

1:1 = FULL SCALE

UNIVERSITY OF MAINE SYSTEM OF COLLEGES - MAINE BUREAU OF PARKS AND LANDS - LANDSCAPE ARCHITECTURE DIVISION

AUGUST 2011



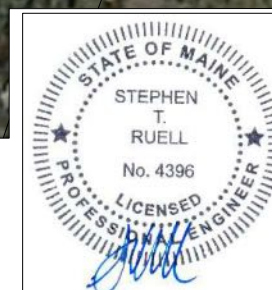
Maine Bureau of Parks and Lands  
 REID STATE PARK, Georgetown, Maine  
**GRIFFITH HEAD BRIDGE  
 RECONSTRUCTION**

**APPENDIX A  
 PLANS**

- Sheet 1 Bridge Site Plan
- Sheet 2 Bridge Plan and Elevation
- Sheet 3 Demolition Plan
- Sheet 4 Bridge Deck Framing Plan
- Sheet 5 Bridge Cross Section
- Sheet 6 Bridge Details at Supports
- Sheet 7 Bridge Sections
- Sheet 8 Sidewalk Ramp Detail
- Sheet 9 Timber Schedule

Reference Drawing "Bridge  
 Reconstruction at Griffith Head"  
 R-109 dated 12-1-1965

**ISSUED FOR BID**



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DATE REVISED 8-17-2022

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 GRIFFITH HEAD BRIDGE RECONSTRUCTION

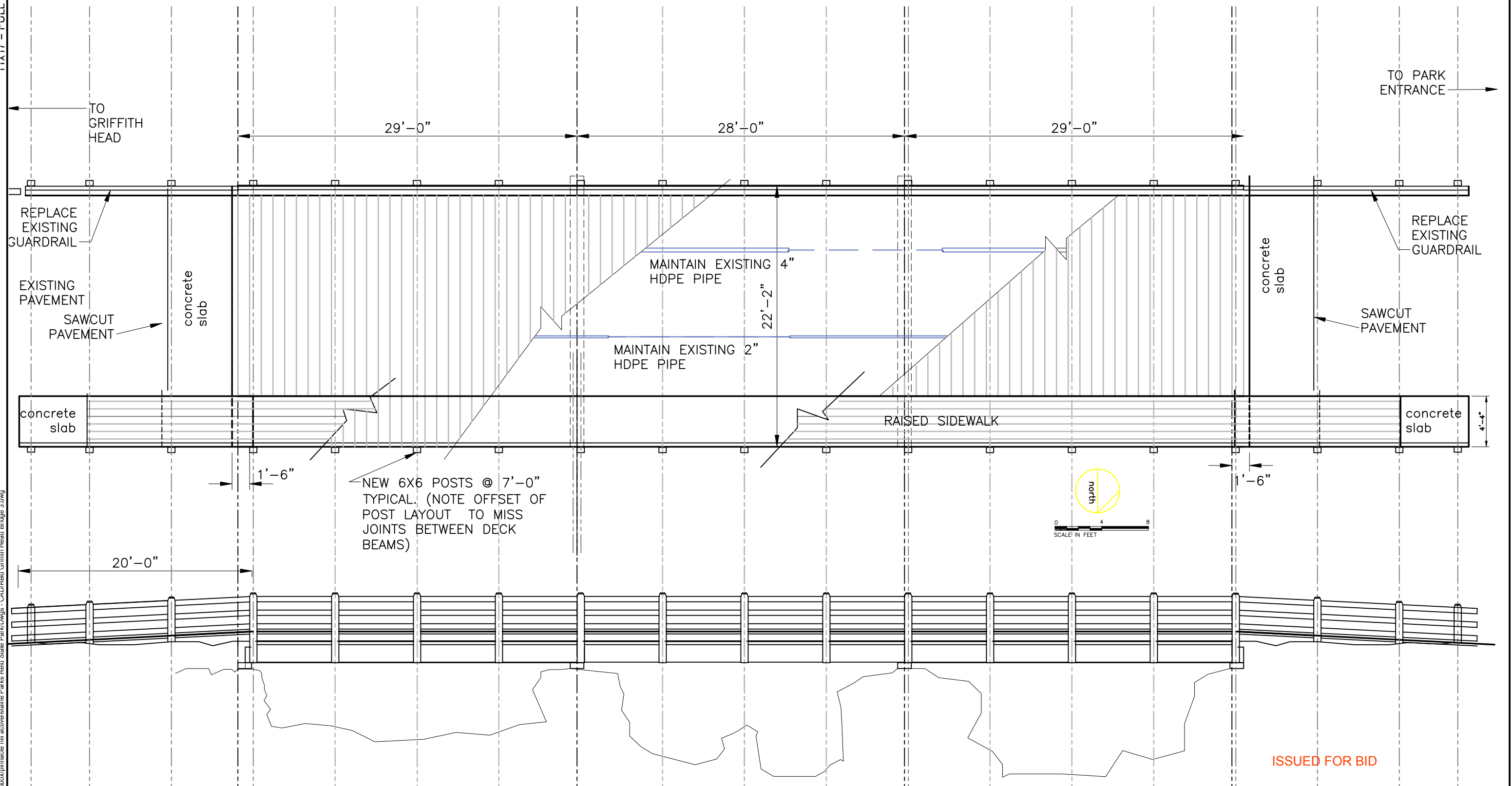
**Bridge Site Plan**

**Pinnacle Hill Engineering**  
 33 Pinnacle Road  
 Canaan, ME 04924  
[PinnacleHillEngineering@gmail.com](mailto:PinnacleHillEngineering@gmail.com)

