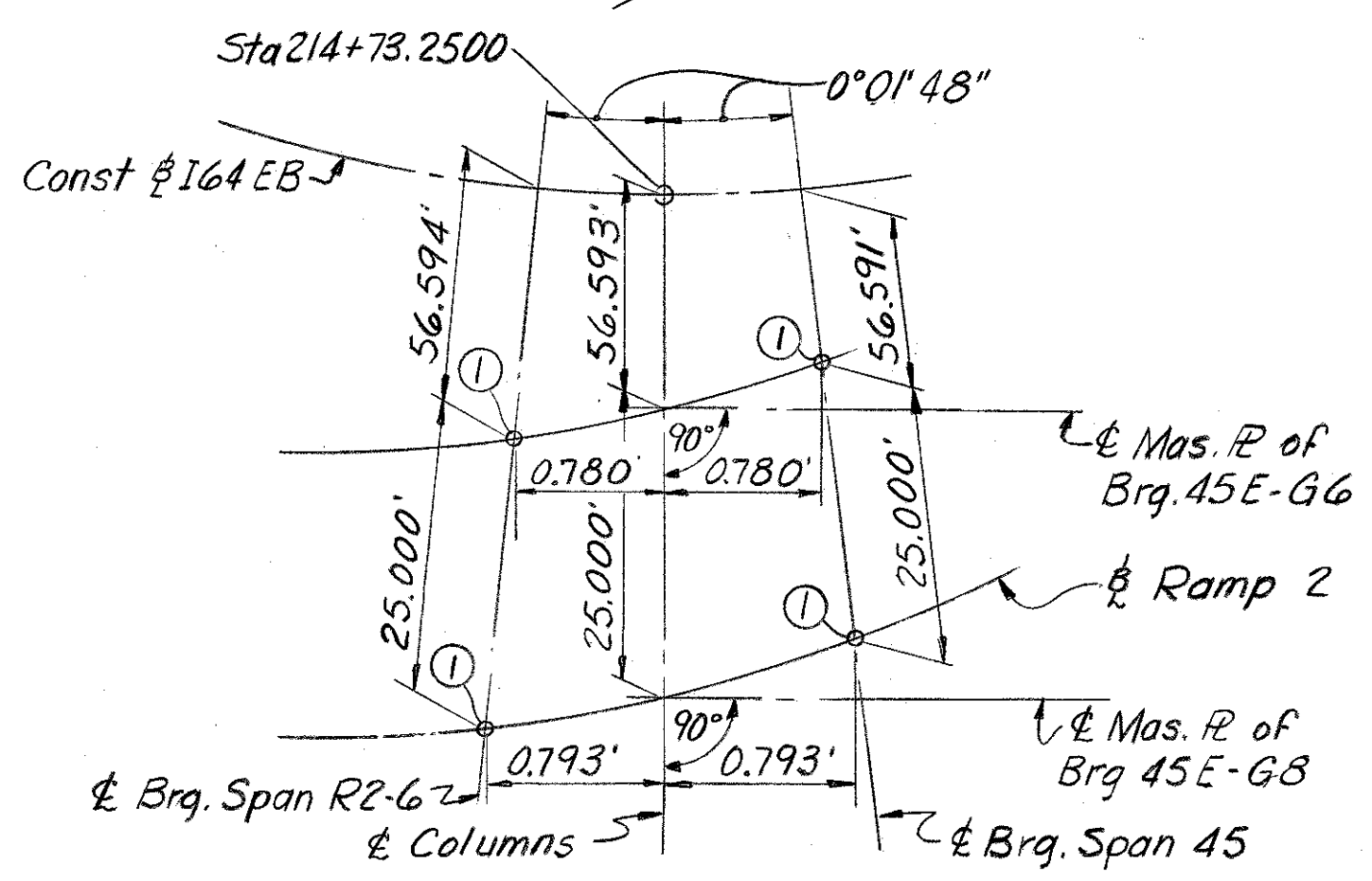
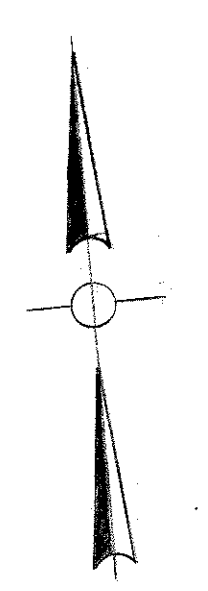
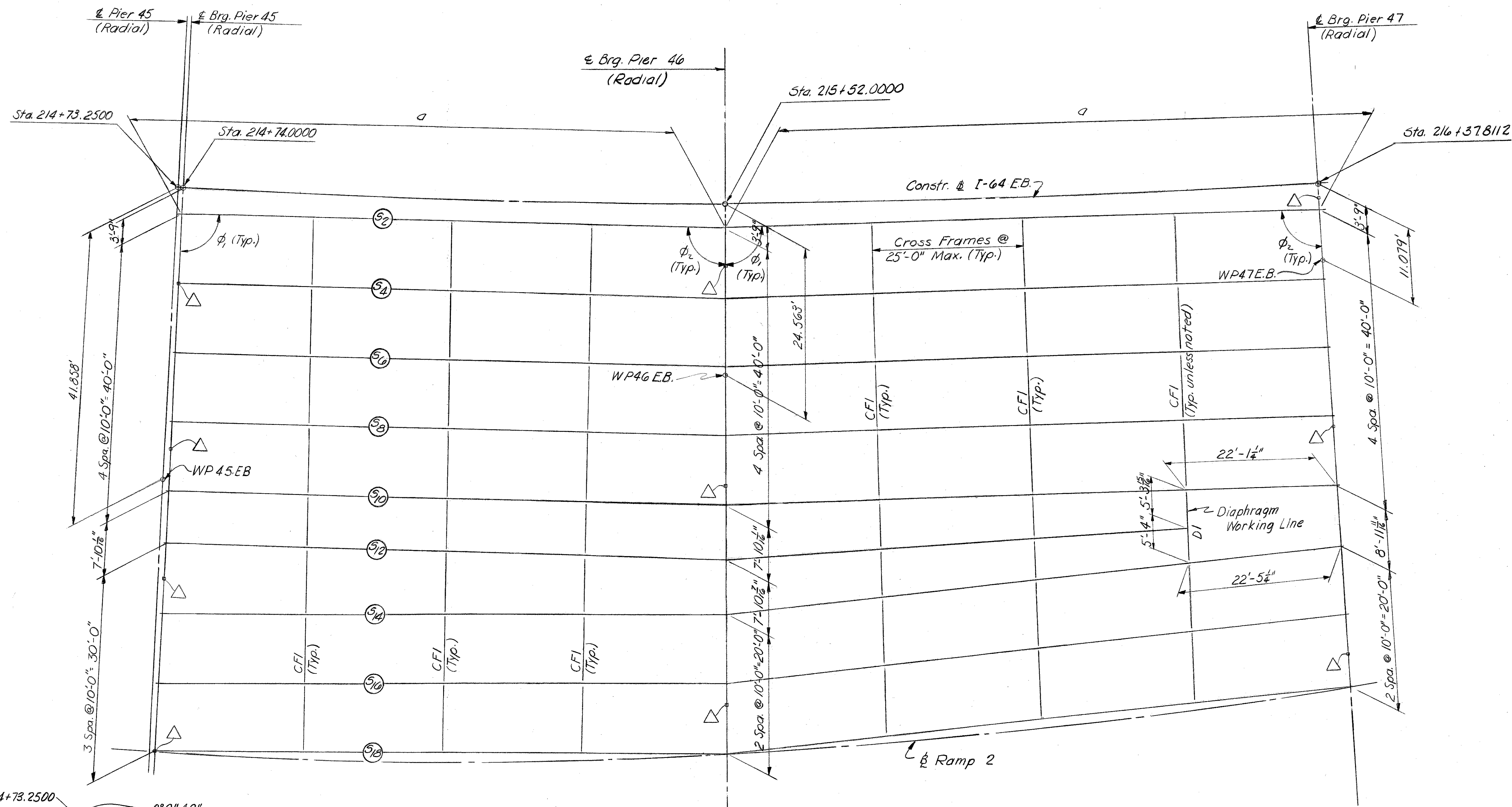
Floorbeam Dimensions - Span 43

Floorbeam N ^o	R & P	Z
IIW10 & IIW12	7.498	9.331
IIW11	7.497	9.330
IIW13	7.500	9.333
IE6 & IE9	7.496	9.328
IE7 & IE8	7.494	9.325
IE10	7.500	9.333

SHEET A78

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO.
 P. E. PROJECT NO. I 64-2(35)3
 MAINTENANCE PROJECT NO.
 DRAWING NO.
 18572

FRAMING
 STRUCTURAL STEEL



GEOMETRICS FOR BEARINGS 45E-G6 & -G8
(For Main Line Bearings see Sheet A76)

① Intersection of longitudinal and transverse ℓ of Rocker and Sole R.

Framing notes
For dimensions and angles see sheet A84
All dimensions shown are horizontal and shall be corrected for grade where applicable.
 Δ indicates Bearing under Pier Girder.

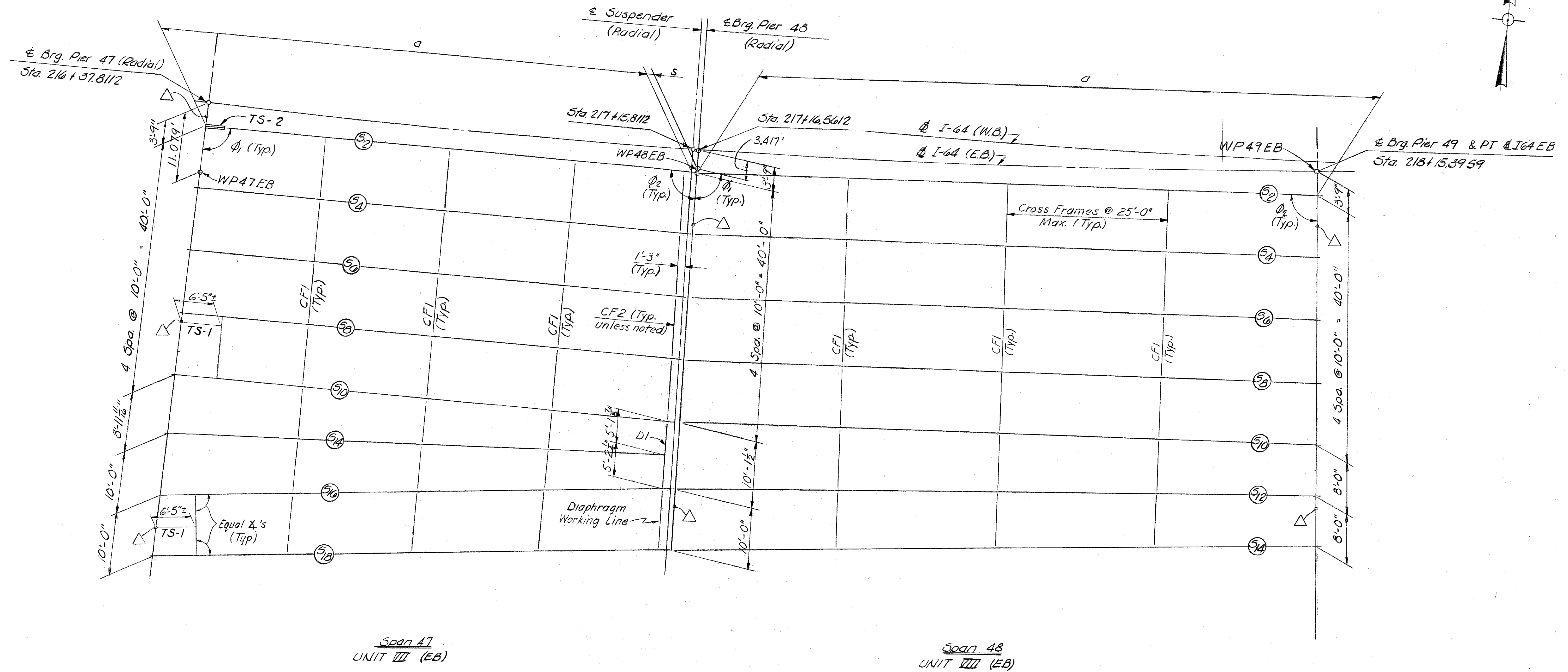
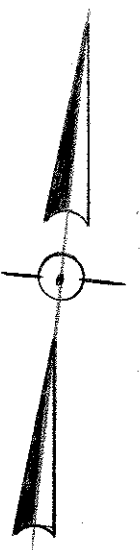
FRAMING
STRUCTURAL STEEL

SHEET A79

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08 PROJECT NO. 164-2(35)3 SP 56-273-11L

BRIDGE NUMBER	DRAWING NO.	INDEX
	18572	

DESIGNED BY: AIR & TEK
CHECKED BY: [Signature]
DATE: 9/7/70
REVISIONS: [Table with 3 columns: NO., DATE, DESCRIPTION]



For Framing notes see sheet A79
For dimensions and angles see
Sheet A84

FRAMING
STRUCTURAL STEEL

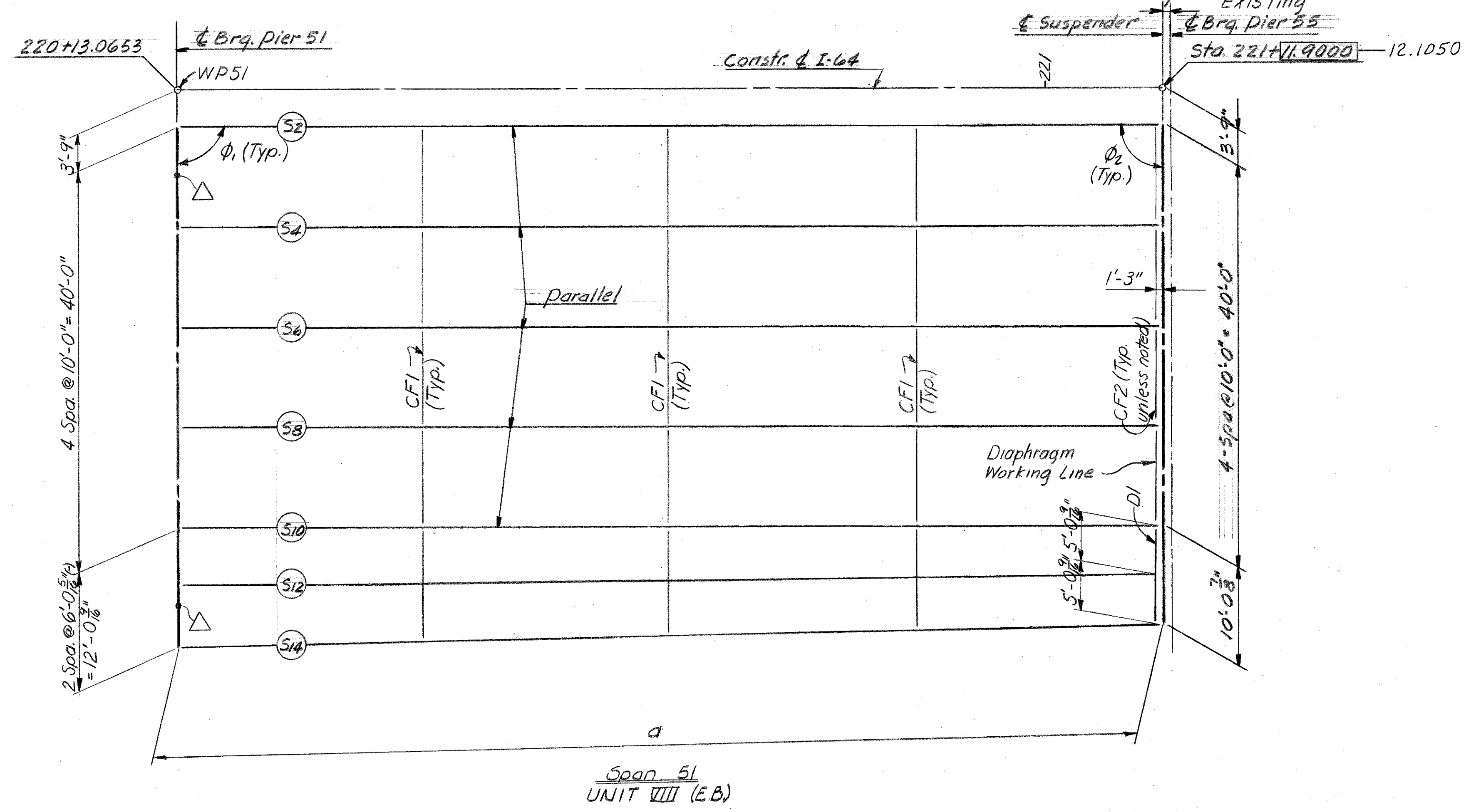
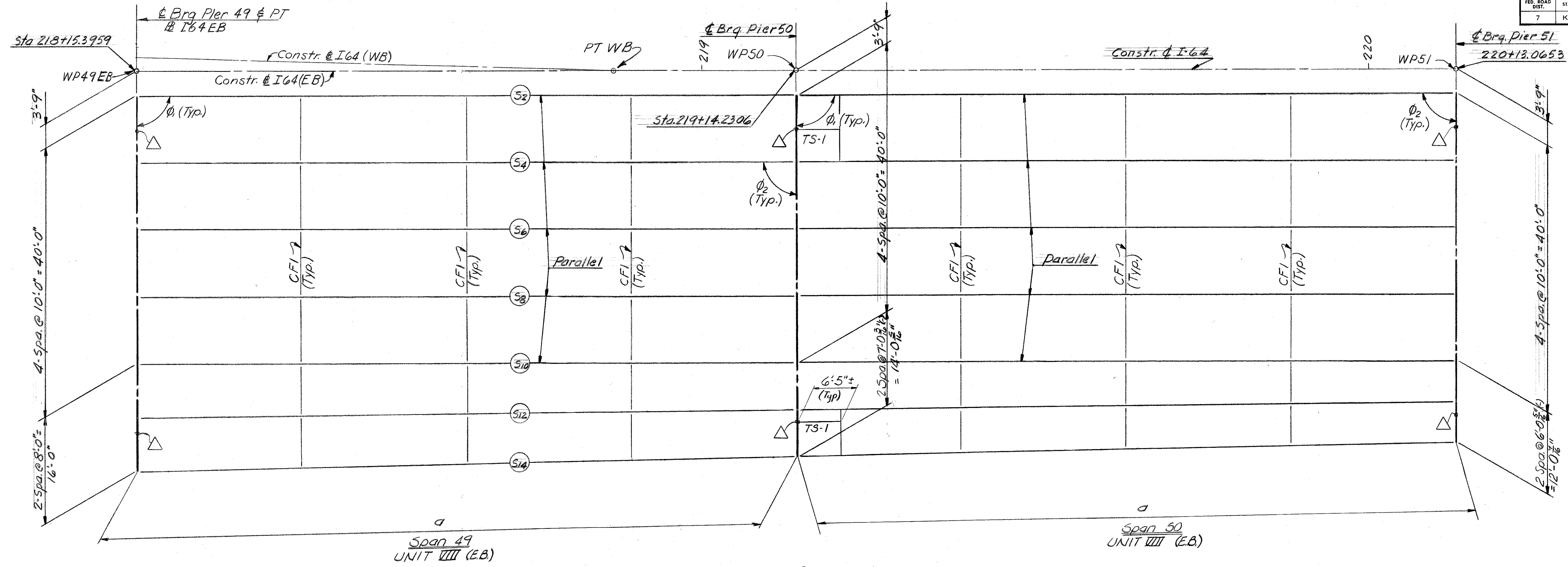
SHEET A80

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
SP 56-273-III

STATION 208+08 PROJECT NO. I 64-2(35)3

BRIDGE NUMBER	DRAWING NO. 18572	INDEX
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DESIGNED BY	DATE	REVISION	DATE
CHKD BY	DATE	REVISION	DATE
TRACED BY	DATE	REVISION	DATE



For Framing notes see Sheet A79
For dimensions and angles see Sheet A84

FRAMING
STRUCTURAL STEEL

SHEET A81

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08 PROJECT NO. 164-2(35)3 SP 56-273-11L

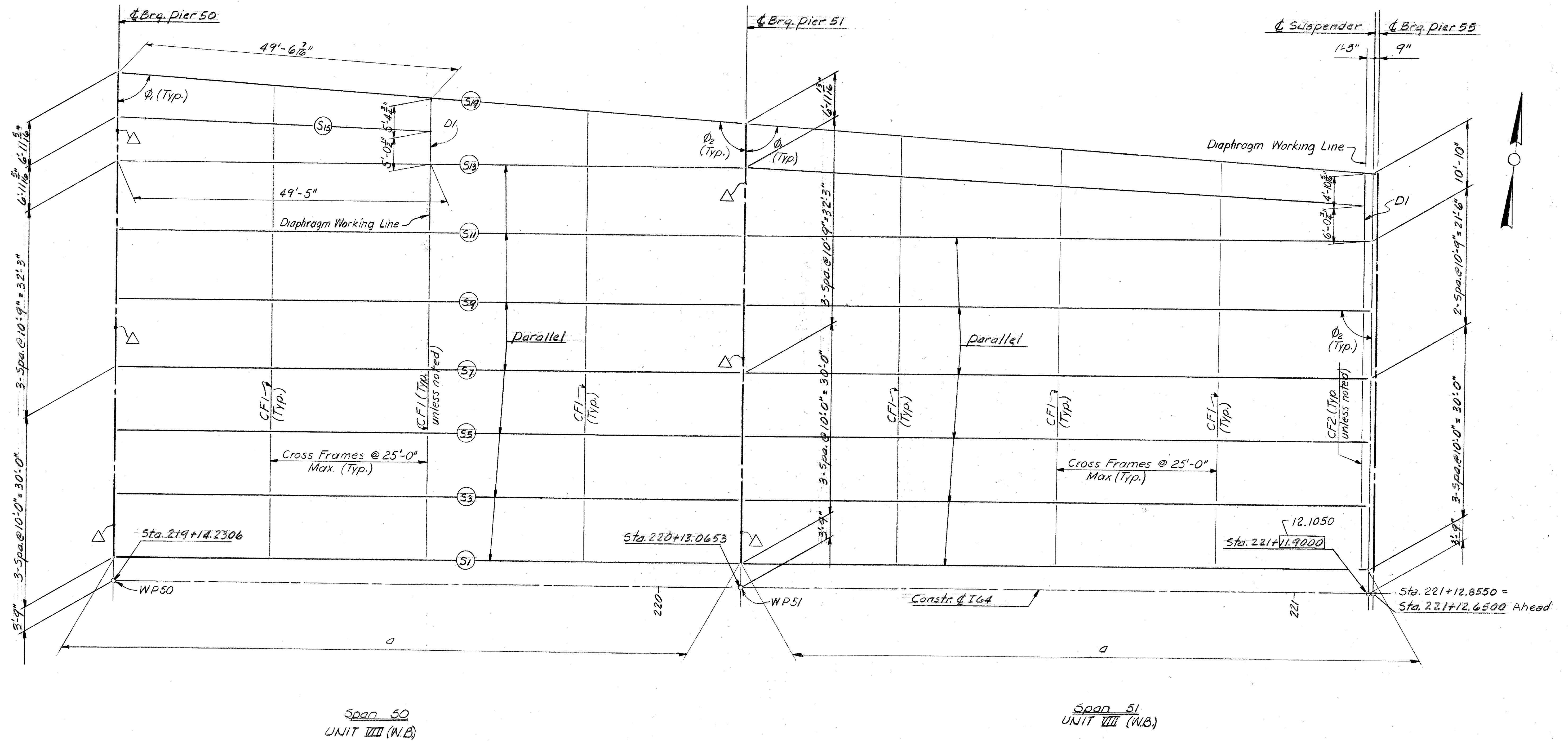
BRIDGE NUMBER	DRAWING NO.	INDEX
	18572	

DESIGNED BY: J.F.K. & A.L.R. CHECKED BY: J.F.K. & A.L.R. DATE: 9/10/13

TRACED BY: J.F.K. & A.L.R. CHECKED BY: J.F.K. & A.L.R. DATE: 9/10/13

REVISIONS: 1. DATE: 9/10/13 BY: J.F.K. & A.L.R.

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



For Framing notes see Sheet A79
For dimensions and angles see Sheet A84

FRAMING
STRUCTURAL STEEL

SHEET A83

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
 164-13TH ST TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD

STATION 208+08 PROJECT NO. 164-2(35)3 SP 56-273-III

BRIDGE NUMBER	DRAWING NO.	INDEX
18572	18572	

DESIGNED BY	CHECKED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION
BY AJZ/JFK	BY BJK	9/70					
TRACED BY	CHECKED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION

LETTING DATE

Dimensions - Span 45

Beam	a	b	c			ϕ_1	ϕ_2	ϕ_3	ϕ_4
West Bound									
S ₇	67.574	22.526	22.522			91°12'58.5"	90°24'19.5"	89°35'40.5"	91°12'58.6"
G ₃	67.892	22.632	22.628			↑	↑	↑	↑
S ₅	68.288	22.764	22.760			↑	↑	↑	↑
S ₃	68.685	22.897	22.892			↑	↑	↑	↑
G ₁	69.081	23.029	23.024			↑	↑	↑	↑
S ₁	69.399	23.135	23.130			91°12'58.5"	90°24'19.5"	89°35'40.5"	91°12'58.6"
East Bound									
S ₂	78.195	—	—			91°33'36.0"	91°33'36.0"	—	—
S ₄	78.739	—	—			↑	↑	—	—
S ₆	79.283	—	—			↑	↑	—	—
S ₈	79.828	—	—			↑	↑	—	—
S ₁₀	80.372	—	—			↑	↑	—	—
S ₁₂	80.919	—	—			91°33'36.0"	91°33'36.0"	—	—
S ₁₄	81.514	—	—			93°03'35.2"	90°03'36.8"	—	—
S ₁₆	81.853	—	—			93°02'59.2"	90°04'12.8"	—	—
S ₁₈	82.402	—	—			93°02'23.8"	90°04'48.2"	—	—

Floorbeam Dimensions - Span 45

Floorbeam N ^o	R	Z	Y	X
VIII W4 & W7	7.500	9.333	—	—
VIII W5 & W6	7.499	9.331	—	—

Dimensions - Span 46

Beam	a	b	c	S	ϕ_1	ϕ_2	ϕ_3	ϕ_4
West Bound								
S ₇	67.574	22.526	22.522	0.728	91°12'58.5"	90°24'19.5"	89°35'40.5"	91°12'58.6"
G ₃	67.892	22.632	22.628	0.732	↑	↑	↑	↑
S ₅	68.288	22.764	22.760	0.736	↑	↑	↑	↑
S ₃	68.685	22.897	22.892	0.741	↑	↑	↑	↑
G ₁	69.081	23.029	23.024	0.745	↑	↑	↑	↑
S ₁	69.399	23.135	23.130	0.749	91°12'58.5"	90°24'19.5"	89°35'40.5"	91°12'58.6"
East Bound								
S ₂	86.023	—	—	—	91°42'58.4"	91°42'58.4"	—	—
S ₄	86.622	—	—	—	↑	↑	—	—
S ₆	87.221	—	—	—	↑	↑	—	—
S ₈	87.820	—	—	—	↑	↑	—	—
S ₁₀	88.419	—	—	—	91°42'58.4"	91°42'58.4"	—	—
S ₁₂	88.596*	—	—	—	93°52'23.2"	—	—	—
S ₁₄	89.412	—	—	—	96°02'05.4"	87°23'51.1"	—	—
S ₁₆	90.009	—	—	—	96°00'22.1"	87°25'34.5"	—	—
S ₁₈	90.607	—	—	—	95°58'40.1"	87°27'16.5"	—	—

* & Brg. to Diaphragm DI Working Line

Floorbeam Dimensions - Span 46

Floorbeam N ^o	R	Z	Y	X
VII W7 & W10	7.500	9.333	—	—
VII W8 & W9	7.499	9.331	—	—

Dimensions - Span 48

Beam	a	ϕ_1	ϕ_2
West Bound			
S ₁₉	87.817	91°31'17.3"	98°54'35.5"
S ₁₇	86.410*	94°07'28.1"	—
S ₁₅	90.127	96°10'36.8"	94°15'16.0"
S ₁₃	92.084	96°10'36.0"	94°15'16.8"
S ₁₁	93.247	91°41'50.8"	94°15'17.6"
S ₉	94.363	91°41'52.8"	94°15'15.6"
S ₇	95.478	91°41'52.6"	94°15'15.8"
S ₅	96.515	91°41'50.8"	94°15'17.6"
S ₃	97.553	91°41'51.2"	94°15'17.2"
S ₁	98.590	91°41'51.6"	94°15'16.8"
East Bound			
S ₂	99.074	91°58'36.2"	91°58'36.2"
S ₄	99.764	↑	↑
S ₆	100.454	↑	↑
S ₈	101.144	↑	↑
S ₁₀	101.834	91°58'36.2"	91°58'36.2"
S ₁₂	102.481	93°09'47.0"	90°47'25.4"
S ₁₄	103.162	94°15'55.1"	89°41'17.3"

Ⓐ Angles ϕ_1 & ϕ_2 have changed. See Sht. A82. The angles are indeterminate for the erected position. Field-measure if needed.

Dimensions - Span 49

Beam	a	ϕ_1	ϕ_2
West Bound			
S ₁₉	99.075	86°00'20.0"	93°59'40.0"
S ₁₅	98.908	87°37'39.8"	92°12'20.2"
S ₁₃	98.835	90°00'00"	90°00'00"
S ₁₁	↑	↑	↑
S ₉	↑	↑	↑
S ₇	↑	↑	↑
S ₅	↑	↑	↑
S ₃	↑	↑	↑
S ₁	98.835	90°00'00"	90°00'00"
East Bound			
S ₂	98.835	90°00'00"	90°00'00"
S ₄	↑	↑	↑
S ₆	↑	↑	↑
S ₈	↑	↑	↑
S ₁₀	98.835	90°00'00"	90°00'00"
S ₁₂	98.840	90°34'22.5"	89°25'37.5"
S ₁₄	98.855	91°08'44.7"	88°51'15.3"

Dimensions - Span 50

Beam	a	ϕ_1	ϕ_2
West Bound			
S ₁₉	99.075	86°00'20.5"	93°59'39.5"
S ₁₅	49.454*	87°47'38.9"	—
S ₁₃	98.835	90°00'20"	90°00'00"
S ₁₁	↑	↑	↑
S ₉	↑	↑	↑
S ₇	↑	↑	↑
S ₅	↑	↑	↑
S ₃	↑	↑	↑
S ₁	98.835	90°00'00"	90°00'00"
East Bound			
S ₂	↑	↑	↑
S ₄	↑	↑	↑
S ₆	↑	↑	↑
S ₈	↑	↑	↑
S ₁₀	98.835	90°00'00"	90°00'00"
S ₁₂	98.840	90°34'22.5"	89°25'37.5"
S ₁₄	98.855	91°08'44.7"	88°51'15.3"

* From & Brg. to Diaphragm DI Working Line

Dimensions - Span 51

Beam	a	ϕ_1	ϕ_2
West Bound			
S ₁₉	99.075	86°00'20.5"	93°59'39.5"
S ₁₃	97.698*	87°14'54.5"	—
S ₁₁	98.835	90°00'00"	90°00'00"
S ₉	↑	↑	↑
S ₇	↑	↑	↑
S ₅	↑	↑	↑
S ₃	↑	↑	↑
S ₁	↑	↑	↑
East Bound			
S ₂	↑	↑	↑
S ₄	↑	↑	↑
S ₆	↑	↑	↑
S ₈	↑	↑	↑
S ₁₀	98.835	90°00'00"	90°00'00"
S ₁₂	97.590*	90°34'22.5"	—
S ₁₄	98.855	91°08'44.7"	88°51'15.3"

* From & Brg. Pier 51 to Diaphragm DI Working Line
99.060

* From & Brg. to Diaphragm DI Working Line
Dimensions Span 47

Beam	a	s	ϕ_1	ϕ_2
East Bound				
S ₂	78.194	0.752	91°34'30.0"	91°34'30.0"
S ₄	78.738	0.757	↑	↑
S ₆	79.283	0.763	↑	↑
S ₈	79.827	0.768	↑	↑
S ₁₀	80.372	0.773	91°34'30.0"	91°34'30.0"
S ₁₄	79.599*	—	94°19'20.6"	—
S ₁₆	81.641	0.781	97°44'17.0"	85°24'42.8"
S ₁₈	82.182	0.786	97°41'50.4"	85°27'09.6"

* & Brg. to Diaphragm DI Working Line

* $\frac{5}{8}$ " R must engage 12 bolts of bottom flange splice. See Sheet A139

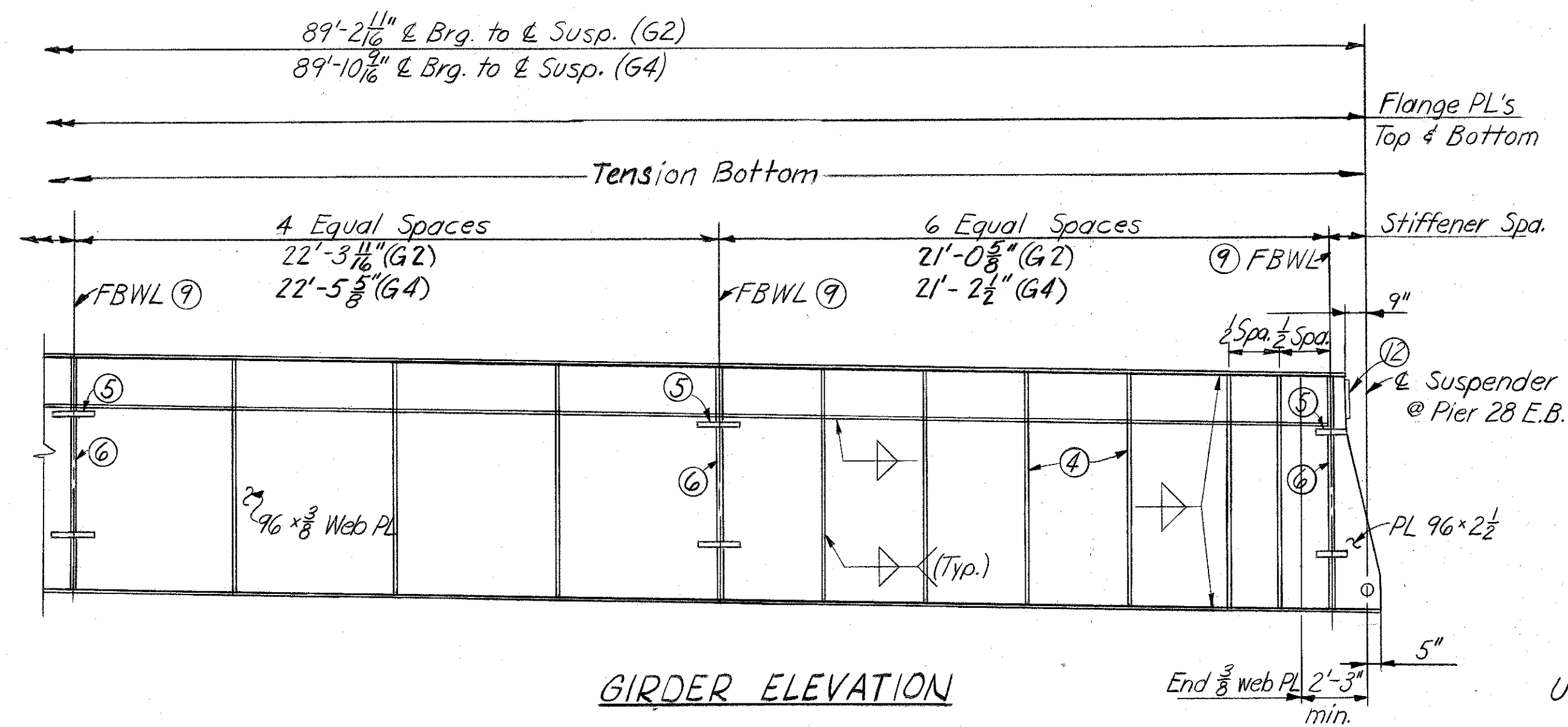
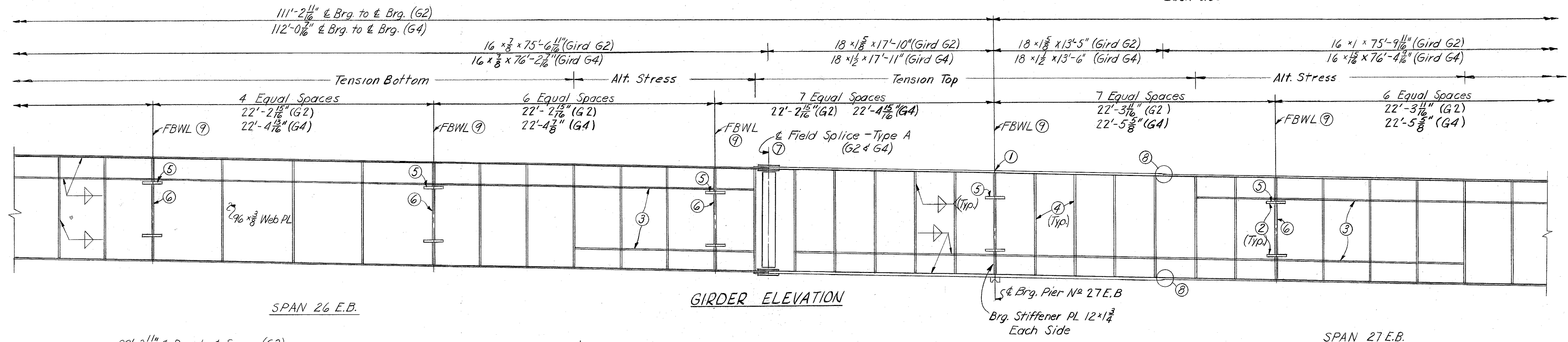
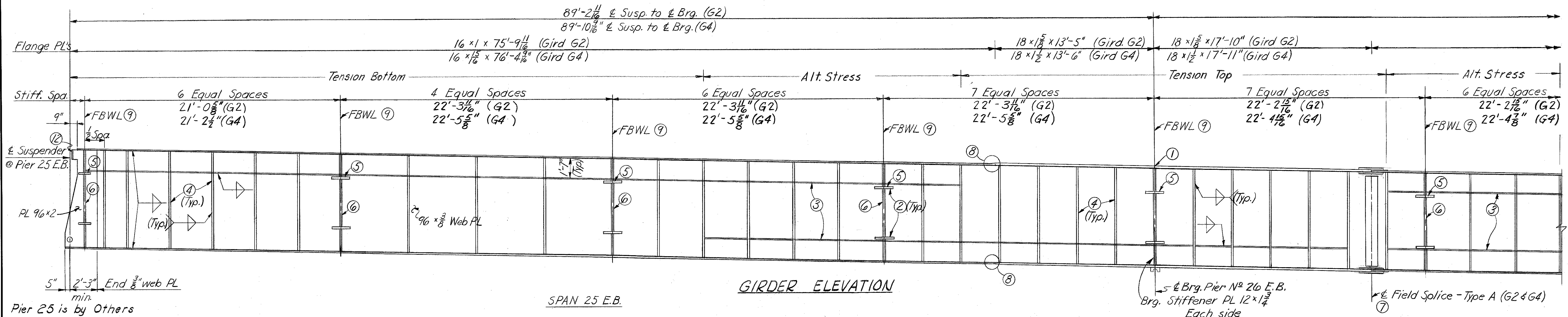
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 REVISION: 1. DIMENSION OF SPAN 51. DATE: 9/15/10
 REVISION: 2. PER 49MB. DATE: 9/15/10

FRAMING
STRUCTURAL STEEL

SHEET A84

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO. 164-2(35)3
 P. E. PROJECT NO. 164-2(35)3
 MAINTENANCE PROJECT NO. 18572
 DRAWING NO. 18572

NOTE: Contractor shall verify existing suspender dimensions before fabricating this end of girders.

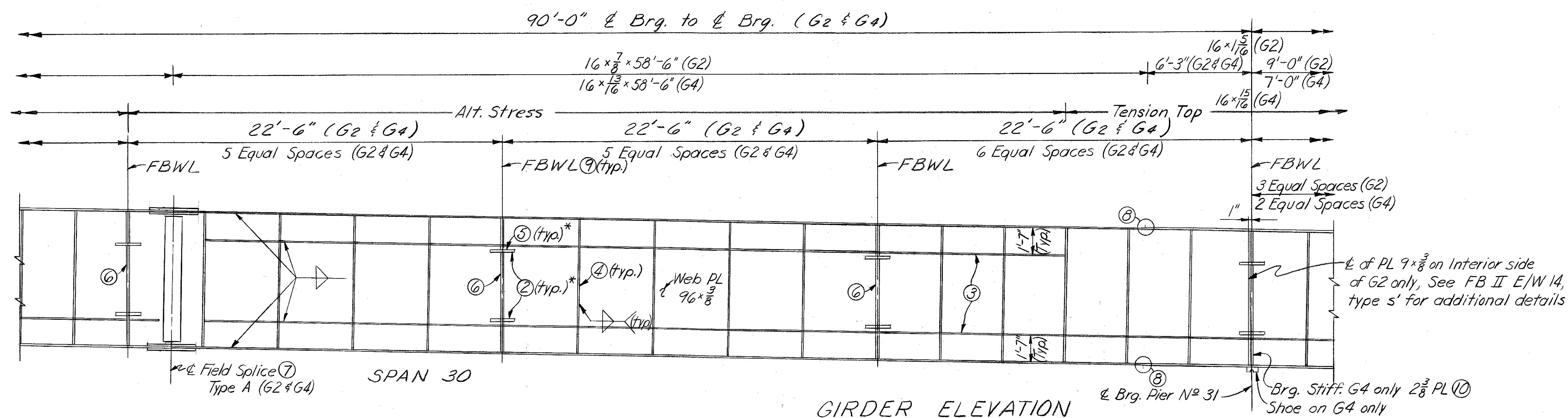
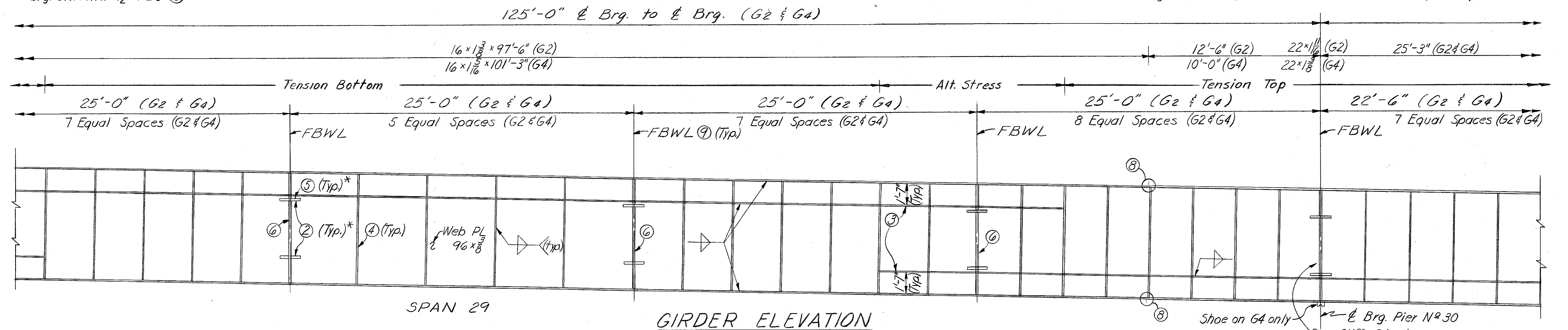
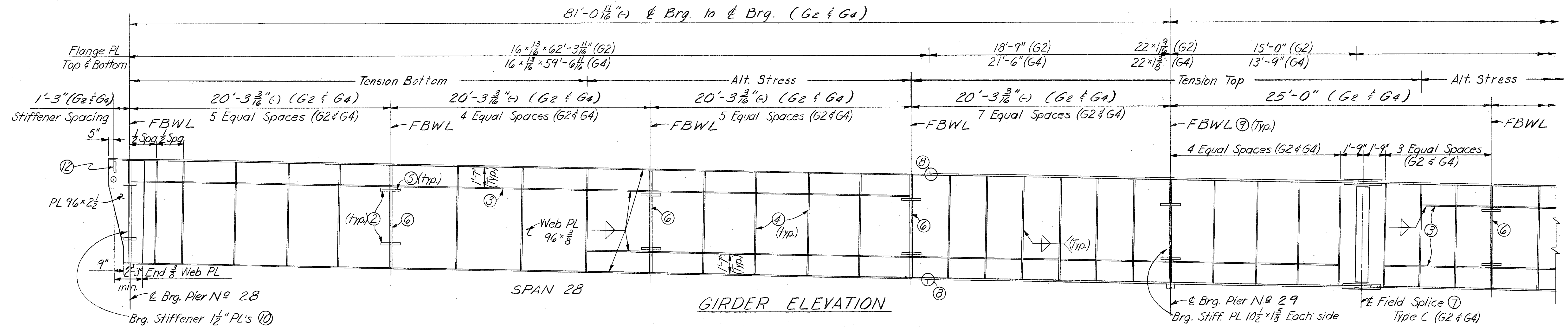


NOTES:
Shop welded web splices shall be preferably in middle of stiffener panel, but not less than 1'-0" from a stiffener (unless shown).
For butt weld of flange plates and flange to web weld details see Sh. A95
For typ. detail of interior and brg. stiffener see Sh. A87
All Brg Stiffeners and Floorbeam Webs are vertical.
All steel this sheet A441 for $\frac{3}{4}$ " thick and under, A588 over $\frac{3}{4}$ " thickness (Unless noted)

- ① For detail of Angled Flange PL's see Sheet A91.
- ② For Floorbeam connection plates see Floorbeam Details
- ③ 5 $\times \frac{3}{8}$ Longitudinal Stiffener on interior side of Girder (A36 steel)
- ④ 5 $\frac{1}{2} \times \frac{3}{8}$ Stiffener PL's (Typ.) (A36 steel) (1 Each side)
- ⑤ Slot Girder web for top Floorbeam connection PL
- ⑥ Stiffener and Floorbeam flange connection PL to be A441 steel
- ⑦ For Field Splice detail see Sheet A101
- ⑧ For butt weld detail see AWS 3, current edition.
- ⑨ For type of Floorbeam see Framing Plans. For the Girder-Floorbeam detail see Floorbeam details.
- ⑩ Stiffener $7\frac{1}{2}$ " wide on cantilever side and 9" wide on interior side
- ⑪ Stiffener $8\frac{1}{2}$ " wide on cantilever side and 9" wide on interior side
- ⑫ $\frac{3}{4}$ " PL, A36, See Expansion Dam Details

LETTING DATE

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
GM	2/7				
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
GM	2/7	RB			
TRACED BY	DATE	TRACED BY	DATE	TRACED BY	DATE



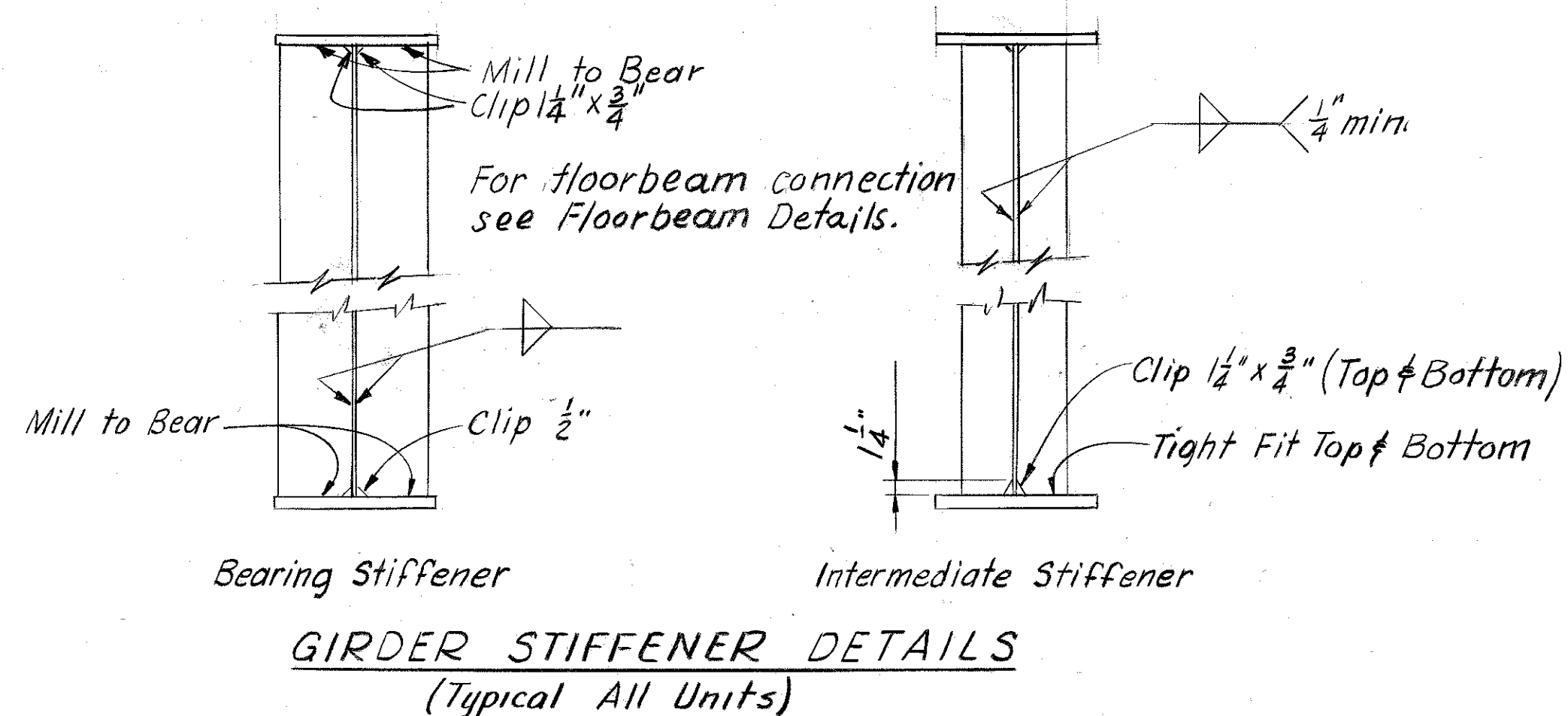
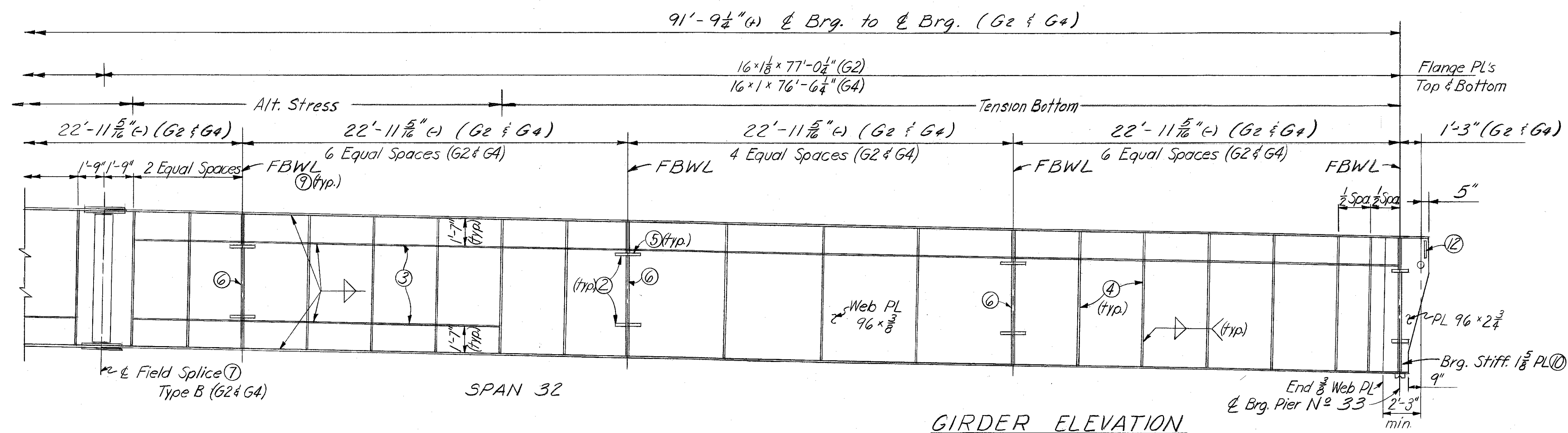
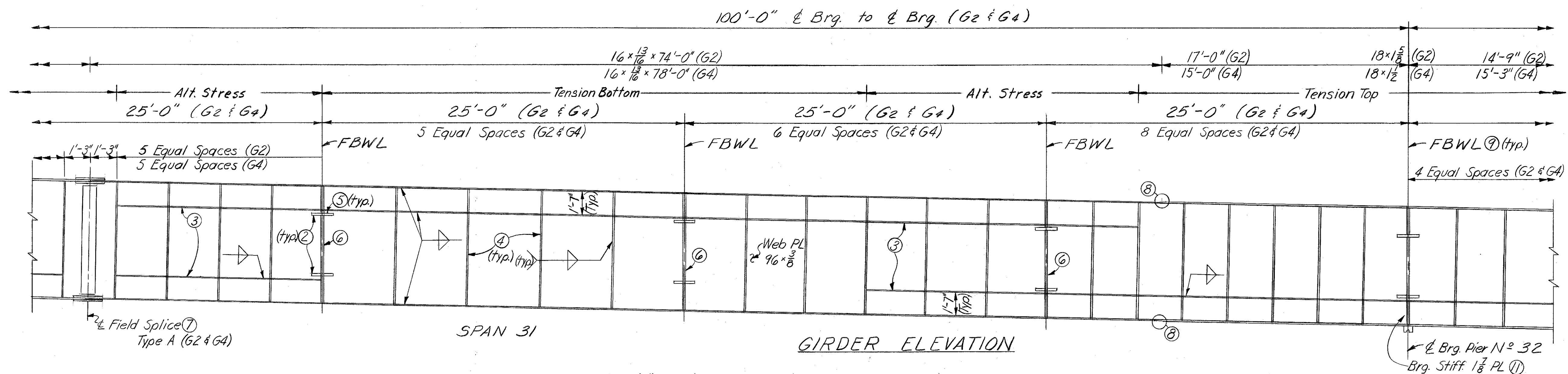
Notes
 * Except G2 at Piers 30 and 31
 All steel this sheet A441 for 3/4" thickness and under
 and A588 over 3/4" thickness (Unless noted)
 For notes ①-② see Sheet A85

UNIT II E.B. GIRD. G2 & G4
 STRUCTURAL STEEL

SHEET A86

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 I 64-13TH ST. TO 7TH ST
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 P.E. PROJECT NO. I 64-2 (35) 3
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
 18572

LETTING DATE



Notes

All steel this sheet A441 for $\frac{3}{4}$ " thickness and under and A588 over $\frac{3}{4}$ " thickness (Unless noted)
For notes ①-⑫ see Sheet A85

SHEET A87

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08

P. E. PROJECT NO. 164-2 (35) 3

CONSTRUCTION PROJECT NO.

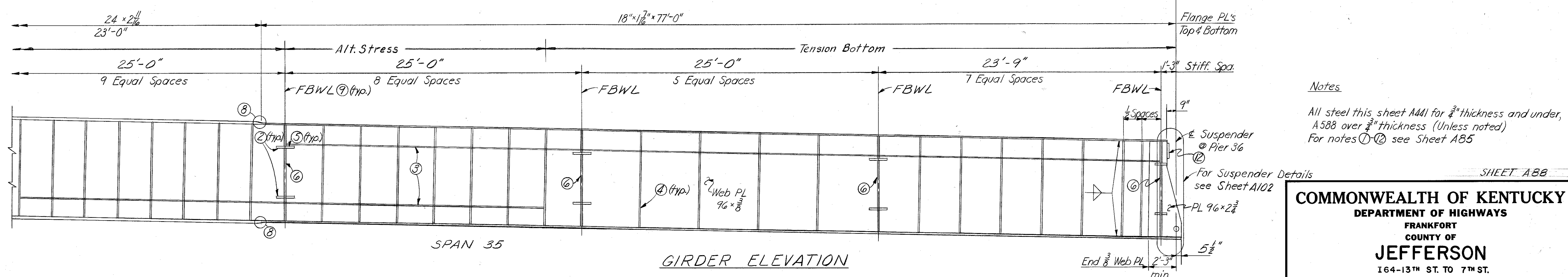
MAINTENANCE PROJECT NO.

DRAWING NO.

18572

UNIT II E.B. GIRDERS G2 & G4
STRUCTURAL STEEL

DESIGNED BY	DATE	CHECKED BY	DATE
BY	2/7/71	BY	
TRACED BY		CHECKED BY	

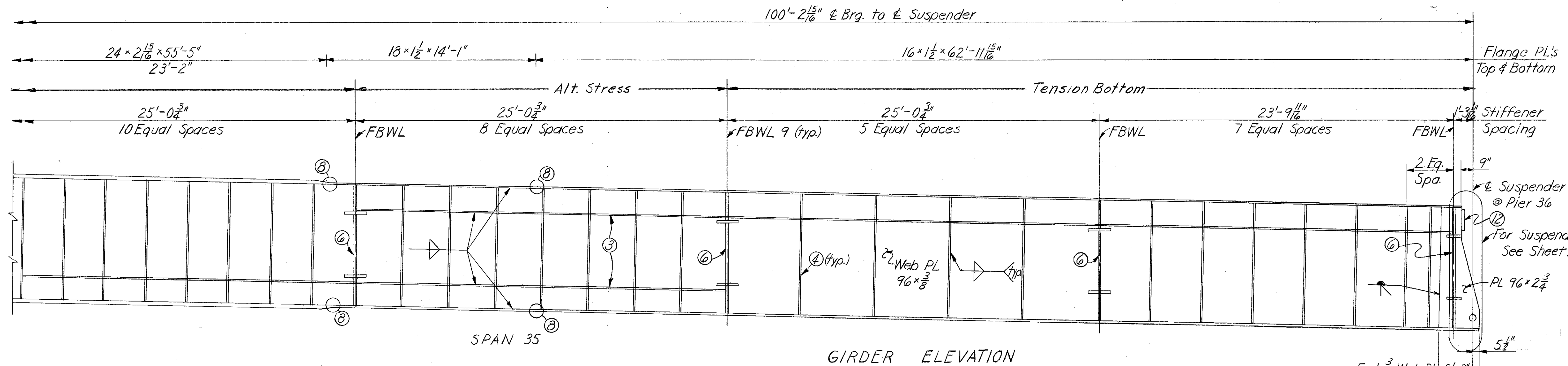
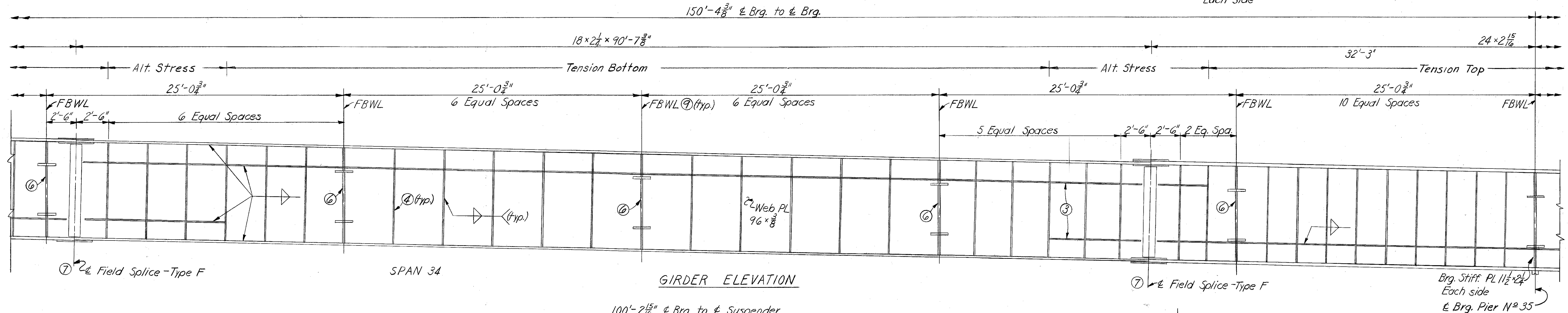
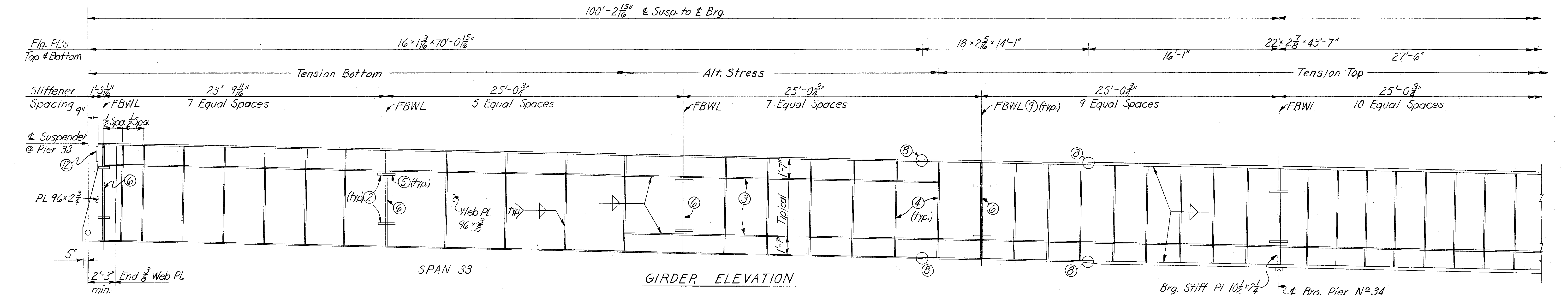
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18572

UNIT III E.B. GIRD. G2
STRUCTURAL STEEL

LETTING DATE

DESIGNED BY: DATE 2/71
 CHECKED BY: DATE
 TRACED BY: DATE



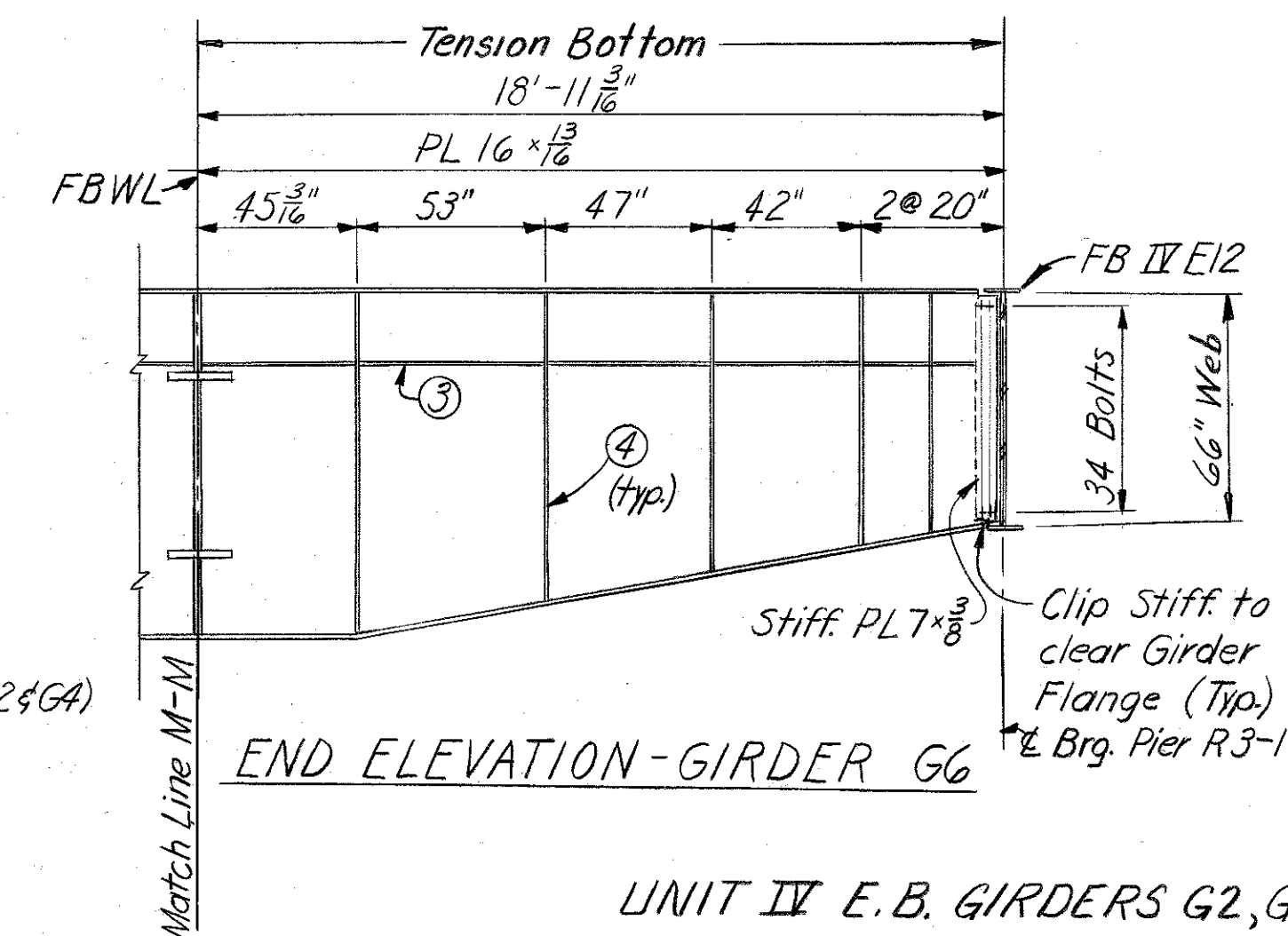
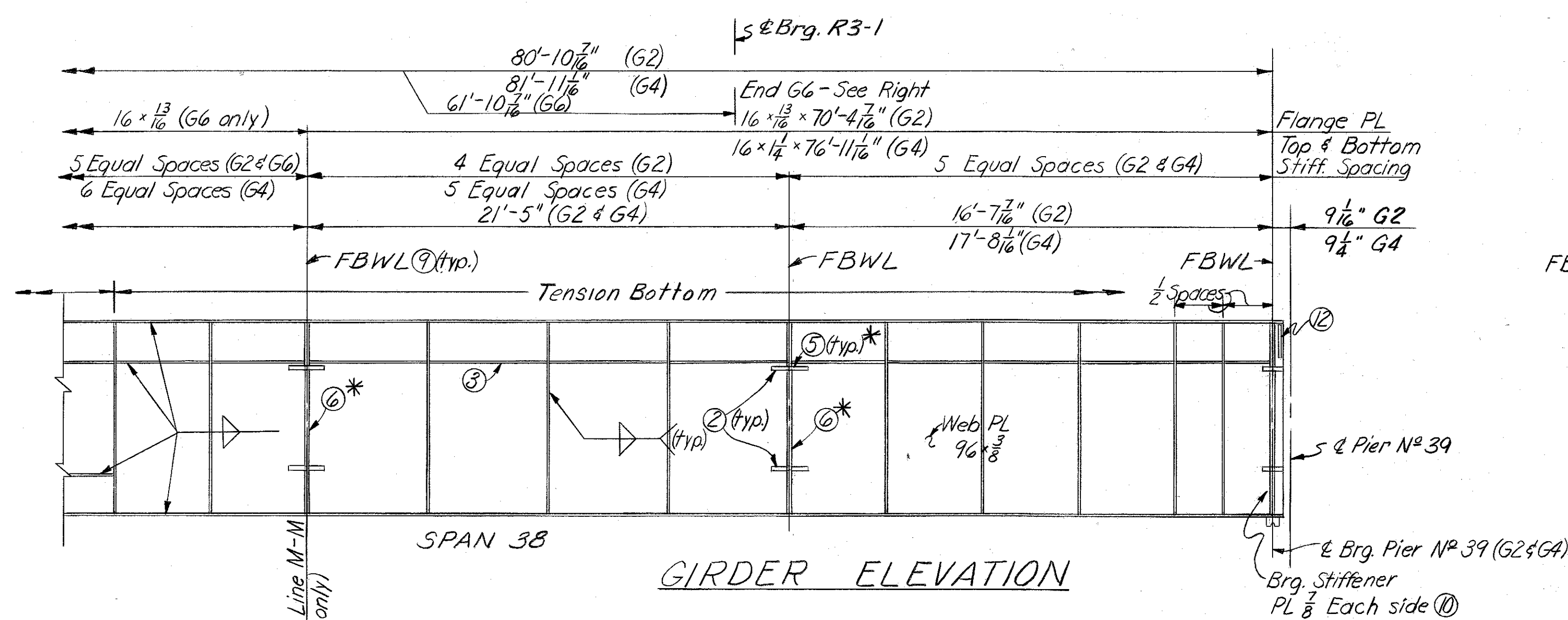
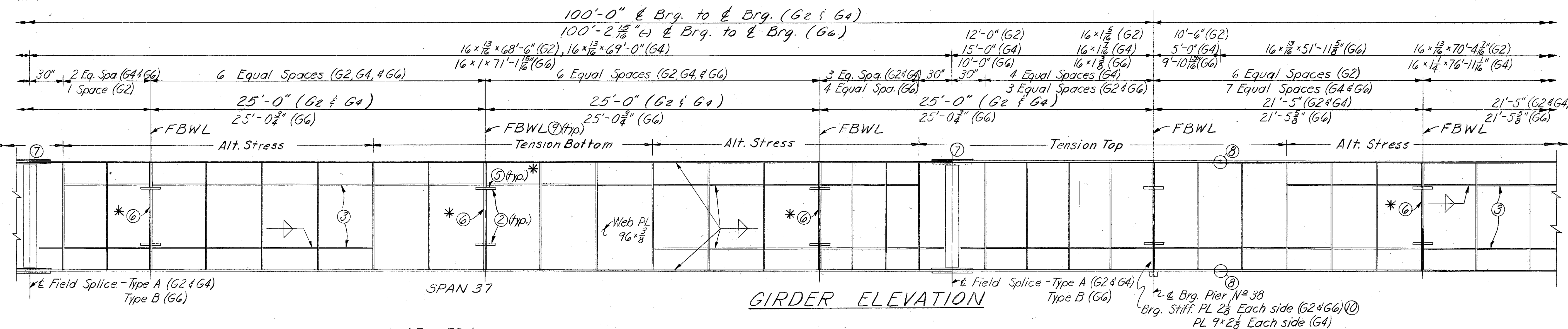
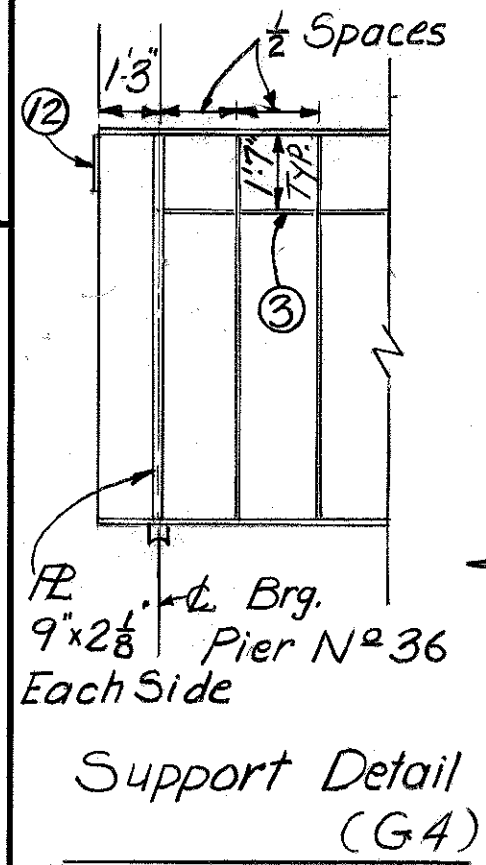
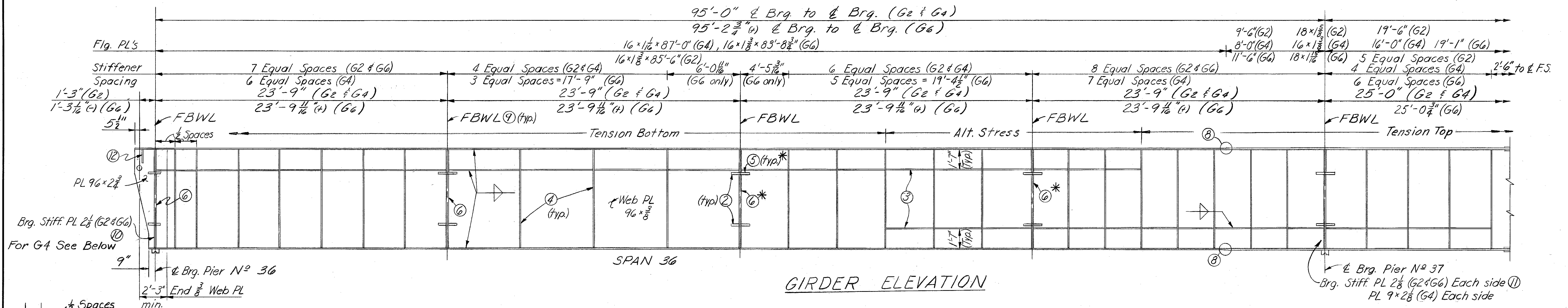
Notes
 All steel this sheet A441 for 3/4" thickness and under,
 A588 over 3/4" thickness (Unless noted)
 For notes ① - ⑫ see Sheet A85

SHEET A89

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 SP 56-273-11L
 P. E. PROJECT NO. I 64-2 (35) 3
 STATION 208+08
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18572

LETTING DATE

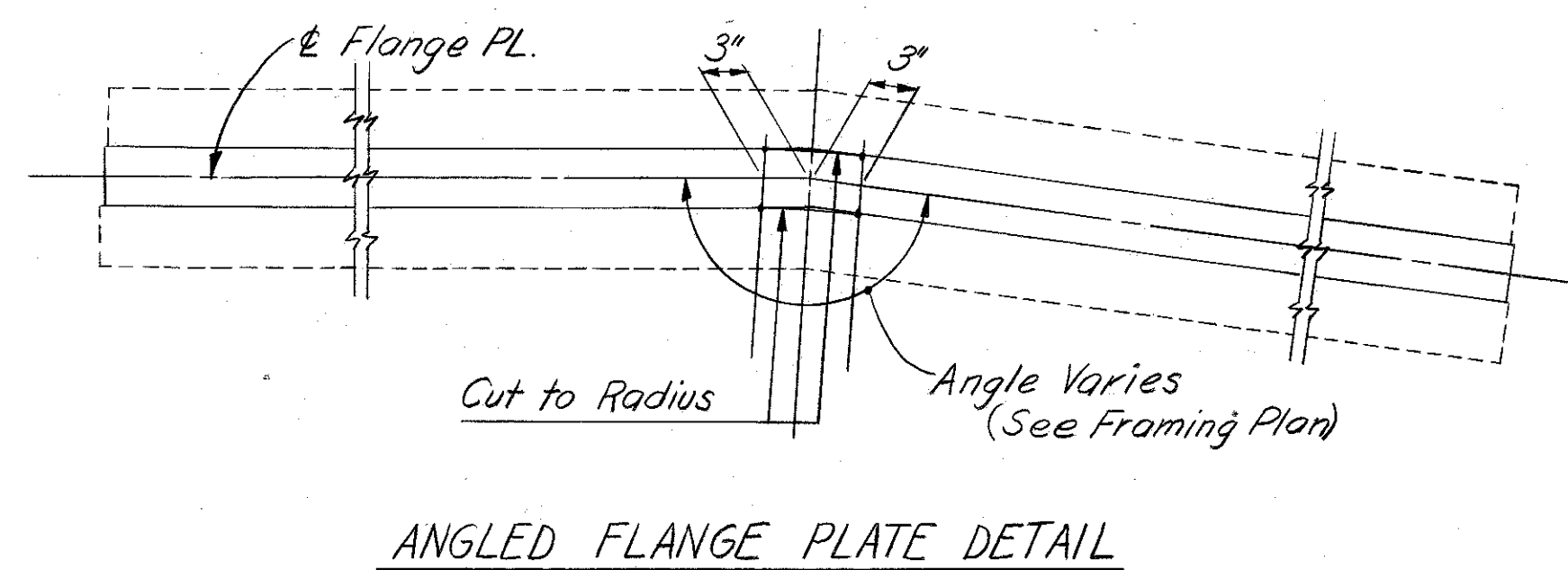
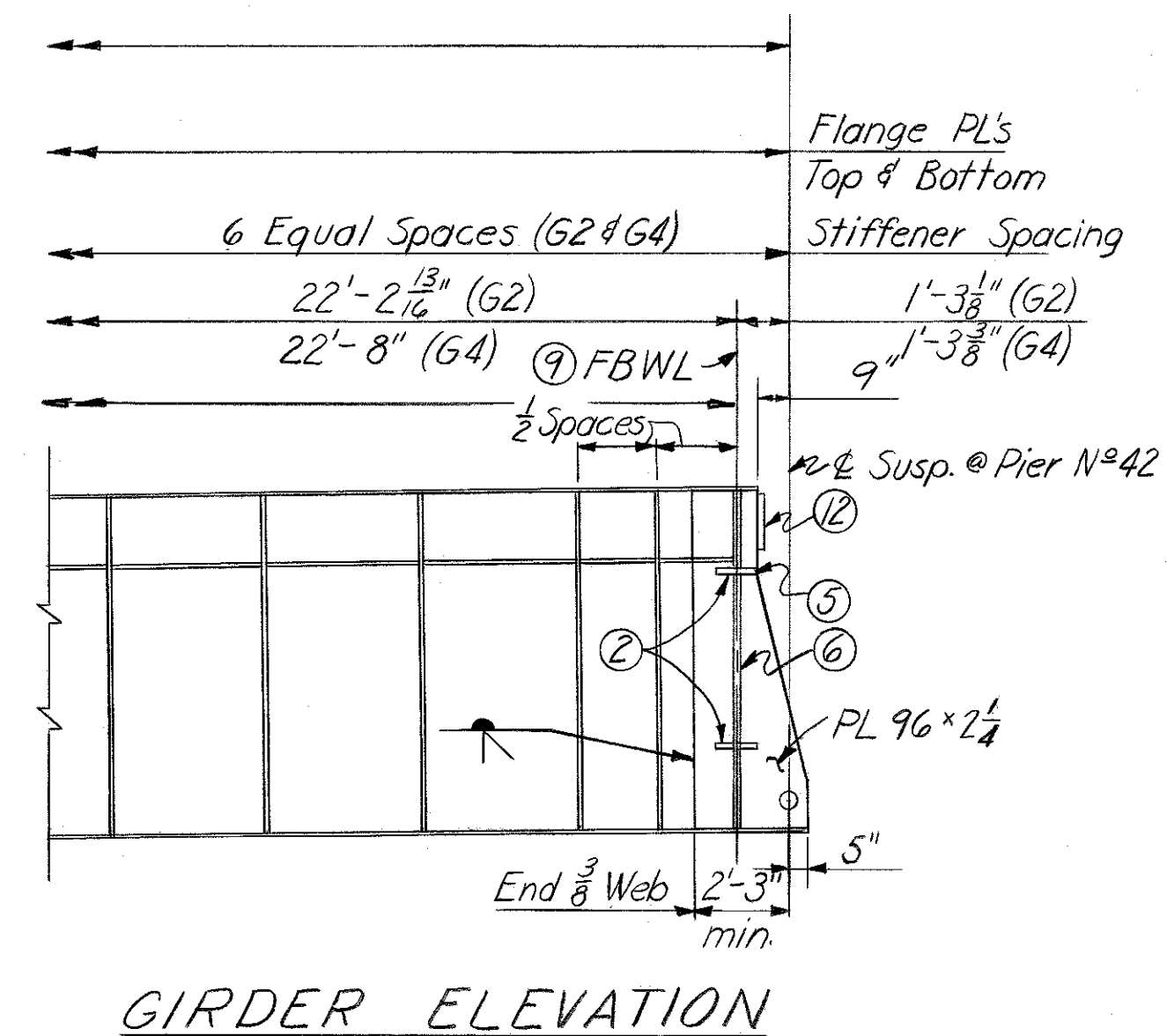
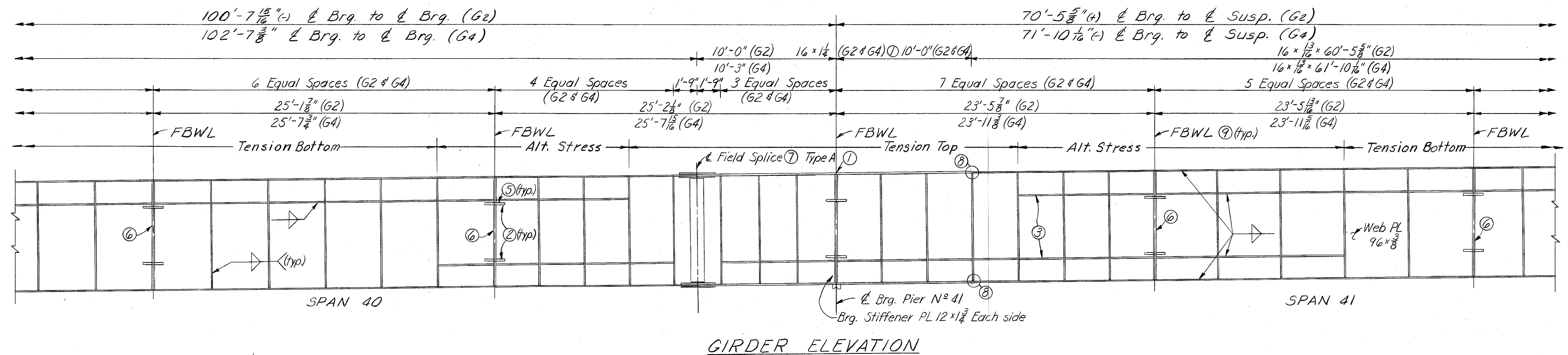
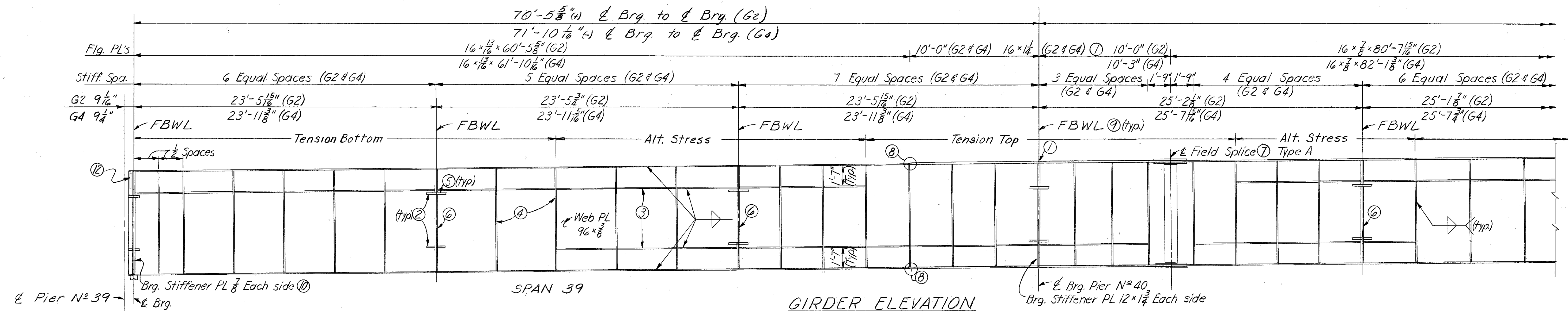
DESIGNED BY: GMA & JMB
 CHECKED BY: HBS
 DATE: 2/7/75
 TRACED BY: HBS
 DATE: 2/7/75



Notes
 All steel this sheet A441 for 3/4" thickness and under, and A588 over 3/4" thickness (Unless noted)
 For notes ①-⑫ see Sheet A85

SHEET A90

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
 JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO.
 P. E. PROJECT NO. I 64-2 (35) 3
 MAINTENANCE PROJECT NO.
 SP 56-273-11L
 DRAWING NO.
 18572

[illegible]

Notes

All steel this sheet A441 for $\frac{3}{4}"$ thickness and under
A588 over $\frac{3}{4}"$ thickness (Unless noted)
For notes ① - ⑫ see Sheet A85

SHEET A91

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

I 64-13TH ST. TO 7TH ST.
LOUISVILLE—LEXINGTON
ROAD S

STATION 208+08

P. E. PROJECT NO. I 6
MAINTENANCE PROJECT NO.

P 56-273-11L

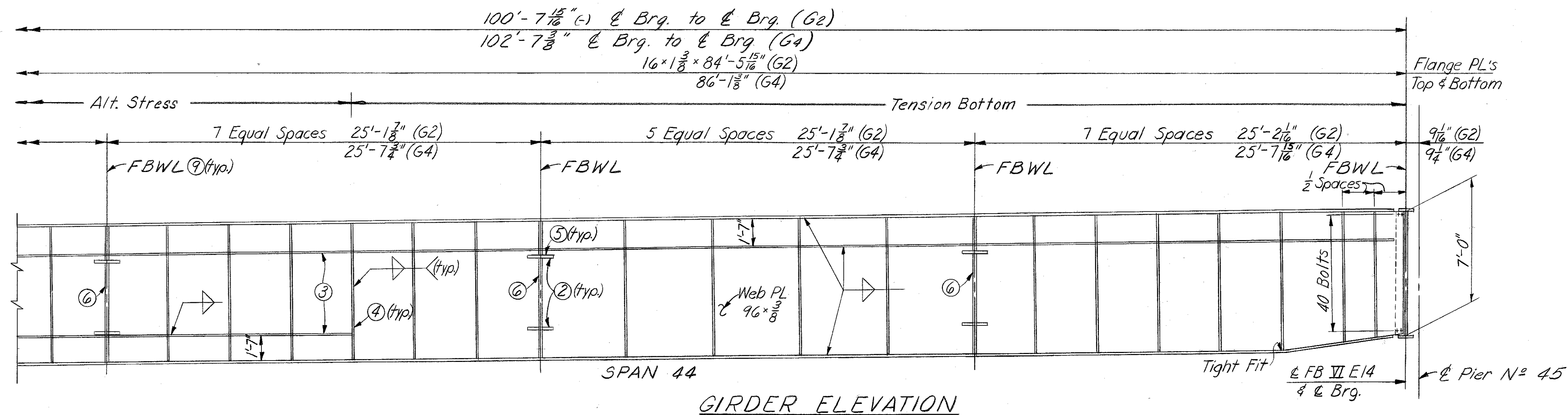
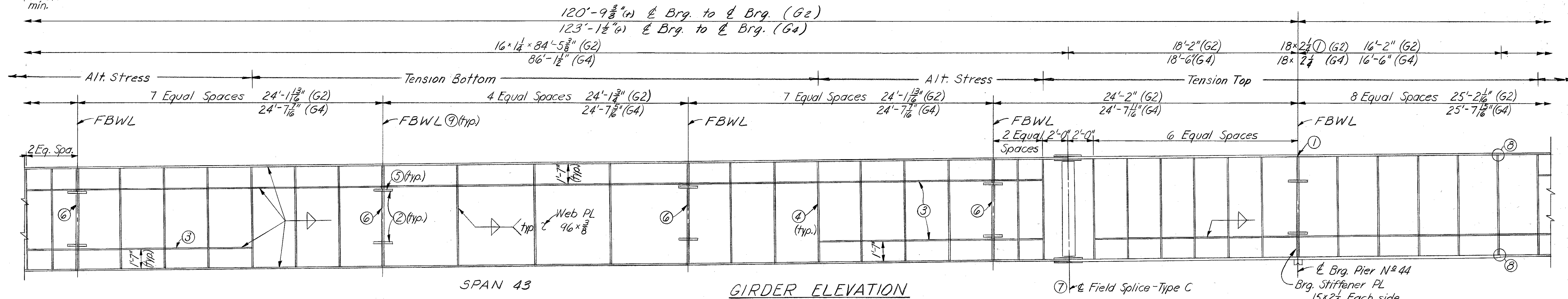
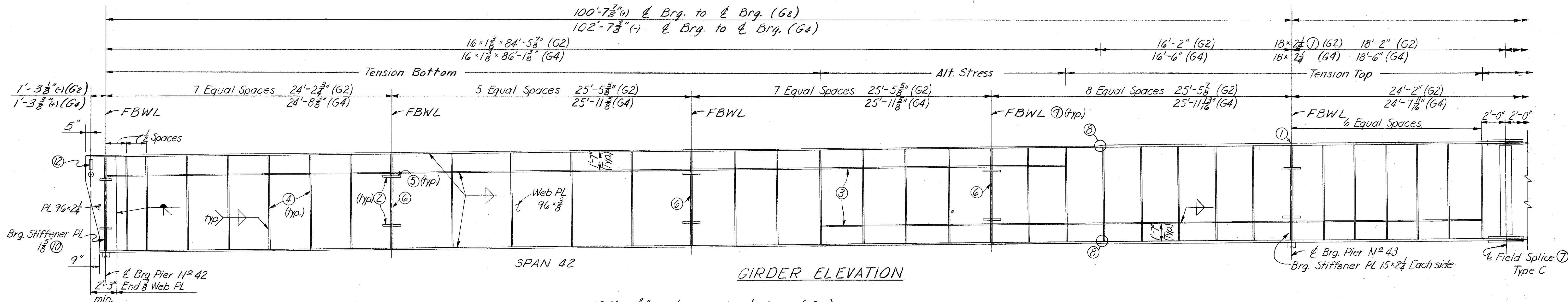
RAWING NO.

