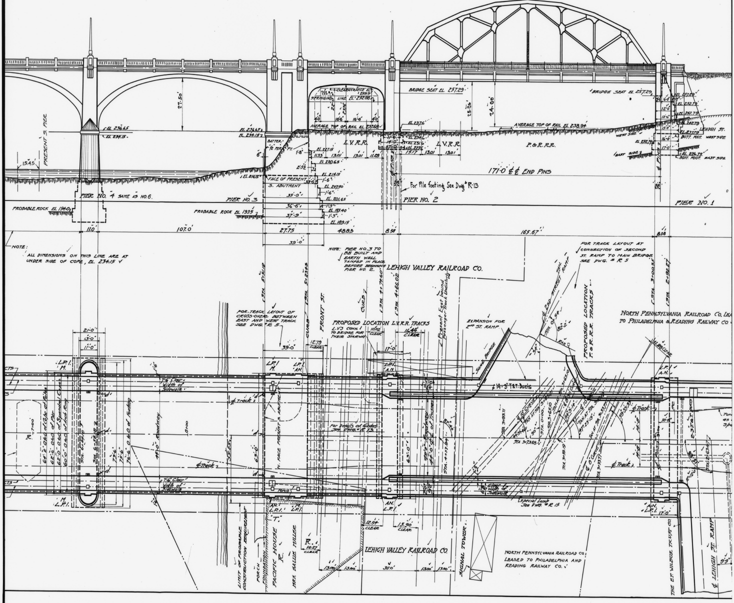
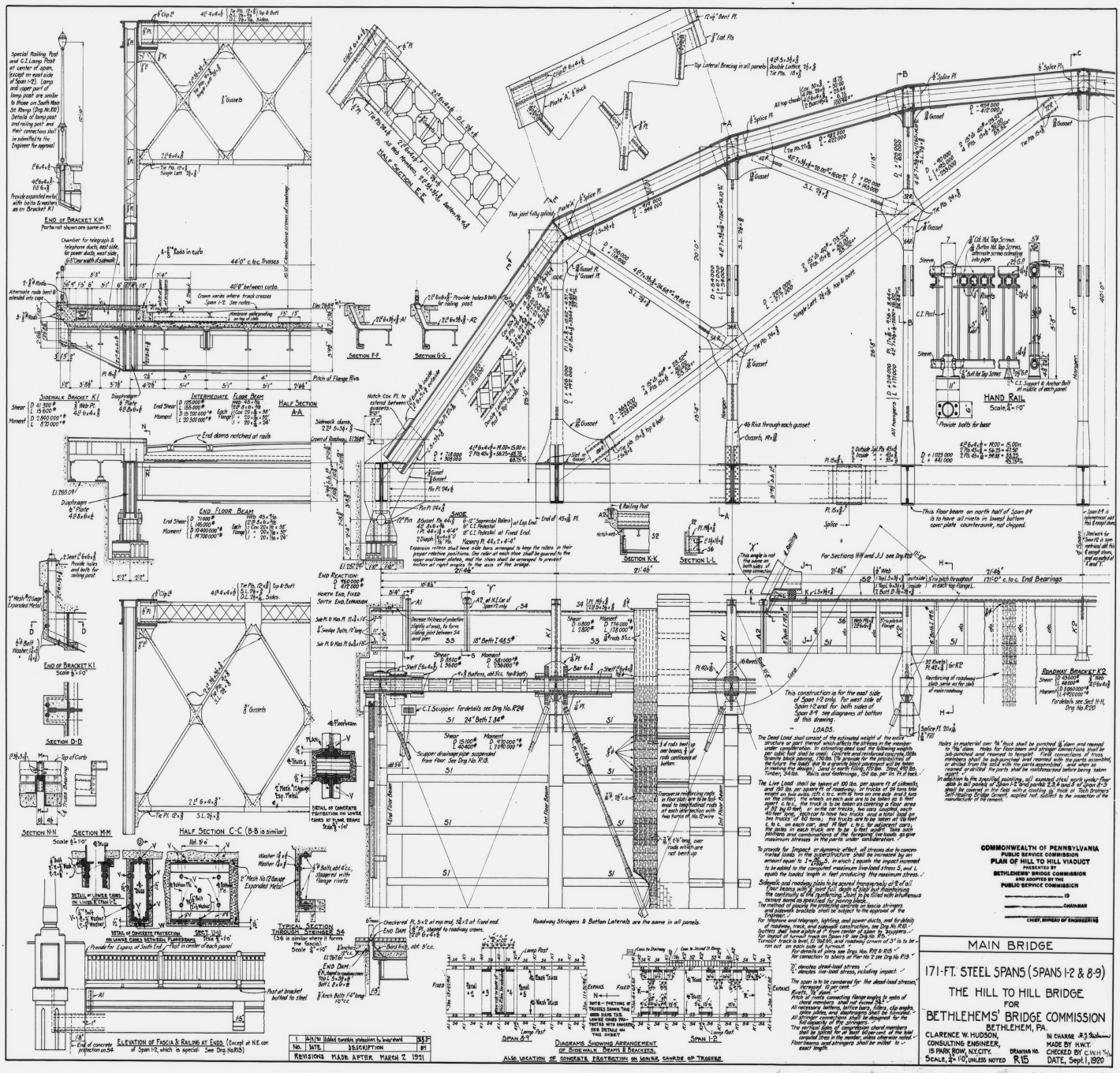


PRESENT S. PIER
PIER NO. 4 SAME AS NO. 6.
PROBABLE ROCK EL 194.0
PIER NO. 3
FACE OF PRESENT S. ABUTMENT
PROBABLE ROCK EL 193.5
PIER NO. 2
For Pile footing See Dwg. R-13
PIER NO. 1
BRIDGE SEAT EL 257.29
AVERAGE TOP OF RAIL EL 238.94
171-0 ¢-¢ END PINS
L.V.R.R.
P.&R.R.R.
LEHIGH ST.
NOTE: ALL DIMENSIONS ON THIS LINE ARE AT UNDER SIDE OF COPE, EL. 234.15
NOTE: PIER NO. 3 TO BE BUILT AND EARTH WELL TAMPED IN PLACE BEFORE BEGINNING PIER NO. 2.
LEHIGH VALLEY RAILROAD CO.
FOR TRACK LAYOUT OF CROSS-OVER BETWEEN EAST AND WEST TRACK SEE DWG. R 5.
PROPOSED LOCATION L.V.R.R. TRACKS
EXPANSION FOR 2ND ST. RAMP
FOR TRACK LAYOUT AT CONNECTION OF SECOND ST. RAMP TO MAIN BRIDGE SEE DWG. R 5
PROPOSED LOCATION P. & R.R.R. TRACKS
NORTH PENNSYLVANIA RAILROAD CO. LEASED TO PHILADELPHIA & READING RAILWAY CO.
FRONT ST.
Present East bound Passenger Track
7'-6" Clear Width of Sidewalk
For Details of Girders See Dwg. R 13
Special Lamp See Dwg. R 15
LIMIT OF PROPOSED CONSTRUCTION EASEMENT
PORCH
FOUNDATION
PACIFIC HOUSE
MRS. SALLIE MILLER
LEHIGH VALLEY RAILROAD CO.
SIGNAL TOWER
NORTH PENNSYLVANIA RAILROAD CO. LEASED TO PHILADELPHIA AND READING RAILWAY CO.
THE E.F. WILBUR TRUST CO.
LEHIGH ST. RAMP



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ADOPTED BY THE
PUBLIC SERVICE COMMISSION

_____ 19
_____ CHAIRMAN
_____ CHIEF, BUREAU OF ENGINEERING

MAIN BRIDGE

171-FT. STEEL SPANS (SPANS 1-2 & 8-9)

THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.

