



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0016

Paul R. LePage  
GOVERNOR

David Bernhardt  
COMMISSIONER

May 10, 2018  
Subject: Lisbon Center Bridge  
Replacement  
State WIN: 018970.00  
Location: **Lisbon**  
**Amendment No. 1**

Dear Sir/Ms.:

Please make the following changes to the Bid Documents:

In the Plan Set:

**REMOVE** SHEET NUMBER 36 of 53, BEAM DETAILS 1, and **REPLACE** with the attached, revised SHEET NUMBER 36 of 53, BEAM DETAILS 1.

**REMOVE** SHEET NUMBER 37 of 53, BEAM DETAILS 2, and **REPLACE** with the attached, revised SHEET NUMBER 37 of 53, BEAM DETAILS 2.

In the Bid Book and in the Plan Set:

**CHANGE** all references to the outside diameter of the Pre-Insulated Ductile Iron Water Main from 18 inches to 20 inches. The larger diameter is needed due to the large diameter mechanical joint flanges on each end of the 12 inch MECH-LOK pipe. Change all references to the U-Bolt Style hanger legs being [20 inch +/- c/c] to [22 inch +/- c/c]. Adjust vertical dimensions of hangers by approximately 1 inch such that vertical centerline of water main matches that shown on the plans. Holes in the concrete abutments, etc. need to be sized to accommodate Kor-N-Seal II connectors. Make these changes in pen and ink.

The following questions have been received:

**Question:** On sheet 36 of 53 and 37 of 53 there is a detail showing the girder reinforcing for Girders G1 and G4, and G2 and G3 respectively. On the detail, it seems to show a vertical bar in the middle of the web of the girder. There are no details on the drawings indicating a size, shape or quantity of this bar. Can you provide clarification so we can get accurate pricing for reinforcing in these girders?

**Response:** Please refer to revised Sheets 36 and 37, Beam Details 1 and 2 respectively.



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**Question:** Can you clarify whether the stirrups that project out of the top of the concrete girders need to be stainless steel like the bent reinforcing in the bridge deck, or whether they can be plain like the rest of the reinforcing in the girders?

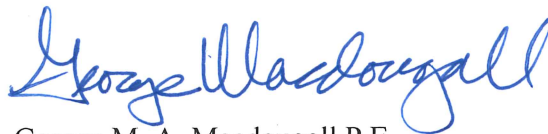
**Response:** The girder stirrups projecting into the deck may be plain reinforcement.

**Question:** Please confirm that the dimension of the Pre-Insulated Ductile Iron Water Main is 18 inches and will mate with the 12 inch MECH-LOK pipe shown on the plans.

**Response:** Please refer to the aforementioned changes in the Bid Book and in the Plan Set.

Consider these changes and information prior to submitting your bid on **May 16, 2018**.

Sincerely,



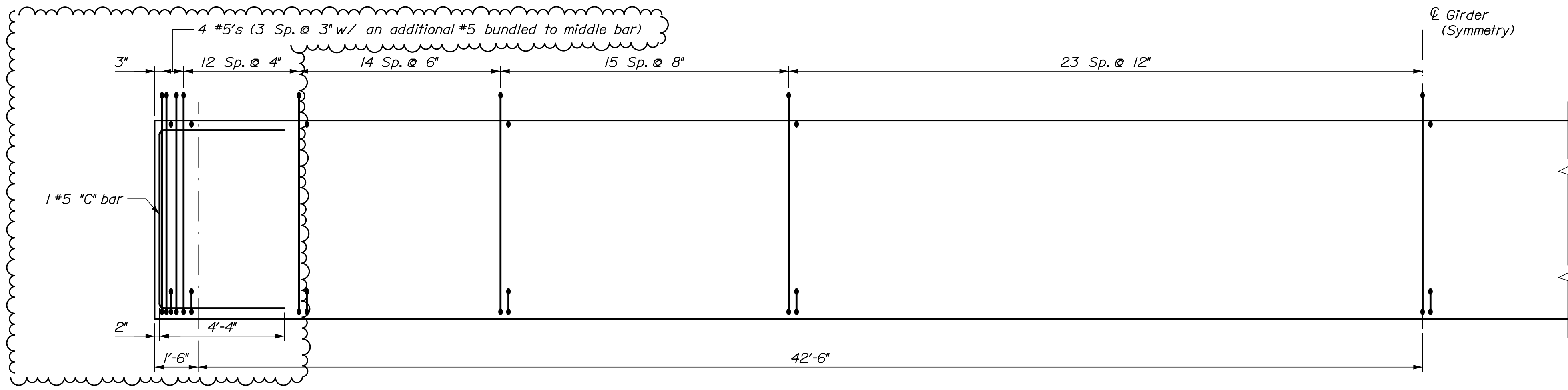
George M. A. Macdougall P.E.  
Contracts & Specifications Engineer