18572

UNIT V E.B. GIRDERS G24G4
STRUCTURAL STEEL

LETTING DATE

DESIGNED BY	DATE	DATE	DATE
DETAILED BY	DATE	DATE	DATE
CHECKED BY	DATE	DATE	DATE
TRACED BY	DATE	DATE	DATE



Notes

All steel this sheet A441 for 3/4" thickness and under and A588 over 3/4" thickness (Unless noted)
For notes ①-⑫ see Sheet A85

SHEET A92

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD

STATION 208+08

P.E. PROJECT NO. 164-2(35)3

CONSTRUCTION PROJECT NO.

MAINTENANCE PROJECT NO.

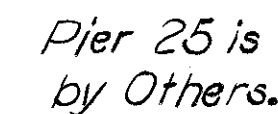
DRAWING NO.

18572

UNIT VI E.B. GIRD. G2 & G4

STRUCTURAL STEEL

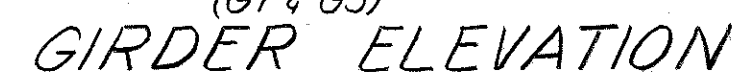
LETTING DATE:



SPAN 25



SPAN 27



STRUCTURAL STEEL

SHEET A93

DRAFTING NO.

1857Z

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
DETAILED BY	JFK4UMB	CHECKED BY	RBS	DATE 2/7/71
TRACED BY		CHECKED BY		DATE
			REVISED	DATE



Notes

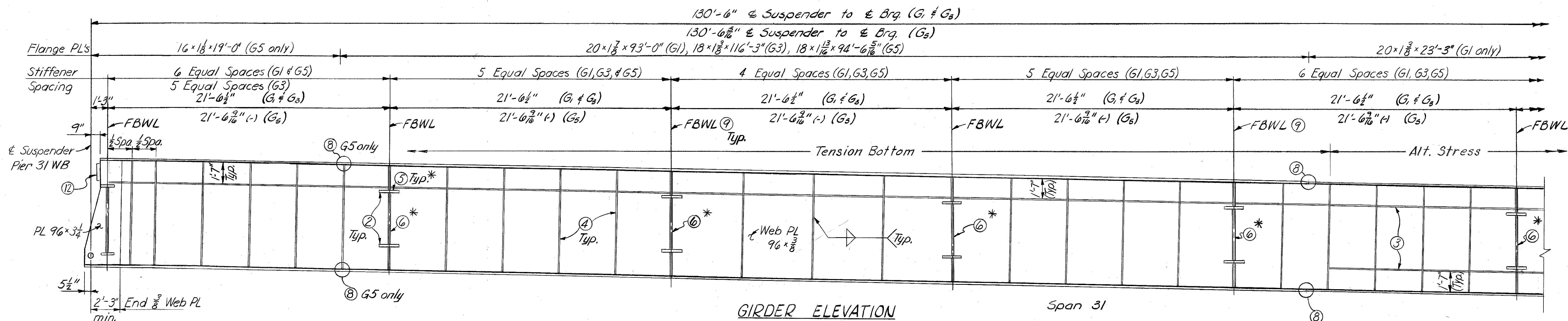
All steel this sheet A441 for $\frac{3}{4}$ " thickness and under, and
A588 over $\frac{3}{4}$ " thickness (Unless noted)
For notes ① - ⑫ see Sheet A85

SHEET A94

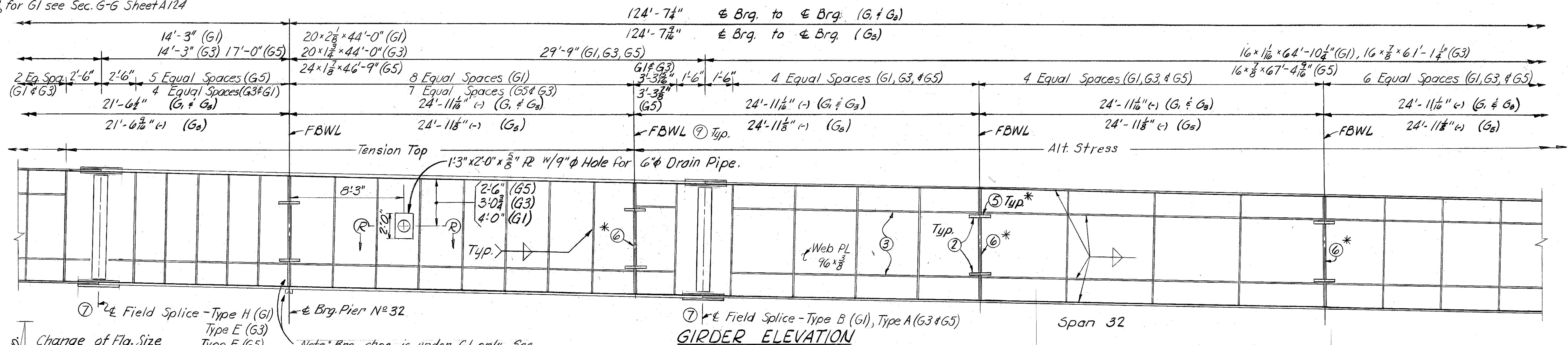
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
SP 56-273-11L
STATION 208+08
PROJECT NO. 164-2(35)3

BRIDGE NUMBER	DRAWING NO. 18572	INDEX
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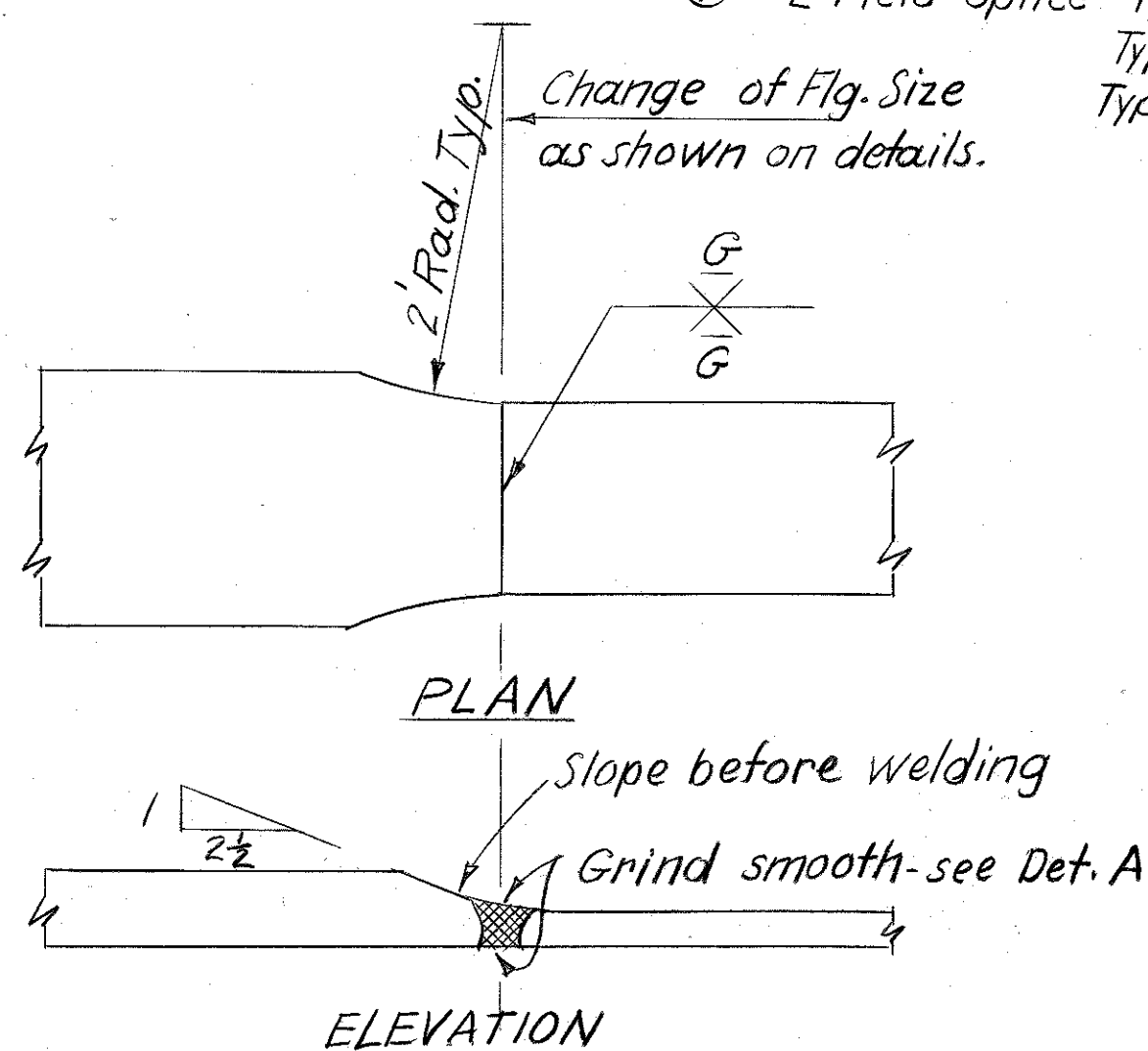
LETTING DATE



Detail G5 as shown here, for G3 see Sec. M-M Sheet A108, for G1 see Sec. G-G Sheet A124

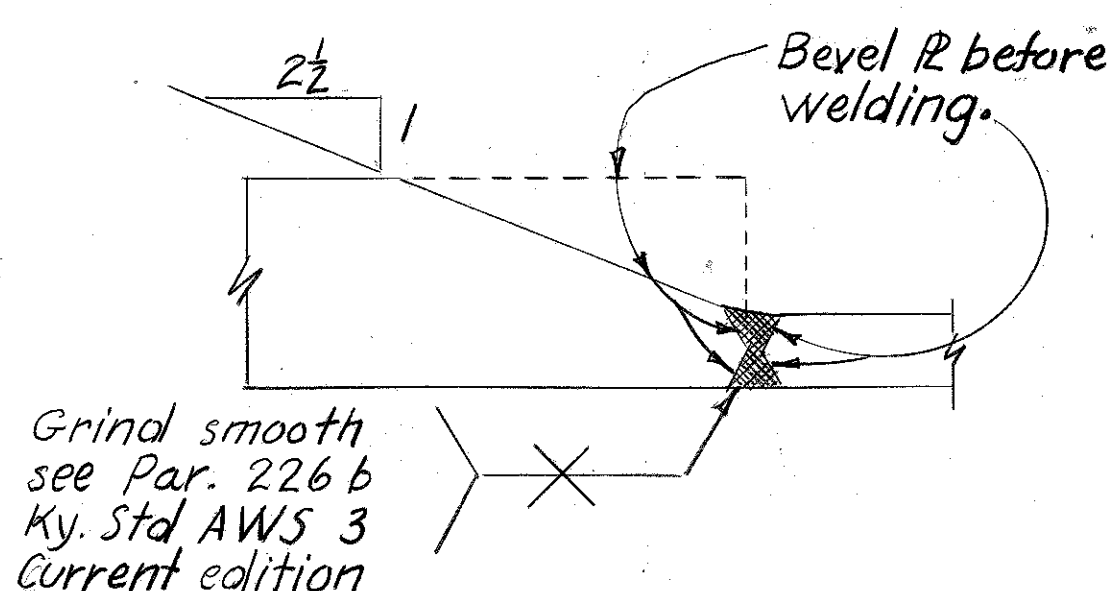


* No flange connection R for Girder G3



SHOP FLANGE SPLICE DETAIL

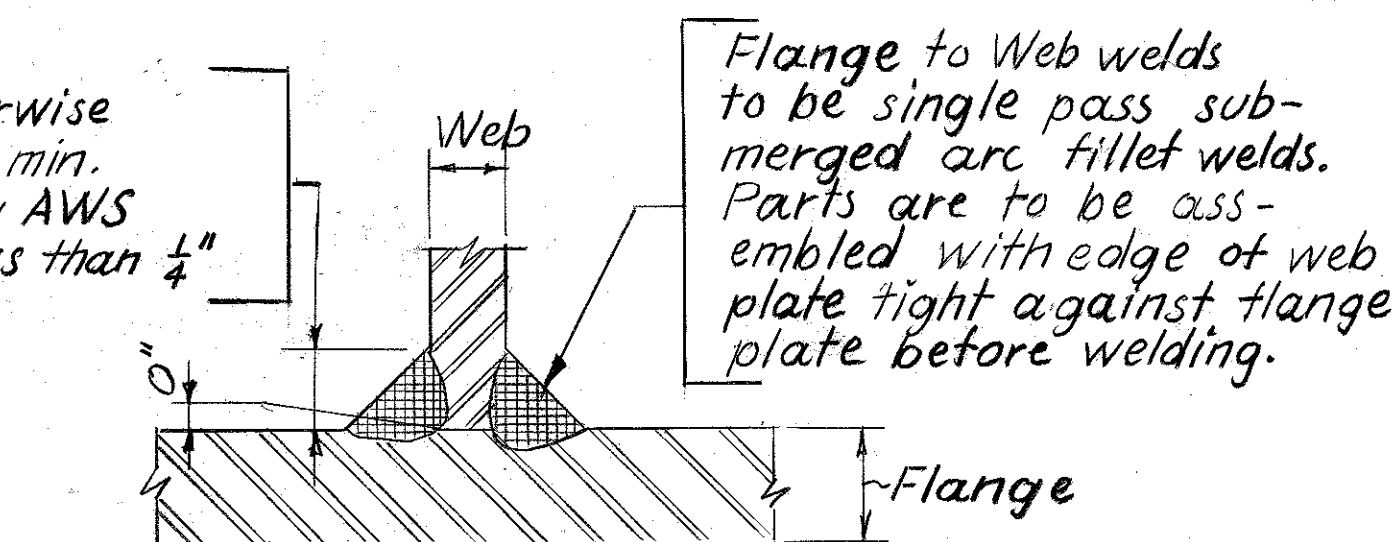
Refer also to Std. Dwg. "Modifications & Additions to AWS D2.0-69 Specifications" AWS 3, Current edition.



DETAIL A

Also typ. for flanges that change in thickness only.

Unless noted otherwise weld size to be min. size specified by AWS Specs. but not less than 1/4"



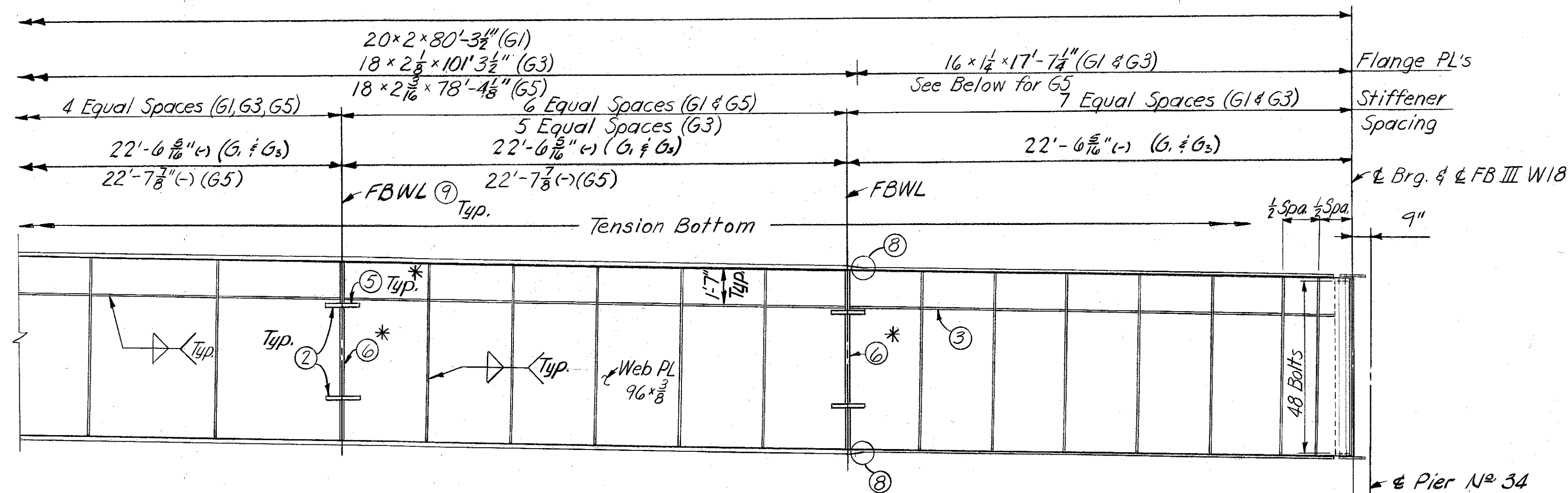
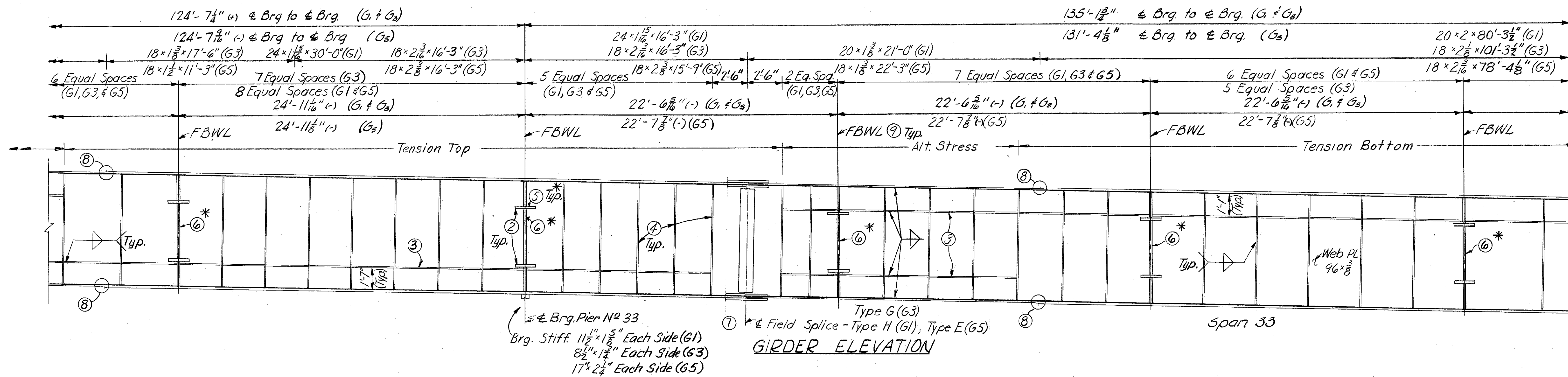
FLANGE TO WEB WELD

Notes
For Section R-R see Sheet A94.
All steel this sheet A441 for 3/4" thickness and under, and A588 over 3/4" thickness (Unless noted)
For notes ①-⑫ see Sheet A85

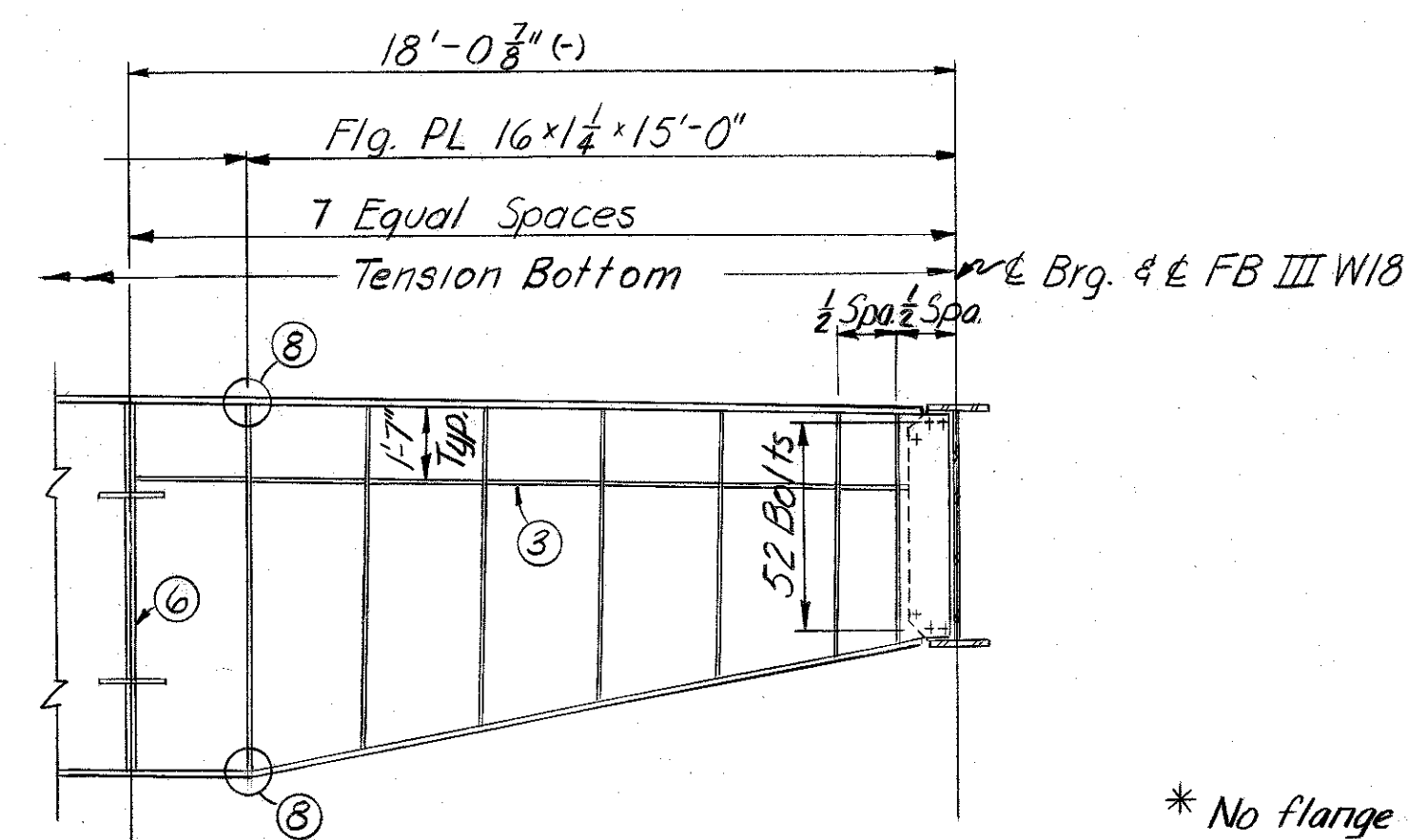
COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS FRANKFORT COUNTY OF JEFFERSON 164-13TH ST. TO 7TH ST. LOUISVILLE - LEXINGTON ROAD		
STATION 208+08	P. E. PROJECT NO. I 64-2 (35) 3	SP 56-273-11L
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO. 18572

UNIT III W.B. GIRDERS G1, G3, & G5
STRUCTURAL STEEL

LETTING DATE



GIRDER ELEVATION



END ELEVATION - GIRDER G5

UNIT III WB GIRDERS G1, G3, & G5
STRUCTURAL STEEL

Notes

All steel this sheet A441 for $\frac{3}{4}$ " thickness and under, and A588 over $\frac{3}{4}$ " thickness (Unless noted)
For notes ①-⑫ see Sheet A85

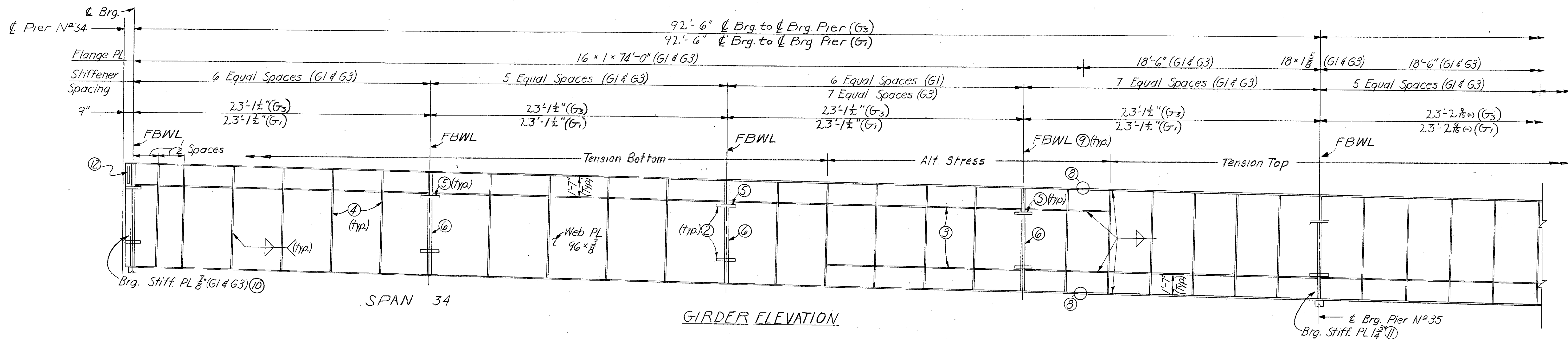
SHEET A96

COMMONWEALTH OF KENTUCKY		
DEPARTMENT OF HIGHWAYS		
FRANKFORT		
COUNTY OF		
JEFFERSON		
164-13 TH ST. TO 7 TH ST.		
LOUISVILLE - LEXINGTON		
ROAD		
STATION 208+08	P. E. PROJECT NO. I 64-2 (35) 3	SP 56-273-11L
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18572

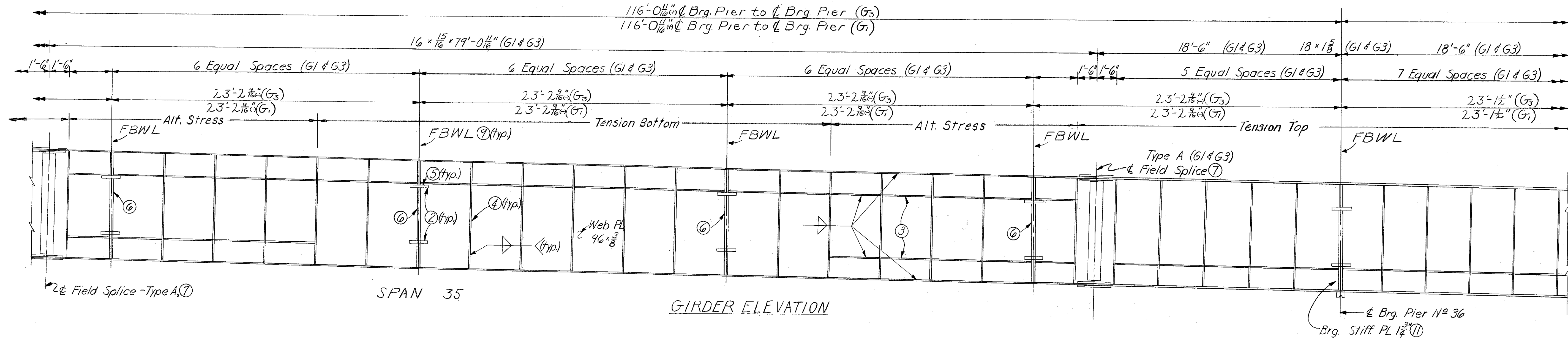
DESIGNED BY	DATE	REVISION	DATE
TRB	2-8-71		
CHECKED BY	DATE	REVISION	DATE
AMB & JMB			
TRACED BY	DATE	REVISION	DATE

LETTING DATE

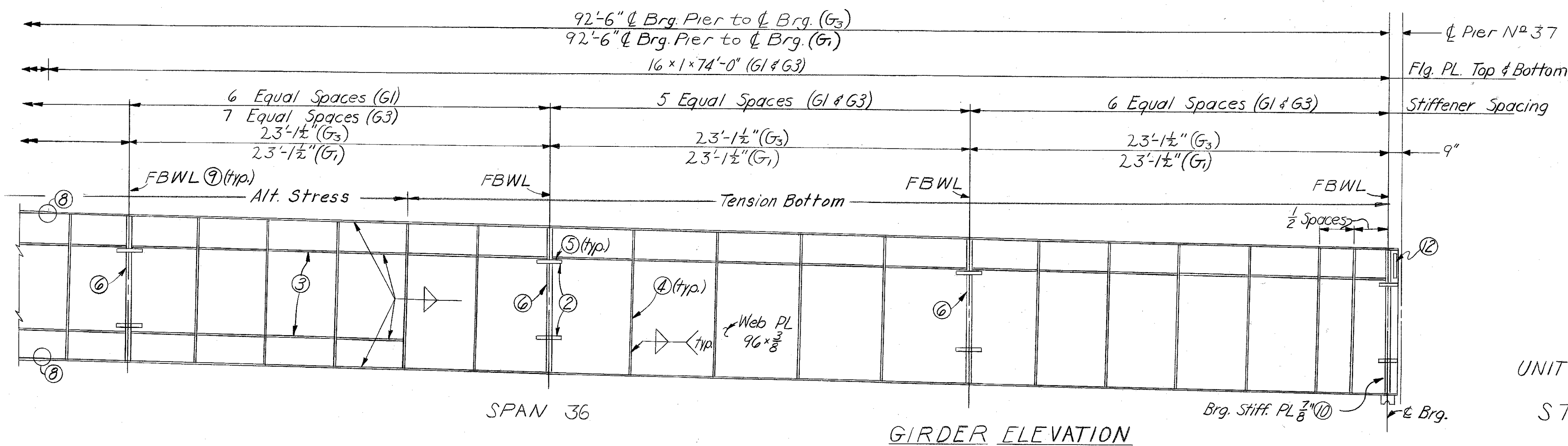
DESIGNED BY	CHECKED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION
JFH	JMB	2/71	XBS				



GIRDER ELEVATION



GIRDER ELEVATION



GIRDER ELEVATION

Notes

All steel this sheet A441 for 3/4" thickness and under and A588 over 3/4" thickness (Unless noted)
For notes ①-⑫ see Sheet A85

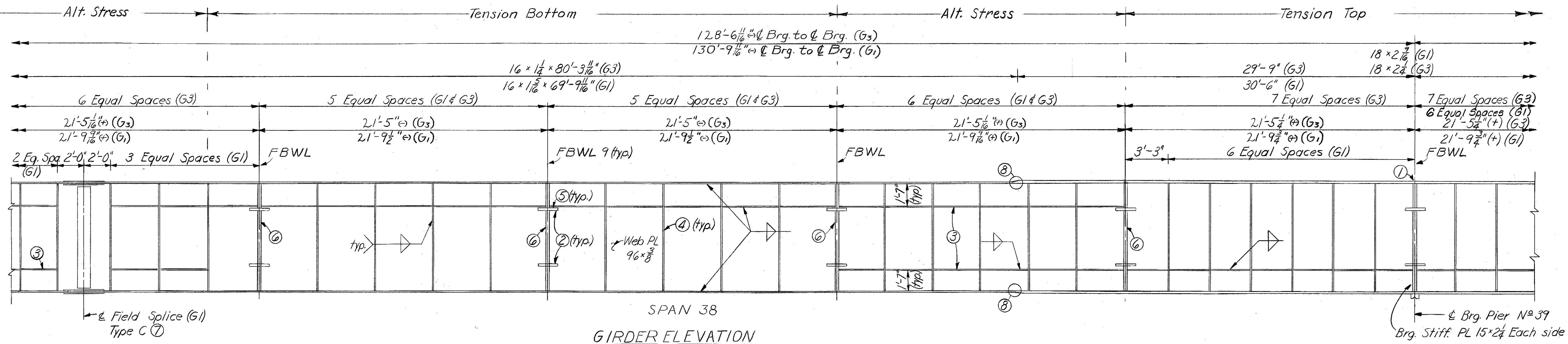
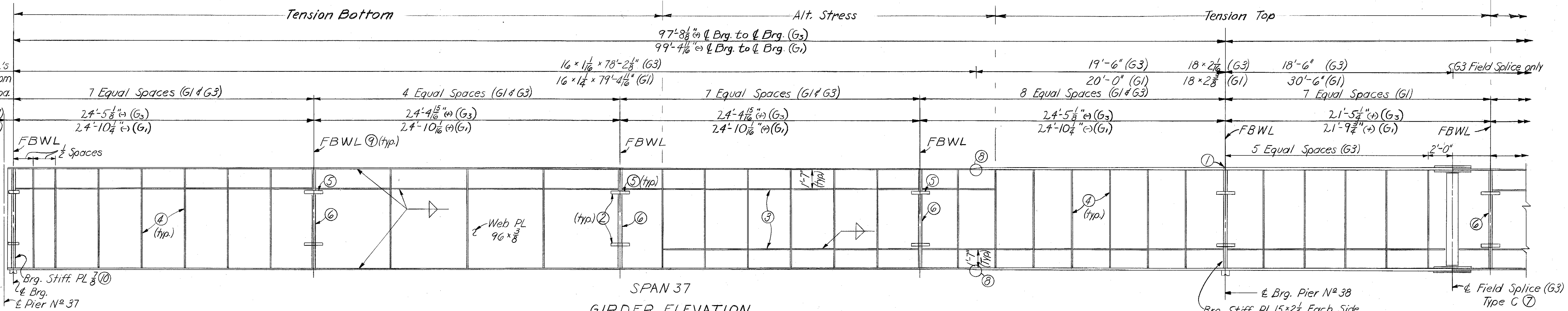
UNIT III WB. GIRDERS G1 & G3
STRUCTURAL STEEL

SHEET A97

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. I 64-2 (35) 3
MAINTENANCE PROJECT NO.
SP 56-273-III
DRAWING NO.
18572

LETTING DATE

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
DATE	2/71				
CHECKED BY		CHECKED BY		CHECKED BY	
DATE		DATE		DATE	
TRACED BY		TRACED BY		TRACED BY	
DATE		DATE		DATE	



Notes

All steel this sheet A441 for 3/4" thickness and under, and A588 over 3/4" thickness (Unless noted)
For notes ①-⑫ see Sheet A85

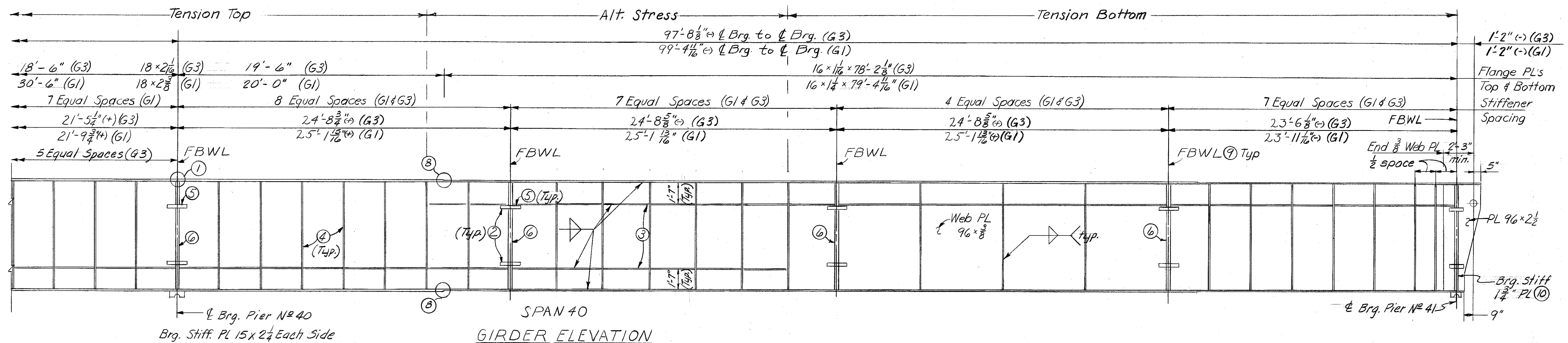
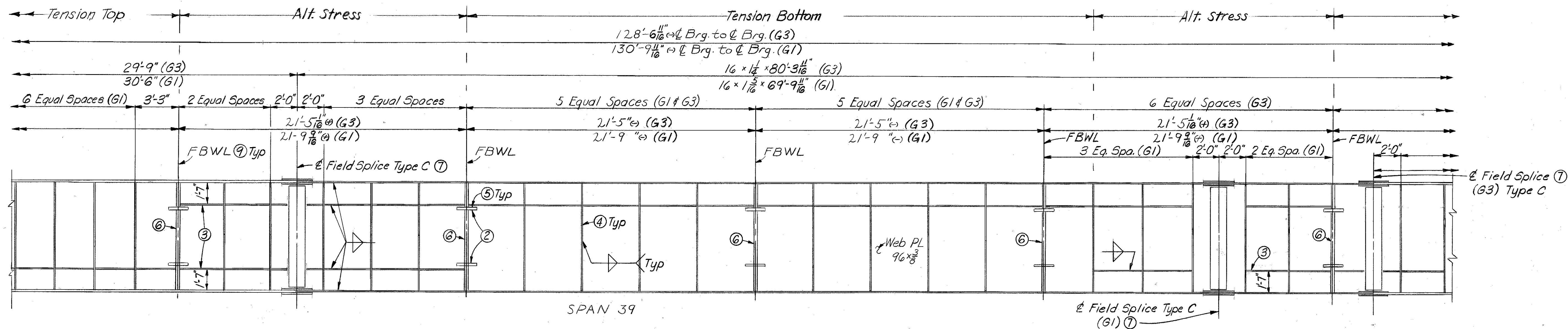
SHEET A98

UNIT V W.B. GIRDERS G1 & G3
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS FRANKFORT COUNTY OF JEFFERSON I 64-13TH ST. TO 7TH ST. LOUISVILLE - LEXINGTON ROAD P. E. PROJECT NO. I 64-2 (35) 3 STATION 208+08 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18572		
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LETTING DATE

DESIGNED BY	CHECKED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION
JFK & JMB	RBS	2/21					
DATE	CHECKED BY	DATE	REVISION	DATE	REVISION	DATE	REVISION



Notes

All steel this sheet A441 for 3/4" thickness and under, and A588 over 3/4" thickness (Unless noted)
For notes ①-⑫ see Sheet A85

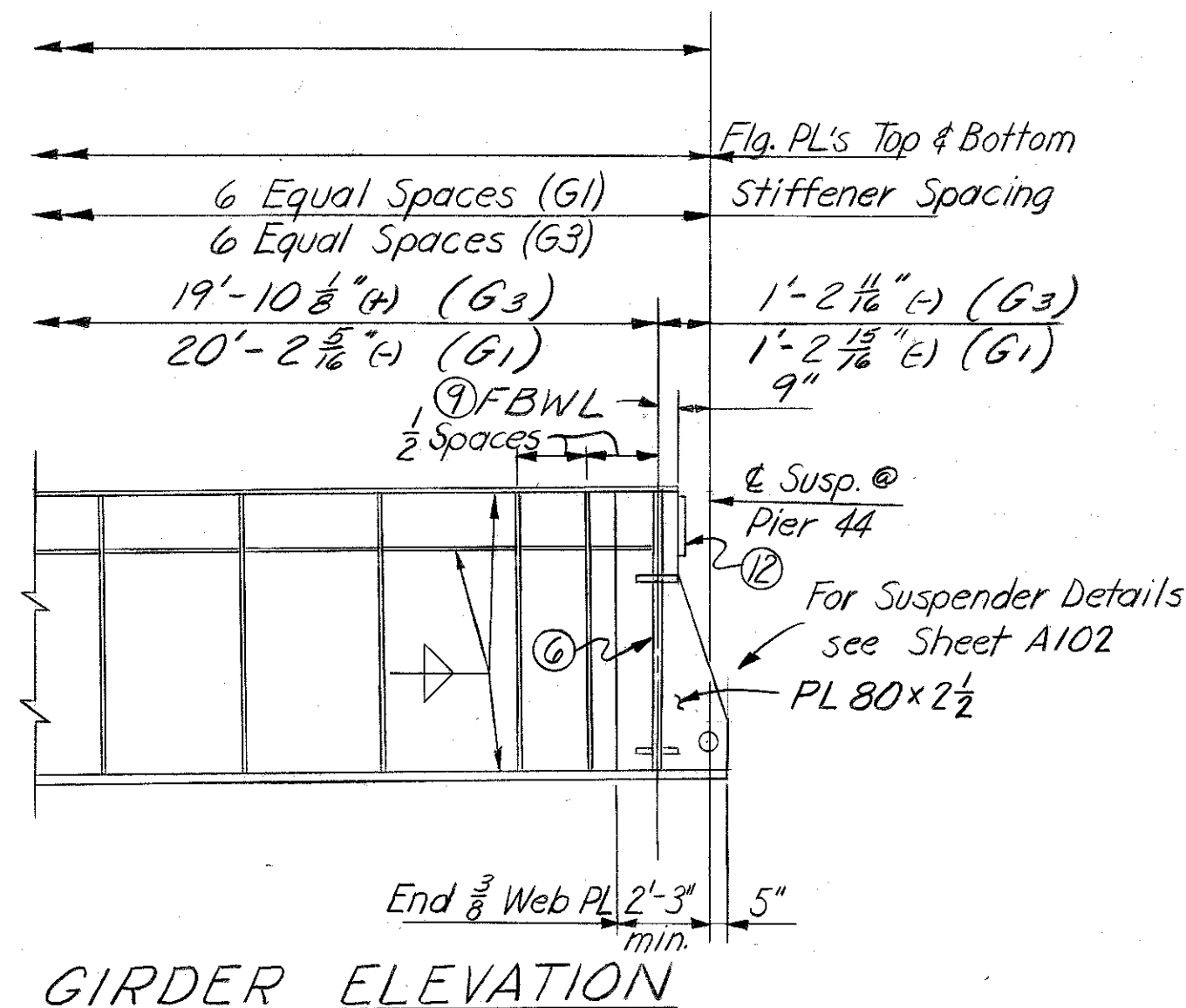
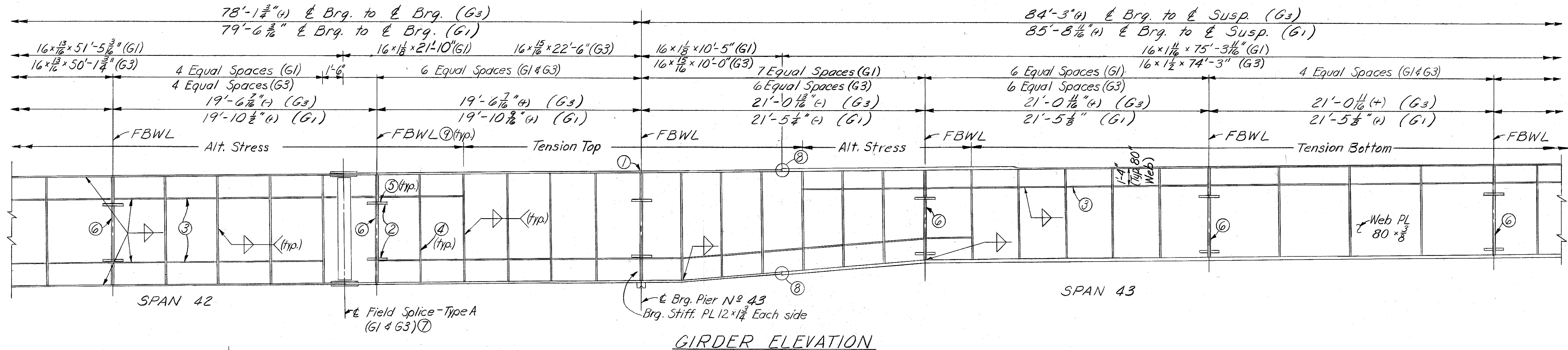
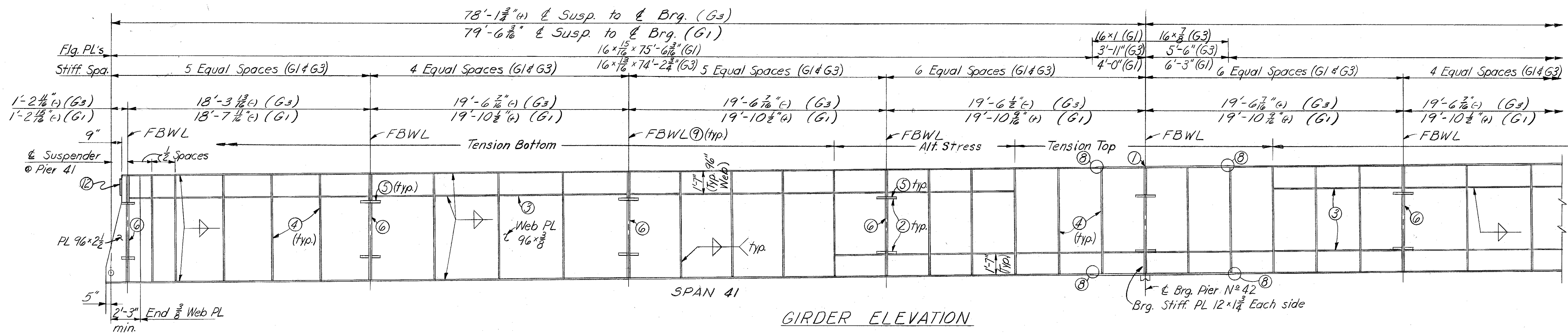
UNIT II W.B. GIRDERS G1 & G3
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			
COUNTY OF			
JEFFERSON			
I 64-13 TH ST. TO 7 TH ST.			
LOUISVILLE - LEXINGTON			
ROAD			
STATION 208+08		P. E. PROJECT NO. I 64-2 (35) 3	
CONSTRUCTION PROJECT NO.		MAINTENANCE PROJECT NO.	
		DRAWING NO.	
		18572	

SHEET A99

LETTING DATE

DESIGNED BY: GMA & JMB
 CHECKED BY: JMB
 DATE: 7-23-5
 TRACED BY: JMB
 DATE: 7-23-5



Notes

All steel this sheet A441 for 3/4" thickness and under, and A588 over 3/4" thickness (Unless noted)
 For notes ①-⑫ see Sheet A85

SHEET A100

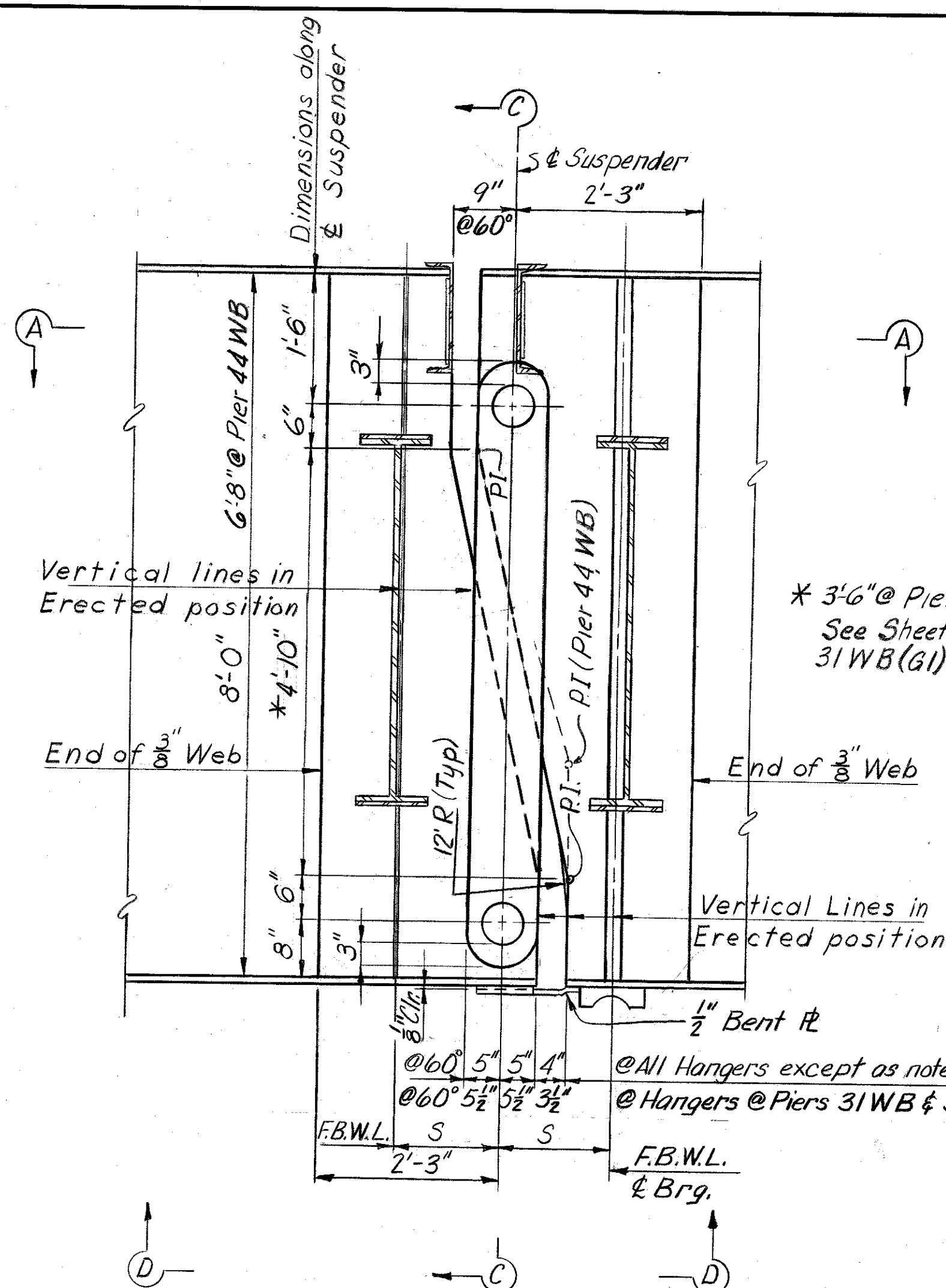
COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS FRANKFORT COUNTY OF JEFFERSON 164-13TH ST. TO 7TH ST. LOUISVILLE-LEXINGTON ROAD SP 56-273-11L P. E. PROJECT NO. I 64-2 (35) 3 STATION 208+08 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18572		
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UNIT II W.B. GIRD. G1 & G3
 STRUCTURAL STEEL

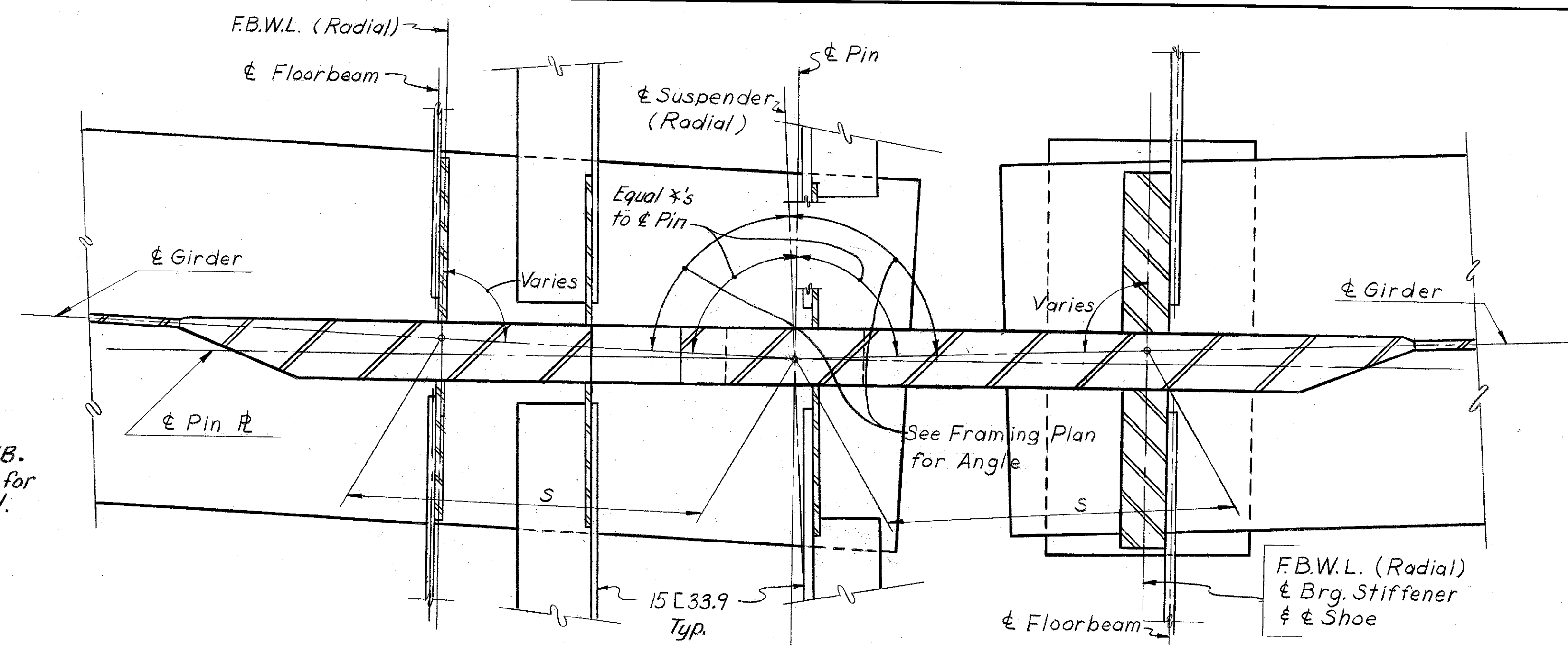


UNIT VII W.B. GIRDERS G1 & G3
STRUCTURAL STEEL

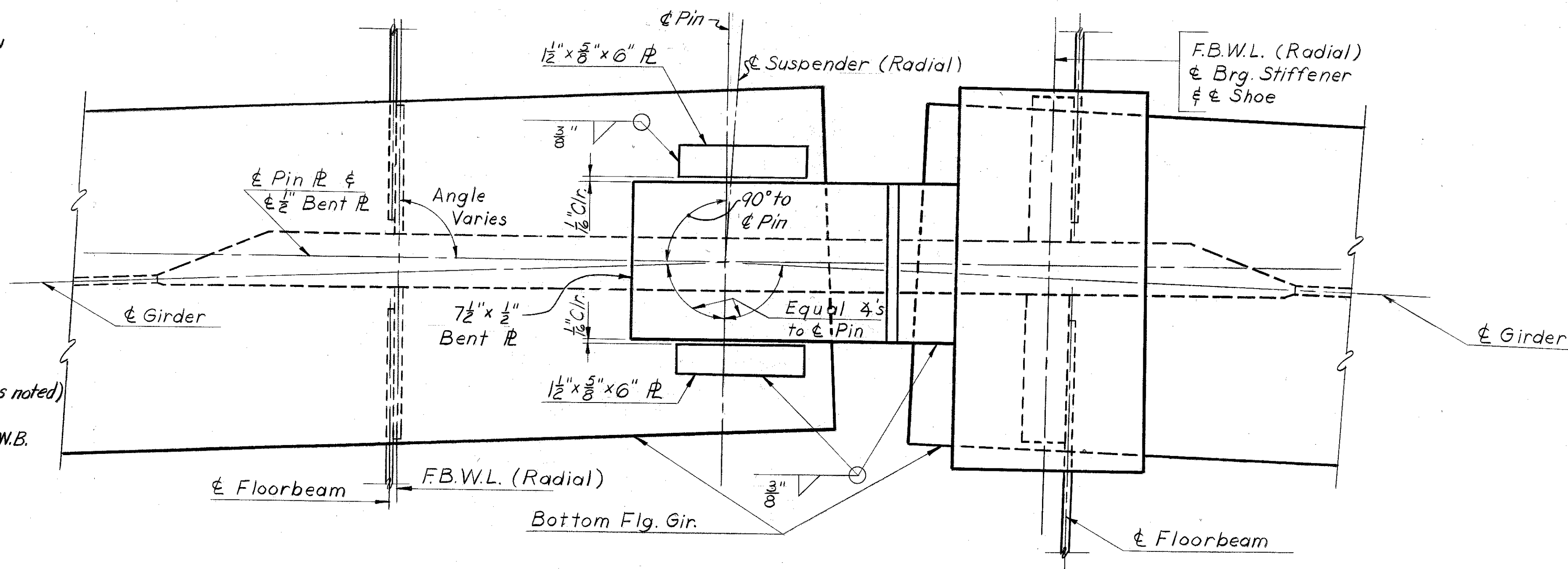
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



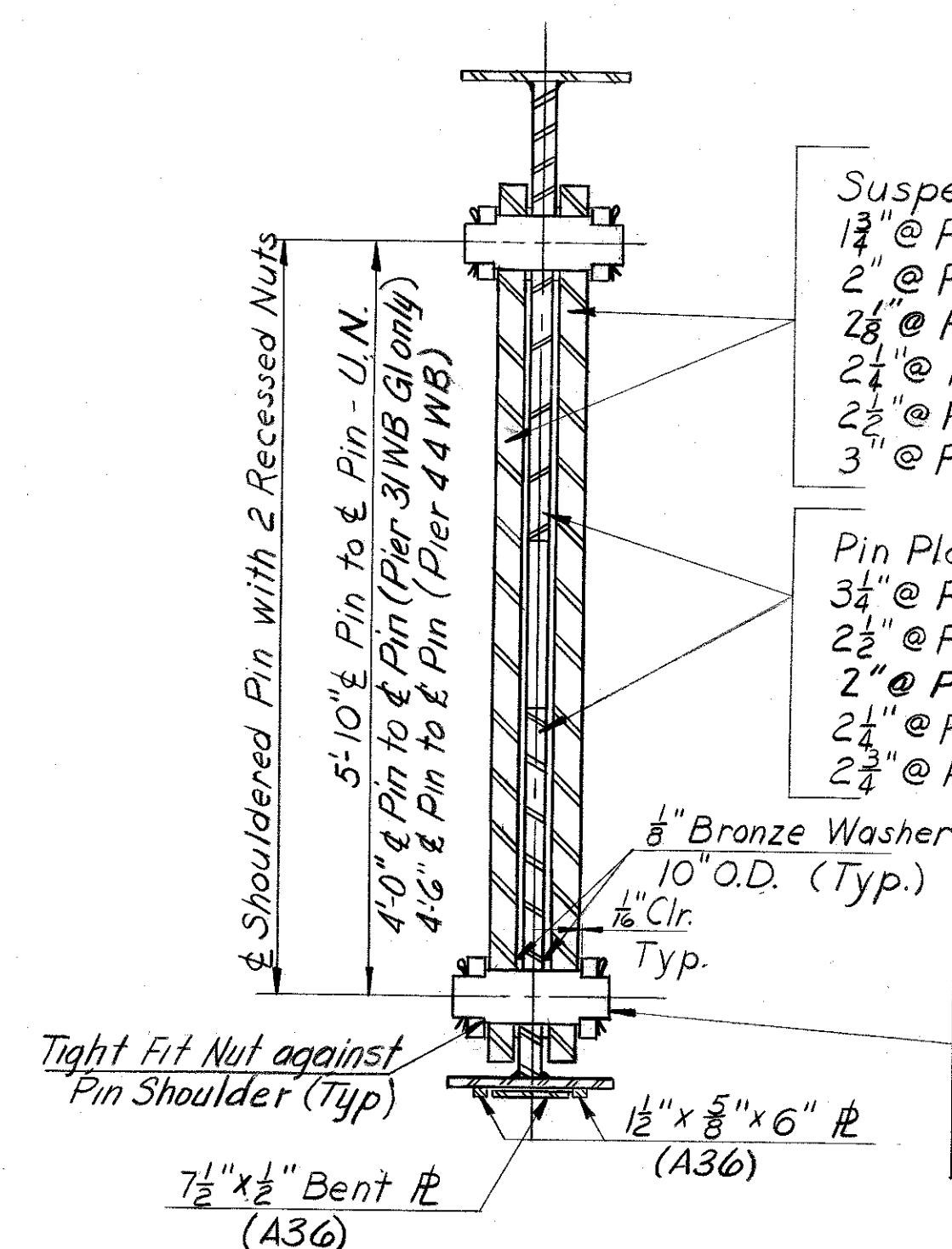
SUSPENDER DETAIL
See Framing Plan for Dimension "S"



SECTION A-A
Suspender Plates Not Shown
Floor Beam Flanges Not Shown



VIEW D-D
Suspender Plates Not Shown
Floor Beam Flanges Not Shown



SECTION C-C

- Suspender Plates (A588 Unless noted),
 1 $\frac{1}{2}$ " @ Pier 42 E.B.
 2" @ Piers 28 E.B. & W.B., 44 W.B., 41 W.B.
 2 $\frac{1}{8}$ " @ Pier 25 E.B. & W.B.*
 2 $\frac{1}{4}$ " @ Pier 33 E.B.
 2 $\frac{1}{2}$ " @ Pier 36 E.B.
 3" @ Pier 31 W.B.

- Pin Plates (A588 unless noted)
 $3\frac{1}{4}"$ @ Pier 31 W.B.
 $2\frac{1}{2}"$ @ Piers 28 E.B. & W.B., 44 W.B., 41 W.B.
 $2"$ @ Pier 25 E.B. & W.B.
 $2\frac{1}{4}"$ @ Pier 42 E.B.
 $2\frac{3}{4}"$ @ Piers 33, 36 E.B.

- Suspender Pins (A235 Class G or A237 Class A, unless noted)
 6" ϕ @ Piers 28, 41, 44 W.B.
 28, 33, 42 E.B.
 7" ϕ @ Piers 31 W.B. & 36 E.B.
 5½" ϕ @ Piers 25 E.B. & W.B.*

* - By Others

GIRDER DETAILS
STRUCTURAL STEEL

SHEET A102

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE -- LEXINGTON
ROAD

STATION 208+08		PROJECT NO. 164-2 (35)3	
BRIDGE NUMBER		DRAWING NO. 18577	INDEX

LETTING DATE

WESTBOUND ROADWAY

UNIT	GIRDER	FLOOR BEAM No.	± SUSP.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	± SUSP.
I	G1	Elev. Top of Web	487.785	487.775	487.561	487.292	487.005	486.761	486.522	486.251	485.984	485.747	485.512	485.245	485.969	484.796									484.780
		Δ Total	.000	.003	.040	.031	.000	.017	.035	.018	.000	.023	.043	.028	.000	.003									.000
		Δ Steel	.000	.000	.006	.005	.000	.003	.005	.003	.000	.004	.007	.004	.000	.000									.000
	G3	Elev. Top of Web	487.032	487.020	486.783	486.499	486.215	485.968	485.718	485.431	485.144	484.893	484.644	484.366	484.081	483.897									483.883
		Δ Total	.000	.002	.027	.016	.000	.027	.046	.025	.000	.020	.039	.025	.000	.001									.000
		Δ Steel	.000	.000	.004	.002	.000	.004	.007	.004	.000	.003	.006	.004	.000	.000									.000
II	G1	Elev. Top of Web	484.780	484.773	484.598	484.396	484.181	483.973	483.756	483.531	483.246	482.902	482.558	482.294	482.042	481.761	481.439								481.423
		Δ Total	.000	.005	.025	.018	-.002	.000	.053	.104	.102	.048	.000	.007	.033	.034	.000								.000
		Δ Steel	.000	.001	.005	.003	.000	.000	.010	.019	.018	.009	.000	.001	.006	.006	.000								.000
	G3	Elev. Top of Web	483.883	483.877	483.798	483.692	483.574	483.387	483.165	482.936	482.642	482.287	481.934	481.662	481.407	481.118	480.787								480.770
		Δ Total	.000	.000	.024	.019	-.001	.000	.055	.110	.107	.049	.000	.007	.036	.037	.000								.000
		Δ Steel	.000	.000	.004	.003	.000	.000	.010	.019	.019	.009	.000	.001	.006	.006	.000								.000
III	G1	Elev. Top of Web	481.423	481.414	481.250	481.030	480.750	480.410	480.030	479.647	479.259	478.902	478.537	478.168	477.835	477.586	477.348	477.066	476.727	476.325	475.864				
		Δ Total	.000	.007	.124	.190	.201	.157	.077	.000	-.029	-.023	-.024	-.030	.000	.079	.170	.216	.206	.132	.000				
		Δ Steel	.000	.001	.023	.037	.039	.030	.015	.000	-.006	-.004	-.005	-.006	.000	.015	.033	.041	.040	.025	.000				
	G3	Elev. Top of Web	480.987	480.974	480.790	480.560	480.281	479.944	479.580	479.211	478.825	478.460	478.089	477.724	477.398	477.154	476.925	476.642	476.298	475.889	475.429				
		Δ Total	.000	.004	.101	.157	.168	.127	.063	.000	-.027	-.029	-.036	-.038	.000	.083	.182	.228	.212	.132	.000				
		Δ Steel	.000	.001	.021	.032	.034	.026	.013	.000	-.006	-.006	-.007	-.008	.000	.017	.037	.047	.044	.027	.000				
	G5	Elev. Top of Web	480.770	480.761	480.595	480.373	480.092	479.735	479.343	478.954	478.554	478.184	477.811	477.437	477.102	476.651	476.158	475.629	475.104	474.615	474.224				
		Δ Total	.000	.007	.129	.200	.216	.162	.077	.000	-.033	-.032	-.034	-.037	.000	.089	.184	.232	.218	.130	.000				
		Δ Steel	.000	.001	.023	.035	.038	.028	.013	.000	-.006	-.006	-.006	-.006	.000	.016	.032	.041	.038	.023	.000				
IV	G1	Elev. Top of Web		475.842	475.547	475.216	474.852	474.486	474.154	473.830	473.474	473.086	472.714	472.419	472.162	471.904	471.642								471.636
		Δ Total		.000	.042	.048	.021	.000	.024	.056	.056	.024	.000	.021	.048	.042	.000								.000
		Δ Steel		.000	.007	.008	.004	.000	.004	.010	.010	.004	.000	.004	.008	.007	.000								.000
	G3	Elev. Top of Web		475.406	475.122	474.792	474.419	474.012	473.592	473.183	472.736	472.253	471.789	471.408	471.069	470.721	470.358								470.348
		Δ Total		.000	.053	.060	.025	.000	.026	.063	.063	.026	.000	.025	.060	.053	.000								.000
		Δ Steel		.000	.008	.009	.004	.000	.004	.010	.010	.004	.000	.004	.009	.008	.000								.000
V	G1	Elev. Top of Web	471.636	471.630	471.484	471.338	471.202	471.133	471.099	471.128	471.170	471.212	471.267	471.391	471.526	471.730	471.945	472.138	472.314	472.524	472.762	473.029	473.270	473.459	473.473
		Δ Total	.000	.000	.061	.066	.027	.000	.029	.078	.098	.076	.024	.000	.024	.076	.098	.078	.029	.000	.027	.066	.061	.000	.000
		Δ Steel	.000	.000	.010	.011	.004	.000	.005	.012	.016	.012	.004	.000	.004	.012	.016	.012	.005	.000	.004	.011	.010	.000	.000
	G3	Elev. Top of Web	470.348	470.342	470.194	470.049	469.913	469.845	469.807	469.827	469.868	469.912	469.978	470.104	470.237	470.430	470.643	470.836	471.021	471.237	471.473	471.740	471.980	472.172	472.185
		Δ Total	.000	.000	.058	.064	.025	.000	.023	.063	.082	.062	.022	.000	.022	.062	.082	.063	.023	.000	.025	.064	.058	.000	.000
		Δ Steel	.000	.000	.010	.011	.004	.000	.004	.011	.015	.011	.004	.000	.004	.011	.015	.011	.004	.000	.004	.011	.010	.000	.000
VI	G1	Elev. Top of Web	473.473	473.485	473.689	473.883	474.052	474.222	474.389	474.574	474.762	474.971	475.195	475.421	475.615	475.759									475.771
		Δ Total	.000	.002	.046	.058	.034	.000	-.004	.000	-.005	.000	.041	.072	.057	.000									.000
		Δ Steel	.000	.000	.006	.008	.005	.000	-.001	.000	-.001	.000	.006	.010	.008	.000									.000
	G3	Elev. Top of Web	472.185	472.198	472.399	472.592	472.763	472.934	473.102	473.287	473.476	473.684	473.905	474.128	474.323	474.471									474.483
		Δ Total	.000	.002	.043	.054	.032	.000	-.003	.000	-.004	.000	.038	.066	.052	.000									.000
		Δ Steel	.000	.000	.007	.008	.005	.000	.000	.000	-.001	.000	.006	.010	.008	.000									.000
VII	G1	Elev. Top of Web	475.771	475.780	475.985	476.125	476.211	476.258	476.289	476.300	476.274	476.206	476.079												
		Δ Total	.000	.000	.045	.038	.000	-.002	-.001	.000	.028	.034	.000												
		Δ Steel	.000	.000	.006	.005	.000	.000	.000	.000	.004	.005	.000												
	G3	Elev. Top of Web	474.483	474.492	474.691	474.830	474.923	474.972	475.003	475.013	474.982	474.913	474.791												
		Δ Total	.000	.000	.038	.031	.000	-.001	.000	.000	.023	.028	.000												
		Δ Steel	.000	.000	.006	.005	.000	.000	.000	.000	.004	.004	.000												

See following sheet for notes and girder elevation and section.

SHEET A103

COMMONWEALTH OF KENTUCKY		
DEPARTMENT OF HIGHWAYS		
FRANKFORT		
COUNTY OF		
JEFFERSON		
164-13TH ST. TO 7TH ST.		
LOUISVILLE-LEXINGTON		
ROAD		
SP 56-273-11L		
STATION 208+08	P. E. PROJECT NO. 164-2(35)3	DRAWING NO.
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	18572

GIRDER CAMBER
STRUCTURAL STEEL

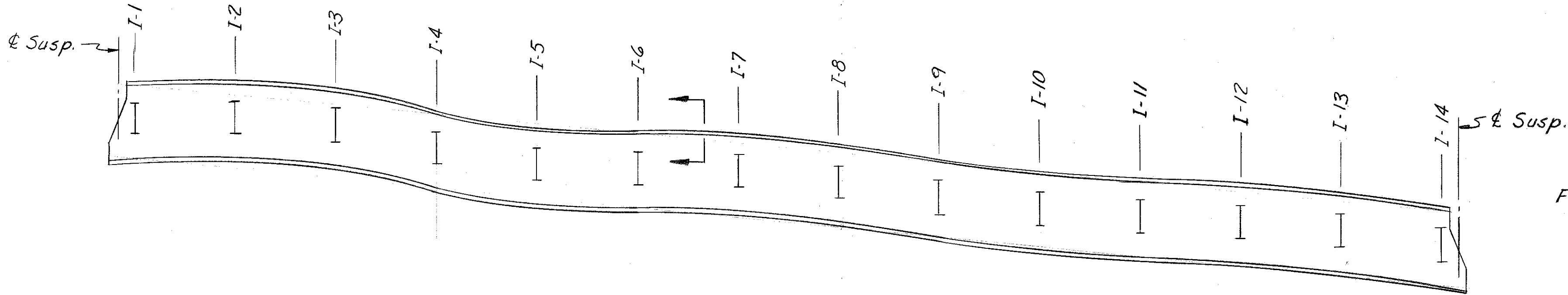
DESIGNED BY	CHECKED BY	DATE
DEFINED BY	CHECKED BY	DATE
TRACED BY	CHECKED BY	DATE

DESIGNED BY: C.E.F. & E.L.L.
CHECKED BY: BMD

LETTING DATE

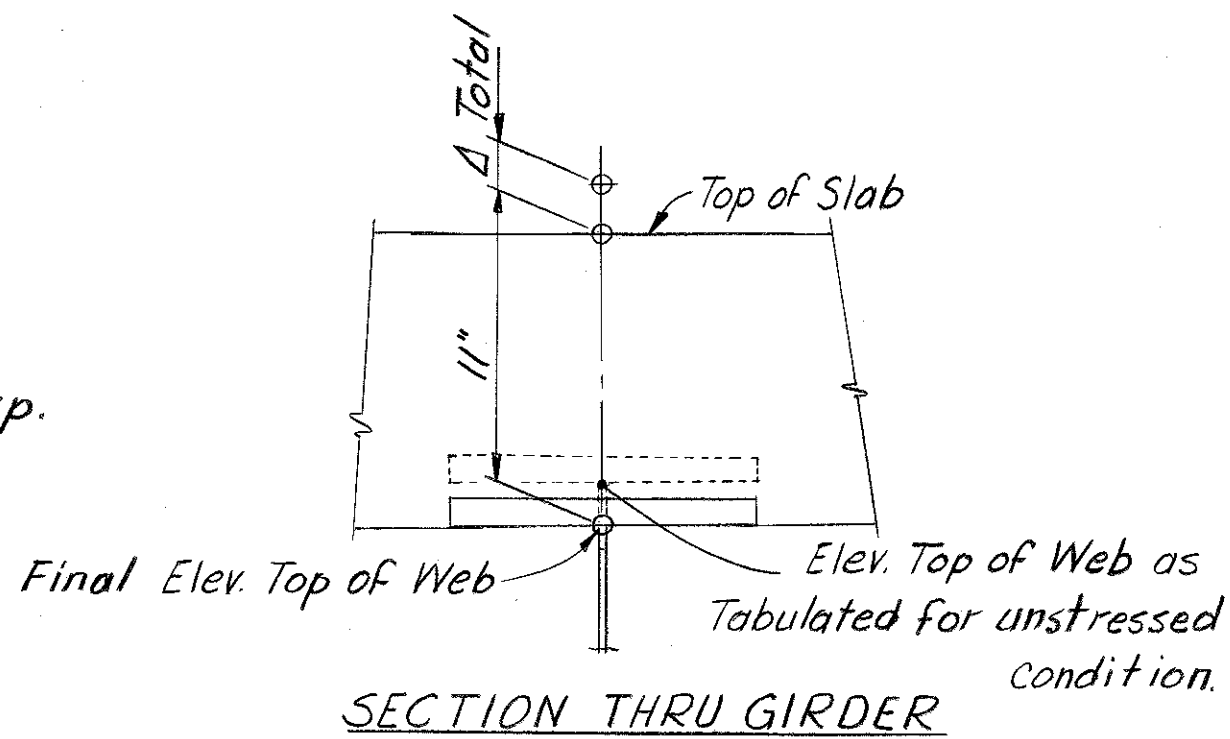
EASTBOUND ROADWAY

UNIT	GIRDER	FLOORBEAM NO.	± SUSP.	1* (Typ)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	± SUSP.
I	G2	Elev. Top of Web	488.063	488.052	487.876	487.650	487.386	487.137	486.927	486.731	486.500	486.234	485.983	485.770	485.571	485.334	485.073									485.058
		Δ Total	.000	.003	.050	.057	.023	.000	.027	.065	.065	.027	.000	.023	.057	.050	.003									.000
		Δ Steel	.000	.000	.007	.008	.003	.000	.004	.009	.009	.004	.000	.003	.008	.007	.000									.000
	G4	Elev. Top of Web	488.762	488.751	488.574	488.348	488.086	487.836	487.623	487.423	487.192	486.931	486.683	486.469	486.268	486.031	485.772									485.757
		Δ Total	.000	.002	.048	.055	.023	.000	.024	.058	.058	.024	.000	.023	.055	.048	.002									.000
		Δ Steel	.000	.000	.007	.008	.004	.000	.004	.009	.009	.004	.000	.004	.008	.007	.000									.000
II	G2	Elev. Top of Web	485.058	485.046	484.837	484.604	484.360	484.147	483.943	483.729	483.448	483.098	482.732	482.446	482.175	481.895	481.613	481.328	481.012	480.640	480.270	479.976	479.681	479.339	478.953	478.932
		Δ Total	.000	.002	.020	.013	-.005	.000	.066	.128	.130	.070	.000	-.014	-.008	-.006	.000	.041	.058	.025	.000	.029	.063	.054	.003	.000
		Δ Steel	.000	.000	.003	.002	-.001	.000	.010	.012	.019	.011	.000	-.002	-.001	-.001	.000	.006	.009	.004	.000	.004	.009	.008	.000	.000
	G4	Elev. Top of Web	485.757	485.739	485.451	485.141	484.819	484.583	484.376	484.160	483.881	483.530	483.119	482.884	482.613	482.332	482.049	481.760	481.443	481.073	480.706	480.411	479.776	479.776	479.390	479.368
		Δ Total	.000	.001	.018	.013	-.003	.000	.063	.123	.127	.066	.000	-.013	-.006	-.005	.000	.037	.052	.022	.000	.028	.064	.055	.003	.000
		Δ Steel	.000	.001	.003	.002	.000	.000	.010	.019	.020	.010	.000	-.002	-.001	-.001	.000	.006	.008	.003	.000	.004	.010	.009	.000	.000
III	G2	Elev. Top of Web	478.932	478.917	478.608	478.236	477.835	477.474	477.178	476.903	476.565	476.162	475.711	475.287	474.930	474.618	474.274	473.892								473.872
		Δ Total	.000	.003	.041	.033	-.003	.000	.069	.158	.185	.146	.060	.000	.008	.049	.054	.003								.000
		Δ Steel	.000	.001	.007	.006	-.001	.000	.012	.027	.032	.025	.010	.000	.001	.008	.009	.001								.000
	G4	Elev. Top of Web	479.368	479.354	479.069	478.722	478.350	478.019	477.756	477.508	477.203	476.824	476.397	475.995	475.657	475.351	475.013	474.636								474.616
		Δ Total	.000	.003	.038	.028	-.006	.000	.074	.164	.196	.155	.065	.000	.003	.047	.053	.003								.000
		Δ Steel	.000	.000	.006	.005	-.001	.000	.012	.027	.033	.026	.011	.000	.000	.008	.009	.000								.000
IV	G2	Elev. Top of Web	473.872	473.858	473.590	473.274	472.930	472.620	472.391	472.209	472.017	471.853	471.784	471.742	471.707	471.689										
		Δ Total	.000	.003	.066	.080	.040	.000	.019	.048	.029	.000	.017	.039	.029	.000										
		Δ Steel	.000	.000	.009	.011	.006	.000	.003	.007	.004	.000	.003	.006	.004	.000										
	G4	Elev. Top of Web	474.531	474.521	474.325	474.088	473.828	473.598	473.446	473.336	473.229	473.164	473.176	473.151	473.111	473.089										
		Δ Total	.000	.003	.059	.073	.038	.000	.013	.030	.013	.000	.027	.048	.033	.000										
		Δ Steel	.000	.001	.010	.013	.007	.000	.002	.005	.002	.000	.005	.008	.006	.000										
V	G2	Elev. Top of Web		471.638	471.646	471.675	471.758	471.882	472.051	472.224	472.441	472.652	472.883	473.090												473.103
		Δ Total		.000	.020	.009	.000	.042	.070	.042	.000	.009	.020	.000												.000
		Δ Steel		.000	.003	.001	.000	.006	.010	.006	.000	.001	.003	.000												.000
	G4	Elev. Top of Web		473.037	473.045	473.074	473.158	473.281	473.450	473.623	473.840	474.051	474.283	474.490												474.503
		Δ Total		.000	.020	.009	.000	.042	.070	.042	.000	.009	.020	.000												.000
		Δ Steel		.000	.003	.001	.000	.006	.010	.006	.000	.001	.003	.000												.000
VI	G2	Elev. Top of Web	473.103	473.113	473.373	473.613	473.824	474.062	474.271	474.514	474.741	474.952	475.198	475.437	475.702	475.939	476.145									
		Δ Total		.000	.064	.075	.035	.000	.022	.058	.058	.022	.000	.035	.075	.064	.000									
		Δ Steel		.000	.010	.012	.006	.000	.003	.009	.009	.003	.000	.006	.012	.010	.000									
	G4	Elev. Top of Web	474.503	474.513	474.776	475.014	475.220	475.461	475.673	475.922	476.149	476.355	476.597	476.834	477.104	477.342	477.544									
		Δ Total		.000	.068	.078	.033	.000	.026	.068	.068	.026	.000	.033	.078	.068	.000									
		Δ Steel		.000	.010	.012	.005	.000	.004	.010	.010	.004	.000	.005	.012	.010	.000									



ELEVATION OF GIRDERS - UNIT I (EB) SHOWN
(Other Units Similar)

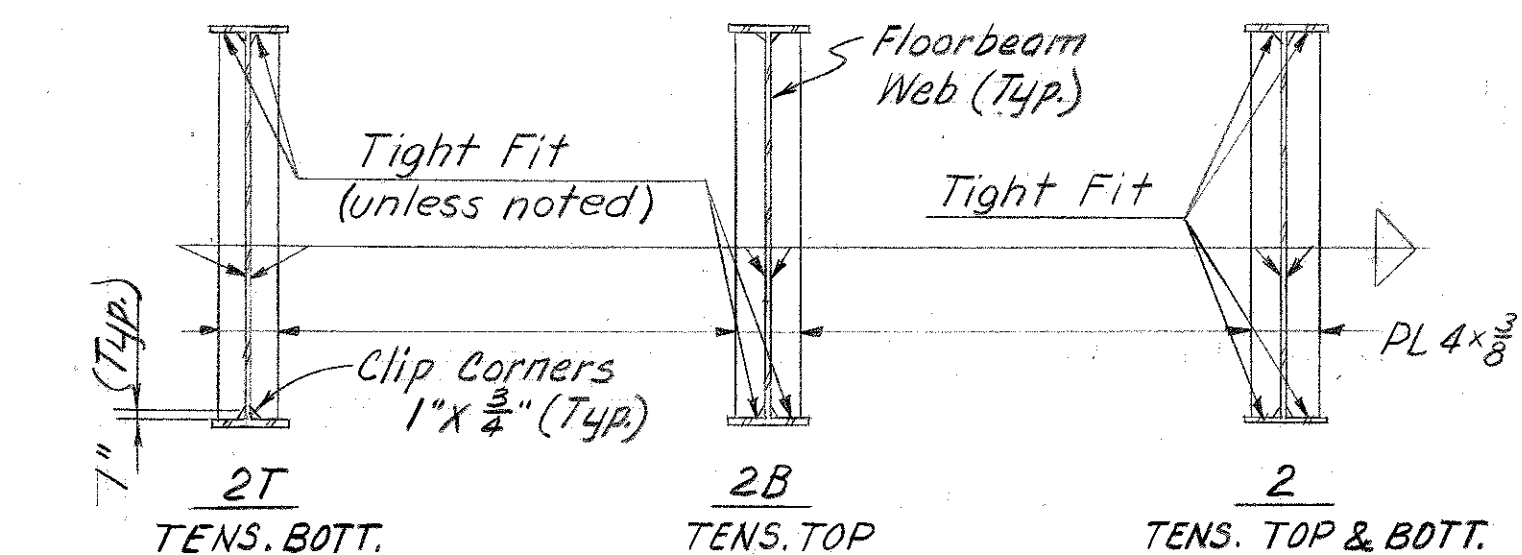
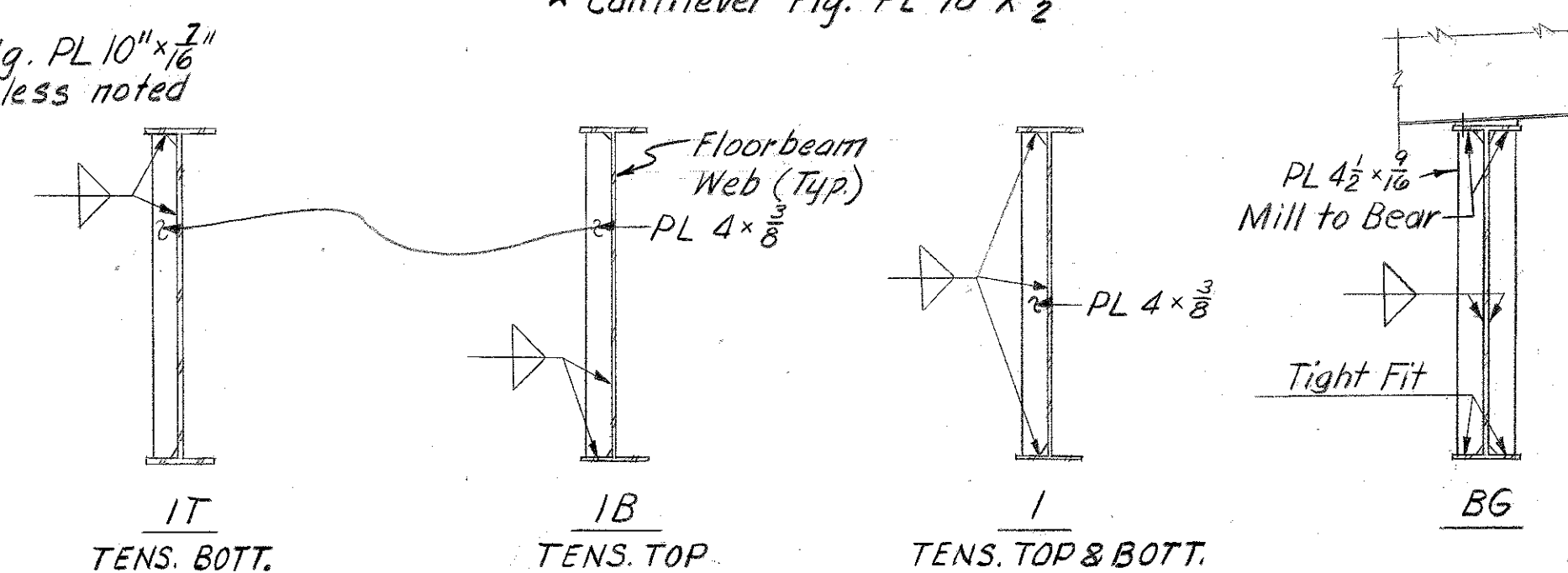
* Prefix with Unit Number for Floorbeam Number



NOTE:
All deflections are shown in feet. Elevations given are for the unstressed condition and contain all dead load camber. All girders must be cambered in the unstressed condition. Should the theoretical final elevation at top of web be desired subtract Δ Total from elevations given. Use Δ Total for Camber.
Stringers are to be placed so any natural camber will conform to the grade.
For Camber in Stringer System see Sheets A142 - A144
Floorbeams are to be built with no camber except as noted.
SHEET A104

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. 164-2(35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