1  
REV. O

BGS Project No. PT 3207





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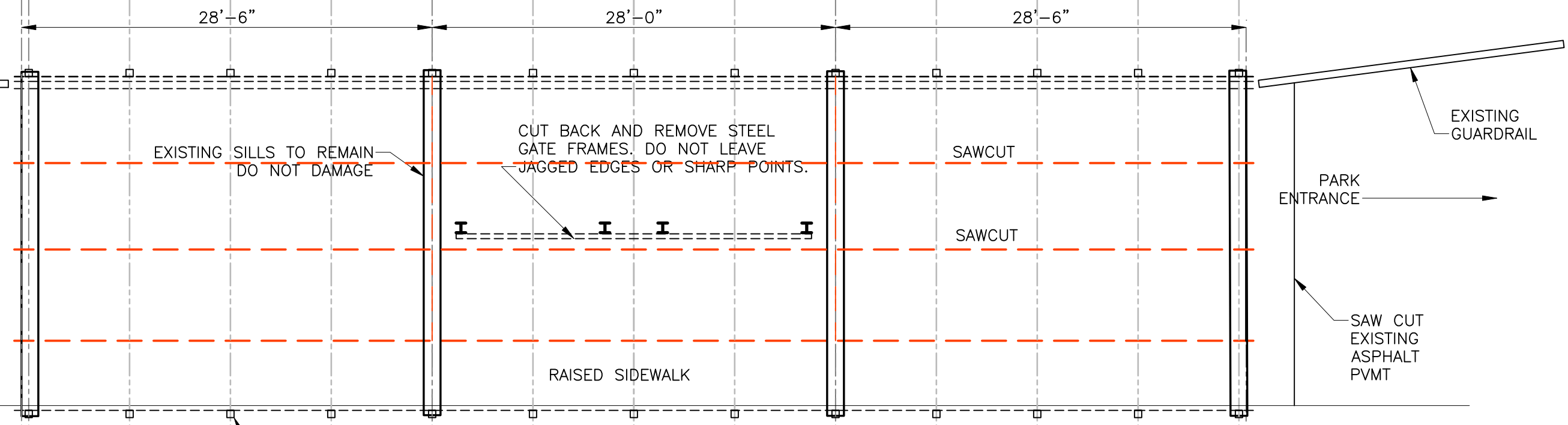
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### Bridge Plan and Elevation

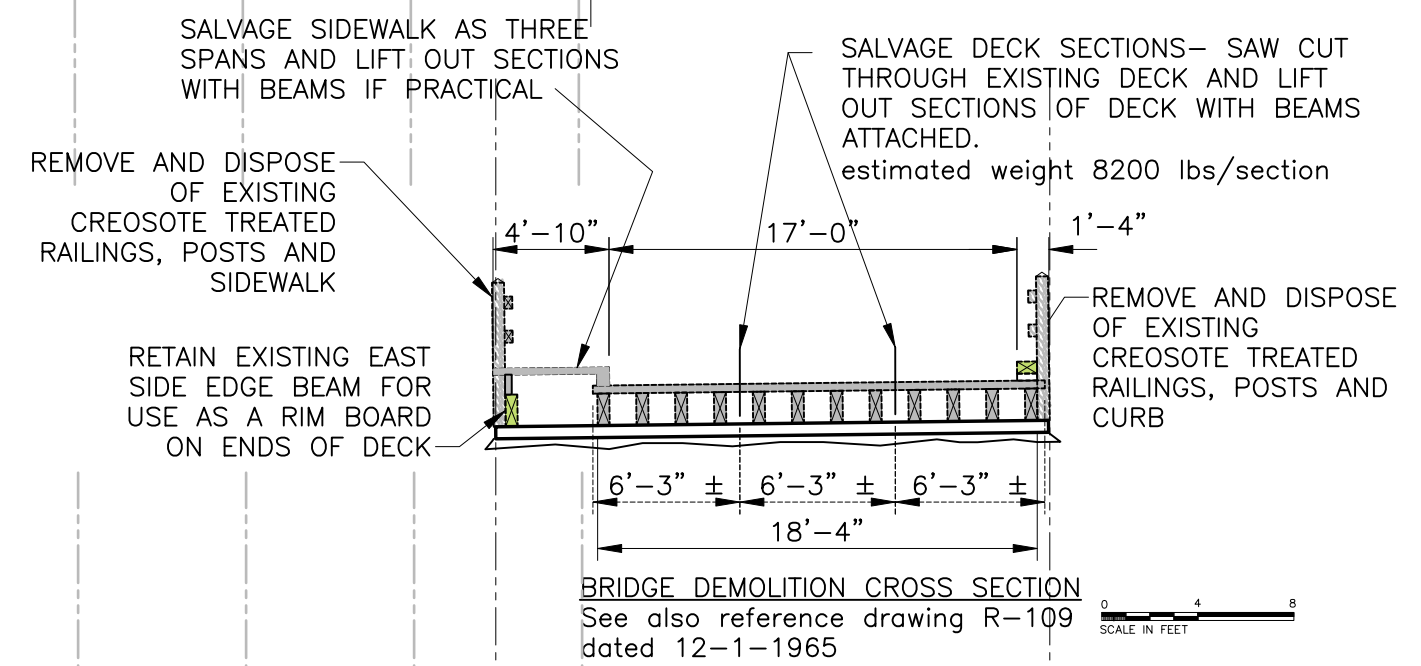
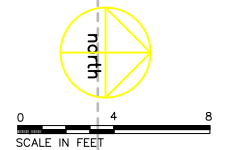
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Canaan, ME 04924  
PinnacleHillEngineering@gmail.com