Date: 5/8/2018

Username:

Division:

Filename: 036A\_Beam\_Details 1.dgn



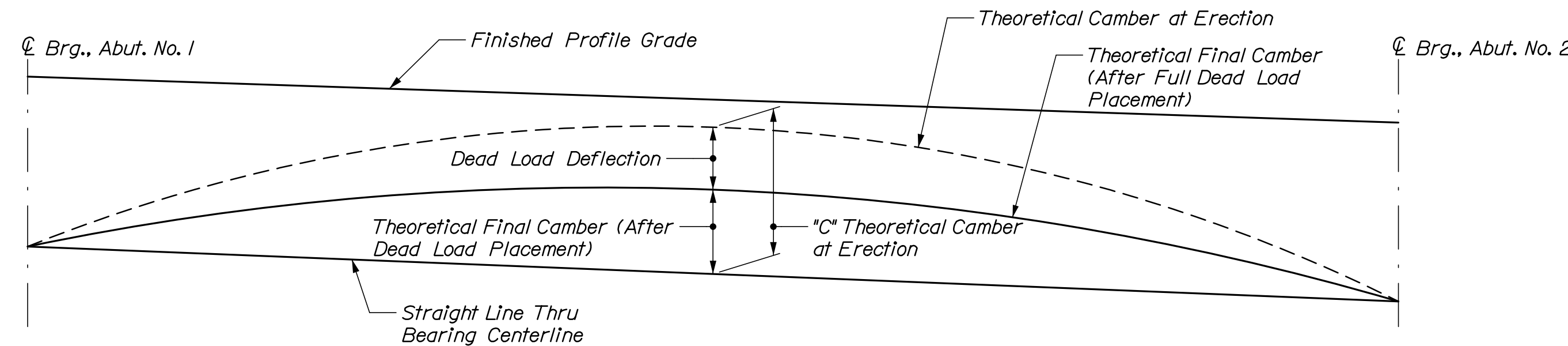
Revision  $\Delta$

**NEBT 39 PRECAST GIRDER - G1 AND G4**

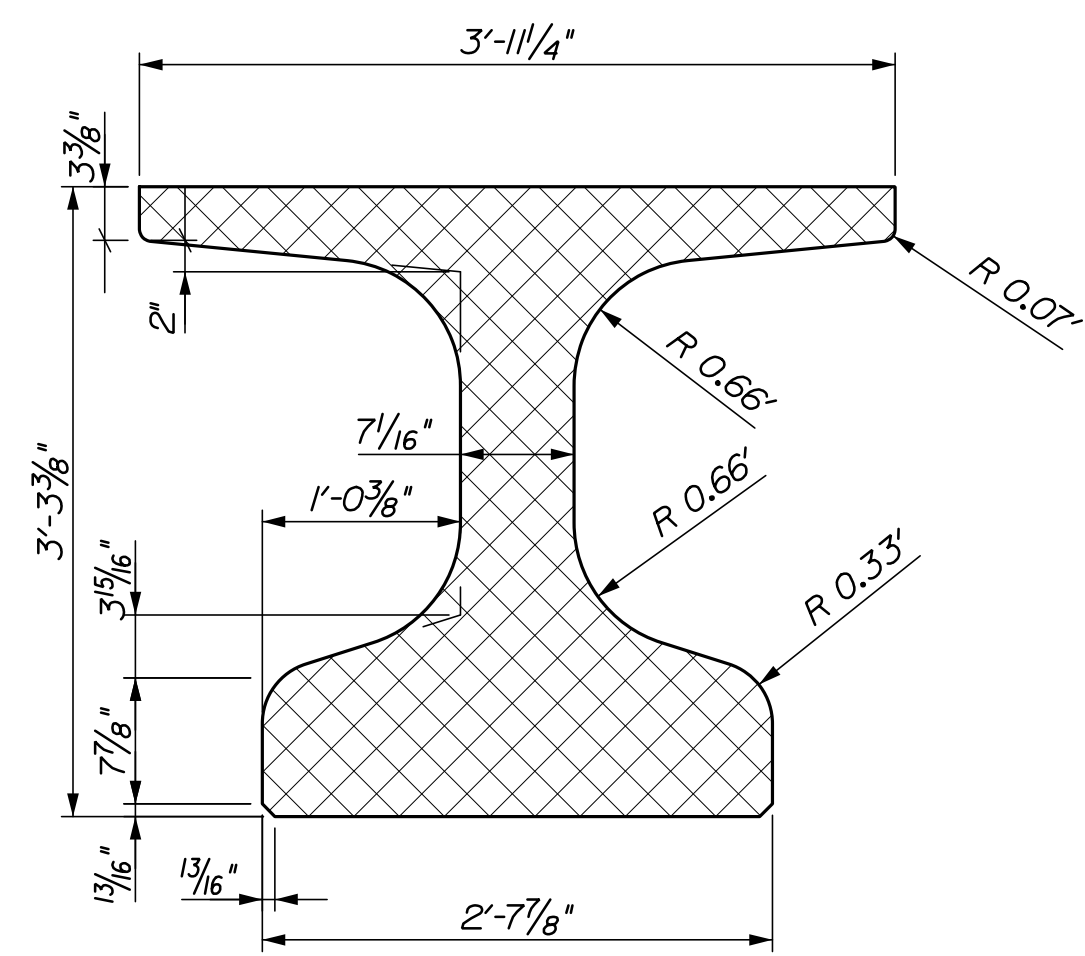
Reinforcing layout  
Vertically Exaggerated for Clarity  
(All bars #4 unless otherwise noted)