GIRDER CAMBER
STRUCTURAL STEEL



SHEET A106

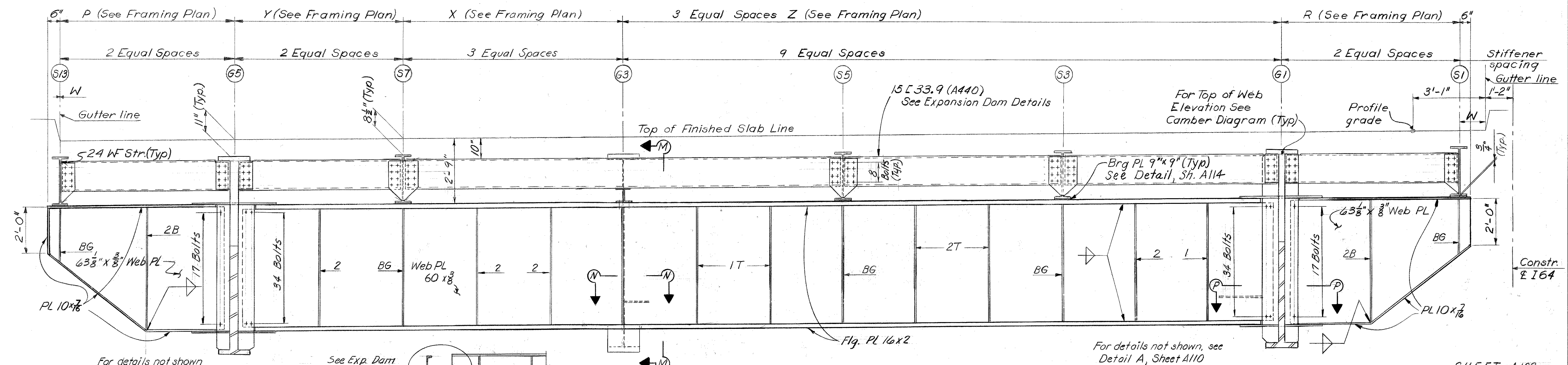
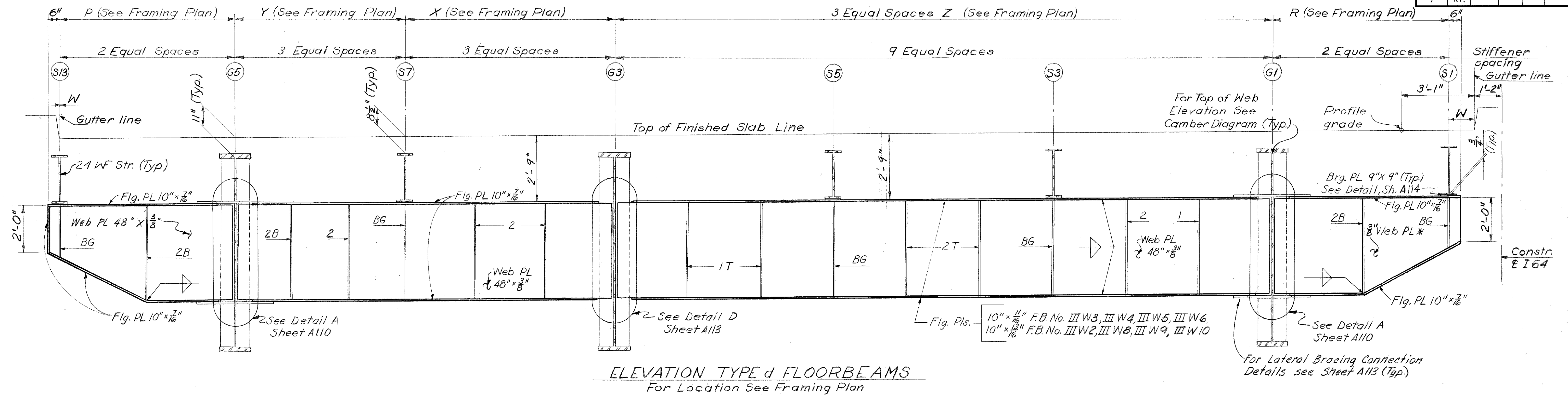
Notes:

- * For Web depth see Detail / A Sheet A110
- For other notes see Sheet A105
- ① For FB II E22 only
- ② Bend to conform with elevations shown above and for $8\frac{1}{2}" \text{ dim. @ } S8$
- ③ Bend to obtain a $9" \text{ dim. @ } \textcircled{1}$

⊗ See Elevation

FLOORBEAMS
STRUCTURAL STEEL

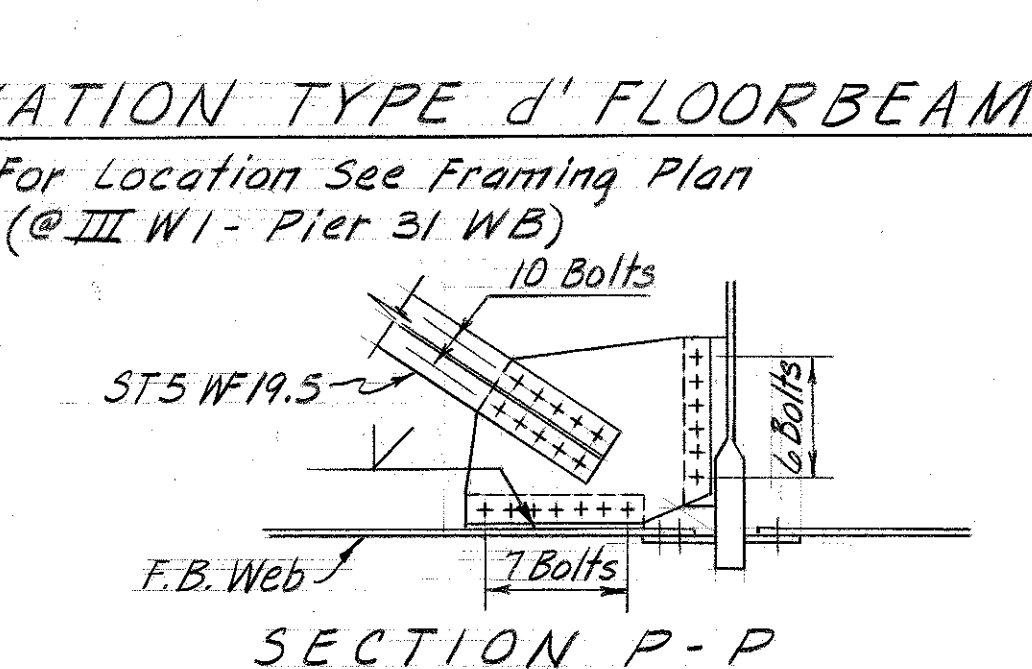
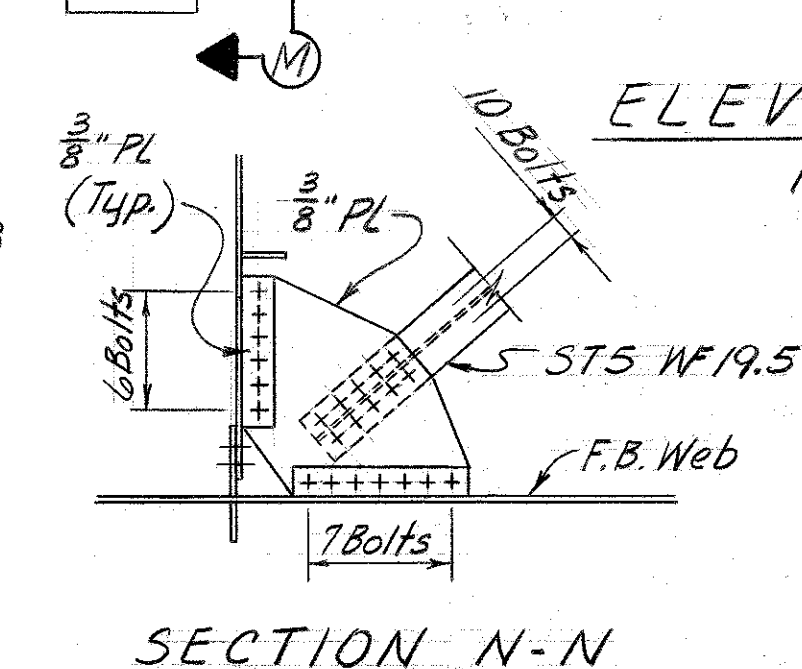
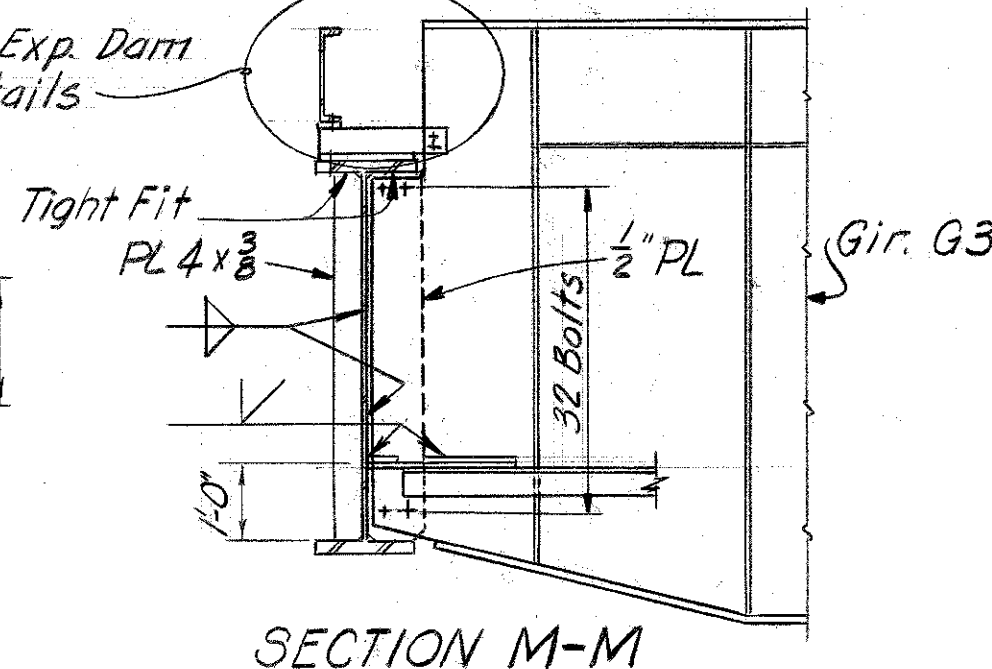
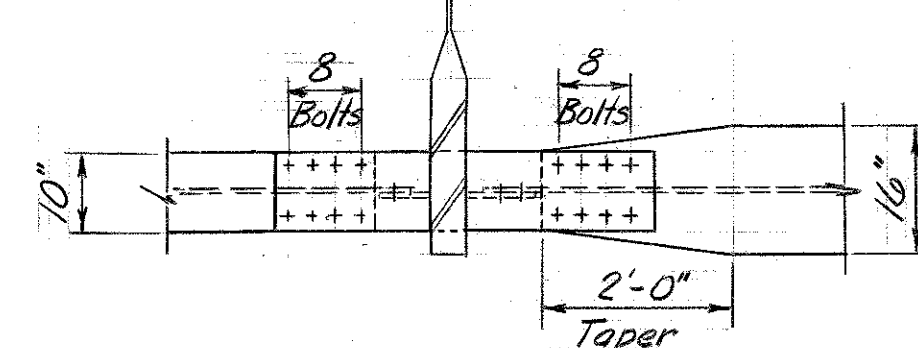
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For details not shown see Detail A, Sheet A110

See Exp. Dam Details

For details not shown, see Detail A, Sheet A110

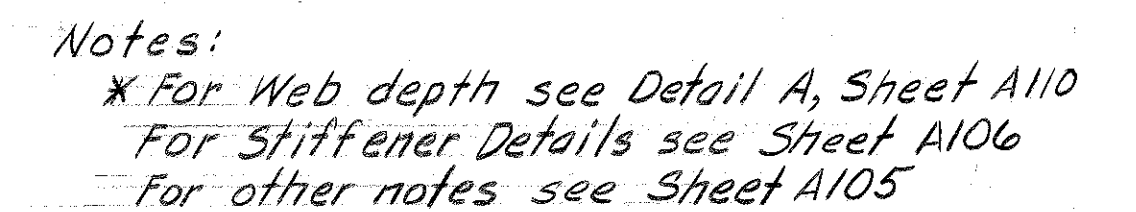


Notes:
For Stiffener details see Sheet A106
*For Web depth see Detail A, Sheet A110
For other notes see Sheet A105

**FLOORBEAMS
STRUCTURAL STEEL**

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08 PROJECT NO. I 64-2(35) 33
BRIDGE NUMBER 18572 INDEX

DESIGNED BY: T.B.S. CHECKED BY: B.M.D. DATE: 9/13
DATE: 1-11
REVISIONS: 1-11
DATE: 1-11
CHECKED BY: B.M.D. DATE: 1-11

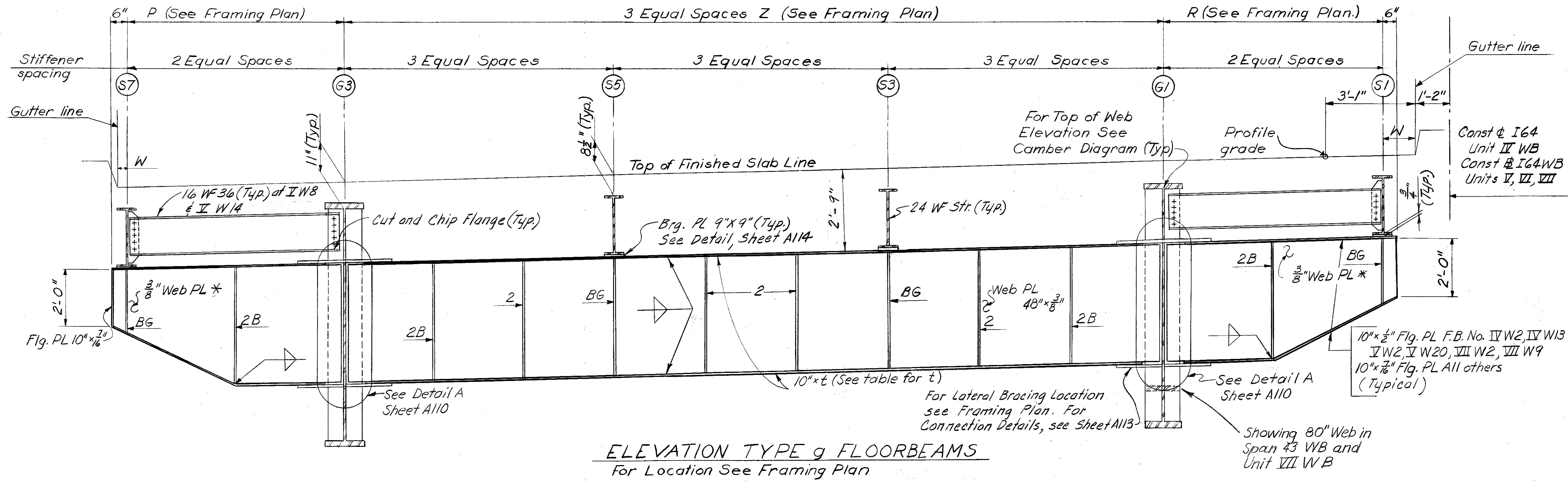


FINAL TOP OF SLAB ELEVATIONS					Dimen W ①
	@G5	@Break	@G3	@G1	
F.B. III W13	477.479	477.937	477.988	478.424	6.040
W14	476.891	477.594	477.660	478.095	5.094
W15	476.314	477.250	477.331	477.767	4.148
W16	475.803	476.907	477.003	477.438	3.202
W17	475.402	476.564	476.674	477.110	2.256

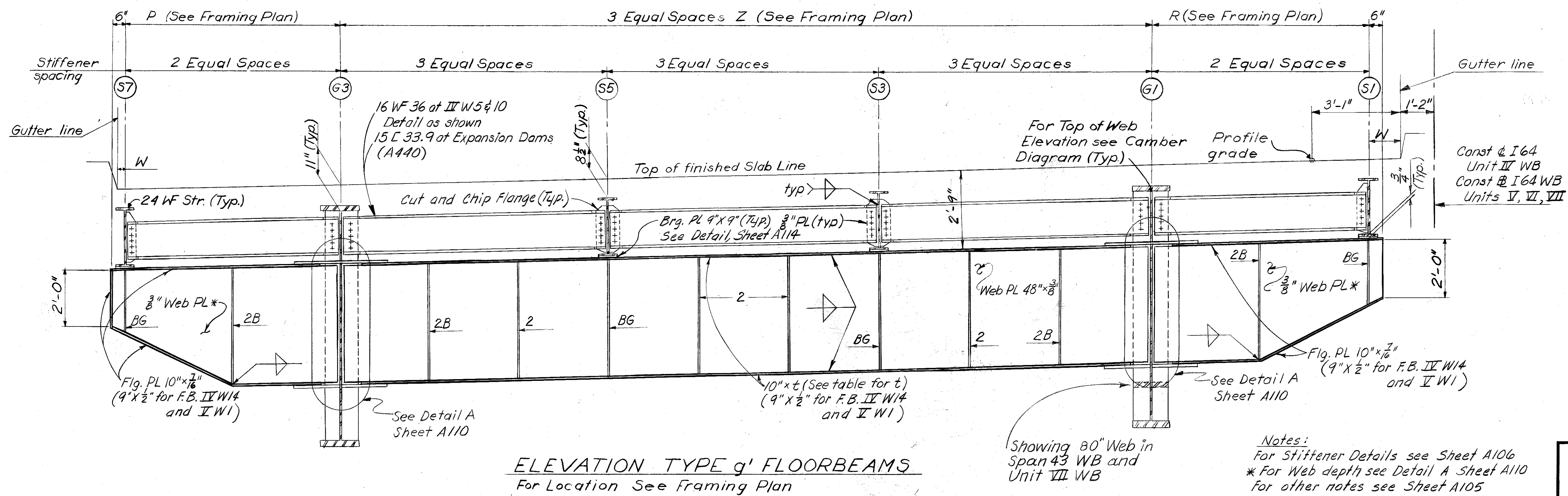
FLOOR BEAMS
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS FRANKFORT COUNTY OF JEFFERSON	
I 64-13TH ST. TO 7TH ST. LOUISVILLE - LEXINGTON ROAD	
STATION 208+08	SP 56-273-11L P. E. PROJECT NO. I 64-2 (35) 3
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO. 10572





TYPE g FLOORBEAMS TABLE OF FLANGE TH.												
F.B. No.	II W2	II W3	II W4	II W6	II W7	II W8	II W9	II W11	II W12	II W13	II W14	II W15
t	5/8	1/2	3/16	3/16	3/16	3/16	3/16	3/16	1/2	5/8		
F.B. No.	II W2	II W3	II W4	II W6	II W7	II W8	II W9	II W11	II W12	II W13	II W14	II W15
t	5/8	3/16	3/16	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
F.B. No.	II W15	II W16	II W18	II W19	II W20	II W21	II W22	II W23	II W24	II W25	II W26	II W27
t	1/2	1/2	3/16	3/16	5/8	3/16	1/2	1/2	1/2	1/2		
F.B. No.	II W28	II W29	II W30	II W31	II W32	II W33	II W34	II W35	II W36	II W37	II W38	II W39
t	1/2	1/2	1/2	3/16	5/8	3/16	3/16	3/16	3/16	5/8		



TYPE g' FLOORBEAMS TABLE OF FLANGE TH.												
F.B. No.	II W1	II W5	II W10	II W14	II W1	II W2	II W1	II W13	II W1	II W10		
t	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16		

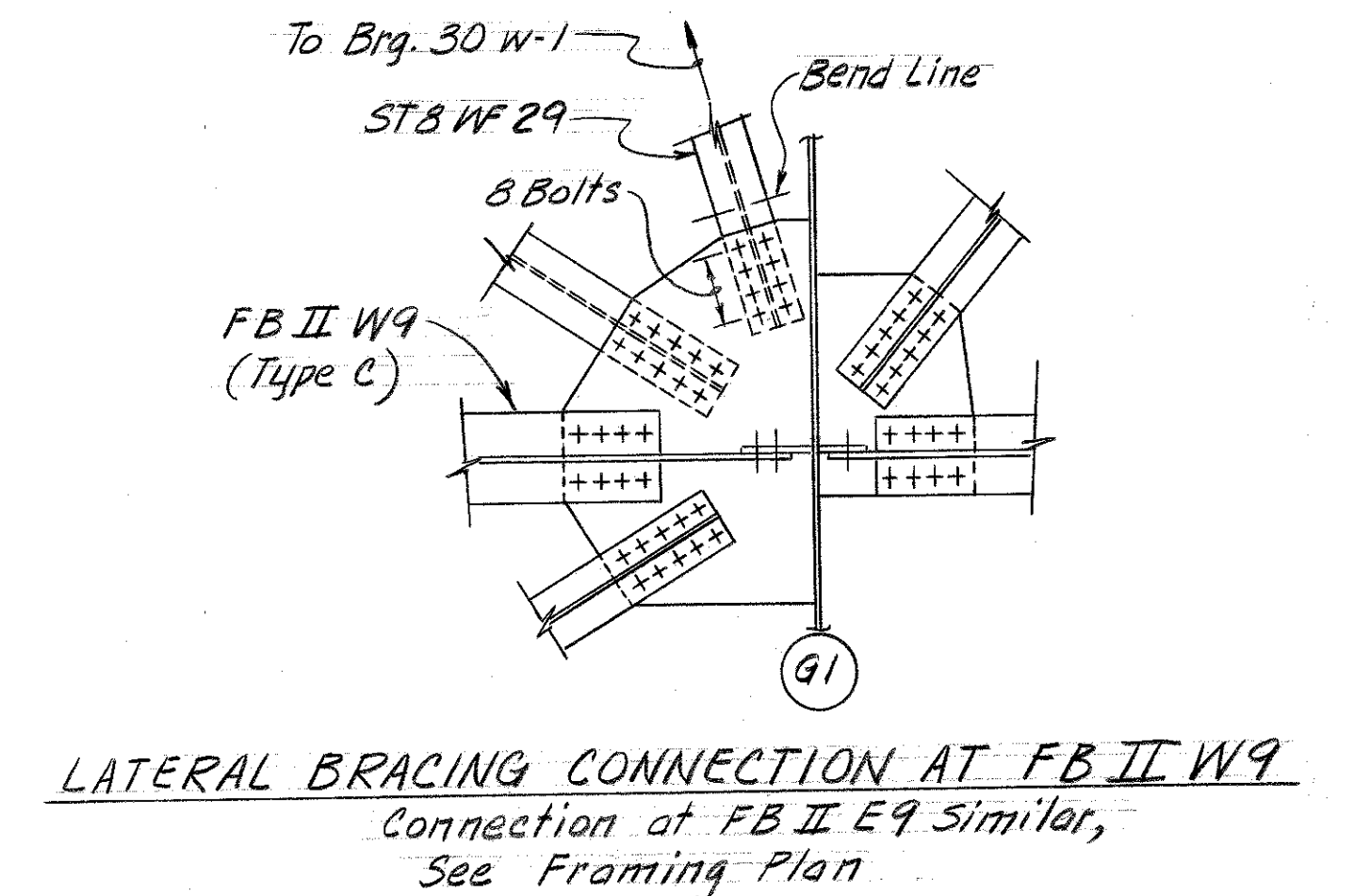
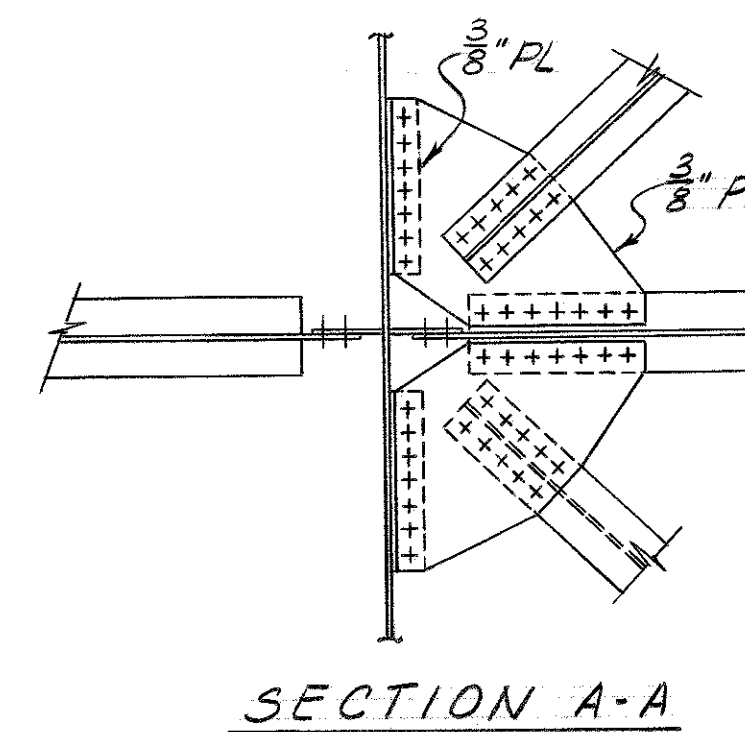
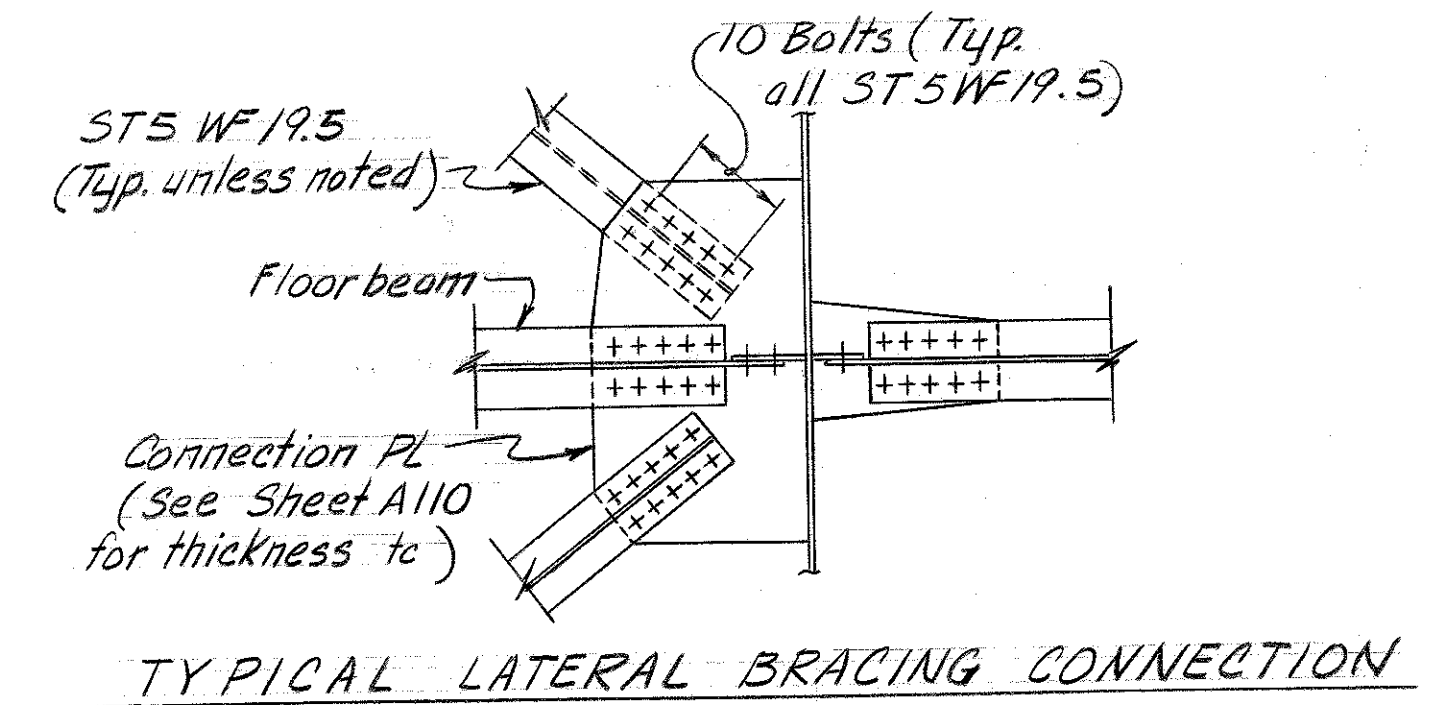
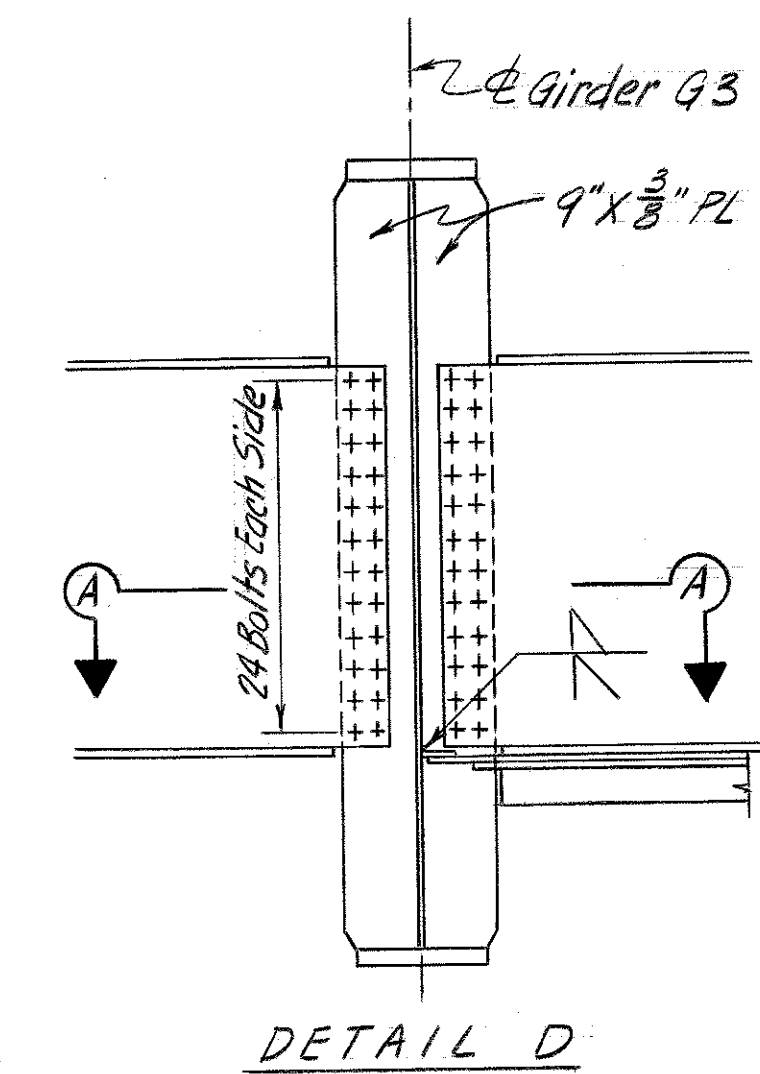
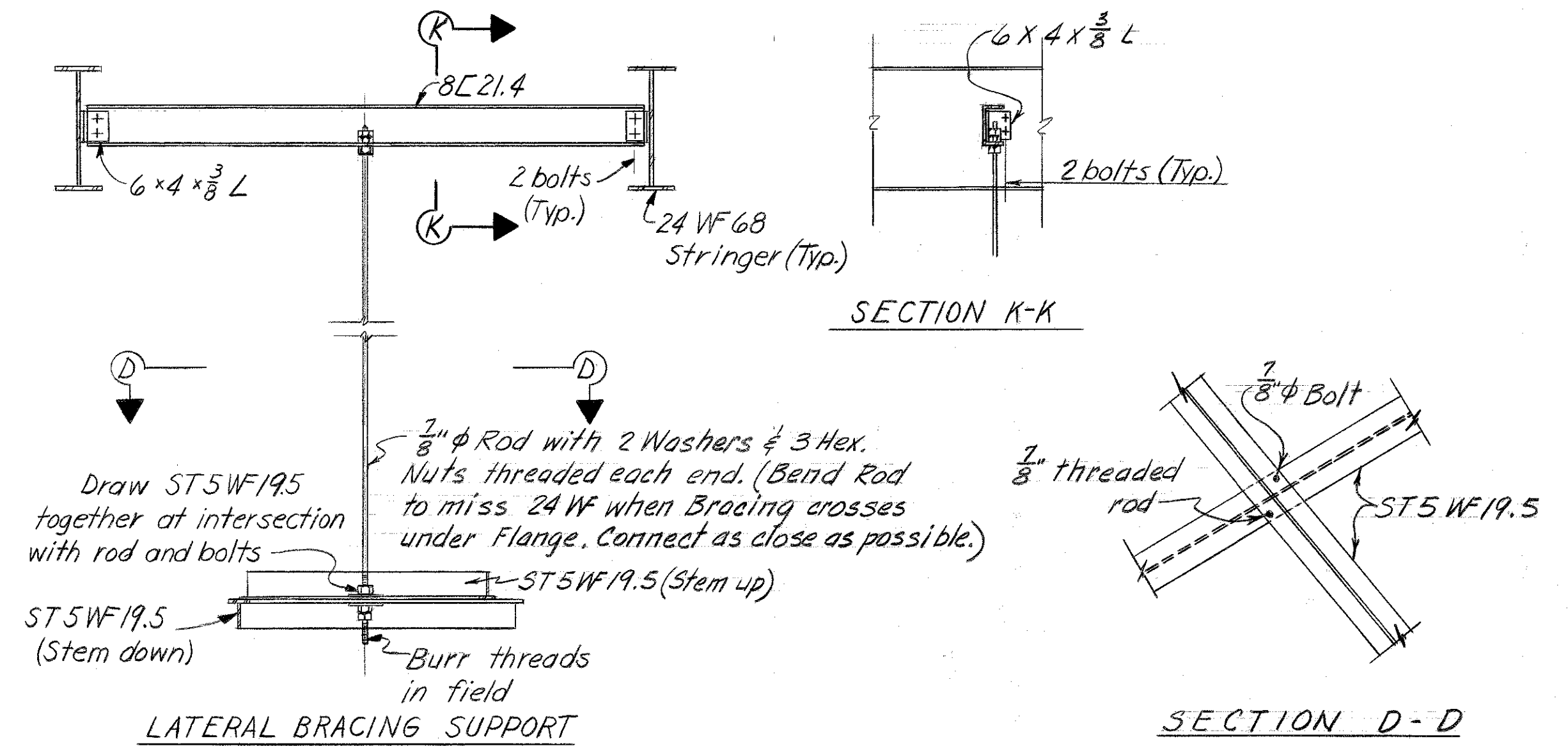
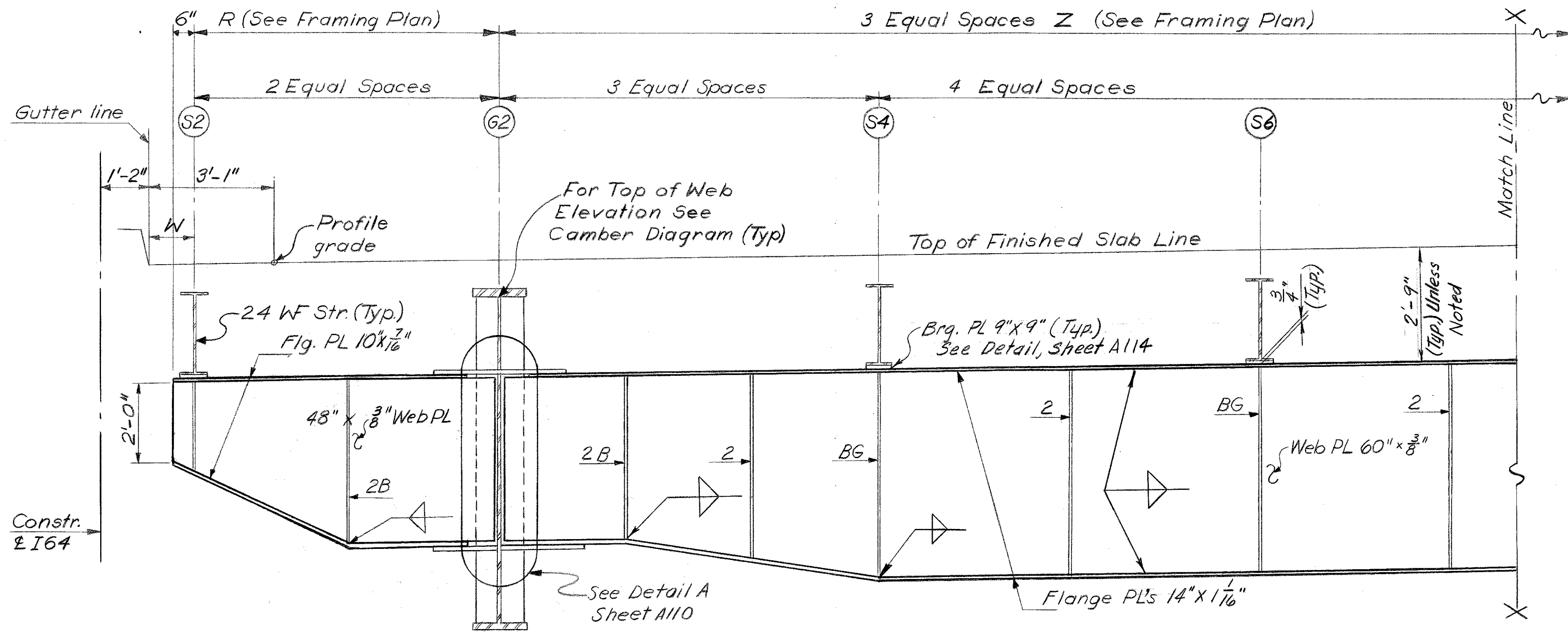
⊗ See Elevation

Notes:
For Stiffener Details see Sheet A106
* For Web depth see Detail A Sheet A110
For other notes see Sheet A105

FLOORBEAMS
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
PROJECT NO. 164-2(35)3
BRIDGE NUMBER
18572

DESIGNED BY: MDC
CHECKED BY: LIT JMB
DATE: 8/16
REVISIONS:
1. DATE: 1/11
2. DATE: 1/11
3. DATE: 1/11

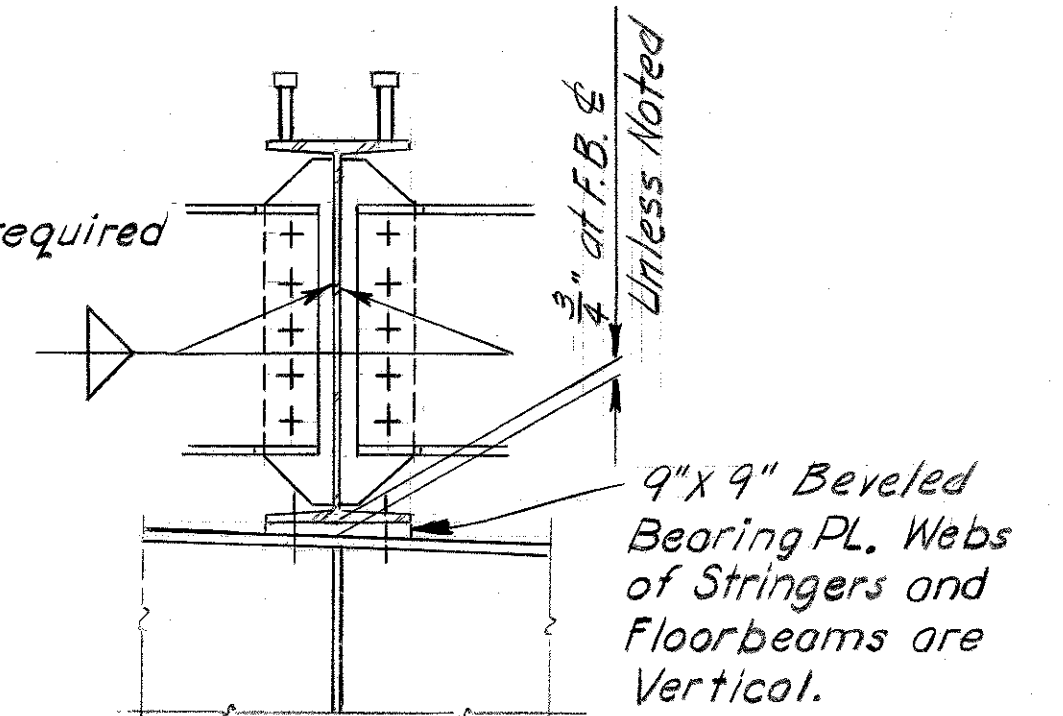
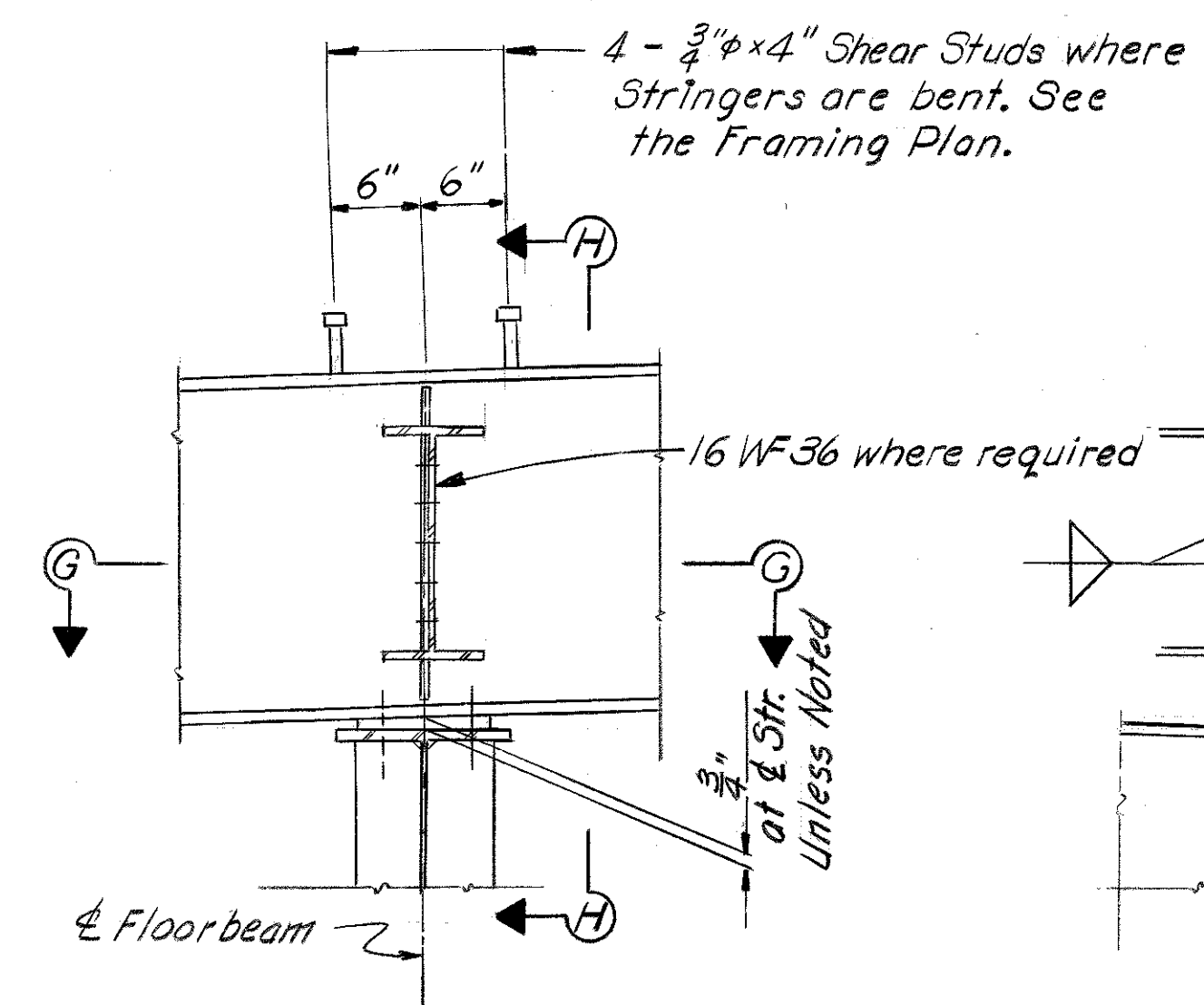
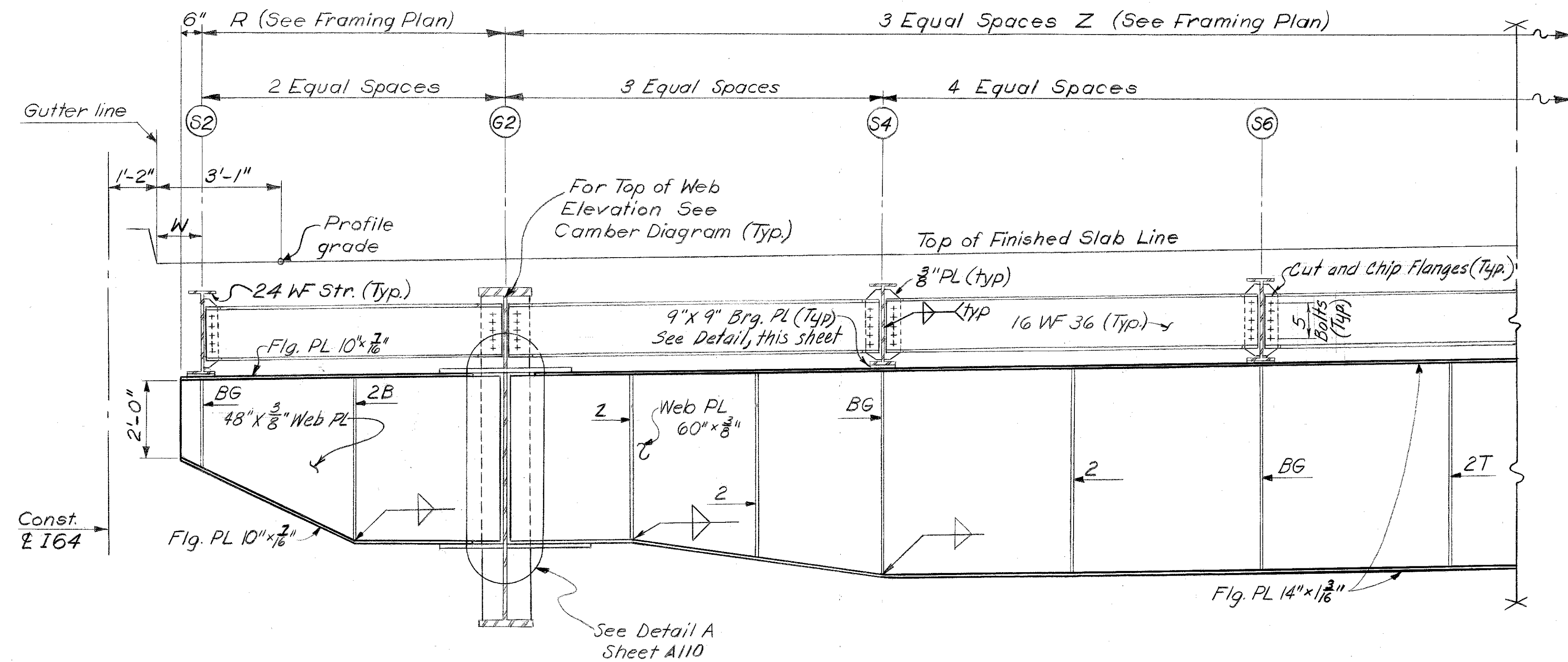


Notes:
For Stiffener Details see Sheet A106
For other notes see Sheet A105

ELEVATION TYPE H FLOORBEAMS
For Location See Framing Plan

FLOORBEAMS
STRUCTURAL STEEL

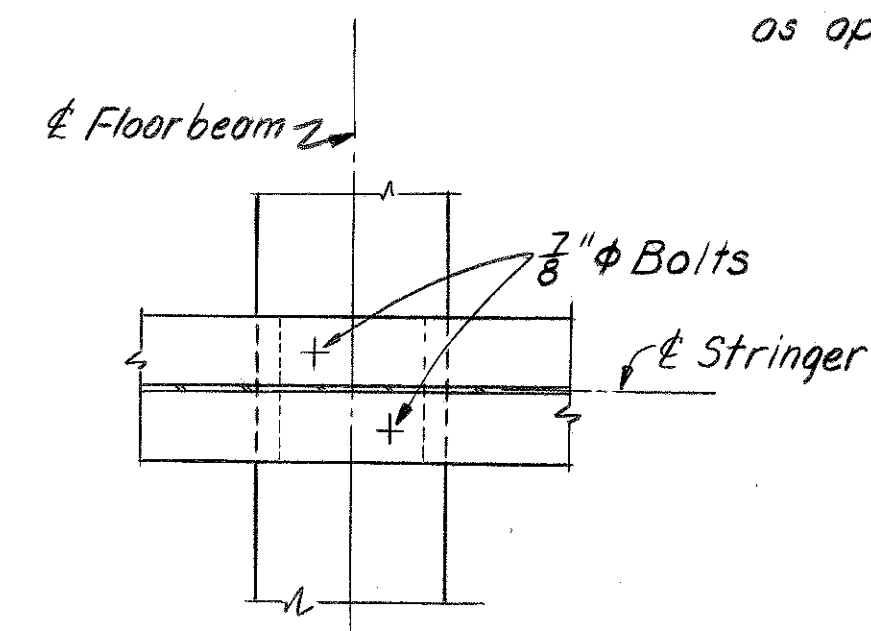
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7	KY.				



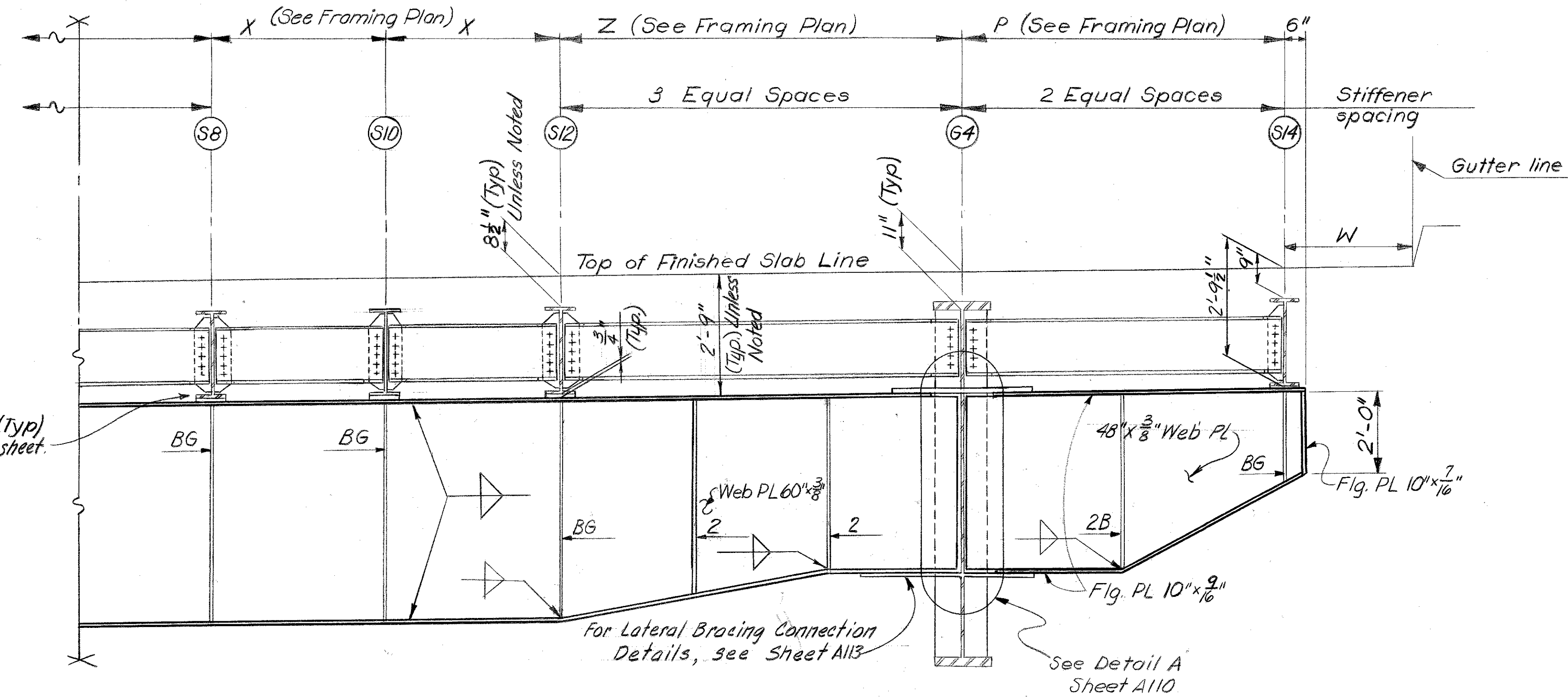
STRINGER BEARING &
SHEAR STUD DETAILS

SECTION H-H

Note: Bent Stringers may be bent either hot or cold, as approved by the Engineer.



SECTION G-G



ELEVATION TYPE H' FLOORBEAM

For Location See Framing Plan
(F.B. III E11 - Pier 35 EB)

Notes:
For Stiffener Details see Sheet A106
For other notes see Sheet A105

FLOORBEAMS
STRUCTURAL STEEL

SHEET A114

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
SP 56-273-11L

STATION 208+08 PROJECT NO. 164-2(35)3

BRIDGE NUMBER	DRAWING NO. 18572	INDEX
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DESIGNED BY: JDC	CHECKED BY: JMB	DATE: 1-11
DATE: 1-11	DATE: 1-11	DATE: 1-11
TRACED BY: JMB	CHECKED BY: JMB	DATE: 1-11

LETTING DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

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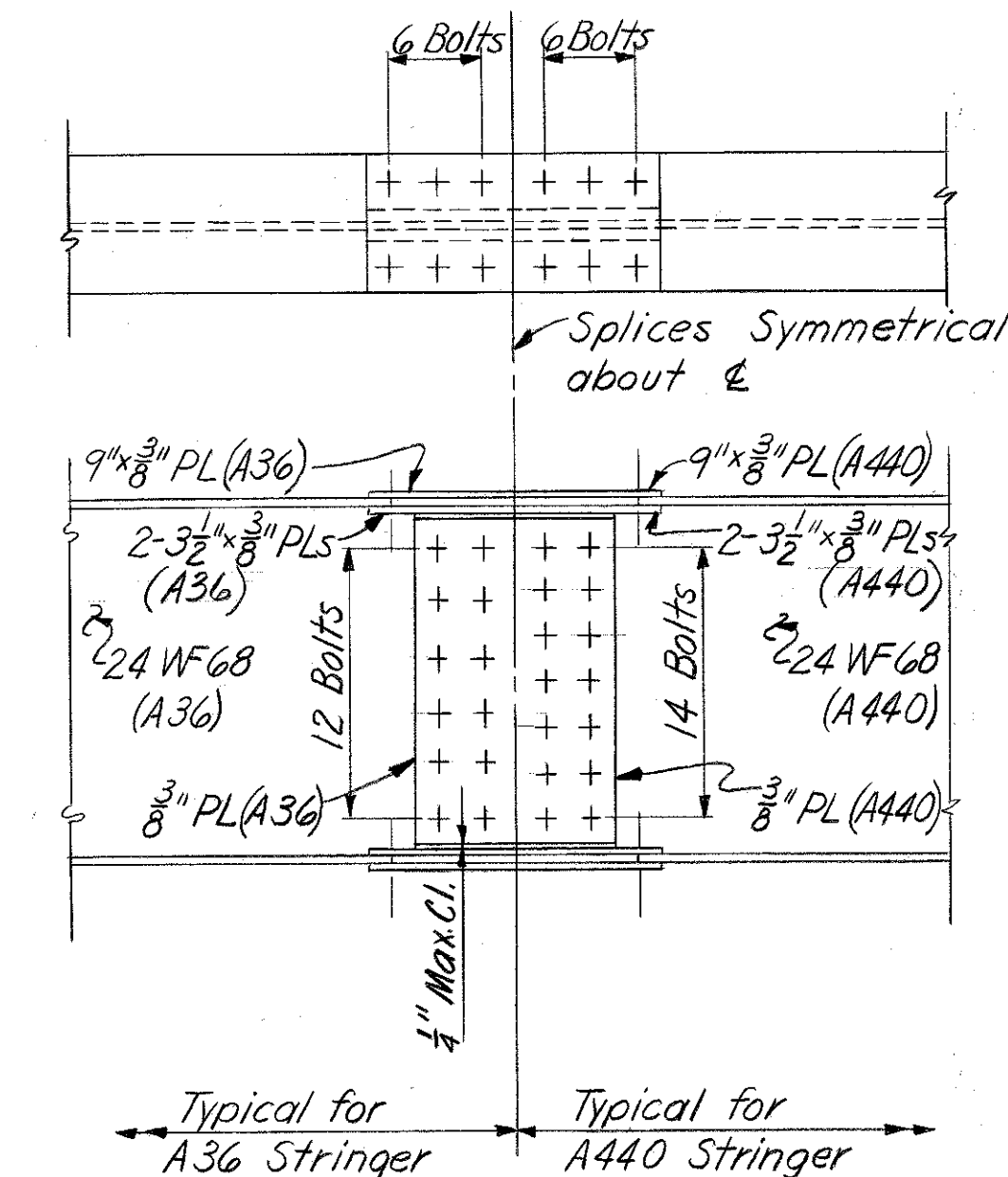
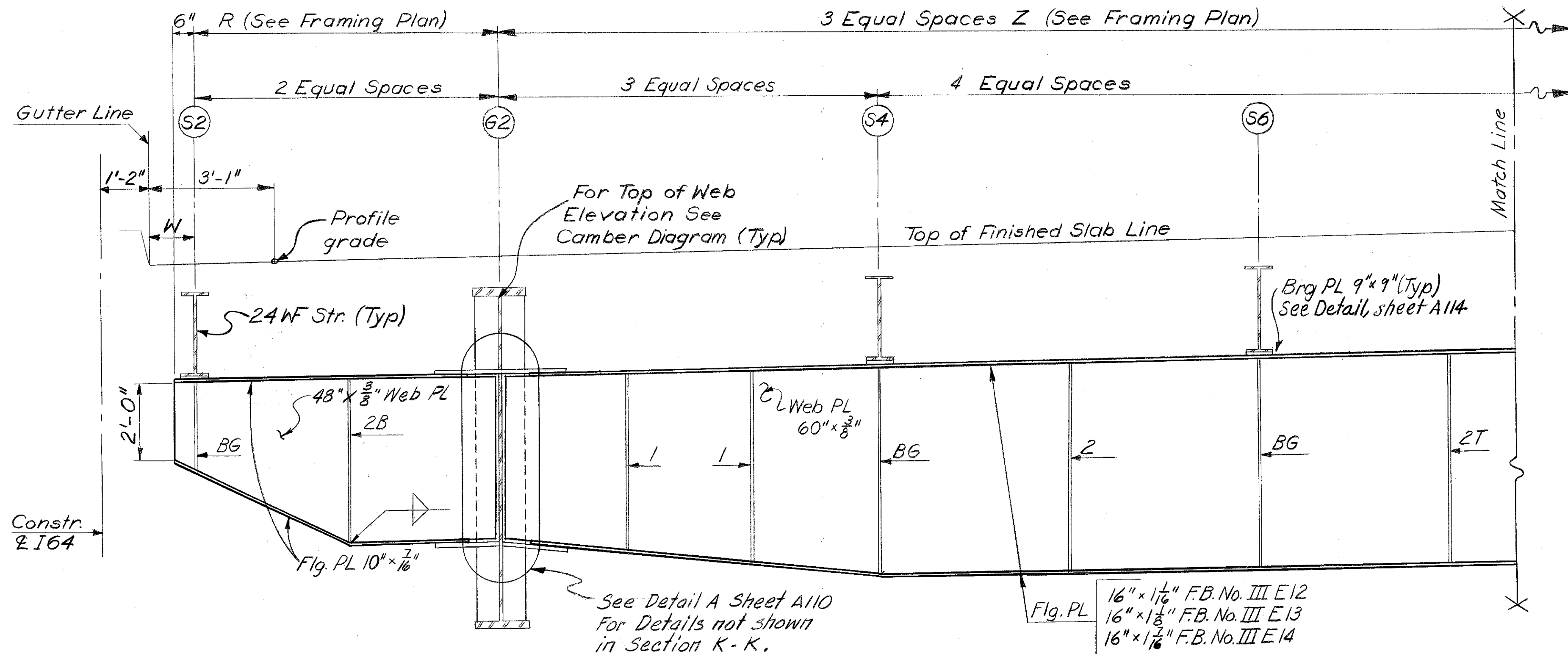
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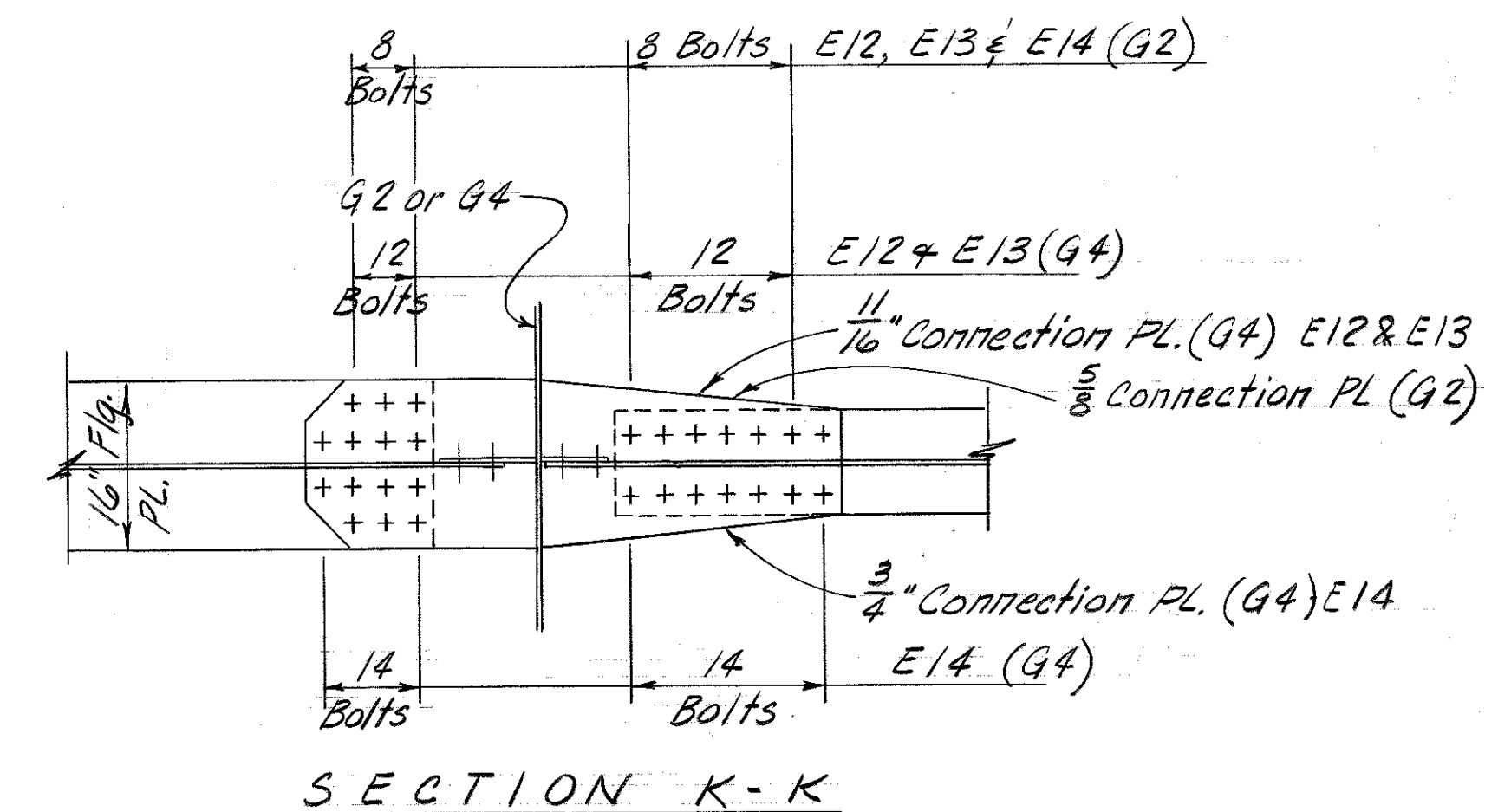
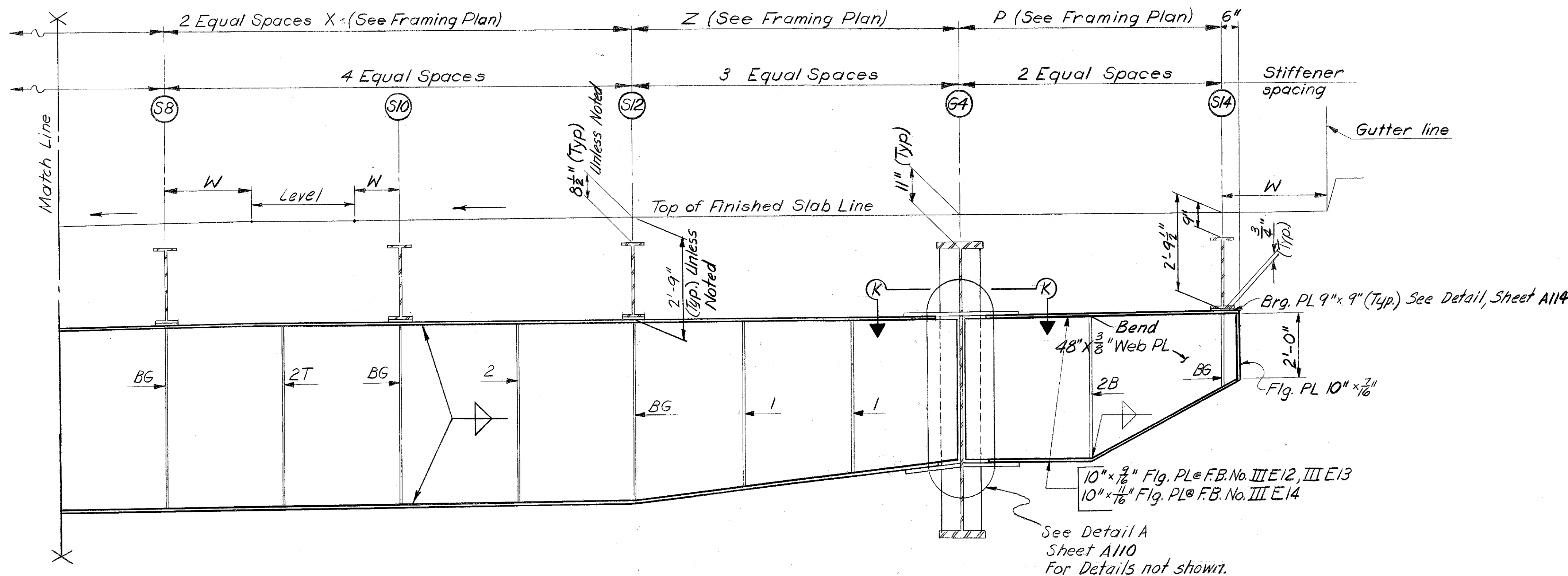
DATE

DATE

DATE



FIELD SPLICE FOR 24 WF68 STRINGER



SECTION K-K

ELEVATION TYPE J FLOORBEAMS
For Location See Framing Plan

Notes:
For Stiffener Details see Sheet A106
For other notes see Sheet A105

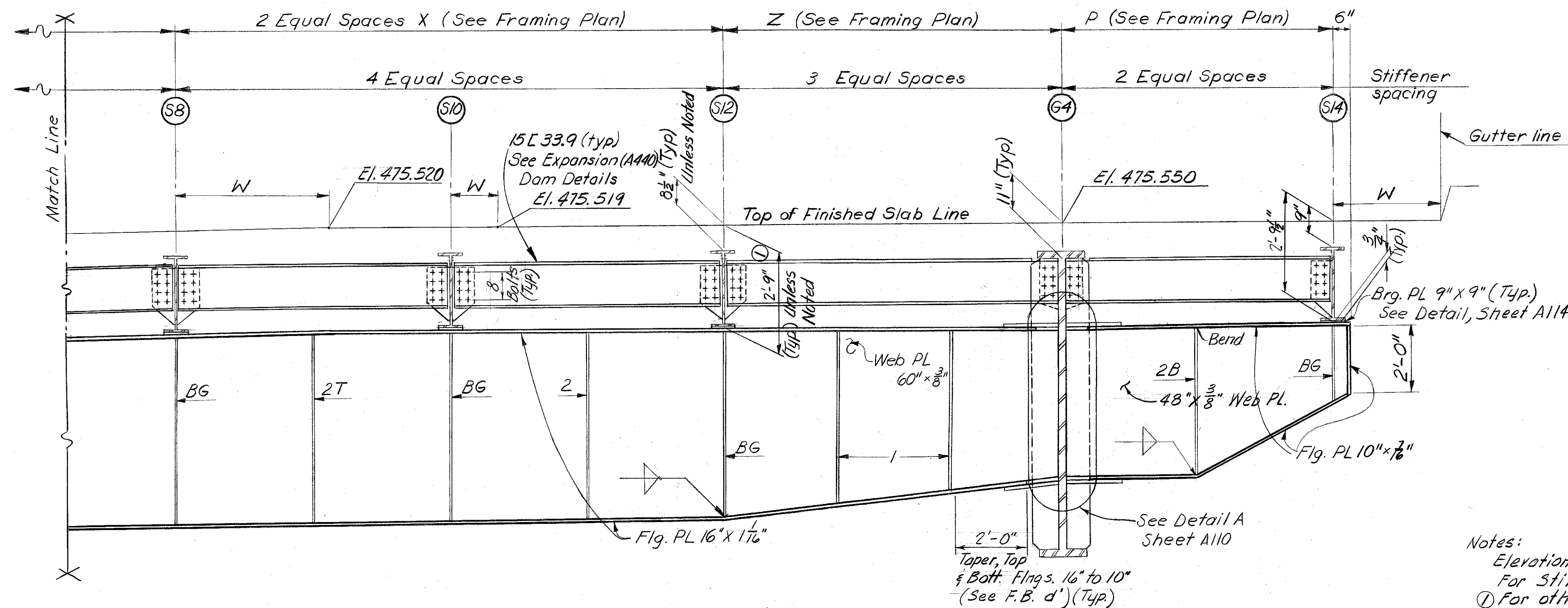
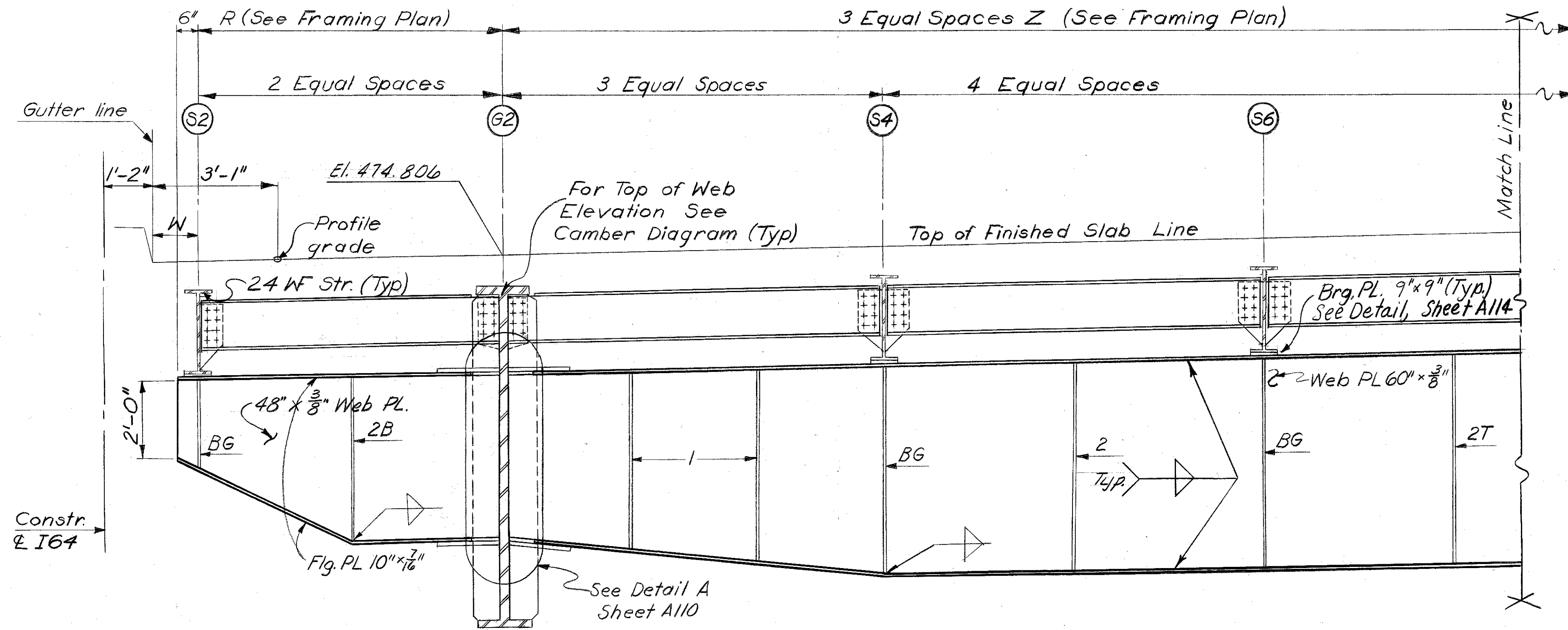
FINAL TOP OF SLAB ELEVATION			
	@G2	@Breaks	@G4
FB III E12	475.839	476.313	476.571
13	475.486	476.022	476.221
14	475.137	475.764	475.877

FLOORBEAMS
STRUCTURAL STEEL

SHEET A115

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. 164-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

LETTING DATE



ELEVATION TYPE j' FLOORBEAMS
For Location See Framing Plan
(F.B. III E15, Pier 36 EB)

Notes:
Elevations shown are final Top of Slab.
For Stiffener Details see Sheet A106
① For other notes see Sheet A105

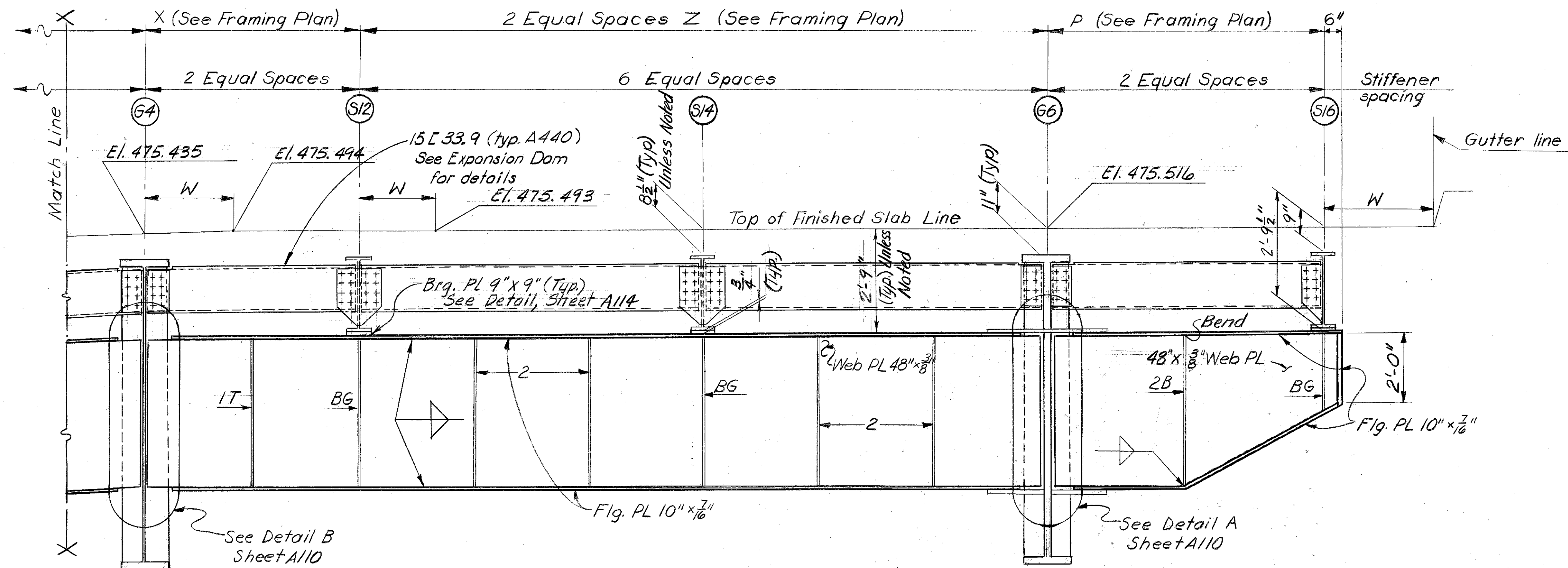
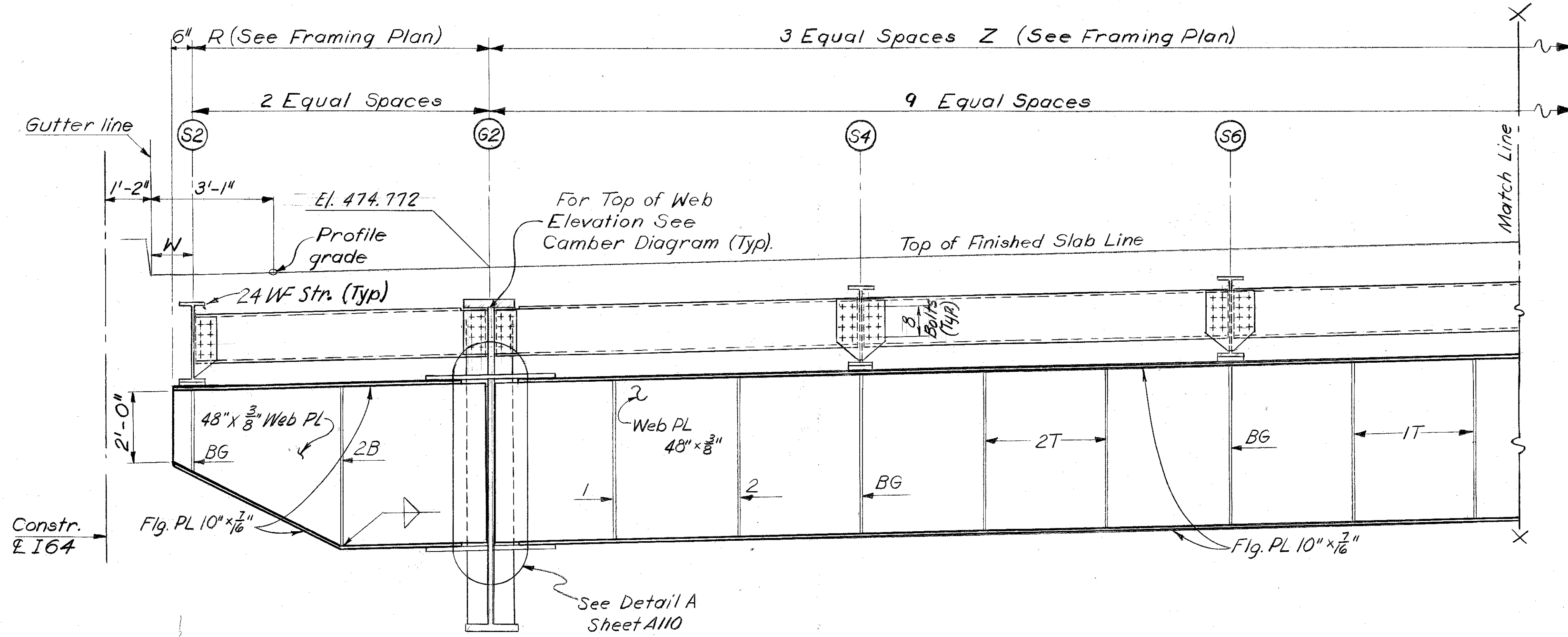
SHEET A116

COMMONWEALTH OF KENTUCKY		
DEPARTMENT OF HIGHWAYS		
FRANKFORT		
COUNTY OF		
JEFFERSON		
164-13 TH ST. TO 7 TH ST		
LOUISVILLE-LEXINGTON		
ROAD		
STATION 208+08	P. E. PROJECT NO. I 64-2 (35) 3	SP 56-273-11L
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18572

FLOORBEAMS
STRUCTURAL STEEL

DESIGNED BY	DATE	REVISION	DATE
7/35	11/17/71		
CHECKED BY	DATE	REVISION	DATE
7/35	11/17/71		
TRACED BY	DATE	REVISION	DATE
7/35	11/17/71		

LETTING DATE



ELEVATION TYPE K' FLOORBEAM
For Location See Framing Plan
(F. B. IV E1 - Pier 36 EB)

Notes:
Elevations shown are final Top of Slab.
For Stiffener Details see Sheet A106
For other notes see Sheet A105

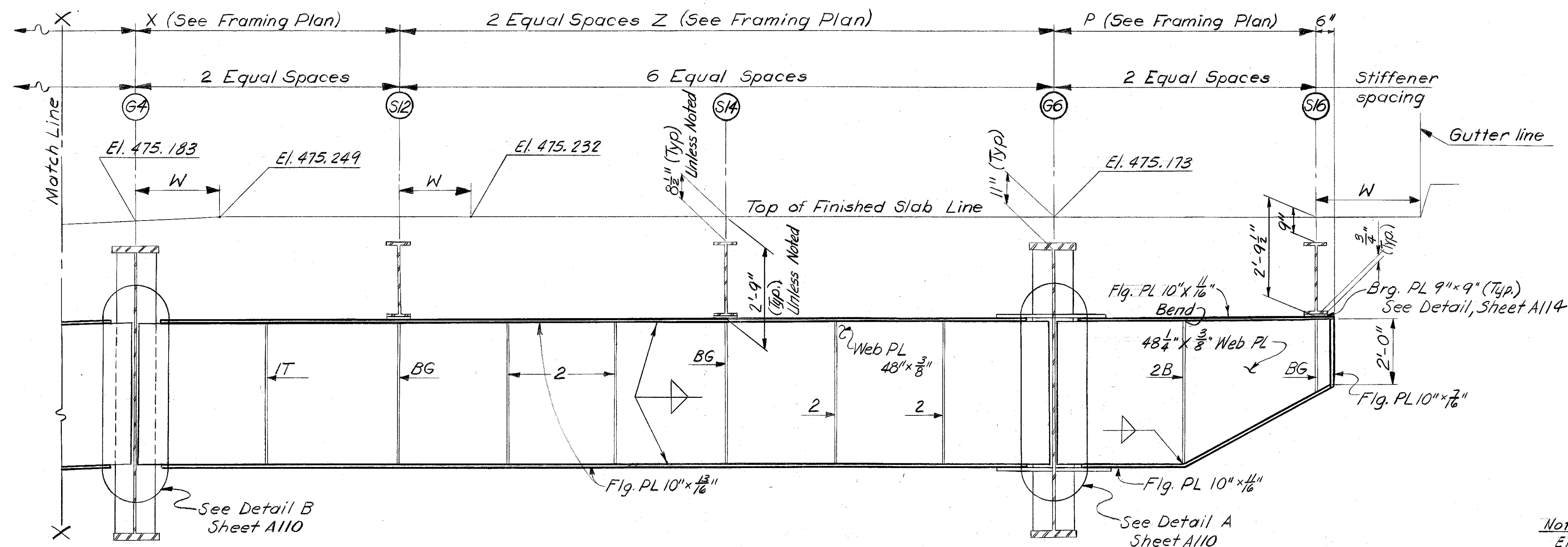
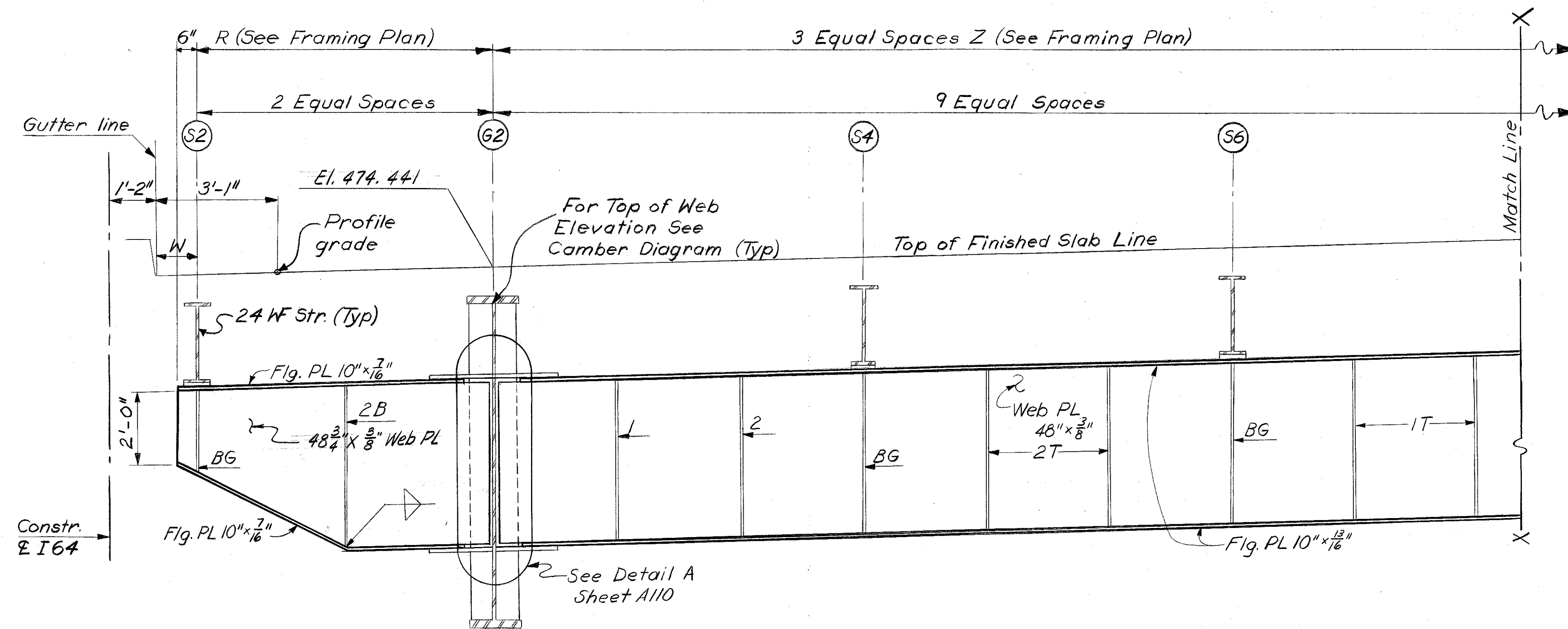
SHEET A117

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD SP 56-273-11L
STATION 208+08 P. E. PROJECT NO. I 64-2 (35) 3
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
18572

**FLOORBEAMS
STRUCTURAL STEEL**

DESIGNED BY: RBS	CHECKED BY: MDC	DATE: 8/20	REVISION:	DATE:
DETAILED BY: LLL	CHECKED BY: BRL	DATE: 1-71	REVISION:	DATE:
TRACED BY:	CHECKED BY:	DATE:	REVISION:	DATE:

LETTING DATE



ELEVATION TYPE K FLOORBEAM
For Location See Framing Plan
(FB II E 2)

Notes:
Elevations shown are final Top of Slab.
For Stiffener Details see Sheet A106
For Other Notes see Sheet A105

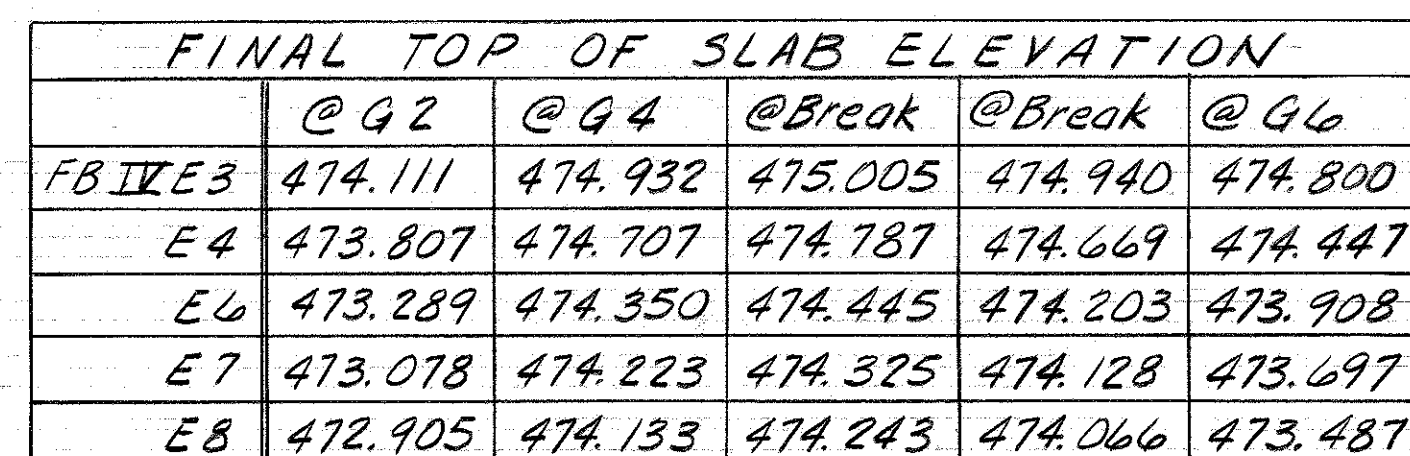
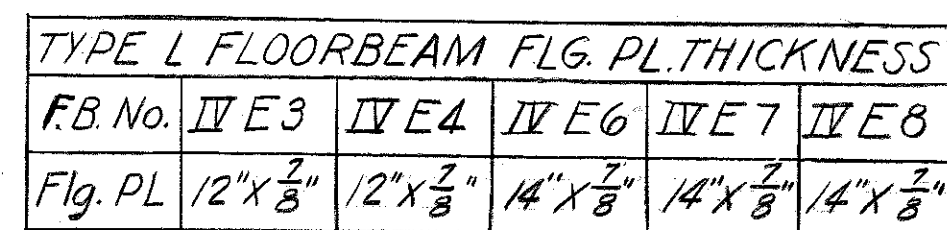
SHEET A118