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6X6  
POSTS  
TYPICAL

## DEMOLITION PLAN



## BRIDGE DEMOLITION CROSS SECTION

See also reference drawing R-109  
dated 12-1-1965

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## DEMOLITION ELEVATION

STATE OF MAINE  
STEPHEN  
T.  
RUELL  
No. 4396  
LICENSED  
PROFESSIONAL  
ENGINEER

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ENGINEERING  
PinnacleHillEngineering@gmail.com

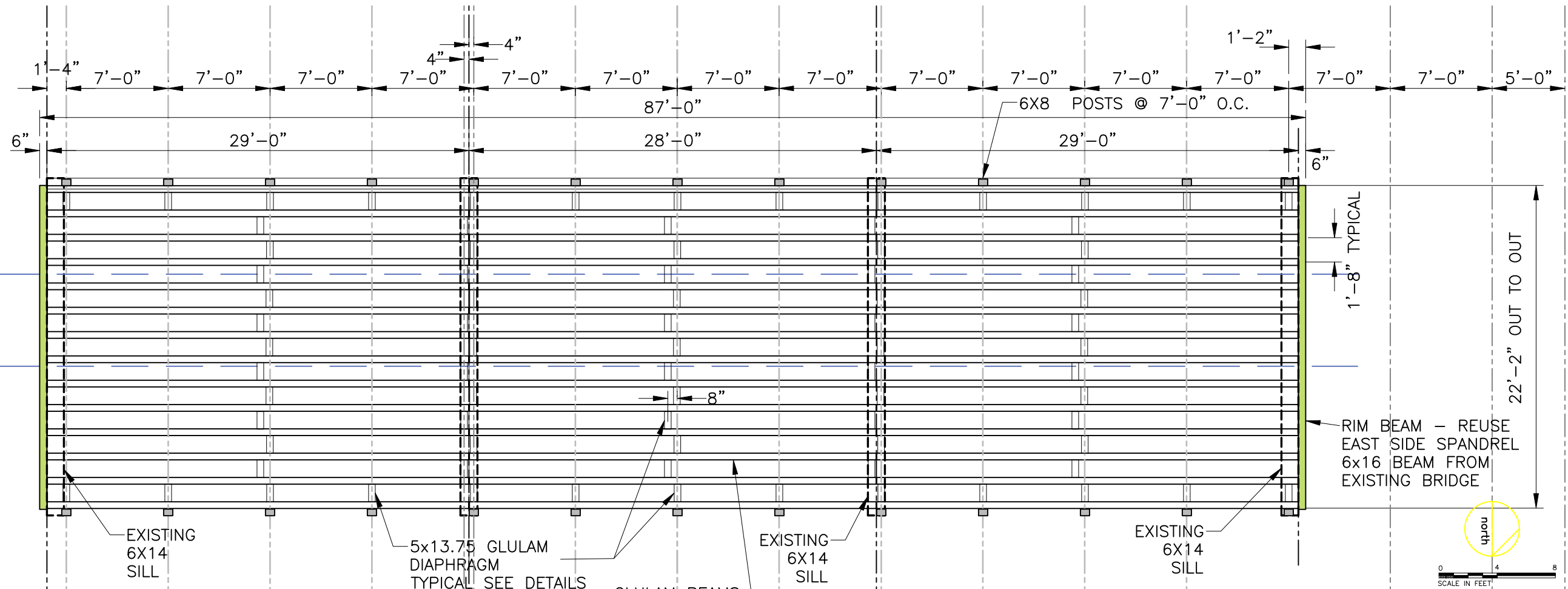
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### Demolition Plan

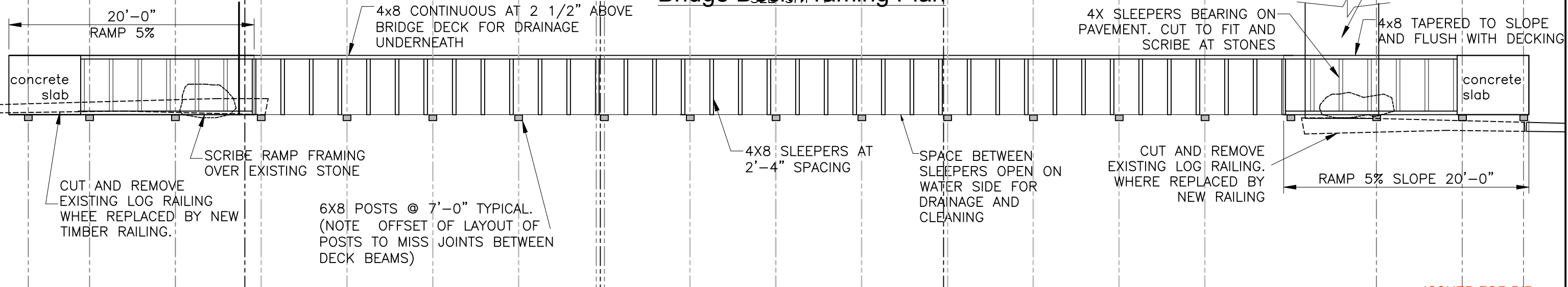
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**Bridge Deck Framing Plan**



**Sidewalk Deck Framing Plan**

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**Bridge Deck Framing Plan**