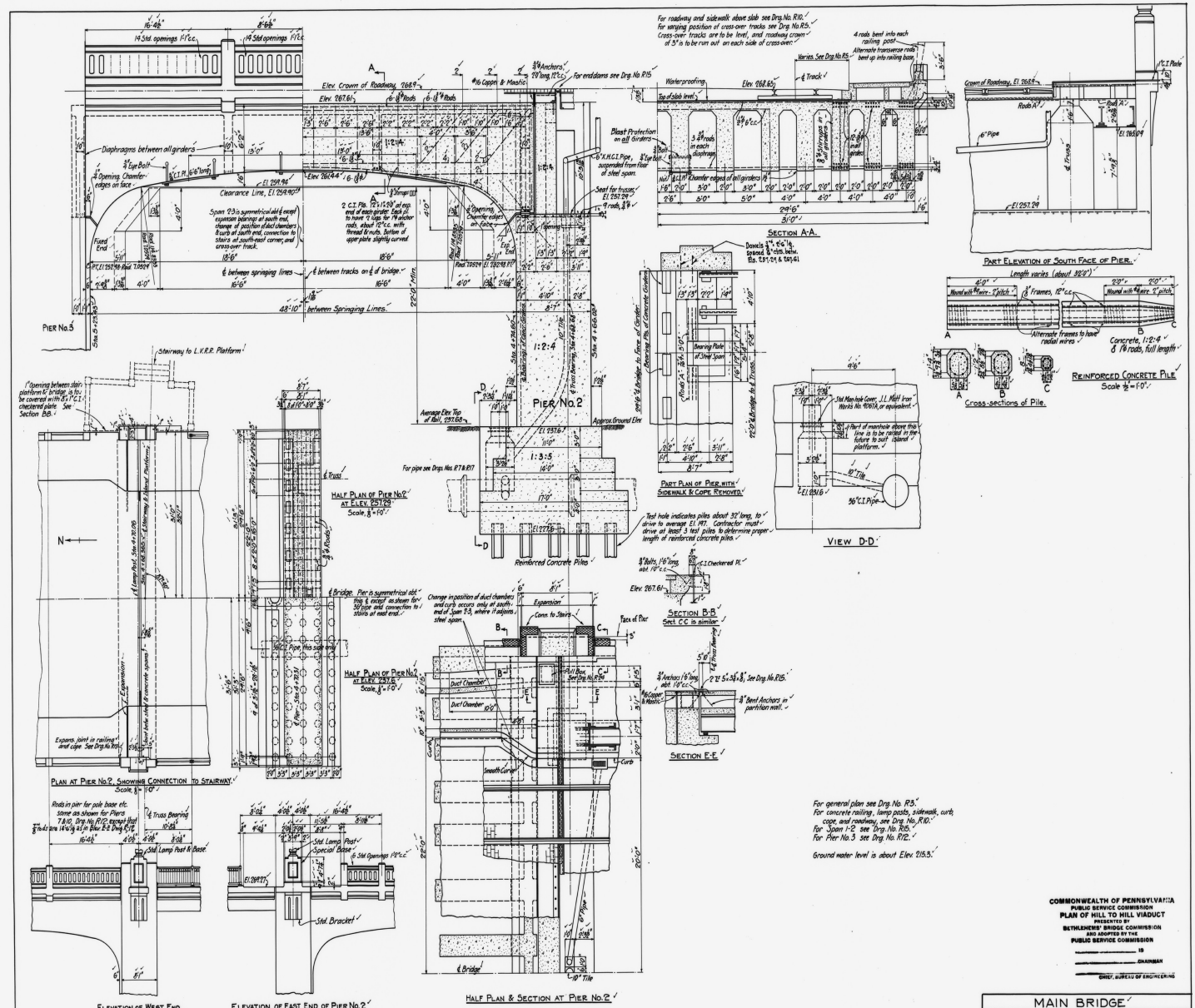
CLARENCE W. HUDSON,
CONSULTING ENGINEER,
15 PARK ROW, N.Y.CITY.

IN CHARGE W.J. Watkins
MADE BY H.W.T.
CHECKED BY C.W.H.
DATE, Sept.1, 1920

DRAWING NO. R15
SCALE, 1"=10", UNLESS NOTED

No.	Date	Description	By
1	4/5/21	Added cantilever protection to lower chord	B.S.?

REVISIONS MADE AFTER MARCH 2 1921



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ADOPTED BY THE
PUBLIC SERVICE COMMISSION

_____ 19
_____ CHAIRMAN
_____ CHIEF, BUREAU OF ENGINEERING

MAIN BRIDGE

DETAILS FOR SPAN 2-3 AND PIER NO. 2 THE HILL TO HILL BRIDGE

FOR

BETHLEHEMS' BRIDGE COMMISSION

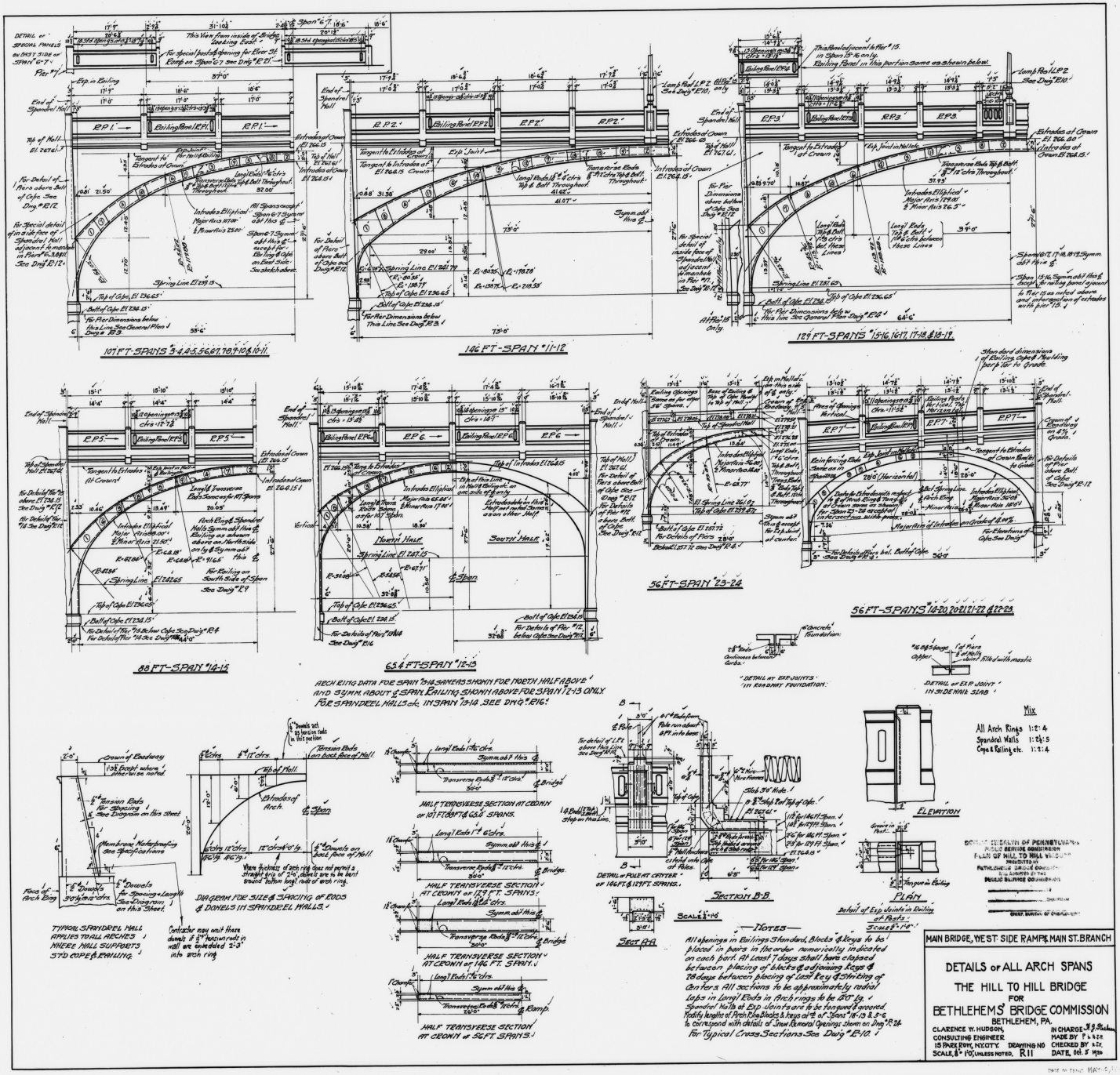
BETHLEHEM, PA.