**PRECAST CONCRETE SUPERSTRUCTURE NOTES:**

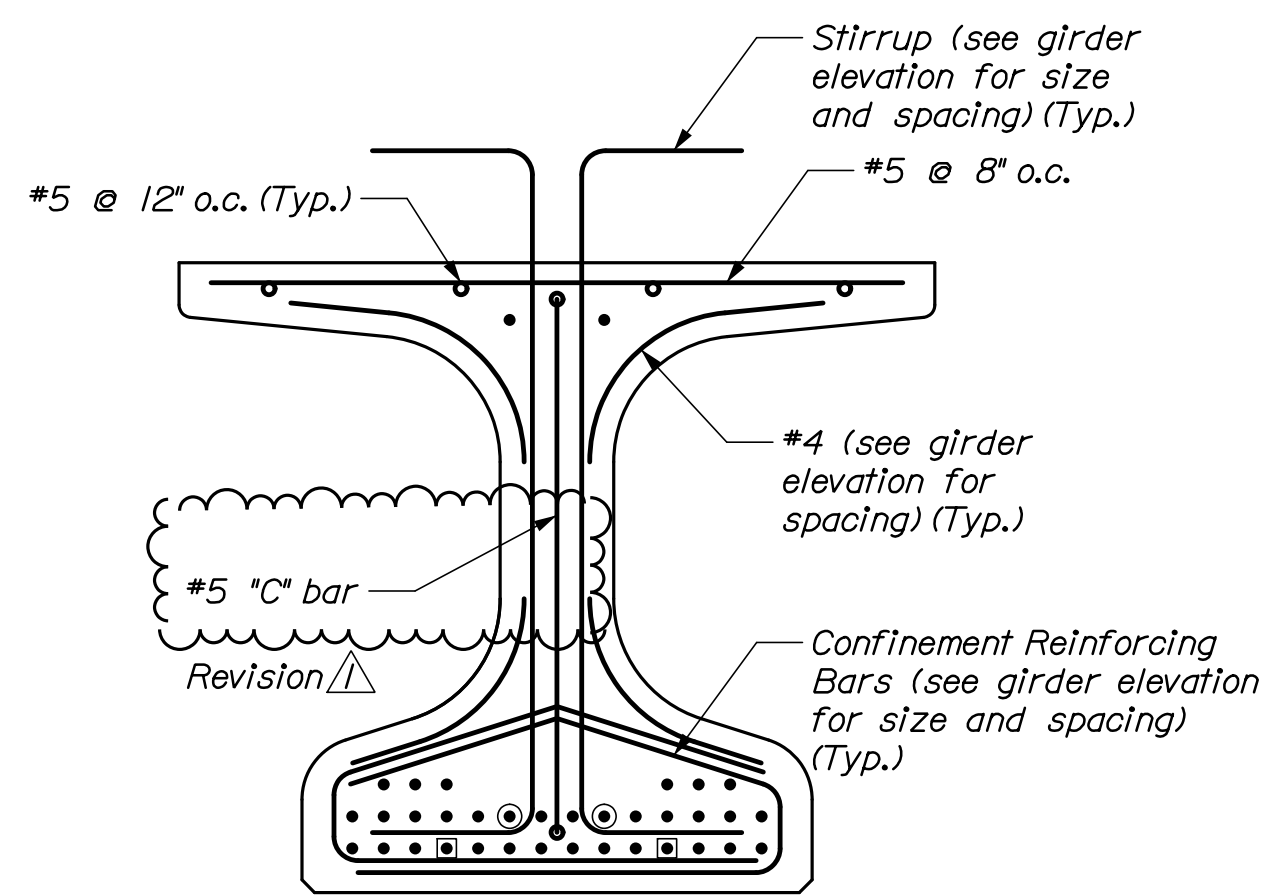
1. Prestressing strands shall be 0.6-in. diameter. The tensioning force is 44 kips per prestressing strand.
2. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
3. The estimated camber for G1 and G4 at release is  $2\frac{1}{8}$  inches and the estimated camber at erection, "C", is  $4\frac{5}{8}$  inches. The estimated camber for G2 and G3 at release is  $2\frac{1}{2}$  inches and the estimated camber at erection, "C", is 5 inches. Refer to Special Provision 535, Precast, Prestressed Concrete Superstructure - Camber.
4. The top surface of the upper flange of the prestressed beams shall be raked to a surface roughness of  $\frac{1}{4}$  inch, except at locations corresponding to the blocking points. At these locations a flattened area of sufficient size shall be finished to facilitate taking elevations for setting bottom of slab elevations.
5. The drilling of holes in the prestressed beams and the use of power actuated tools on the beams will not be permitted.