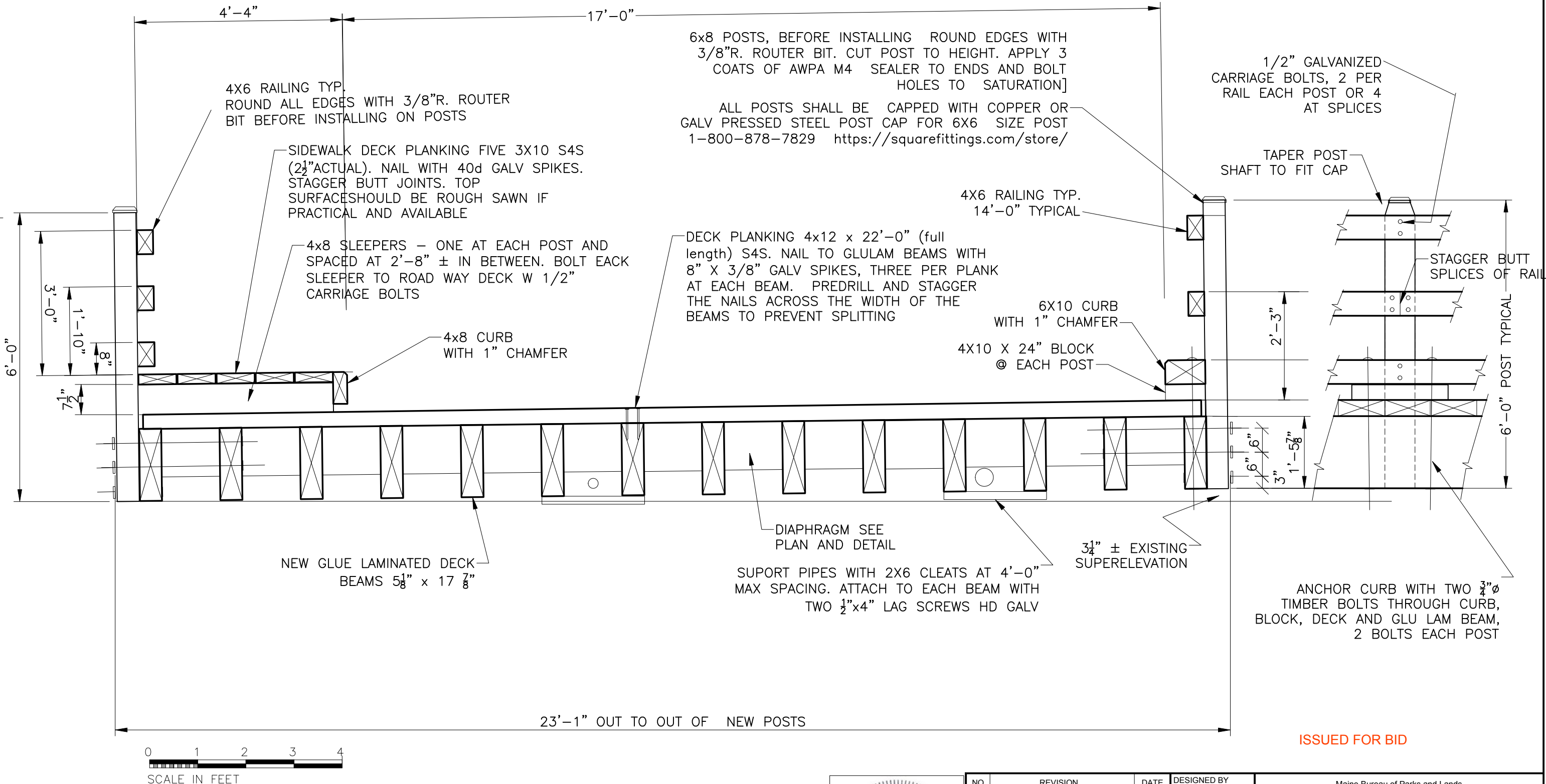
**PINNACLE HILL ENGINEERING** 33 Pinnacle Road  
Canaan, ME 04924  
PinnacleHillEngineering@gmail.com

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BGS Project No. PT 3207

11.11.17 - FULL SCALE

UNIVERSITY OF MAINE GEORGETOWN CAMPUS - LANDSCAPE ARCHITECTURE - GRADUATE STUDENT DESIGN JURY



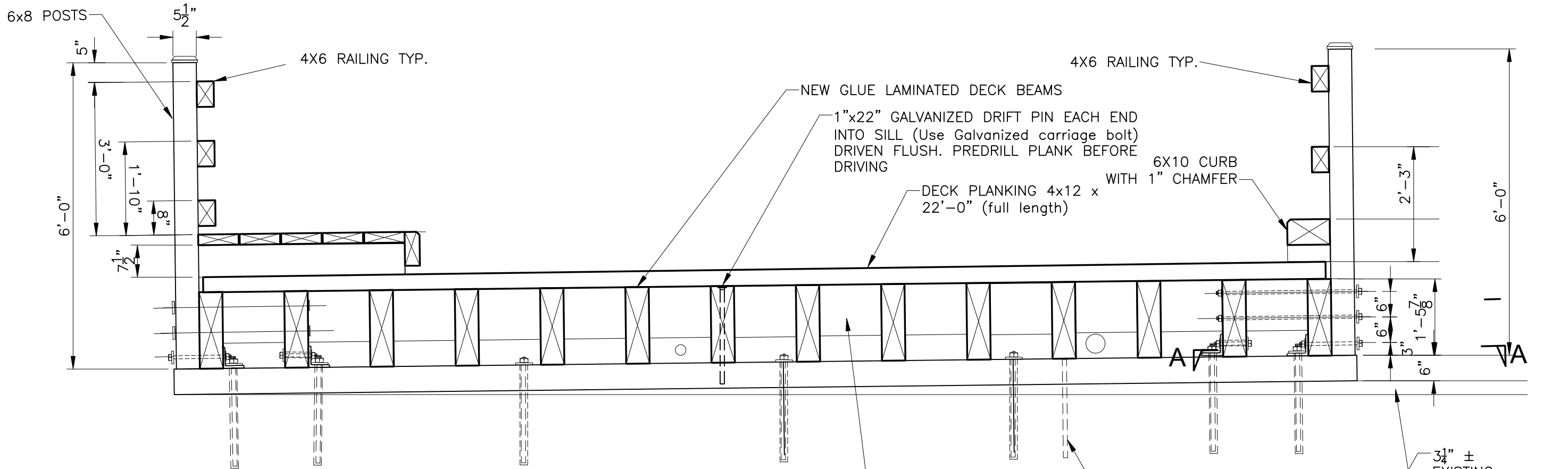
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### Bridge Cross Section