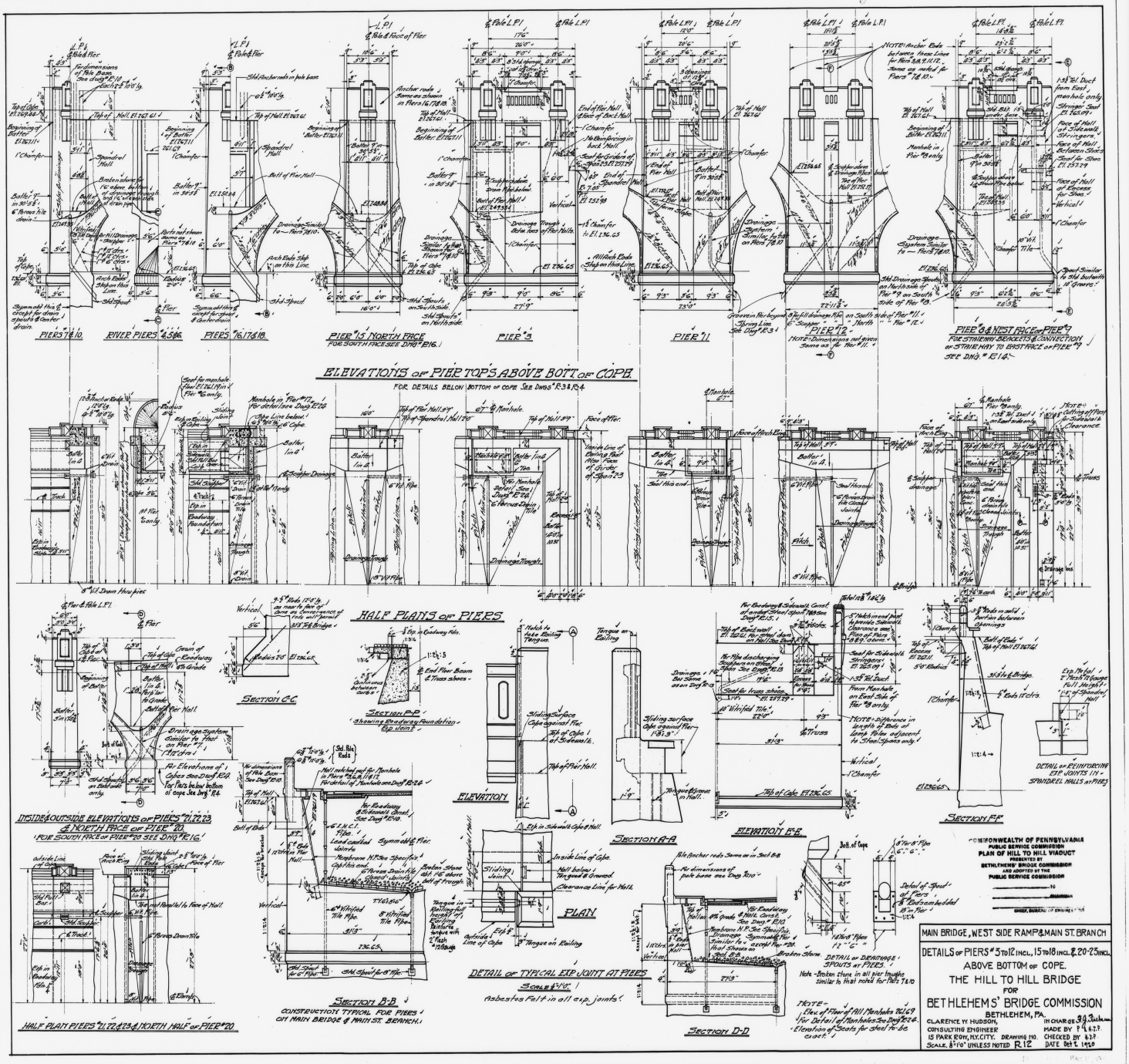
CLARENCE W. HUDSON,
CONSULTING ENGINEER
15 PARK ROW, N.Y.CITY.