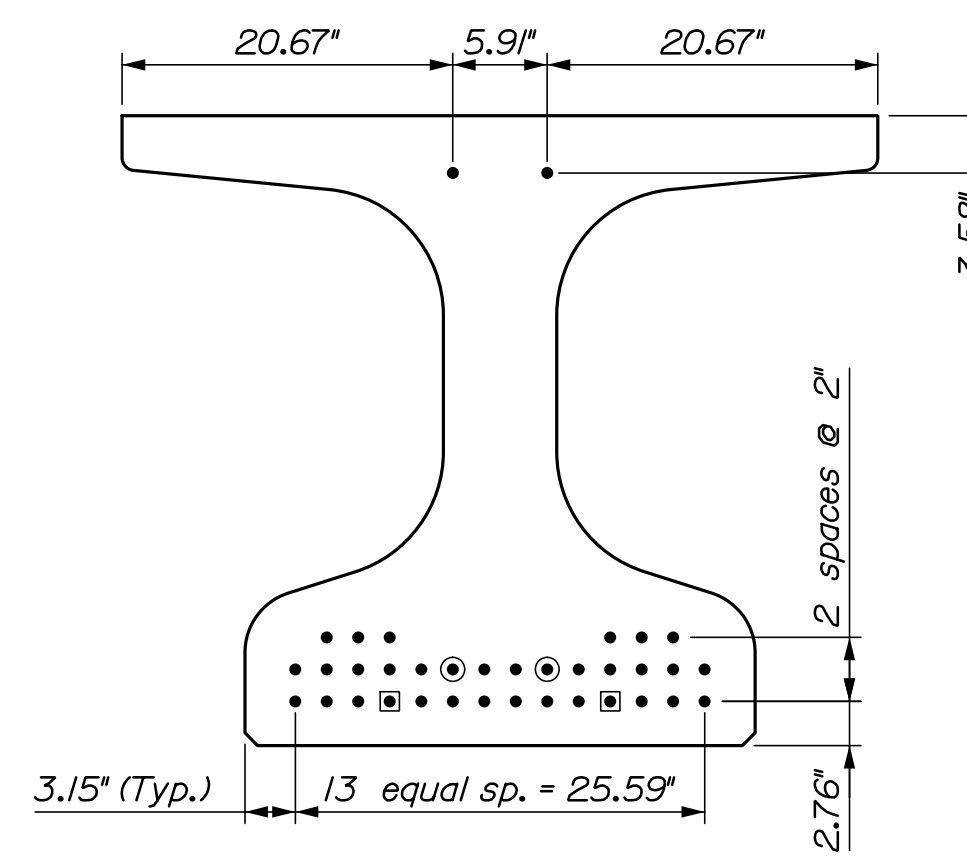
**NEXT BEAM CAMBER DIAGRAM**  
Not to Scale



**TYPICAL GIRDER SECTION**  
NEBT 39



**GIRDER REINFORCING**  
G1 AND G4



**PRESTRESSING STRANDS**  
G1 AND G4

**PRESTRESSING LEGEND**

- ~ Steel Reinforcing
- ~ Strand
- ⊙ ~ Debonded Strand 4' at Each End
- ⊠ ~ Debonded Strand 8' at Each End

All Strands ~ 0.6"  $\phi$   
f'ci = 6.5 ksi Span = 85'  
f'c = 8.0 ksi One diaphragm @ midspan