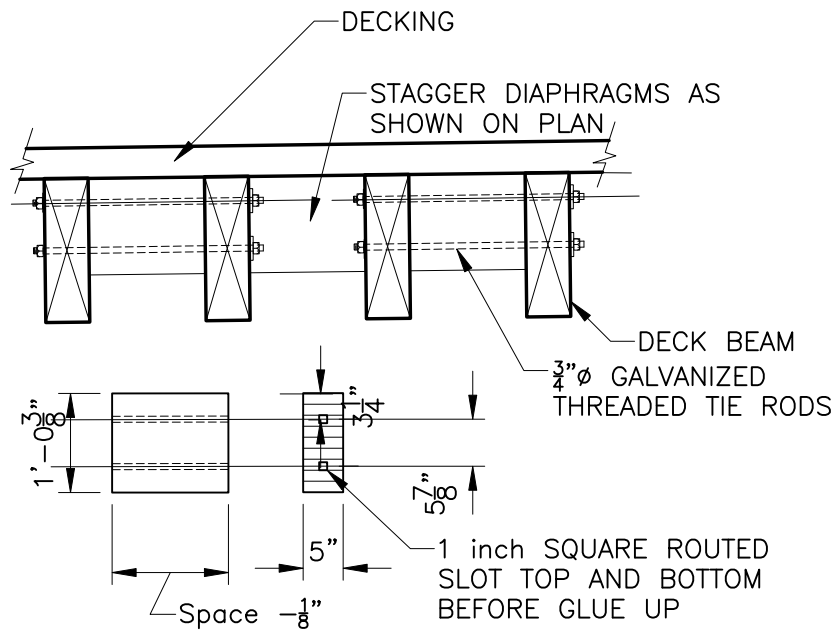
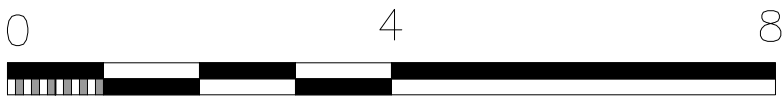
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PINNACLE HILL ENGINEERING 33 Pinnacle Road Canaan, ME 04924 <a href="mailto:PinnacleHillEngineering@gmail.com">PinnacleHillEngineering@gmail.com</a>	
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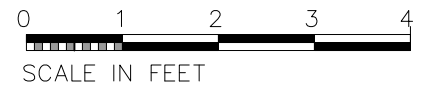


AT EACH SUPPORT DRILL AND GROUT 7 NEW 1"  $\phi$  X 24" GALVANIZED ANCHOR BOLTS WITH FOUR NEW L5x5x1/2" x 24" GALV CLIP ANGLES. ATTACH OUTSIDE BEAM PLUS NEXT INNER ONE. REMAINDER OF SILL INSTALL NEW ANCHORS AT 4'-6"  $\pm$  FT SPACING. ADJUST LOCATIONS TO BEST FIT STONE CONFIGURATION AND SEPARATED FROM EXISTING ANCHOR BOLTS BY AT LEAST 6".

### Bridge Cross Section at Supports



### Detail of Diaphragms



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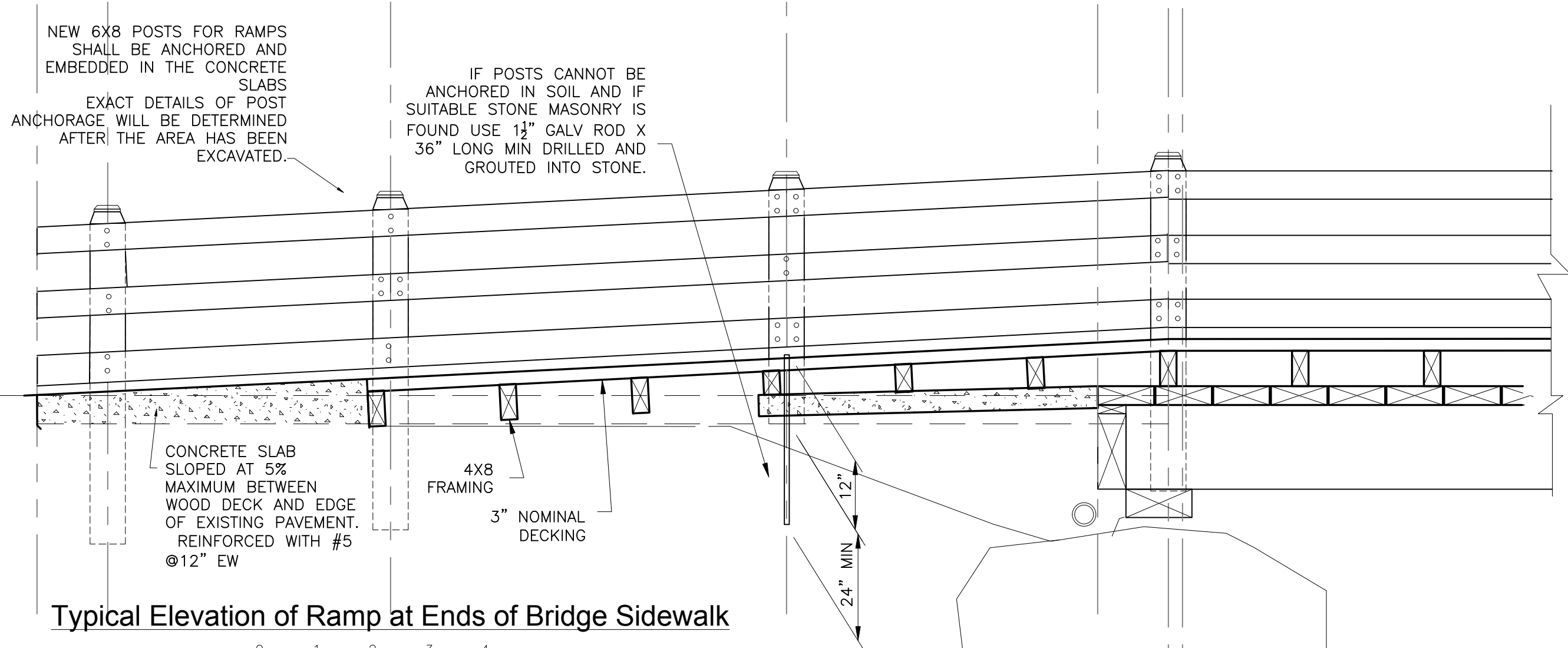
**Pinnacle Hill Engineering**  
 33 Pinnacle Road  
 Canaan, ME 04924  
 PinnacleHillEngineering@gmail.com