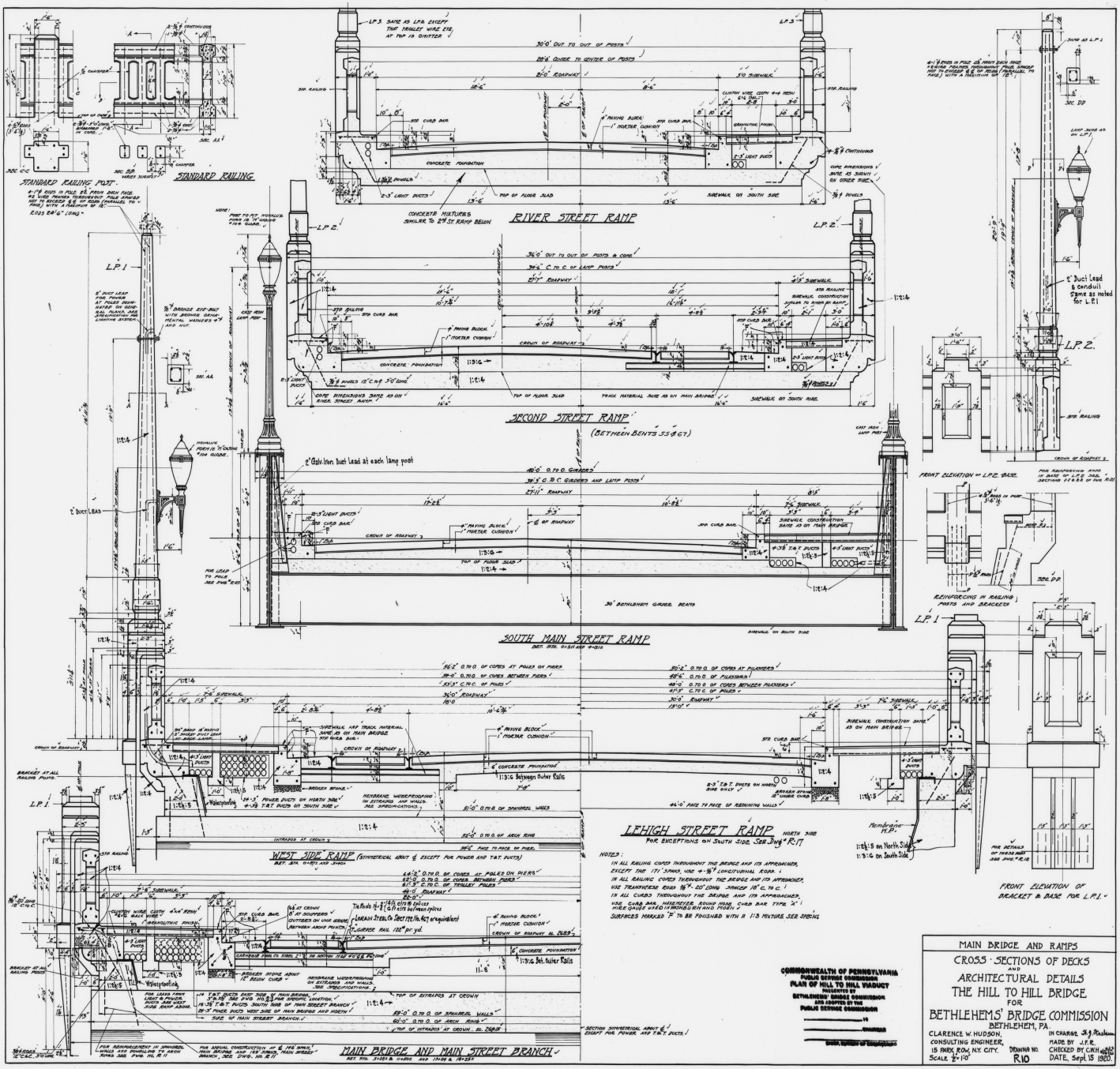
SCALE, ½"=1'0", UNLESS NOTED

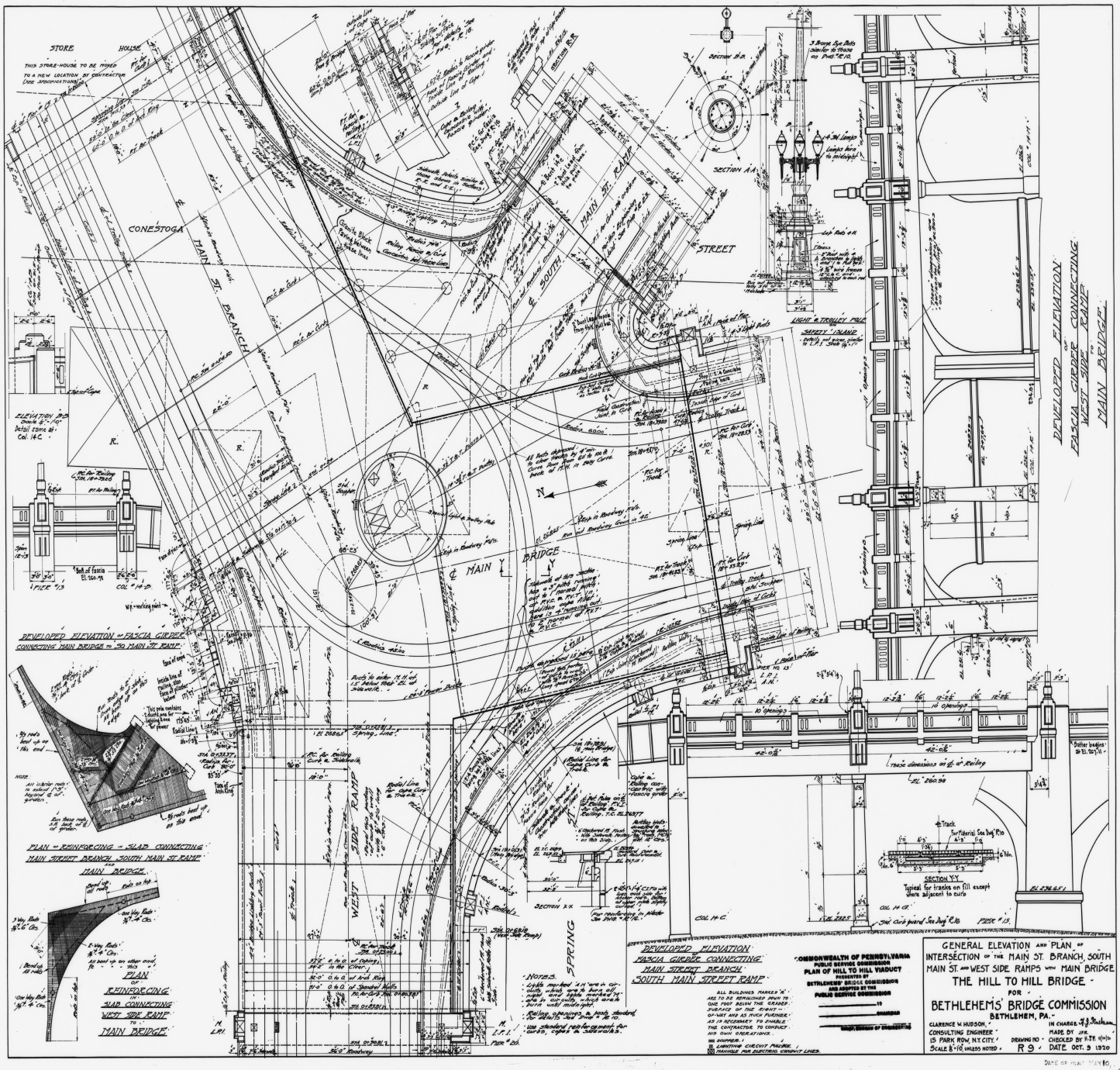
DRAWING No. R13

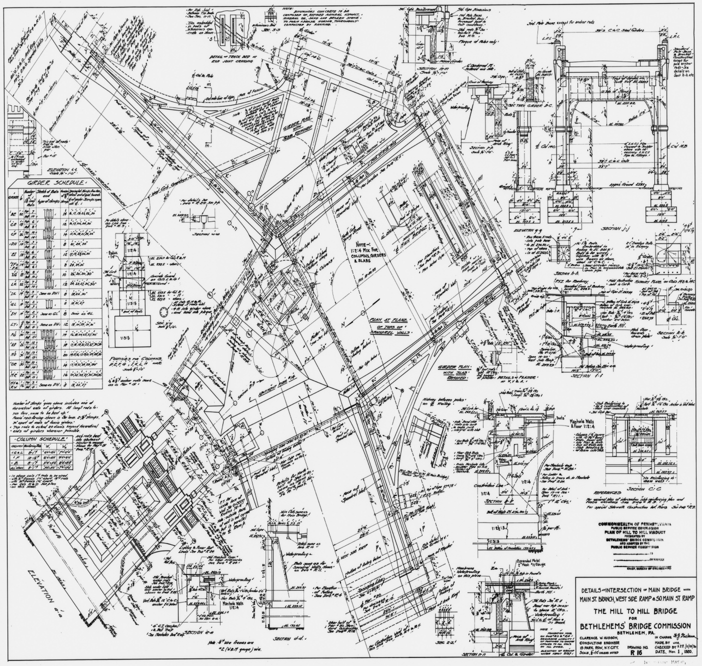
IN CHARGE J.J. Barlow
MADE BY H.W.T.
CHECKED BY C.W.H.
DATE, Aug. 31, 1920


101 FT-SPANS "3-4, 4-5, 5-6, 6-7, 7-8, 7-10 & 10-11
146 FT-SPAN "11-12
129 FT-SPANS "15-16, 16-17, 17-18 & 18-19
88 FT-SPAN "14-15
65.6 FT-SPAN "12-13
56 FT-SPAN "13-24
56 FT-SPANS "14-20, 20-21, 21-22 & 22-23
ARCH RING DATA FOR SPAN "12-13 SAME AS SHOWN FOR NORTH HALF ABOVE, AND SYMM. ABOUT ℄ SPAN. RAILING SHOWN ABOVE FOR SPAN "12-13 ONLY. FOR SPANDREL WALLS etc. IN SPAN "13-14 SEE DWG # 216.
DETAIL OF EXP. JOINTS IN ROADWAY FOUNDATION
DETAIL OF EXP. JOINT IN SIDEWALK SLAB
ELEVATION
PLAN
Detail of Exp. Joints in Railing at Posts
SECT. A-A
SECTION B-B
DIAGRAM FOR SIZE & SPACING OF RODS & DOWELS IN SPANDREL WALLS.
TYPICAL SPANDREL WALL APPLIES TO ALL ARCHES WHERE WALL SUPPORTS STD COPE & RAILING.
HALF TRANSVERSE SECTION AT CROWN or 101 FT. SPANS & 65.6' SPANS.
HALF TRANSVERSE SECTION AT CROWN or 129 FT. SPANS.
HALF TRANSVERSE SECTION AT CROWN or 146 FT. SPANS.
HALF TRANSVERSE SECTION AT CROWN or 56 FT. SPANS.
Mix
All Arch Rings 1:2:4
Spandrel Walls 1:2½:5
Cope & Railing etc. 1:2:4
NOTES
All openings in Railings Standard, Blocks & Keys to be placed in pairs in the order numerically indicated on each part. At least 7 days shall have elapsed between placing of Blocks & adjoining Keys & 28 days between placing of Last Key & Sterting of Curbs. All sections to be approximately radial. Laps in Longl Rods in Arch rings to be 60" Dia.
Spandrel Walls at Exp. Joints are to be tongued & grooved. Modify lengths of Arch Ring Blocks & keys of ℄ of Spans "15-16 & 16-17 to correspond with details of Snow Removal Openings shown on Dwg # 214.
For Typical Cross Sections See Dwg # 210.
DOMINION OF CANADA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL BRIDGE
PRESENTED BY
PATHFINDER (CANADA) LIMITED
TO THE BOARD OF THE
PUBLIC BUILDINGS COMMISSION
CHIEF BUREAU OF CONSTRUCTION
MAIN BRIDGE, WEST SIDE RAMPS, MAIN ST. BRANCH
DETAILS OF ALL ARCH SPANS
THE HILL TO HILL BRIDGE
FOR
BETHLEHEM'S BRIDGE COMMISSION
BETHLEHEM, PA.
CLARENCE W. HUDSON, CONSULTING ENGINEER, 15 PARK ROW, N.Y.CITY.
IN CHARGE W.J.S.
MADE BY P.L.N.D.R.
CHECKED BY A.D.K.
DRAWING NO R11
SCALE 1" = 10', UNLESS NOTED.
DATE Oct. 5 1920


PIERS #6 TO 10
RIVER PIERS #4 & #5
PIERS #16 & #18
PIER #16 NORTH FACE
PIER #3
PIER #1
PIER #2
PIER #3 & WEST FACE OF PIER #4
ELEVATIONS OF PIER TOPS ABOVE BOTT OF COPE
FOR DETAILS BELOW BOTTOM OF COPE SEE DWGS #3 & #4
HALF PLANS OF PIERS
SECTION C-C
SECTION B-B
SECTION A-A
ELEVATION
PLAN
ELEVATION E-E
SECTION F-F
SECTION D-D
INSIDE & OUTSIDE ELEVATIONS OF PIERS #1, 2, 23 & NORTH FACE OF PIER #20
FOR SOUTH FACE OF PIER #20 SEE DWG #16
HALF PLAN PIERS #1, 2, #23 & NORTH HALF OF PIER #20
DETAIL OF TYPICAL EXP JOINT AT PIERS
Asbestos Felt in all exp. joints.
DETAIL OF REINFORCING EXP JOINTS IN SPANDREL WALLS AT PIERS
DETAIL OF DRAINAGE SPOUTS AT PIERS.
Note - Broken Stone in all pier trusses similar to that noted for Piers 7 & 10
COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ADOPTED BY THE
PUBLIC SERVICE COMMISSION
MAIN BRIDGE, WEST SIDE RAMP & MAIN ST. BRANCH
DETAILS OF PIERS # 3 TO 12 INCL., 15 TO 18 INCL. & 20-23 INCL.
ABOVE BOTTOM OF COPE.
THE HILL TO HILL BRIDGE
FOR
BETHLEHEM'S BRIDGE COMMISSION
BETHLEHEM, PA.
CLARENCE W. HUDSON, CONSULTING ENGINEER
15 PARK ROW, N.Y. CITY.
DRAWING NO. R.12
SCALE 1/4"=1'0" UNLESS NOTED
IN CHARGE J.G.J.
MADE BY P.J. & J.F.
CHECKED BY A.J.F.
DATE Oct 5, 1920