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD SP 56-273-1 IL

STATION 208+08 P.E. PROJECT NO. I 64-2 (35) 3
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
18572

FLOORBEAMS
STRUCTURAL STEEL

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
LM B	SLK	1-11		



Notes:
For Stiffener Details, see Sheet A106
For other notes see Sheet A105

FLOOR BEAMS
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD S P 56-273-1111
STATION 208+08 P. E. PROJECT NO. I 64-2 (35) 3
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
18572

LETTING DATE

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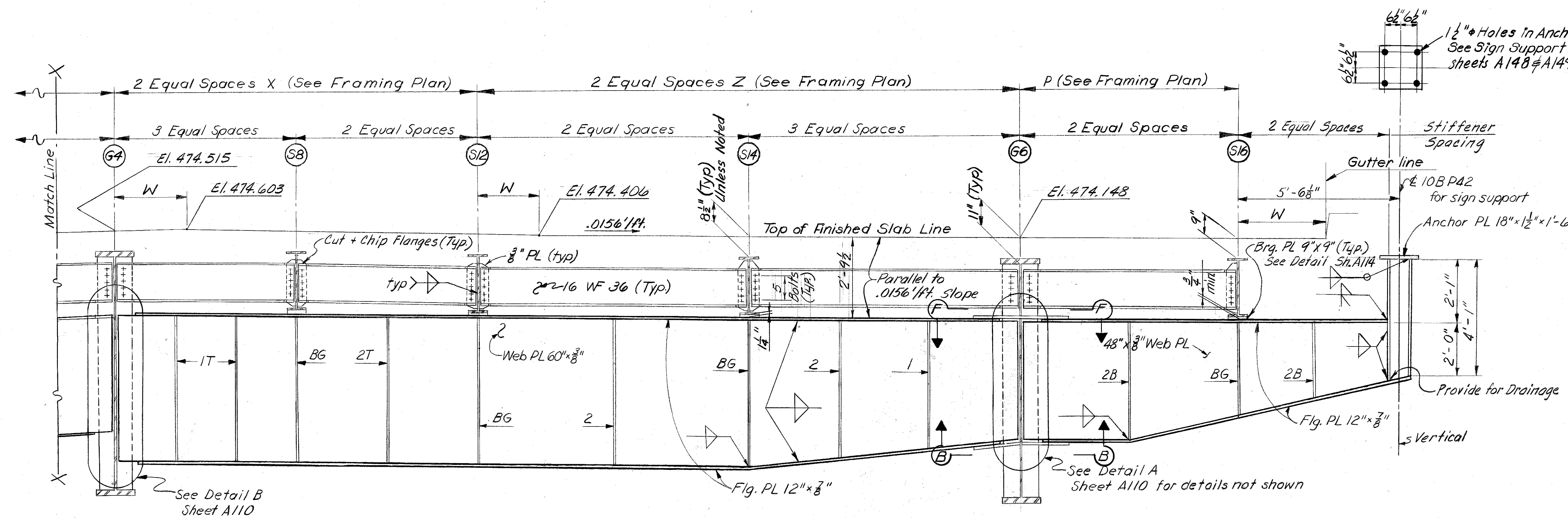
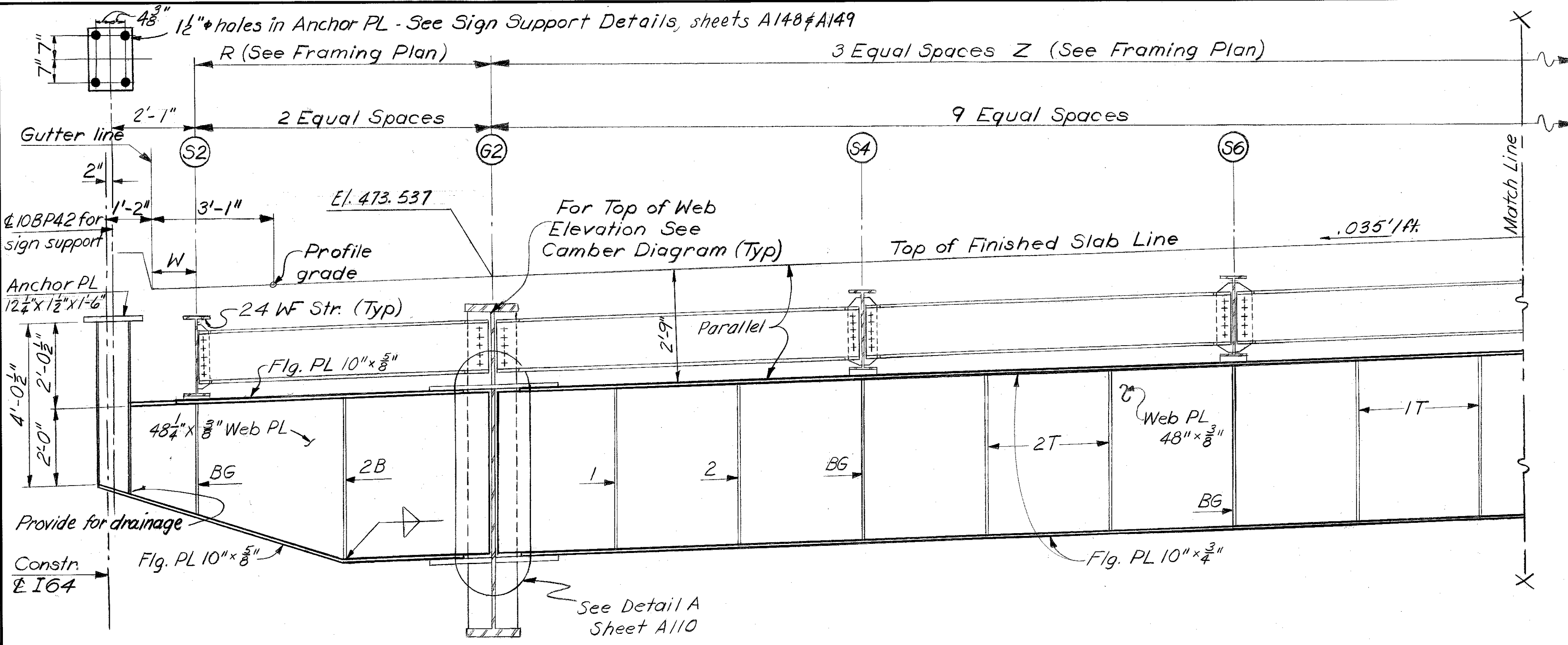
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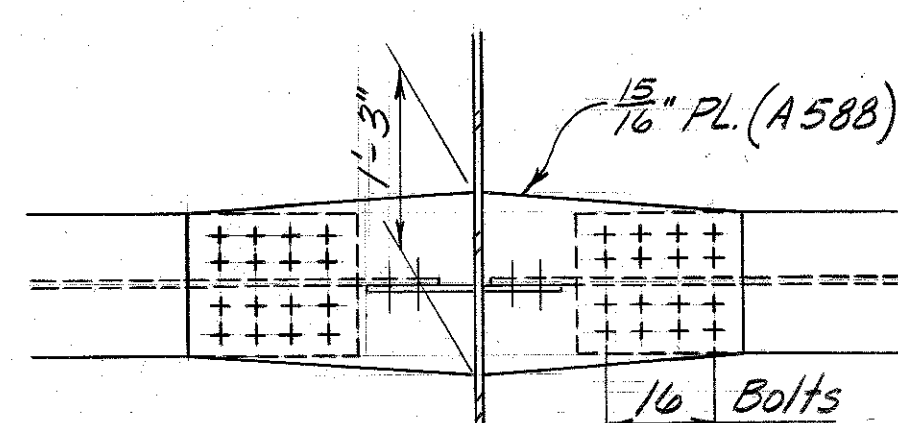
DATE

DATE

DATE



ELEVATION TYPE 1' FLOORBEAM
For Location See Framing Plan
(FB II E5 - Pier 37 EB)



SECTION BB & FF

Notes:
Elevations shown are Final Top of Slab.
For Stiffener Details see Sheet A106
For other notes see Sheet A105

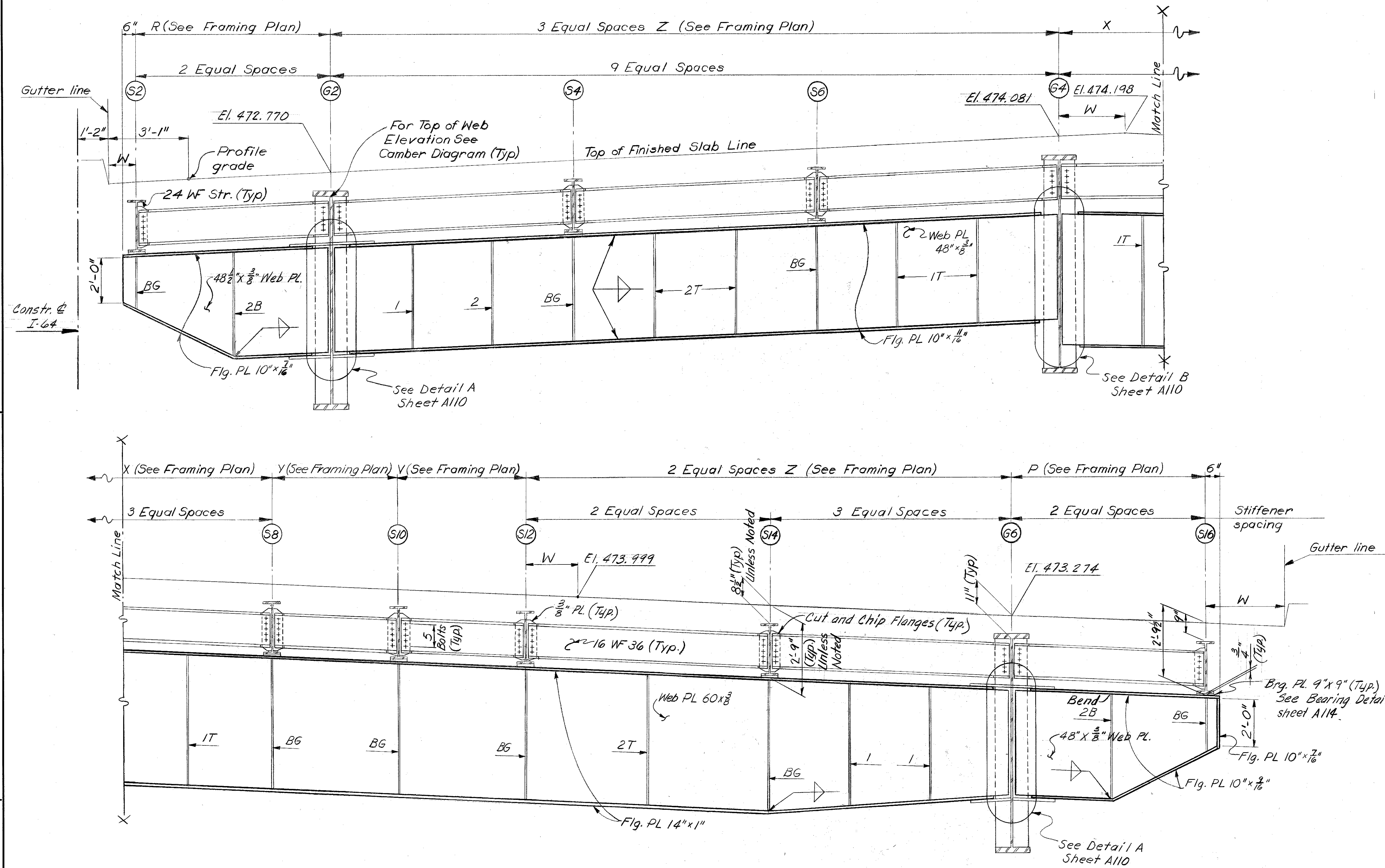
FLOORBEAMS
STRUCTURAL STEEL

SHEET A120

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD
SP 56-273-11L
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. 164-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

LETTING DATE

DESIGNED BY	DATE	REVISION	DATE	REVISION	DATE
BY					
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
BY		BY		BY	
TRACED BY	DATE	TRACED BY	DATE	TRACED BY	DATE
BY		BY		BY	



ELEVATION TYPE m' FLOORBEAM
For Location See Framing Plan
(FB IV E9 - Pier 38 EB)

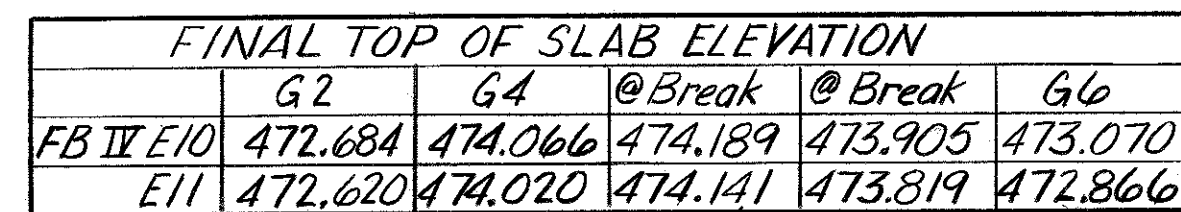
Notes:
Elevations shown are Final Top of Slab.
For Stiffener Details see Sheet A106
For other notes see Sheet A105

**FLOORBEAMS
STRUCTURAL STEEL**

SHEET 121

COMMONWEALTH OF KENTUCKY		
DEPARTMENT OF HIGHWAYS		
FRANKFORT		
COUNTY OF		
JEFFERSON		
164-13TH ST. TO 7TH ST.		
ROAD		
LOUISVILLE - LEXINGTON		
SP 56-273-11L		
STATION 208+08	P. E. PROJECT NO. 164-2(35)3	DRAWING NO.
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	18572

DESIGNED BY <u>TRBS</u>	CHECKED BY <u>MDC</u>	DATE <u>8-70</u>	REVISED _____	DATE _____
DEFINED BY <u>LLP MB</u>	CHECKED BY <u>Black</u>	DATE <u>1-71</u>	REVISED _____	DATE _____
THAWED BY _____	CHECKED BY _____	DATE _____	REVISED _____	DATE _____



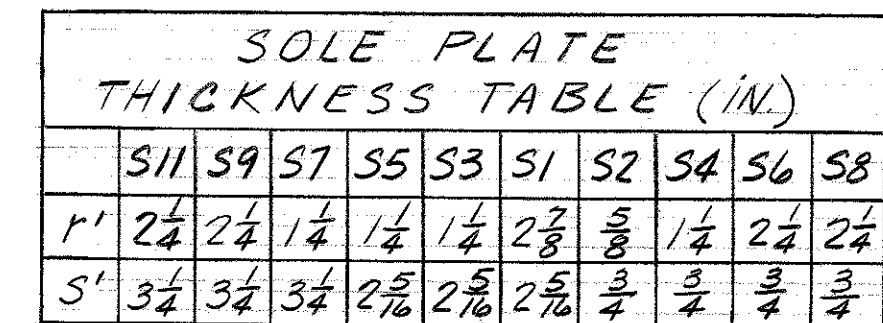
Notes:
 *For Web depth See Detail A Sheet A110
 For Stiffener Details See Sheet A106
 For other notes See Sheet A105

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE — LEXINGTON
ROAD SP 56-273-III
STATION 208+08 P.E. PROJECT NO. I 64-2 (35) 3

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.
	18572

FLOOR BEAMS
STRUCTURAL STEEL

8



This structural drawing illustrates the design of a bridge girder, including a cross-section, a framing plan, and an elevation view.

Cross-Section (Left): Shows a 24 WF Str. (Typ.) with a 6" flange and 2'-0" web. It includes 42 bolts (1" dia) and 24 bolts (1/2" dia). The section is labeled with "Type A" and "Type B" for different parts of the girder.

Framing Plan (Top): Shows the layout of the girder with various framing members. Key dimensions include 2 Equal Spaces, 3 Equal Spaces, 9 Equal Spaces, and 2 Equal Spaces. The plan also shows the location of stiffeners and the centerline of the girder.

Elevation (Right): Shows the side view of the girder with various framing members. Key dimensions include 2'-0" web, 6" flange, and 24 bolts (1/2" dia). The elevation also shows the location of stiffeners and the centerline of the girder.

Notes:

- See Detail A, Sheet A110 and Exp. Dam Details for details not shown.
- Typ. unless noted
- For Stiffener Details not shown
- For Sections D-D, Q-Q, S-S, G-G, K-K
- For Other notes see Sheet A110

2'-0"

$\frac{3}{4}$ "

$\frac{3}{4}$ "

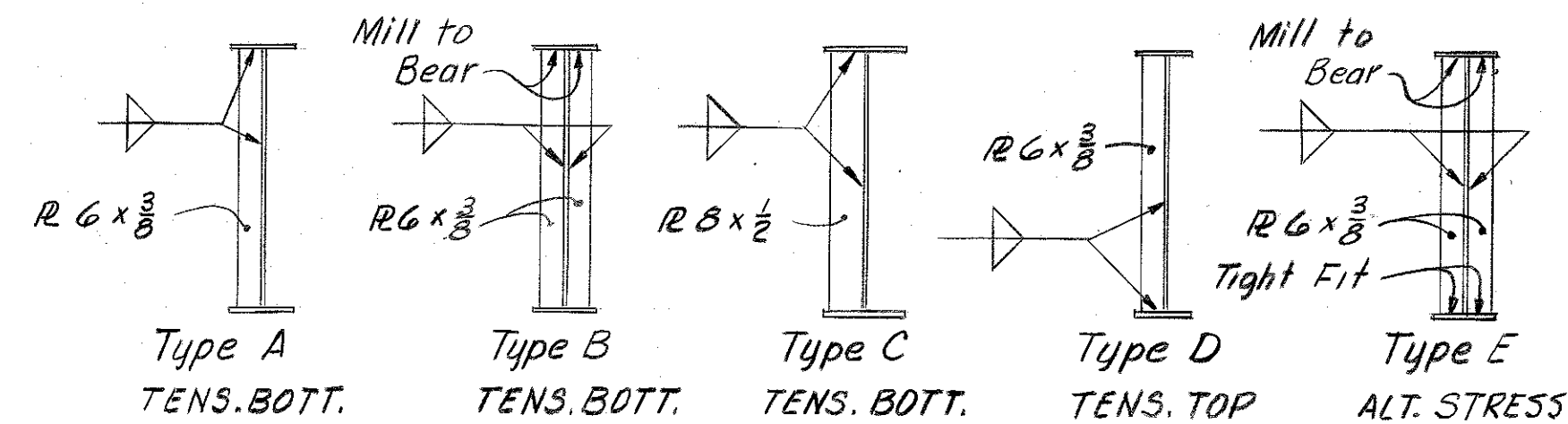
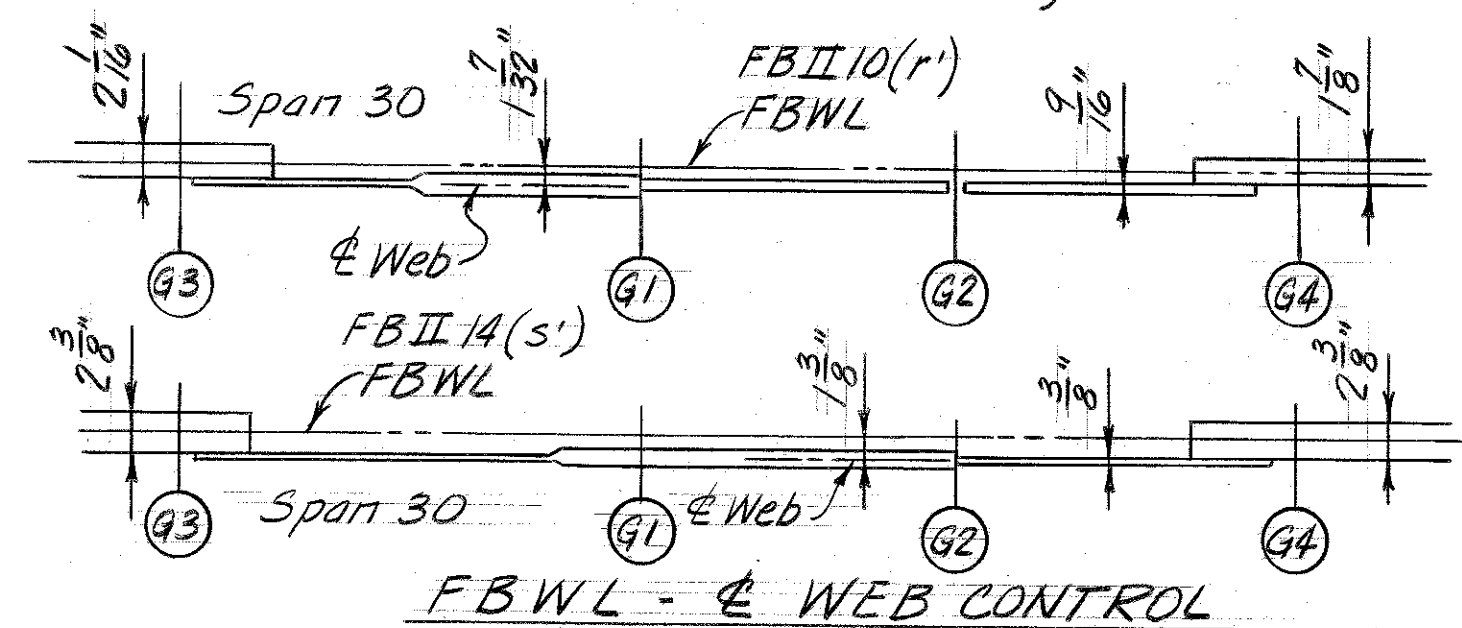
PL $\frac{1}{2}$ "

$\frac{1}{2}$ "

Typ.

@ S7 of F.B Type r' only

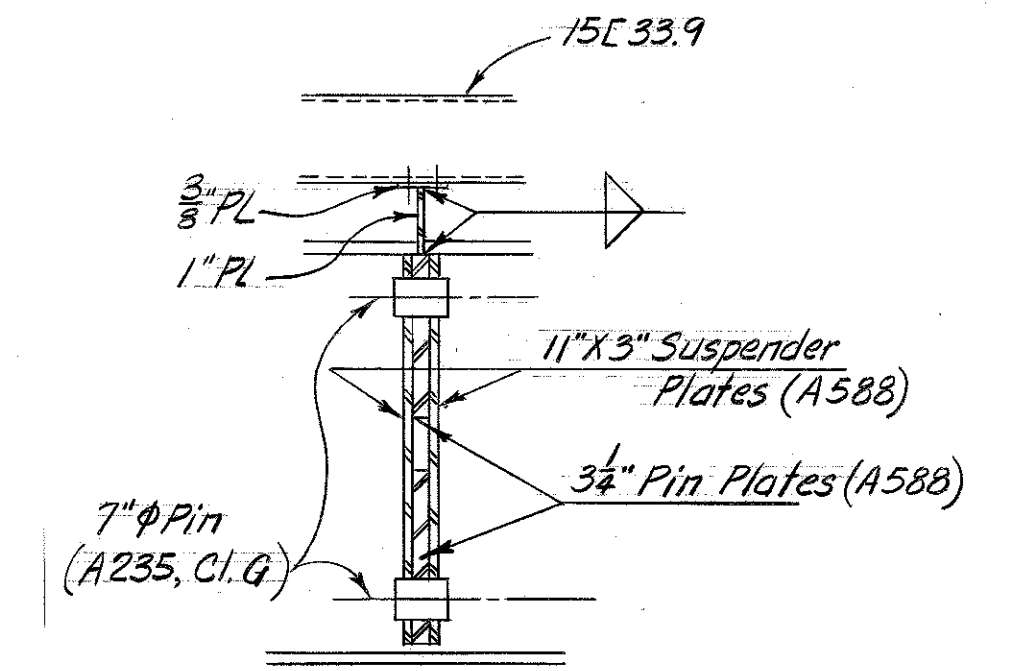
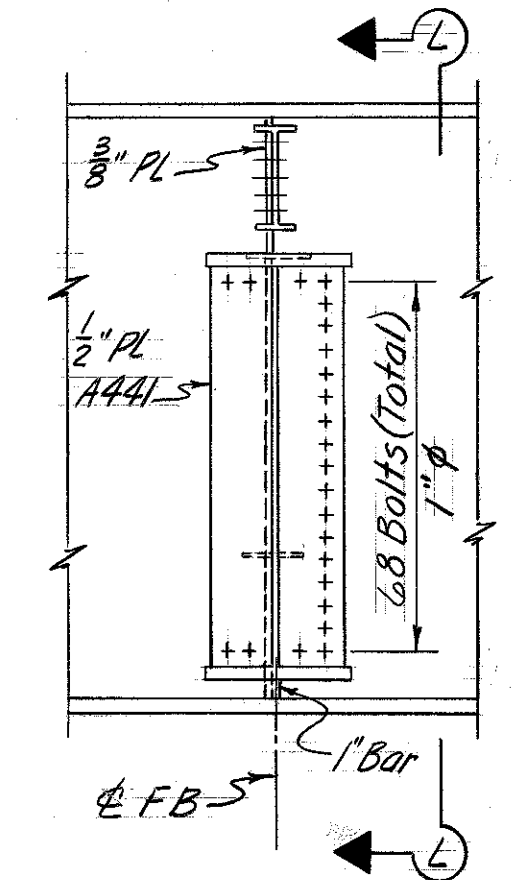
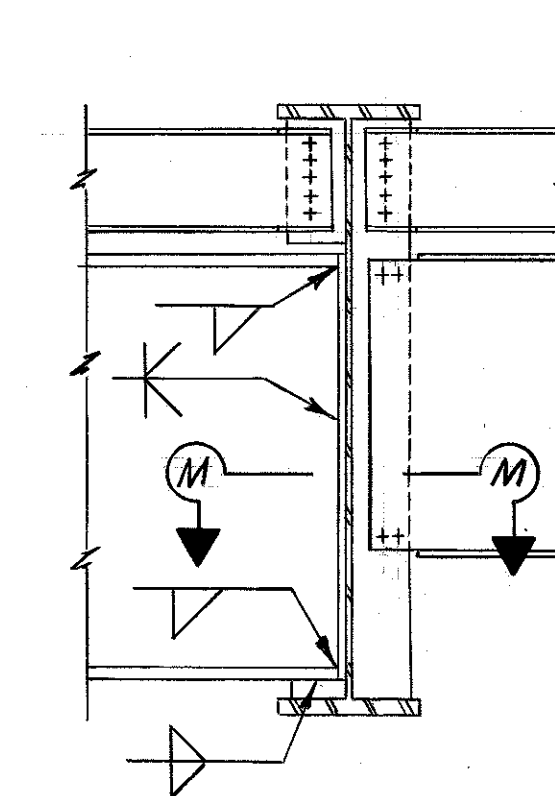
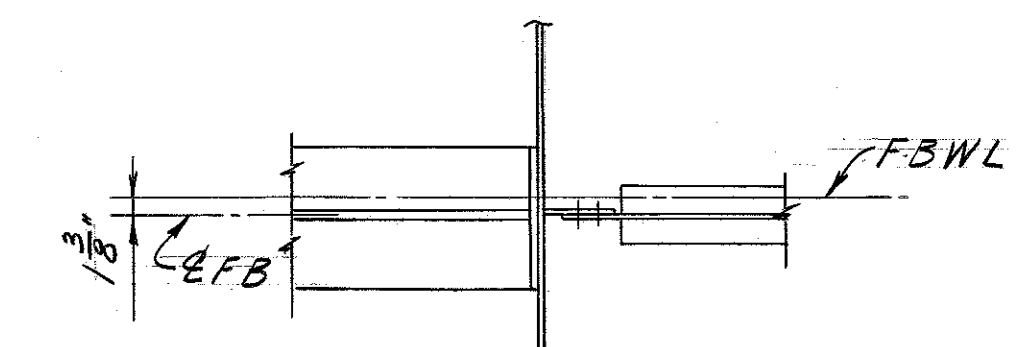
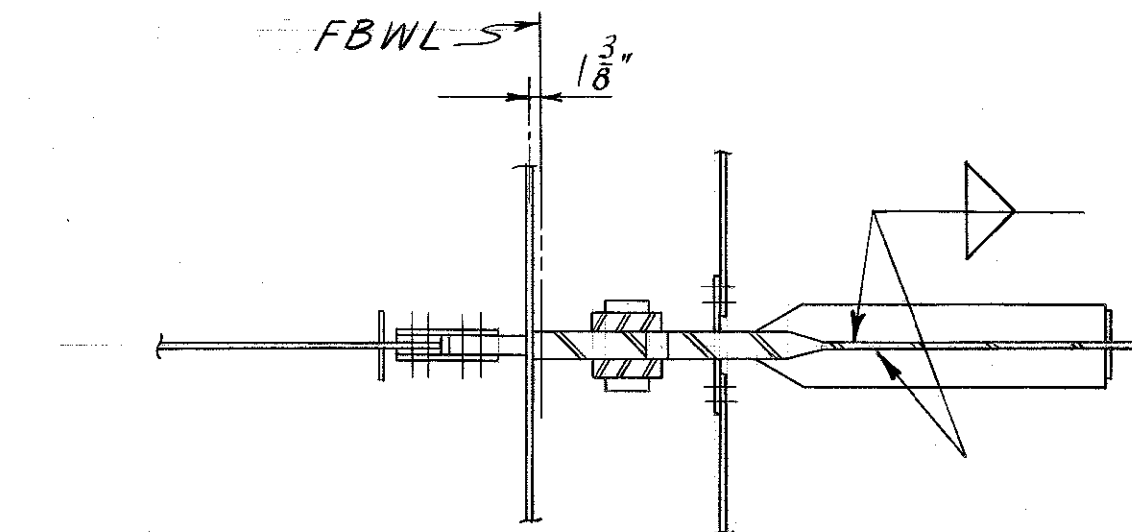
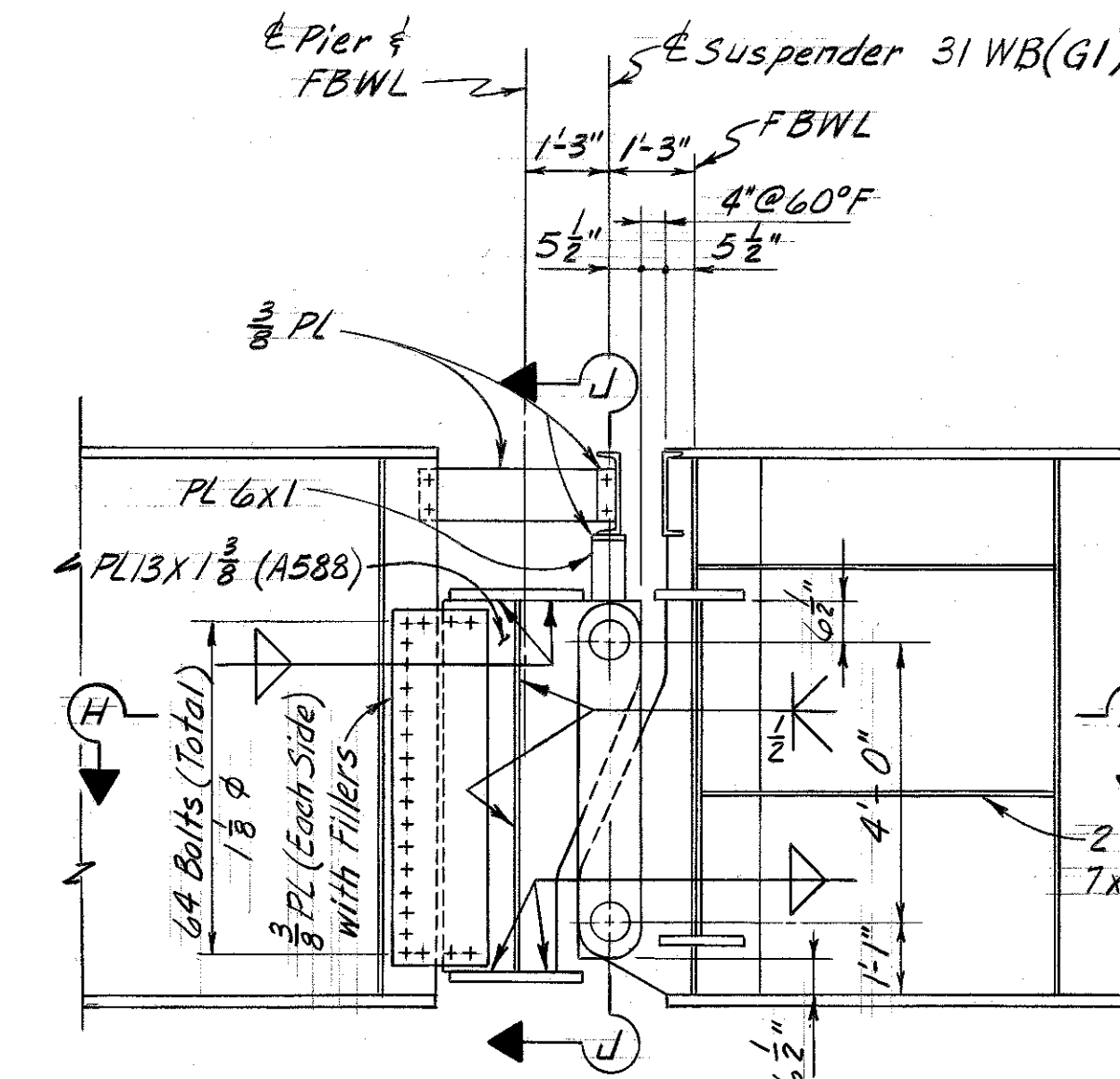
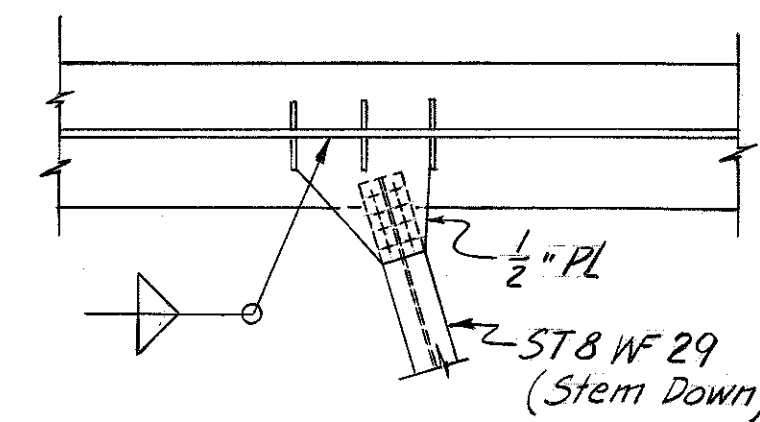
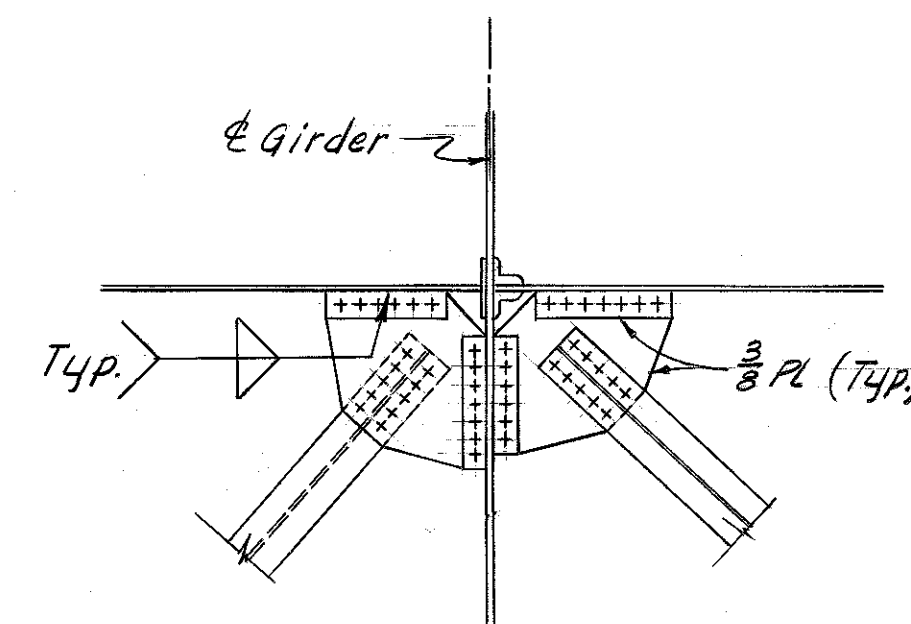
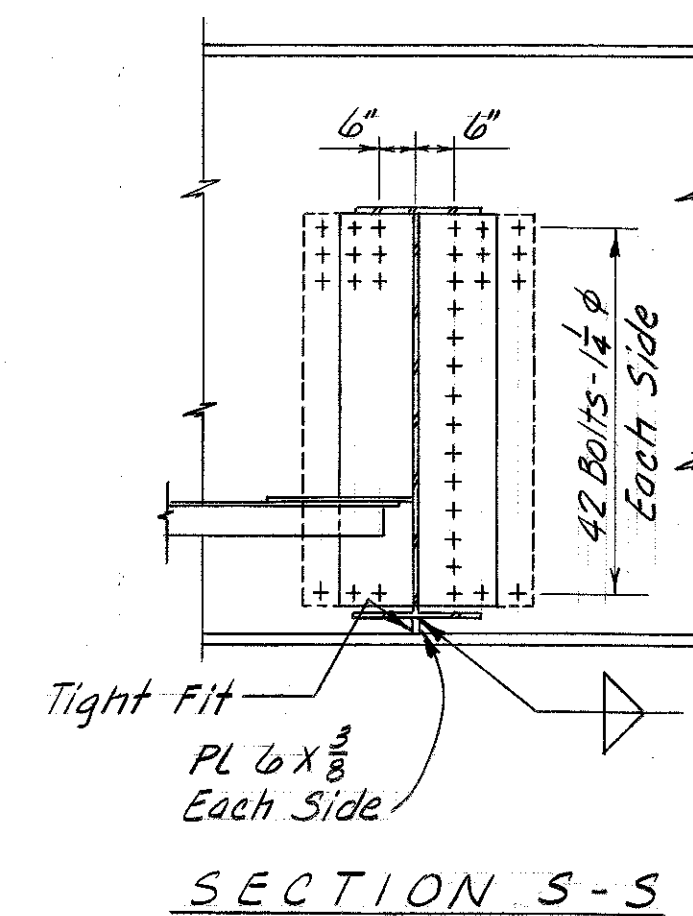
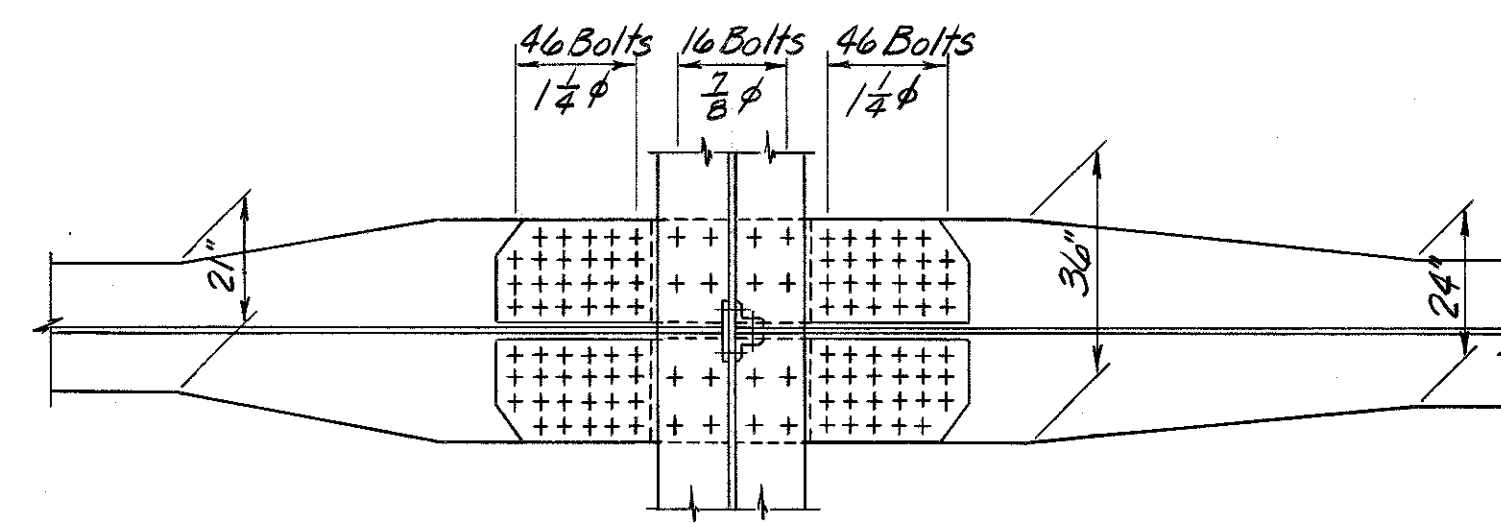
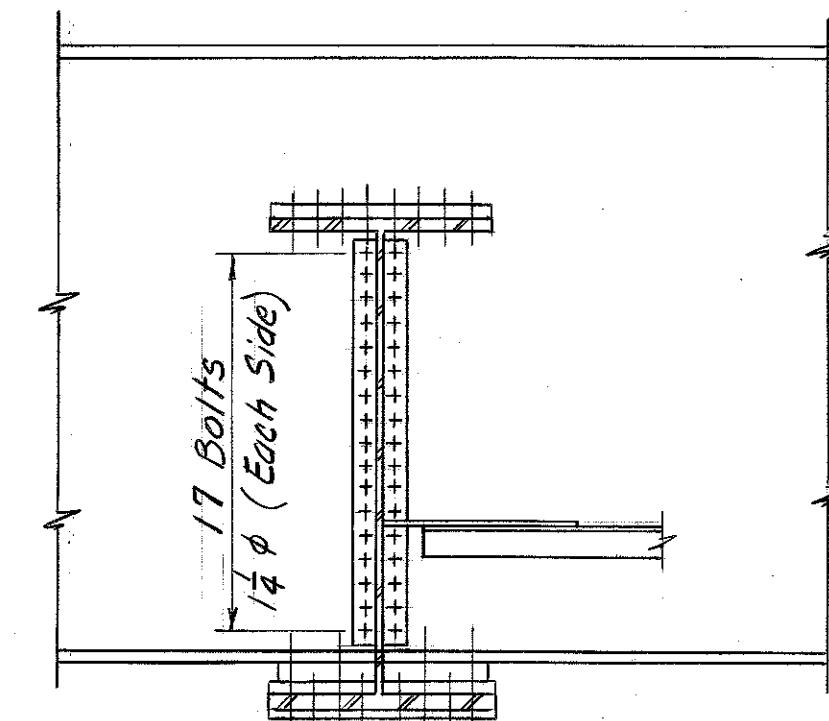
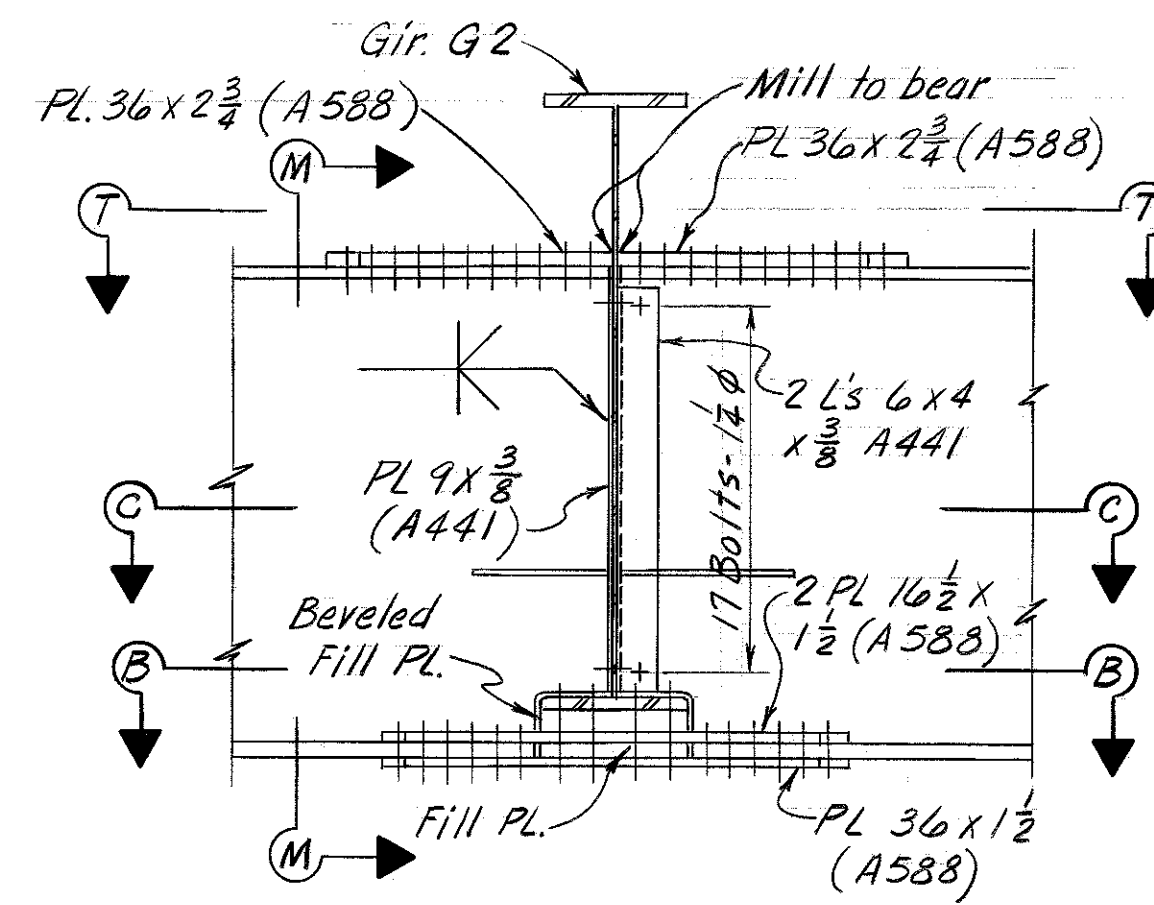
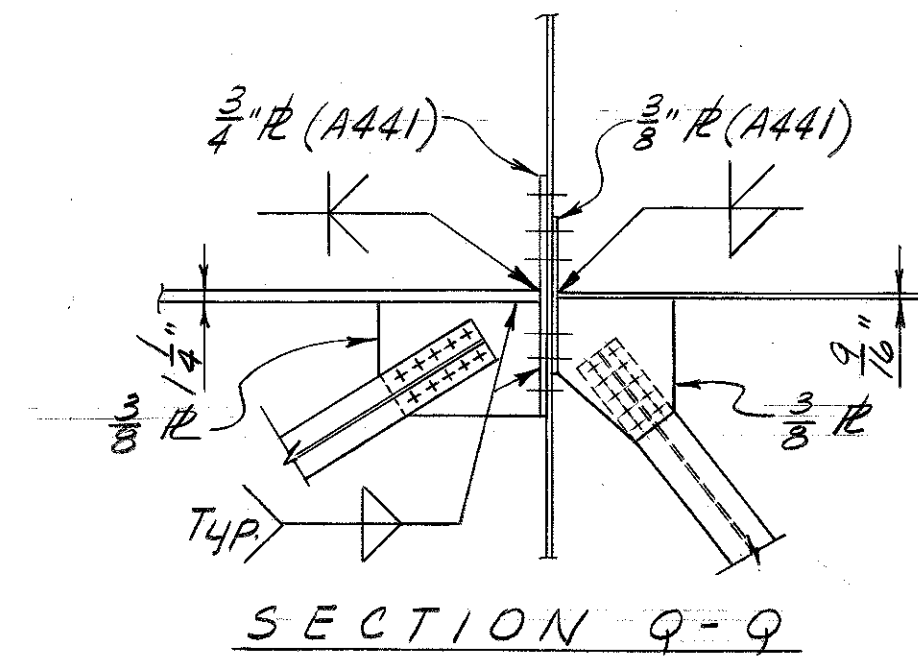
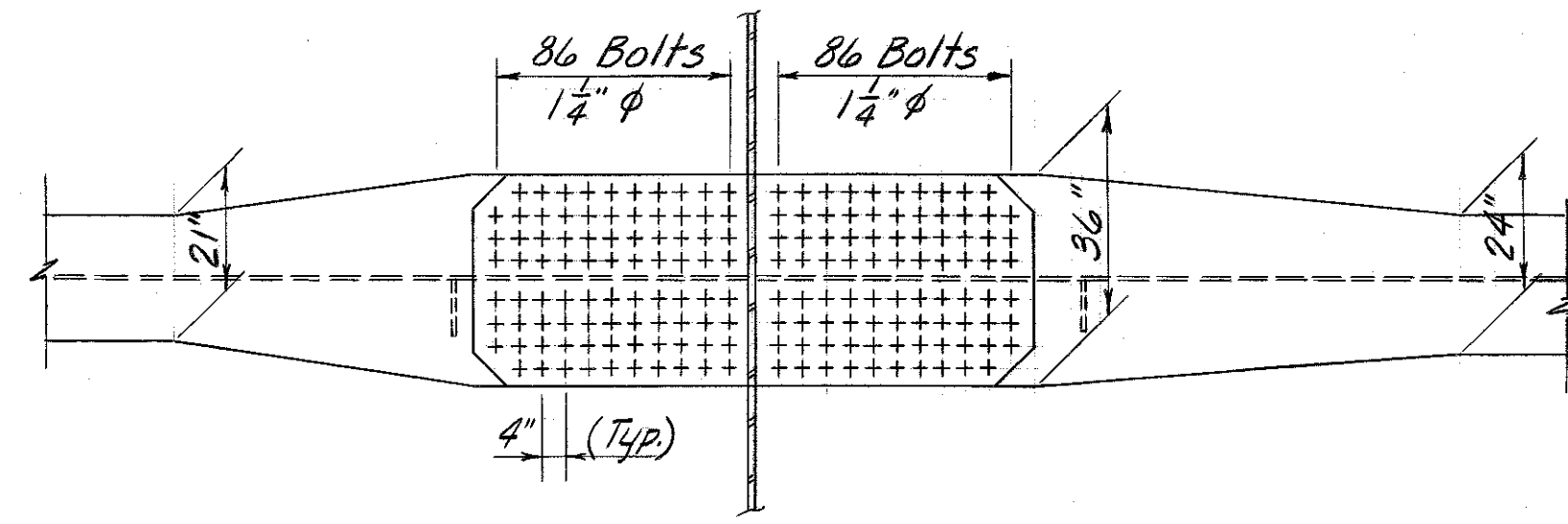
SECTION L-L



FLOORBEAMS
STRUCTURAL STEEL

<i>SHEET A123</i> COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS FRANKFORT COUNTY OF JEFFERSON I 64-13TH ST. TO 7TH ST. LOUISVILLE — LEXINGTON ROAD SP 56-273-11L	
STATION 208+08	P. E. PROJECT NO. I 64-2 (35) 3
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO. <i>18572</i>

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
ELLL	Black	2-70	2-71	
ELLL	Black	2-70		
ELLL	Black	2-71		
ELLL	Black	2-71		



For Details not shown
see Suspender Details

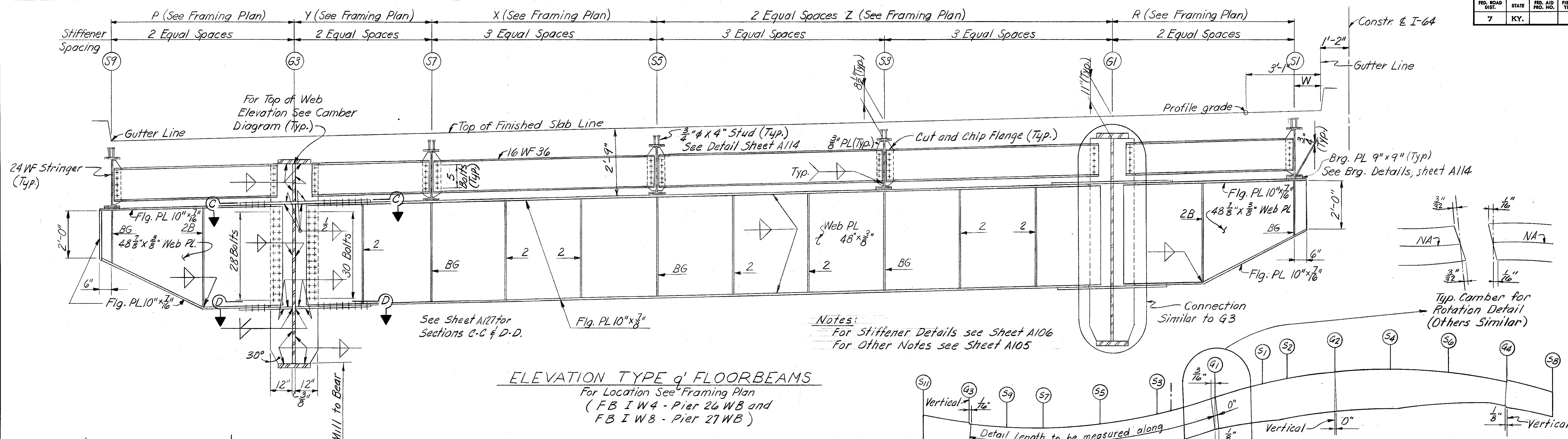
FLOOR BEAM S' DETAILS

FLOORBEAMS
STRUCTURAL STEEL

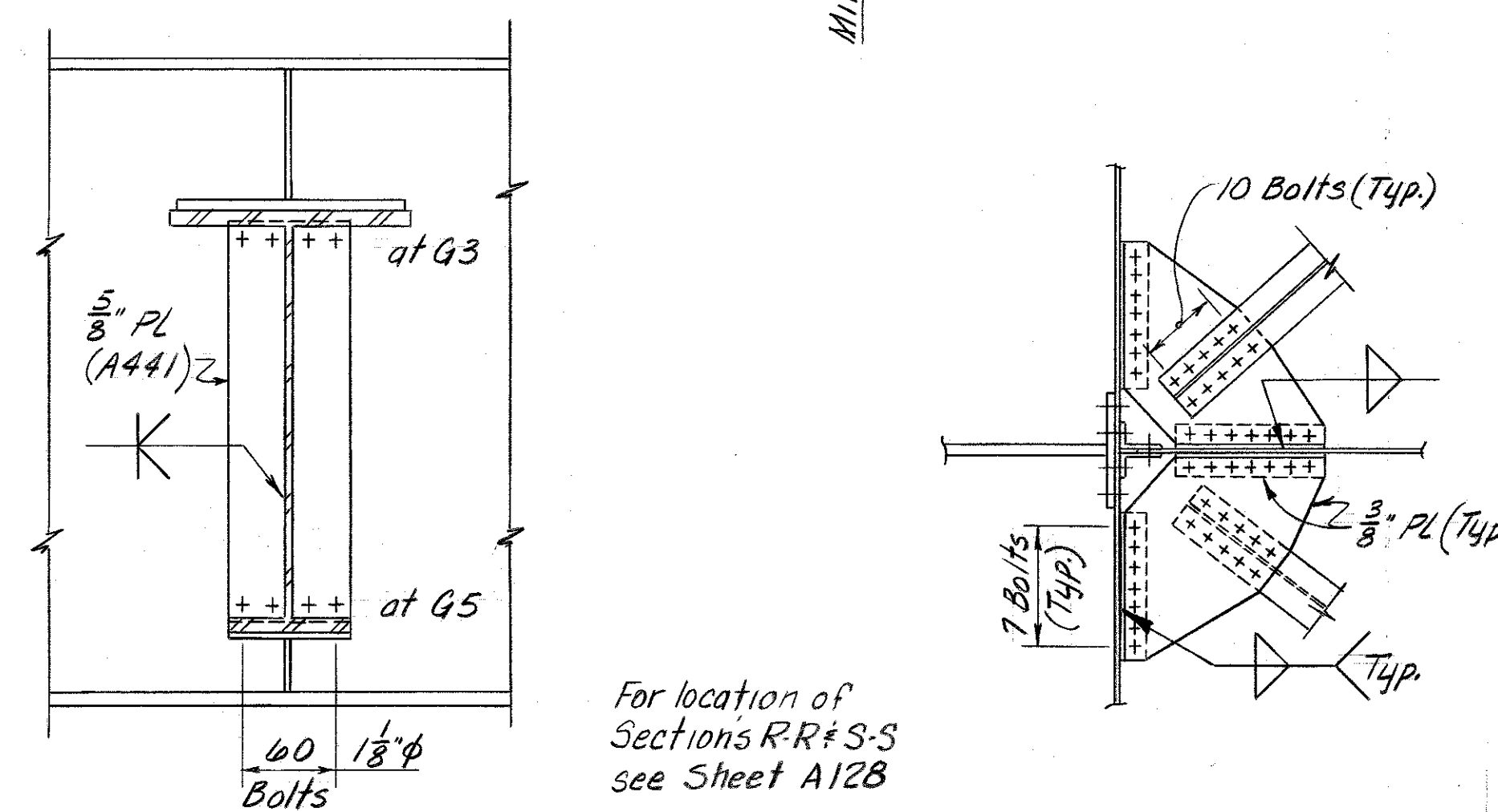
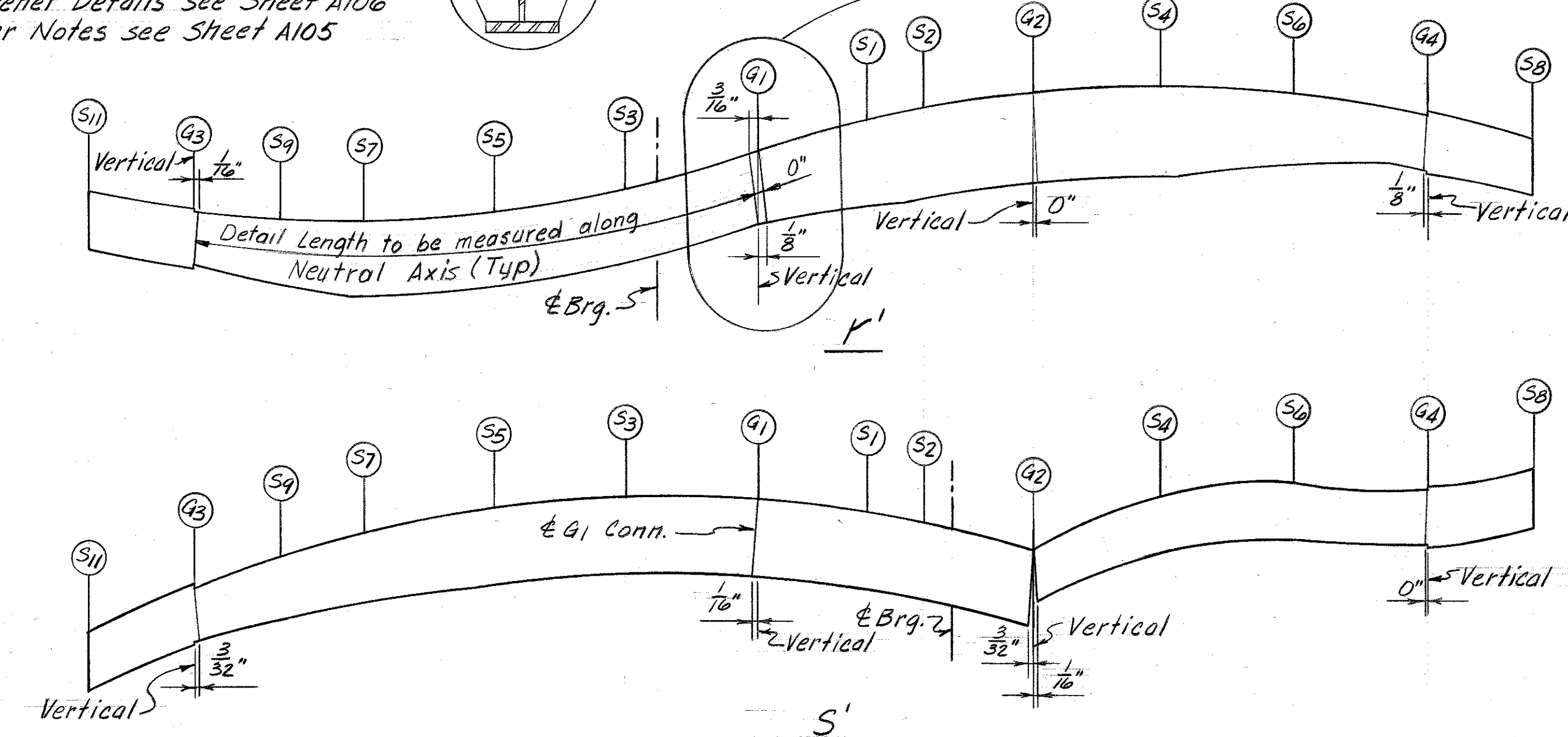
SHEET A124

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I 64-13TH ST. TO 7TH ST.
LOUISVILLE — LEXINGTON
ROAD SP 56-273-III
STATION 208+08 P. E. PROJECT NO. I 64-2 (35) 3

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18572

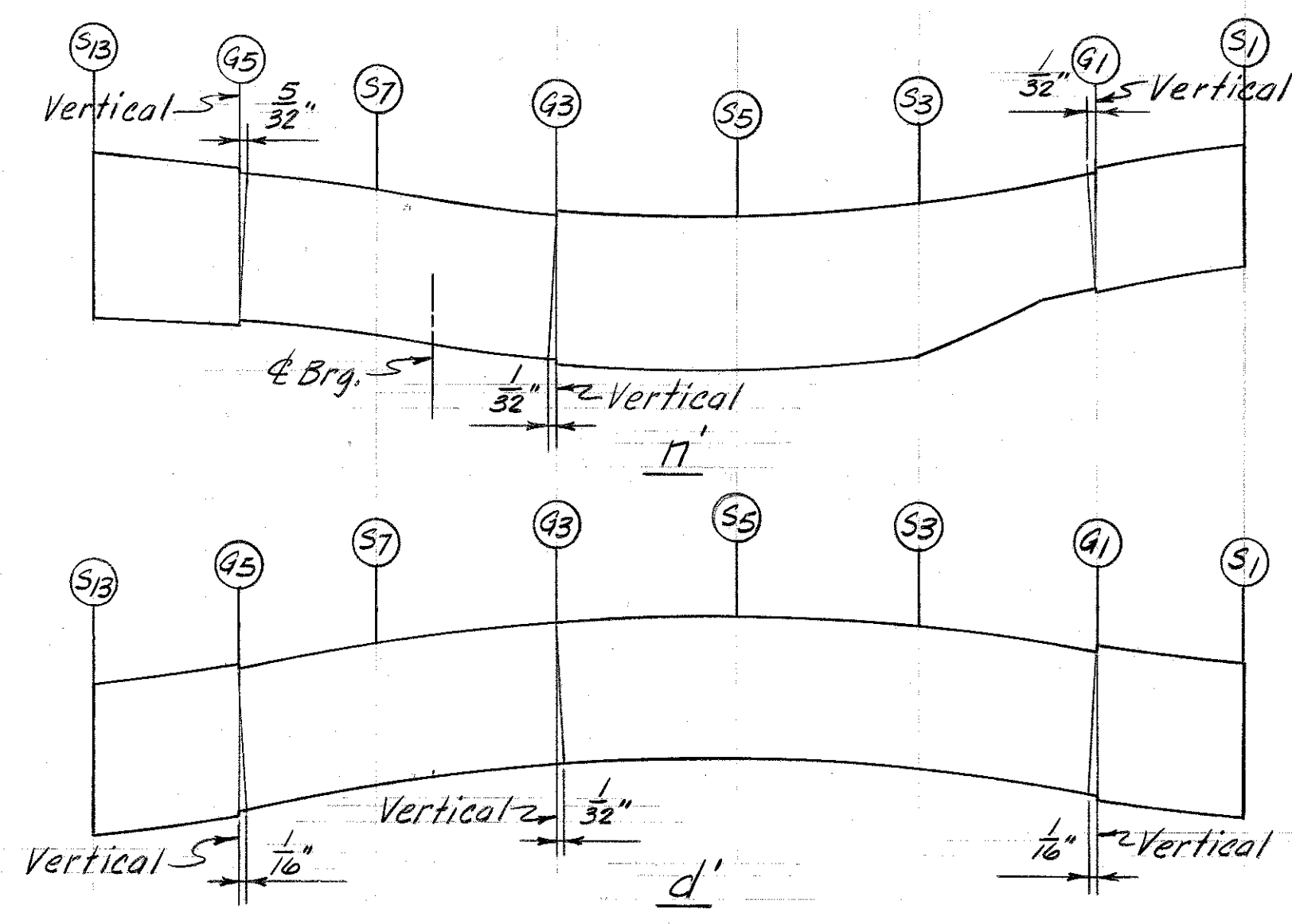


ELEVATION TYPE of FLOORBEAMS
 For Location See Framing Plan
 (FB I W 4 - Pier 26 WB and
 FB I W 8 - Pier 27 WB)



SECTION R-R

SECTION S-S



STRINGER	S11	G3(Cont)	G3(Int)	S9	S7	S5	S3	Brq.	G1	S1	S2	Brq.	G2(Med)	G2(Int)	S4	S6	G4(Int)	G4(Cont)	S8
Elev. Top of Web	479.834	479.939	479.851	479.938	480.027	480.172	480.326	480.362	480.492	480.574	480.619	—	480.690	—	480.831	480.965	481.086	481.174	481.274
Δ Total	.012	.000	.000	-.007	-.012	-.012	-.004	.000	.017	.032	.037	—	.041	—	.037	.025	.000	.000	-.017
Δ Steel	.002	.000	.000	-.001	-.002	-.002	-.001	.000	.003	.006	.006	—	.006	—	.006	.004	.000	.000	-.003
Elev. Top of Web	478.581	478.710	478.616	478.737	478.854	479.006	479.152	—	479.290	479.397	479.458	479.486	479.565	479.716	479.869	480.016	480.159	480.179	480.297
Δ Total	-.012	.000	.000	.013	.022	.029	.029	—	.022	.012	.003	.000	-.007	-.007	.001	.002	.000	.000	.001
Δ Steel	-.002	.000	.000	.002	.004	.005	.005	—	.004	.002	.000	.000	-.001	-.001	.000	.000	.000	.000	.000

Note:
 A negative camber value indicates
 an upward deflection due to D.L.

STRINGER	S13	G5(Cont)	G5(Int)	S7	Brq.	G3(Lt)	G3(Rt)	S5	S3	G1(Int)	G1(Cont)	S1
Elev. Top of Web	477.009	477.105	476.975	477.069	477.014	477.203	477.245	477.388	477.537	477.689	477.777	477.903
Δ Total	.042	.021	.021	.003	.000	-.008	-.008	-.011	-.007	.000	.000	.009
Δ Steel	.007	.004	.004	.001	.000	-.002	-.002	-.002	-.001	.000	.000	.002
Elev. Top of Web	478.759	478.884	478.754	478.870	—	478.983	—	479.129	479.269	479.406	479.537	479.648
Δ Total	-.008	.000	.000	.008	—	.013	—	.014	.008	.000	.000	-.006
Δ Steel	-.001	.000	.000	.001	—	.003	—	.003	.002	.000	.000	-.001

FLOORBEAM CAMBER

**FLOORBEAMS
 STRUCTURAL STEEL**

SHEET A125

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD

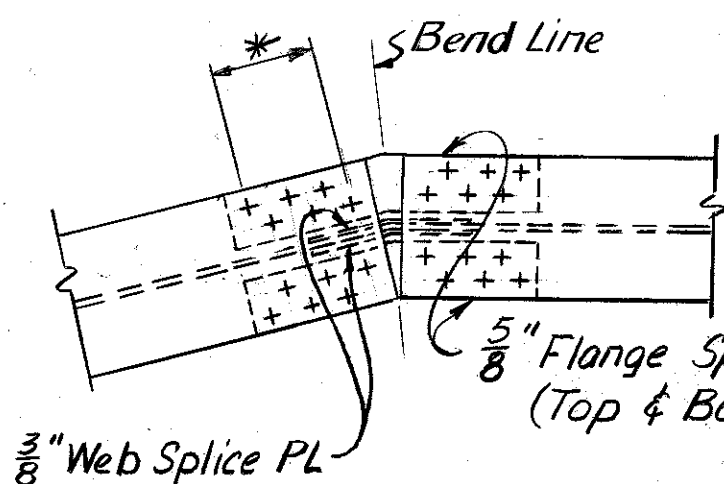
STATION 208+08 PROJECT NO. I 64-2 (35) 3 SP 56-273-11L

BRIDGE NUMBER	DRAWING NO.	INDEX
	18572	

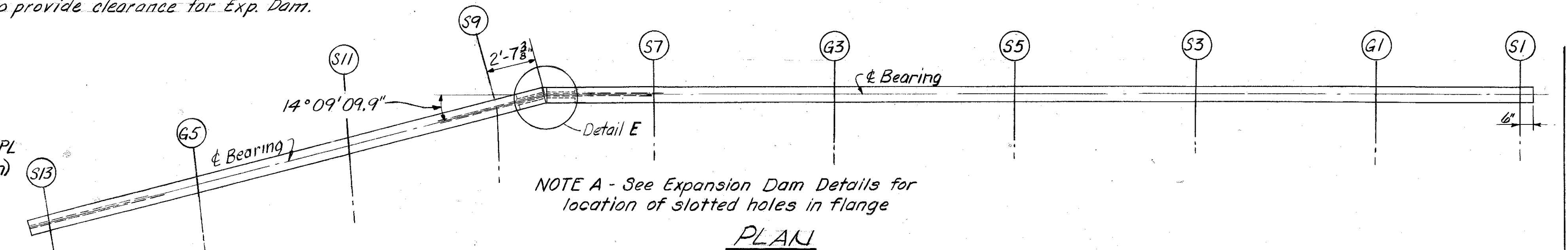
DESIGNED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 TRACED BY: _____ DATE: _____

LETTING DATE

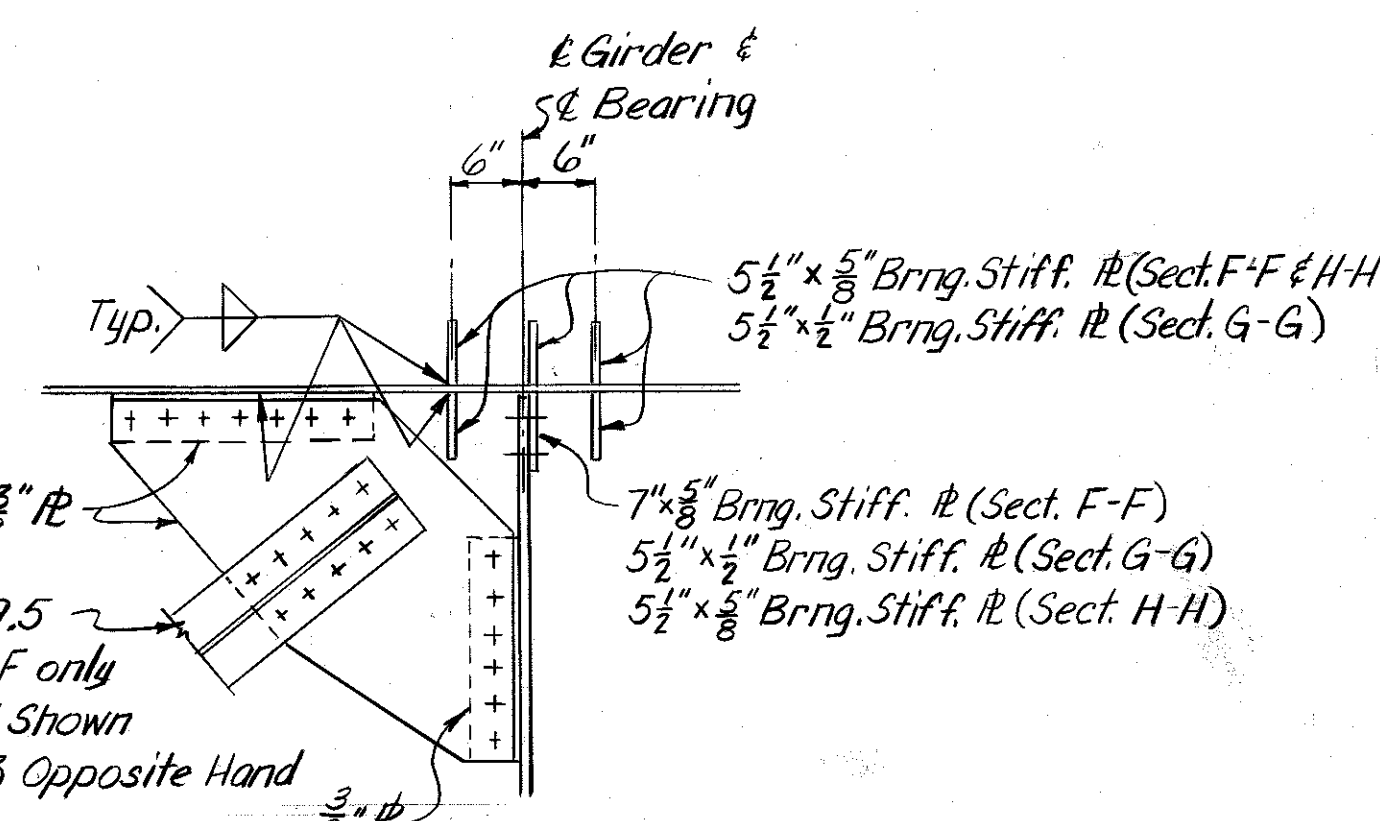
*Top Flange to be threaded for $\frac{1}{2}$ " Machine Bolts to provide clearance for Exp. Dam.



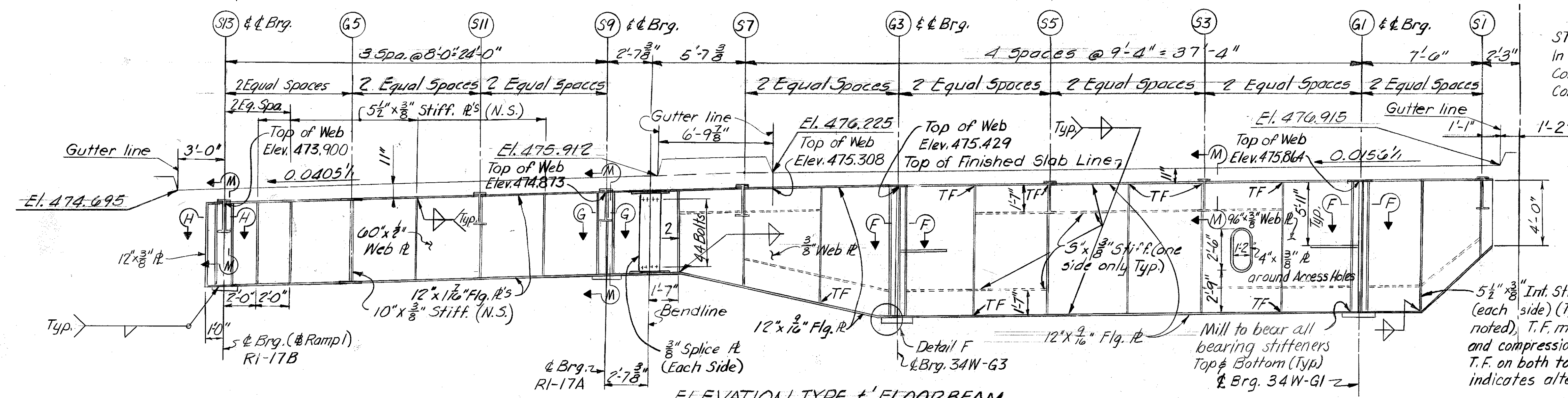
DETAIL E



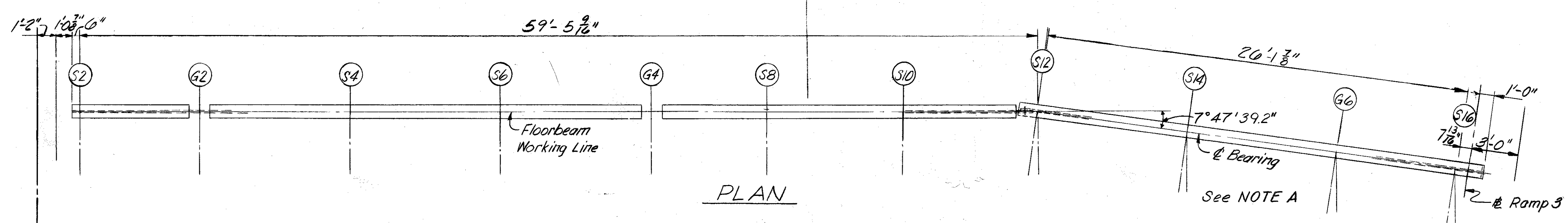
PLAN



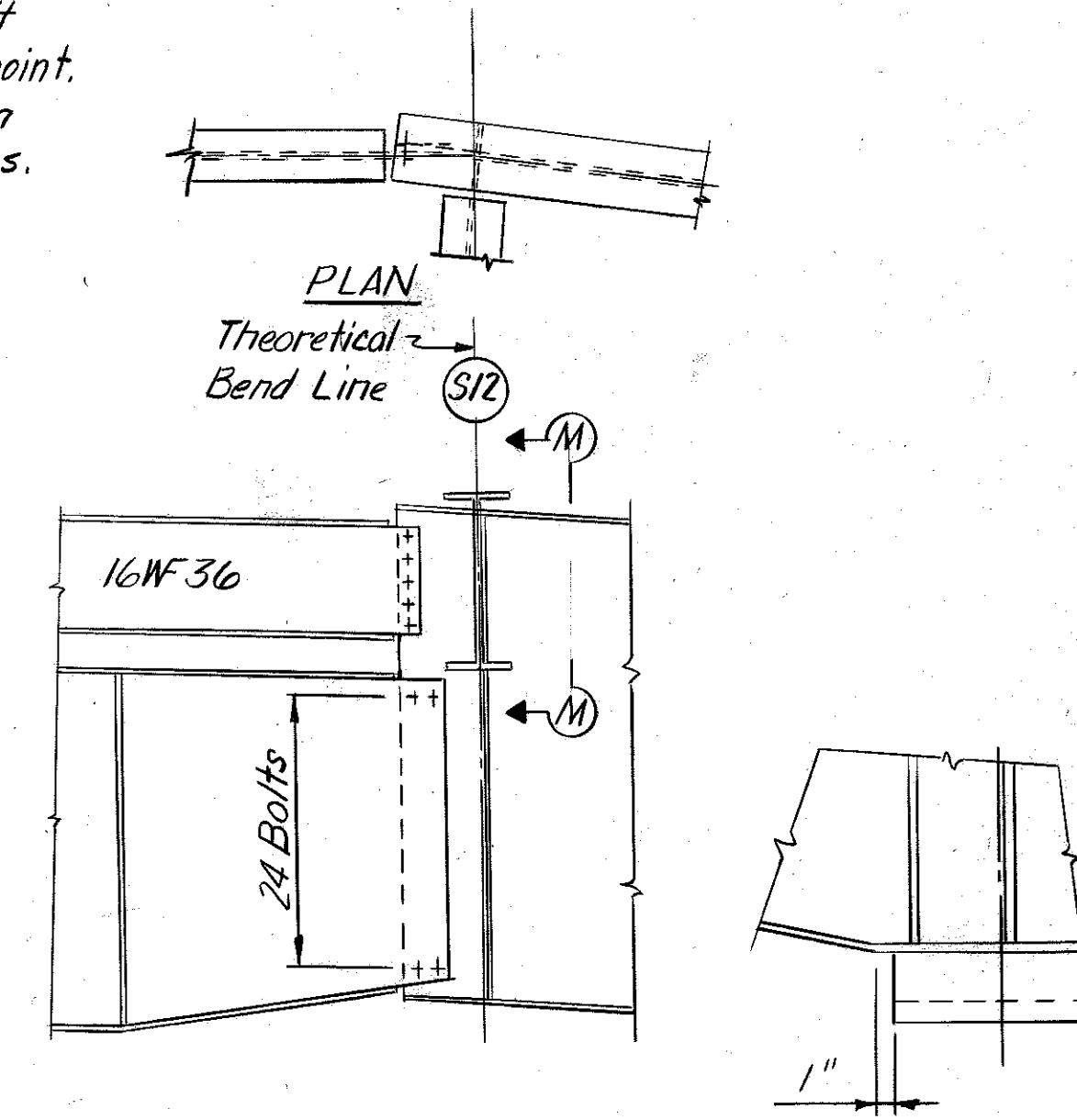
SECTION F-F
SECTION G-G SIMILAR
SECTION H-H SIMILAR



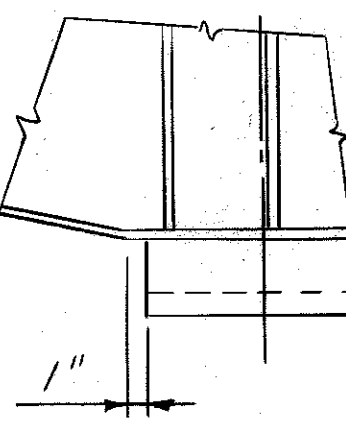
ELEVATION TYPE E' FLOORBEAM
(FB III W18 - Pier 34 WB Pier R1)



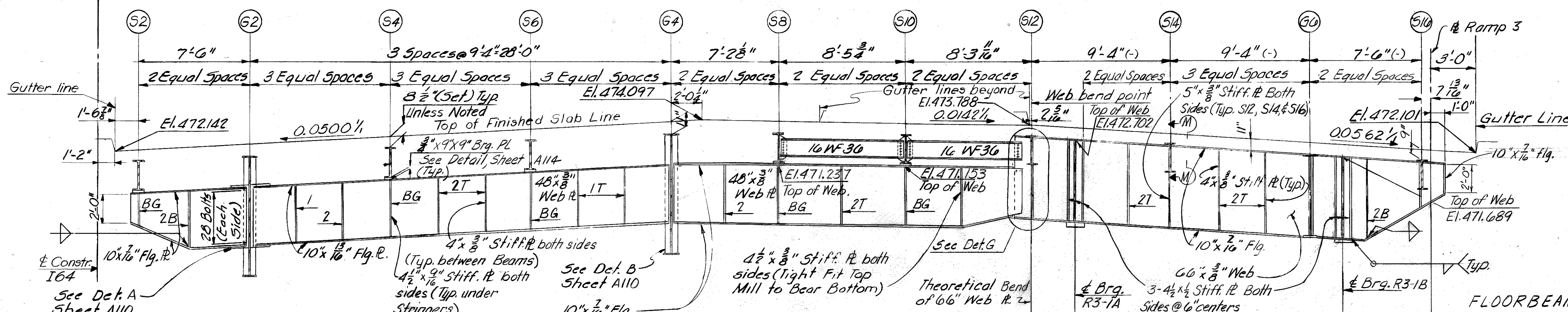
PLAN



ELEVATION
DETAIL G



DETAIL F



ELEVATION TYPE U' FLOORBEAM
(FB II E12 - Pier R31)

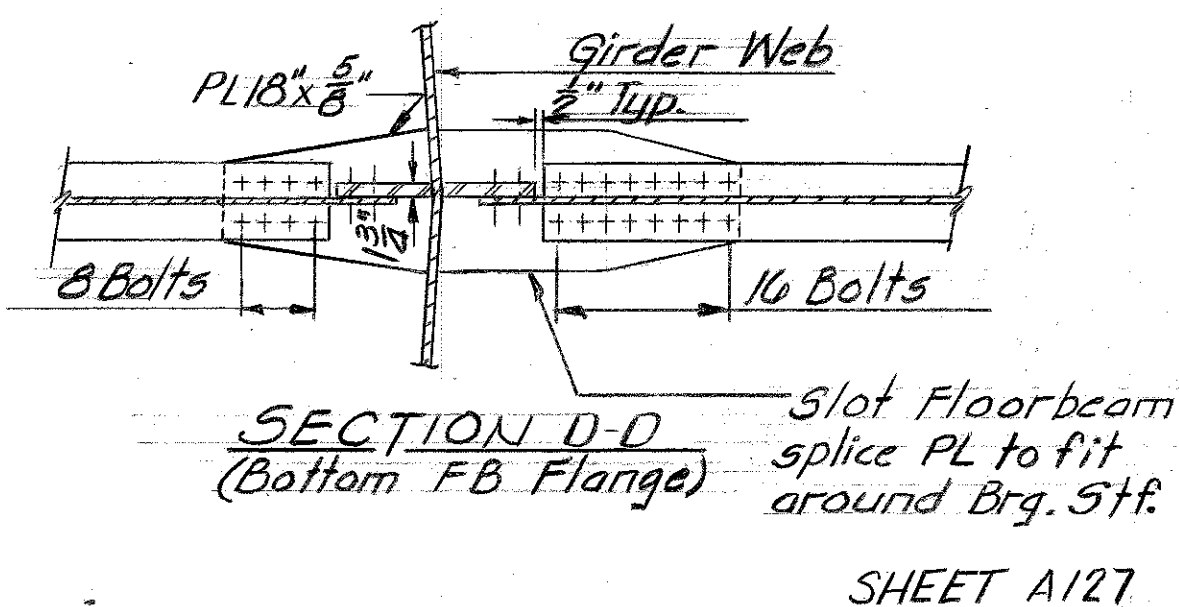
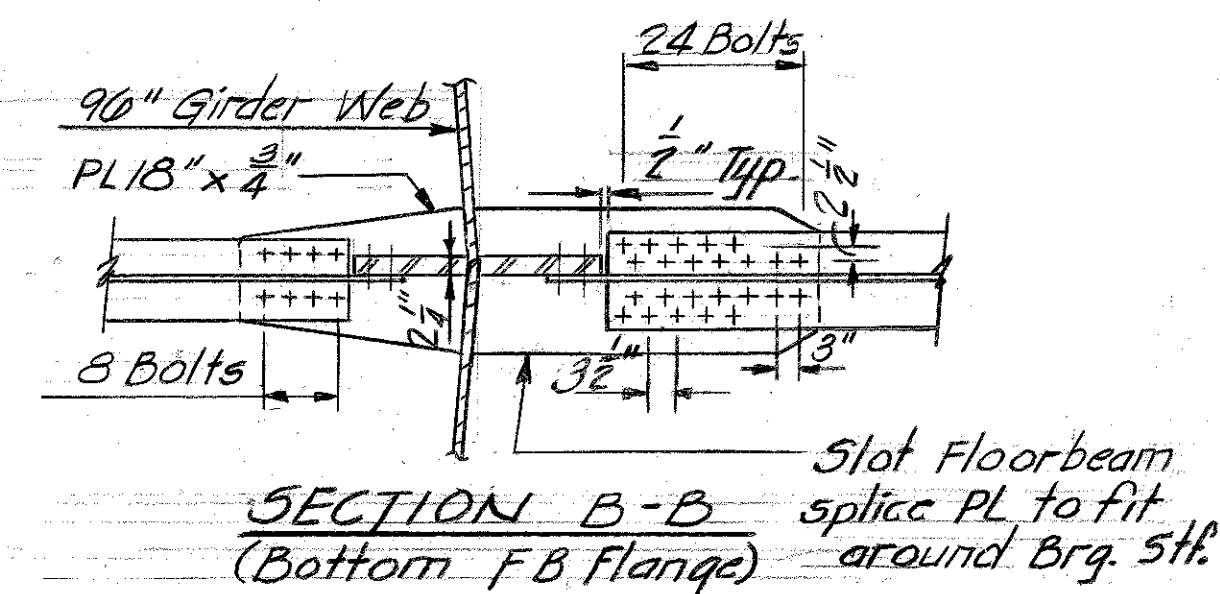
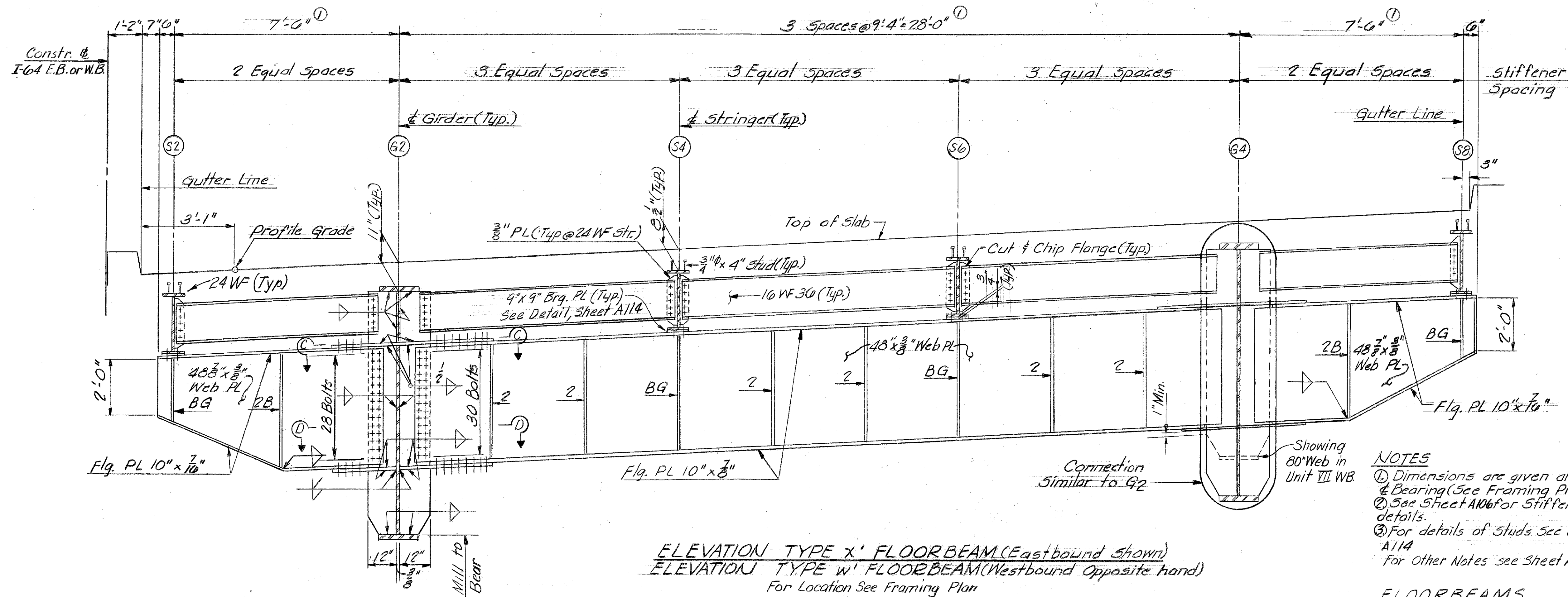
FLOORBEAMS
STRUCTURAL
STEEL