### Bridge details at Supports

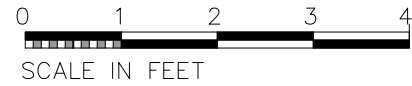
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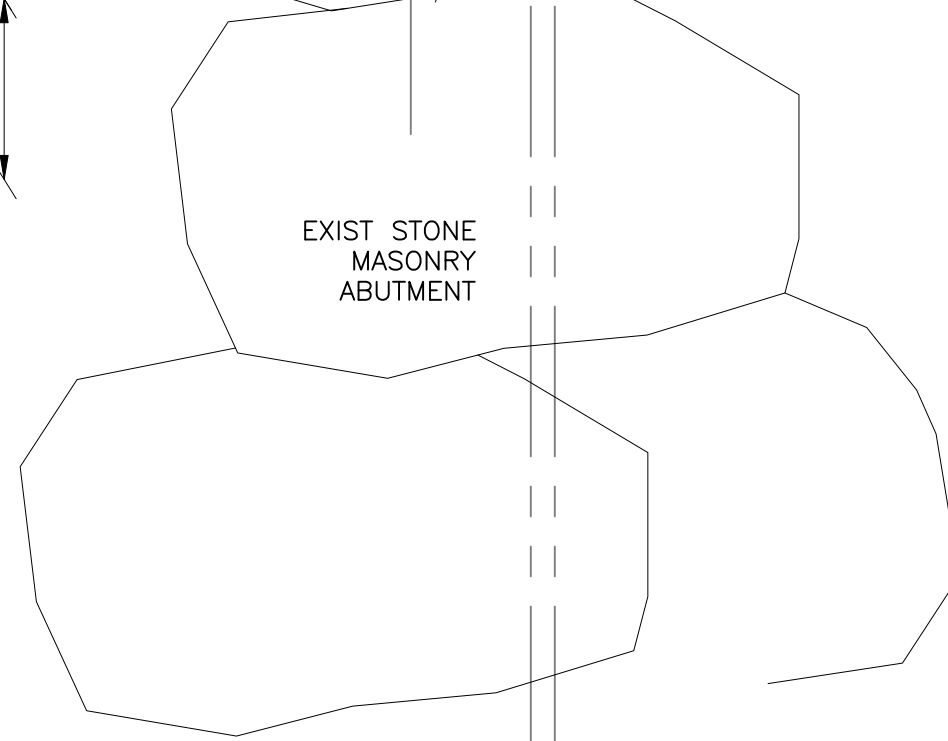


**Typical Elevation of Ramp at Ends of Bridge Sidewalk**



**CONCRETE NOTES**

- All concrete is placed directly against rock surfaces cleaned to remove dirt or loose rock.
- Concrete: 4000 psi @ 28 days, air entrained 5% to 7%
- Reinforcement: 60,000 psi, ASTM A615, epoxy coated
- Rebar cover: 2" unless noted otherwise
- Grout for embedded dowels shall be selected by Contractor, suitable for the particular application and location, and subject to approval of Owner/Owner's representative. Drill hole diameter shall be per manufacturers instructions for the grout used. For dowels that will be subject to tides, rain or spray during installation, use a system that is not sensitive to moisture in the drill holes.  
Acceptable products include, subject to Engineer's review
  - Two part epoxy in self mixing cartridges such as Hilti HY-200 or equivalent
  - Non-shrink, non metallic cementitious grout such as Five Star Grout
  - SikaGrout 212 General Purpose Cementitious Grout. [0.00% shrinkage at early stage and hardened set. Minimum strength 5000 psi at 7 days per ASTM C-109]
  - Polyester resin structural grout such as Kelken Keligrout
- Moist cure minimum of 7 days. conform to ACI 301 and ACI 318 For construction methods, and placement specifications. do not use liquid curing agents which will inhibit bond of future floor coatings as designated by the owner.
- Unless noted otherwise provide 3/4" chamfer on all exposed edges.
- Vertical concrete surfaces shall have a smooth formed finish. Horizontal concrete surfaces shall have a broom finish (U.N.O.). Sidewalk surfaces shall be flush with decking and other existing surfaces to meet ADA guidelines.