STANDARD RAILING POST
STANDARD RAILING
RIVER STREET RAMP
SECOND STREET RAMP
(BETWEEN BENTS 35 & 67)
SOUTH MAIN STREET RAMP
WEST SIDE RAMP
LEHIGH STREET RAMP
MAIN BRIDGE AND MAIN STREET BRANCH
FRONT ELEVATION OF L.P.2. BASE
REINFORCING IN RAILING POSTS AND BRACKETS
FRONT ELEVATION OF BRACKET & BASE FOR L.P.1.
NOTES:
IN ALL RAILING COPES THROUGHOUT THE BRIDGE AND ITS APPROACHES, EXCEPT THE 171 SPACE, USE 4-⅜" LONGITUDINAL REINF.
IN ALL RAILING COPES THROUGHOUT THE BRIDGE AND ITS APPROACHES, USE TRANSVERSE RODS ⅜"ϕ - 20' LONG SPACED 18' C. TO C.
IN ALL CURBS THROUGHOUT THE BRIDGE AND ITS APPROACHES, USE CURB BAR, HEREAFTER, ROUND HOLE, CURB BAR TYPE "A".
WIRE GAUGE SPECIFICATIONS AND NOTES
SURFACES MARKED "F" TO BE FINISHED WITH # 1:3 MIXTURE SEE SPECIFICATIONS
COMMONWEALTH OF PENNSYLVANIA
PUBLIC BUILDING COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ADOPTED BY THE
PUBLIC BUILDING COMMISSION
MAIN BRIDGE AND RAMPS
CROSS-SECTIONS OF DECKS
AND
ARCHITECTURAL DETAILS
THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.
CLARENCE W. HUDSON, CONSULTING ENGINEER, 15 PARK ROW, N.Y. CITY.
SCALE 1/2" = 1'-0"
DRAWING NO. R.10
IN CHARGE J.J.R.
MADE BY J.F.R.
CHECKED BY C.W.H.
DATE, Sept. 15 1920.


STORE HOUSE
THIS STORE-HOUSE TO BE MOVED TO A NEW LOCATION BY CONTRACTOR
CONESTOGA
MAIN ST. BRANCH
MAIN ST. RAMP
SOUTH
STREET
MAIN BRIDGE
SECTION B-B
SECTION A-A
DEVELOPED ELEVATION OF FASCIA GIRDER CONNECTING WEST SIDE RAMP MAIN BRIDGE
ELEVATION B-B
DEVELOPED ELEVATION OF FASCIA GIRDER CONNECTING MAIN BRIDGE TO SO. MAIN ST. RAMP
PLAN OF REINFORCING SLAB CONNECTING MAIN STREET BRANCH SOUTH MAIN ST. RAMP AND MAIN BRIDGE
PLAN OF REINFORCING SLAB CONNECTING WEST SIDE RAMP TO MAIN BRIDGE
WEST SIDE RAMP
SPRING
SECTION X-X
SECTION Y-Y
DEVELOPED ELEVATION FASCIA GIRDER CONNECTING MAIN STREET BRANCH SOUTH MAIN STREET RAMP
NOTES.
COMMONWEALTH OF PENNSYLVANIA PUBLIC SERVICE COMMISSION PLAN OF HILL TO HILL VIADUCT
PRESENTED BY BETHLEHEMS' BRIDGE COMMISSION AND ADOPTED BY THE PUBLIC SERVICE COMMISSION
GENERAL ELEVATION AND PLAN OF INTERSECTION OF THE MAIN ST. BRANCH, SOUTH MAIN ST. AND WEST SIDE RAMPS WITH MAIN BRIDGE
THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.
CLARENCE W. HUDSON, CONSULTING ENGINEER, 15 PARK ROW, N.Y. CITY.
IN CHARGE W.J. Southam
MADE BY J.R.K.
CHECKED BY H.T.F.
SCALE 8-10 UNLESS NOTED
DRAWING NO R 9
DATE OCT. 9 1920
DATE OF PLAN MAY 10,



NOTE:- 1:2:4 MIX FOR COLUMNS, GIRDERS & SLABS
PLAN AT PLANE OF TOPS OF SPANDREL WALLS
GIRDER PLAN - WITH SLAB REMOVED
GIRDER SCHEDULE
COLUMN SCHEDULE
FOOTINGS for COLUMNS
ELEVATION
SECTION C-C
SECTION d-d
SECTION e-e
SECTION f-f
SECTION j-j
SECTION h-h
SECTION k-k
ELEVATION g-g
SECTION GIRDER B-C
REFERENCES
COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ADOPTED BY THE
PUBLIC SERVICE COMMISSION
CHAIRMAN
CHIEF, BUREAU OF ENGINEERING
DETAILS AT INTERSECTION OF MAIN BRIDGE WITH
MAIN ST. BRANCH, WEST SIDE RAMP & SO. MAIN ST RAMP
THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.
CLARENCE W. HUDSON,
CONSULTING ENGINEER
15 PARK ROW, N.Y. CITY.
SCALE, 1/8"=1'-0" UNLESS NOTED
DRAWING NO.
R 16
IN CHARGE
MADE BY
CHECKED BY
DATE, Nov. 1, 1920.

PLAN

ELEVATION X-X

ELEVATION Y-Y

SECTION G-G

SECTION F-F
(Bracket-B is Similar to Bkt-A)

SECTION A-A
Sect. C-C is Similar

SECTION B-B

SECTION H-H

HALF SECTION H-H HALF PLAN J-J

DETAILS OF STAIRS & RAILING.
Scale 1/2"=1'-0"

DETAIL OF LAMP POST
Scale 1"=1'-0"

Section D-D

Section E-E
Scale 1"=1'-0"

Pier No. 9

For Further Details of Pier No. 9 see Drwg. No. R-12.

For Reinforcing and Other Details of Railing see Drwg. No. R-10.

Lamps: 100 C.P.
Wiring: One Leap of #16 B&S Wire, 600 Volt Insulation, single conductor.

Mix- Footings below El. 222.0, 1:3:5
Surface of Landings between Feralun Treads, 3" thick, all other 1:2:4.

Lighting Ducts are Orange Buryfibre.
All railing openings standard.
Stairway lamps to burn all night.

COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ADOPTED BY THE
PUBLIC SERVICE COMMISSION

_____ (C.)
_____ CHAIRMAN
_____ SECR. PUBLIC SERVICE COMMISSION

MAIN BRIDGE

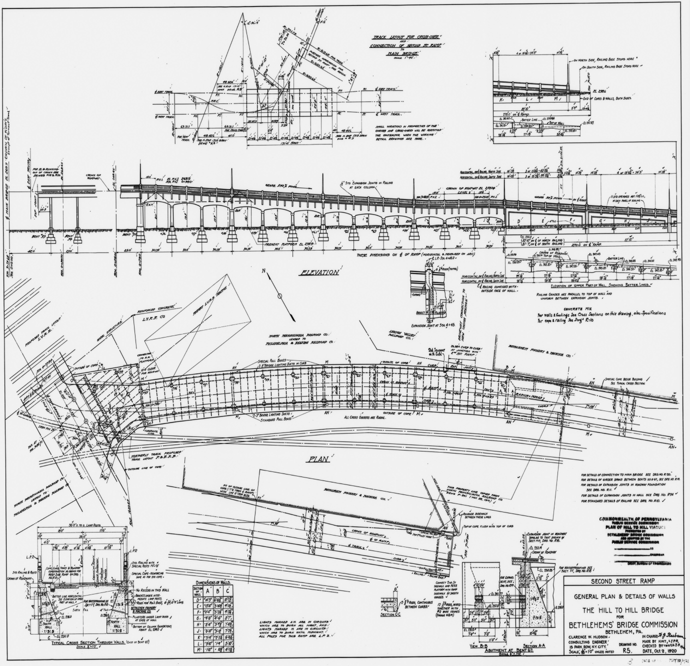
STAIRWAY AT PIER NO. 9

THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.

CLARENCE W. HUDSON, CONSULTING ENGINEER.
15 PARK ROW, N.Y. CITY.
SCALE 1/4"=1'-0" UNLESS NOTED

DRAWING NO. R14

IN CHARGE H.J.S.
MADE BY A.R. H.W.T.
CHECKED BY H.J.F. 11/24/20
DATE OCT. 28 1920



DIMENSIONS OF WALLS.