For other notes See Sheet A105
For Sect. M-M See Sheet A128
For Stiffener Details not shown See Sheet A106
SHEET A126

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
CONSTRUCTION PROJECT NO.
P. E. PROJECT NO. 164-2 (35) 3
MAINTENANCE PROJECT NO.
DRAWING NO.
18572

DESIGNED BY: T.H.C.
CHECKED BY: R.L. M.
DATE: 2-77
REVISIONS:
DATE: 2-77
REVISIONS:
DATE: 2-77
REVISIONS:

	DESIGNED BY _____	CHECKED BY _____	DATE _____	REVISED _____	DATE _____
	DETAILED BY _____	CHECKED BY <u>Bloek</u>	DATE <u>1-7</u>	REVISED _____	DATE _____
	DRAWN BY _____	CHECKED BY _____	DATE _____	REVISED _____	DATE _____

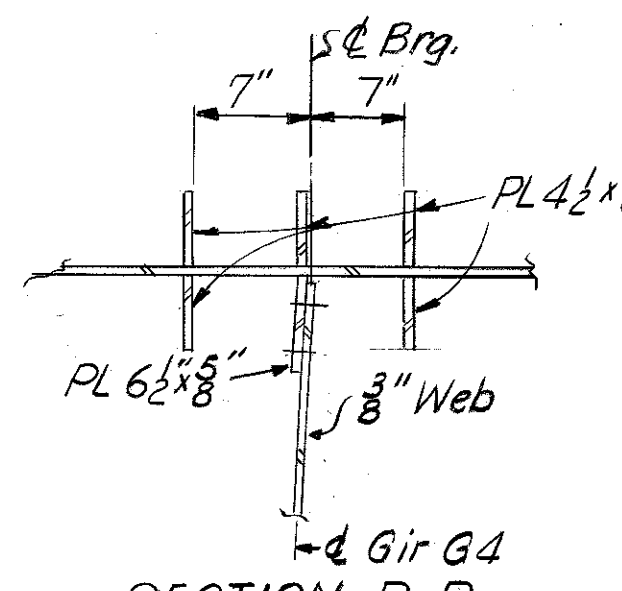
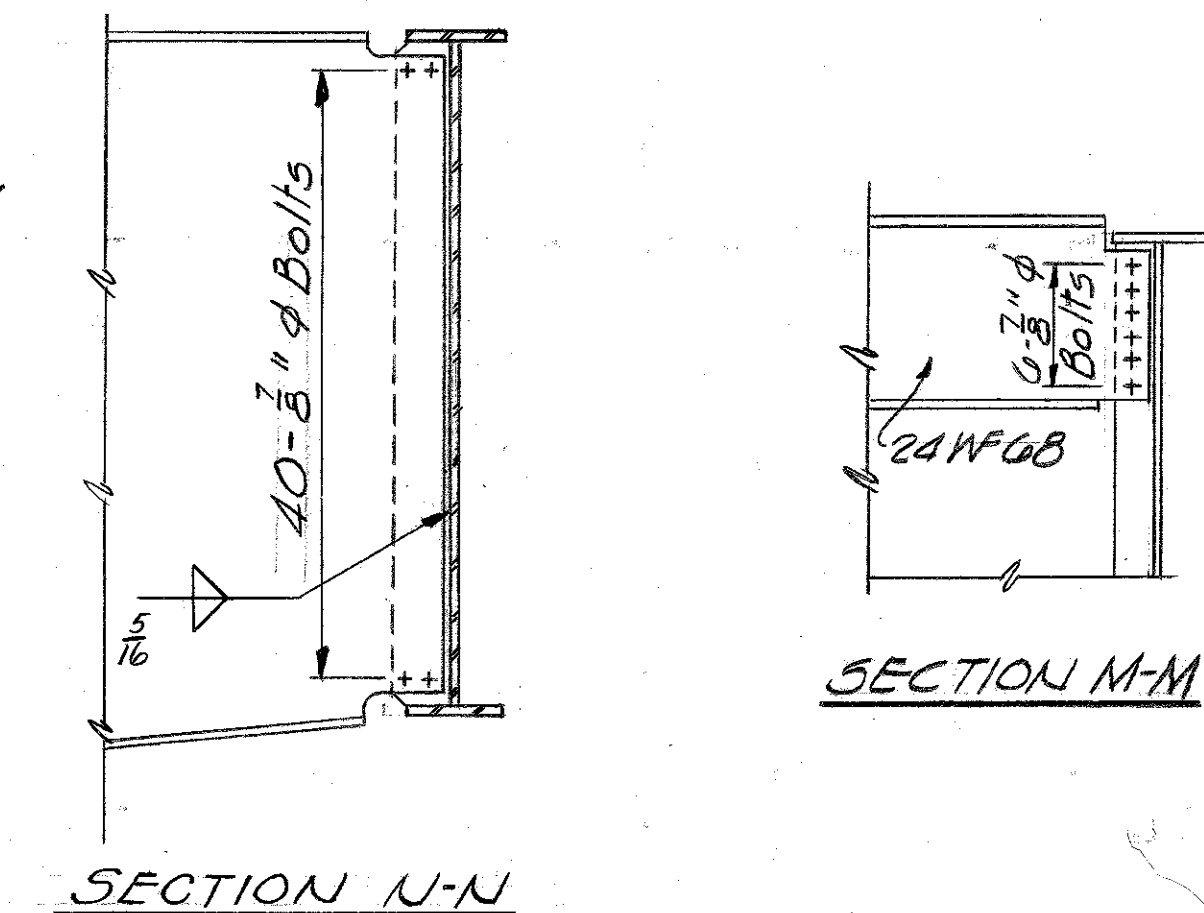
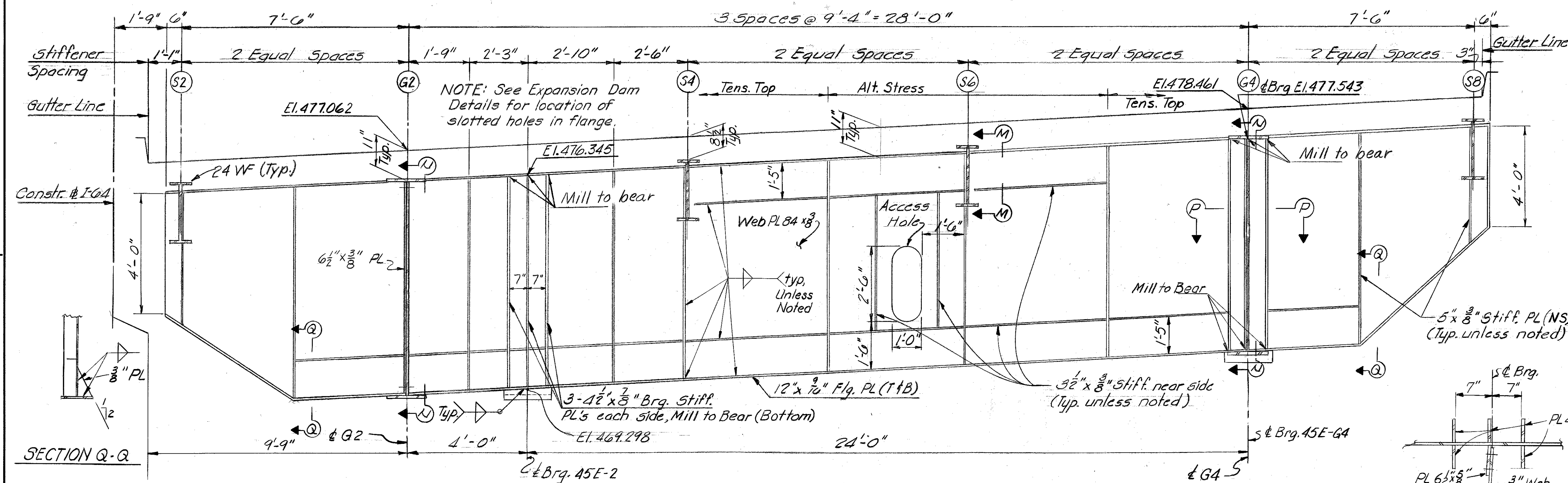
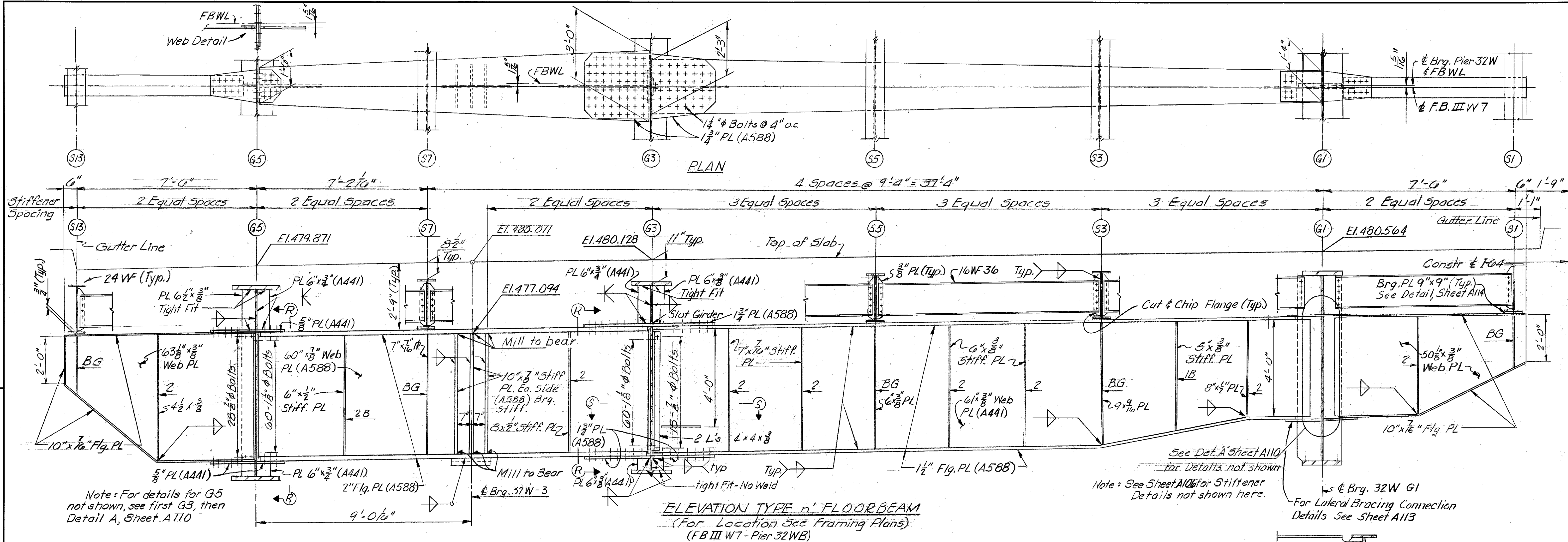


FLOORBEAMS
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
ROAD SP 56-273-11L
STATION 208+08 P. E. PROJECT NO. I 64-2 (35) 3

LETTING DATE

DESIGNED BY: CHM-CARTER CHECKED BY: EDU-BLUE DATE: 2-71
 TRACED BY: CHM-CARTER CHECKED BY: EDU-BLUE DATE: 2-71

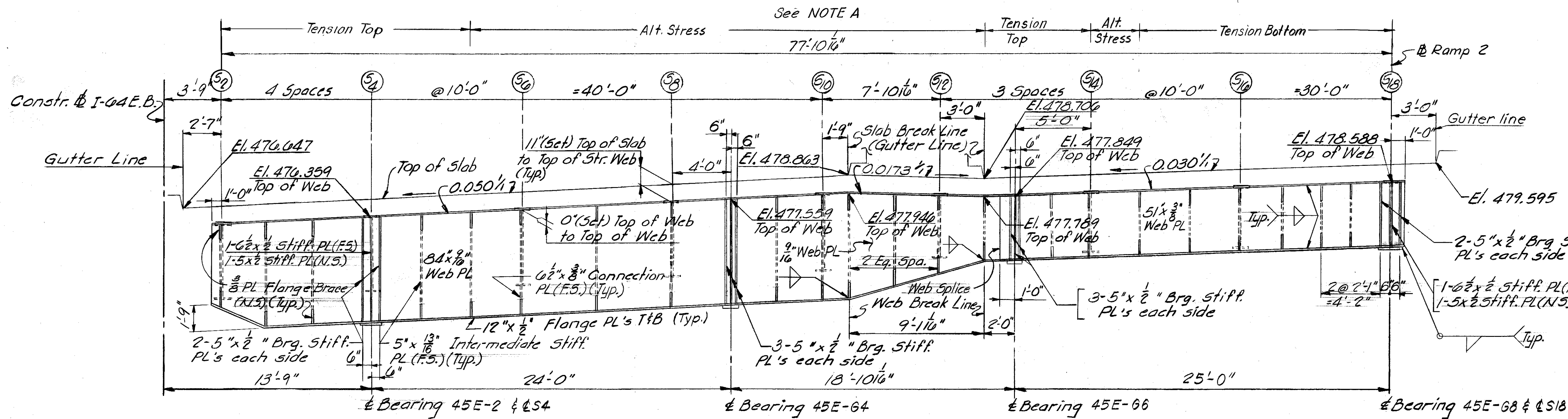


ELEVATION TYPE z' FLOORBEAM
 (For Location See Framing Plans)
 (FB II E4 - Pier 45 EB)

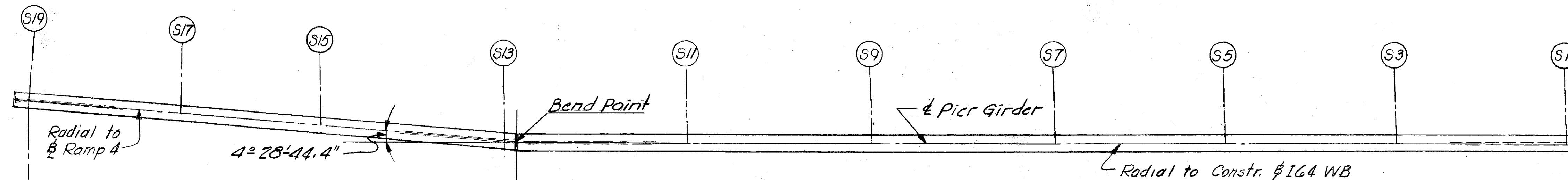
**FLOORBEAMS
 STRUCTURAL STEEL**

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO.
 P. E. PROJECT NO. I 64-2 (35) 3
 MAINTENANCE PROJECT NO.
 SP 56-273-11L
 DRAWING NO.
 18572

LETTING DATE

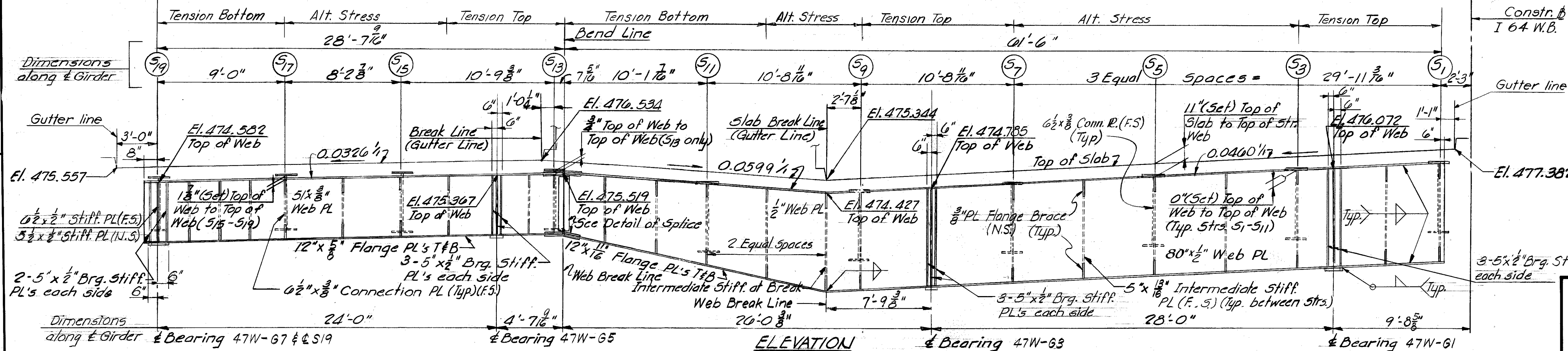


PIER GIRDER 45 E.B.

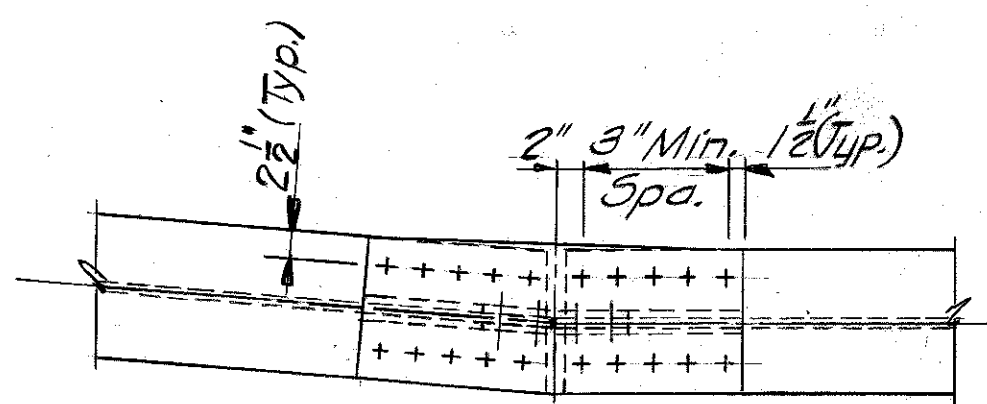


PLAN

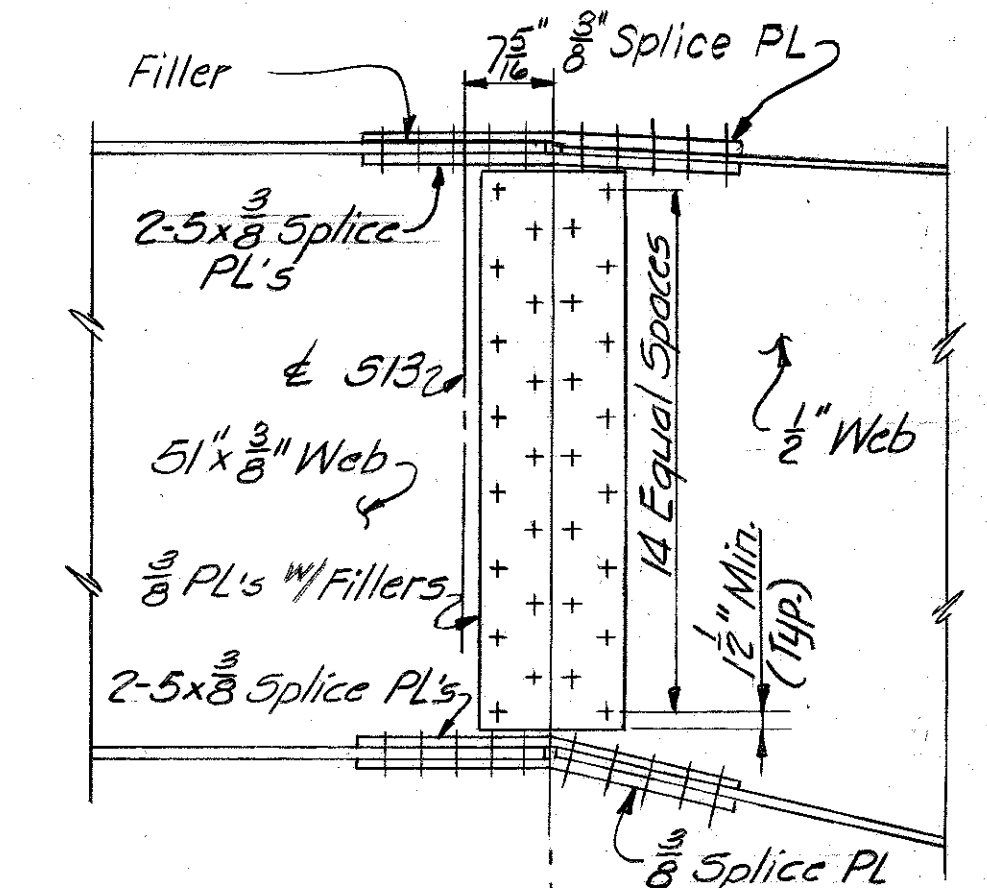
NOTE A - See Expansion Dam Details for location of slotted holes in flange



PIER GIRDER 47 W.B.



PLAN



ELEVATION

SPLICE DETAIL P.G. 47 W.B.

SHEET A129

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE-LEXINGTON
ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO.
 MAINTENANCE PROJECT NO.
 DRAWING NO. 18572

All steel this sheet ASTM A36 unless noted.
PIER GIRDERS
STRUCTURAL STEEL

[illegible][illegible]

For Pier Girder Notes See Sheet A129
All Steel this sheet ASTM A36 unless
noted.

PIER GIRDERS
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

FRANKFORT

COUNTY OF

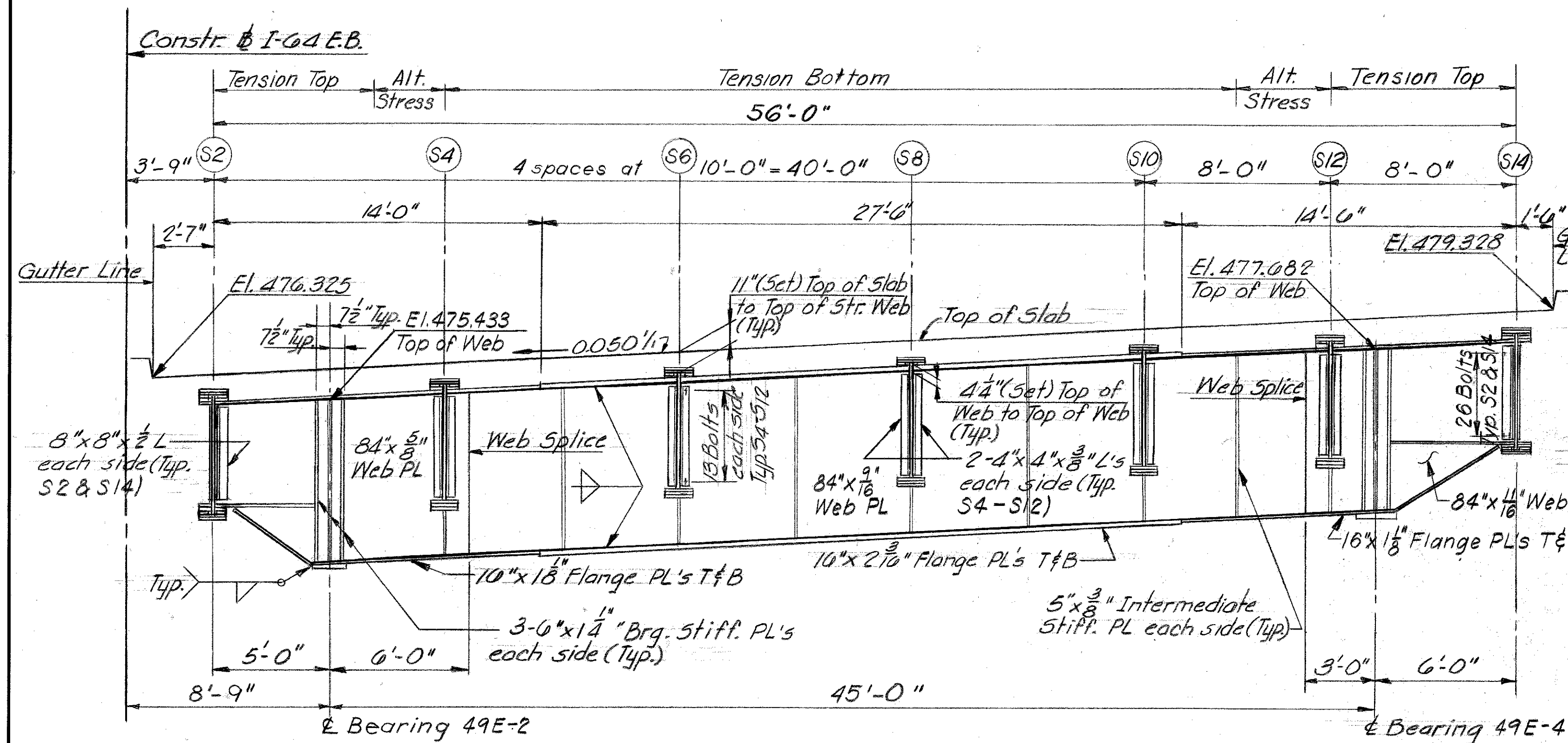
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

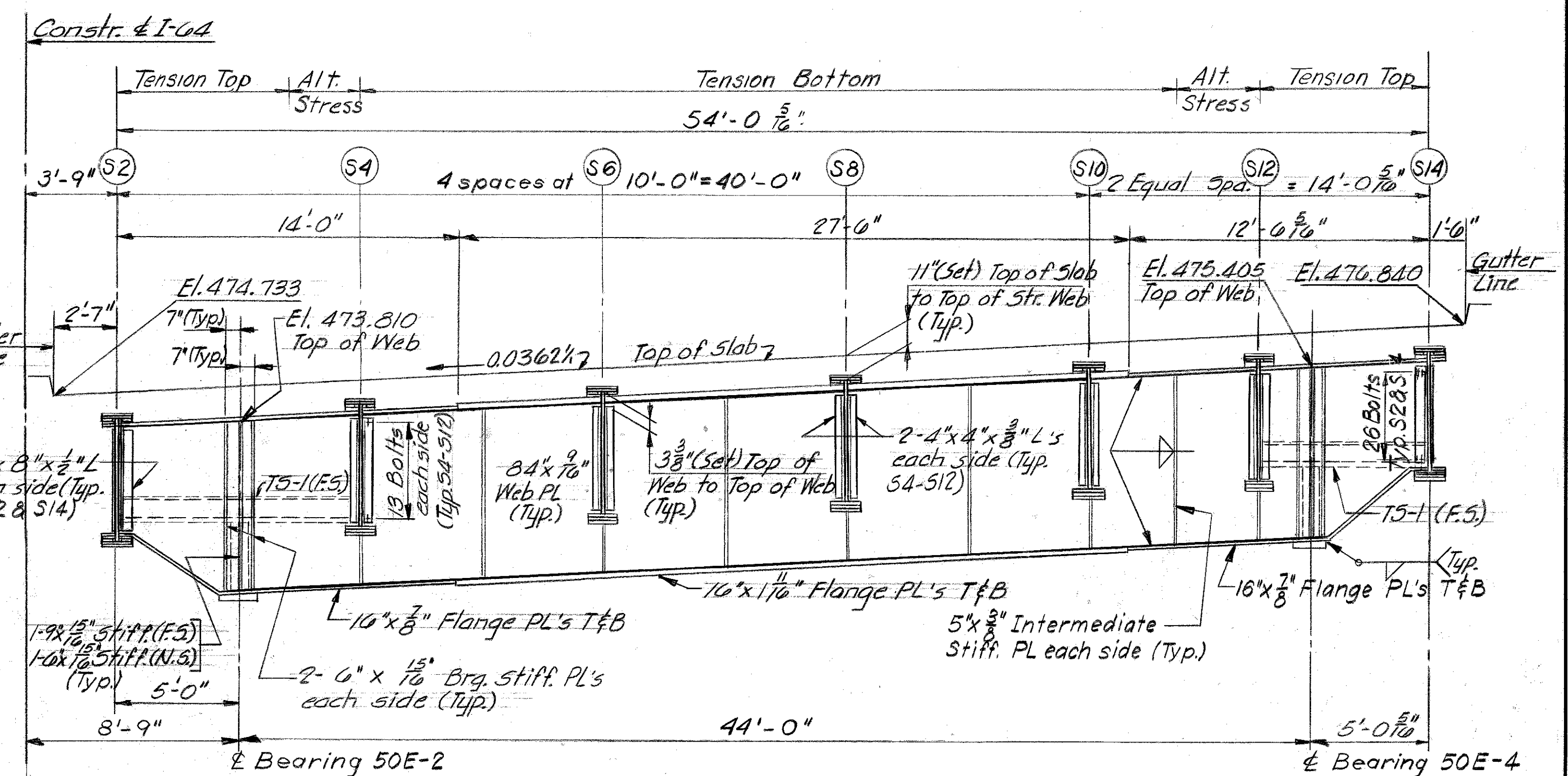
SP 56-273-11L

STATION 208+08 **PROJECT NO. 164-2(35)3**

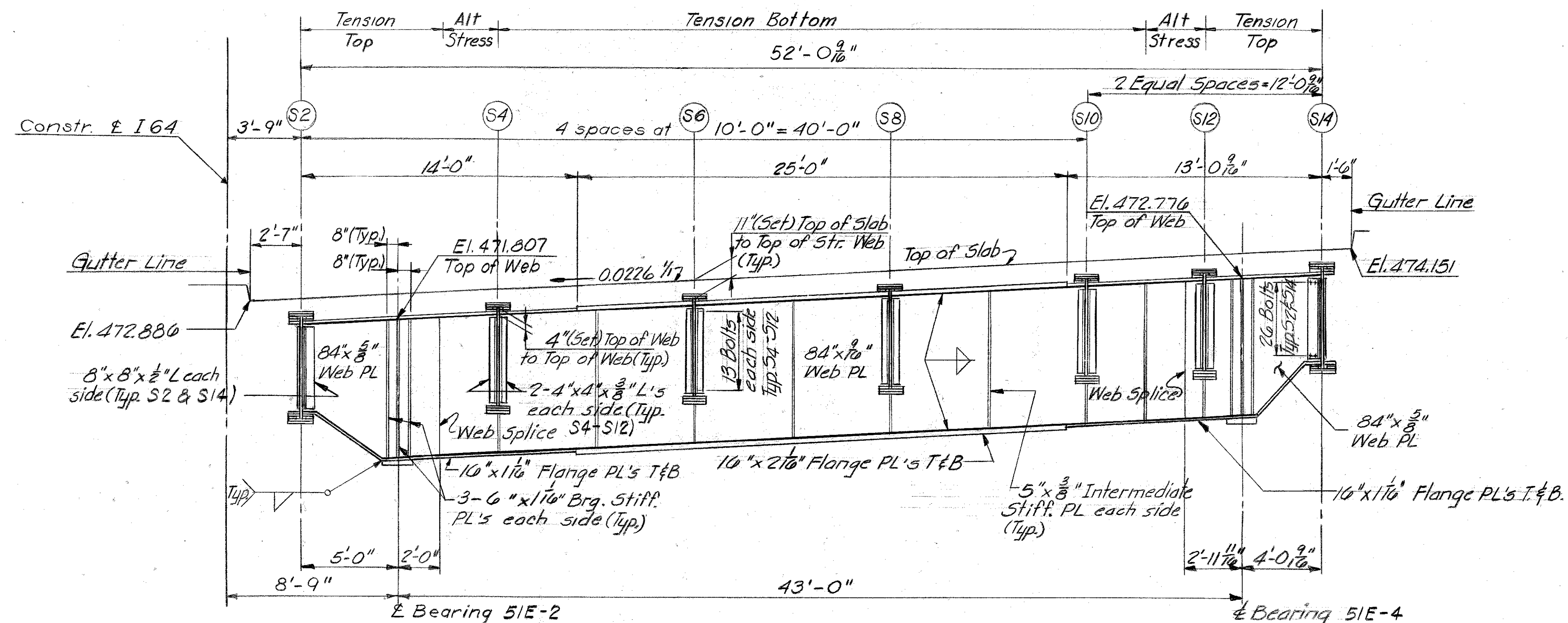
BRIDGE NUMBER	DRAWING NO. 18572	INDEX
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PIER GIRDER 49EB



PIER GIRDER 50EB



PIER GIRDER 51EB

For Pier Girder Notes see Sheet A129
All Steel this Sheet ASTM A36 unless noted.

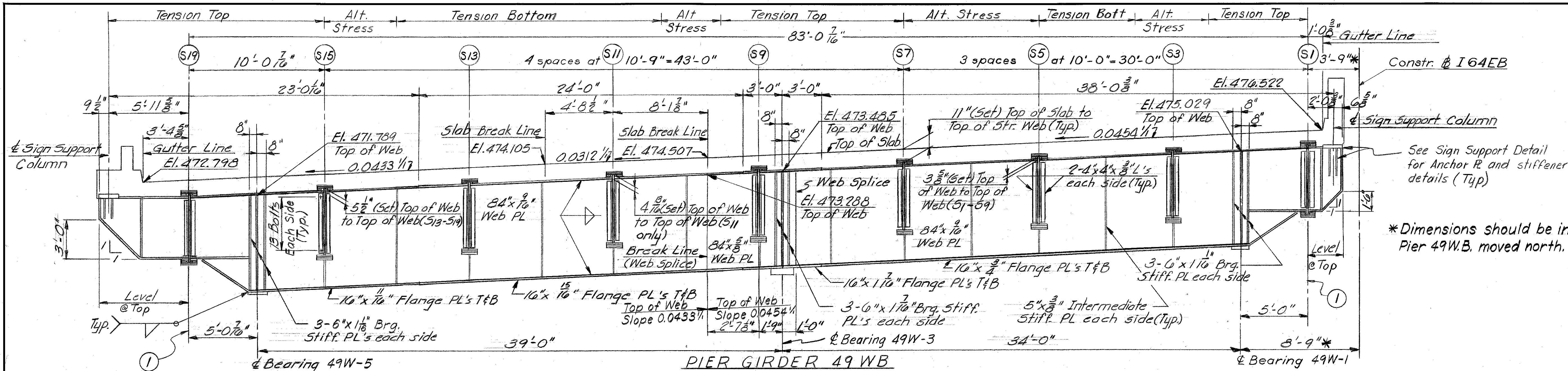
PIER GIRDERS
STRUCTURAL STEEL

SHEET A131

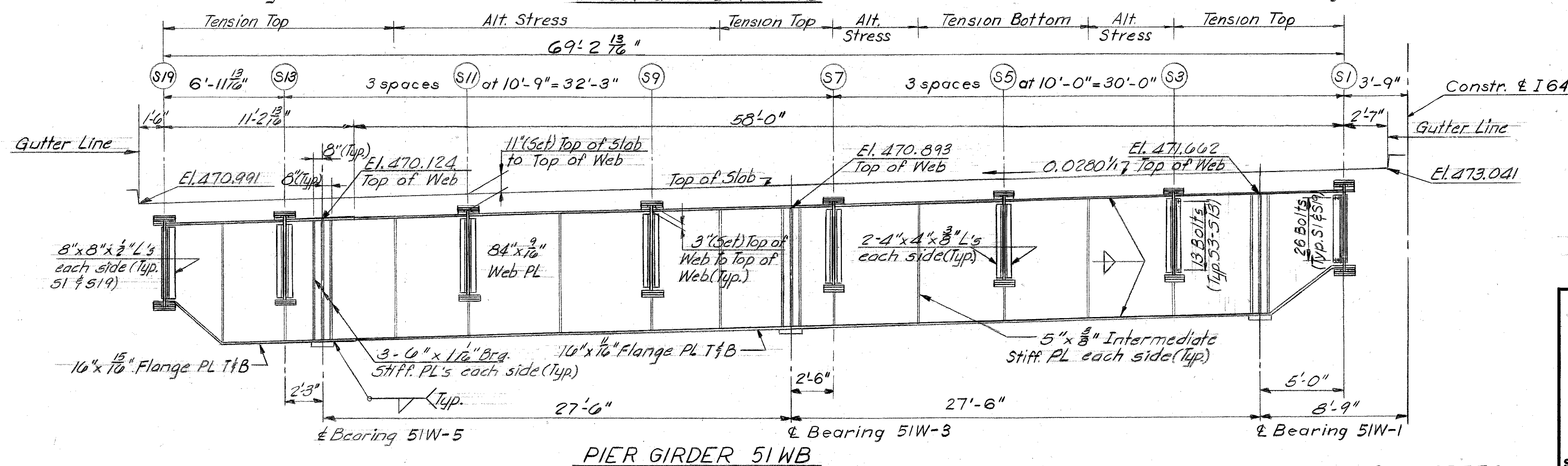
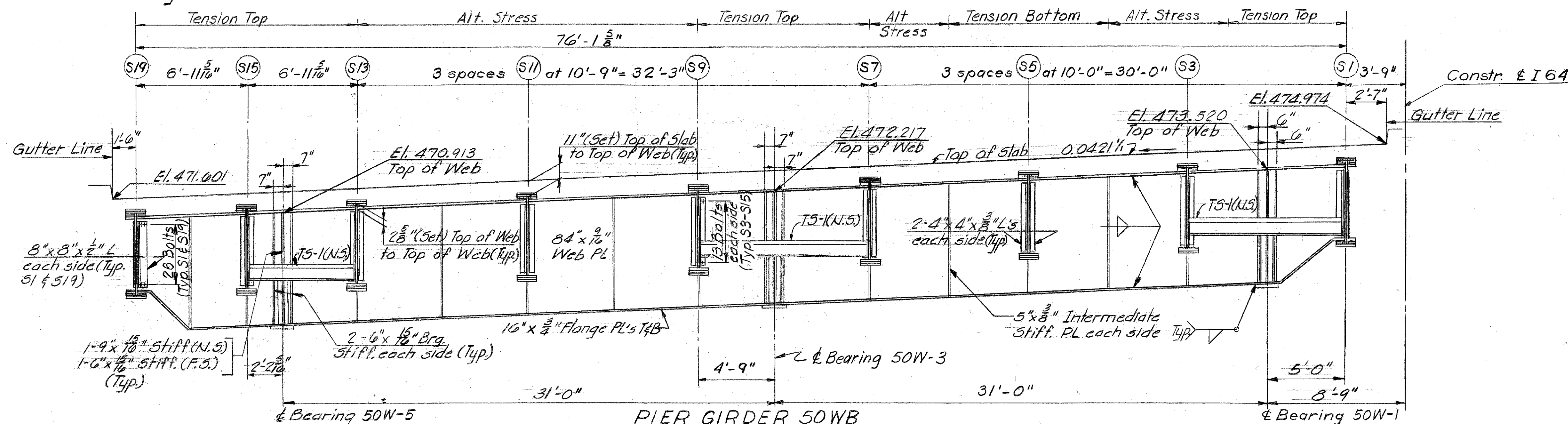
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
SP 56-273-III
PROJECT NO. I 64-2 (35) 3

STATION 208+08
BRIDGE NUMBER
DRAWING NO.
INDEX
18572

DESIGNED BY: **EB**
CHECKED BY: **R.H. McCarty**
DATE: **9-70**
REVISIONS:
DATE: **11-70**
REVISIONS:
DATE: **11-70**
REVISIONS:



*Dimensions should be increased by 1.549'.
Pier 49 W.B. moved north. See Sht. A31.



NOTE
All steel this sheet ASTM A36
For Sign Support Details See Sheet A149
For Pier Girder Notes see Sheet A129
① See Sh. A139 for Stringer Splice.

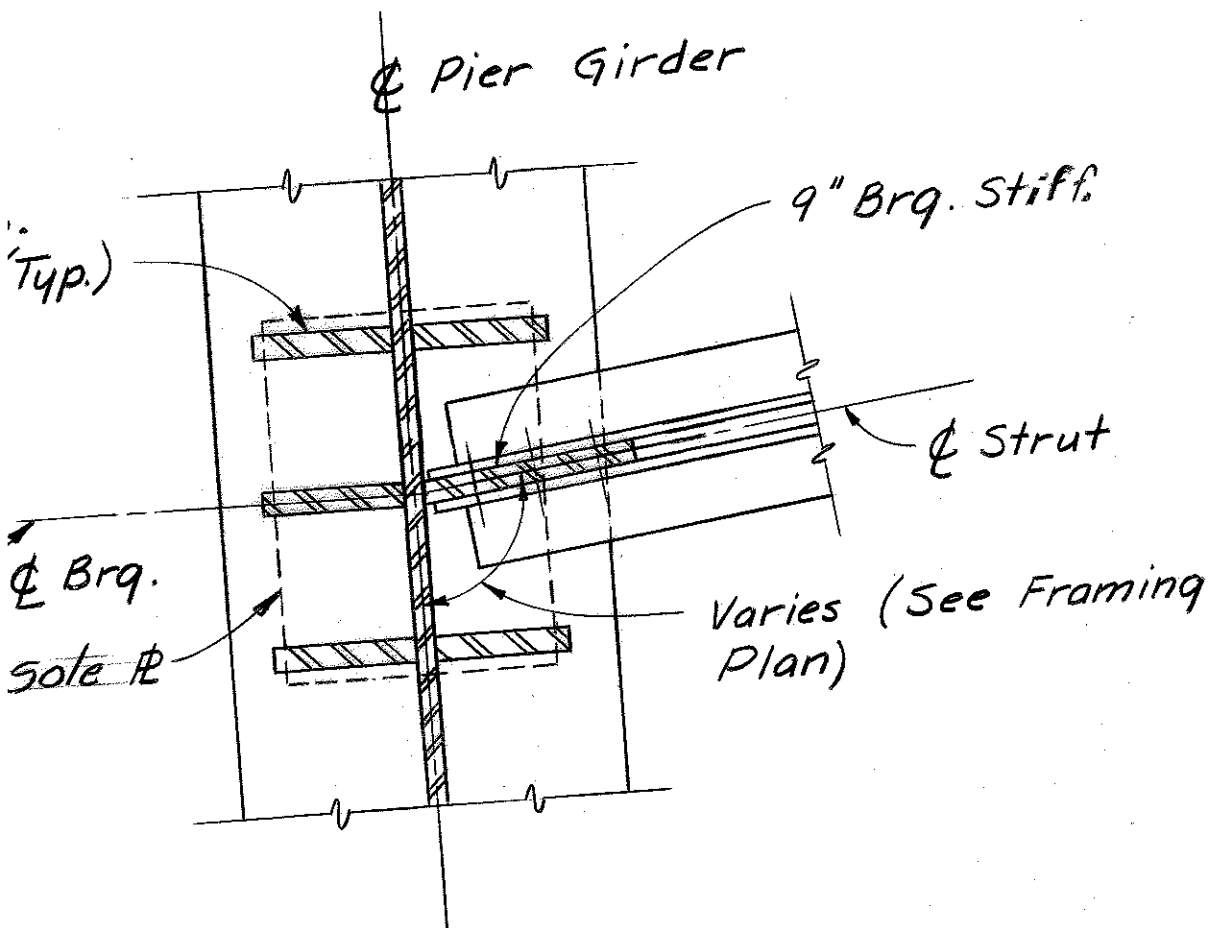
SHEET A132

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I64-13TH ST. TO 7TH ST.
LOUISVILLE - LE XINGTON
ROAD. SP. 56-273-11

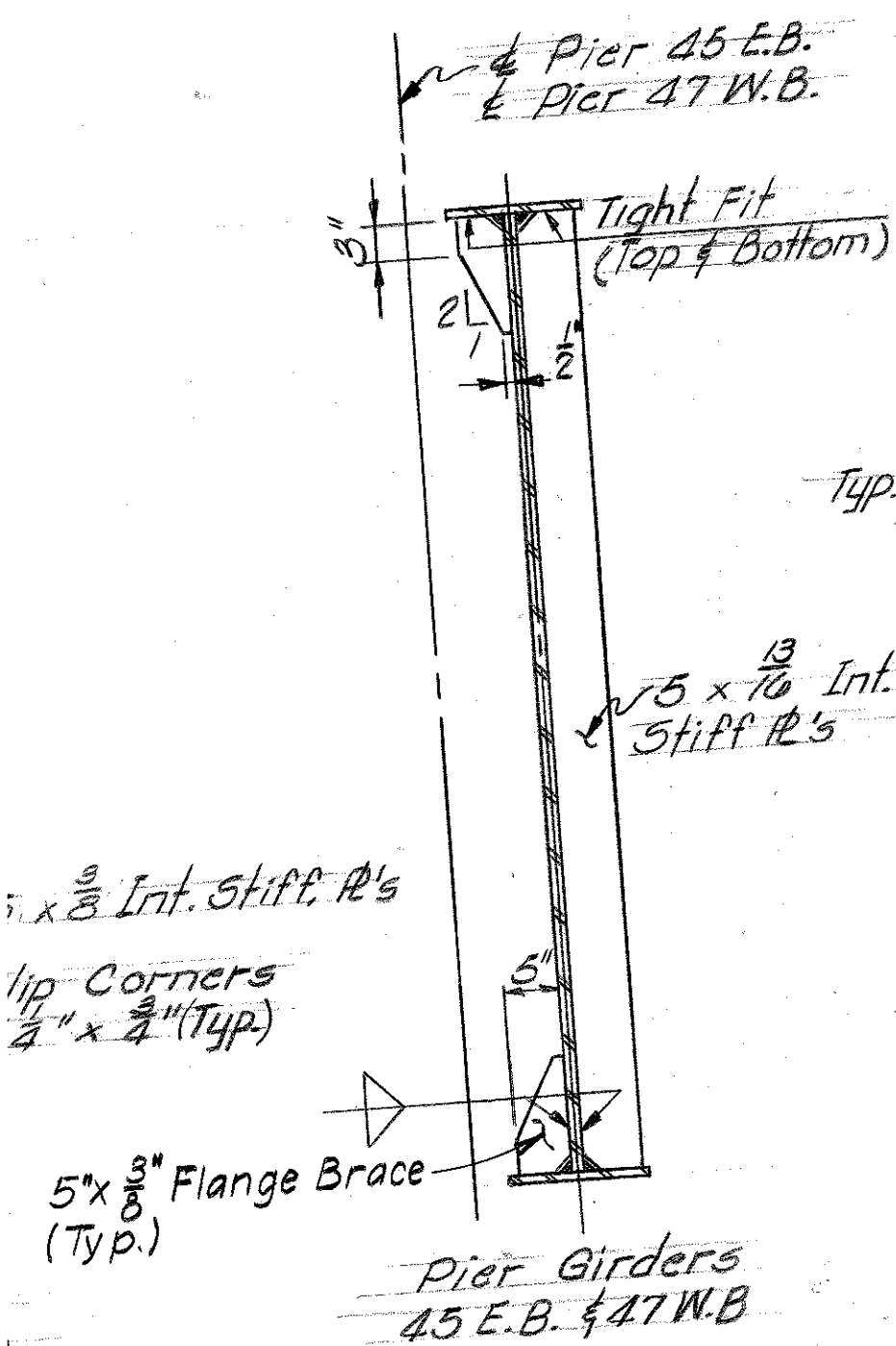
STATION 208+0.8		PROJECT NO. 164-2(35)3	
BRIDGE NUMBER		DRAWING NO. 18572	INDEX

PIER GIRDERS
STRUCTURAL STEEL

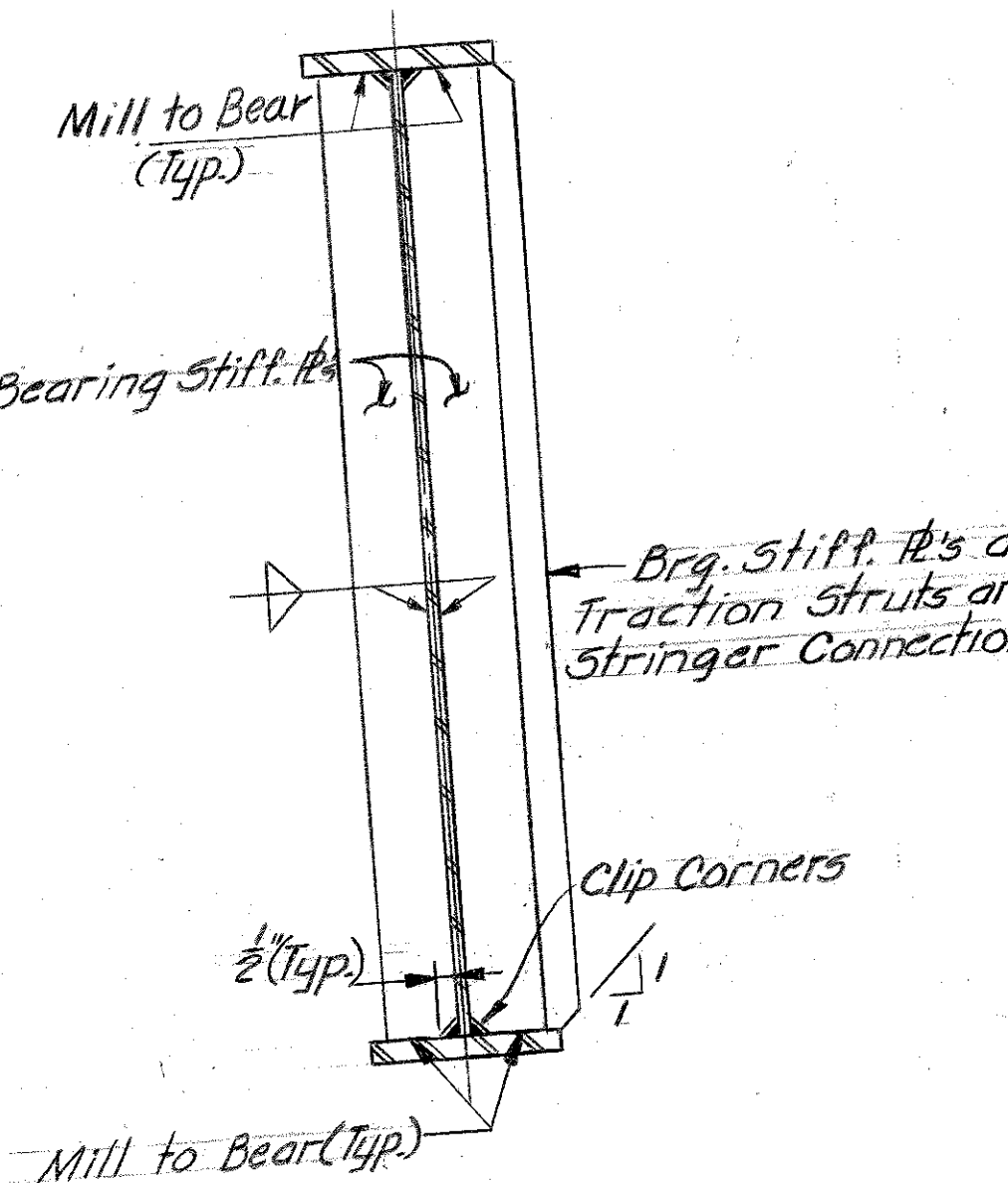
DESIGNED BY <u>EB</u>	CHECKED BY <u>PME</u>	DATE <u>9-70</u>	REVISED	<u>Pier 49WB.*</u>	DATE <u>4-75</u>
DRAWN BY <u>R.H. McCarthy</u>	CHECKED BY <u>BIGL</u>	DATE <u>11-70</u>	REVISED		DATE
TRACED BY	CHECKED BY	DATE	REVISED		DATE



SECTION B-B



INTERMEDIATE STIFFENERS



BEARING STIFFENERS
(For thickness and spacing
see Pier Girder Details)

PIER GIRDER STIFFENERS

Note
For Location of Traction
Struts see Framing Plan.

PIER GIRDERS
STRUCTURAL STEEL

SHEET A133

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

FRANKFORT
COUNTY OF

JEFFERSON

I 64-13TH ST. TO 7TH ST.
LOUISVILLE-LEXINGTON
ROAD

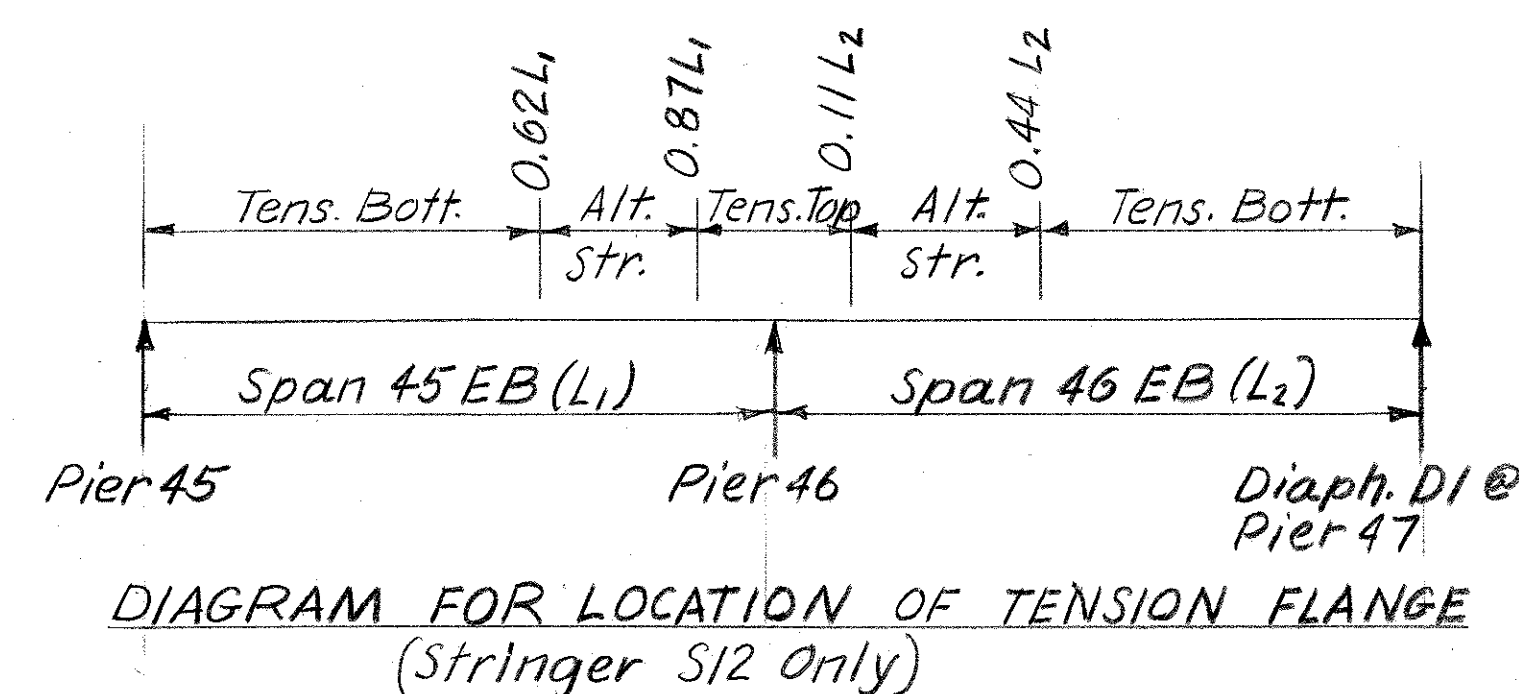
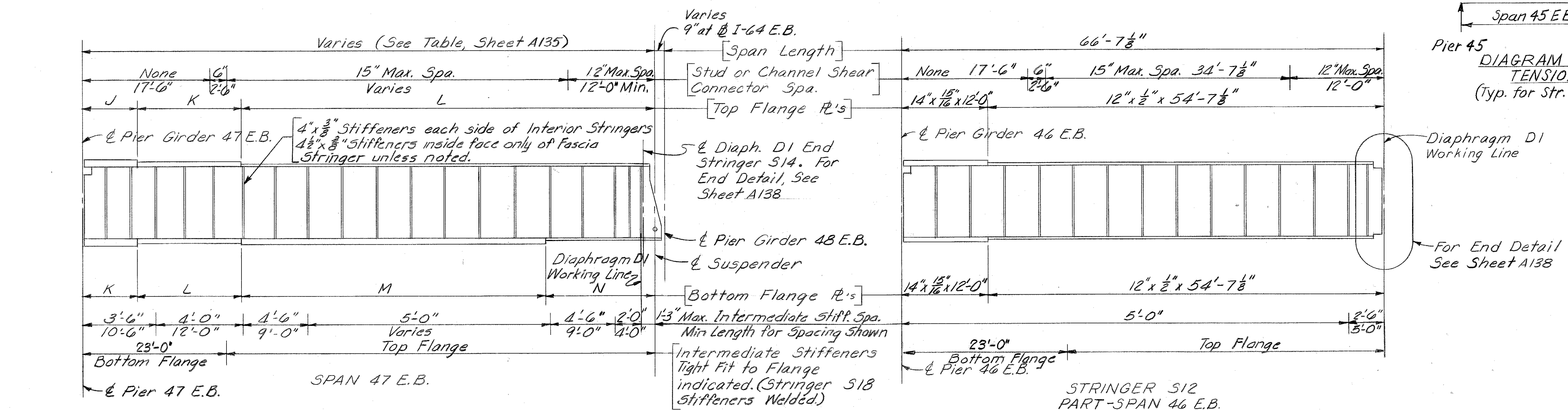
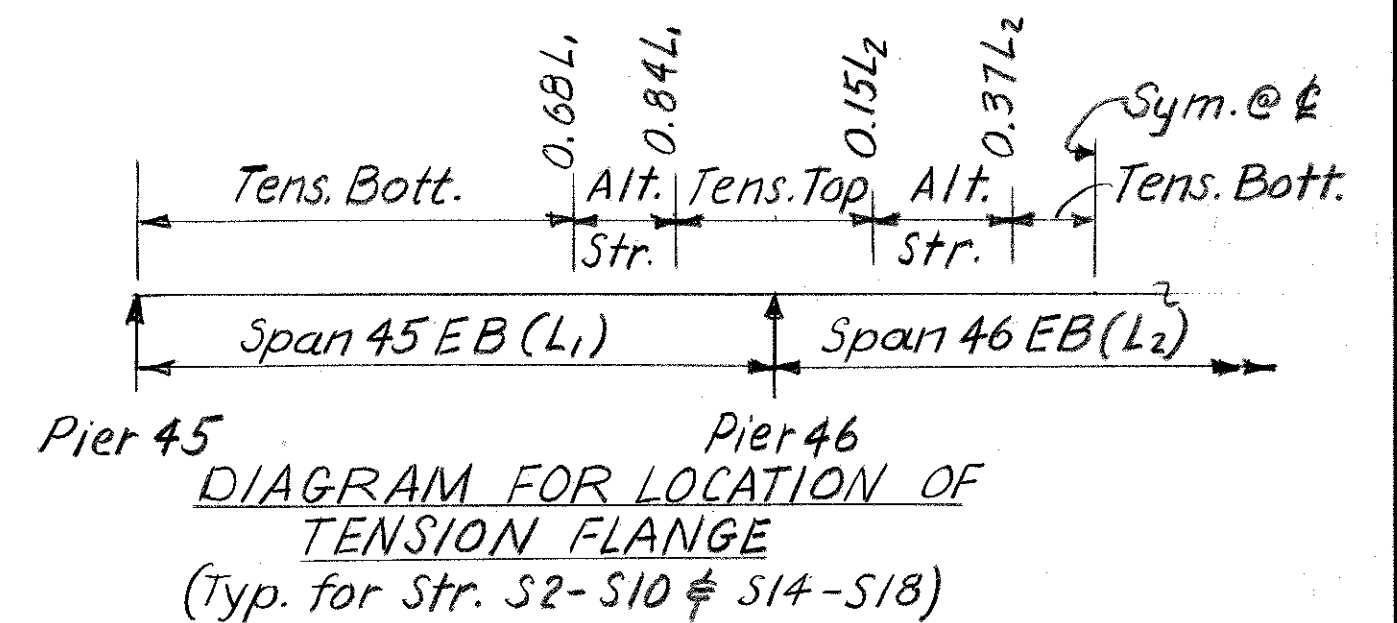
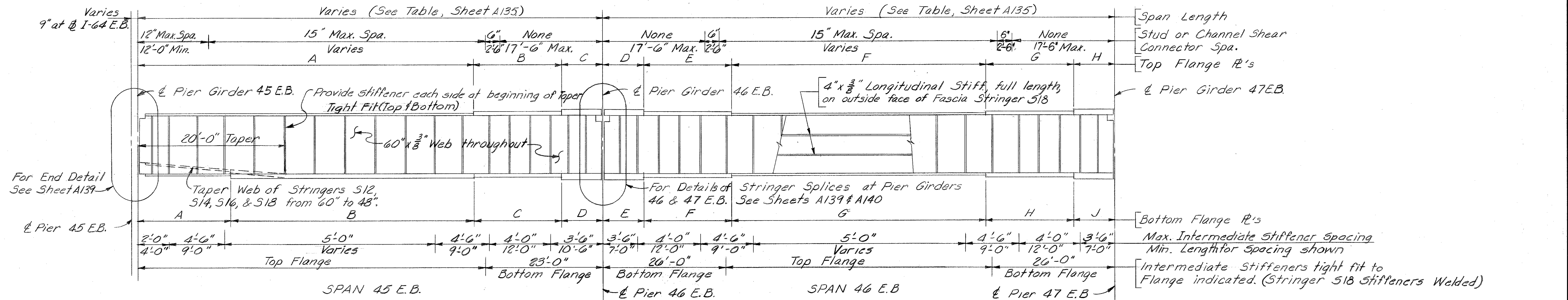
STATION 208+08

CONSTRUCTION PROJECT NO.

P. E. PROJECT NO. 164-7

MAINTENANCE PROJECT NO.

SP 56-



STRINGER ELEVATION
UNIT VII E.B.

All Steel ASTM A36 Unless noted

NOTES

1. For Structural Steel Notes see Sheet A3
2. All dimensions shown are horizontal and should be corrected for grade where applicable.
3. Intermediate stiffeners shall be fabricated perpendicular to the stringer flanges.
4. Bolts $\frac{3}{4}" \phi$ A325 unless noted. Holes $\frac{15}{16}" \phi$ unless noted.
5. For Pier Girder details see Sheets A129 thru A133
6. For Weld details see Sheet A139

STRINGERS
STRUCTURAL STEEL

SHEET A134

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD S P 56-273-11L
STATION 208+08 PROJECT NO. I64-2(35) 3

BRIDGE NUMBER	DRAWING NO.	INDEX
	18572	

TOP FLANGE PLATES UNIT VII E.B.

SPAN 45 E.B.											
A	B	C	D	E	F	G	H	J	K	L	
S2	12"x $\frac{1}{2}$ "x51'-2 $\frac{5}{8}$ "	12"x $\frac{3}{8}$ "x15'-0"	16"x1 $\frac{1}{8}$ "x12'-0"	16"x1 $\frac{1}{8}$ "x13'-0"	12"x $\frac{3}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x30'-0 $\frac{1}{2}$ "	12"x $\frac{3}{8}$ "x15'-0"	16"x1 $\frac{1}{8}$ "x13'-0"	16"x1 $\frac{1}{8}$ "x12'-0"	12"x $\frac{3}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x51'-2 $\frac{5}{8}$ "
S4	12"x $\frac{1}{2}$ "x53'-8 $\frac{3}{8}$ "	12"x $\frac{1}{8}$ "x15'-0"	14"x1 $\frac{5}{8}$ "x10'-0"	14"x1 $\frac{5}{8}$ "x10'-0"	12"x $\frac{1}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x36'-7 $\frac{3}{8}$ "	12"x $\frac{1}{8}$ "x15'-0"	14"x1 $\frac{5}{8}$ "x10'-0"	14"x1 $\frac{5}{8}$ "x10'-0"	12"x $\frac{1}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x53'-8 $\frac{3}{8}$ "
S6	12"x $\frac{1}{2}$ "x54'-3 $\frac{3}{8}$ "	do.	do.	do.	do.	12"x $\frac{1}{2}$ "x37'-2 $\frac{3}{8}$ "	do.	do.	do.	do.	12"x $\frac{1}{2}$ "x54'-3 $\frac{3}{8}$ "
S8	12"x $\frac{1}{2}$ "x54'-9 $\frac{15}{16}$ "	do.	do.	do.	do.	12"x $\frac{1}{2}$ "x37'-9 $\frac{13}{16}$ "	do.	do.	do.	do.	12"x $\frac{1}{2}$ "x54'-9 $\frac{15}{16}$ "
S10	12"x $\frac{1}{2}$ "x54'-4'-7 $\frac{1}{2}$ "	do.	14"x1 $\frac{3}{8}$ "x11'-0"	14"x1 $\frac{3}{8}$ "x12'-0"	do.	12"x $\frac{1}{2}$ "x35'-5"	12"x $\frac{3}{4}$ "x15'-0"	14"x1 $\frac{3}{8}$ "x11'-0"	14"x1 $\frac{3}{8}$ "x12'-0"	12"x $\frac{3}{4}$ "x15'-0"	12"x $\frac{1}{2}$ "x53'-4'-7 $\frac{1}{2}$ "
S12	12"x $\frac{1}{2}$ "x68'-9 $\frac{3}{8}$ "	14"x1 $\frac{15}{16}$ "x12'-0"	For Stringer S12 in Span 46 E.B. See Sheet 1								
S14	12"x $\frac{1}{2}$ "x55'-3 $\frac{3}{8}$ "	12"x $\frac{1}{8}$ "x15'-0"	14"x1 $\frac{3}{8}$ "x11'-0"	14"x1 $\frac{3}{8}$ "x12'-0"	12"x $\frac{1}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x36'-4'-7 $\frac{3}{8}$ "	12"x $\frac{1}{8}$ "x15'-0"	14"x1 $\frac{3}{8}$ "x11'-0"	14"x1 $\frac{3}{8}$ "x12'-0"	12"x $\frac{1}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x52'-7 $\frac{3}{8}$ " *
S16	12"x $\frac{1}{2}$ "x56'-10 $\frac{5}{8}$ "	do.	14"x1 $\frac{3}{8}$ "x10'-0"	14"x1 $\frac{3}{8}$ "x10'-0"	do.	12"x $\frac{1}{2}$ "x40'-0 $\frac{5}{8}$ "	do.	14"x1 $\frac{3}{8}$ "x10'-0"	14"x1 $\frac{3}{8}$ "x10'-0"	do.	12"x $\frac{1}{2}$ "x56'-7 $\frac{11}{16}$ "
S18	12"x $\frac{1}{2}$ "x55'-4'-1 $\frac{15}{16}$ "	12"x $\frac{3}{8}$ "x15'-0"	16"x1 $\frac{1}{8}$ "x12'-0"	16"x1 $\frac{1}{8}$ "x13'-0"	12"x $\frac{3}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x34'-7 $\frac{3}{8}$ "	12"x $\frac{3}{8}$ "x15'-0"	16"x1 $\frac{1}{8}$ "x13'-0"	16"x1 $\frac{1}{8}$ "x12'-0"	12"x $\frac{3}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x55'-2 $\frac{3}{8}$ "

* Measured to Diaph DI Working Line

STR. LENGTHS UNIT VII E.B.

	45 E.B.	46 E.B.	47 E.B.
S2	78'-2 $\frac{5}{16}$ "	86'-0 $\frac{1}{4}$ "	78'-2 $\frac{5}{16}$ "
S4	78'-8 $\frac{3}{8}$ "	86'-7 $\frac{1}{16}$ "	78'-8 $\frac{3}{8}$ "
S6	79'-3 $\frac{3}{8}$ "	87'-2 $\frac{3}{8}$ "	79'-3 $\frac{3}{8}$ "
S8	79'-9 $\frac{15}{16}$ "	87'-9 $\frac{13}{16}$ "	79'-9 $\frac{15}{16}$ "
S10	80'-4 $\frac{1}{16}$ "	88'-5"	80'-4 $\frac{1}{16}$ "
S12	80'-9 $\frac{7}{16}$ "	See Sheet 1	
S14	81'-3 $\frac{3}{8}$ "	89'-4 $\frac{13}{16}$ "	79'-7 $\frac{3}{16}$ " *
S16	81'-10 $\frac{5}{16}$ "	90'-0 $\frac{3}{8}$ "	81'-7 $\frac{1}{16}$ "
S18	82'-4 $\frac{1}{16}$ "	90'-7 $\frac{1}{16}$ "	82'-2 $\frac{3}{16}$ "

* $\notin$ Pier Girder 47 E.B. to Diaph DI Working Line

BOTTOM FLANGE PLATES UNIT VII E.B.

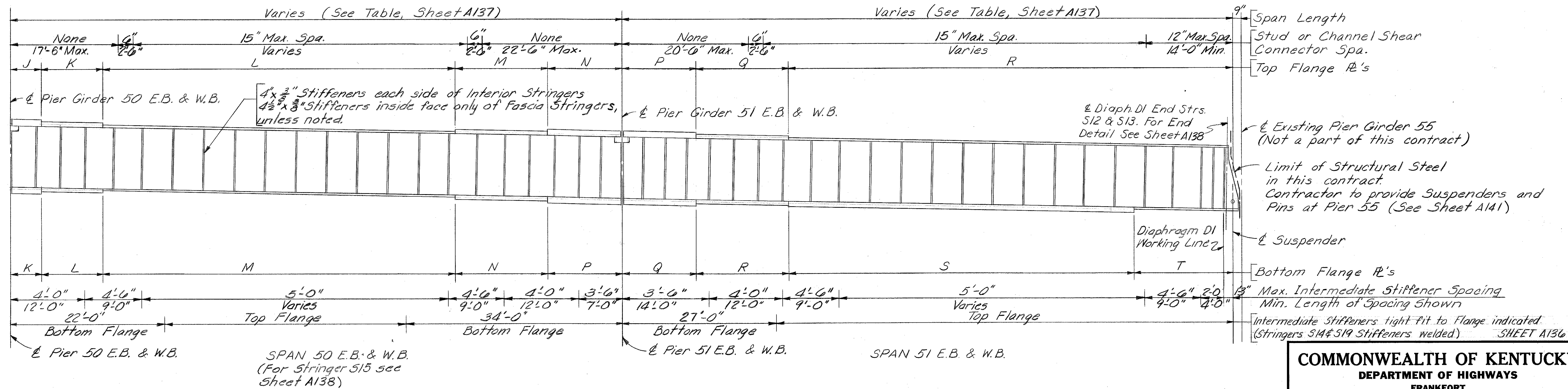
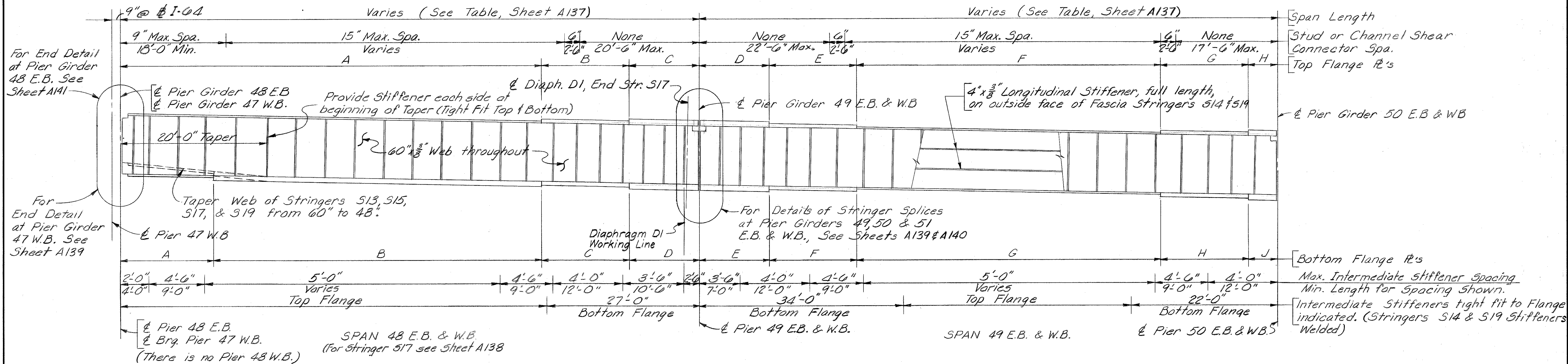
SPAN 45 E.B.											
A	B	C	D	E	F	G	H	J	K	L	
S2	12"x $\frac{3}{8}$ "x14'-0"	12"x1 $\frac{1}{8}$ "x37'-2 $\frac{5}{8}$ "	12"x $\frac{3}{8}$ "x15'-0"	16"x1 $\frac{1}{8}$ "x12'-0"	16"x1 $\frac{1}{8}$ "x13'-0"	12"x $\frac{3}{8}$ "x15'-0"	12"x $\frac{3}{8}$ "x30'-0 $\frac{1}{2}$ "	12"x $\frac{3}{8}$ "x15'-0"	16"x1 $\frac{1}{8}$ "x13'-0"	16"x1 $\frac{1}{8}$ "x12'-0"	12"x $\frac{3}{8}$ "x15'-0"
S4	12"x $\frac{1}{2}$ "x15'-0"	12"x $\frac{15}{16}$ "x38'-8 $\frac{3}{8}$ "	12"x $\frac{1}{8}$ "x15'-0"	14"x1 $\frac{1}{8}$ "x10'-0"	14"x1 $\frac{1}{8}$ "x10'-0"	12"x $\frac{1}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x36'-7 $\frac{3}{8}$ "	12"x $\frac{1}{8}$ "x15'-0"	14"x1 $\frac{5}{8}$ "x10'-0"	14"x1 $\frac{5}{8}$ "x10'-0"	12"x $\frac{1}{8}$ "x15'-0"
S6	do.	12"x $\frac{15}{16}$ "x39'-3 $\frac{3}{8}$ "	do.	do.	do.	do.	12"x $\frac{1}{2}$ "x37'-2 $\frac{3}{8}$ "	do.	do.	do.	12"x $\frac{15}{16}$ "x39'-3 $\frac{3}{8}$ "
S8	do.	12"x $\frac{15}{16}$ "x39'-9 $\frac{15}{16}$ "	do.	do.	do.	do.	12"x $\frac{1}{2}$ "x37'-9 $\frac{13}{16}$ "	do.	do.	do.	12"x $\frac{15}{16}$ "x39'-9 $\frac{15}{16}$ "
S10	do.	12"x $\frac{15}{16}$ "x39'-4'-7 $\frac{1}{2}$ "	do.	14"x1 $\frac{3}{8}$ "x11'-0"	14"x1 $\frac{3}{8}$ "x12'-0"	do.	12"x $\frac{3}{4}$ "x15'-0"	14"x1 $\frac{3}{8}$ "x11'-0"	14"x1 $\frac{3}{8}$ "x12'-0"	12"x $\frac{3}{4}$ "x15'-0"	12"x $\frac{1}{2}$ "x20'-0"
S12	do.	12"x $\frac{15}{16}$ "x38'-9 $\frac{7}{8}$ "	12"x $\frac{1}{2}$ "x15'-0"	14"x1 $\frac{15}{16}$ "x12'-0"	For Stringer S12 in Span 46 E.B. See Sheet 1						
S14	do.	12"x $\frac{15}{16}$ "x40'-3 $\frac{3}{8}$ "	12"x $\frac{1}{8}$ "x15'-0"	14"x1 $\frac{3}{8}$ "x11'-0"	14"x1 $\frac{3}{8}$ "x12'-0"	12"x $\frac{1}{8}$ "x15'-0"	12"x $\frac{3}{4}$ "x36'-4'-7 $\frac{3}{8}$ "	12"x $\frac{1}{8}$ "x15'-0"	14"x1 $\frac{3}{8}$ "x11'-0"	14"x1 $\frac{3}{8}$ "x12'-0"	12"x $\frac{1}{8}$ "x15'-0"
S16	12"x $\frac{3}{8}$ "x15'-0"	12"x1 $\frac{15}{16}$ "x41'-10 $\frac{5}{8}$ "	do.	14"x1 $\frac{3}{8}$ "x10'-0"	14"x1 $\frac{3}{8}$ "x10'-0"	do.	12"x $\frac{1}{2}$ "x40'-0 $\frac{5}{8}$ "	do.	14"x1 $\frac{3}{8}$ "x10'-0"	14"x1 $\frac{3}{8}$ "x10'-0"	do.
S18	12"x $\frac{3}{8}$ "x15'-0"	12"x1 $\frac{1}{8}$ "x40'-4'-7 $\frac{1}{2}$ "	12"x $\frac{3}{8}$ "x15'-0"	16"x1 $\frac{1}{8}$ "x12'-0"	16"x1 $\frac{1}{8}$ "x13'-0"	12"x $\frac{3}{8}$ "x15'-0"	12"x $\frac{1}{2}$ "x34'-7 $\frac{3}{8}$ "	12"x $\frac{3}{8}$ "x15'-0"	16"x1 $\frac{1}{8}$ "x13'-0"	16"x1 $\frac{1}{8}$ "x12'-0"	12"x $\frac{3}{8}$ "x15'-0"

* Measured to Diaph. DI Working Line

DESIGNED BY	EB	CHECKED BY	FME	DATE	7-10
DETAILED BY	GMA	CHECKED BY	SEL	DATE	7-10
TRACED BY		CHECKED BY		DATE	
REVISED		REVISED		DATE	

STRINGERS
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
STATION 208+08
BRIDGE NUMBER
PROJECT NO. I 64-2(35)3
DRAWING NO. 18572
INDEX



Note: For location of tension flange see sheet A137

STRINGER ELEVATION
UNIT VIII E.B. & W.B.

All Steel ASTM A36 Unless noted

STRINGERS
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD

SP 56 - 273-III
 PROJECT NO. 164-2(35)3
 STATION 208+08
 BRIDGE NUMBER

DRAWING NO.
 18572
 INDEX

DESIGNED BY: EB
 CHECKED BY: GMA
 DATE: 7-10
 REVISION: 13
 DATE: 13

* Measured to Diaph. DI Working Line

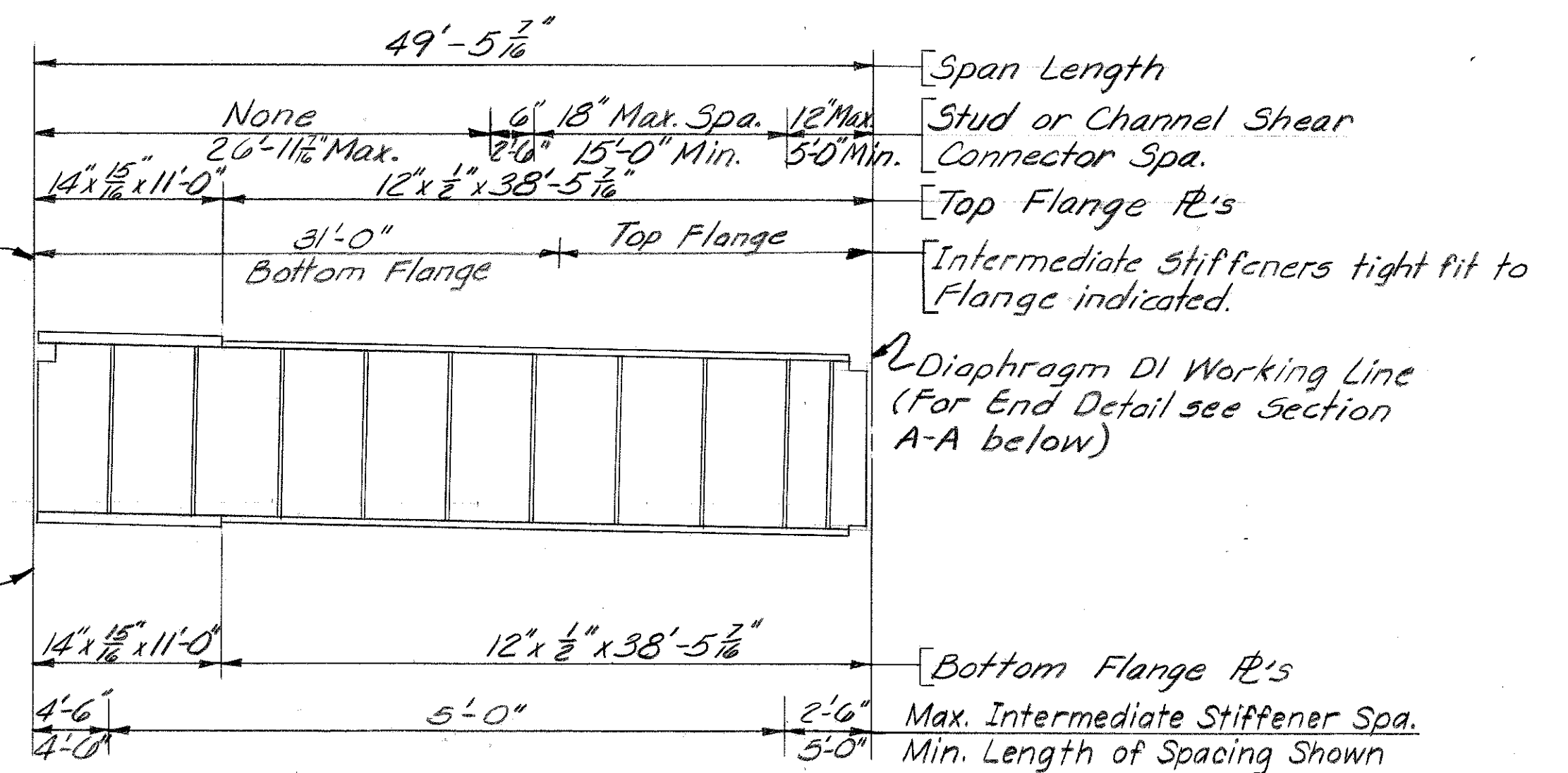
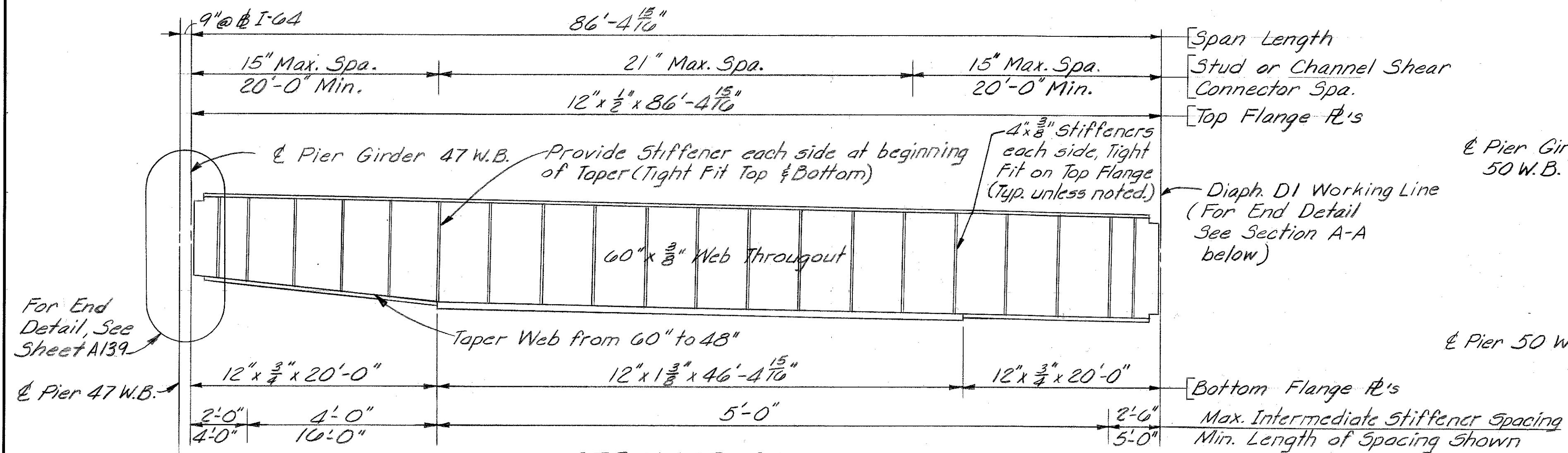
* Measured to Diaph. DI Working Line $-3\frac{3}{8}"$

* $\nless$ Pier Girder 51 to Diaph. DI Working Line



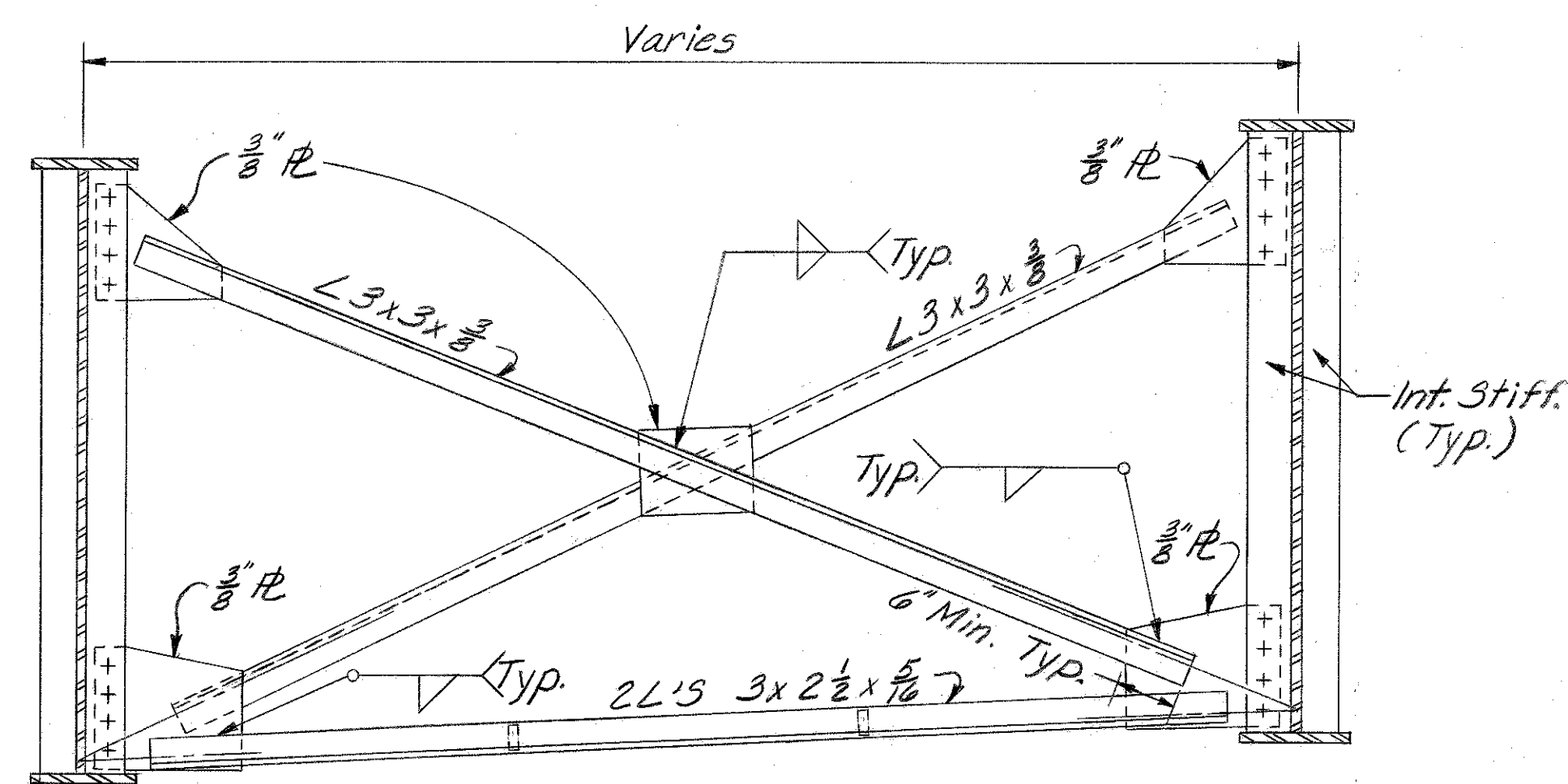
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
I64-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
SP 56-273-11L
STATION 208+08
PROJECT NO. I 64-2(35) 3

BRIDGE NUMBER	DRAWING NO.	INDEX
	18572	

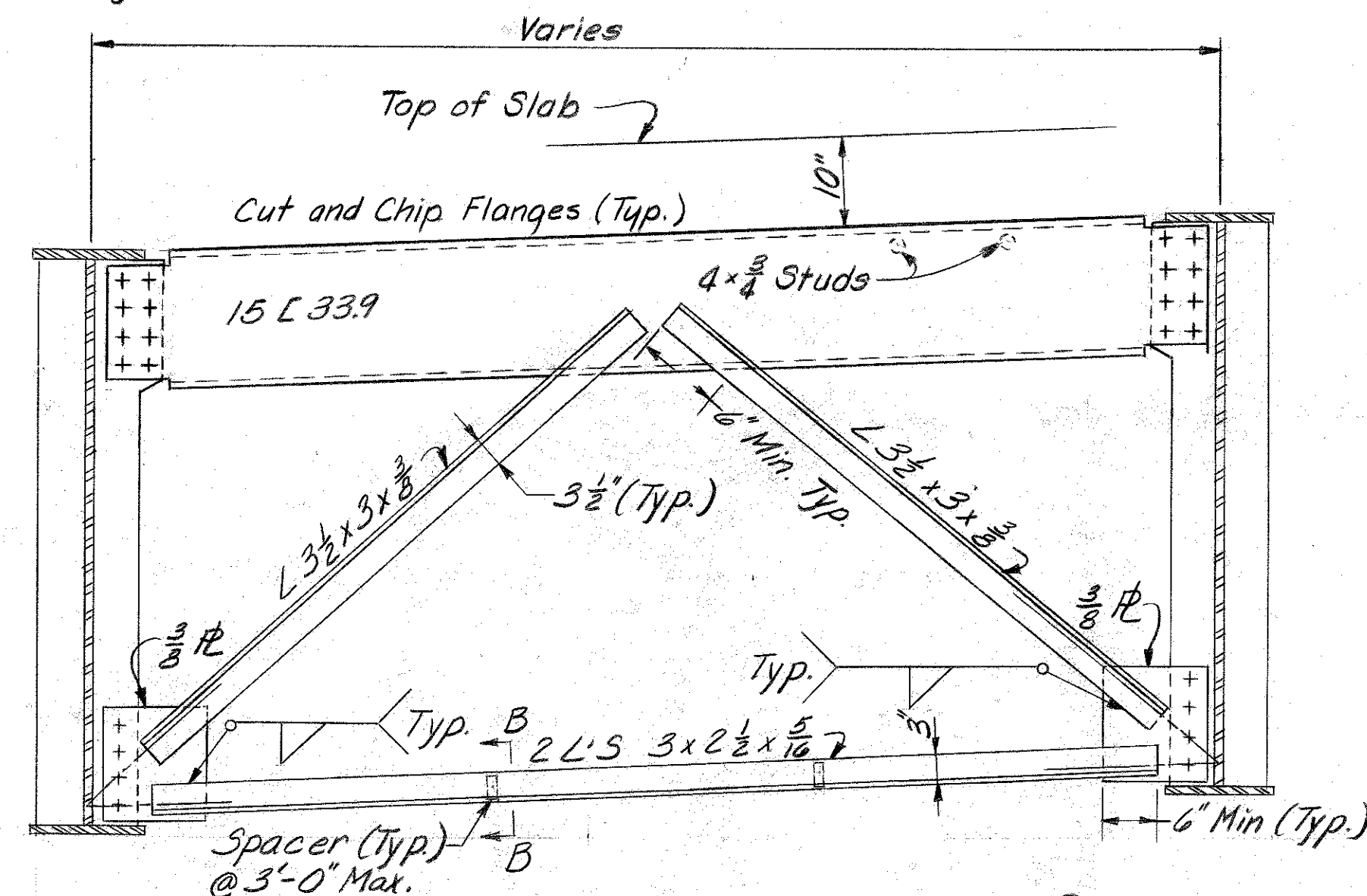


STRINGER 517
SPAN 48 W.B.
(There is no Pier 48 W.B.)