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Canaan, ME 04924  
PinnacleHillEngineering@gmail.com

**Sidewalk Ramp Detail**

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# TIMBER SCHEDULE

ITEM	SIZE	SPECIES AND GRADE	TREATMENT USE GROUP	TYPE	CONNECTIONS
SILLS	6" X14" ACTUAL	EXISTING		EXISTING CREOSOTE TREATED TIMBER	ANCHOR BOLTS
DECK BEAMS	5 $\frac{1}{8}$ " x 17 $\frac{7}{8}$ " finished size	SO. PINE GLULAM 24F-V3	UC5A	PENTACHLOROPHENOL TYPE C 0.60 pcf	1" x 22" DRIFT PINS
RIM BEAM	6x16	Reuse existing deck beam		EXISTING CREOSOTE TREATED TIMBER	1/2" x 12" DRIFT PINS
DIAPHRAGM Btwn DECK BEAMS	5" OR 5 $\frac{1}{8}$ "x12 $\frac{3}{8}$ "	SO. PINE GLU-LAM 24F-1.8E	UC5A	PENTACHLOROPHENOL TYPE C 0.60 pcf OR CCA 1.5 pcf	
BRIDGE DECK	4X10 OR 4X12 NOMINAL	SO. PINE COMMERCIAL DECKING	UC5A	CCA 1.5 pcf	SEE SECTIONS
SIDEWALK FRAMING	4X8 NOMINAL	SO. PINE NO. 2	UC4B	WATERBORNE, COPPER BASED, SEE NOTES	SEE SECTIONS
SIDEWALK DECKING	3X8 or 3x10 Nominal	SO. PINE COMMERCIAL DECKING	UC4B	WATERBORNE, COPPER BASED, SEE NOTES	SEE SECTIONS
SIDEWALK FACE	4x8 NOMINAL	SO. PINE NO. 2	UC4B	WATERBORNE, COPPER BASED, SEE NOTES	SEE SECTIONS
CURB	6X10 NOMINAL	SO. PINE NO. 2	UC4B	WATERBORNE, COPPER BASED, SEE NOTES	SEE SECTIONS
CURB BLOCKING	4X10 NOMINAL	SO. PINE NO. 2	UC4B	WATERBORNE, COPPER BASED, SEE NOTES	SEE SECTIONS
GUARDRAIL POSTS	6X8 NOMINAL	SO. PINE NO. 1	UC4B	WATERBORNE, COPPER BASED, SEE NOTES	SEE SECTIONS
RAILS	4X6 NOMINAL	SO. PINE NO. 1	UC4B	WATERBORNE, COPPER BASED, SEE NOTES	SEE SECTIONS

**NOTES**

WATERBORNE, COPPER BASED PRESERVATIVE SHALL BE ONE OF THE FOLLOWING:  
 COPPER AZOLE (CA-C) - 0.31 PCF  
 DISPERSED OR MICRONIZED COPPER (uCA-C, MCA,MCQ) 0.15 PCF

PROVIDE RETENTION LEVELS FOR THESE PRESERVATIVES TO MEET THE REQUIREMENTS OF THE USE GROUP SPECIFIED.

ALKALINE COPPER (ACD, ACQ-C, ACQ-D, KDS,KDS-B) 0.50 PCF -BUT MAY NOT BE USED UNLESS CONTRACTOR USES STAINLESS FASTENERS AT HIS EXPENSE.