SECTION OF WALL	A	B	C
D	14'3"	6'6⅞"	10'7⅞"
E	12'10"	5'10⅝"	9'10⅛"
F	10'6"	5'2⅝"	9'3⅜"
G	9'10"	4'6"	8'7"
H	8'6"	3'9⅜"	7'10⅜"
J	6'10"	3'0⅛"	7'2⅞"
K	5'4"	2'5⅞"	6'6⅞"
L	3'10"	1'9"	5'10"
M	1'10"	10⅞"	4'11⅞"

COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ADOPTED BY THE
PUBLIC SERVICE COMMISSION
______ 19
______ CHAIRMAN
______ CHIEF, BUREAU OF ENGINEERING

SECOND STREET RAMP

GENERAL PLAN & DETAILS OF WALLS

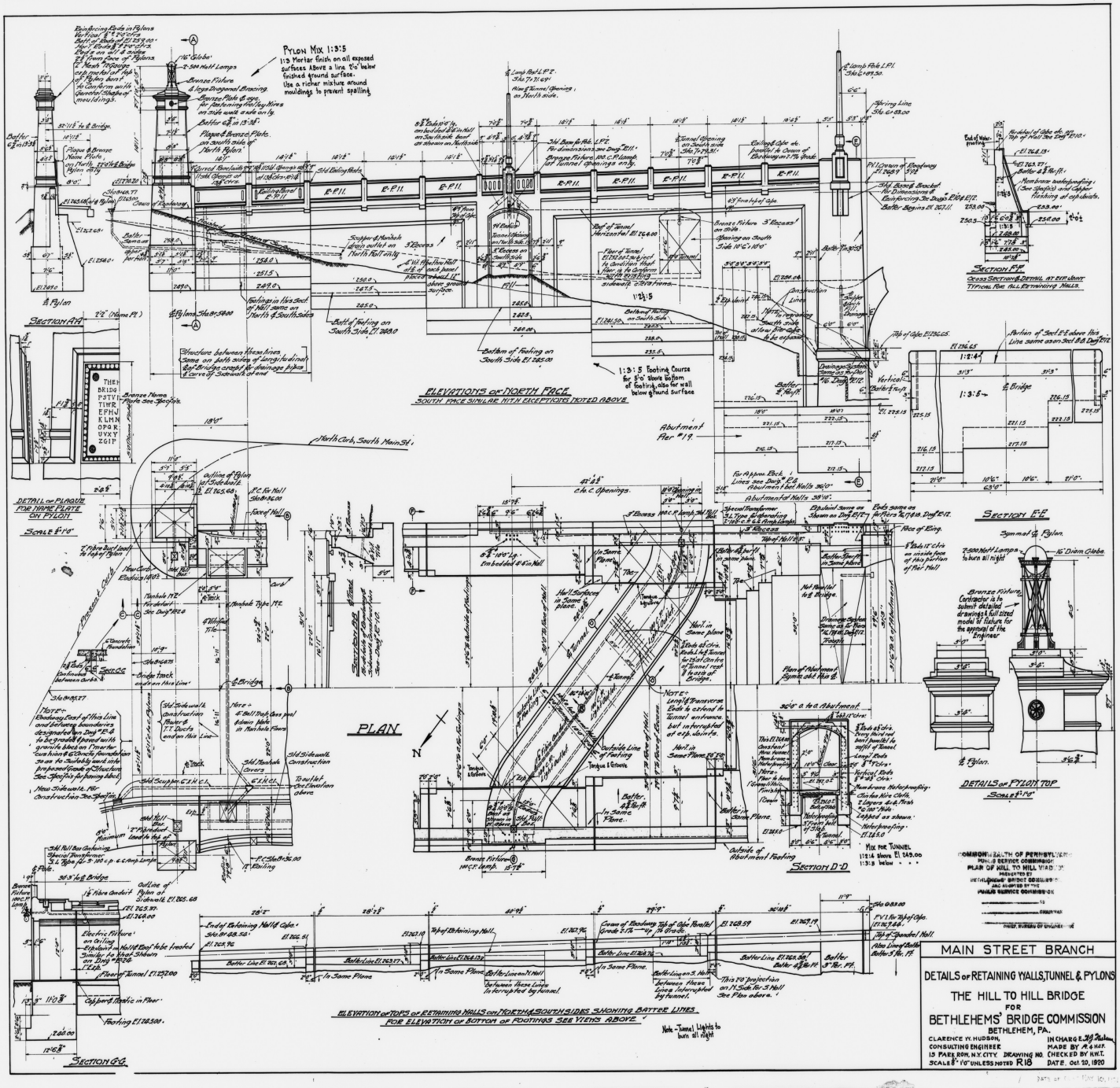
THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.

CLARENCE W. HUDSON
CONSULTING ENGINEER
15 PARK ROW, N.Y. CITY.
SCALE; 1/20" = 1'-0" UNLESS NOTED

DRAWING NO. R5.

IN CHARGE F. G. Koebam
MADE BY H.W.T. & J.P.R.
CHECKED BY C.W.H. & H.T.F.
DATE, Oct. 2, 1920

3 DATE OF ... MAY 10, 1921



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEM DISTRICT ENGINEER
AND ADOPTED BY THE
PUBLIC SERVICE COMMISSION
CHAIRMAN
CHIEF BUREAU OF ENGINEER

MAIN STREET BRANCH

DETAILS OF RETAINING WALLS, TUNNEL & PYLONS

THE HILL TO HILL BRIDGE

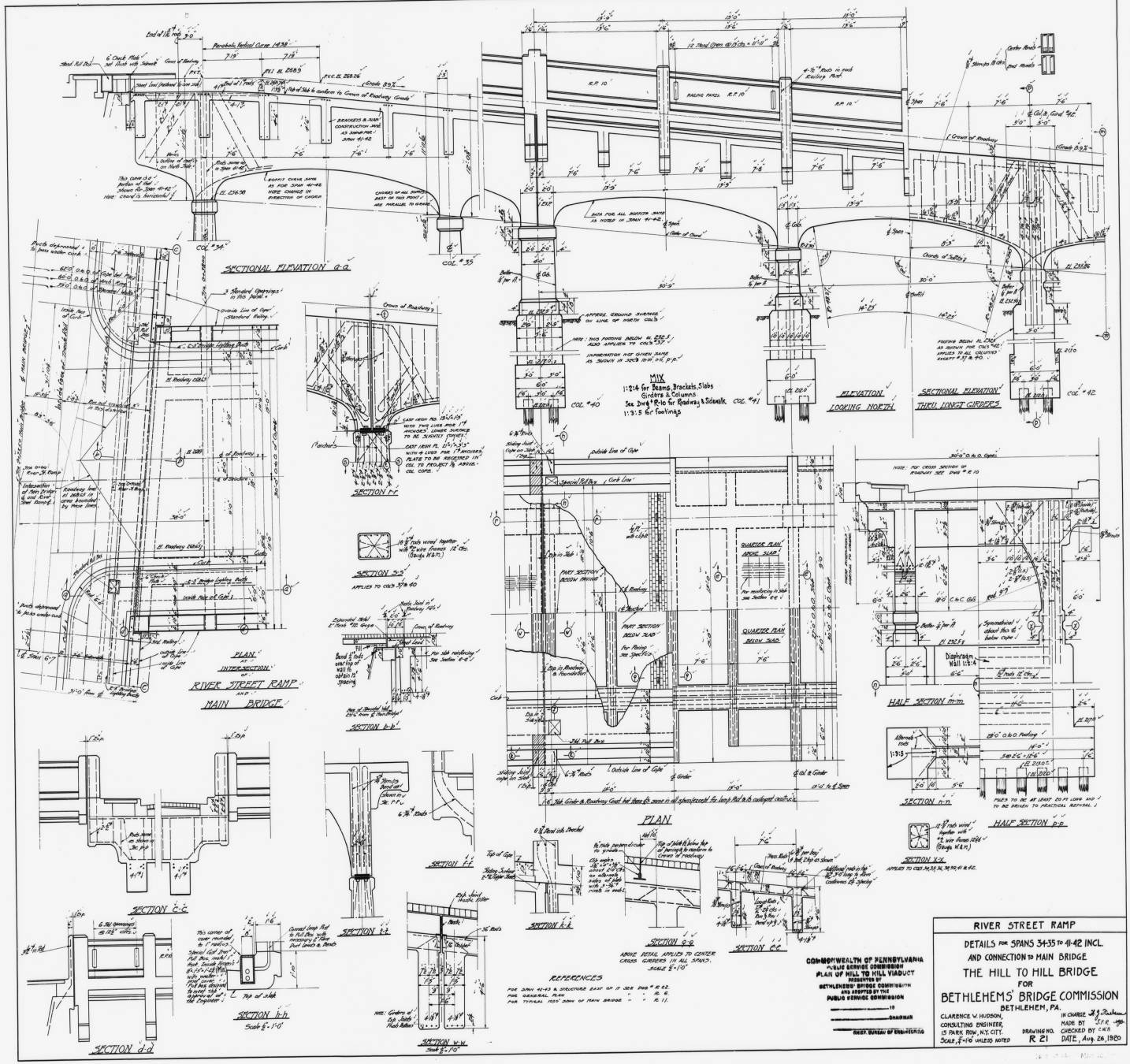
FOR

BETHLEHEMS' BRIDGE COMMISSION

BETHLEHEM, PA.