Note: For Location of Tension Flange See Sh. A137

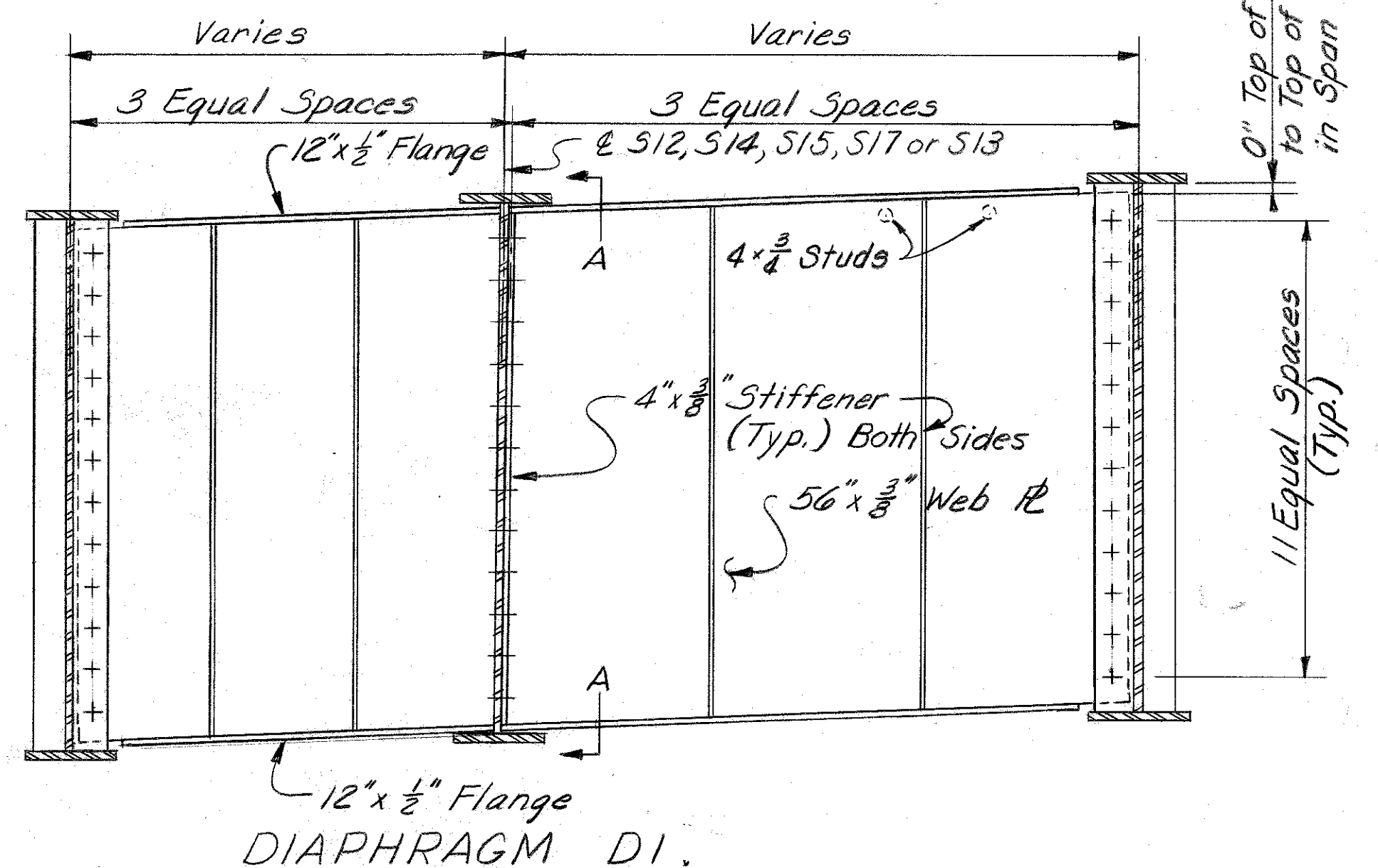


ELEVATION CROSS-FRAME CFI



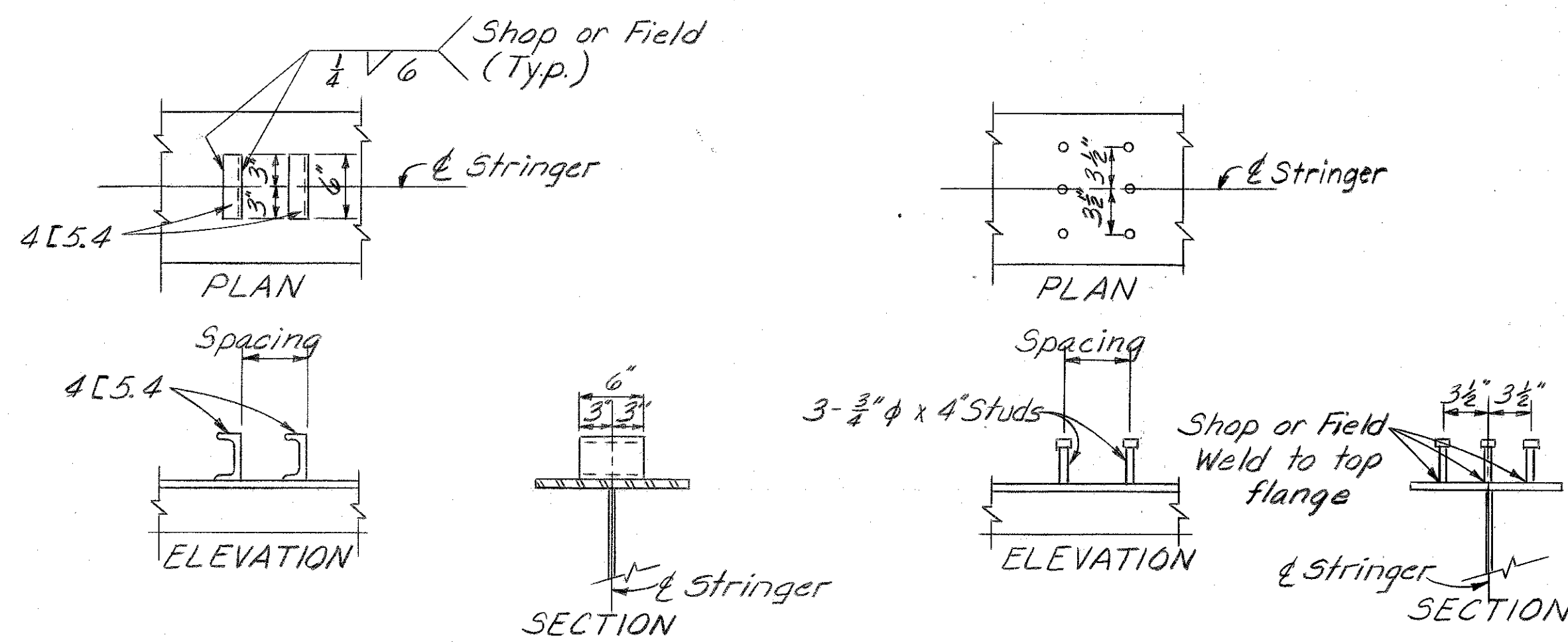
ELEVATION CROSS-FRAME CF2 ①
TYPICAL @ HANGERS

①-See Expansion Dam Details for location of Studs and Slotted Holes in flange.



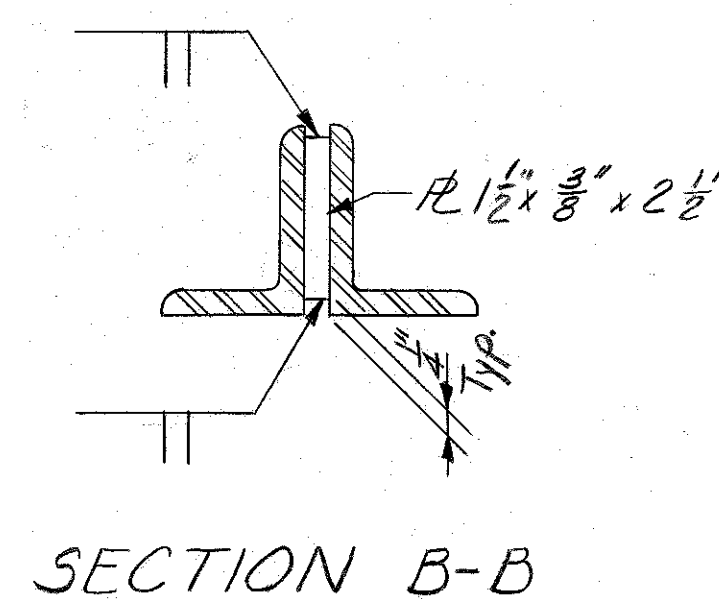
DIAPHRAGM DI.

Typical at end of Stringer S12 in Span 46 E.B.,
S14 in 47 E.B. ①, S15 in 50 WB, S17 in 48 WB, S12
in 51 E.B. ①, and S13 in 51 WB. ① (See Framing Plan)

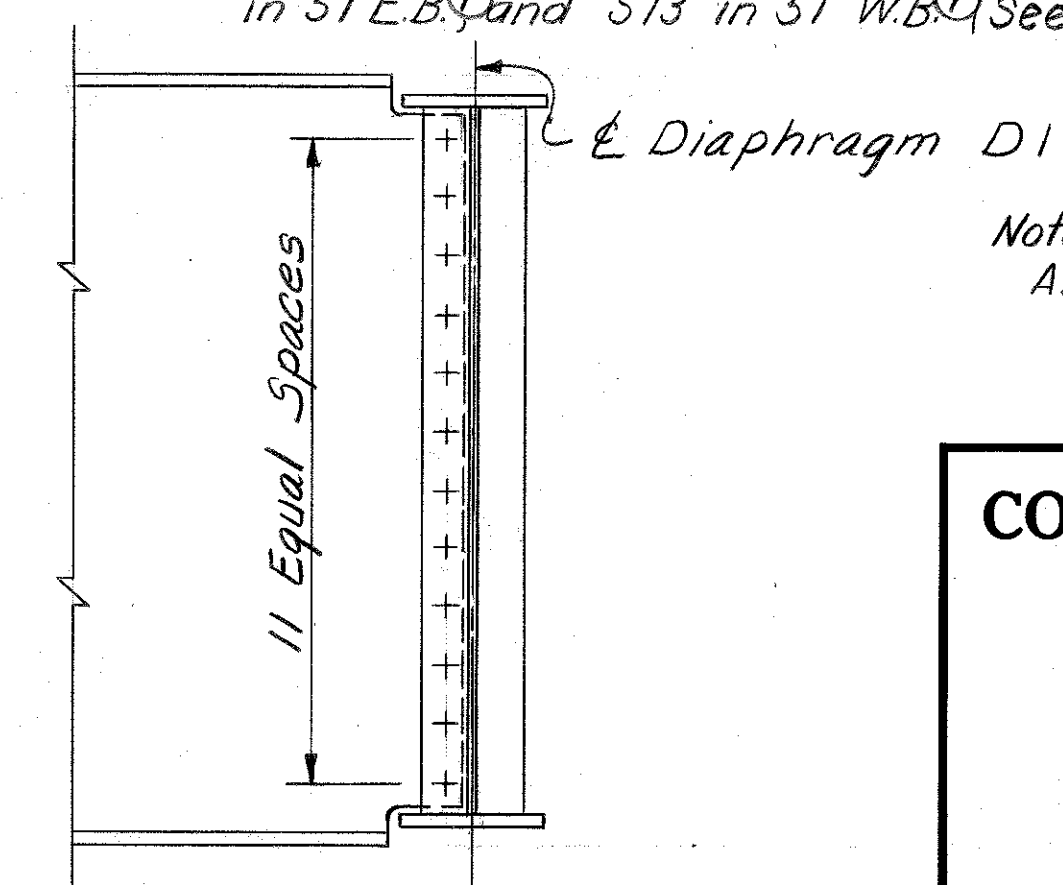


OPTION 2 OPTION 1

SHEAR CONNECTOR DETAILS



SECTION B-B



SECTION A-A

Note:
All Steel this sheet ASTM A36 unless noted.

SHEET A138

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

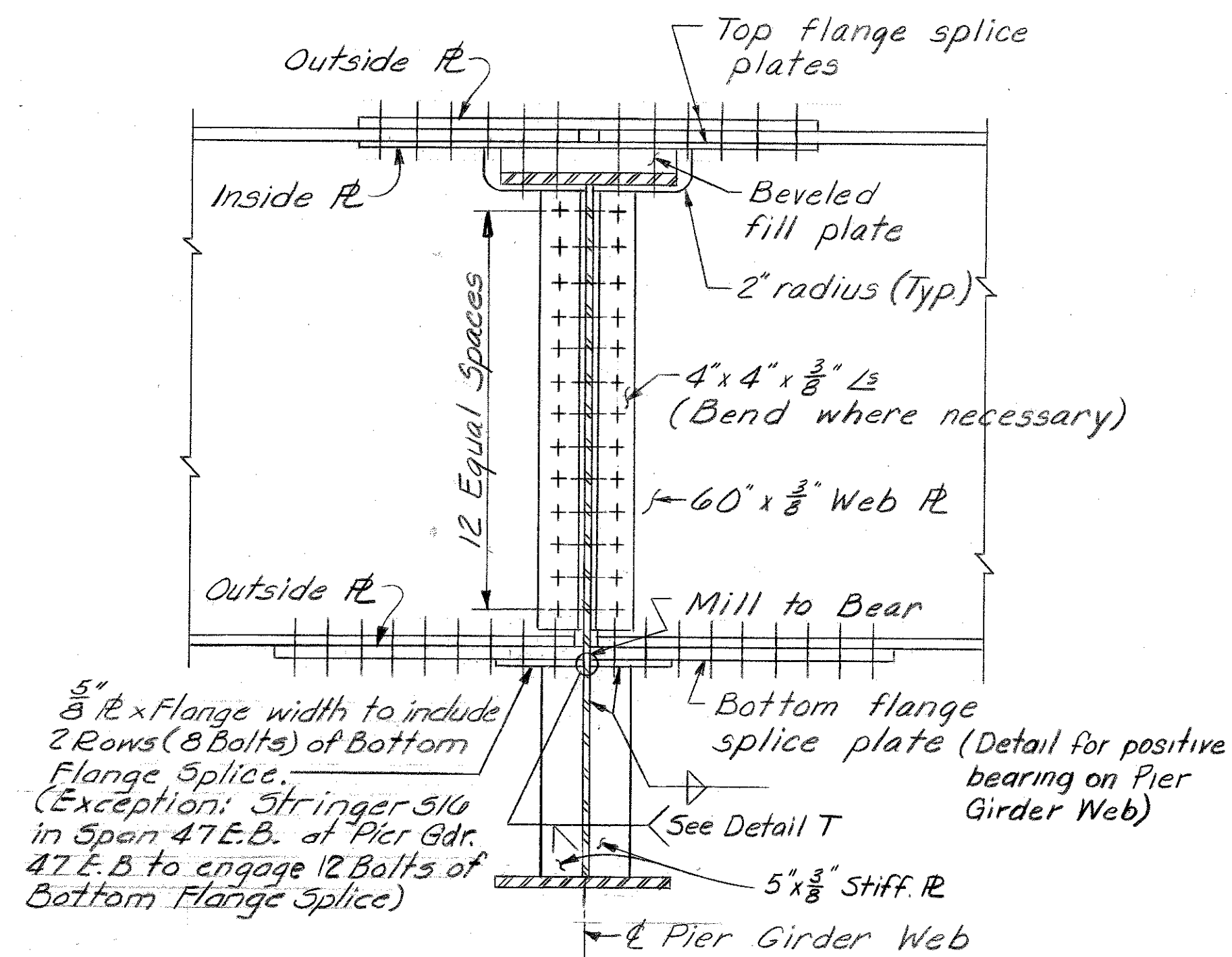
SP 56-273-11L

STATION 208+08

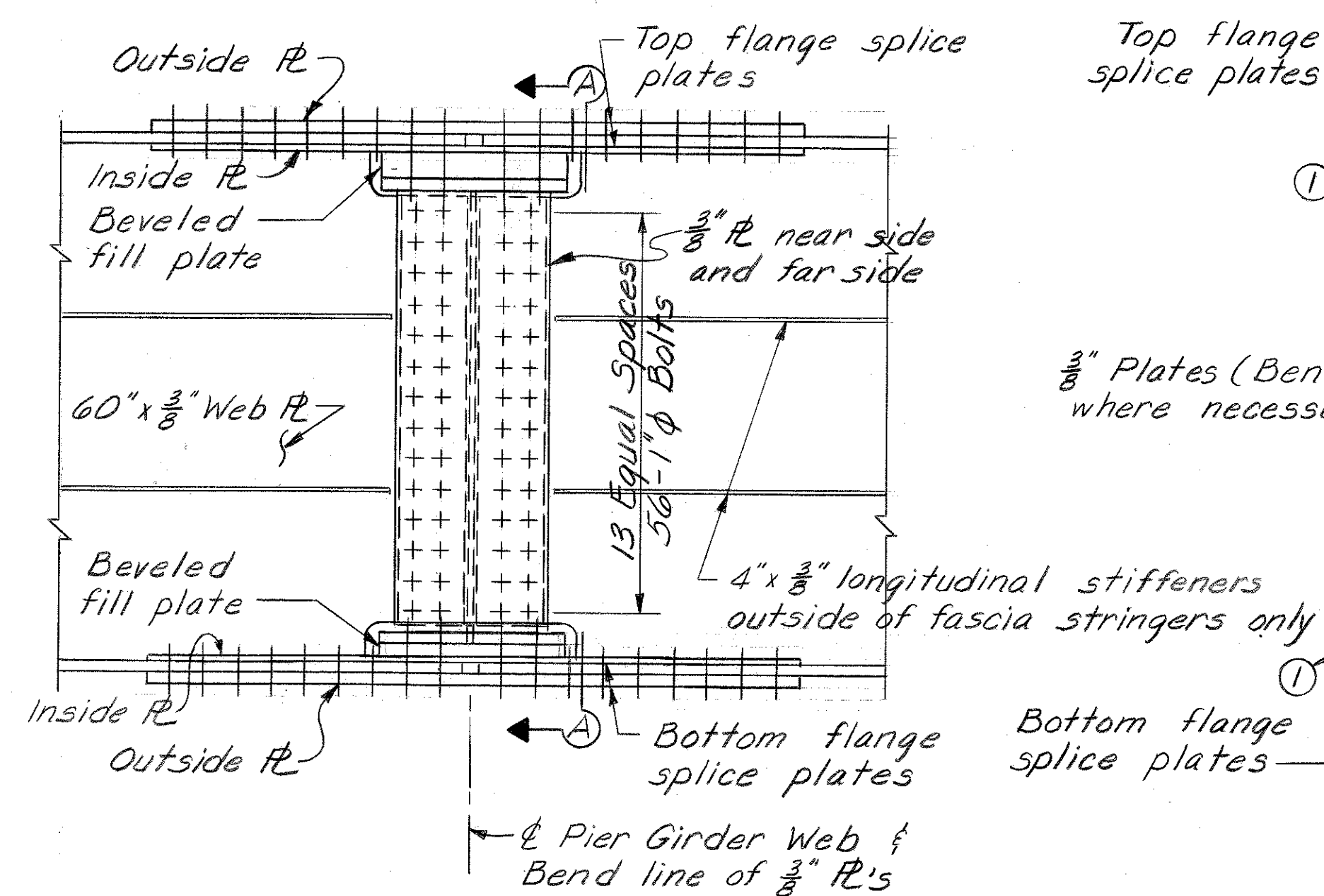
PROJECT NO. I64-2(35)3

BRIDGE
NUMBER

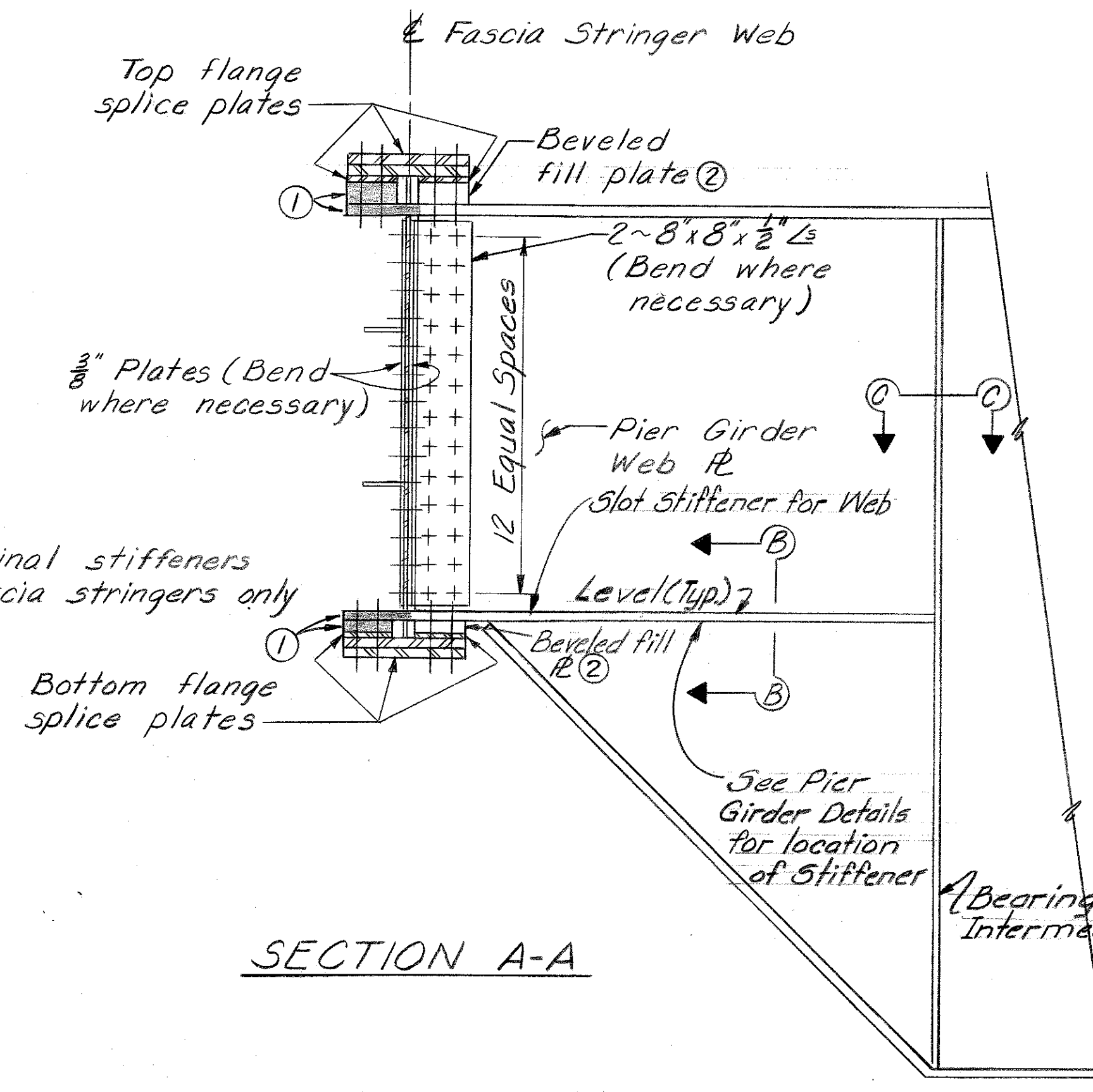
DRAWING NO.	INDEX
18572	



TYPICAL INTERIOR STRINGER SPLICE
(Web Splice for the following Fascia & Median Stringers: S1 & S19 at Pier Girder 49 W.B. and S2 at Pier Girder 47 E.B.)

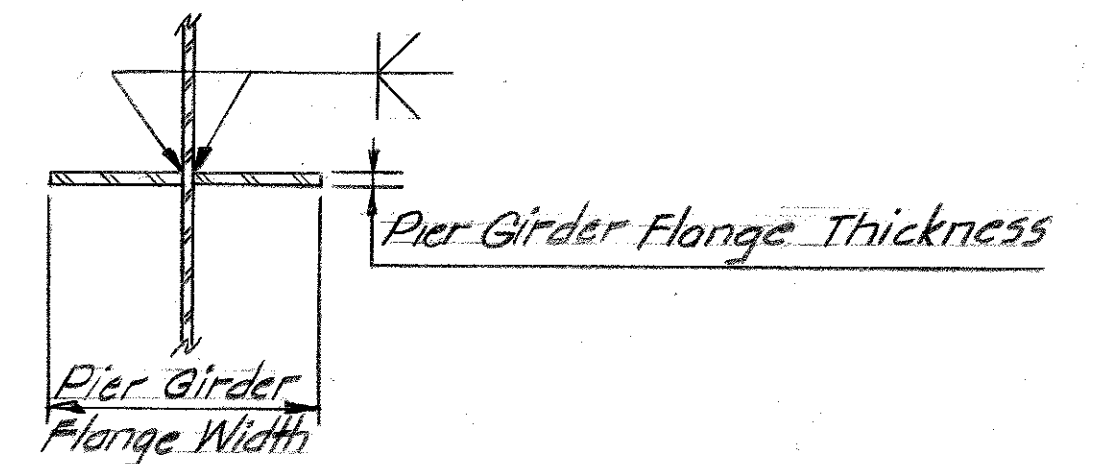


TYPICAL FASCIA AND MEDIAN STRINGER SPLICE

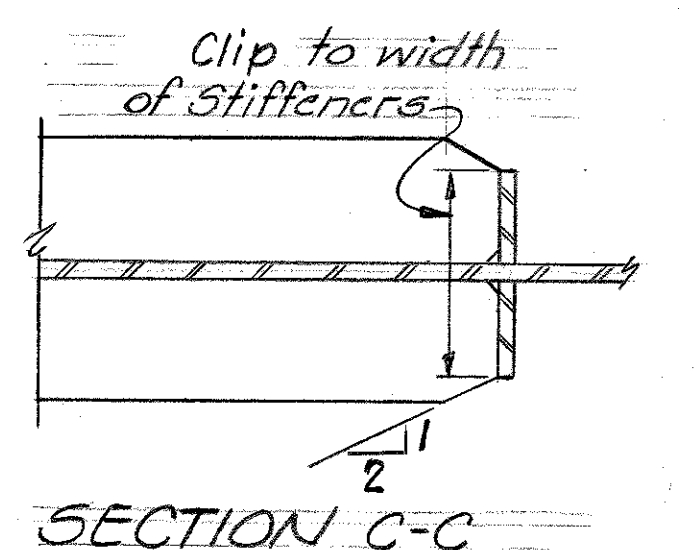


SECTION A-A

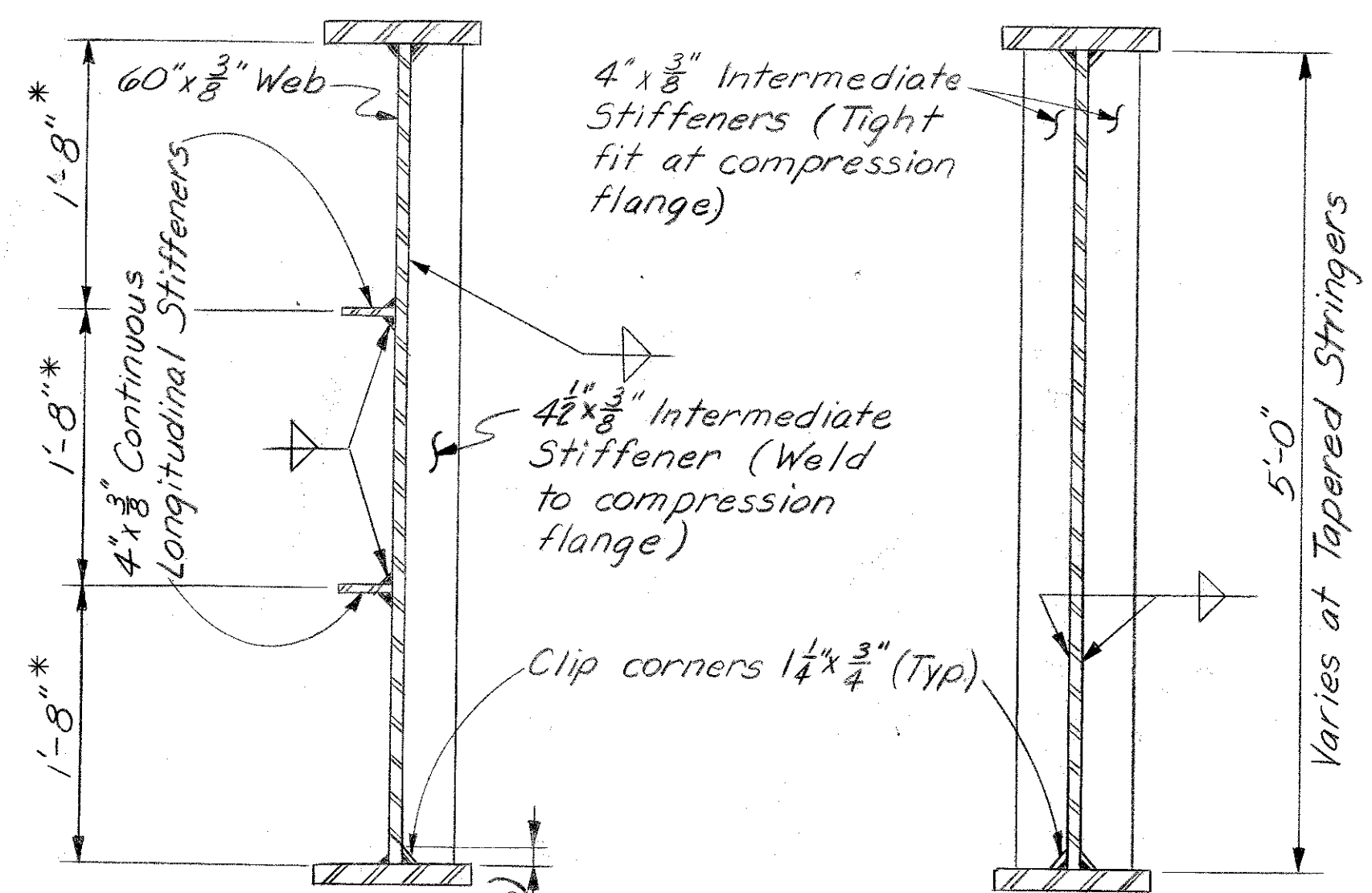
- At Pier Girders where stringers extend straight through (do not change direction) the shaded fill plate and portion of pier girder flange may be omitted. (Opening in stringer web not necessary)
- Under same circumstances as above the beveled fill plate may be omitted providing there is clearance for the bolts.



SECTION B-B

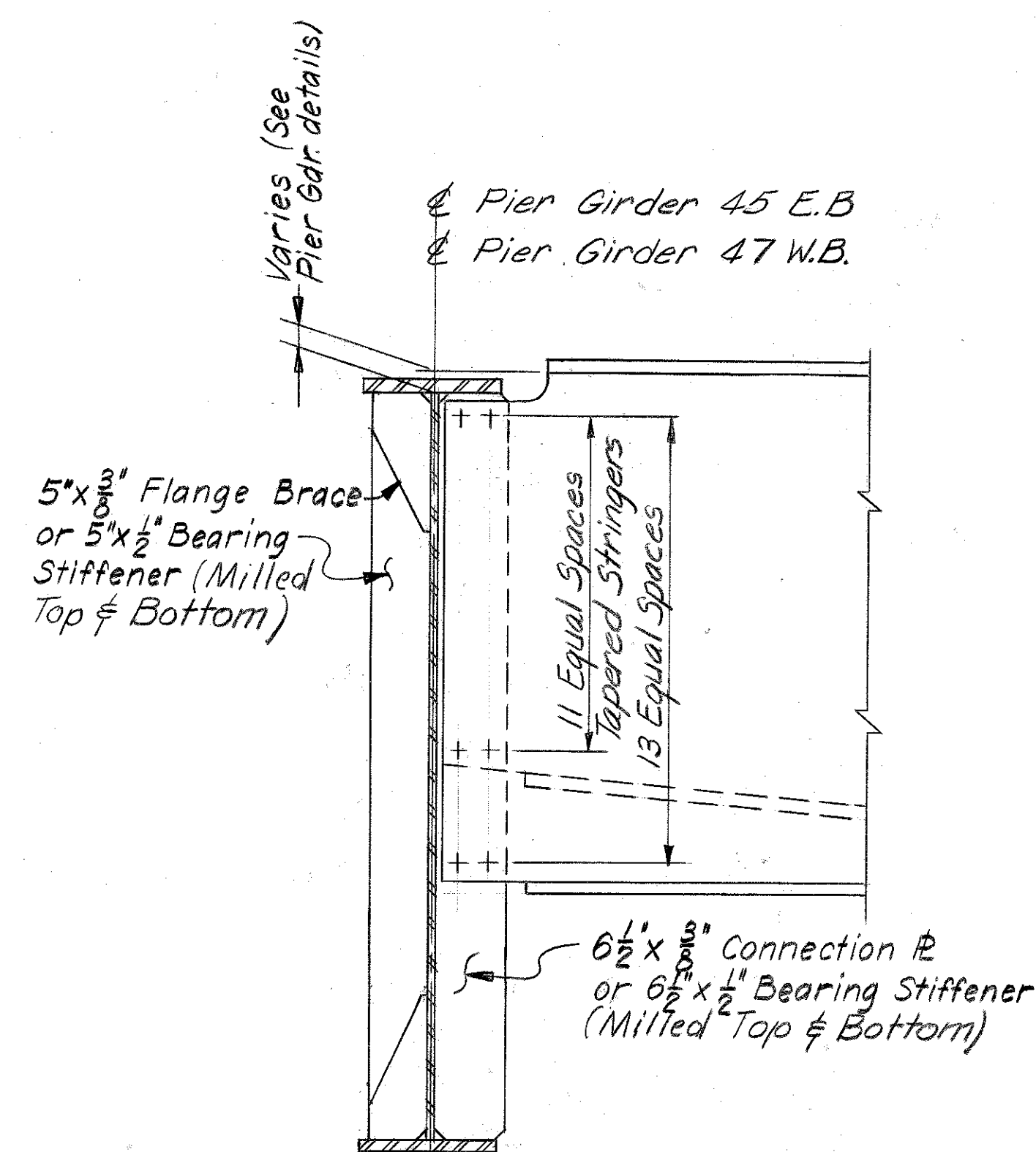


SECTION C-C

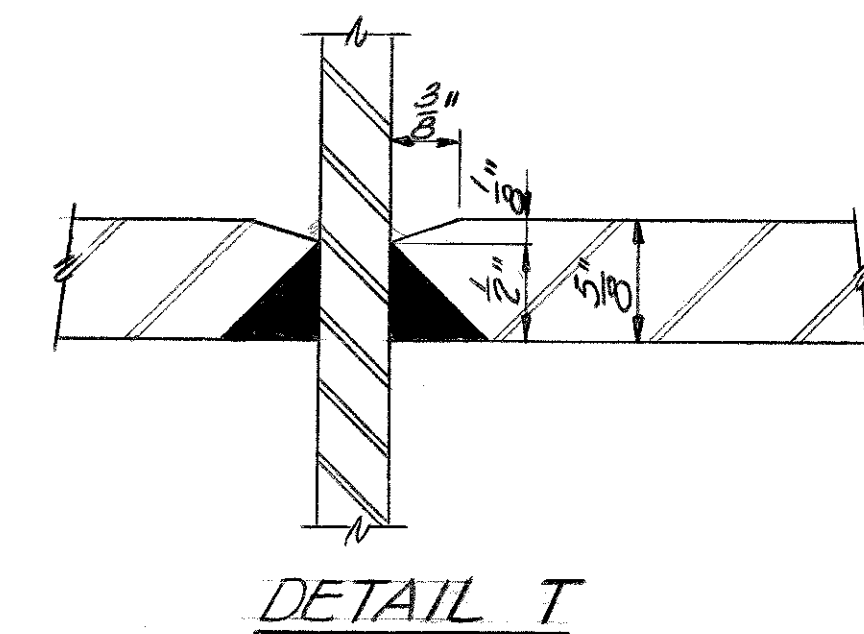


FASCIA STRINGER INTERMEDIATE STIFFENER DETAILS

INTERIOR STRINGER



**STRINGER END DETAILS
PIER GIRDER 45 E.B.
PIER GIRDER 47 W.B.**

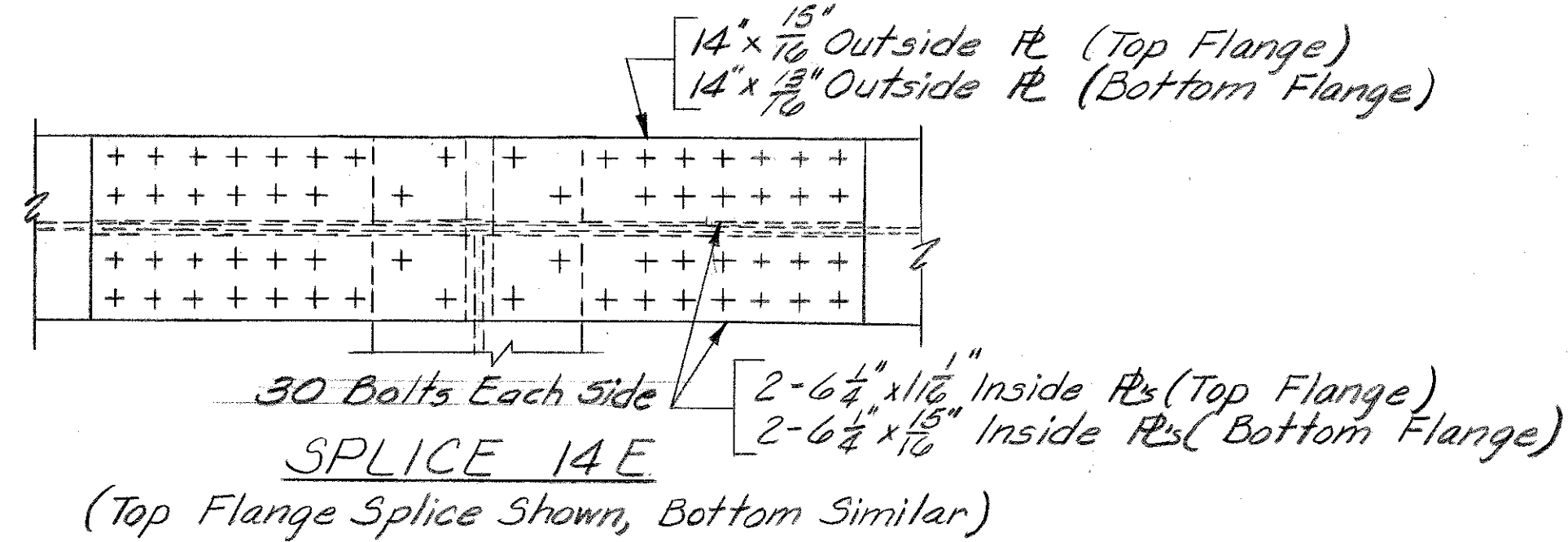
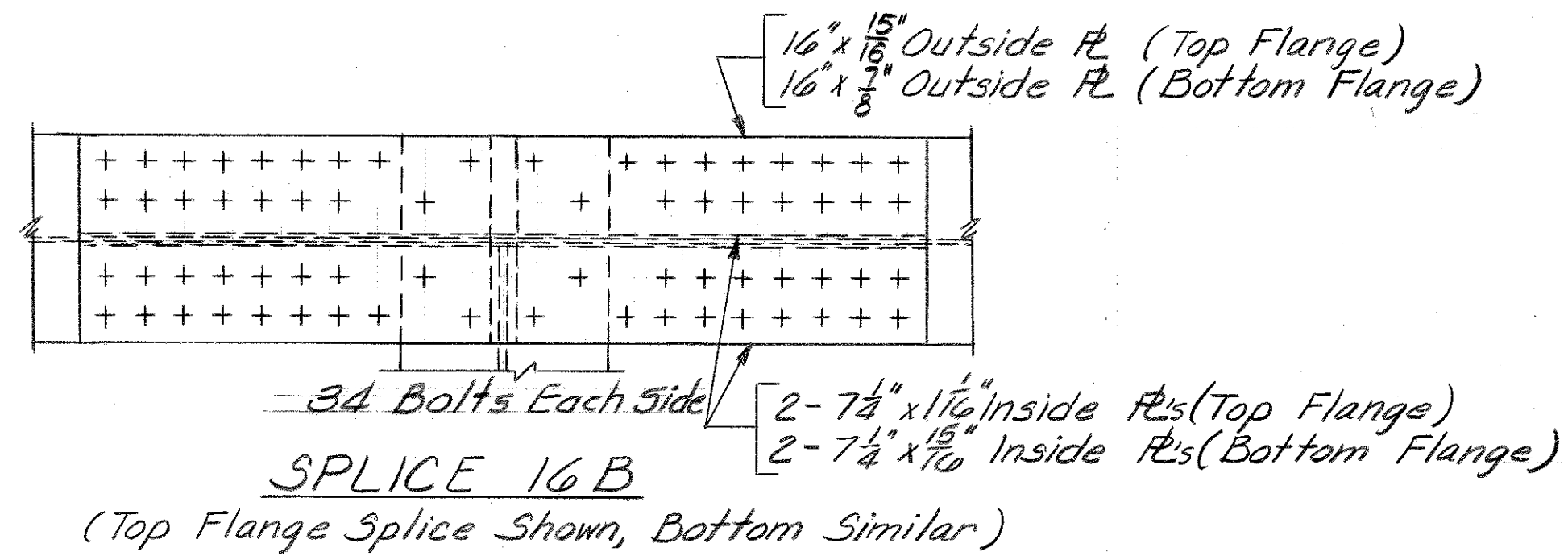
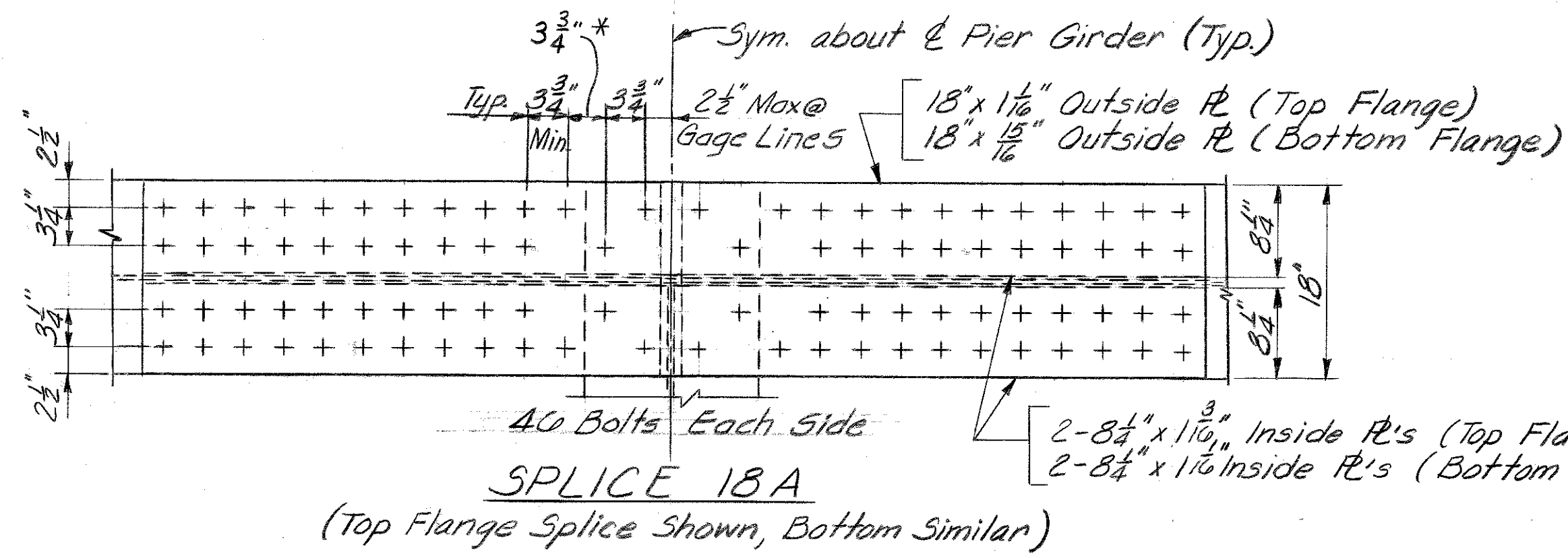


NOTE: For details of top and bottom splice R's, see following sheet
All steel this sheet ASTM A36 unless noted
* Where girder web varies in depth place Long Stiff to give three equal spaces.

SHEET A139

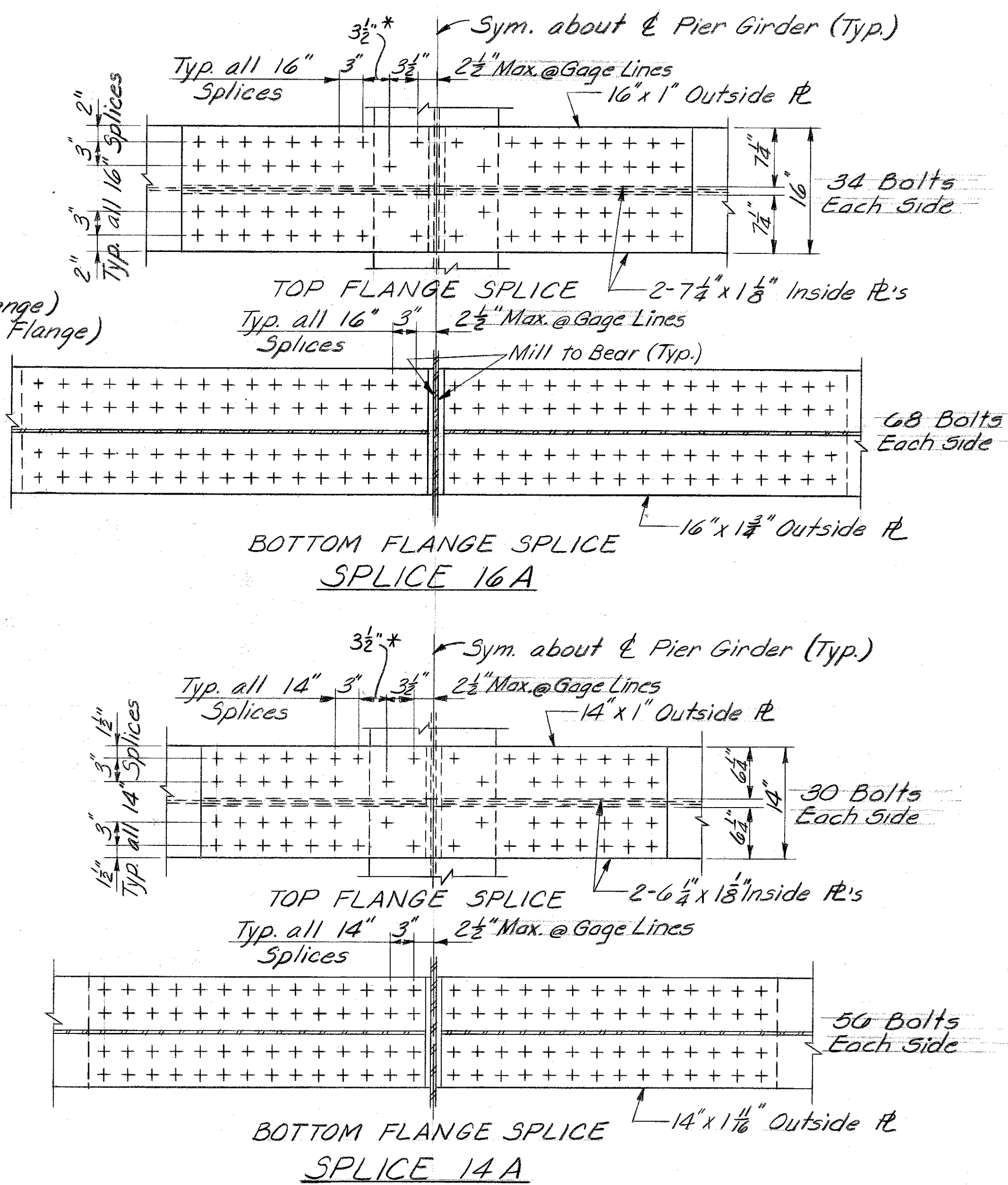
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
164-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD
SP 56-273-III
STATION 208+08
PROJECT NO. I 64-2(35)3
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**STRINGERS
STRUCTURAL STEEL**

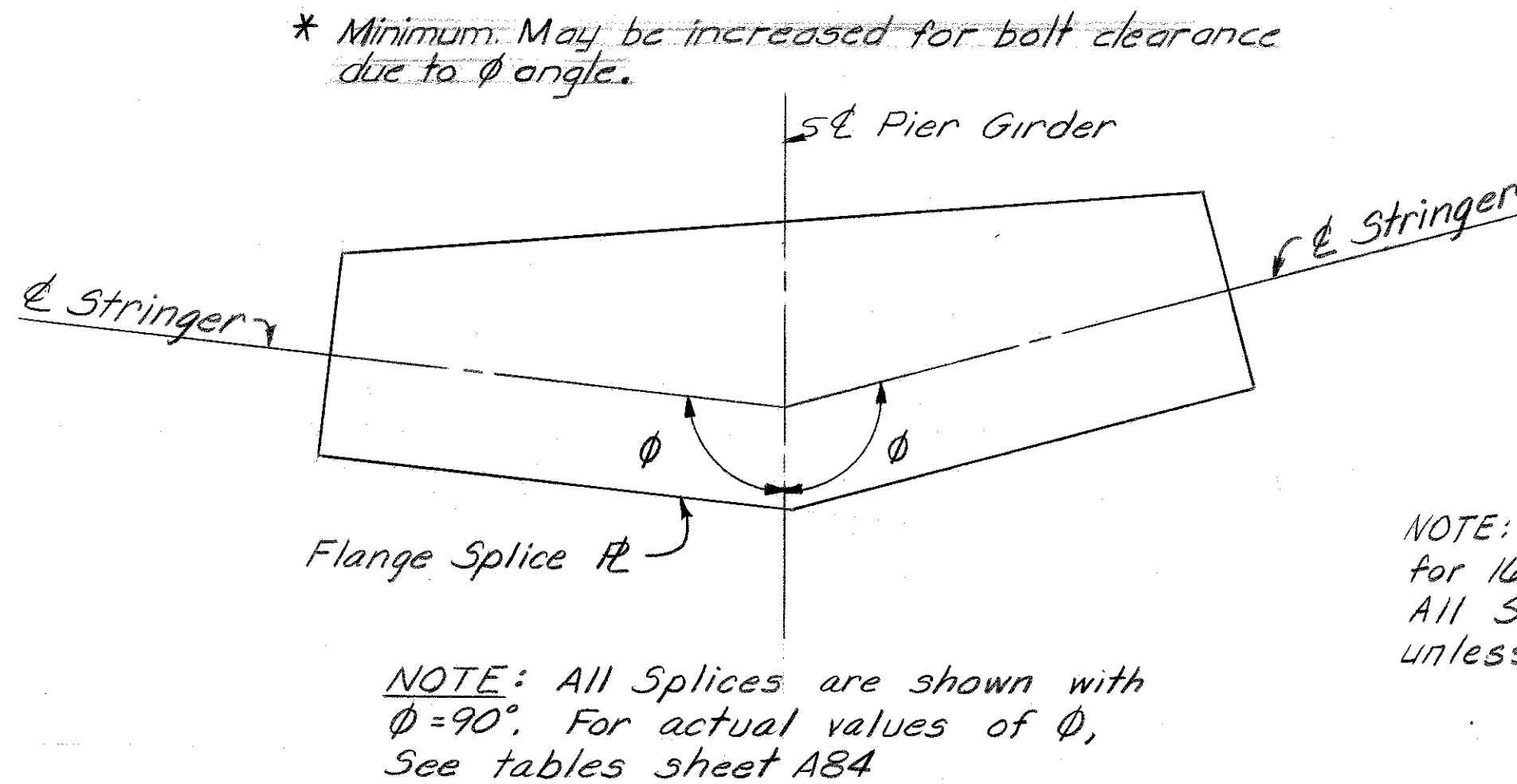
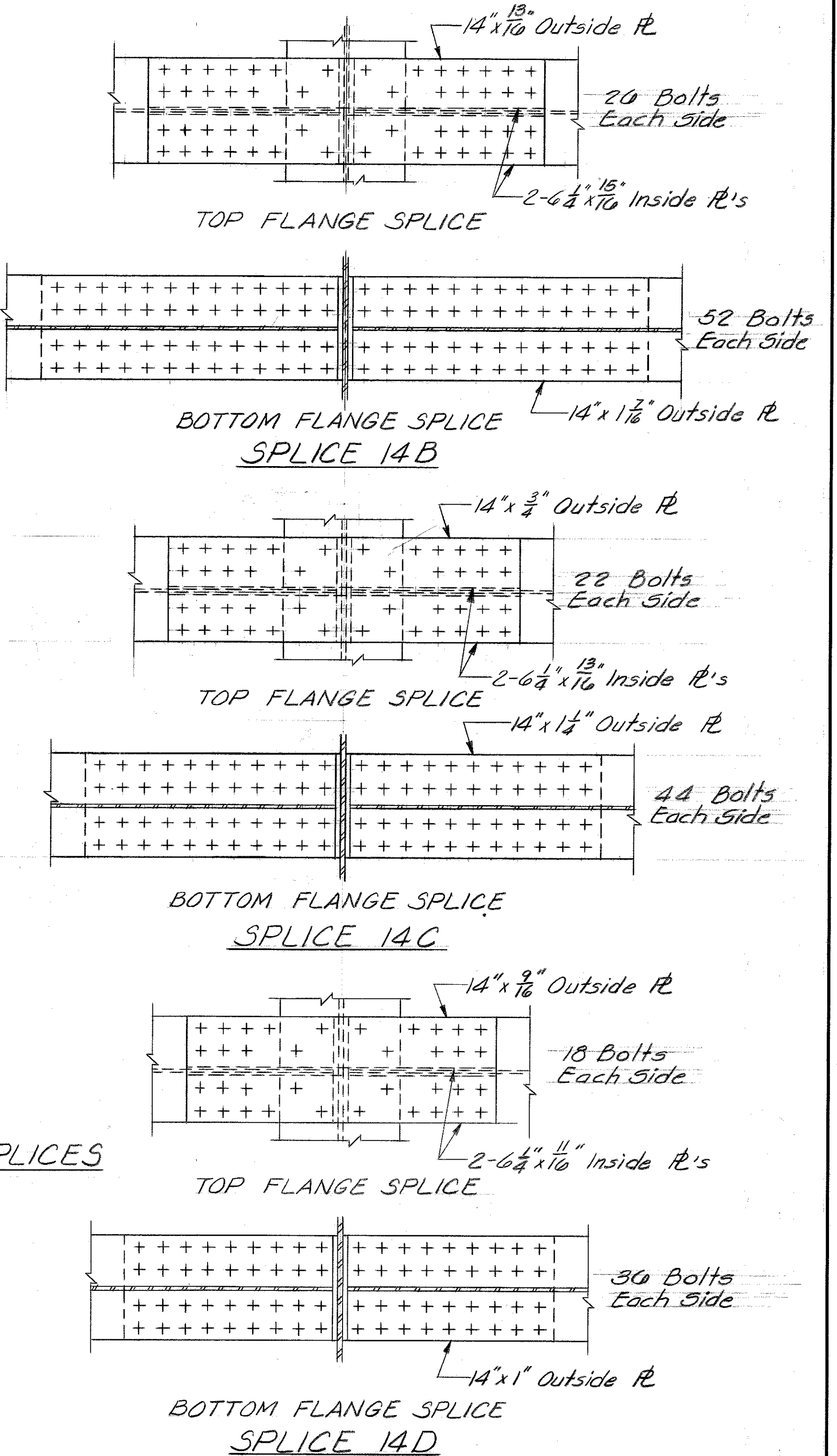


FASCIA & MEDIAN STRINGER FLANGE SPLICES

Unit VII E.B.			Unit VIII E.B.			Unit VIII W.B.		
Str.	Pier 46	Pier 47	Str.	Pier 49	Pier 50	Str.	Pier 49	Pier 50
S2	16B	16A	S2	18A	14E	S1	18A	14E
S4	14C	14C	S4	16A	14C	S3	16A	14C
S6	14C	14C	S6	16A	14C	S5	16A	14C
S8	14C	14C	S8	16A	14C	S7	16A	14B
S10	14B	14B	S10	16A	14C	S9	16A	14B
S12	14D	14D	S12	16A	14C	S11	16A	14B
S14	14B	14B	S14	18A	14E	S13	16A	14B
S16	14B	14B				S15	14A	14D
S18	16B	16B				S17		
						S19	16B	14E



INTERIOR STRINGER FLANGE SPLICES



NOTE: All Splices are detailed for 16\"/>

STRINGERS STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

FRANKFORT

COUNTY OF

JEFFERSON

164-13TH ST. TO 7TH ST.

LOUISVILLE - LEXINGTON

ROAD

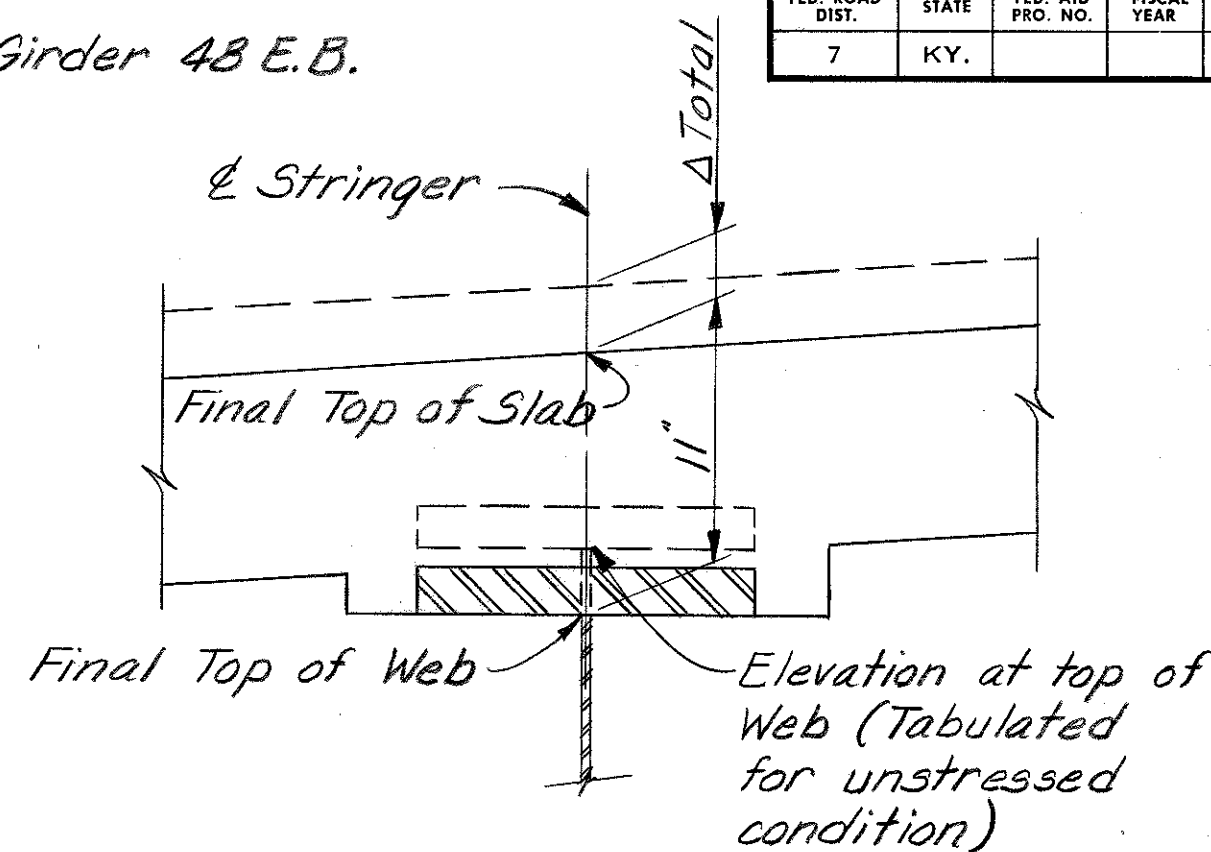
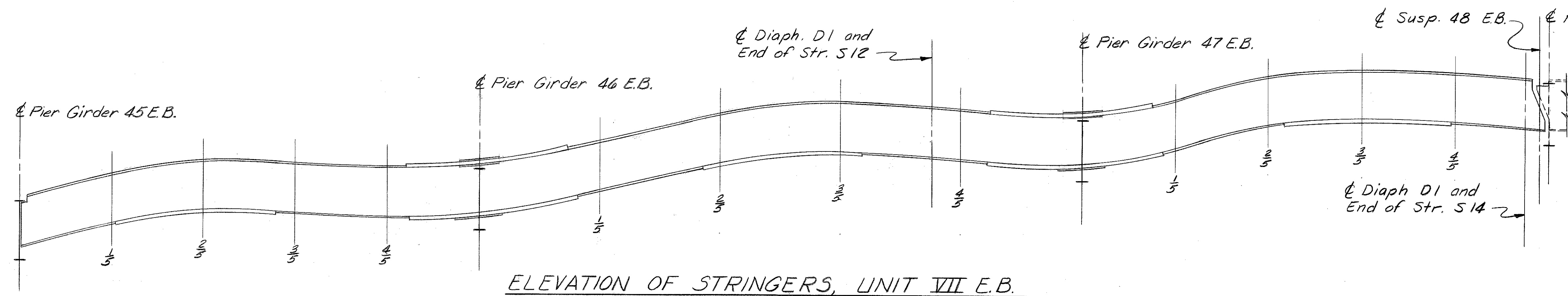
SP 56-273-11L

PROJECT NO. I 64-2(35) 3

STATION 208+08

BRIDGE NUMBER

18572

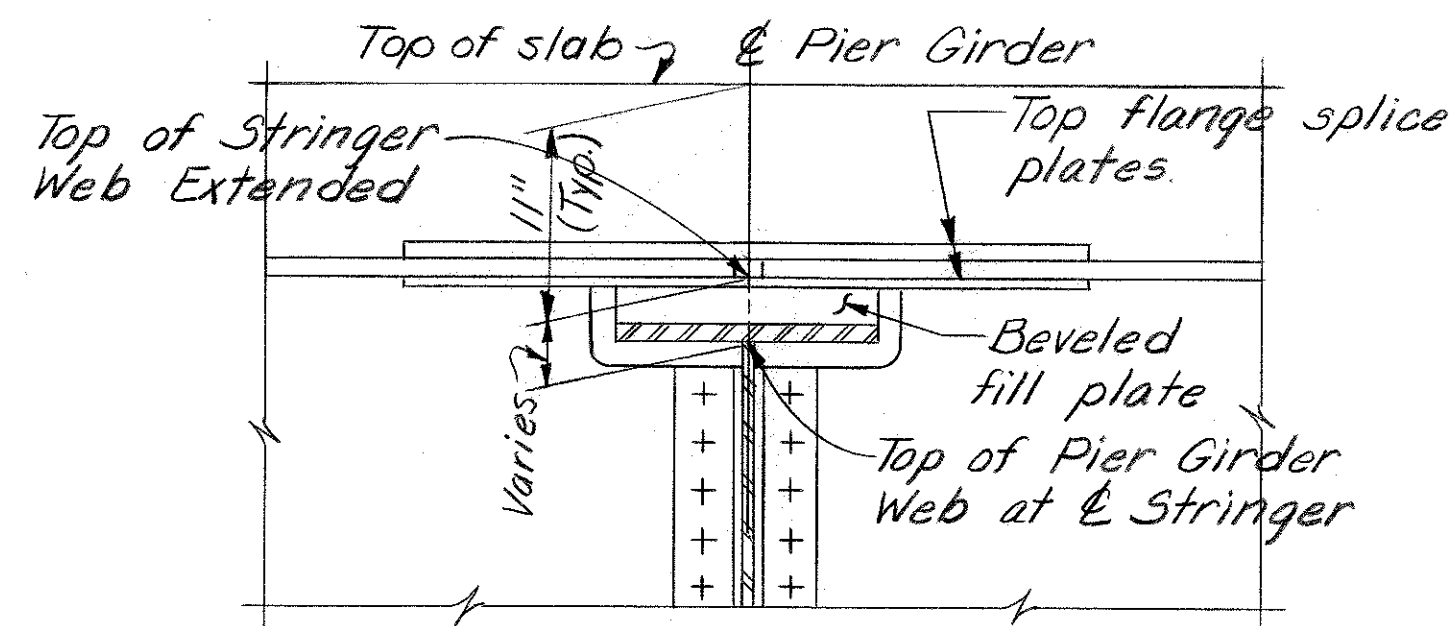


SECTION THRU STRINGER

NOTE: All deflections are shown in feet. Elevations given are for the unstressed condition with the Stringers on the Pier Girders. Elevations contain the camber for total dead load for both Stringers and Pier Girders. All Stringers and Pier Girders must be cambered in the unstressed condition. Should the theoretical final elevation at top of Stringer Web be desired, subtract Δ total from the elevation given.

Str.	Location	SPAN 45 E.B.					SPAN 46 E.B.					SPAN 47 E.B.					E Susp. 48
		E.P.G. 45EB	1/5	2/5	3/5	4/5	E.P.G. 46EB	1/5	2/5	3/5	4/5	E.P.G. 47EB	1/5	2/5	3/5	4/5	
S2	Elev. top of Str. Web	475.865	476.044	476.201	476.321	476.411	476.502	476.569	476.640	476.686	476.707	476.733	476.725	476.717	476.678	476.597	476.481
	Δ Total	0.006	0.053	0.073	0.060	0.026	0.000	0.000	0.015	0.015	0.001	0.002	0.026	0.057	0.069	0.047	-0.003
	Δ Stl.	0.001	0.007	0.009	0.008	0.003	0.000	0.000	0.002	0.002	0.000	0.000	0.003	0.007	0.009	0.006	0.000
S4	Elev. top of Str. Web	476.359	476.532	476.689	476.813	476.909	477.002	477.071	477.140	477.189	477.213	477.238	477.228	477.214	477.174	477.095	476.985
	Δ Total	0.000	0.043	0.061	0.052	0.023	0.001	0.003	0.016	0.017	0.006	0.007	0.028	0.056	0.065	0.045	0.001
	Δ Stl.	0.000	0.006	0.008	0.007	0.003	0.000	0.000	0.002	0.002	0.001	0.001	0.004	0.007	0.008	0.006	0.000
S6	Elev. top of Str. Web	476.858	477.032	477.189	477.313	477.410	477.503	477.571	477.641	477.688	477.711	477.736	477.728	477.716	477.677	477.601	477.493
	Δ Total	-0.001	0.042	0.062	0.052	0.025	0.003	0.004	0.016	0.017	0.005	0.005	0.028	0.058	0.069	0.051	0.009
	Δ Stl.	0.000	0.005	0.008	0.007	0.003	0.000	0.000	0.002	0.002	0.001	0.001	0.004	0.008	0.009	0.007	0.001
S8	Elev. top of Str. Web	477.358	477.532	477.689	477.812	477.908	478.002	478.069	478.137	478.184	478.206	478.232	478.224	478.214	478.177	478.102	477.996
	Δ Total	0.000	0.043	0.061	0.052	0.023	0.001	0.001	0.014	0.013	0.001	0.000	0.025	0.056	0.069	0.053	0.013
	Δ Stl.	0.000	0.006	0.008	0.007	0.003	0.000	0.000	0.002	0.002	0.000	0.000	0.003	0.007	0.009	0.007	0.002
S10	Elev. top of Str. Web	477.859	478.030	478.185	478.308	478.405	478.501	478.572	478.647	478.699	478.718	478.732	478.711	478.692	478.653	478.586	478.493
	Δ Total	0.000	0.041	0.059	0.048	0.020	0.000	0.005	0.024	0.028	0.013	0.002	0.013	0.035	0.046	0.037	0.010
	Δ Stl.	0.000	0.005	0.008	0.006	0.003	0.000	0.001	0.003	0.004	0.002	0.000	0.002	0.004	0.006	0.005	0.001
S12	Elev. top of Str. Web	477.842	478.078	478.295	478.519	478.697	478.888	478.940	478.944	478.966	478.978*						
	Δ Total	0.000	0.050	0.072	0.063	0.031	0.003	0.002	0.017	0.023	0.019*						
	Δ Stl.	0.000	0.006	0.009	0.008	0.004	0.000	0.000	0.002	0.003	0.002*						
S14	Elev. top of Str. Web	477.998	478.264	478.518	478.796	479.019	479.213	479.264	479.278	479.266	479.235	479.183	479.122	479.062	478.984	478.877	478.752*
	Δ Total	0.002	0.043	0.061	0.050	0.022	0.003	0.007	0.026	0.030	0.015	0.003	0.014	0.034	0.044	0.034	0.007*
	Δ Stl.	0.000	0.006	0.008	0.007	0.003	0.000	0.001	0.003	0.004	0.002	0.000	0.002	0.004	0.006	0.004	0.001*
S16	Elev. top of Str. Web	478.297	478.632	478.926	479.202	479.424	479.616	479.697	479.743	479.748	479.722	479.681	479.579	479.475	479.347	479.185	478.995
	Δ Total	0.004	0.046	0.064	0.053	0.024	0.000	0.001	0.013	0.014	0.001	0.001	0.021	0.046	0.055	0.038	0.003
	Δ Stl.	0.001	0.006	0.008	0.007	0.003	0.000	0.000	0.002	0.002	0.000	0.000	0.003	0.006	0.007	0.005	0.000
S18	Elev. top of Str. Web	478.589	479.008	479.352	479.624	479.836	480.022	480.136	480.220	480.249	480.220	480.179	480.087	479.996	479.873	479.701	479.488
	Δ Total	0.000	0.059	0.084	0.070	0.031	0.002	0.001	0.017	0.017	0.000	0.000	0.029	0.067	0.081	0.055	-0.004
	Δ Stl.	0.000	0.008	0.011	0.009	0.004	0.000	0.000	0.002	0.002	0.000	0.000	0.004	0.009	0.010	0.007	-0.001

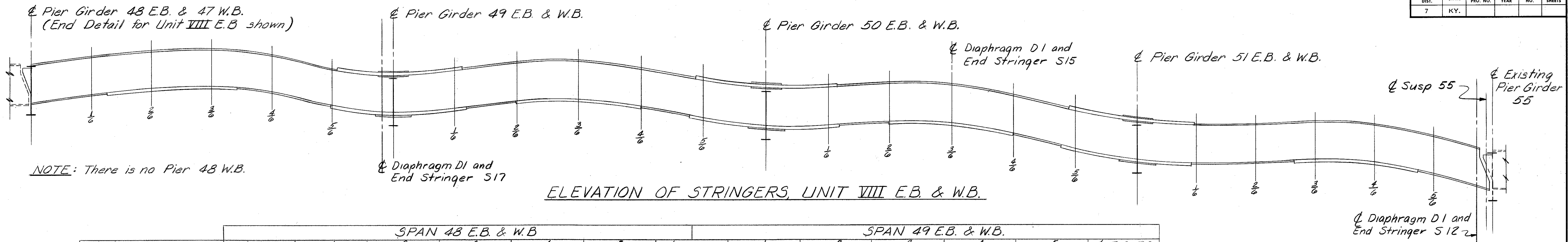
*Elevations and Δ 's at E Diaph. D1



NOTE: To obtain elevations of top of Pier Girder Webs at E Stringers for the unstressed condition, read values of "Elev. of top of Str. Web" vertically under "E Pier Girder" and subtract the distance from top of Stringer Web to top of Pier Girder Web shown on Pier Girder details Sheets

SECTION THRU PIER GIRDER AT STRINGER

STRINGER CAMBER
STRUCTURAL STEEL



		SPAN 48 E.B. & W.B.							SPAN 49 E.B. & W.B.						
Str.	Location	E.P.G.	1/6	2/6	3/6	4/6	5/6	E.P.G. 49	1/6	2/6	3/6	4/6	5/6	E.P.G. 50	
UNIT VIII E.B.	32 Elev. top of Str. Web	476.478	476.426	476.331	476.183	475.981	475.754	475.531	475.301	475.068	474.819	474.536	474.224	473.904	
	Δ Total	-0.003	0.078	0.125	0.129	0.089	0.035	-0.006	-0.012	-0.002	0.011	0.010	0.000	-0.006	
	Δ Stl.	0.000	0.011	0.018	0.018	0.013	0.005	-0.001	-0.002	0.000	0.002	0.001	0.000	-0.001	
	34 Elev. top of Str. Web	476.981	476.923	476.823	476.675	476.478	476.258	476.045	475.792	475.541	475.271	474.964	474.625	474.280	
	Δ Total	0.001	0.075	0.119	0.123	0.087	0.040	0.007	0.002	0.016	0.033	0.031	0.016	0.007	
	Δ Stl.	0.000	0.011	0.017	0.017	0.012	0.006	0.001	0.000	0.002	0.005	0.004	0.002	0.001	
	36 Elev. top of Str. Web	477.489	477.430	477.332	477.185	476.988	476.769	476.554	476.279	476.005	475.713	475.384	475.021	474.651	
	Δ Total	0.009	0.084	0.128	0.132	0.097	0.051	0.018	0.013	0.026	0.043	0.041	0.026	0.016	
	Δ Stl.	0.001	0.012	0.018	0.019	0.014	0.007	0.003	0.002	0.004	0.006	0.006	0.004	0.002	
	38 Elev. top of Str. Web	477.993	477.934	477.835	477.687	477.490	477.272	477.057	476.759	476.461	476.146	475.794	475.408	475.016	
UNIT VIII W.B.	Δ Total	0.014	0.088	0.131	0.135	0.100	0.053	0.021	0.015	0.029	0.045	0.043	0.028	0.018	
	Δ Stl.	0.002	0.012	0.018	0.019	0.014	0.007	0.003	0.002	0.004	0.006	0.006	0.004	0.003	
	310 Elev. top of Str. Web	478.490	478.427	478.325	478.177	477.981	477.763	477.550	477.229	476.907	476.567	476.193	475.786	475.372	
	Δ Total	0.010	0.081	0.122	0.126	0.091	0.045	0.013	0.008	0.021	0.035	0.034	0.020	0.011	
	Δ Stl.	0.002	0.011	0.017	0.018	0.013	0.006	0.002	0.001	0.003	0.005	0.005	0.003	0.002	
	312 Elev. top of Str. Web	478.988	478.904	478.782	478.615	478.402	478.169	477.939	477.594	477.244	476.879	476.480	476.053	475.618	
	Δ Total	0.003	0.070	0.108	0.111	0.078	0.034	0.003	-0.001	0.010	0.023	0.022	0.010	0.003	
	Δ Stl.	0.000	0.010	0.015	0.016	0.011	0.005	0.000	0.000	0.001	0.003	0.003	0.001	0.000	
	314 Elev. top of Str. Web	479.481	479.384	479.249	479.065	478.834	478.580	478.329	477.957	477.585	477.196	476.773	476.321	475.863	
	Δ Total	-0.004	0.067	0.109	0.112	0.077	0.029	-0.008	-0.012	0.002	0.017	0.015	0.002	-0.006	
UNIT VIII E.B.	Δ Stl.	-0.001	0.009	0.015	0.016	0.011	0.004	-0.001	-0.002	0.000	0.002	0.002	0.000	-0.001	
	51 Elev. top of Str. Web	476.418	476.381	476.301	476.167	475.979	475.767	475.559	475.318	475.091	474.857	474.590	474.275	473.948	
	Δ Total	0.003	0.084	0.131	0.136	0.096	0.041	0.000	-0.006	0.012	0.031	0.028	0.011	0.000	
	Δ Stl.	0.000	0.012	0.018	0.019	0.013	0.006	0.000	-0.001	0.002	0.004	0.004	0.002	0.000	
	53 Elev. top of Str. Web	475.957	475.901	475.810	475.674	475.495	475.295	475.105	474.863	474.635	474.399	474.133	473.833	473.530	
	Δ Total	-0.001	0.063	0.100	0.102	0.070	0.029	0.001	0.000	0.016	0.033	0.030	0.013	0.001	
	Δ Stl.	0.000	0.009	0.014	0.014	0.010	0.004	0.000	0.000	0.002	0.005	0.004	0.002	0.000	
	55 Elev. top of Str. Web	475.498	475.444	475.353	475.217	475.038	474.839	474.653	474.405	474.178	473.941	473.675	473.391	473.111	
	Δ Total	-0.001	0.063	0.100	0.103	0.071	0.030	0.003	0.002	0.018	0.035	0.032	0.015	0.003	
	Δ Stl.	0.000	0.009	0.014	0.014	0.010	0.004	0.000	0.000	0.002	0.005	0.004	0.002	0.000	
UNIT VIII W.B.	57 Elev. top of Str. Web	475.039	474.973	474.875	474.740	474.566	474.373	474.197	473.947	473.721	473.481	473.213	472.946	472.689	
	Δ Total	-0.001	0.051	0.082	0.084	0.059	0.024	0.001	0.003	0.020	0.034	0.030	0.013	0.002	
	Δ Stl.	0.000	0.007	0.011	0.012	0.008	0.003	0.000	0.000	0.003	0.005	0.004	0.002	0.000	
	59 Elev. top of Str. Web	474.548	474.481	474.384	474.248	474.073	473.880	473.709	473.451	473.225	472.986	472.718	472.467	472.235	
	Δ Total	0.002	0.053	0.083	0.085	0.059	0.024	0.001	0.003	0.020	0.033	0.028	0.012	0.000	
	Δ Stl.	0.000	0.007	0.011	0.012	0.008	0.003	0.000	0.000	0.003	0.005	0.004	0.002	0.000	
	511 Elev. top of Str. Web	474.918	474.723	474.483	474.204	473.899	473.598	473.343	472.989	472.736	472.495	472.225	471.991	471.783	
	Δ Total	0.004	0.056	0.087	0.090	0.064	0.030	0.008	0.009	0.024	0.037	0.031	0.013	0.000	
	Δ Stl.	0.001	0.008	0.012	0.013	0.009	0.004	0.001	0.001	0.003	0.005	0.004	0.002	0.000	
	513 Elev. top of Str. Web	475.556	475.117	474.607	474.122	473.662	473.251	472.936	472.508	472.234	471.994	471.725	471.510	471.331	
UNIT VIII E.B.	Δ Total	0.001	0.064	0.098	0.102	0.074	0.036	0.010	0.005	0.018	0.031	0.025	0.009	-0.001	
	Δ Stl.	0.000	0.009	0.014	0.014	0.010	0.005	0.001	0.001	0.003	0.004	0.004	0.001	0.000	
	515 Elev. top of Str. Web	475.301	474.755	474.204	473.684	473.199	472.768	472.464	472.069	471.823	471.619	471.378	471.194	471.041	
	Δ Total	0.002	0.048	0.072	0.071	0.047	0.019	0.004	0.014	0.040	0.061	0.055	0.029	0.002	
	Δ Stl.	0.000	0.007	0.010	0.010	0.007	0.003	0.001	0.002	0.006	0.008	0.008	0.004	0.000	
	517 Elev. top of Str. Web	475.034	474.537	474.004	473.500	473.028	472.588	472.303 *							
	Δ Total	0.003	0.076	0.119	0.134	0.119	0.074	0.013 *							
	Δ Stl.	0.000	0.011	0.017	0.019	0.017	0.010	0.002 *							
	519 Elev. top of Str. Web	474.738	474.258	473.714	473.201	472.720	472.298	472.025	471.638	471.405	471.226	471.007	470.859	470.753	
	Δ Total	0.000	0.062	0.095	0.095	0.063	0.023	-0.002	0.005	0.033	0.056	0.050	0.025	0.006	
UNIT VIII W.B.	Δ Stl.	0.000	0.009	0.013	0.013	0.009	0.003	0.000	0.001	0.005	0.008	0.007	0.003	0.001	
	521 Elev. top of Str. Web	474.238	473.684	473.114	472.529	471.929	471.314	470.689	470.054	469.419	468.774	468.119	467.454	466.779	
	Δ Total	-0.001	0.051	0.082	0.084	0.059	0.024	0.001	0.003	0.020	0.033	0.028	0.012	0.000	
	Δ Stl.	0.000	0.007	0.011	0.012	0.008	0.003	0.000	0.000	0.003	0.005	0.004	0.002	0.000	
	523 Elev. top of Str. Web	473.738	473.184	472.614	472.029	471.429	470.814	470.189	469.554	468.919	468.274	467.619	466.954	466.279	
	Δ Total	-0.001	0.051	0.082	0.084	0.059	0.024	0.001	0.003	0.020	0.033	0.028	0.012	0.000	
	Δ Stl.	0.000	0.007	0.011	0.012	0.008	0.003	0.000	0.000	0.003	0.005	0.004	0.002	0.000	
	525 Elev. top of Str. Web	473.238	472.684	472.114	471.529	470.929	470.314	469.689	469.054	468.419	467.774	467.119	466.454	465.779	
	Δ Total	-0.001	0.051	0.082	0.084	0.059	0.024	0.001	0.003	0.020	0.033	0.028	0.012	0.000	
	Δ Stl.	0.000	0.007	0.011	0.012	0.008	0.003	0.000	0.000	0.003	0.005	0.004	0.002	0.000	

*Elevations and deflections shown are at Diaphragm D1

STRINGER CAMBER
STRUCTURAL STEEL SHEET 1143

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON

I 64-13TH ST TO 7TH ST
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08 PROJECT NO. I 64-2(35)3

BRIDGE NUMBER DRAWING NO. 18572 INDEX

DESIGNED BY JMB & PMS CHECKED BY JMB & PMS
DATE 12-21-24 REVISED DATE 12-21-24
DATE 12-21-24 REVISED DATE 12-21-24

		SPAN 50 E.B. & W.B.						SPAN 51 E.B. & W.B.						
Str.	Location →	E.P.G. 50	$\frac{1}{6}$	$\frac{2}{6}$	$\frac{3}{6}$	$\frac{4}{6}$	$\frac{5}{6}$	E.P.G. 51	$\frac{1}{6}$	$\frac{2}{6}$	$\frac{3}{6}$	$\frac{4}{6}$	$\frac{5}{6}$	E. Susp. 55**
UNIT VIII E.B.	52 Elev. top of Str. Web	473.904	473.598	473.297	472.985	472.658	472.332	472.022	471.733	471.455	471.168	470.854	470.512	470.148
	Δ Total	-0.006	0.002	0.014	0.016	0.003	-0.010	-0.007	0.018	0.053	0.079	0.078	0.049	-0.002
	Δ Stl.	-0.001	0.000	0.002	0.002	0.000	-0.001	-0.001	0.003	0.007	0.011	0.011	0.007	0.000
	54 Elev. top of Str. Web	474.280	473.955	473.635	473.301	472.947	472.595	472.261	474.952	471.659	471.354	471.014	470.636	470.230
	Δ Total	0.007	0.019	0.035	0.038	0.021	0.005	0.007	0.037	0.080	0.114	0.111	0.071	0.003
	Δ Stl.	0.001	0.003	0.005	0.005	0.003	0.001	0.001	0.005	0.010	0.016	0.016	0.010	0.000
	56 Elev. top of Str. Web	474.651	474.304	473.962	476.605	473.228	472.854	472.496	472.162	471.843	471.514	471.148	470.744	470.314
	Δ Total	0.016	0.028	0.045	0.048	0.031	0.015	0.018	0.046	0.089	0.121	0.117	0.076	0.007
	Δ Stl.	0.002	0.004	0.006	0.007	0.004	0.002	0.002	0.006	0.012	0.017	0.016	0.011	0.001
	58 Elev. top of Str. Web	475.016	474.646	474.281	473.900	473.501	473.103	472.723	472.366	472.024	471.671	471.281	470.855	470.401
UNIT VIII W.B.	Δ Total	0.018	0.030	0.047	0.050	0.033	0.017	0.019	0.047	0.090	0.122	0.118	0.077	0.007
	Δ Stl.	0.003	0.004	0.007	0.007	0.005	0.002	0.003	0.007	0.013	0.017	0.017	0.011	0.001
	510 Elev. top of Str. Web	475.372	474.976	474.586	474.183	473.763	473.344	472.941	472.557	472.185	471.801	471.396	470.956	470.494
	Δ Total	0.011	0.021	0.036	0.038	0.023	0.009	0.011	0.034	0.069	0.092	0.092	0.059	0.003
	Δ Stl.	0.002	0.003	0.005	0.005	0.003	0.001	0.002	0.005	0.010	0.013	0.013	0.008	0.000
	512 Elev. top of Str. Web	475.618	475.199	474.785	474.361	473.925	473.490	473.068	472.664	472.269	471.863	471.447	471.003	470.577*
	Δ Total	0.003	0.011	0.023	0.025	0.013	0.001	0.003	0.021	0.049	0.062	0.068	0.043	0.003*
	Δ Stl.	0.000	0.002	0.003	0.004	0.002	0.000	0.000	0.003	0.007	0.009	0.010	0.006	0.000*
	514 Elev. top of Str. Web	475.863	475.425	474.992	474.550	474.091	473.633	473.195	472.785	472.387	471.980	471.543	471.078	470.590
	Δ Total	-0.006	0.004	0.019	0.022	0.007	-0.008	-0.006	0.023	0.062	0.090	0.088	0.054	-0.003
UNIT VIII W.B.	Δ Stl.	-0.001	0.001	0.003	0.003	0.001	-0.001	-0.001	0.003	0.009	0.013	0.012	0.008	0.000
	51 Elev. top of Str. Web	473.948	473.645	473.348	473.036	472.701	472.365	472.053	471.714	471.507	471.229	470.909	470.550	470.160
	Δ Total	0.000	0.013	0.032	0.036	0.017	-0.003	0.001	0.036	0.085	0.121	0.117	0.073	-0.003
	Δ Stl.	0.000	0.002	0.004	0.005	0.002	0.000	0.000	0.005	0.012	0.017	0.016	0.010	0.000
	53 Elev. top of Str. Web	473.530	473.247	472.971	472.681	472.371	472.063	471.773	471.511	471.261	471.002	470.706	470.374	469.996
	Δ Total	0.001	0.012	0.028	0.030	0.014	-0.001	0.001	0.032	0.078	0.112	0.110	0.071	0.003
	Δ Stl.	0.000	0.002	0.004	0.004	0.002	0.000	0.000	0.004	0.011	0.016	0.015	0.010	0.000
	55 Elev. top of Str. Web	473.111	472.852	472.599	472.333	472.047	471.762	471.495	471.254	471.028	470.791	470.518	470.216	469.834
	Δ Total	0.003	0.014	0.030	0.032	0.016	0.001	0.003	0.034	0.080	0.115	0.114	0.075	0.009
	Δ Stl.	0.000	0.002	0.004	0.005	0.002	0.000	0.000	0.005	0.011	0.016	0.016	0.011	0.001
UNIT VIII W.B.	57 Elev. top of Str. Web	472.689	472.452	472.220	471.977	471.718	471.457	471.214	470.996	470.792	470.575	470.322	470.037	469.676
	Δ Total	0.002	0.010	0.025	0.028	0.014	-0.001	0.001	0.033	0.077	0.110	0.107	0.072	0.011
	Δ Stl.	0.000	0.001	0.003	0.004	0.002	0.000	0.000	0.005	0.011	0.015	0.015	0.010	0.001
	59 Elev. top of Str. Web	472.235	472.023	471.817	471.600	471.366	471.131	470.912	470.721	470.542	470.351	470.125	469.865	469.512
	Δ Total	0.000	0.008	0.023	0.026	0.013	-0.003	0.000	0.031	0.076	0.109	0.105	0.070	0.008
	Δ Stl.	0.000	0.001	0.003	0.004	0.002	0.000	0.000	0.004	0.011	0.015	0.015	0.010	0.001
	511 Elev. top of Str. Web	471.783	471.596	471.415	471.224	471.014	470.804	470.611	470.446	470.294	470.129	469.929	469.697	469.351
	Δ Total	0.000	0.008	0.023	0.026	0.012	-0.003	-0.001	0.030	0.073	0.105	0.101	0.065	0.002
	Δ Stl.	0.000	0.001	0.003	0.004	0.002	0.000	0.000	0.004	0.011	0.015	0.014	0.009	0.000
	513 Elev. top of Str. Web	471.331	471.175	471.026	470.865	470.680	470.491	470.312	470.178	470.054	469.922	469.761	469.571	469.261
UNIT VIII W.B.	Δ Total	-0.001	0.014	0.035	0.044	0.029	0.009	0.001	0.016	0.045	0.070	0.070	0.045	-0.001
	Δ Stl.	0.000	0.002	0.005	0.006	0.004	0.001	0.000	0.002	0.006	0.010	0.010	0.006	0.000
	515 Elev. top of Str. Web	471.041	470.919	470.804	470.686*									
	Δ Total	0.002	0.008	0.024	0.041*									
	Δ Stl.	0.000	0.001	0.003	0.006*									
	519 Elev. top of Str. Web	470.753	470.670	470.591	470.495	470.370	470.240	470.123	470.036	469.957	469.861	469.717	469.525	469.190
	Δ Total	0.006	0.014	0.032	0.038	0.022	0.004	0.007	0.042	0.092	0.130	0.125	0.077	-0.004
	Δ Stl.	0.001	0.002	0.005	0.005	0.003	0.001	0.001	0.006	0.013	0.018	0.017	0.011	-0.001

**Deflections shown are expected deflections of existing
Pier Girder 55 caused by Span 51 steel and/or concrete.
* Elevations and deflections shown are at Diaphragm D1.