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
WIN 18970.00  
BRIDGE NO. 5007  
BRIDGE PLANS

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
J. Kirtledge	HNTB	12/17			
R. Nopoulos	HNTB	12/17			
Beam End Reinforcing		05/18			
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

LISBON CENTER BRIDGE  
SABATTUS RIVER  
ANDROSCOGGIN  
LISBON  
**BEAM DETAILS 1**

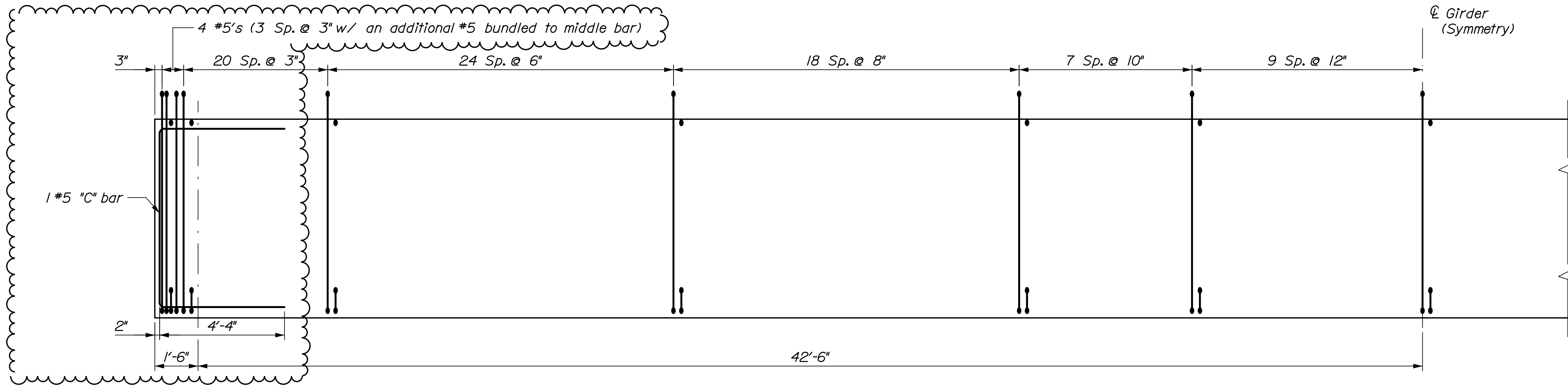
SHEET NUMBER  
**36**  
OF 53

Date: 5/8/2018

Username:

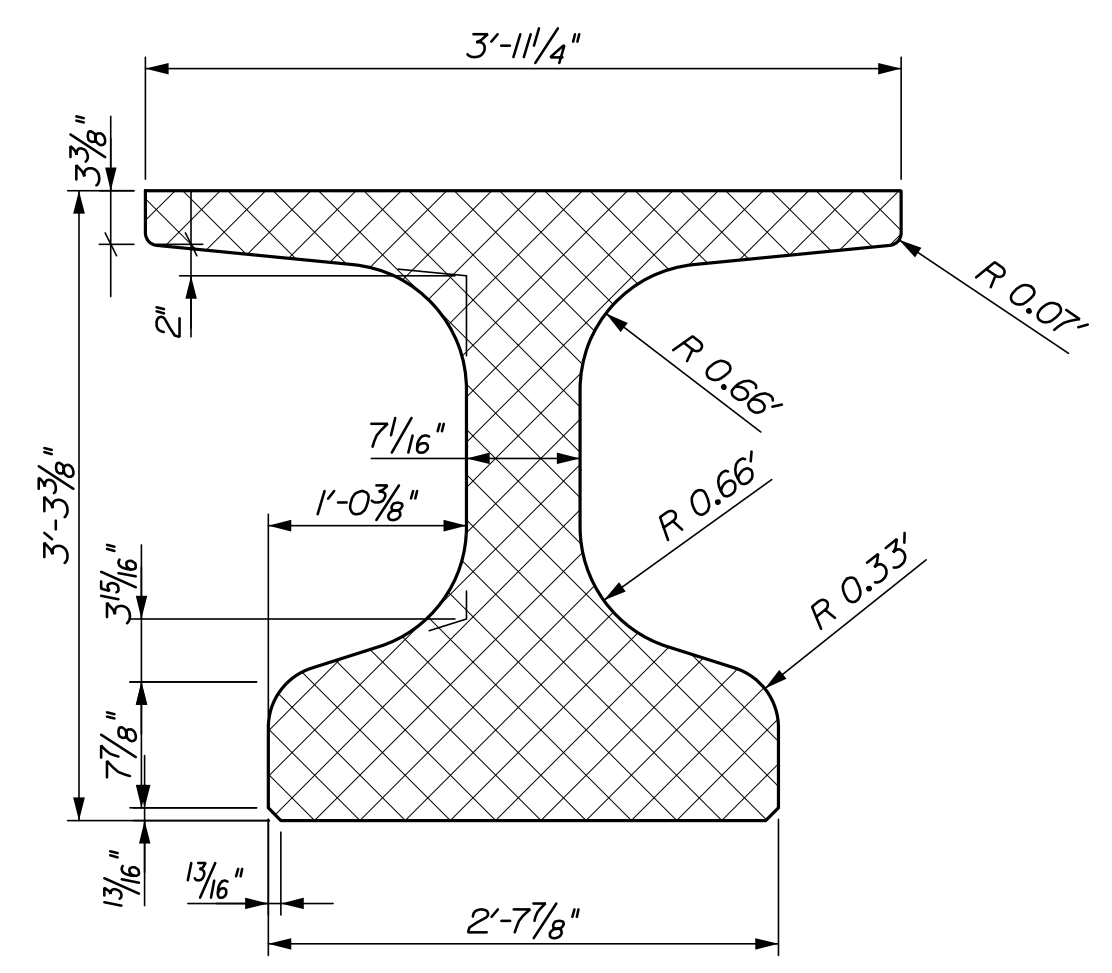
Division:

Filename: 037A\_Beam\_Details 2.dgn

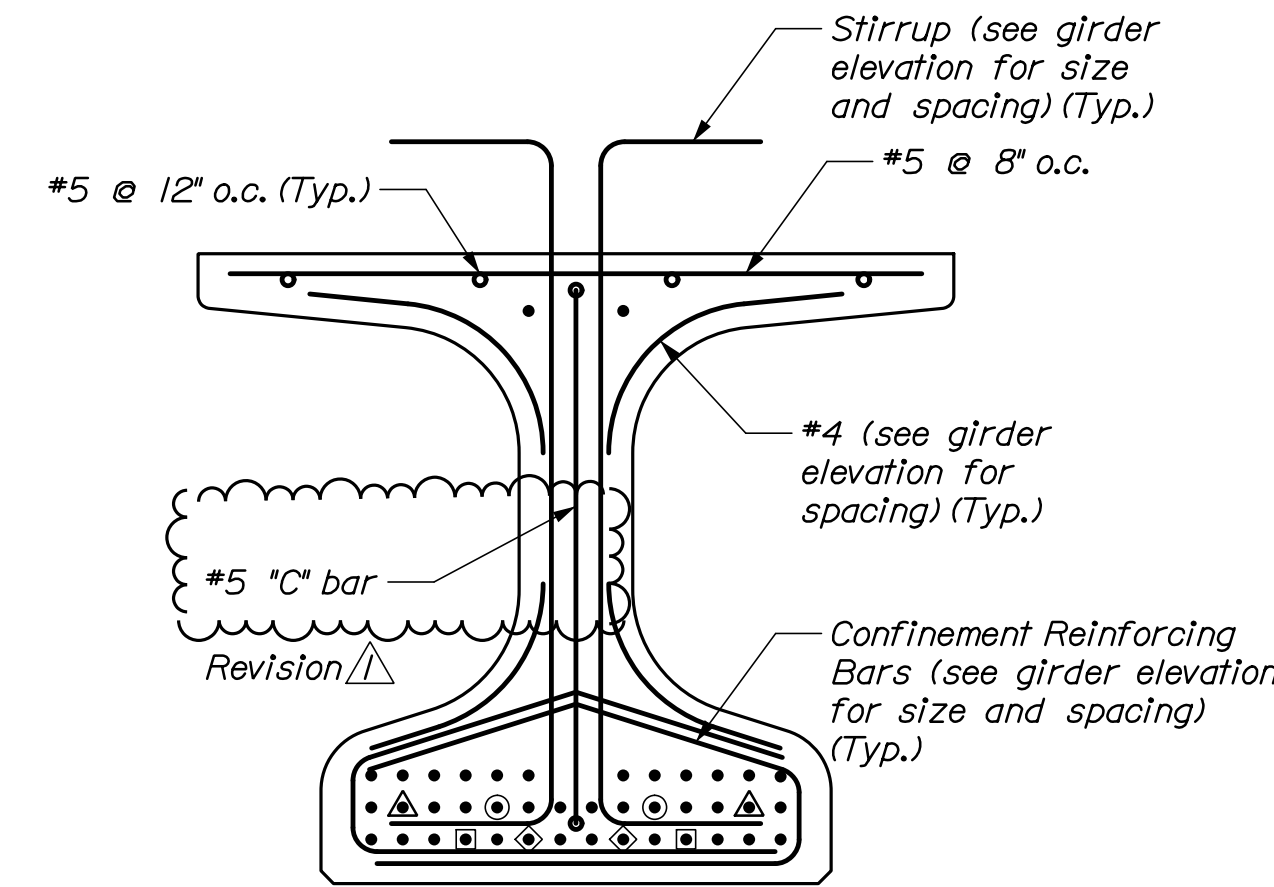


**NEBT 39 PRECAST GIRDER - G2 AND G3**

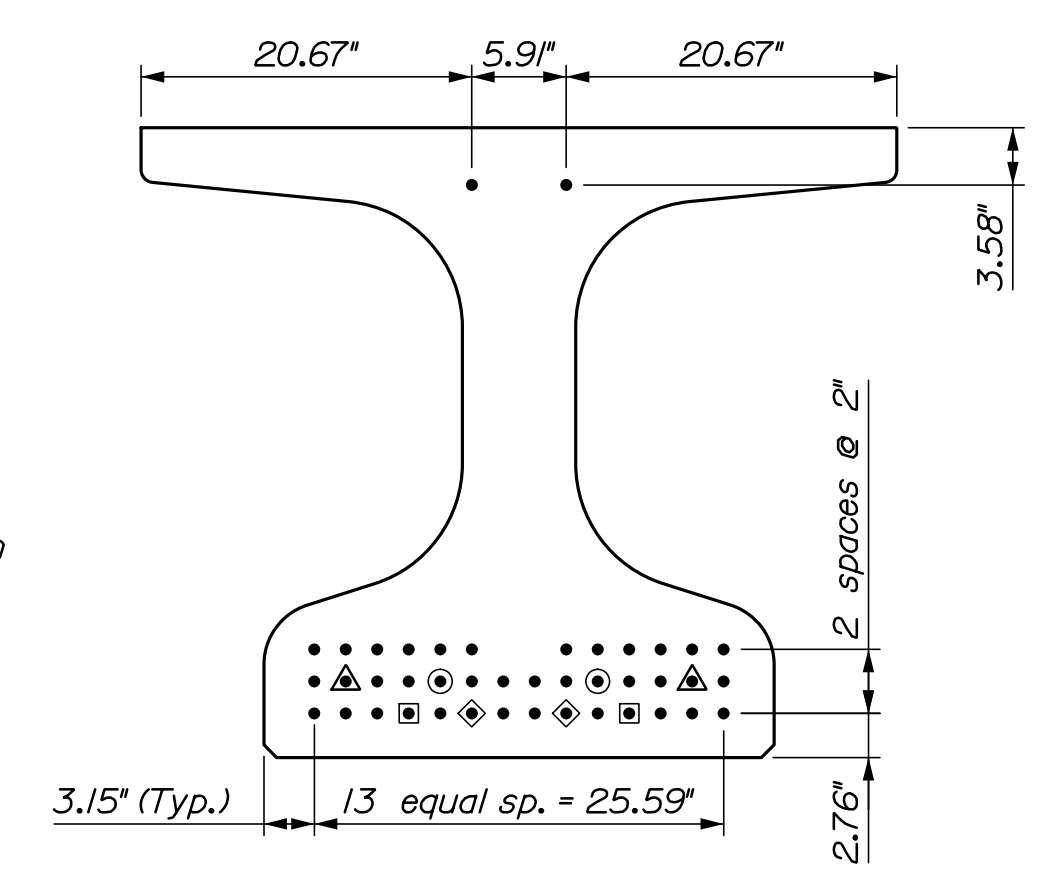
Reinforcing layout  
Vertically Exaggerated for Clarity  
(All bars #4 unless otherwise noted)



**TYPICAL GIRDER SECTION**  
NEBT 39



**GIRDER REINFORCING**  
G2 AND G3



**PRESTRESSING STRANDS**  
G2 AND G3

- PRESTRESSING LEGEND**
- ~ Steel Reinforcing
  - ~ Strand
  - ▲ ~ Debonded Strand 6' at Each End
  - ~ Debonded Strand 8' at Each End
  - ~ Debonded Strand 20' at Each End
  - ◆ ~ Debonded Strand 25' at Each End

All Strands ~ 0.6"φ  
f'ci = 6.5 ksi Span = 85'  
f'c = 8.0 ksi One diaphragm @ midspan

STATE OF MAINE		DATE	
DEPARTMENT OF TRANSPORTATION		12/17	SIGNATURE
WIN 18970.00		12/17	P.E. NUMBER
BRIDGE NO. 5007		05/18	DATE
BRIDGE PLANS			
LISBON CENTER BRIDGE		PROJ. MANAGER	J. Kirtledge
SABATTUS RIVER		DESIGN-DETAILED	R. Nopous
ANDROSCOGGIN		CHECKED-REVIEWED	HNTB
LISBON		DESIGN-DETAILED 2	
BEAM DETAILS 2		DESIGN-DETAILED 3	
		REVISIONS 1	Beam End Reinforcing
		REVISIONS 2	
		REVISIONS 3	
		REVISIONS 4	
		FIELD CHANGES	
SHEET NUMBER			
37			
OF 53			