CLARENCE W. HUDSON, CONSULTING ENGINEER
15 PARK ROW, N.Y. CITY
SCALE 1" = 10' UNLESS NOTED

IN CHARGE W. H. Nichols
DRAWING NO. R18
MADE BY A.G.H.
CHECKED BY H.N.T.
DATE Oct. 20, 1920



RIVER STREET RAMP

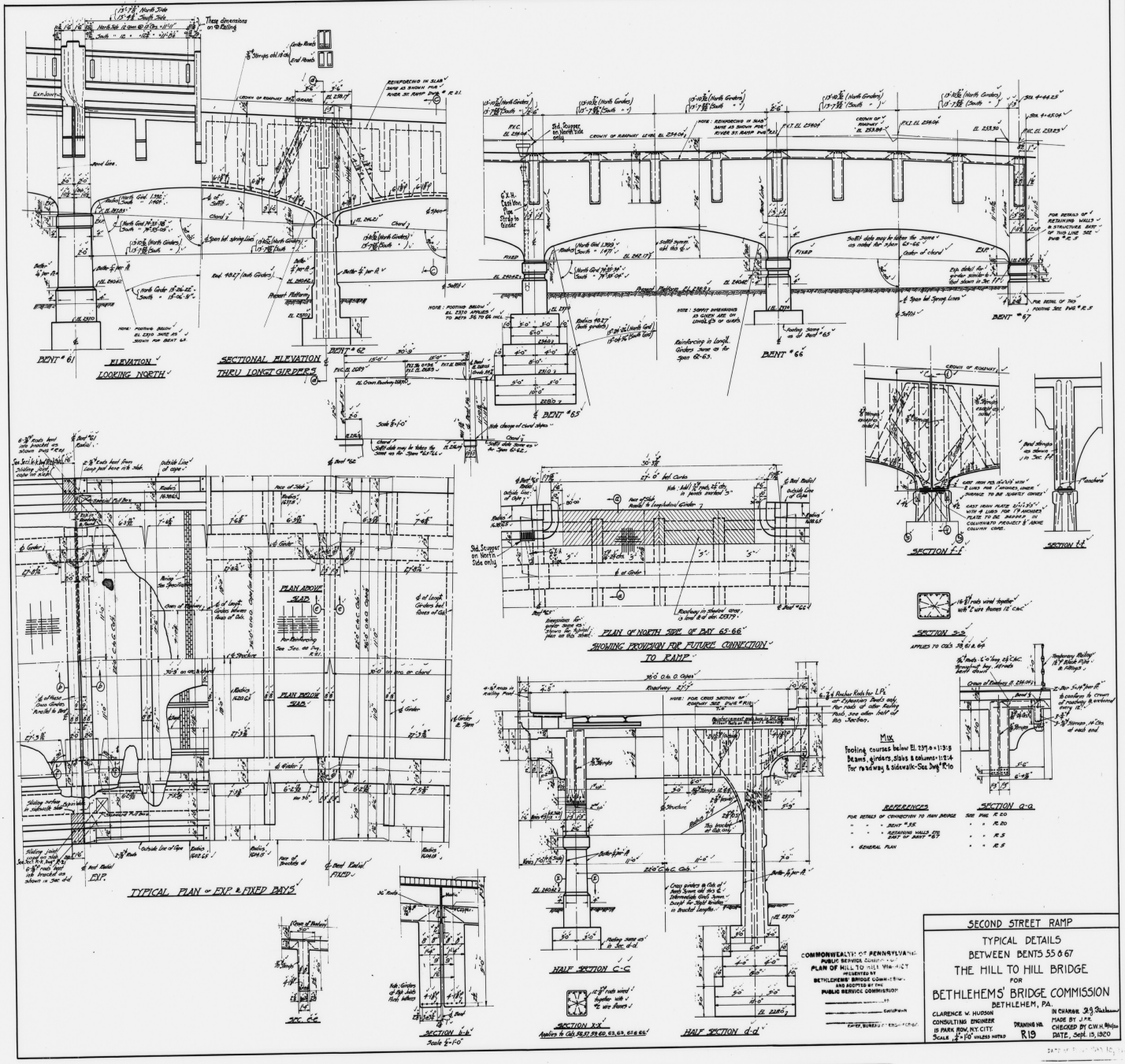
DETAILS FOR SPANS 34-35 to 41-42 INCL.
AND CONNECTION TO MAIN BRIDGE
THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.

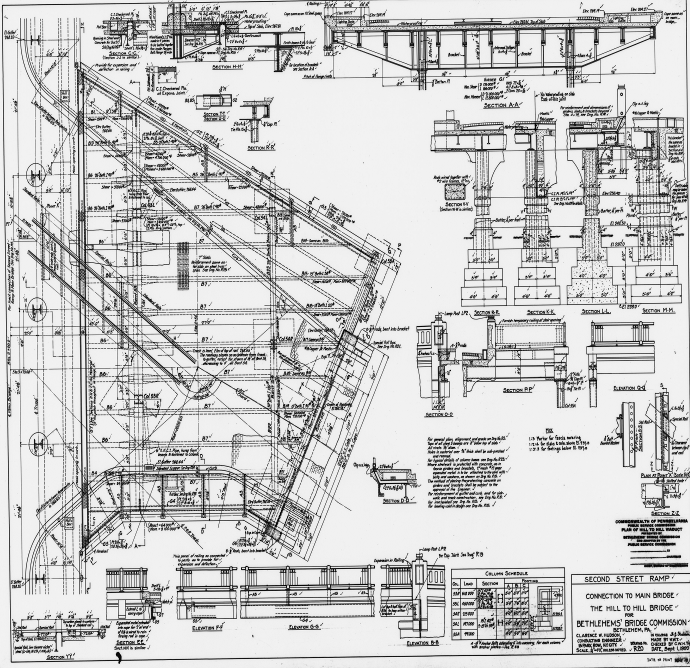
CLARENCE W. HUDSON,
CONSULTING ENGINEER,
15 PARK ROW, N.Y. CITY.

SCALE, 1"=10' UNLESS NOTED

DRAWING NO. R 21

IN CHARGE J.J. Paulmann
MADE BY T.T.C.
CHECKED BY C.W.H.
DATE, Aug. 26, 1920


BENT # 61
ELEVATION LOOKING NORTH
SECTIONAL ELEVATION THRU LONGIT GIRDERS
BENT # 62
BENT # 65
BENT # 66
BENT # 67
PLAN ABOVE SEAT
PLAN BELOW SEAT
TYPICAL PLAN OF EXP. & FIXED BAYS
PLAN OF NORTH SIDE OF BAY 65-66
SHOWING PROVISION FOR FUTURE CONNECTION TO RAMP
SECTION F-F
SECTION E-E
SECTION J-J
SECTION 3-3
SECTION Q-Q
HALF SECTION C-C
HALF SECTION Q-Q
SECTION K-K
SECTION L-L
SEC. C-C
SECTION L-L
REFERENCES
Mix
Footing courses below El. 237.0 = 1:3:5
Beams, girders, slabs & columns = 1:2:4
For roadway & sidewalk - See Dwg # R-10
COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ACCEPTED BY THE
PUBLIC SERVICE COMMISSION
SECOND STREET RAMP
TYPICAL DETAILS
BETWEEN BENTS 55 & 67
THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.
CLARENCE W. HUDSON
CONSULTING ENGINEER
15 PARK ROW, N.Y. CITY.
SCALE 1/4"=1'0" UNLESS NOTED
DRAWING NO. R19
IN CHARGE J.J.S.
MADE BY J.P.K.
CHECKED BY C.W.H.
DATE, Sept. 15, 1920



For general plan, alignment, and grade see Drg. No. R5.
Tops of all steel I-beams are 8" below top of slab.
All rivets 7/8" diam.
Holes in material over 3/4" thick shall be sub-punched and reamed.
For typical details of column bases see Drg. No. R23.
Where steelwork is protected with concrete, as in fascia girders and brackets, 2" mesh #12 gage expanded metal is to be attached to the steel with bolts and washers, as shown on Drg. No. R15.
The method of placing the protecting concrete on girders and brackets shall be subject to the approval of the Engineer.
For reinforcement of gutter and curb, and for sidewalk and track construction, see Drg. No. R10.
For iron handrail see Drg. No. R15.
For loading used in design see Drg. No. R15.