SHEET A144

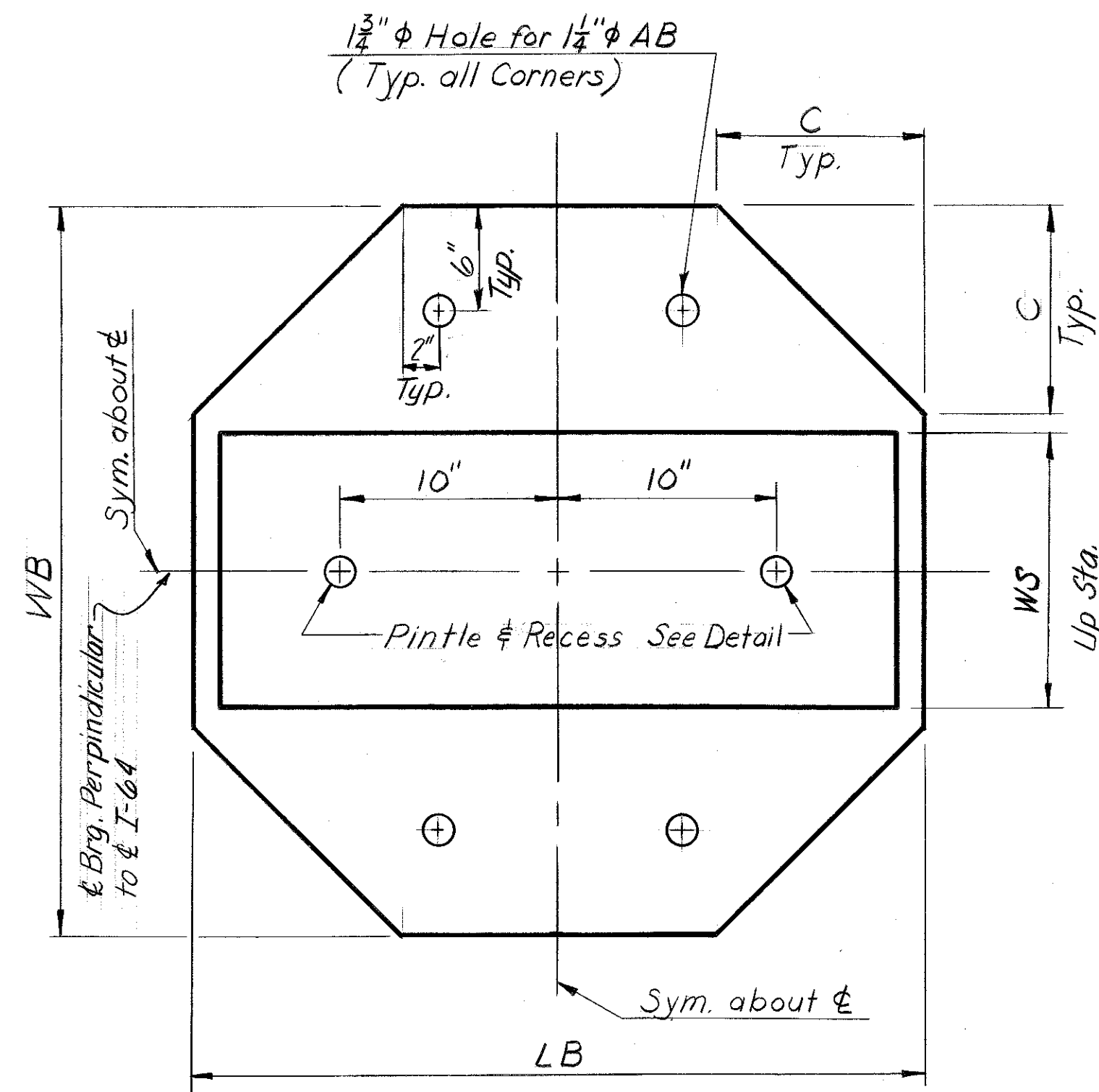
COMMONWEALTH OF KENTUCKY	
DEPARTMENT OF HIGHWAYS	
FRANKFORT	
COUNTY OF	
JEFFERSON	
I 64-13TH ST. TO 7TH ST.	
LOUISVILLE - LEXINGTON	
ROAD	
STATION 208+08	PROJECT NO. I 64-2(35) 3
BRIDGE NUMBER	DRAWING NO. 18572
	INDEX

STRINGER CAMBER
STRUCTURAL STEEL

DESIGNED BY PNE & JMB
CHECKED BY GMA & JMB
DATE 10-27-72
REVISIONS
DATE 11-1-72
REVISIONS
DATE 11-1-72
REVISIONS

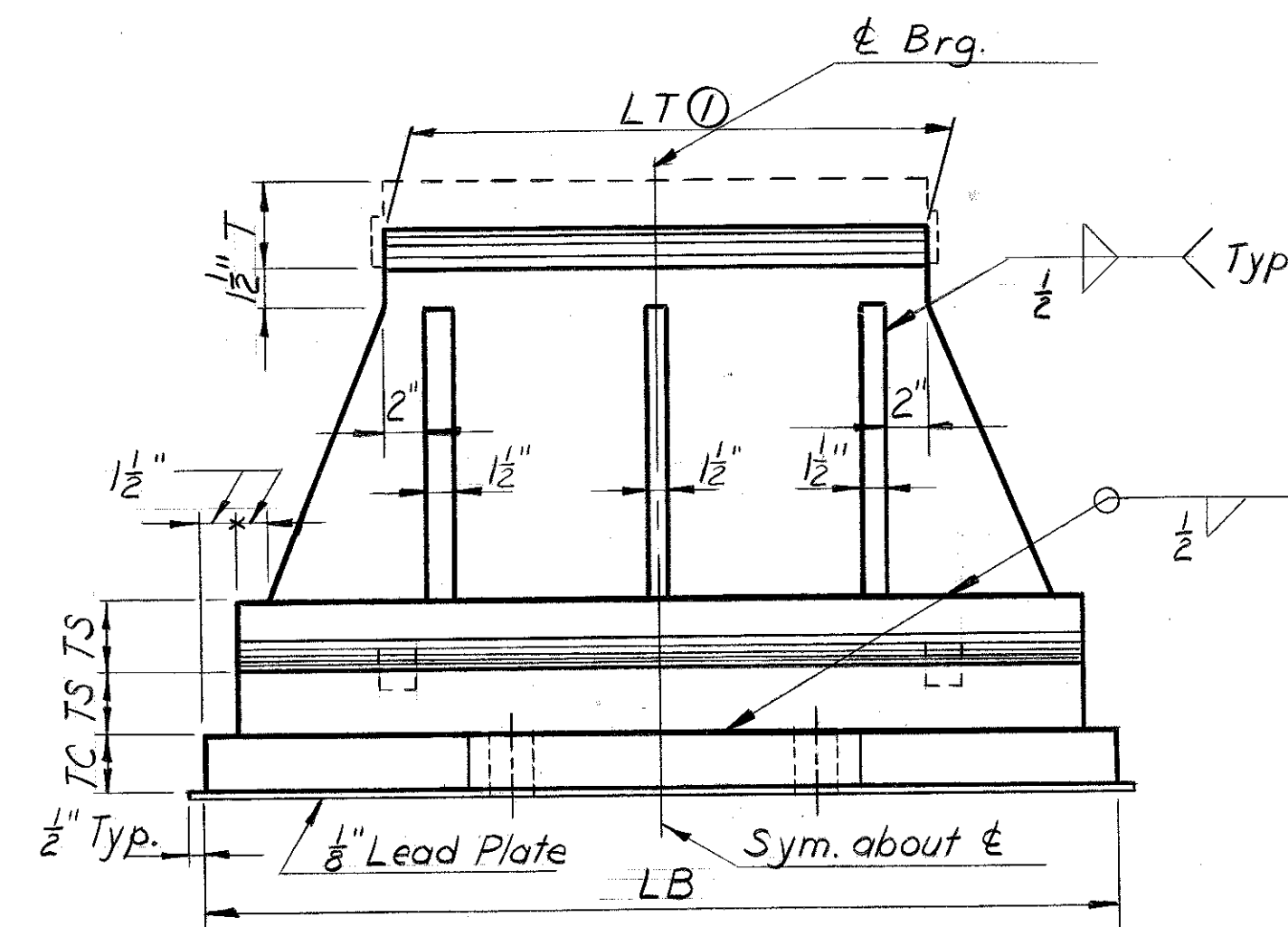
LETTING DATE.

DESIGNED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 TRACED BY: _____ DATE: _____

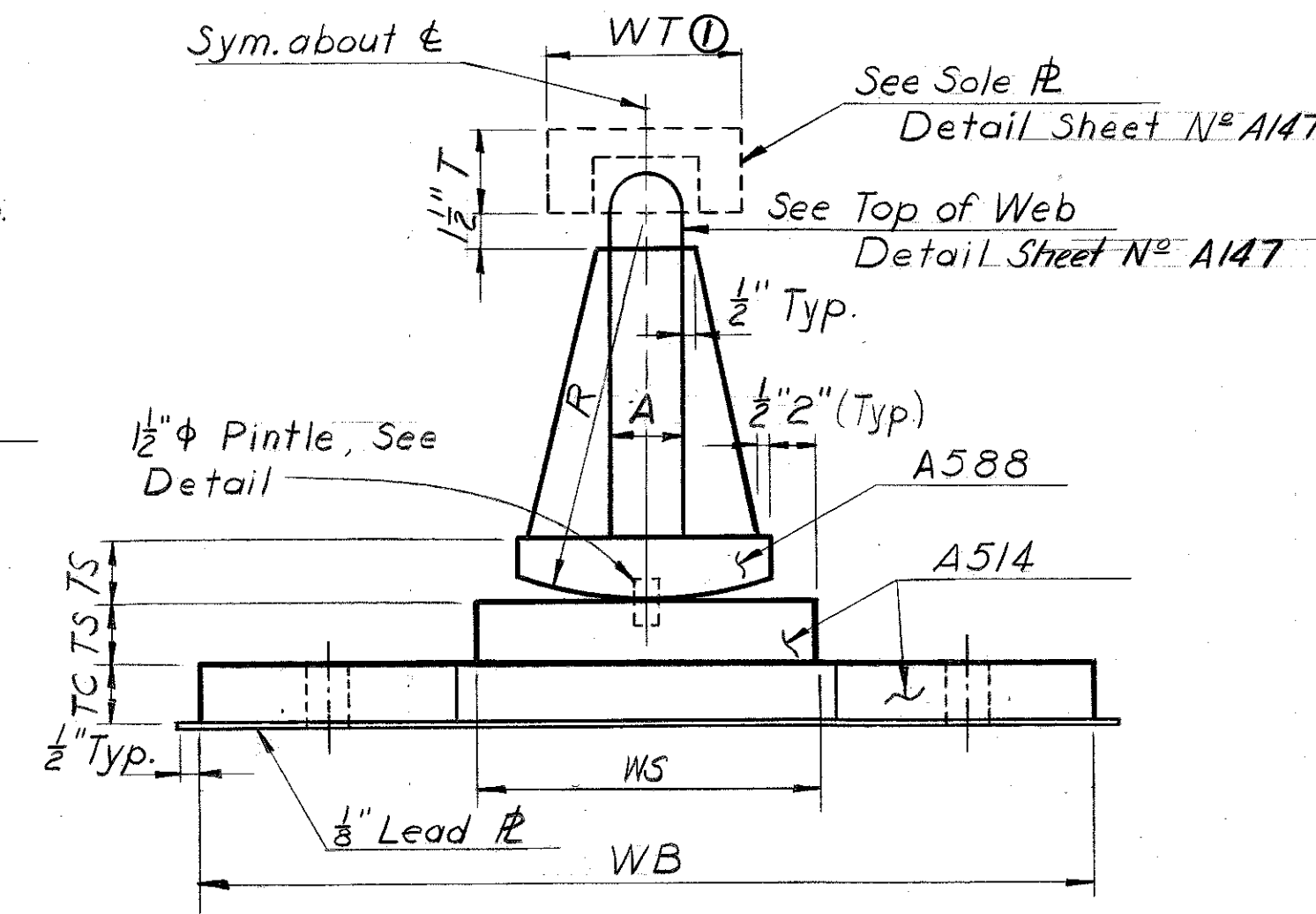


PLAN OF MASONRY PLATE

Note:
All material A36
unless noted.



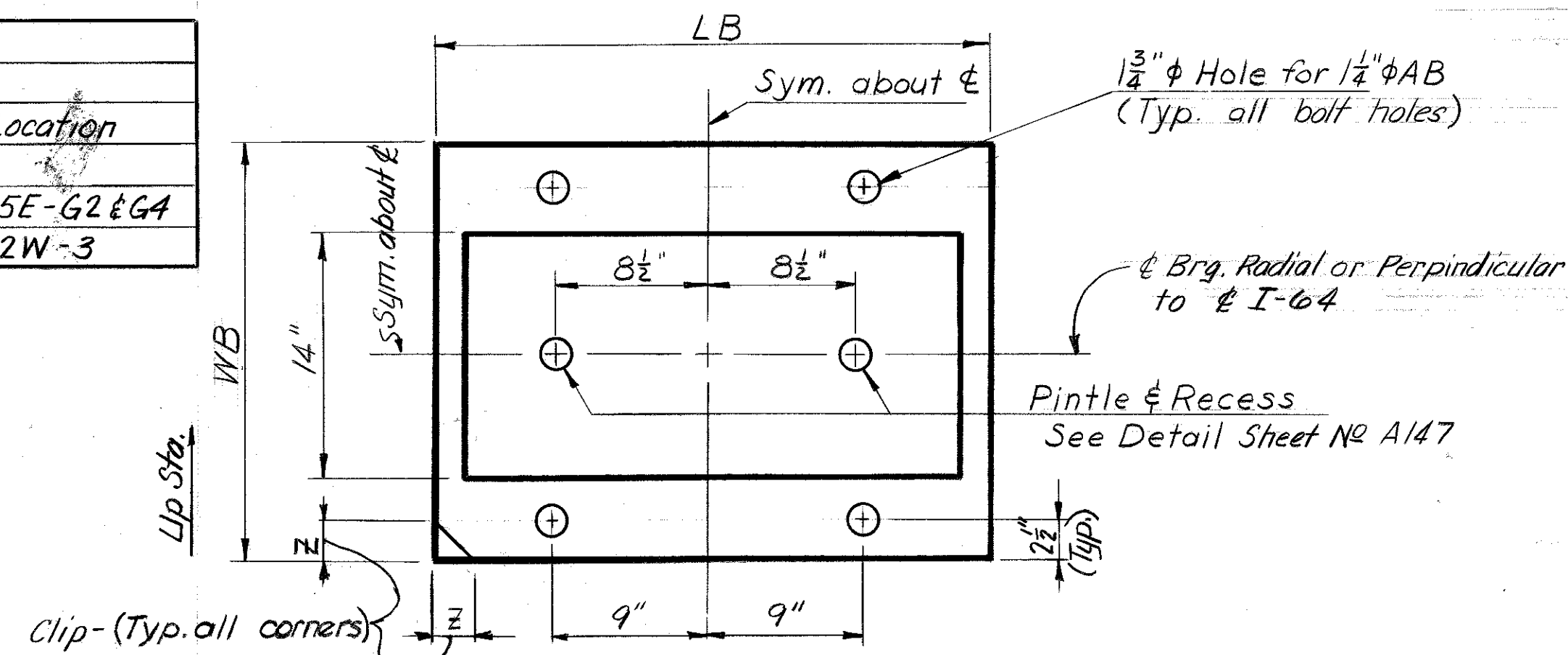
FRONT ELEVATION



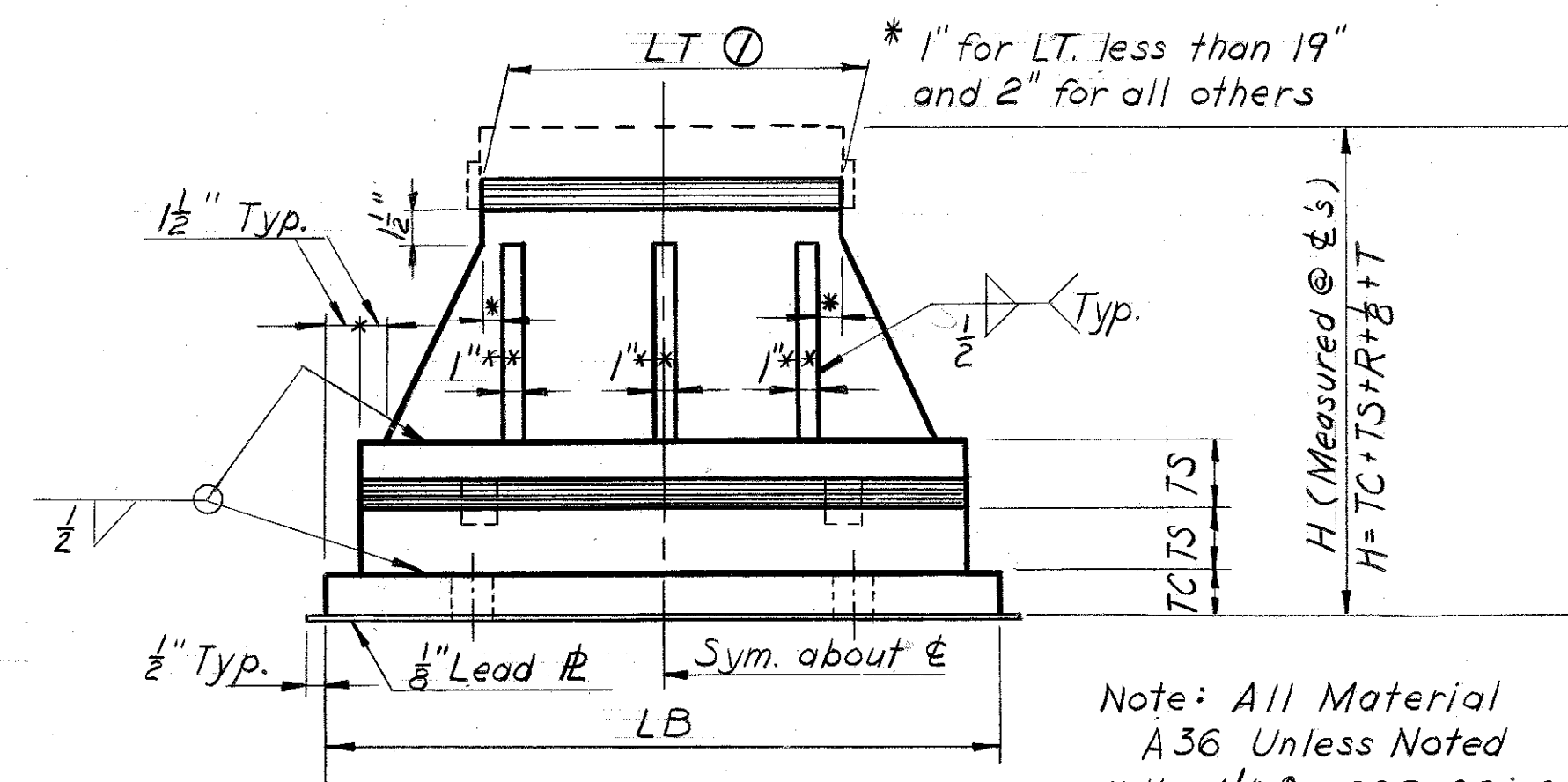
END ELEVATION

TYPE ① & ② BEARINGS

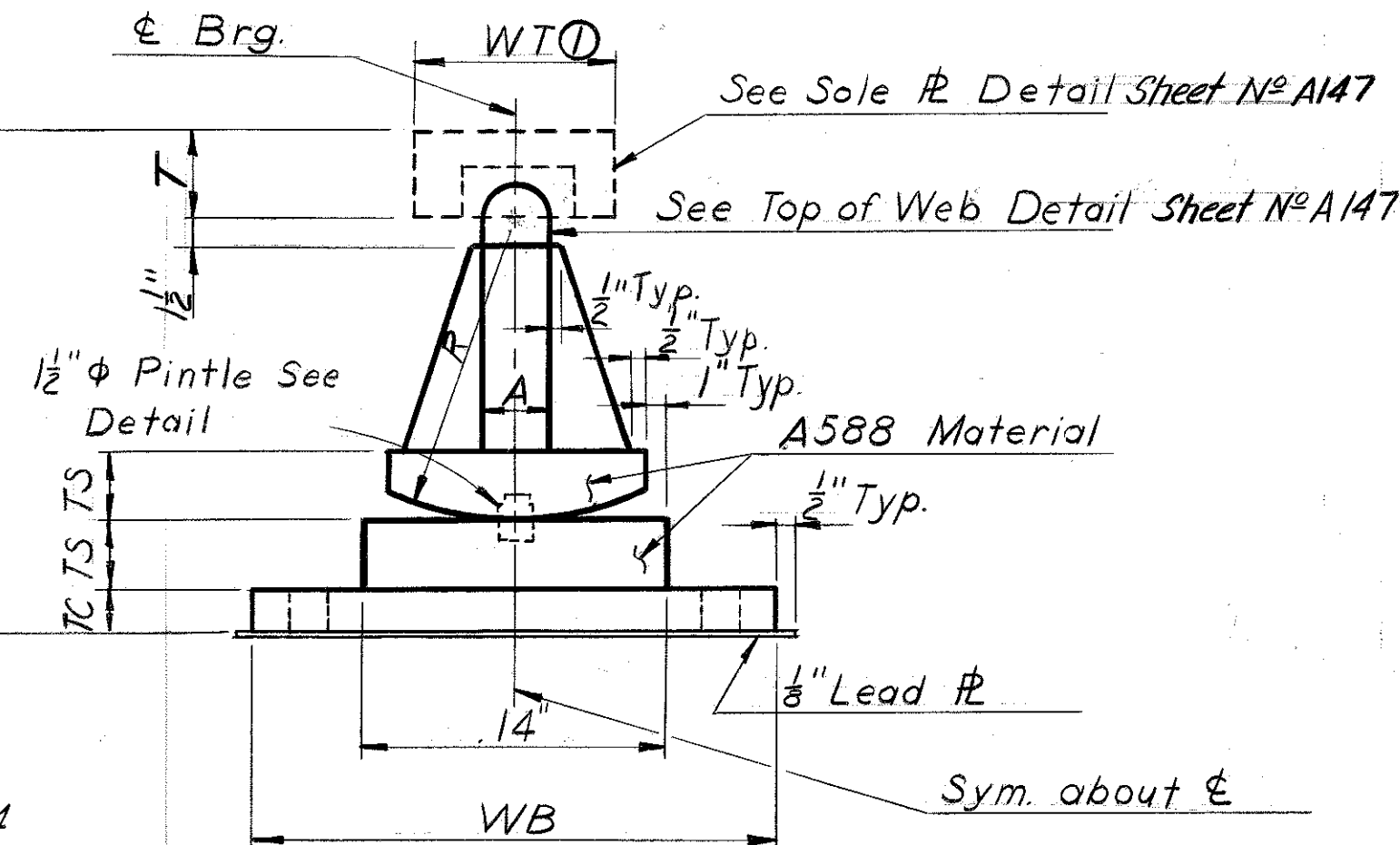
BEARING TYPE ① & ②										
TABLE OF DIMENSIONS IN INCHES										
Type	C	A	R	LB	WB	TC	TS	WS	React. (kips)	Wgt. (lbs)
①	12	3 1/2	18	42	42	2 3/8	2 7/8	16	1181	2853.1
②	14	5	24	48	48	3 1/4	3 3/8	16	1563	4481.5



PLAN OF MASONRY PLATE



FRONT ELEVATION



END ELEVATION

TYPE ① thru ⑩ BEARINGS

BEARING TYPE ① thru ⑩										
Type	A	R	LB	WB	TC	TS	React. (kips)	Wgt. (lbs)	Location	
①	3	14	32	24	2	3	608	1496.7	28E-G2#G4; 31E-G4; 36E-G4; 40E-G2#G4; 42E-G2#G4; 43W-G1#G3; 44W-G1#G3; 46W-G1#G3	
②	3	14	34	26	2 3/8	3 1/4	711	1849.8	26E#W-G1,G2,G3,G4; 28W-G1#G3; 29E-G4; 36E#W-G1,G2,G3,G6; 38E-G2,G4,G6; 41W-G1#G3	
③	3	14	36	28	2 3/4	3 1/2	819	2179.4	29E#W-G1,G2; 38W-G3; 40W-G3; 44E-G2#G4; 46E-2,4,6; 49W-1#5; 51E#W-1,2,3,4,5	
④	3 1/2	14	38	30	3 1/8	3 3/4	847	2315.3	29W-G3; 38W-G1; 40W-G1	
⑤	3 1/2	14	36	28	2 3/4	3 1/2	822	2223.2	31W-G3; 48E-2#4	
⑥	3 1/2	14	38	30	3	3 1/2	904	2546.5	49E-2#4	
⑦	3 1/2	14	40	32	3 1/2	3 1/2	962	2760.8	32W-G1	
⑧	3 1/2	18	40	32	3 1/2	3 1/2	1076	3108.4	31E-2; 49W-3	
⑨	4	14	36	28	2 3/4	3 1/2	715	2097.5	32E-G2	
⑩	4 1/2	14	34	26	2 3/8	3 1/4	655	1893.7	32E-G4; 33E-G2#G4	

*Reactions & Weights given are Maximums

BEARINGS
STRUCTURAL STEEL

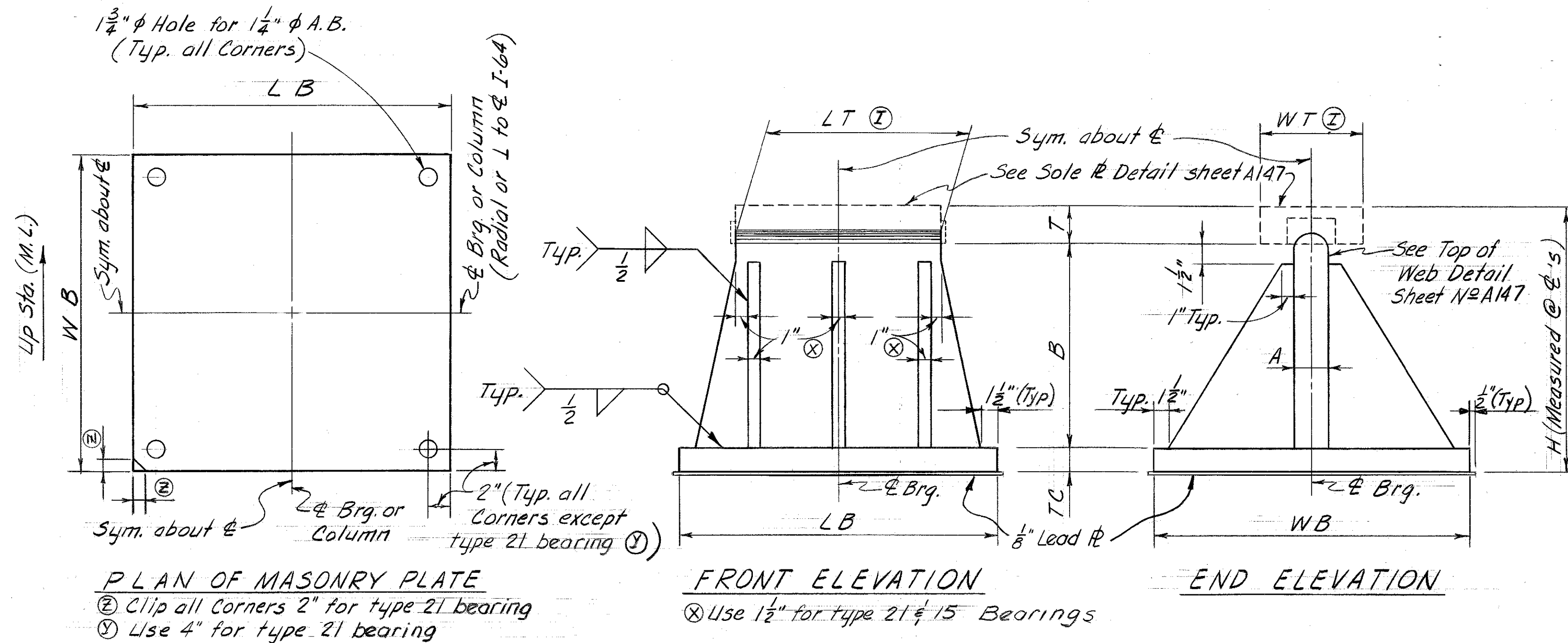
TABLE OF MASONRY PLATE
CORNER DIMENSIONS

TYPE	DIMENSION Z (In Inches)
3,5,7,9	3"
4	6"
All Others	0

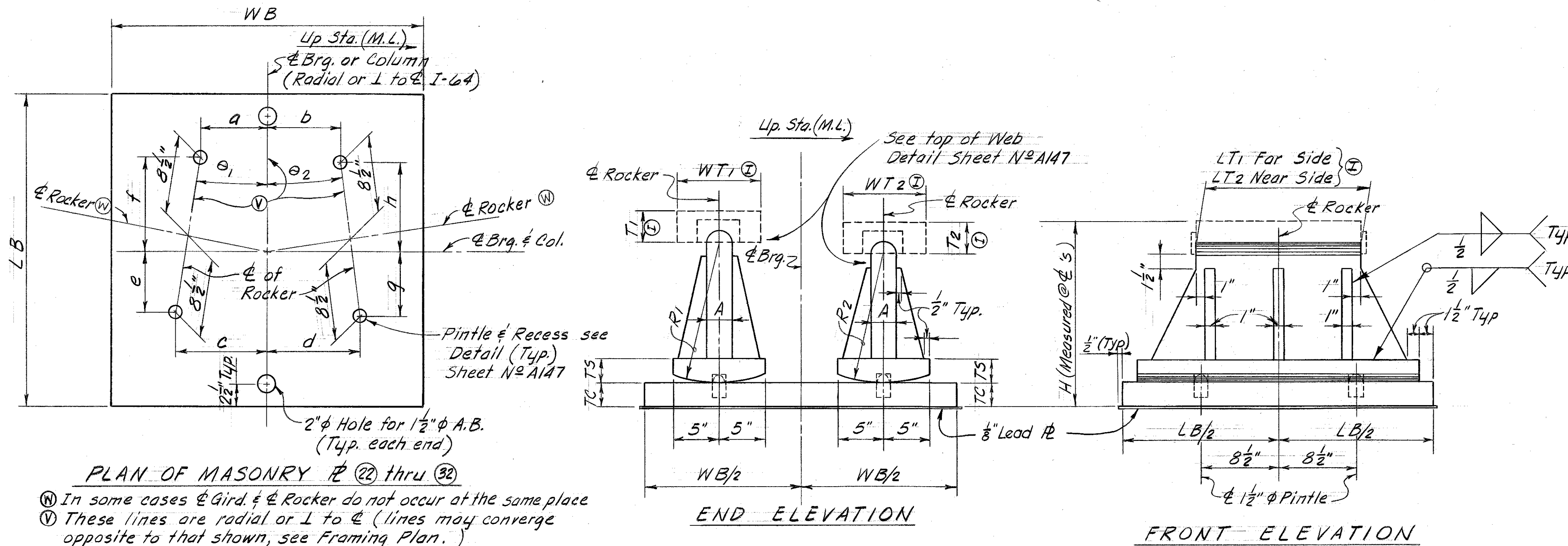
All anchor bolts are 1/2 inch. See Sheet N° A147 for detail.
 For "NOTES" See Sheet N° A147.
 ① This dimension is not constant for any one
 type Bearing. For length See Sheet N° A147.

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO. _____
 P. E. PROJECT NO. 164-2 (35) 3
 MAINTENANCE PROJECT NO. _____
 DRAWING NO. 18572

LETTING DATE



TYPE 13 thru 21 BEARINGS



TYPE 22 thru 33 BEARING

*React. & Weights given are Maximums.

BEARING TYPE 13 thru 21							
TABLE OF DIMENSIONS IN INCHES							
TYPE	A	B	TC	LB & WB	React. (kips)*	Wgt. (lbs)*	Location
13	3	18	2	28	744	1195.0	27W-G1 & G3; 27E-G2 & G4; 33W-G3; 35W-G1 & G3
14	3	18	2	30	839	1402.6	37E-G2 & G4; 41E-G2 & G4; 42W-G1 & G3; 45W-G1 & G3
15	3	18	2	32	908	1572.4	33W-G1 & G5; 37E-G6; 43E-G2 & G4; 30W-G3
16	3	16	2	28	715	1236.9	30E-G4
17	3	16	2	30	683	1341.5	47E-2 & 6; 50W-1, 5 & 3
18	3 1/2	18	2	32	852	1465.3	50E-2 & 4
19	3 1/2	18	2	34	1069	1650.3	34W-G1 & G3
20	3 1/2	15 1/2	2	30	879	1426.6	34E-G2 & G4
21	4 1/2	14 1/2	3	40	1473	2736.1	47E-4
							30W-1

BEARING TYPE 22 thru 33																					
TABLE OF DIMENSIONS IN INCHES																					
TYPE	WB	LB	TC	R1	R2	TS	A	a"	b"	c"	d"	e"	f"	g"	h"	θ_1	θ_2	West	East	Wgt.(lbs)	Location
22	30	30	2½	14	14	2½	3	9⅜	9⅜	9⅜	9⅜	8½	8½	8½	8½	0° 09' 00"	0° 09' 00"	123.2, 163.0	1771.9	R3-1A	
23	30	30	3	14	14	3¼	4	9	8⅝	9	8⅝	8½	8½	8½	8½	0°	0° 01' 34.5"	264.9, 278.2	2046.9	37W-G3	
24	30	30	3	14	14	3¼	4	9	8⅝	9	8⅝	8½	8½	8½	8½	0°	0° 01' 34.5"	258.3, 302.8	2052.5	37W-G1	
24	32	32	2½	14	14	2½	3	9⅜	9⅜	9⅜	9⅜	8½	8½	8½	8½	0° 04' 30"	0° 04' 30"	236.3, 161.0	1892.9	R1-17A	
25	32	32	2½	14	14	2½	3	9⅜	9⅜	9⅜	9⅜	8½	8½	8½	8½	0° 09' 00"	0° 09' 00"	309.7, 284.0	1996.0	R3-1B	
26	34	34	2½	14	14	2½	3	9½	9½	9½	9½	8½	8½	8½	8½	0° 01' 48"	0° 01' 48"	174.0, 195.6	2047.2	45E-G8	
27	34	34	2½	14	14	3	3	9⅜	9⅜	9⅜	9⅜	8½	8½	8½	8½	0° 01' 48"	0° 01' 48"	158.0, 287.3	2296.0	45E-G6	
28	34	34	3	14	14	3¼	3	9	9	9	9	8½	8½	8½	8½	0°	0°	373.2, 264.9	2491.1	34W-G1&G3	
28	34	34	3	14	14	3¼	3½	8⅝	8⅝	8⅝	8⅝	8½	8½	8½	8½	0° 01' 34.5"	0° 01' 34.5"	264.8, 330.6	2484.6	47W-G1	
29	34	34	3¼	14	14	3½	3½	9½	9½	9½	9½	8½	8½	8½	8½	0° 01' 48"	0° 01' 48"	417.5, 365.6	2567.7	45E-2	
29	34	34	3¼	14	14	3½	3½	9½	9½	9½	9½	8½	8½	8½	8½	0° 01' 48"	0° 01' 48"	345.4, 216.0	2545.2	45E-G4	
29	34	34	3¼	14	14	3½	3½	8⅝	8⅝	8⅝	8⅝	8½	8½	8½	8½	0° 01' 34.5"	0° 01' 34.5"	246.2, 372.5	2584.0	47W-G3	
30	36	36	3	14	14	3½	3	9	9	9	9	8½	8½	8½	8½	0° 04' 30"	0° 04' 30"	333.0, 156.0	2588.7	R1-17B	
31	34	34	2½	20	14	2½	3½	9	9	9	9	8½	8½	8½	8½	0° 01' 48"	0° 01' 48"	159.0, 223.5	2321.0	47W-G7	
32	36	36	3	20	14	3¼	3½	9⅜	9⅜	9⅜	9⅜	8½	8½	8½	8½	0° 01' 48"	0° 01' 48"	163.0, 343.4	2767.8	47W-G5	
33	5	5	3½	14	14	3¼	3	See Type 33 Masonry R for details.										324.9, 248.3	2642.6	39E-G2&G4	

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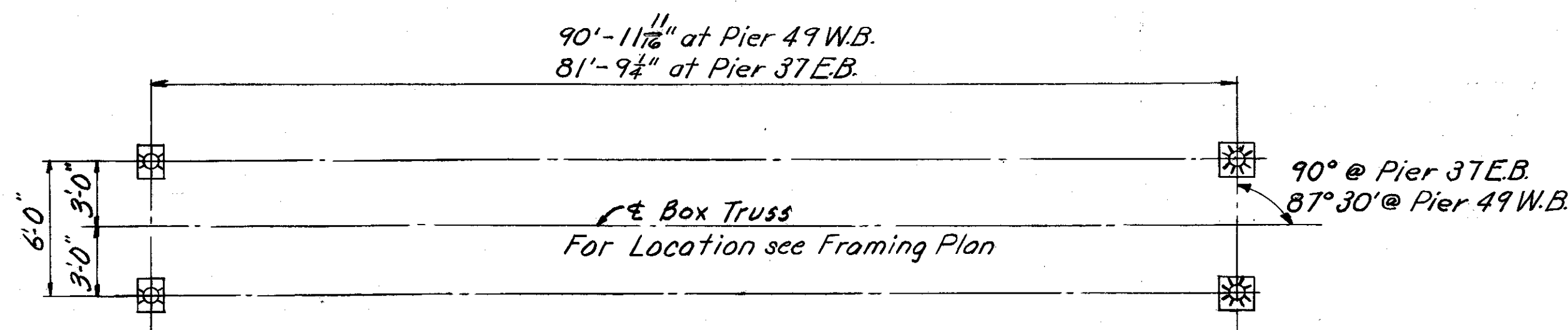
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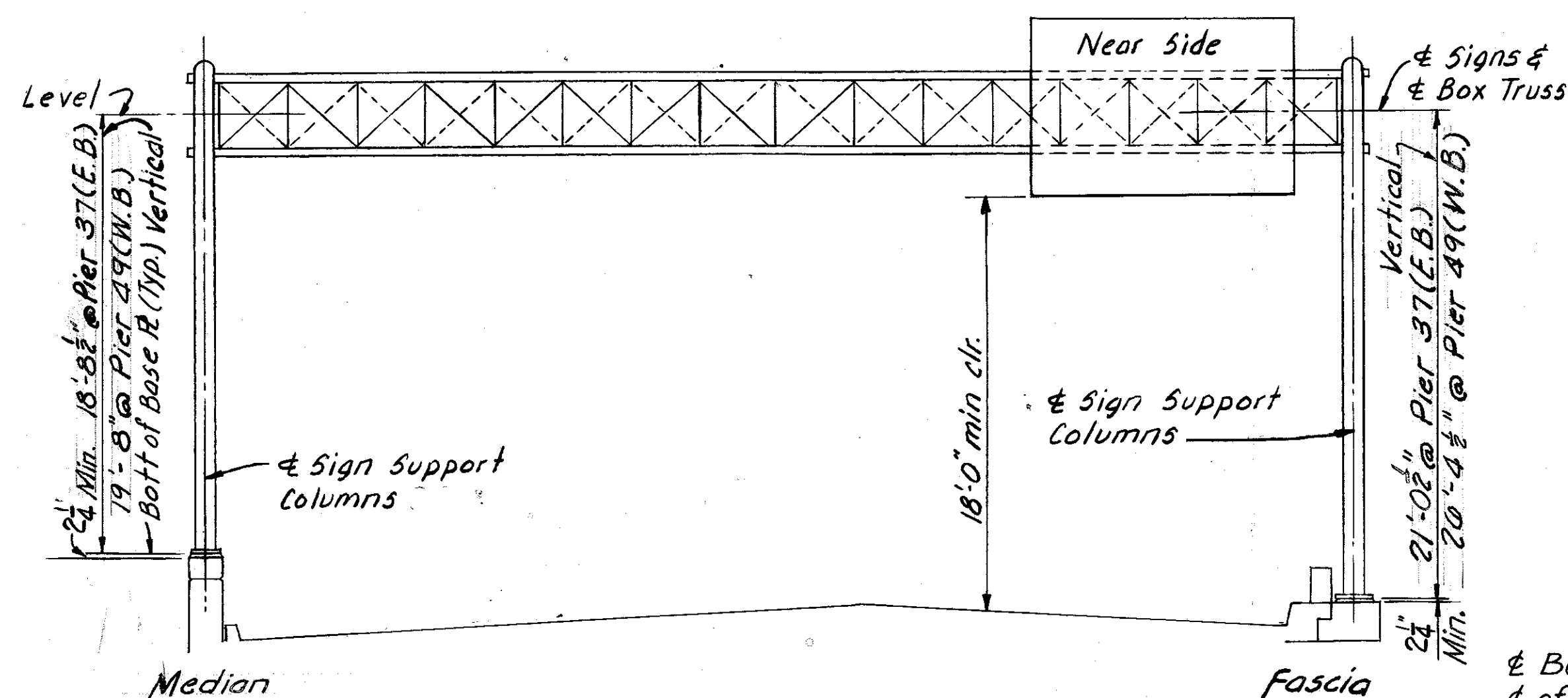
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SOLE PLATE DIMENSIONS AND BEARING ELEVATION SUMMARY

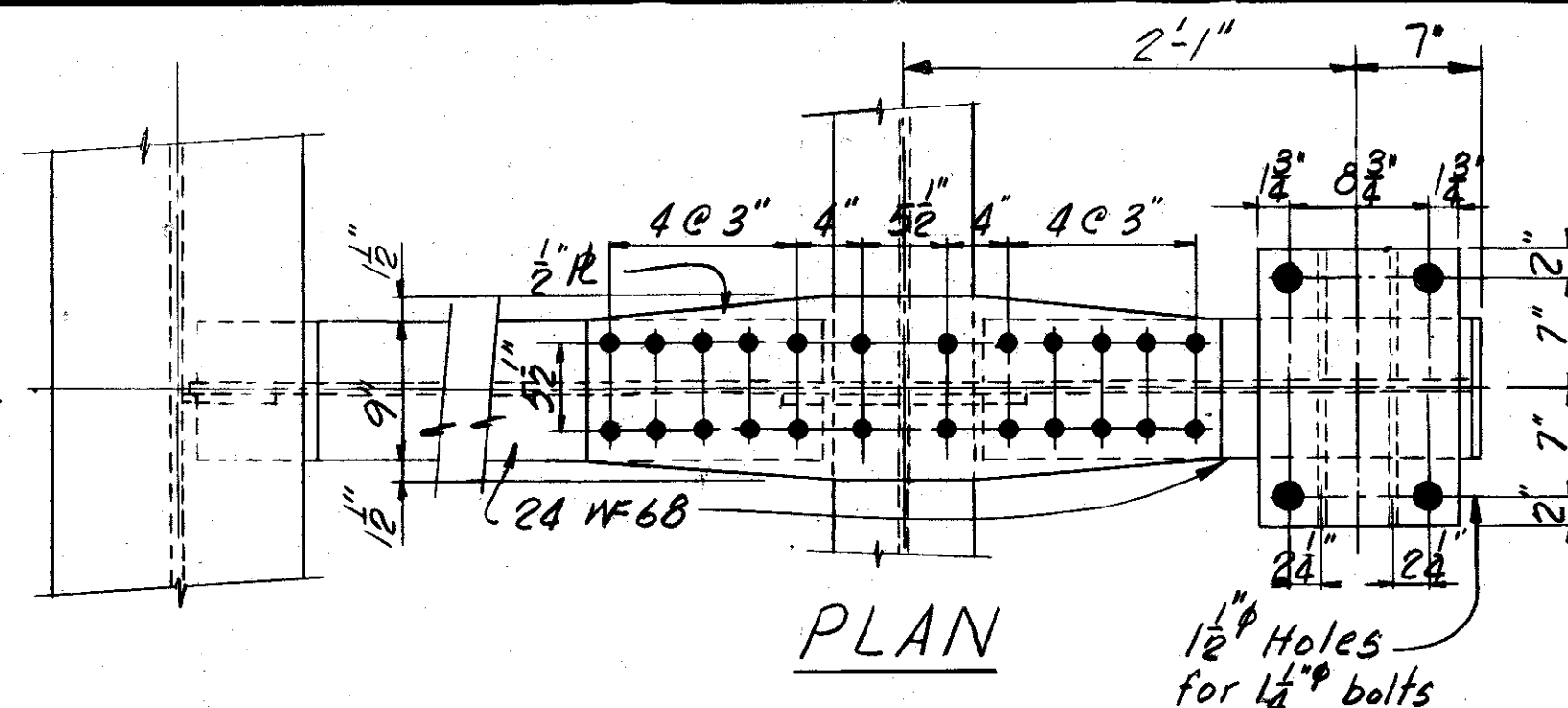
Bearing Number	Brg. Type	Top of Sole Pl. Elev.	LT	WT	T	H	Bottom of Masonry Pl. Elev.	Bearing Number	Brg. Type	Top of Sole Pl. Elev.	LT	WT	T	H	Bottom of Masonry Pl. Elev.	Bearing Number	Brg. Type	Top of Sole Pl. Elev.	LT	WT	T	H	Bottom of Masonry Pl. Elev.
26W-G1	2	478.912	19	9	3 1/2	23 1/2	476.974	38W-G3	3	461.673	19	9	3 1/2	23 1/2	459.704	47E-2	16	469.370	15	11	5 1/2	23 1/2	467.412
26W-G3	2	478.122	19	9	3 1/2	23 1/2	476.184	38E-G2	2	463.744	17	9	3 1/2	23 1/2	461.806	47E-4	20	471.003	18	11	6	23 1/2	469.045
26E-G2	2	479.002	19	9	3 1/2	23 1/2	477.064	38E-G4	2	465.044	17	9	3 1/2	23 1/2	463.106	47E-6	16	472.669	15	11	5 1/2	23 1/2	470.711
26E-G4	2	479.711	19	9	3 1/2	23 1/2	477.773	38E-G6	2	464.243	17	9	3 1/2	23 1/2	462.305	48E-2	5	469.836	18	11	6	26 1/2	467.659
27W-G1	13	477.880	19	9	3 1/2	23 1/2	475.922	39W-G1	18	463.178	19	9	3 1/2	23 1/2	461.220	48E-4	5	472.084	18	11	6	26 1/2	469.907
27W-G3	13	477.040	19	9	3 1/2	23 1/2	475.082	39W-G3	18	461.917	19	9	3 1/2	23 1/2	459.959	49W-1	3	467.966	19	11	5 1/2	25 1/2	465.831
27E-G2	13	477.848	19	9	3 1/2	23 1/2	475.890	R3-1A(38)	22	467.166	15	9	5 1/2	21 1/2	465.381	49W-3	8	466.365	22	10	6	31 1/2	463.771
27E-G4	13	478.558	19	9	3 1/2	23 1/2	476.600	R3-1A(1)	22	467.058	15	9	3 3/4	20 1/2	465.381	49W-5	3	464.732	19	11	5 1/2	25 1/2	462.597
28W-G1	2	476.865	19	9	3 1/2	23 1/2	474.927	R3-1B(38)	25	466.153	15	9	5 1/2	21 1/2	464.342	49E-2	6	468.339	18	11	6	26 1/2	466.120
28W-G3	2	475.977	19	9	3 1/2	23 1/2	474.039	R3-1B(1)	25	466.040	15	9	3 3/4	20 1/2	464.342	49E-4	6	470.588	18	11	6	26 1/2	468.369
28E-G2	1	476.977	17	9	3 1/2	22 1/2	475.092	39E-G2(38)	33	463.622	17	9	4 1/2	21 1/2	461.811	50W-1	16	466.457	15	11	5 1/2	23 1/2	464.499
28E-G4	1	477.671	17	9	3 1/2	22 1/2	475.786	39E-G2(39)	33	463.571	17	9	3 1/2	21 1/2	461.811	50W-3	16	465.154	17	11	5 1/2	23 1/2	463.196
29W-G1	3	475.838	23	9	3 1/2	23 1/2	473.869	39E-G4(38)	33	464.986	17	9	3 1/2	21 1/2	463.210	50W-5	16	463.850	17	11	5 1/2	23 1/2	461.892
29W-G3	4	475.252	23	9	3 1/2	24	473.252	39E-G4(39)	33	464.970	17	9	3 1/2	21 1/2	463.210	50E-2	17	466.737	17	11	5 1/2	23 1/2	464.779
29E-G2	3	476.017	19	9	3 1/2	23 1/2	474.048	40W-G1	4	464.326	19	9	3 1/2	24	462.326	50E-4	17	468.332	17	11	5 1/2	23 1/2	466.374
29E-G4	2	476.469	23	9	3 1/2	23 1/2	474.531	40W-G3	3	463.065	19	9	3 1/2	23 1/2	461.096	51W-1	3	464.605	19	11	5 1/2	25 1/2	462.470
30W-1	21	474.654	24	10	6	23 1/2	472.696	40E-G2	1	463.654	17	9	3 1/2	22 1/2	461.769	51W-3	3	463.836	19	11	5 1/2	25 1/2	461.701
30W-G3	13	473.768	23	9	3 1/2	23 1/2	471.810	40E-G4	1	465.054	17	9	3 1/2	22 1/2	463.169	51W-5	3	463.046	19	11	5 1/2	25 1/2	460.911
30E-G4	15	475.055	23	9	3 1/2	23 1/2	473.097	41W-G1	2	465.355	17	9	3 1/2	23 1/2	463.417	51E-2	3	464.718	19	11	5 1/2	25 1/2	462.583
31W-G3	5	472.704	17	9	3 1/2	23 1/2	470.735	41W-G3	2	464.084	17	9	3 1/2	23 1/2	462.146	51E-4	3	465.687	19	11	5 1/2	25 1/2	463.552
31E-2	8	473.777	22	10	6	31 1/2	471.183	41E-G2	13	464.336	17	9	3 1/2	23 1/2	462.378								
31E-G4	1	473.971	17	9	3 1/2	22 1/2	472.086	41E-G4	13	465.736	17	9	3 1/2	23 1/2	463.778								
32W-G1	7	471.470	21	9	3 1/2	24 1/2	469.418	42W-G1	13	466.139	17	9	3 1/2	23 1/2	464.181								
32W-G3	12	471.928	24	10	6 1/2	37	468.845	42W-G3	13	464.861	17	9	3 1/2	23 1/2	462.903								
32E-G2	9	472.135	19	9	3 1/2	23 1/2	470.166	42E-G2	1	464.999	17	9	3 1/2	22 1/2	463.114								
32E-G4	10	472.581	19	9	3 1/2	23 1/2	470.643	42E-G4	1	466.399	17	9	3 1/2	22 1/2	464.514								
33W-G1	14	469.674	25	9	3 1/2	23 1/2	467.716	43W-G1	1	466.878	17	9	3 1/2	22 1/2	464.993								
33W-G3	13	469.216	19	9	3 1/2	23 1/2	467.258	43W-G3	1	465.606	17	9	3 1/2	22 1/2	463.721								
33W-G5	14	468.904	19	9	3 1/2	23 1/2	466.946	43E-G2	14	465.875	19	9	3 1/2	23 1/2	463.917								
33E-G2	10	470.857	17	9	3 1/2	23 1/2	468.919	43E-G4	14	467.274	19	9	3 1/2	23 1/2	465.316								
33E-G4	10	471.304	17	9	3 1/2	23 1/2	469.366	44W-G1	1	468.983	17	9	3 1/2	22 1/2	467.098								
34W-G1(33)	28	467.817	17	9	5	22 1/2	465.973	44W-G3	1	467.695	17	9	3 1/2	22 1/2	465.810								
34W-G1(34)	28	467.759	17	9	4 1/2	21 1/2	465.973	44E-G2	3	467.011	19	9	3 1/2	23 1/2	465.042								
34W-G3(33)	28	467.382	17	9	5	22 1/2	465.538	44E-G4	3	468.410	19	9	3 1/2	23 1/2	466.441								
34W-G3(34)	28	467.323	17	9	4 1/2	21 1/2	465.538	45W-G1	13	469.430	17	9	3 1/2	23 1/2	467.472								
R1-17A(33)	24	469.754	15	10	4 1/2	20 1/2	468.034	45W-G3	13	468.142	17	9	3 1/2	23 1/2	466.184								
R1-17A(17)	24	469.711	15	9	3 3/4	20 1/2	468.034	45E-2(44)	29	469.298	18	9	4 1/2	21 1/2	467.496								
R1-17B(33)	30	468.781	16	10	4 1/2	21 1/2	467.000	45E-2(45)	29	469.317	15	10	4 1/2	21 1/2	467.496								
R1-17B(17)	30	468.750	15	10	3 1/2	21	467.000	45E-G4(44)	29	470.497	18	9	4	21 1/2	468.716								
34E-G2	19	469.261	23	9	3 1/2	23 1/2	467.303	45E-G4(45)	29	470.517	15	10	4 1/2	21 1/2	468.716								
34E-G4	19	469.780	23	9	3 1/2	23 1/2	467.822	45E-G6(6)	27	473.445	15	9	3 3/4	20 1/2	471.726								
35W-G1	13	466.351	19	9	3 1/2	23 1/2	464.393	45E-G6(45)	27	473.557	15	10	5 1/2	22	471.726								
35W-G3	13	465.877	19	9	3 1/2	23 1/2	463.919	45E-G8(6)	26	474.170	15	9	3 3/4	20 1/2	472.493								
35E-G2	11	467.063	25	9	4	27 1/2	464.761	45E-G8(45)	26	474.296	15	10	5 1/2	21 1/2	472.493								
35E-G4	11	467.751	25	9	4	27 1/2	465.449	46W-G1	1	469.519	17	9	3 1/2	22 1/2	467.634								
36W-G1	2	464.579	19	9	3 1/2	23 1/2	462.641	46W-G3	1	468.232	17	9	3 1/2	22 1/2	466.347								
36W-G3	2	463.654	19	9	3 1/2	23 1/2	461.716	46E-2	3	469.465	19	11	5 1/2	25 1/2	467.330								
36E-G2	2	465.741	17	9	3 1/2	23 1/2	463.803	46E-4	3	471.065	19	11	5 1/2	25 1/2	468.930								
36E-G4	1	466.430	17	9	3 1/2	22 1/2	464.545	46E-6	3	472.383	19	11	5 1/2	25 1/2	470.248								
36E-G6	2	466.485	17	9	3 1/2	23 1/2	464.547	47W-G1(46)	28	469.298	17	10	3 1/2	20 1/2	467.567								
37W-G1(36)	23	463.559	17	9	3 1/2	21	461.807	47W-G1(48)	28	469.348	17	10	4 1/2	21 1/2	467.567								
37W-G1(37)	23	463.526	17	9	3 1/2	20 1/2	461.807	47W-G3(46)	29	468.010	17	10	3 1/2	21	466.259								
37W-G3(36)	23	462.275	17	9	3 3/4	20 1/2	460.535	47W-G3(48)	29	468.061	17	10	4 1/2	21 1/2	466.259								
37W-G3(37)	23	462.254	17	9	3 1/2	20 1/2	460.535	47W-G5(1)	32	471.540	17	9	3 1/2	26 1/2	469.305								
37E-G2	13	464.485	19	9	3 1/2	23 1/2	462.527	47W-G5(48)	32	471.065	17	10	4	21 1/2	469.305								
37E-G4	13	465.484	17	9	3 1/																		



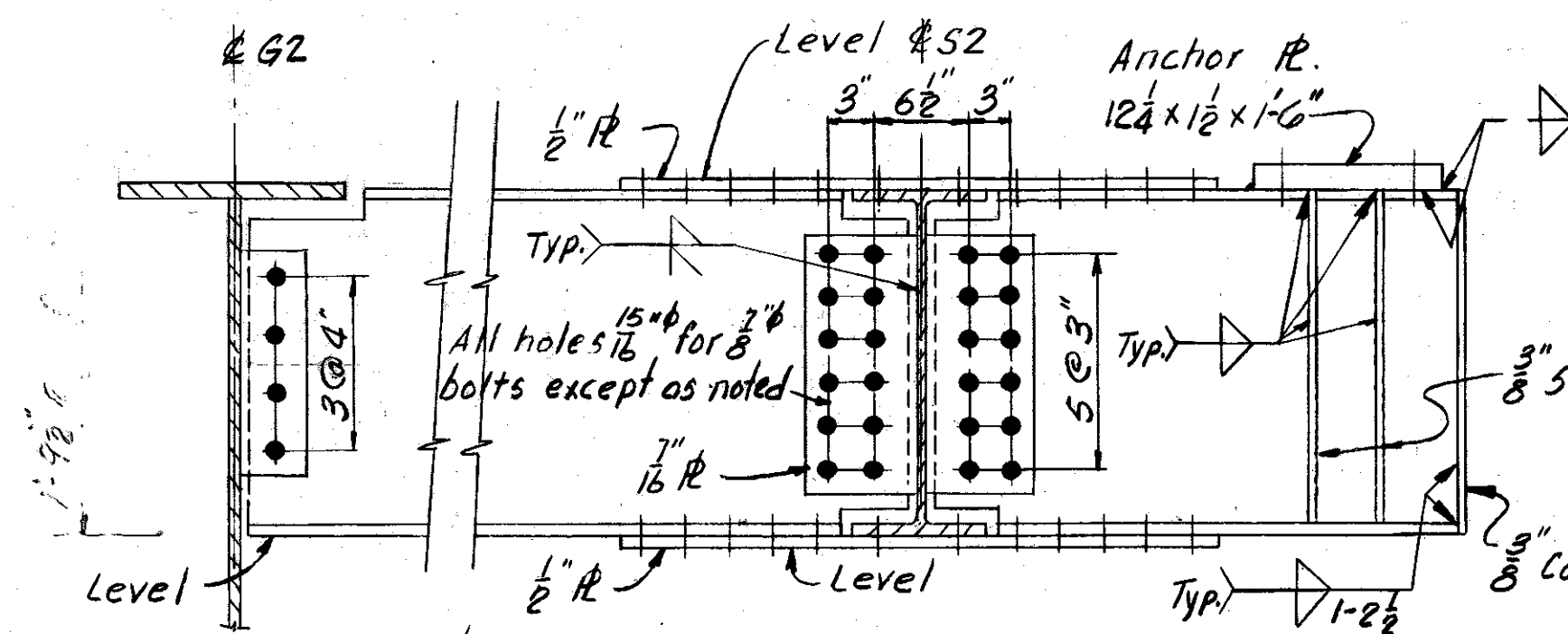
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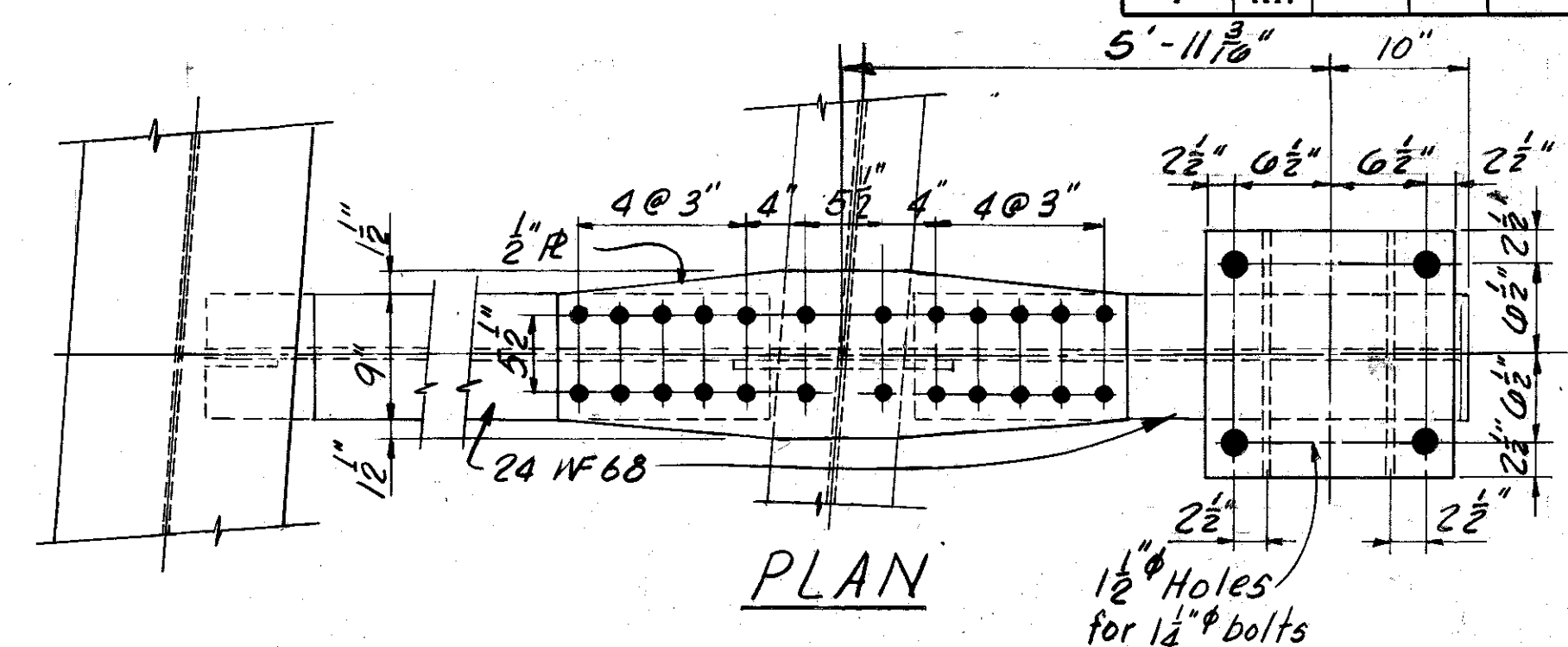
ELEVATION
SIGN SUPPORT @ PIERS
37 (E.B.) & 49 (W.B.)



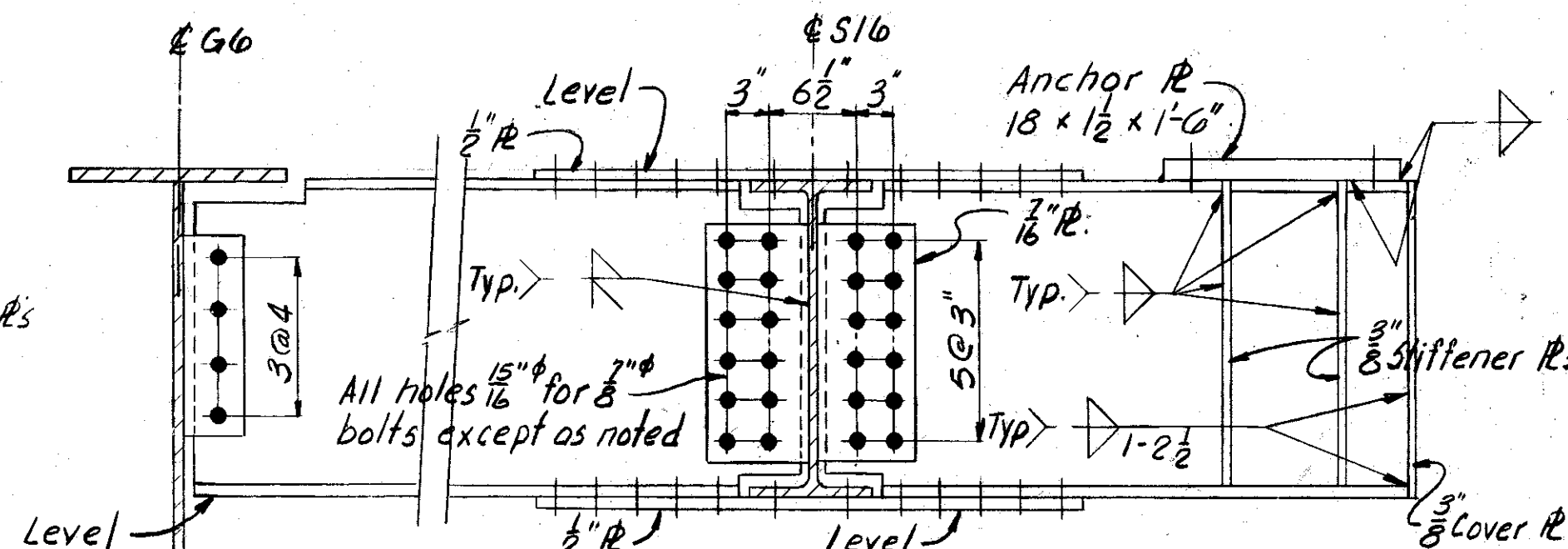
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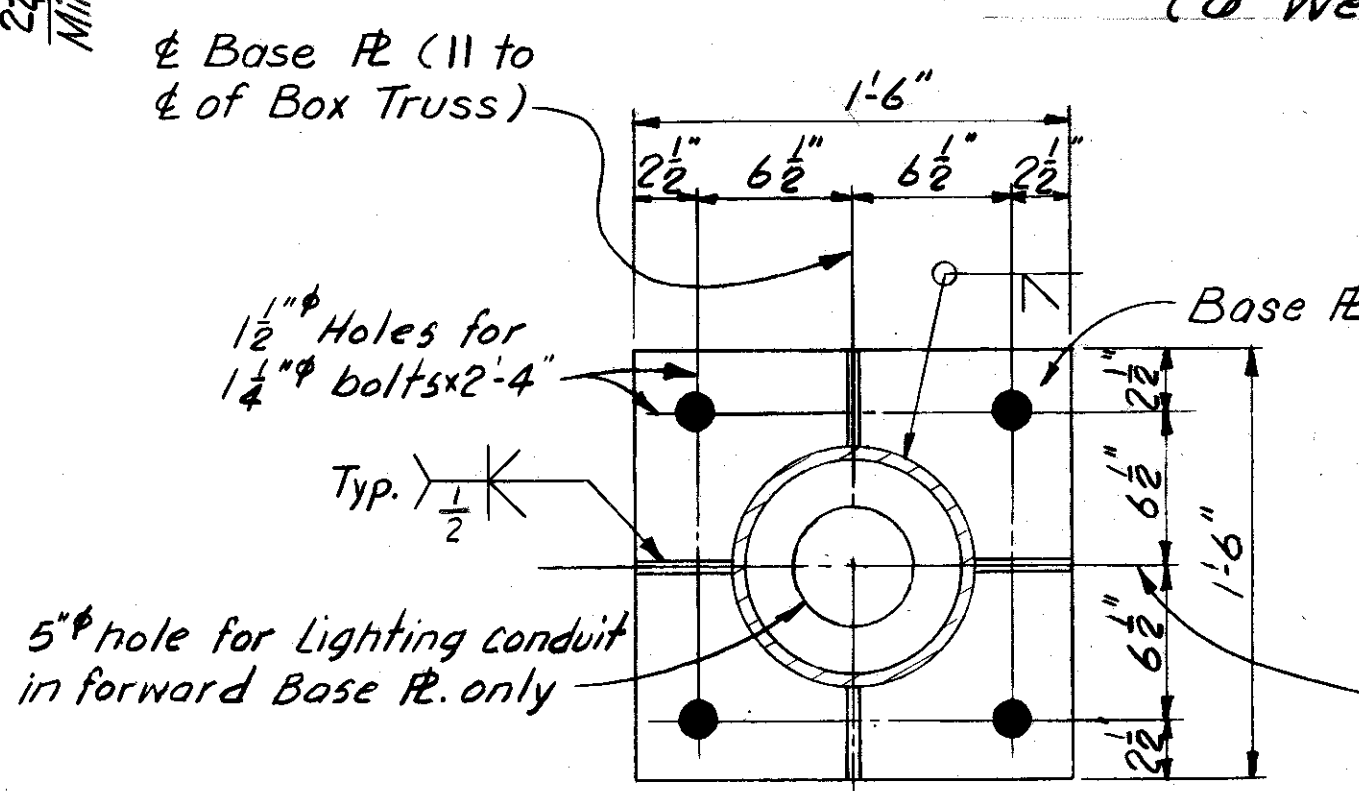
ELEVATION
SIGN SUPPORT @ MEDIAN
(0' West of Pier 37 E.B.)



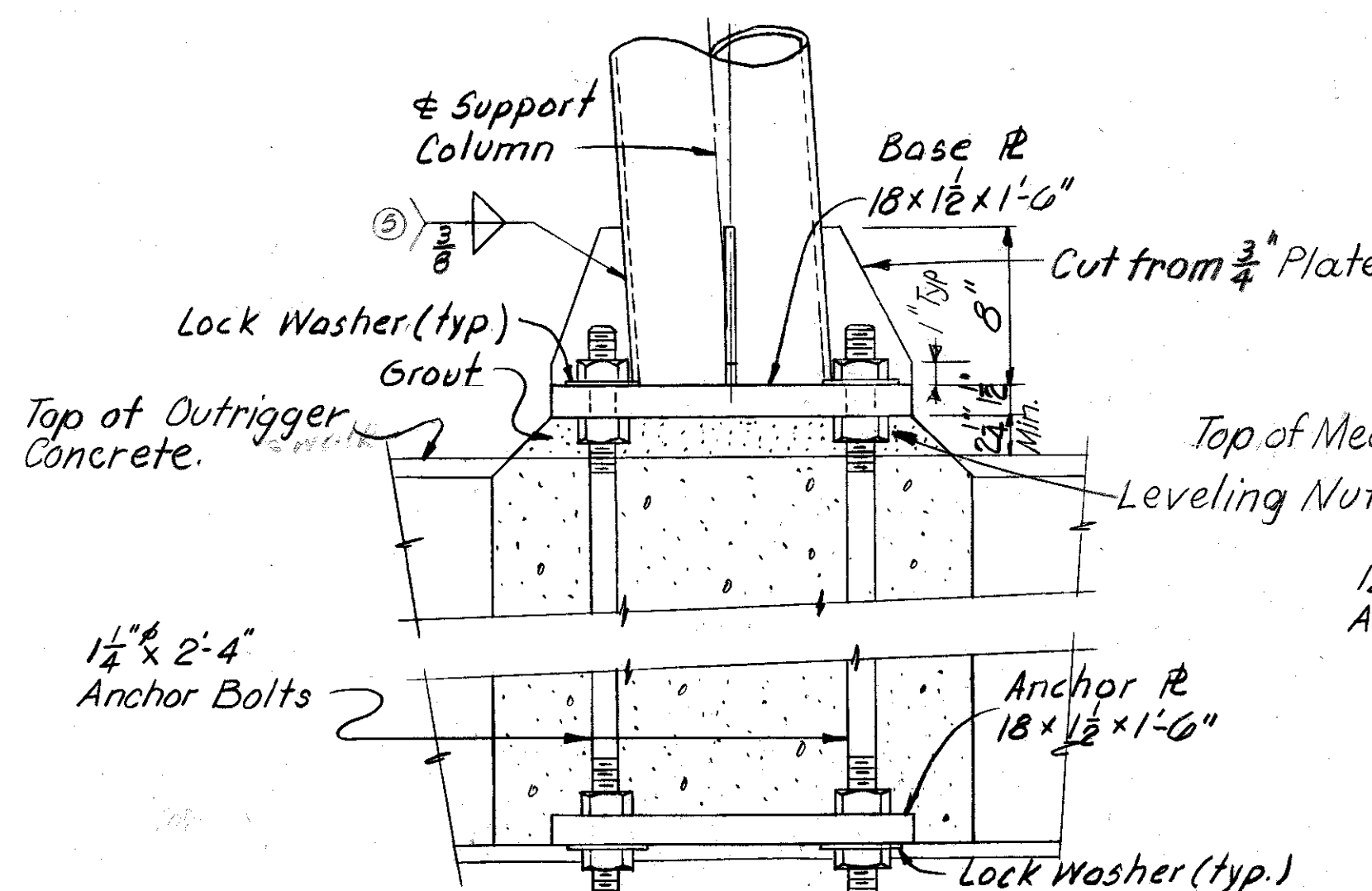
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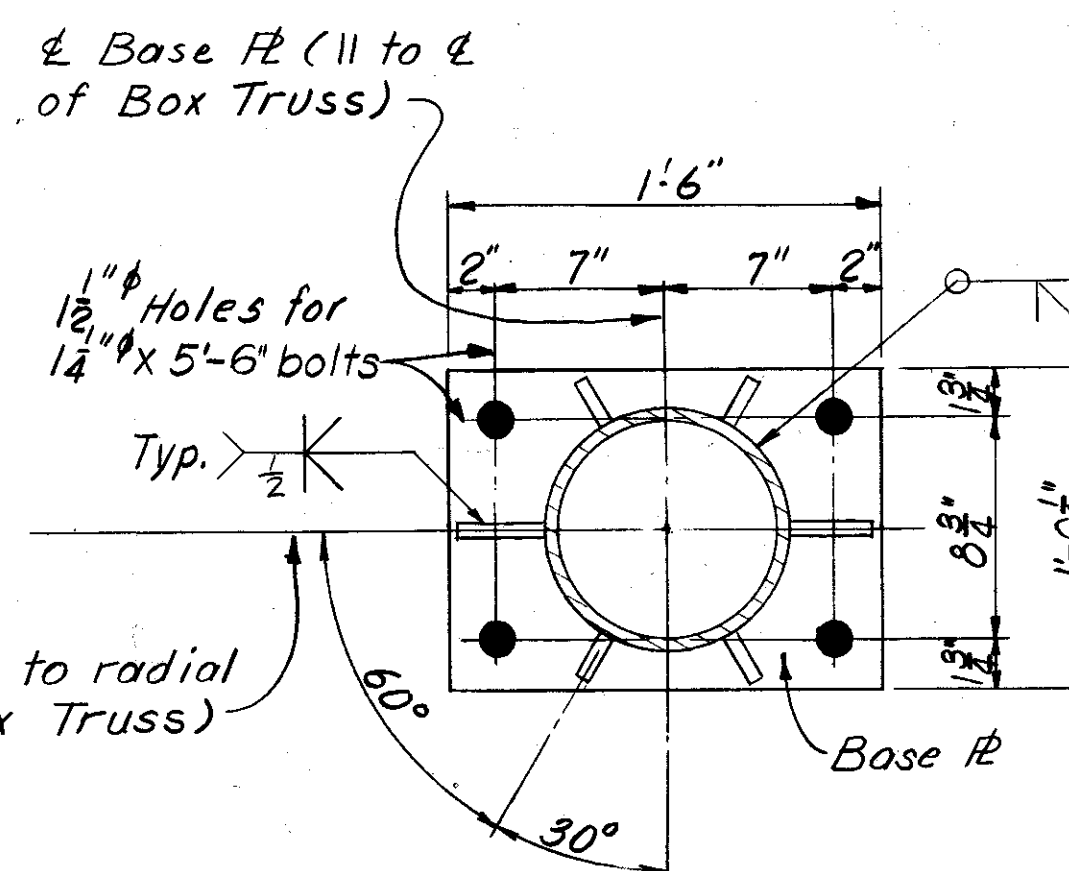
ELEVATION
SIGN SUPPORT @ FASCIA
(0' West of Pier 37 E.B.)



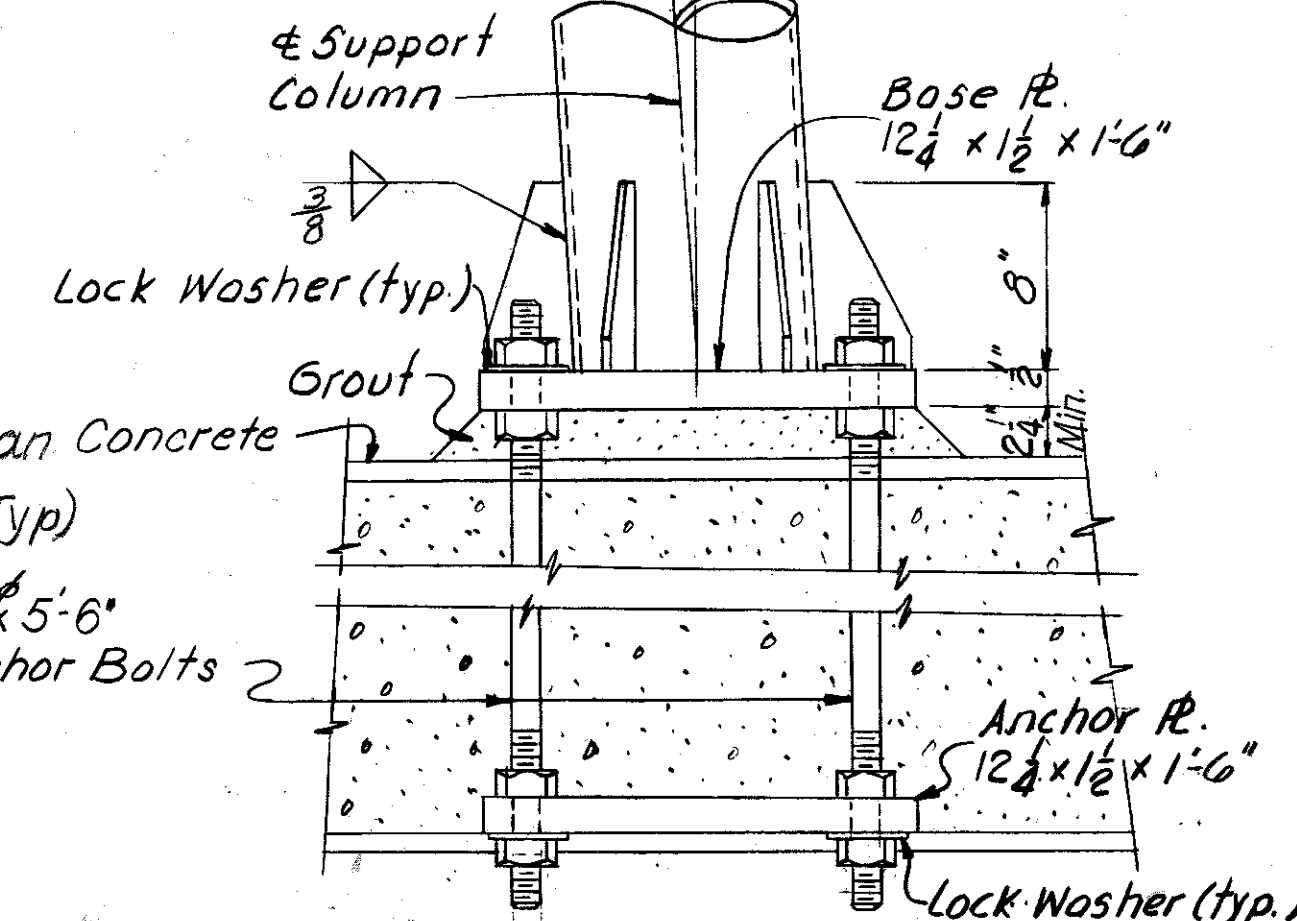
PLAN



ELEVATION
FASCIA BASE PLATE DETAIL



PLAN



ELEVATION
MEDIAN BASE PLATE DETAIL

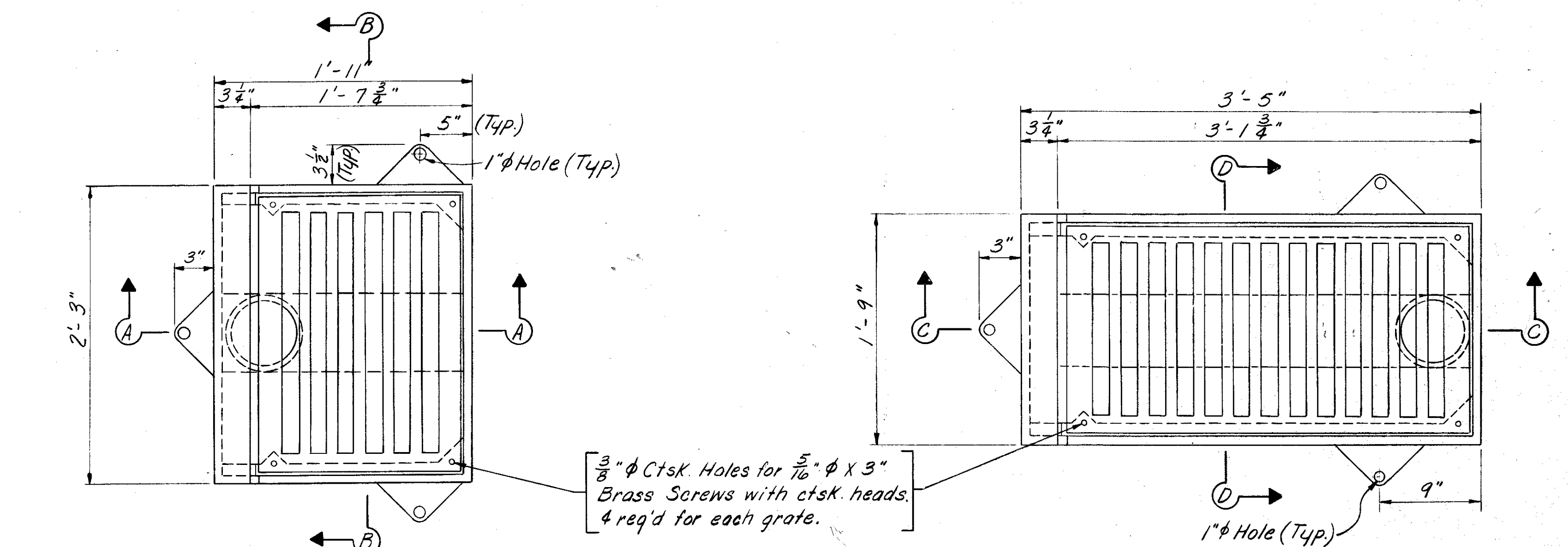
Notes:
Anchor Bolts, Nuts and Washers included in Structural Steel.
Designed for 44 psf wind on a sign area of 400 ft² and in accordance with "Specifications for the Design and Construction of Structural Supports for Highway Signs" Published by AASHTO, 1961
For Std. Overhead Sign Supports See Sheet B40 thru B43 of Drawing No. 18573.
For Concrete Details @ Std. Overhead Sign Supports See Sheets B32 & B33 of Drawing No. 18573.