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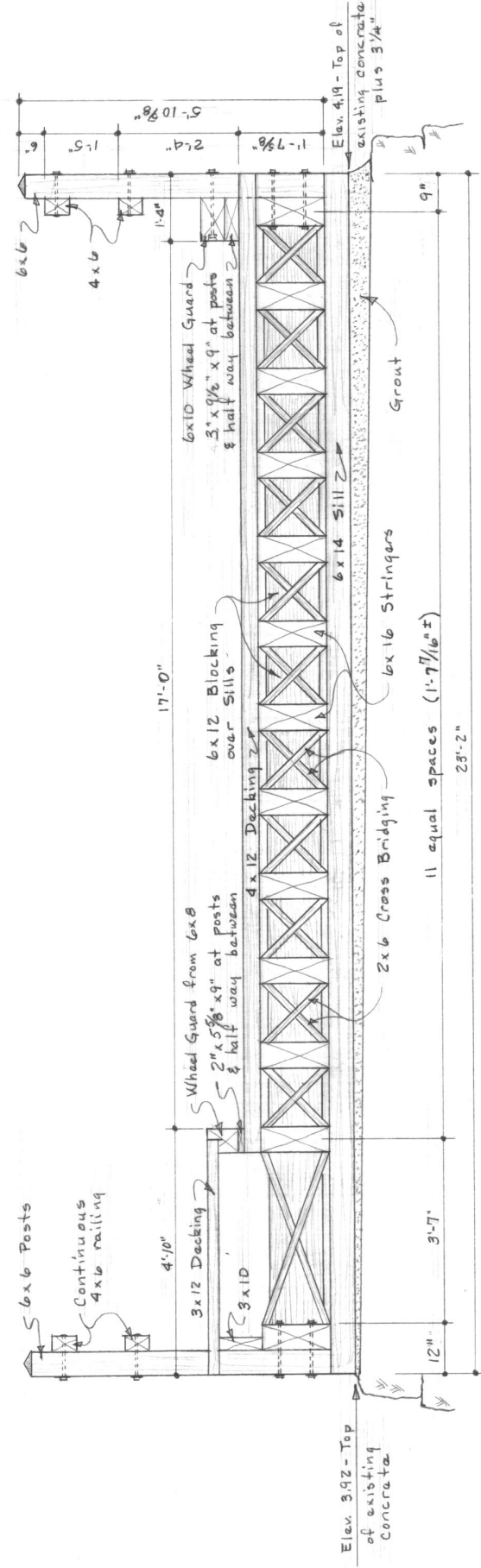
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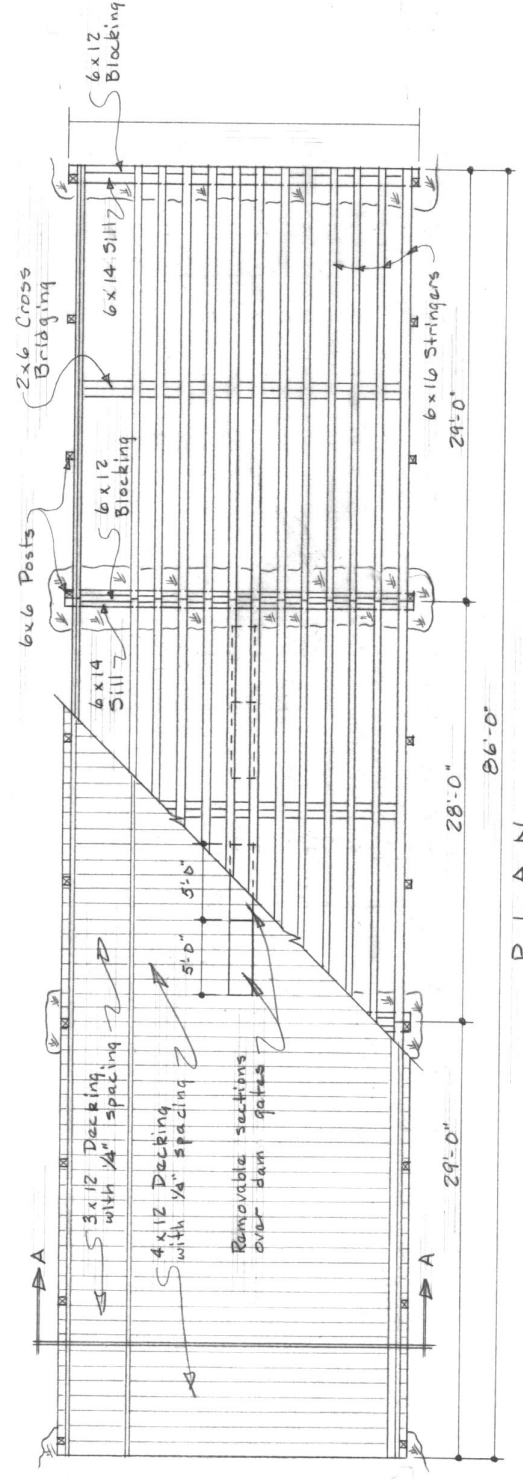
## TIMBER SCHEDULE

**Pinnacle Hill Engineering**  
 33 Pinnacle Road  
 Canaan, ME 04924  
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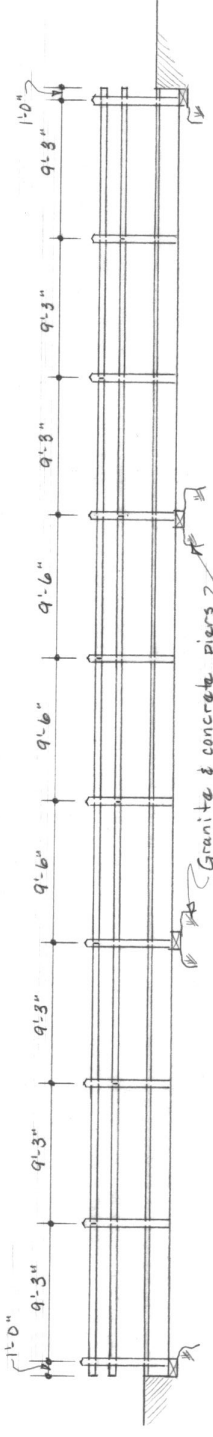
PROJECT NO. 2022-001 - REID STATE PARK, GEORGETOWN, MAINE - BRIDGE RECONSTRUCTION - CIVIL ENGINEERING - 08/17/2022 - SIGNED: STEPHEN T. RUELL, P.E. - LICENSE NO. 4396



SECTION A-A  
1/2" = 1'-0"



PLAN



ELEVATION  
1/8" = 1'-0"

GENERAL NOTES:

1. Salvage all pins, bolts, & hardware for use in new bridge.
2. Note that new deck is super-elevated 3/4" in entire width. This will require re-bedding of the new 6x14 sills and countersinking some of the the anchor bolt nuts. Use a mixture of 1 part of sand for bedding of sill.
3. Secure all stringers to sills with 3/4" x 21" galv. drift pins.
4. Adjacent courses of decking shall break joints by at least the spacing of two stringers. Secure decking with two drive spikes at each joint.
5. Predrill all holes for pins & spikes 1/16" undersize. Predrill all bolt holes the size of bolt.
6. Removable sections of deck over dam gates shall be made up using 2-2x6 cleats lengthwise with 3/8" x 6 1/2" galv. carriage bolts.
7. In all cases where treated lumber is cut or drilled, the cuts and holes shall be hand treated with 5% pentachlorophenol.
8. Replace existing log guardrail on bridge approaches as detailed on a separate sheet.
9. If may be necessary to shim stringers with cedar shingles to provide even bearing for decking.

MAINE STATE PARK AND RECREATION COMMISSION Augusta, Maine		Scale: As Shown
Drawn by F. M. B.	BRIDGE RECONSTRUCTION	Job No. R-109
Designed by	AT GRIFFITH HEAD	Plan No.
Checked by C.N.M.	REID STATE PARK	Date: 12-1-65
	Georgetown, Maine	