MIX

1:3 Mortar for fascia covering
1:2:4 for slabs & cols. above El. 237.0
1:3:5 for footings below El. 237.0

COLUMN SCHEDULE

Col.	Load	Section	Footing A	Footing B	Footing C
53R	618 000	15" I 42#, 2 Pls. 19×½, 4 L 6×4×⅝	5'0"	8'0"	11'0"
53L	460 000	15" I 42#, 2 Pls. 19×⅜, 4 L 6×4×⅜	5'0"	7'6"	10'0"
54R	215 000	15" I 42#, 2-15" [33#	4'0"	6'0"	8'0"
54L	197 000	15" I 42#, 2-15" [33#	4'0"	5'6"	7'0"
55A	99 000	15" I 42#, 2-15" [33#	4'0"	5'0"	6'0"

4-1½"φ Anchor Bolts extending 6' into masonry, for each column; with anchor plates — See R23

COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY
BETHLEHEMS' BRIDGE COMMISSION
AND ADOPTED BY THE
PUBLIC SERVICE COMMISSION

________ 19

________ CHAIRMAN

________ CHIEF, BUREAU OF ENGINEERING

SECOND STREET RAMP

CONNECTION TO MAIN BRIDGE

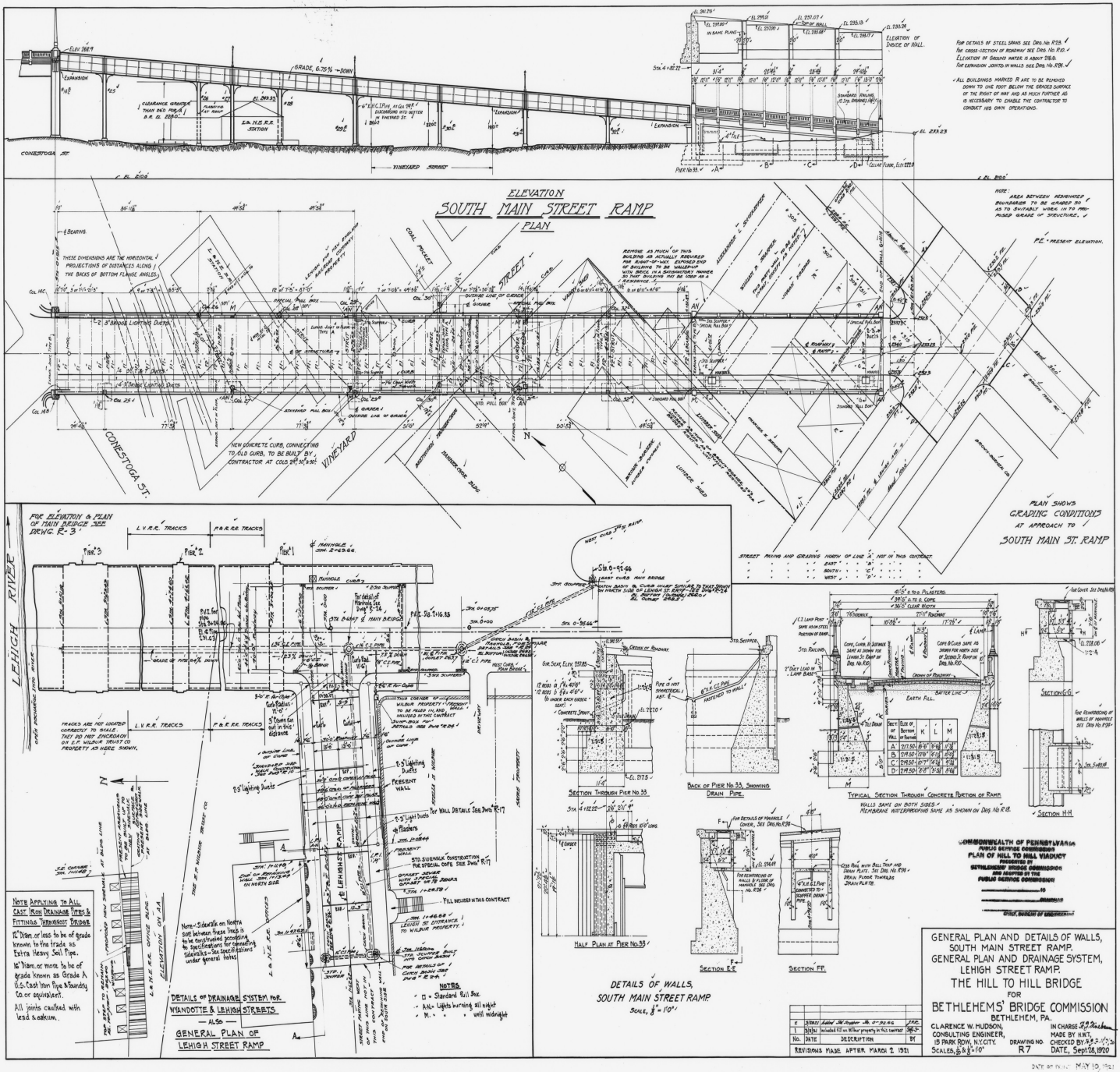
THE HILL TO HILL BRIDGE
FOR
BETHLEHEMS' BRIDGE COMMISSION
BETHLEHEM, PA.

CLARENCE W. HUDSON,
CONSULTING ENGINEER
15 PARK ROW, N.Y. CITY.
SCALE, ¼"=1'0", UNLESS NOTED.

DRAWING NO. R20

IN CHARGE R.J. [illegible]
MADE BY H.W.T.
CHECKED BY C.W.H.
DATE, Sept. 1, 1920

DATE OF PRINT [illegible]


ELEVATION
SOUTH MAIN STREET RAMP
PLAN
CONESTOGA ST.
VINEYARD
VINEYARD STREET
GRADE 6.75% ↓ DOWN
ELEVATION OF INSIDE OF WALL.
ELEVATION
PLAN
NOTE: AREA BETWEEN DESIGNATED BOUNDARIES TO BE GRADED SO AS TO SUITABLY WORK IN TO PROPOSED GRADE OF STRUCTURES.
PE = PRESENT ELEVATION.
PLAN SHOWS GRADING CONDITIONS AT APPROACH TO SOUTH MAIN ST. RAMP
LEHIGH RIVER
LEHIGH STREET RAMP
DETAILS OF DRAINAGE SYSTEM FOR WYANDOTTE & LEHIGH STREETS
— ALSO —
GENERAL PLAN OF LEHIGH STREET RAMP
NOTE APPLYING TO ALL CAST IRON DRAINAGE PIPES & FITTINGS THROUGHOUT BRIDGE
SECTION THROUGH PIER No. 33
BACK OF PIER No. 33, SHOWING DRAIN PIPE.
TYPICAL SECTION THROUGH CONCRETE PORTION OF RAMP
WALLS SAME ON BOTH SIDES
SECTION H-H
SECTION G-G
HALF PLAN AT PIER No. 33
SECTION E-E
SECTION F-F
DETAILS OF WALLS, SOUTH MAIN STREET RAMP.
SCALE, 1/8" = 1'0"
COMMONWEALTH OF PENNSYLVANIA
PUBLIC SERVICE COMMISSION
PLAN OF HILL TO HILL VIADUCT
PRESENTED BY BETHLEHEM BRIDGE COMMISSION AND ADOPTED BY THE PUBLIC SERVICE COMMISSION
GENERAL PLAN AND DETAILS OF WALLS, SOUTH MAIN STREET RAMP.
GENERAL PLAN AND DRAINAGE SYSTEM, LEHIGH STREET RAMP.
THE HILL TO HILL BRIDGE
FOR
BETHLEHEM'S BRIDGE COMMISSION
BETHLEHEM, PA.
CLARENCE W. HUDSON, CONSULTING ENGINEER, 15 PARK ROW, N.Y.CITY.
SCALES, 1/8 & 1/4" = 1'0"
DRAWING NO. R7
IN CHARGE H.J. Jackson
MADE BY H.W.T.
CHECKED BY A.F.S.
DATE, Sept 28, 1920
REVISIONS MADE AFTER MARCH 2, 1921
DATE OF PLAN MAY 10, 1921