SHEET A14B

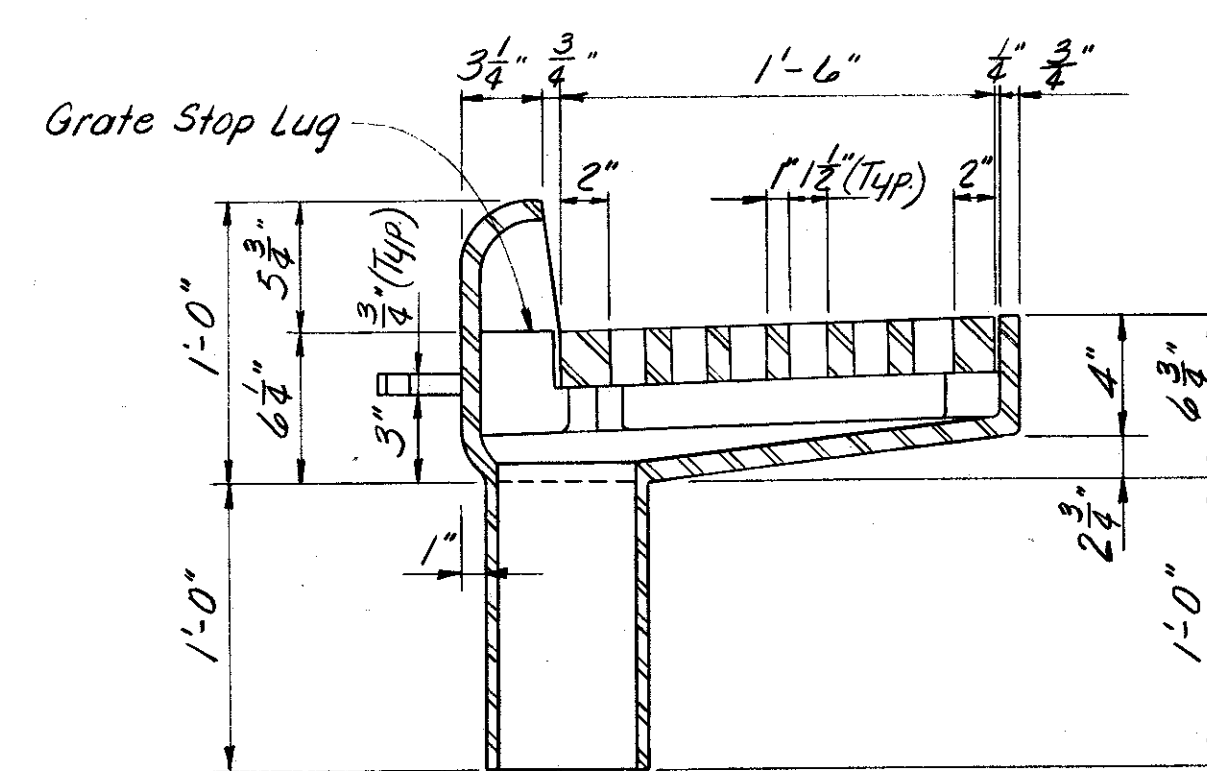
COMMONWEALTH OF KENTUCKY	
DEPARTMENT OF HIGHWAYS	
FRANKFORT	
COUNTY OF JEFFERSON	
I64-13TH ST. TO 7TH ST.	
LOUISVILLE - LEXINGTON ROAD	
STATION 208+08	PROJECT NO. I64-2 (35) 3
BRIDGE NUMBER	DRAWING NO. 18572
	INDEX

DESIGNED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 TRACED BY: _____ DATE: _____
 REVISIONS: _____

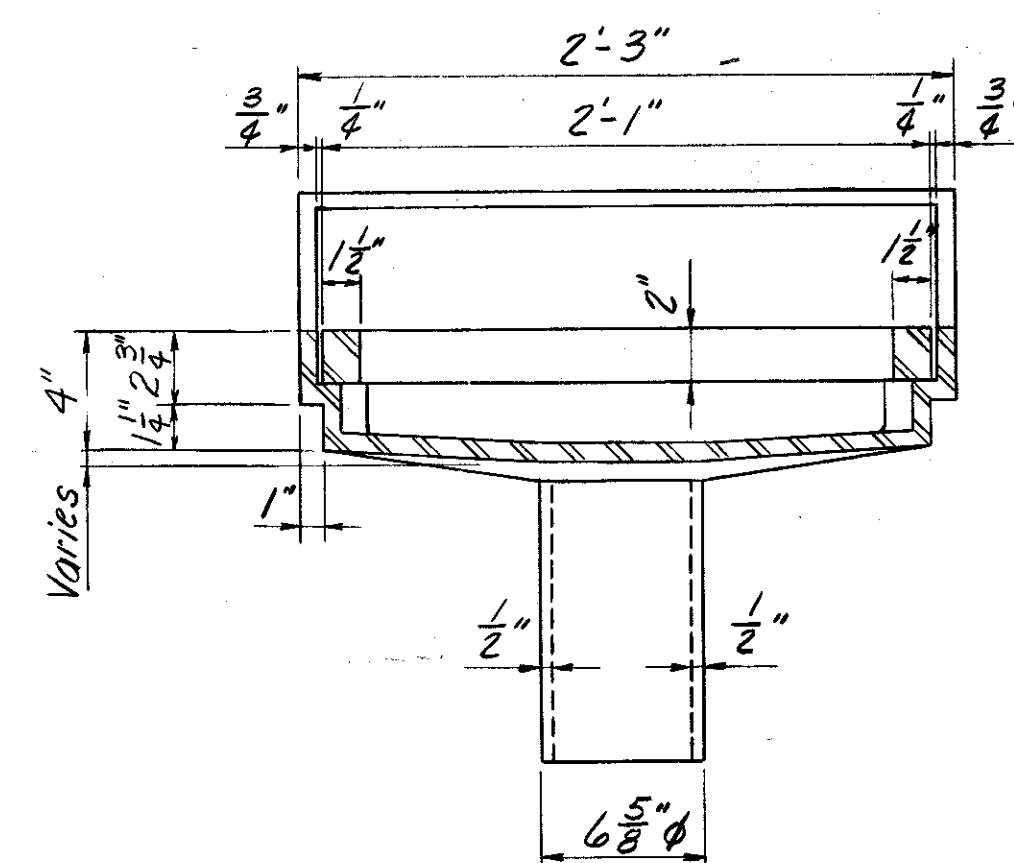
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.		1970		



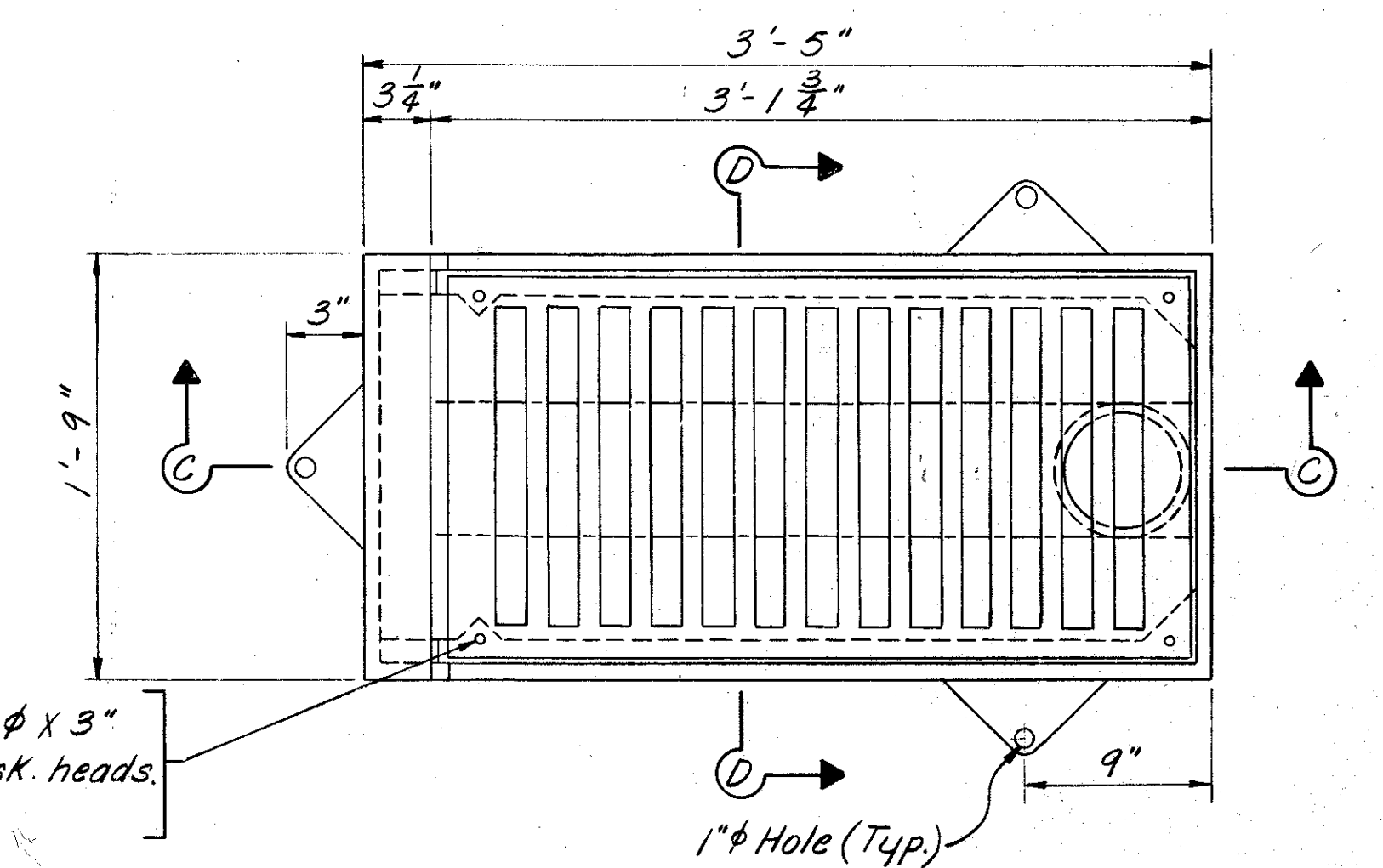
TYPE I DECK DRAIN
Drain Casting @ Median Curb
(31 Required)



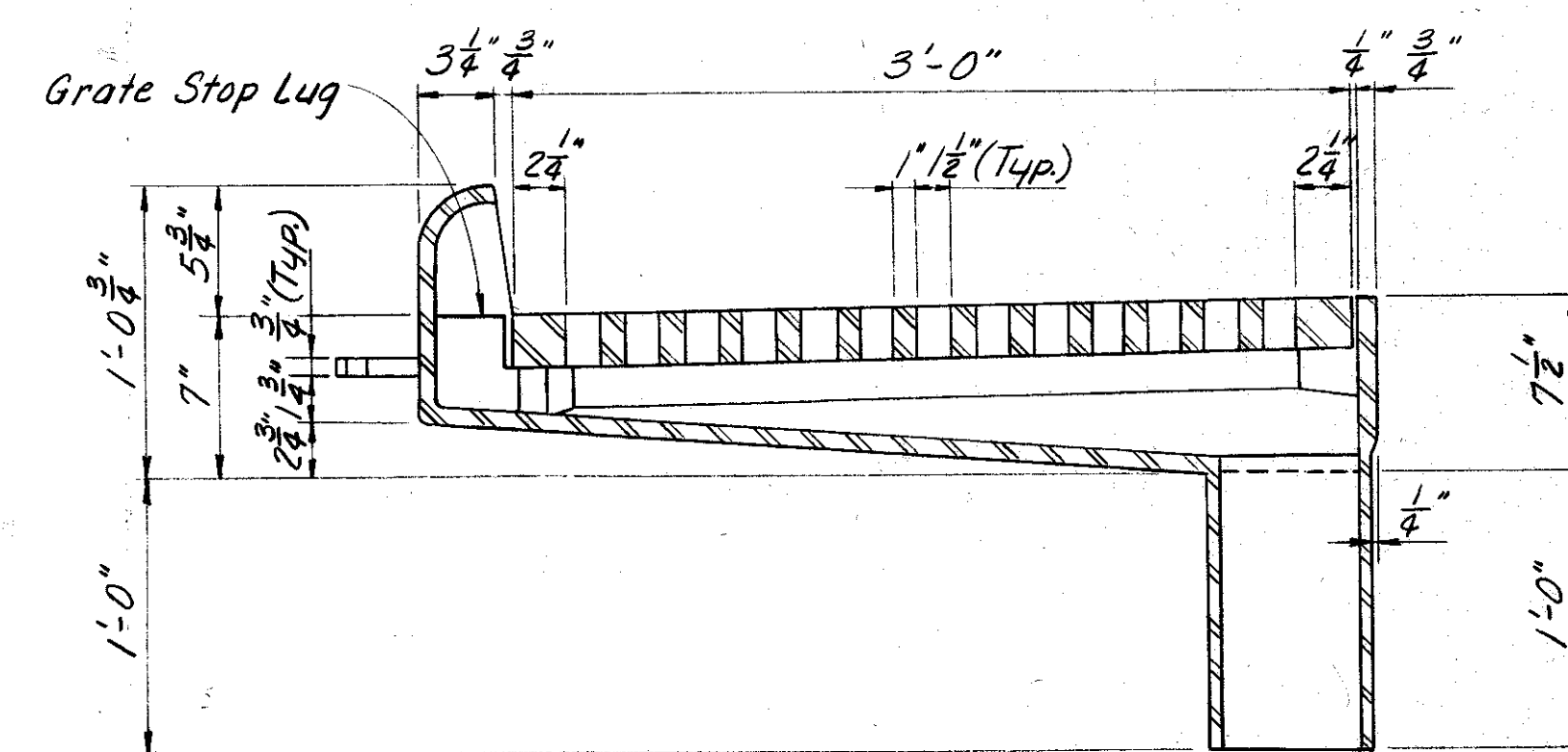
SECTION A-A



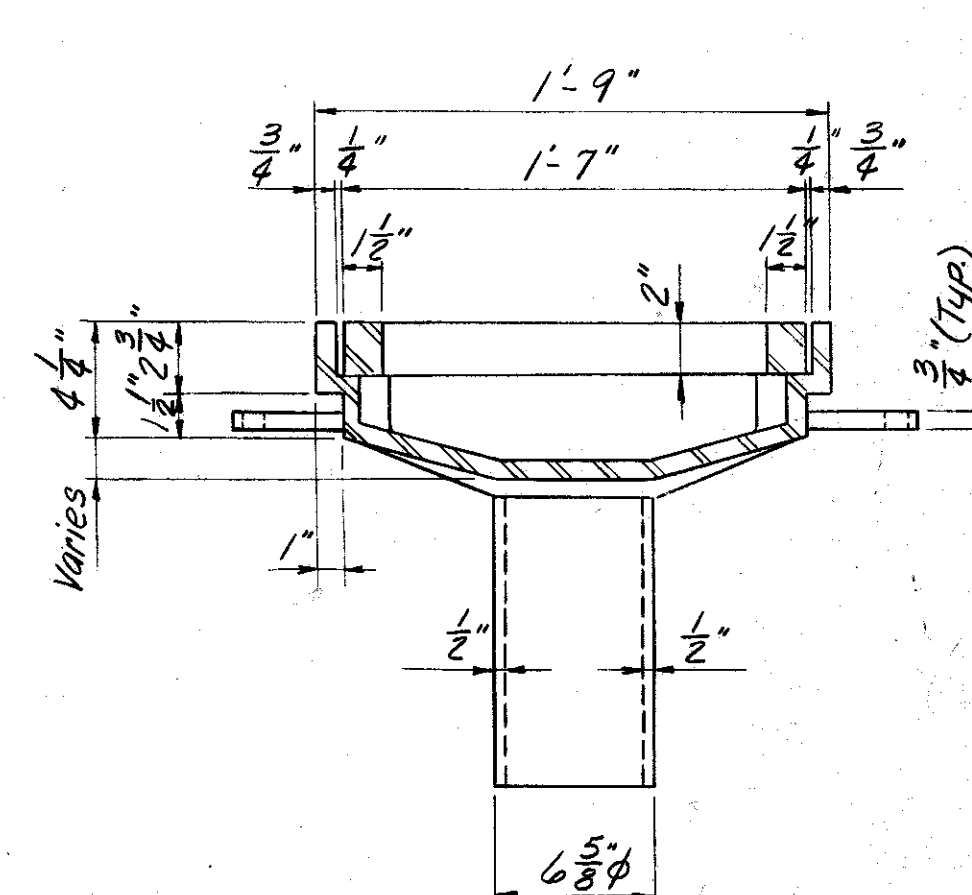
SECTION B-B



TYPE II DECK DRAIN
Drain Casting @ Fascia Curb
(45 Required)



SECTION C-C



SECTION D-D

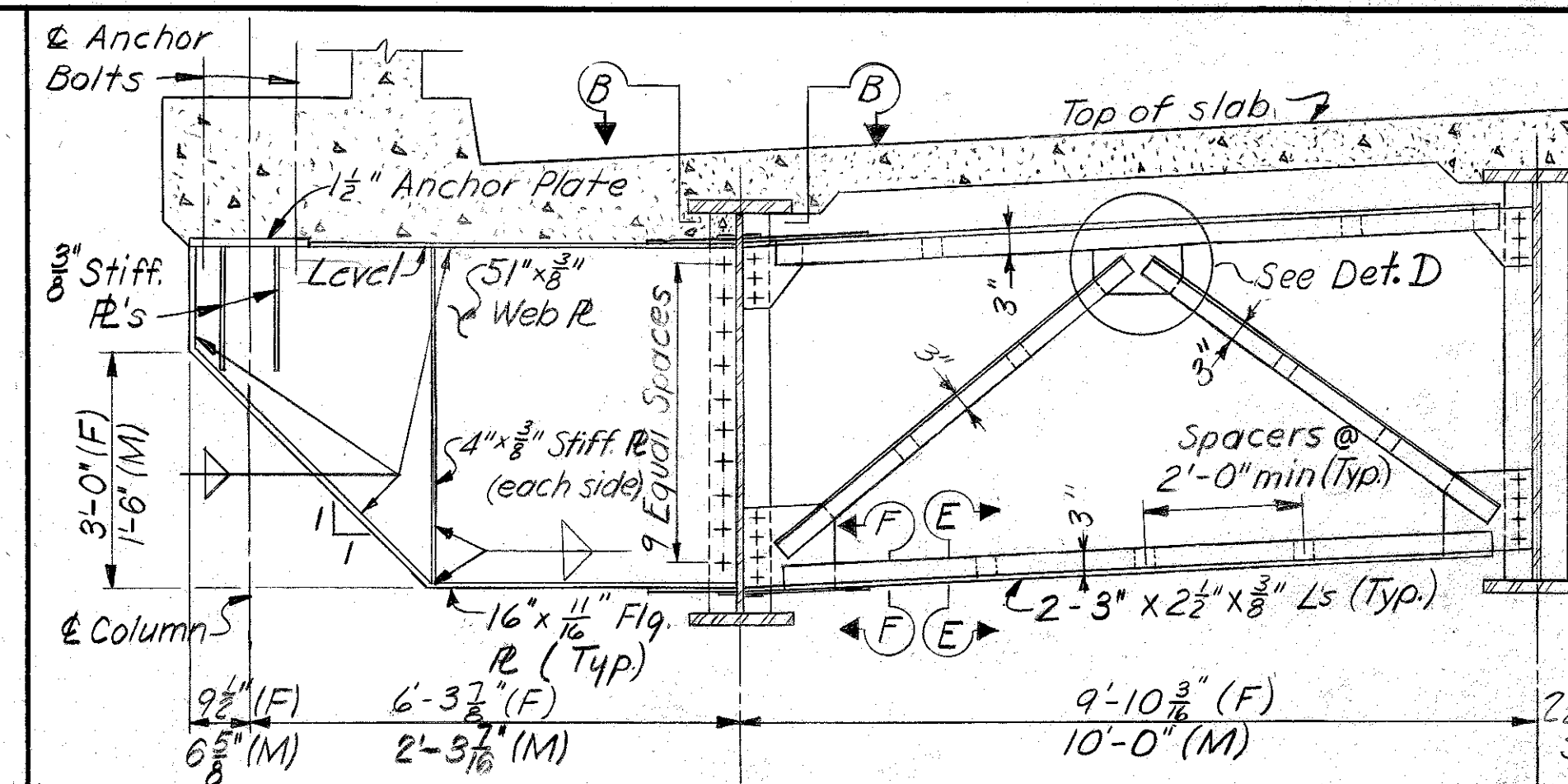
Wall thickness of castings
to be $\frac{3}{4}$ " except outlet pipe.

Foundry Notes:

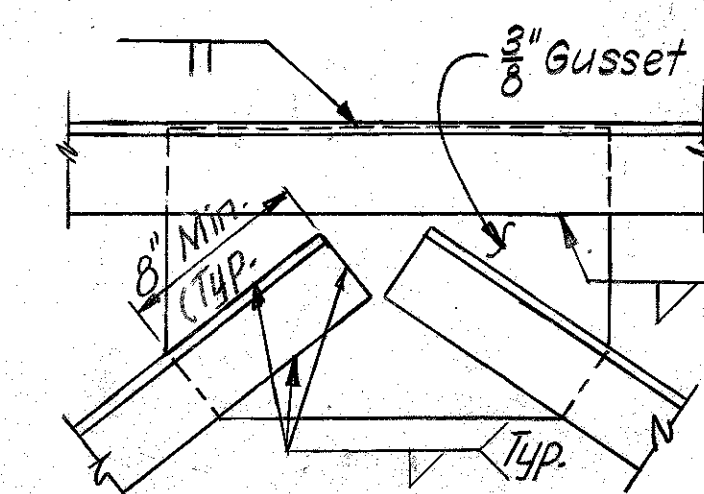
Body of Drain Casting shall be Gray Cast Iron ASTM A48, Class No. 30A* Drain Grates shall be Cast Steel, ASTM A27, Grade 70-36. Fit grate to body and ship in place.
Form T-521 report of field inspection of castings is to be submitted to the laboratory. Payment for drain castings will be included in lump sum bid price of Structural Steel. Surfaces in contact with concrete shall not be painted.

* Ductile Iron, ASTM A536, Grade 60-40-18, may be substituted for Gray Cast Iron or Cast Steel.

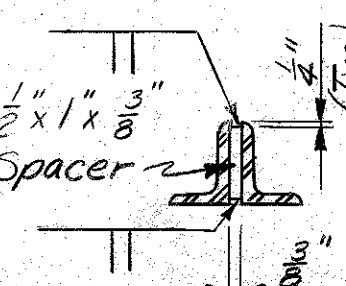
DRAINS AND DRAIN PIPE DETAILS



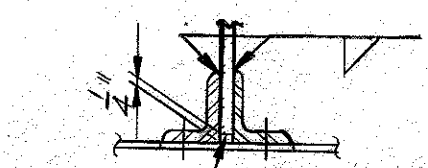
SIGN SLIPPORT BRACKET & CROSSFRAME CF-3
Fascia Shown, Median Similar. (F) denotes Fascia (M) denotes Median



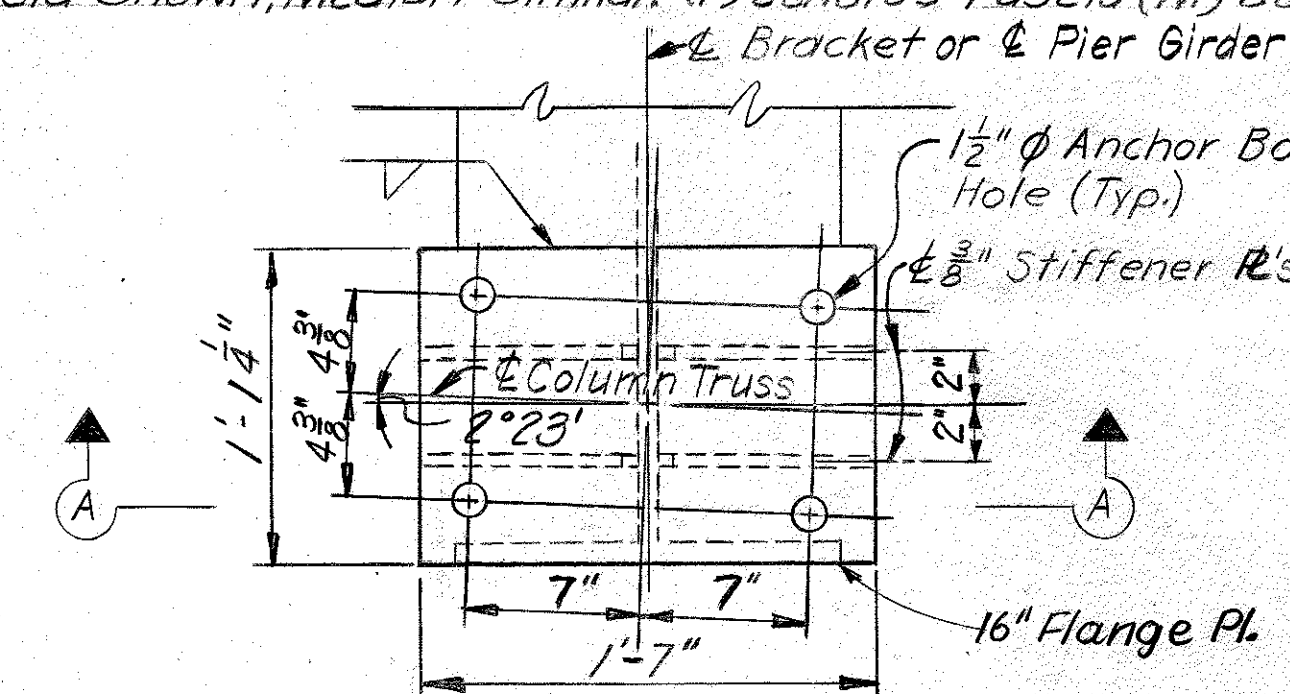
DETAIL D



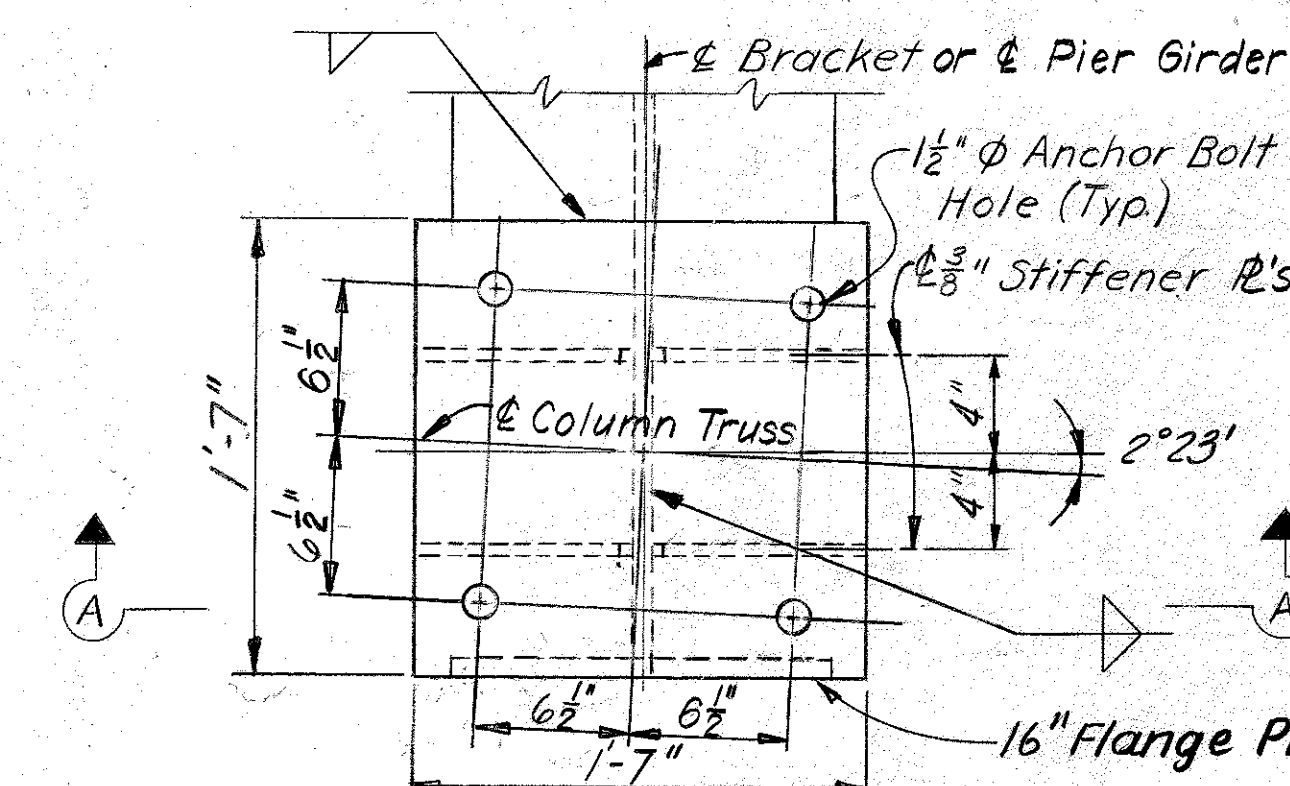
SECTION E-E



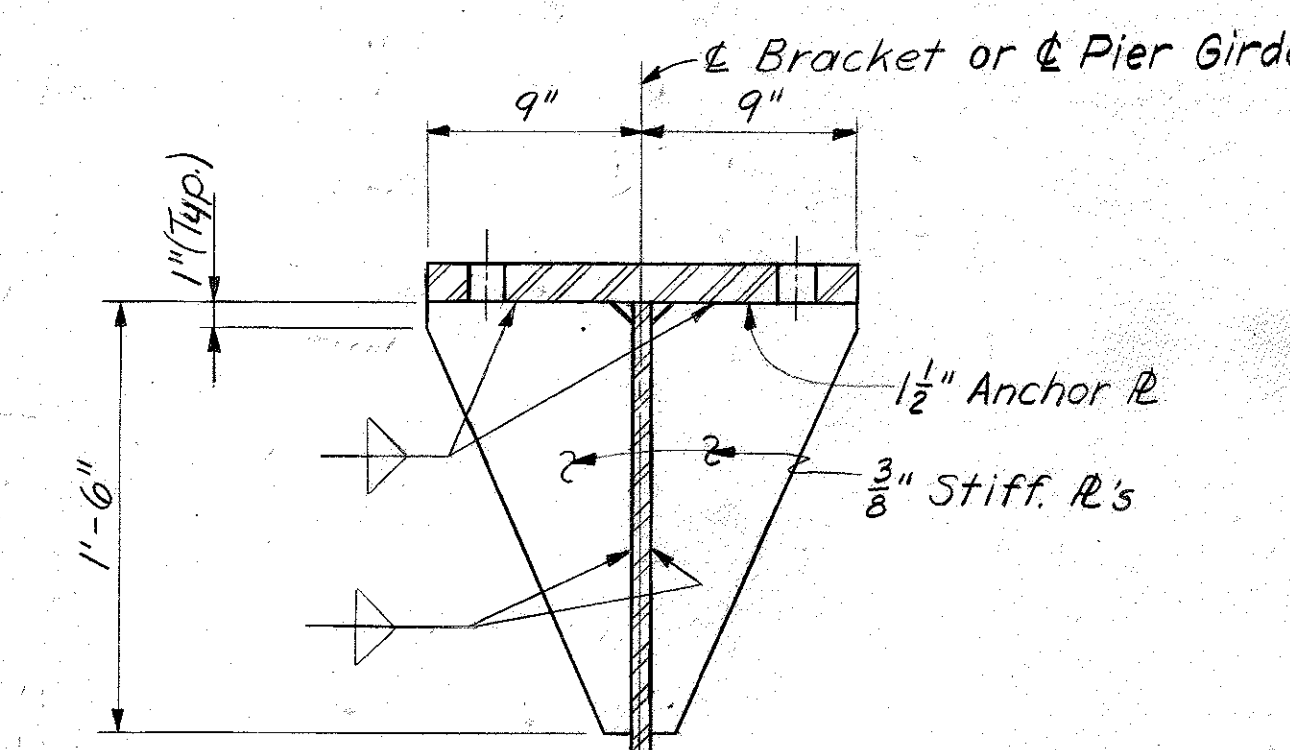
SECTION F-F



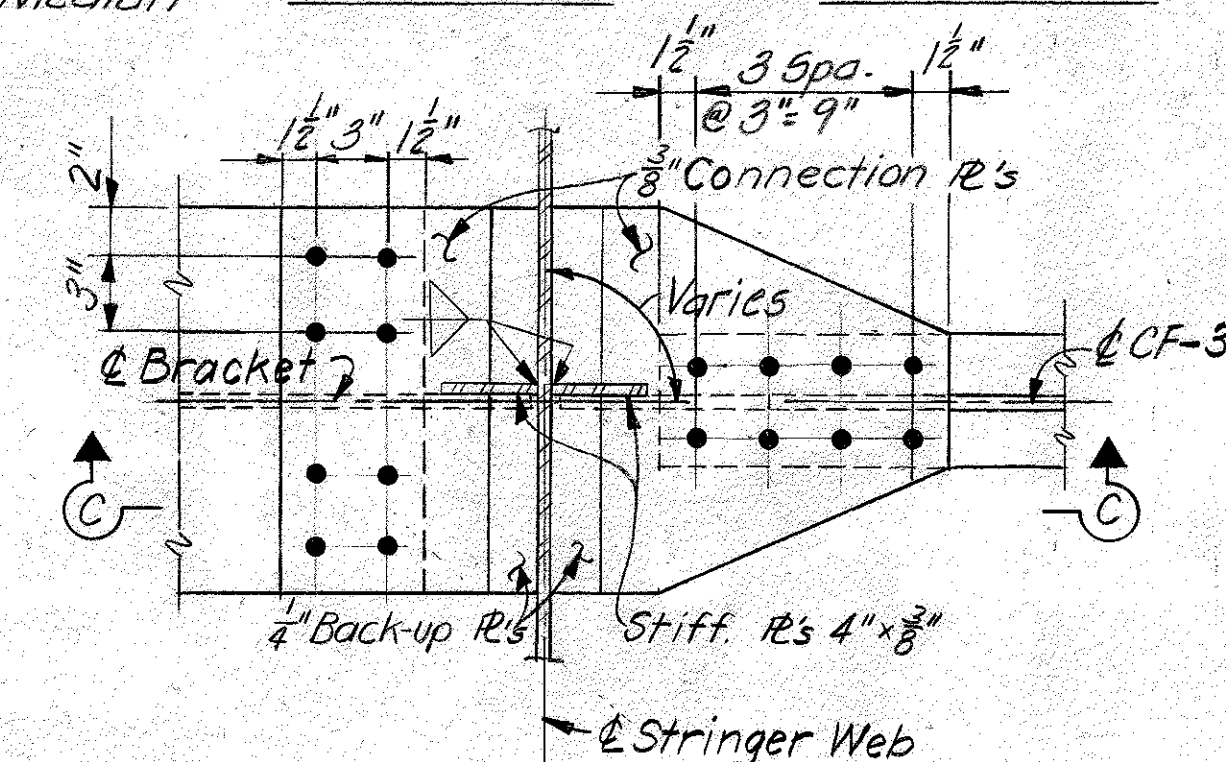
MEDIAN ANCHOR PLATE



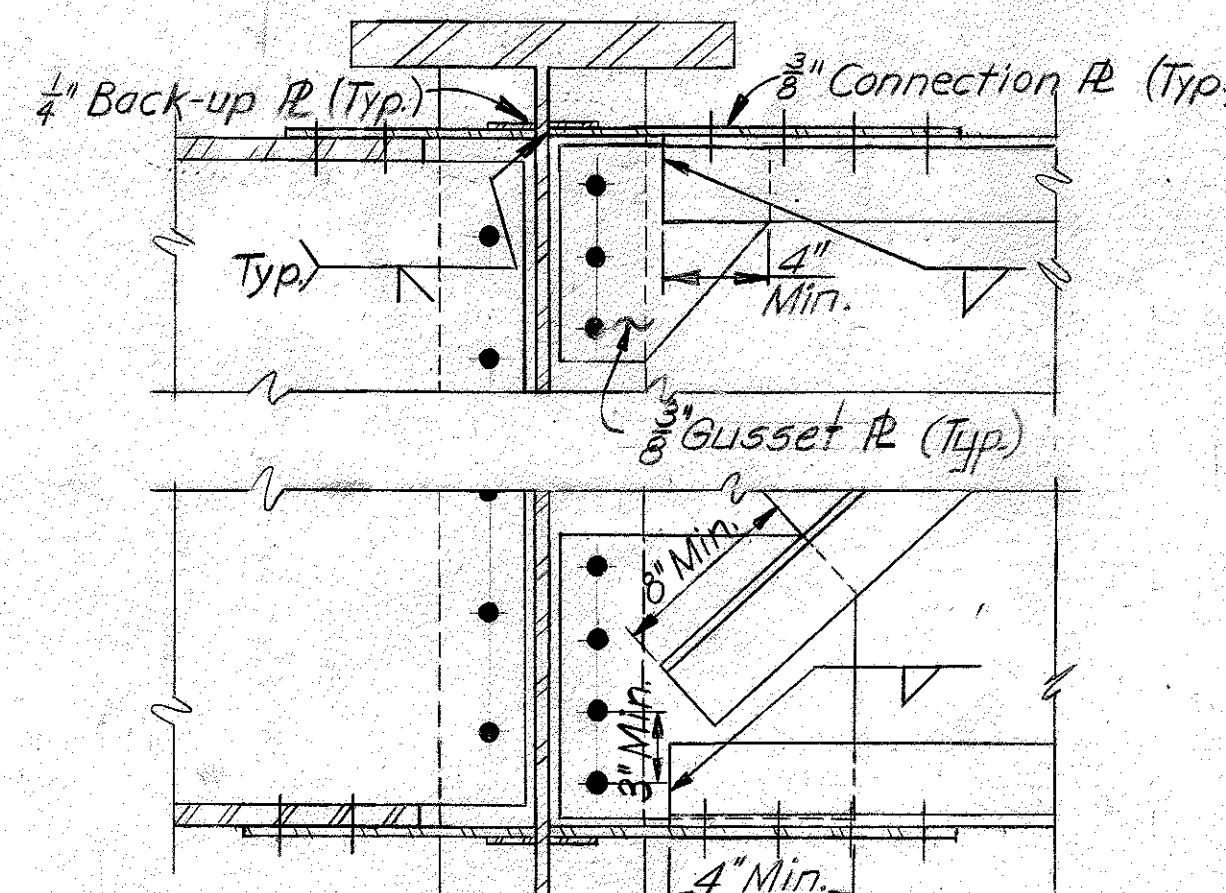
FASCIA ANCHOR PLATE



SECTION A-A



SECTION B-B



SECTION C-C

SHEET A149

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

**FRANKFORT
COUNTY OF
JEFFERSON**
I 64-13TH ST. TO 7TH ST.
LOUISVILLE - LEXINGTON
ROAD

STATION 208+08BRIDGE
NUMBER

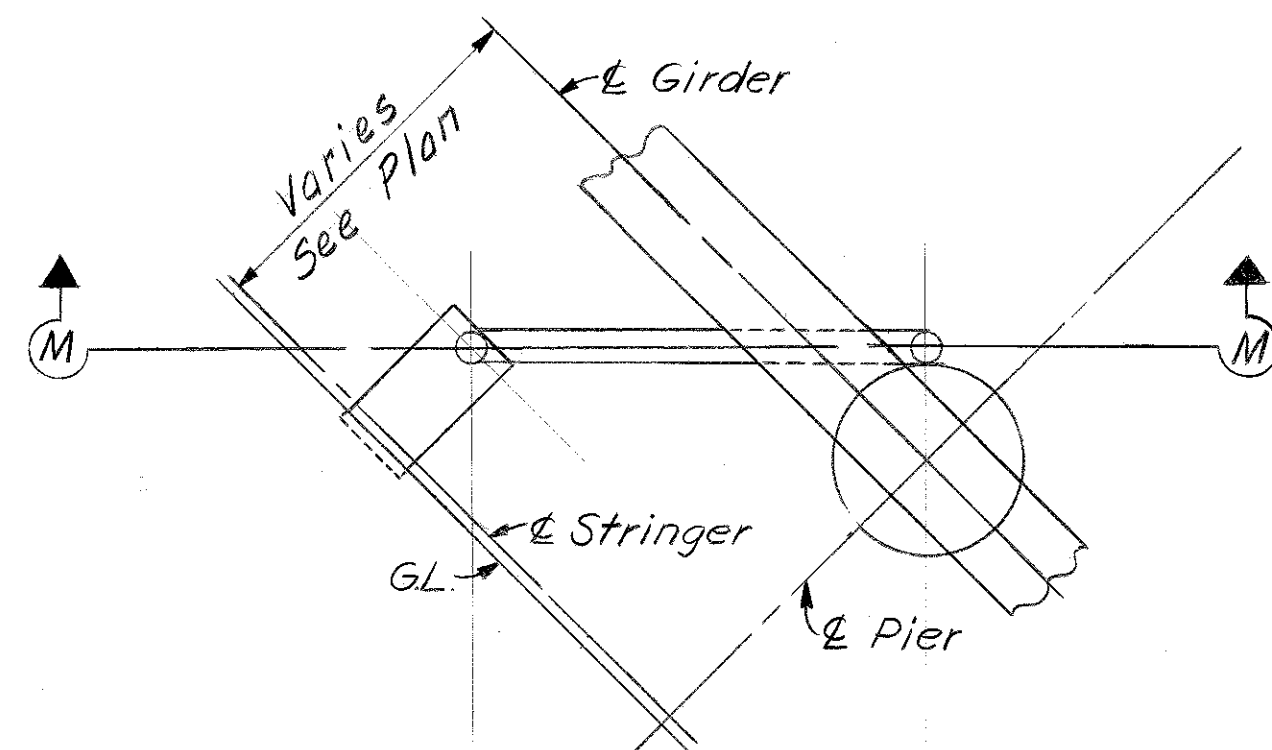
PROJECT NO. I 64-2(35)3

DRAWING NO.	18572
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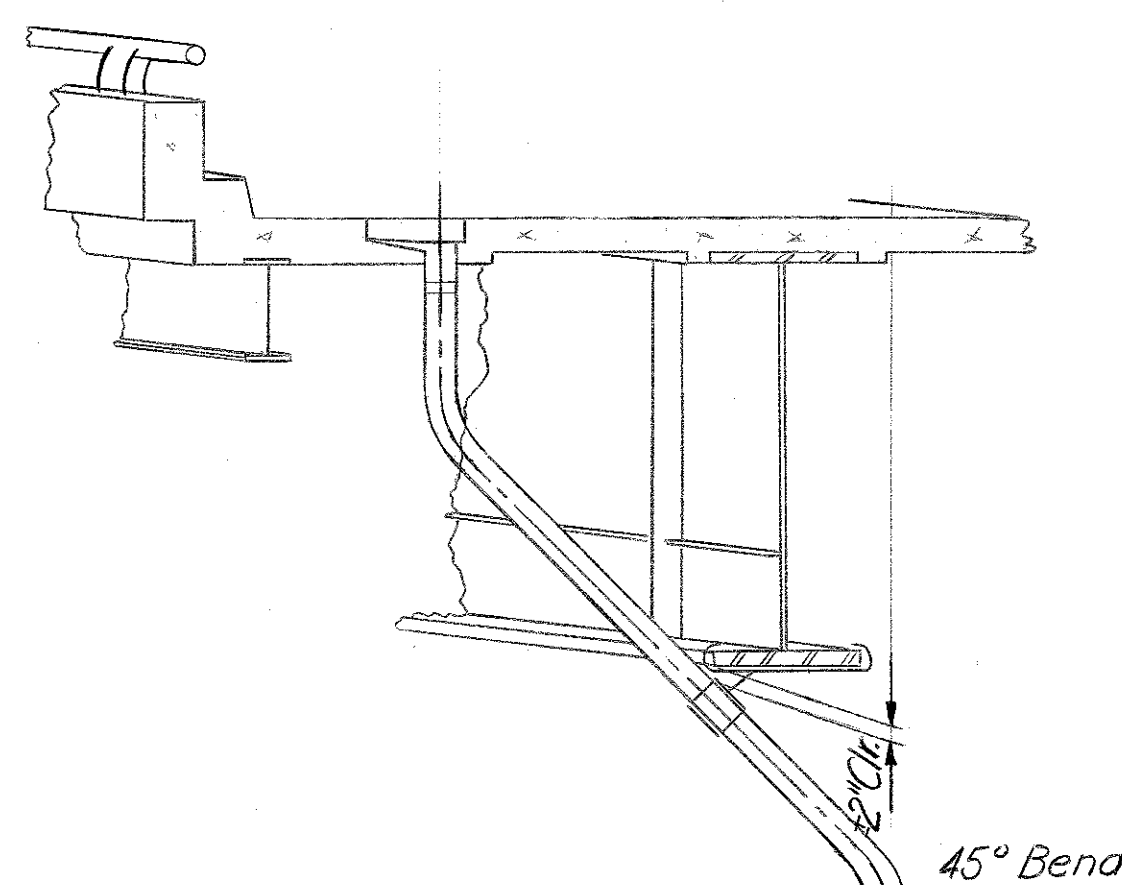
-273-111

LETTING DATE

DESIGNED BY: J.E.K. & L.W. CHECKED BY: J.E.K. & L.W. DATE: 2/7/71
 TRACED BY: J.E.K. & L.W. CHECKED BY: J.E.K. & L.W. DATE: 2/7/71

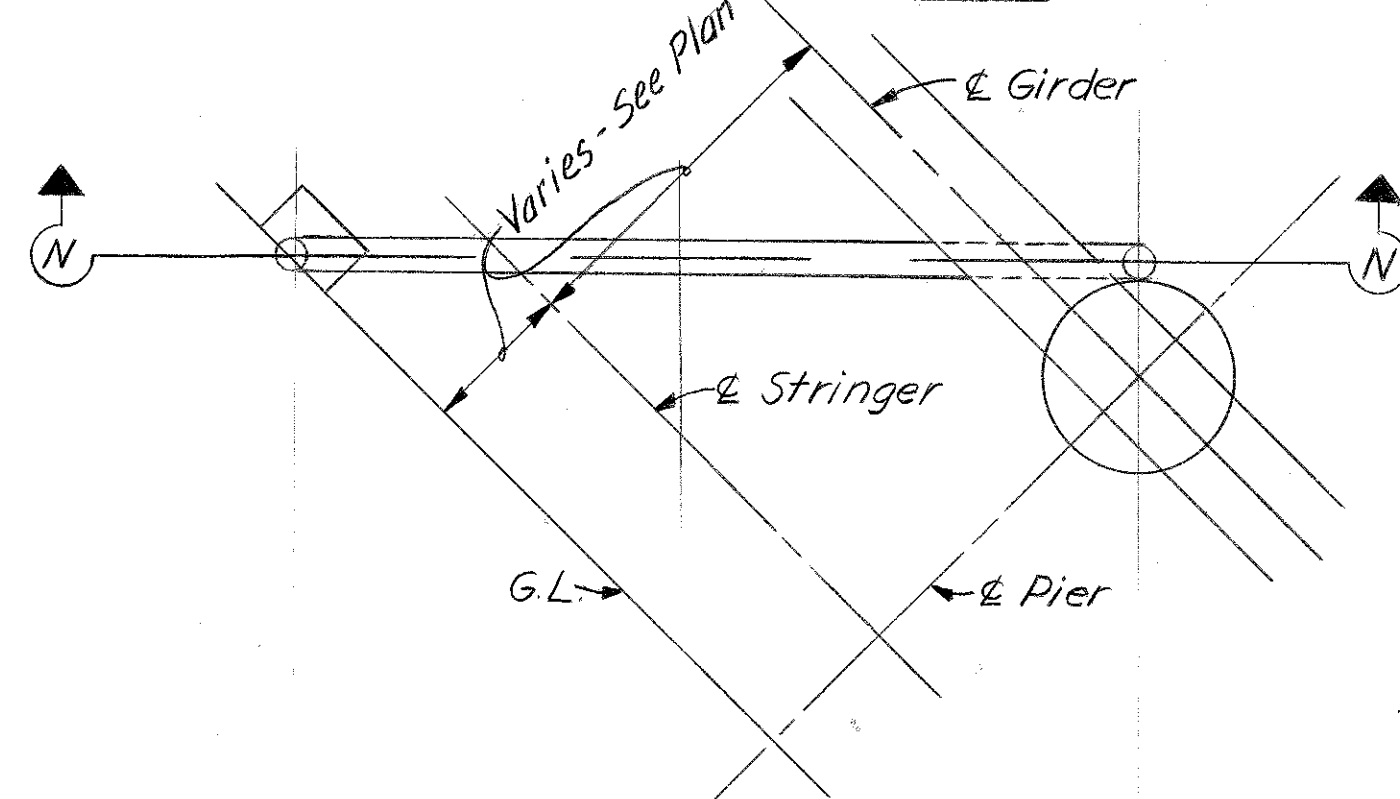


PLAN

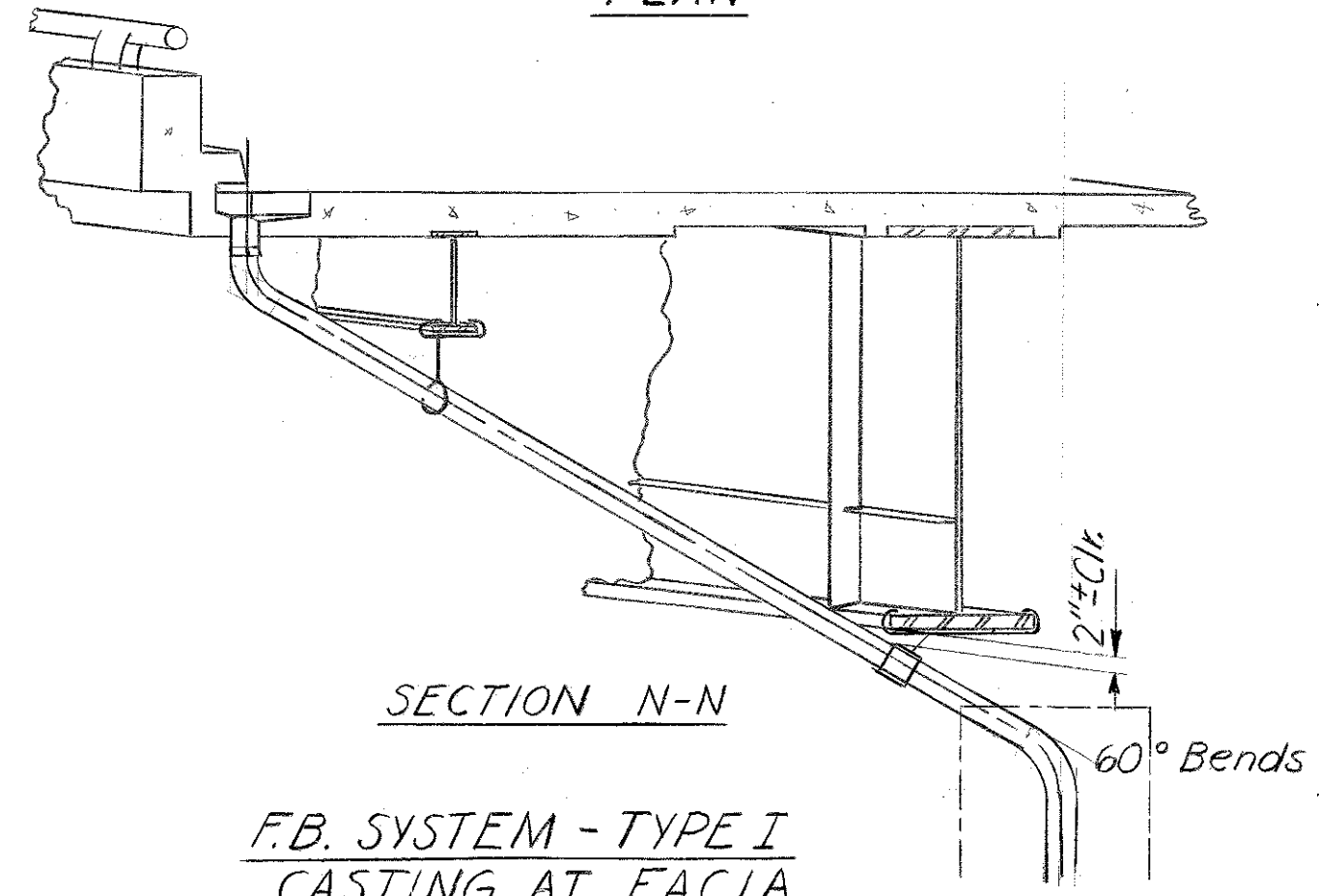


SECTION M-M

F.B. SYSTEM - TYPE II CASTING AT FACIA

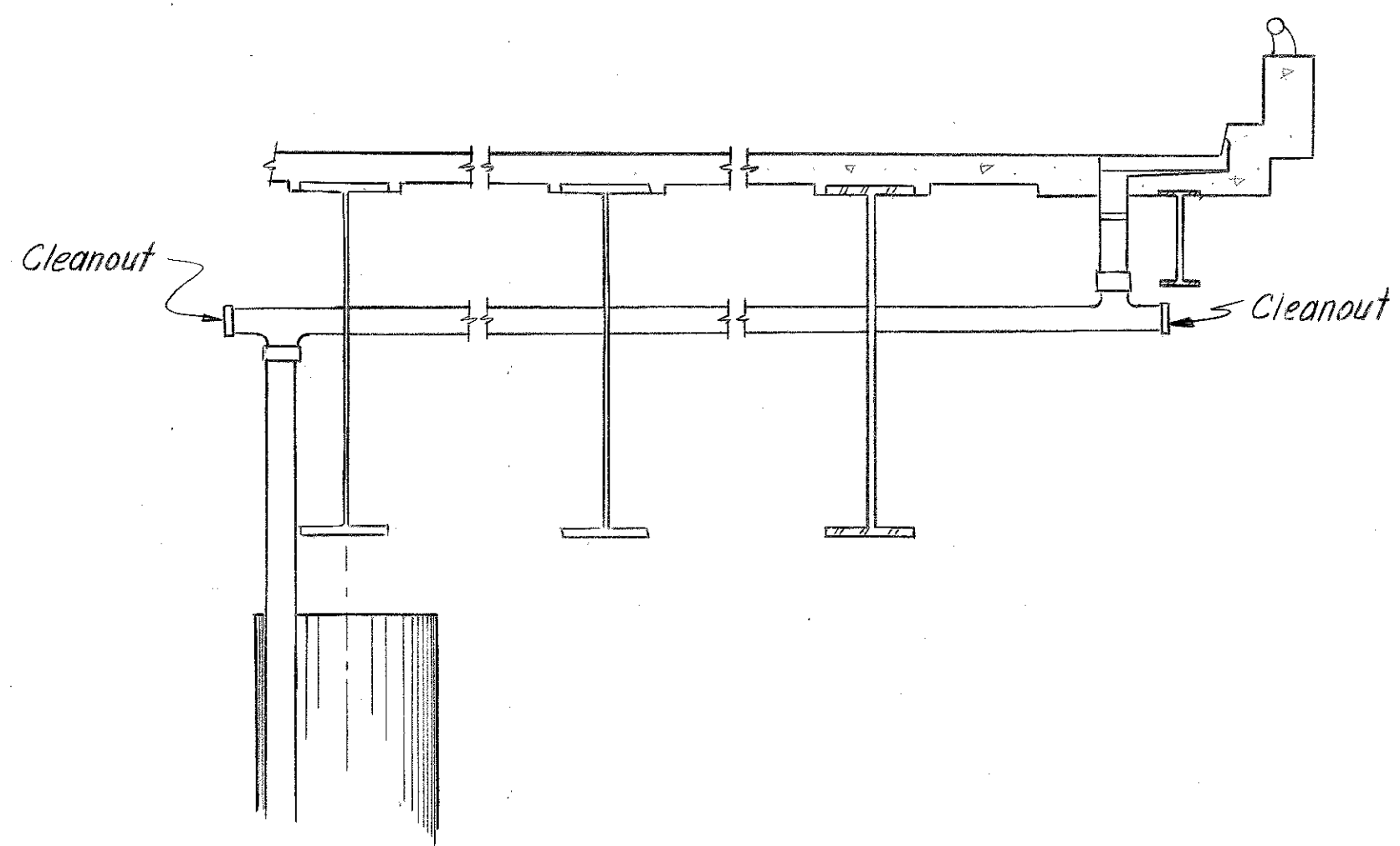


PLAN

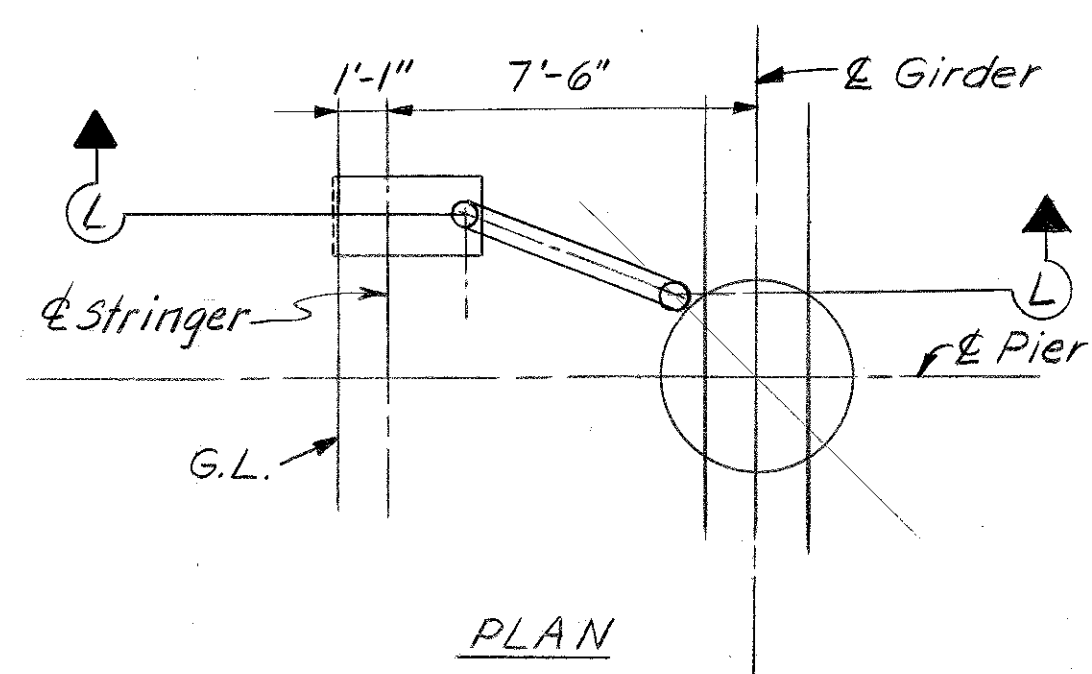


SECTION N-N

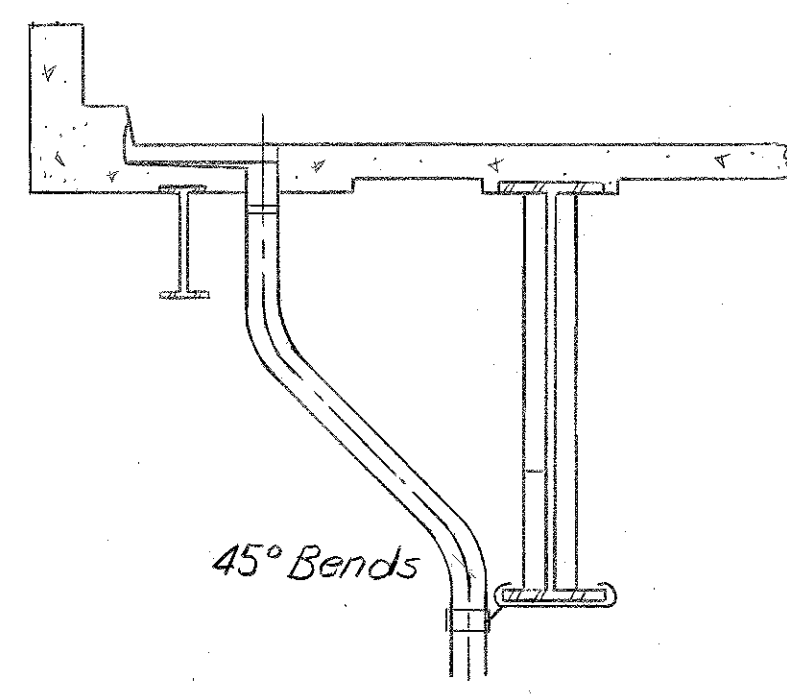
F.B. SYSTEM - TYPE I CASTING AT FACIA



TYPE II AT PIER 32 W.B.
Pier 31 Similar

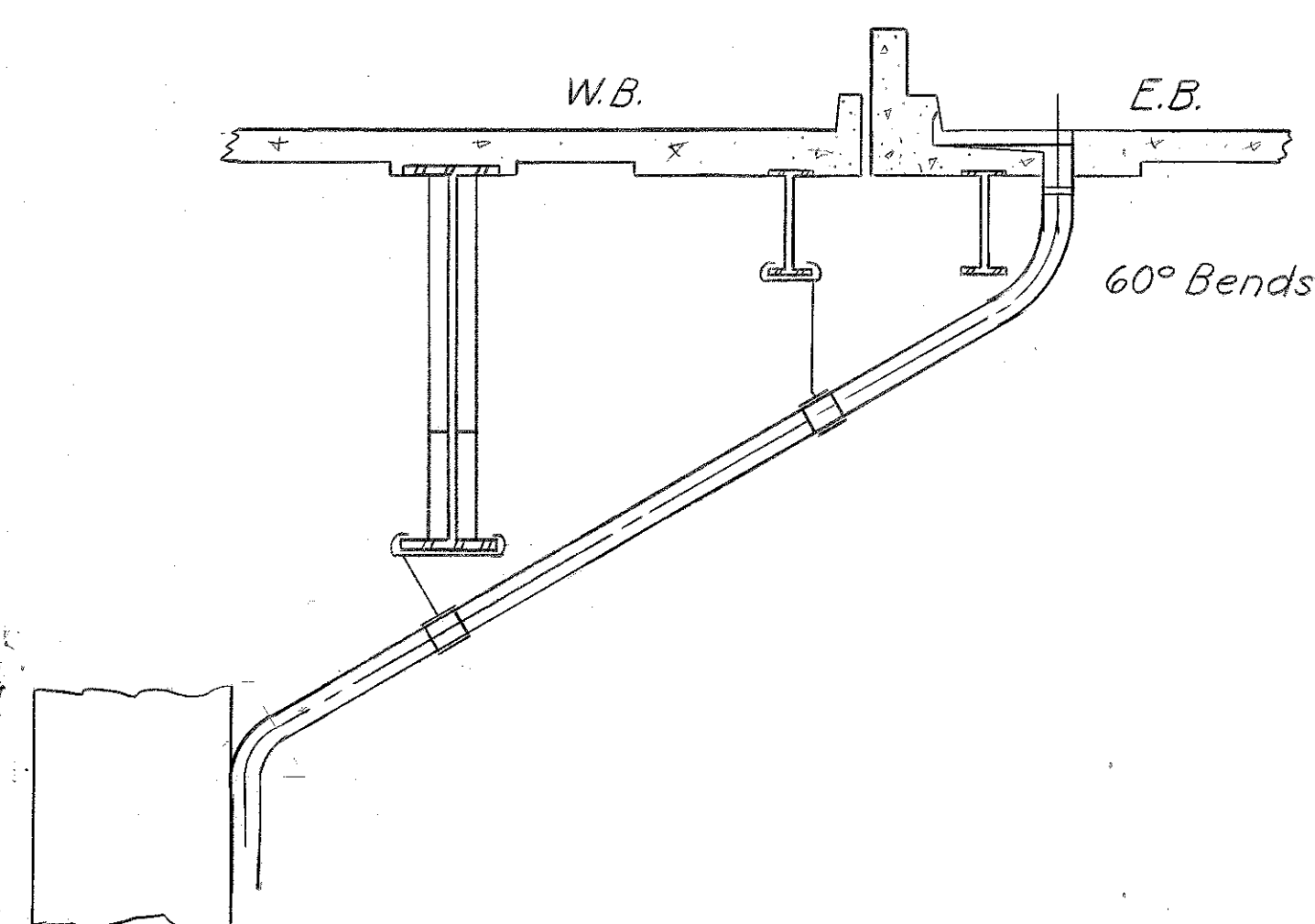


PLAN

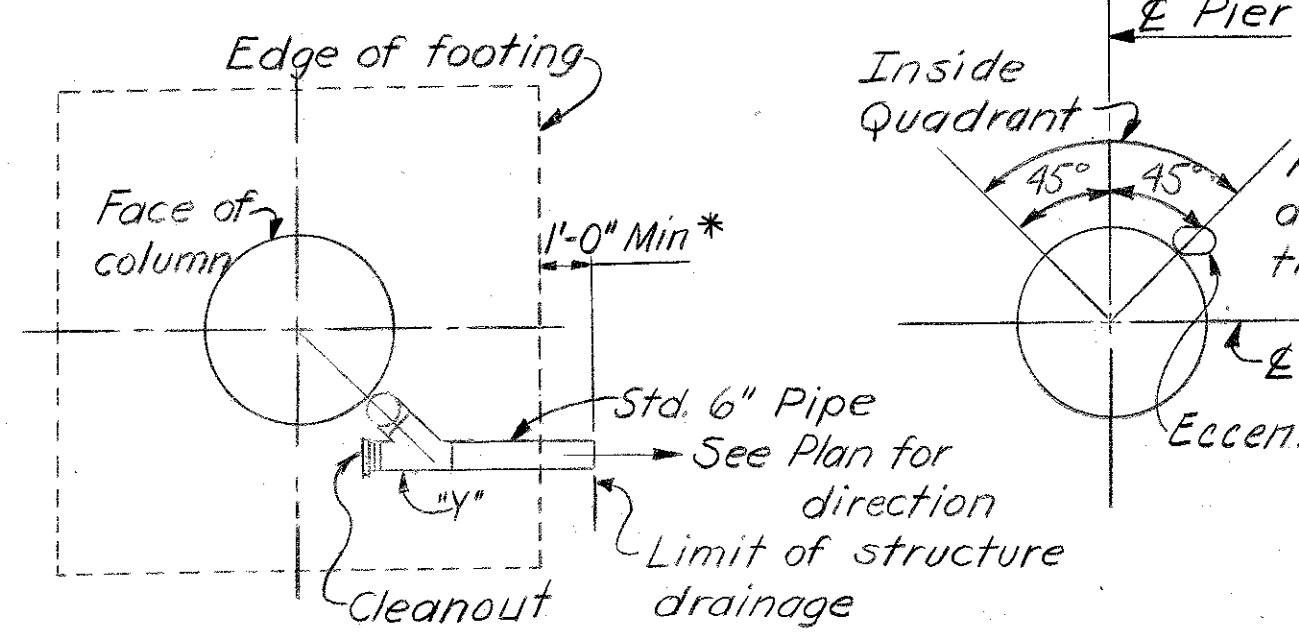


SECTION L-L

F.B. SYSTEM - TYPE II CASTING AT MEDIAN

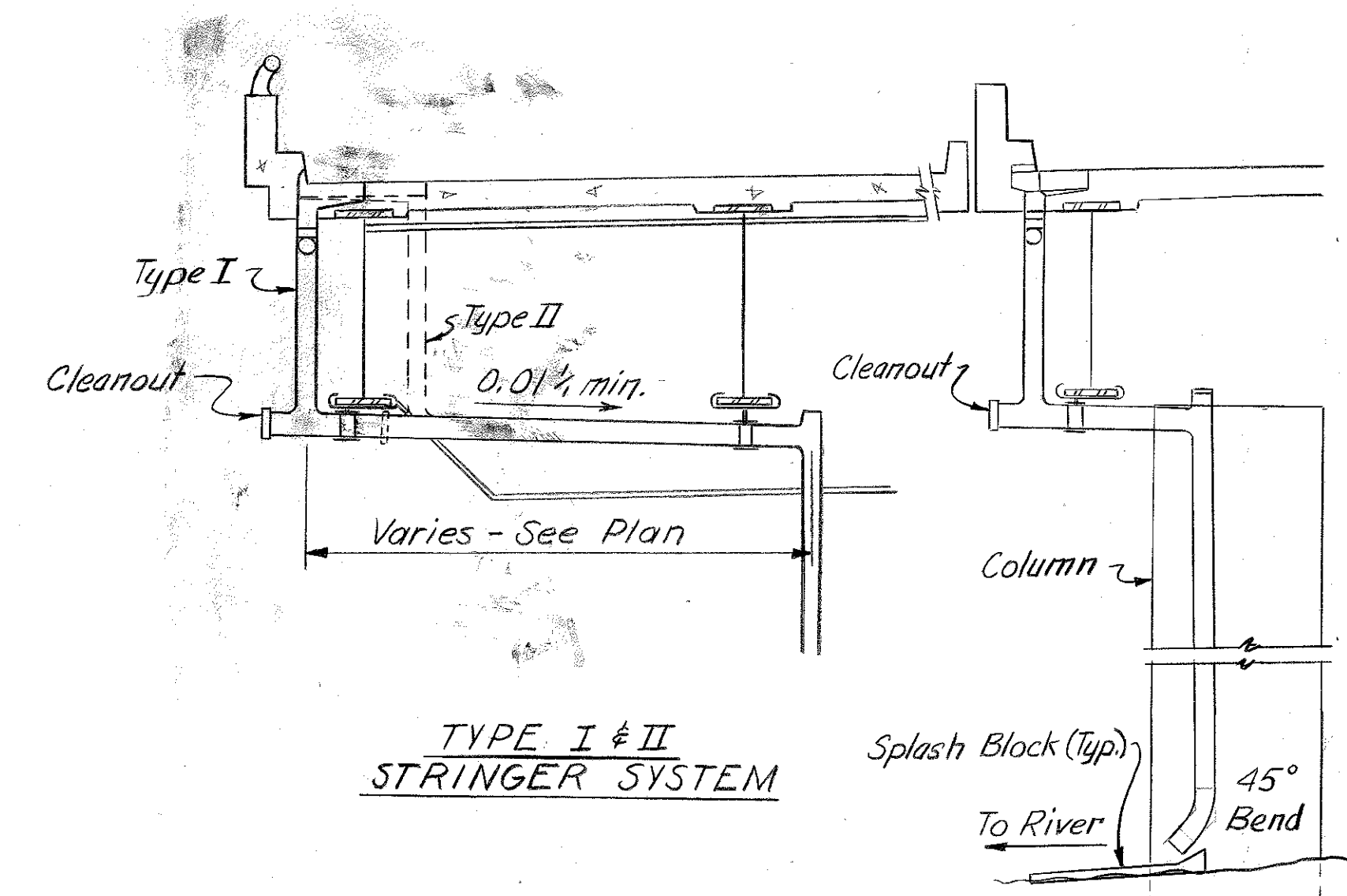


TYPE II AT PIER 30

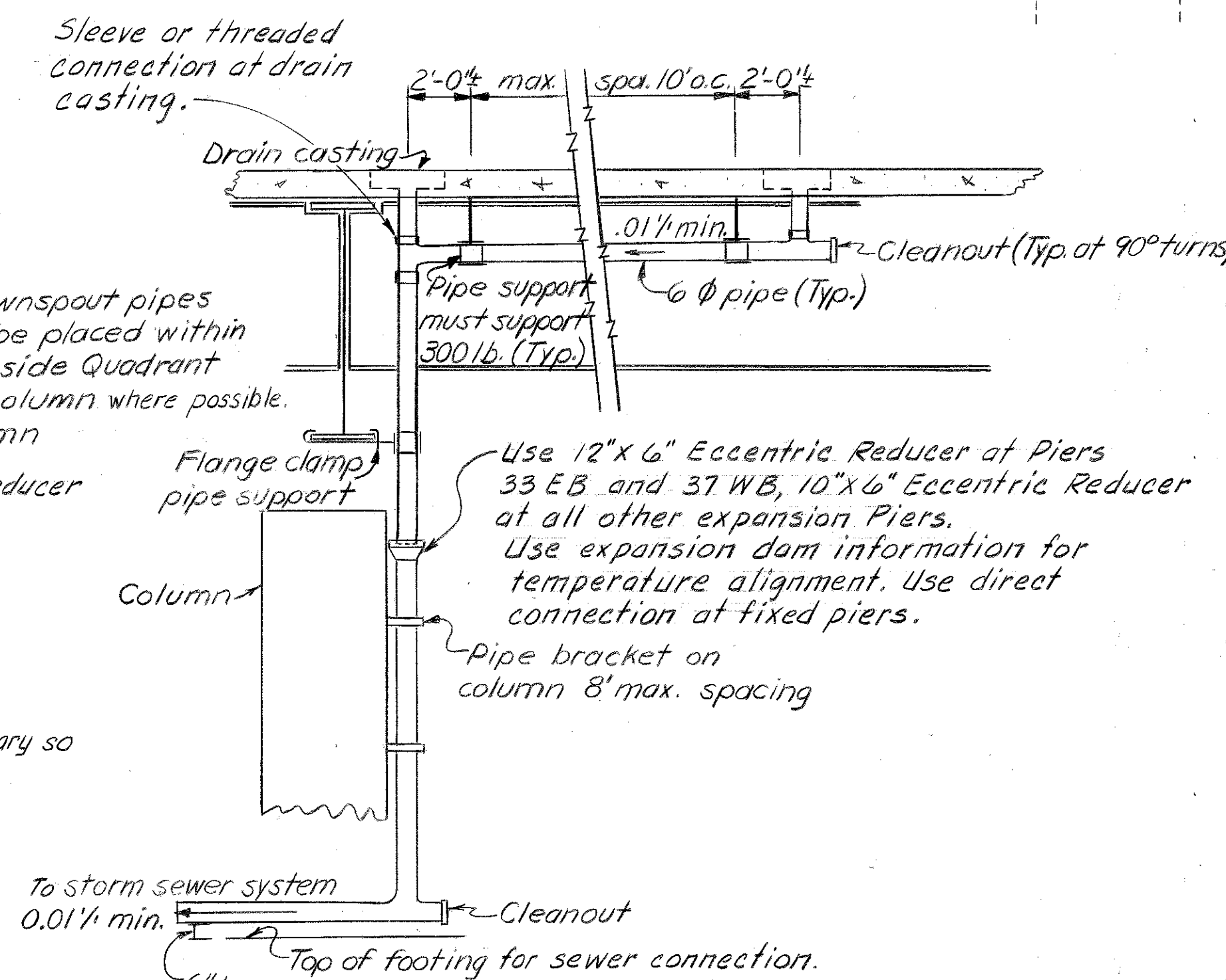


PLAN AT FOOTINGS

*6" Pipe to be extended where necessary so that Sewer Pipe will clear Crashwall.



TYPE I & II STRINGER SYSTEM



DRAINAGE SCHEME
Use details shown where applicable

- NOTES:**
1. All pipe shown on drainage sheets is 6" ϕ Drain Pipe.
 2. Drain Pipe shall be 6" ϕ Standard Weight continuous Steel Pipe in accordance with Article 643.12.0 of the Specifications.
 3. Pipe, fittings, connections and supports, complete and in place, are to be paid for at the unit price per lineal foot of 6" ϕ Drain Pipe.
 4. Pipe and all fittings shall be painted same as Structural Steel (See Structural Steel Notes, Sheet A3)
 5. All anchoring devices for pipe drains shall be so constructed as to be rattle free and secured against rotation or translation.
 6. All pipe connections shall be leak proof.
 7. Pipe shall be cut and welded to field dimensions.
 8. All pipe shall be supported every 10' maximum horizontally and 8' maximum vertically.
 9. Either $\frac{3}{4}$ " ϕ Pipe Hanger or Stiffener Pipe Hanger may be used for intermediate support.
 10. Bends to be "long radius bends" where possible.
 11. Shop Drawings will be required for drainage details.

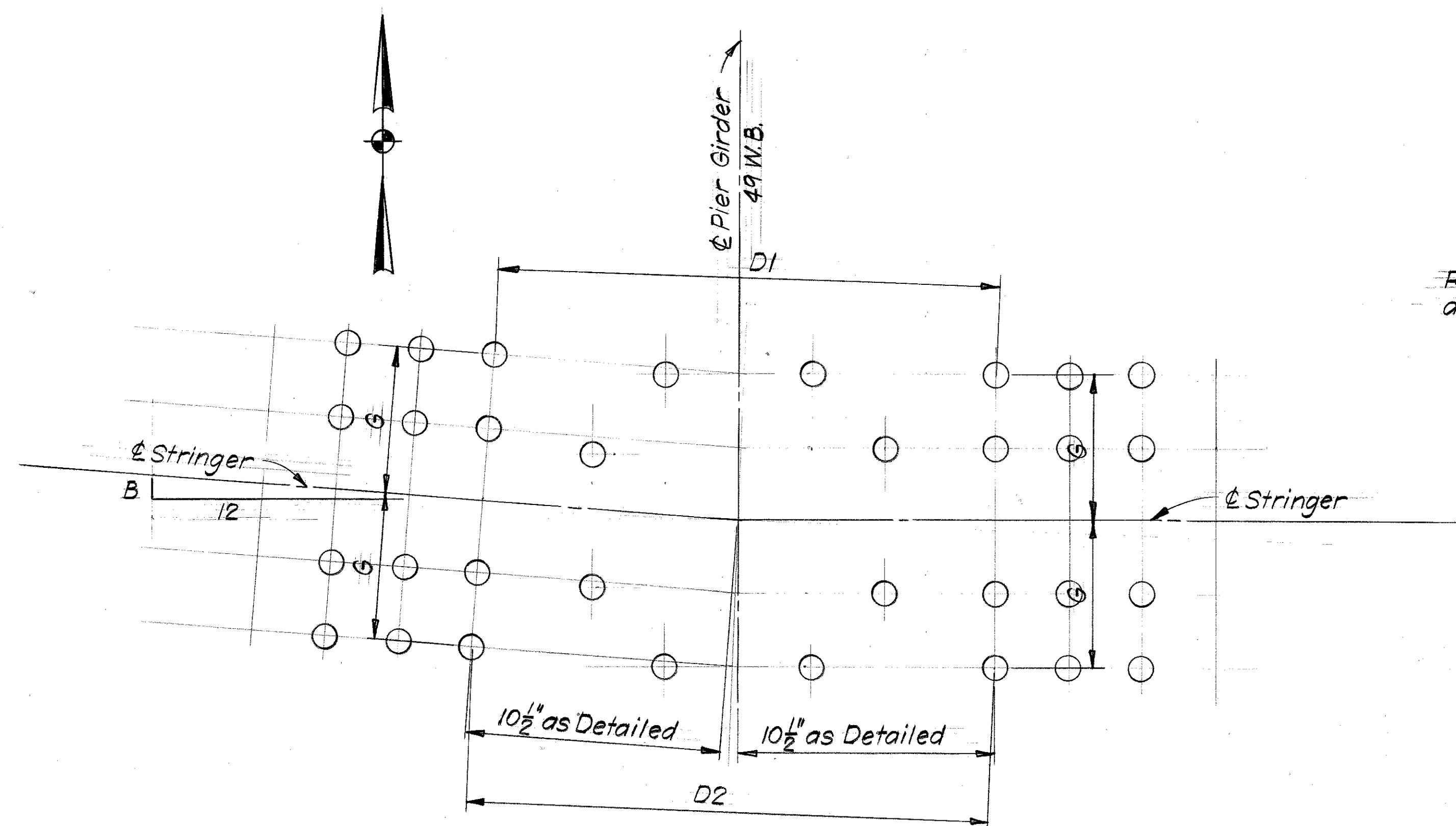
DRAIN DETAILS

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 164-13TH ST. TO 7TH ST.
 LOUISVILLE - LEXINGTON
 ROAD
 STATION 208+08
 CONSTRUCTION PROJECT NO.
 P.E. PROJECT NO. I 64-2 (35) 3
 MAINTENANCE PROJECT NO.
 SP 56-273-III
 DRAWING NO.
 18572

SHEET A150

UPDATE DATE
LETTING DATE

DESIGNED BY FBW & RHC CHECKED BY JAW
DATE 12-18-74
TRACED BY PME
DATE 12-18-74
REVISIONS
DATE
REVISIONS
DATE



PLAN-TYP. TOP FLANGE SPLICE *

This applies to the outside splice plates and the 2 splice plates inside the flanges.

After the splice plates are bent the required amount, the dimensions D1 and D2 are to be measured on the splice plates and on the stringers. D1 and D2 on the splice plates should not exceed the values given in the tables below. Note that D1 and D2 are functions of the existing bevel B at each stringer.

The Engineer shall be notified if, for any stringer, D1 and D2 on the splice plates exceed D1 and D2 on the stringers.

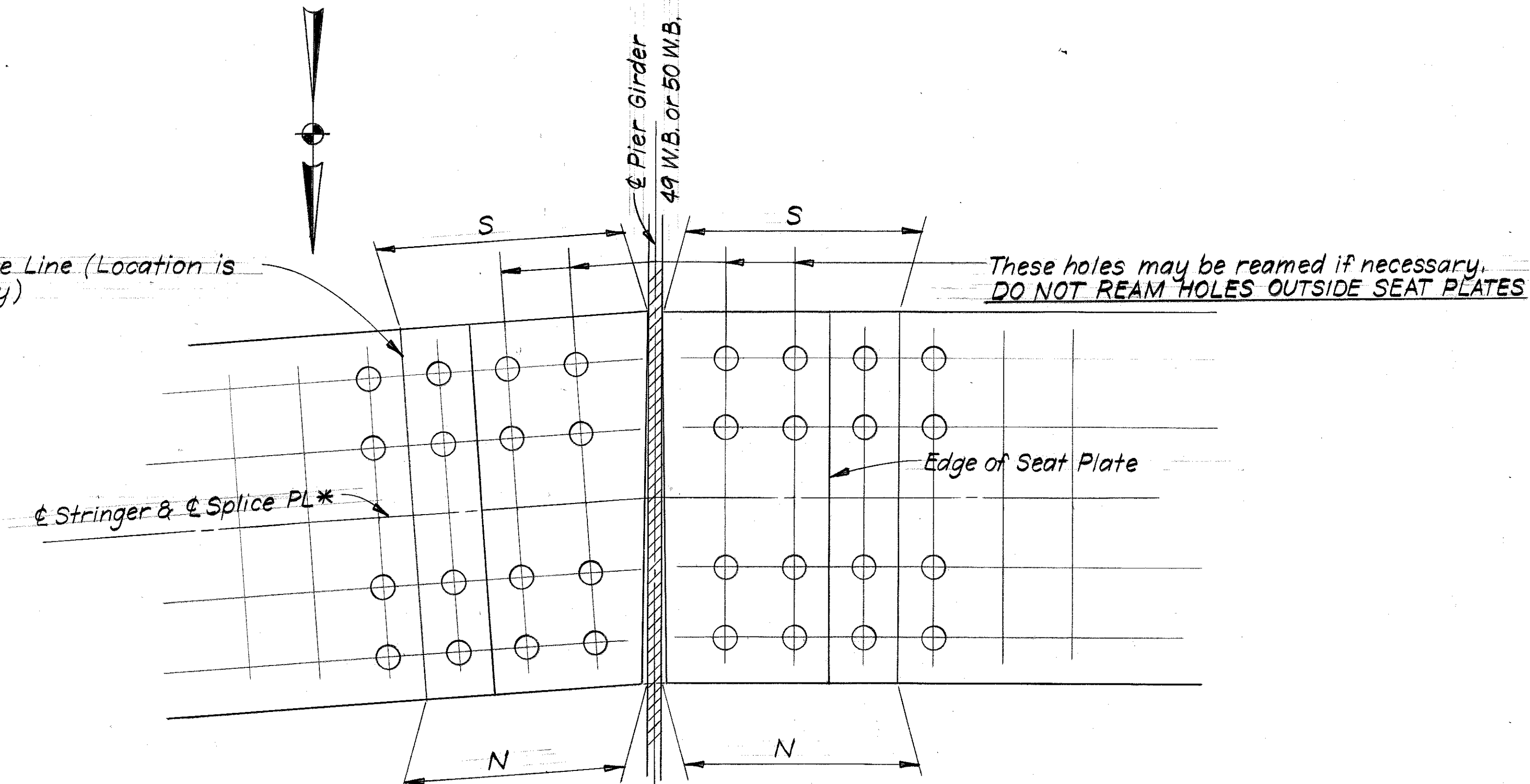
For top flange splice plate details see Shop Drwgs. shts. 330-336, X34 and X35.

Stringer	G62-G72	G64-G73	G65-G74	G66-G75	G67-G76	G68-G77	G69-G78	G70-G79	G71-G80
G	6"	5 1/2"	6"					6"	6 1/2"
D1 & D2	Table 1	Table 2	Table 1				Table 1	Table 3	

TABLE 1			TABLE 3		
B	D1	D2	D1	D2	
1"	20 1/2"	21 1/2"	20 7/16"	21 7/16"	
7/8"	20 9/16"	21 7/16"	20 1/2"	21 1/2"	
3/4"	20 5/8"	21 3/8"	20 5/8"	21 3/8"	
5/8"	20 11/16"	21 5/16"	20 11/16"	21 5/16"	
1/2"	20 3/4"	21 1/4"	20 3/4"	21 1/4"	

TABLE 2		
B	D1	D2
3/8"	20 13/16"	21 3/16"
1/4"	20 7/8"	21 1/8"
1/8"	20 15/16"	21 1/16"

* Also for bottom flange splices of fascia stringers, G62-G72 & G71-G80.



* Must be parallel before measurements are made.

BOTTOM VIEW-TYP. INTERIOR BOTTOM FLANGE SPLICE

Match-mark splice plates and stringers before removing splice plates.

The measurements N and S are to be made along the north and south edges of each splice plate from the reference line to the pier girder web and entered in the table below. The milled end of each splice plate is to be built up by welding and remilled so that the distance from the reference line to the milled end measured along the north and south edges of the plate is equal to N + 1/16 and S + 1/16 respectively.

When splice plates are rebolted to bottom flanges, bolting should begin at the end of the plate away from the milled end and proceed toward the pier girder.

For bottom flange splice plate details see Shop Drwgs. shts. 313-322, 330-336 and X36.

	G64		G65		G66		G67		G68		G69		G70	
	N	S	N	S	N	S	N	S	N	S	N	S	N	S
Pier 49 W.B. West Stringers	0.063	0.063											0.063	0.063
	G73		G74		G75		G76		G77		G78		G79	
	N	S	N	S	N	S	N	S	N	S	N	S	N	S
Pier 49 W.B. East Stringers	0.063	0.063											0.063	0.063

Note:
Crossed-out stringers
do not require correction.

	G73		G74		G75		G76		G77		G78		G79	
	N	S	N	S	N	S	N	S	N	S	N	S	N	S
Pier 50 W.B. West Stringers only	0.063	0.063											0.063	0.063

PIER 49 WB & 50 WB
MODIFICATIONS TO STRINGER SPLICES

COMMONWEALTH OF KENTUCKY	
BUREAU OF HIGHWAYS	
FRANKFORT	
COUNTY OF	
JEFFERSON	
164-13th ST. TO 7th ST.	
STATION	SP56-273-11L
CONSTRUCTION PROJECT NO.	P. E. PROJECT NO. 164-2(35)3
ACI 64-2(87)3	MAINTENANCE PROJECT NO.
	DRAWING NO.
	18572

SHEET A151