



1 PRECAST ABUTMENT & WING WALL LAYOUT  
 F1  
 1/4" = 1'-0"

- ### ABUTMENT GENERAL NOTES
- MIN. CONCRETE STRENGTH AT 28 DAYS SHALL BE 5,000 PSI.
  - MIN. CONCRETE STRENGTH FOR HANDLING SHALL BE 3,500 PSI (UNLESS NOTED OTHERWISE).
  - REINFORCING STEEL SHALL BE GR-250, ASTM A955 M, STAINLESS STEEL (2304 DUPLEX UNS-S32304) (AS NOTED ON SHOP DRAWINGS).
  - THE TOP OF ABUTMENTS SHALL RECEIVE A RAKE FINISH ROUGHENED TO 1/4" AMPLITUDE (UNLESS NOTED OTHERWISE).
  - ABUTMENTS SHALL BE HANDLED AND ERECTED USING THE LIFTING LOOPS ONLY. RIGGING SHALL BE CONFIGURED SUCH THAT EQUAL FORCES ARE APPLIED TO EACH OF THE LIFTING LOOPS AT EACH END OF THE ABUTMENT. THE MINIMUM SLING ANGLE FROM THE FROM THE HORIZONTAL SHALL BE 60°. THE PINS OF THE SHACKLES SHALL BE PLACED THROUGH THE LIFTING LOOP. ABUTMENTS SHALL BE STORED AND TRANSPORTED WITH TIMBER SUPPORTS WITHIN 2'-0" OF THE ABUTMENTS ENDS, UNLESS APPROVED BY J.P. CARRARA & SONS, INC.
  - MATERIAL SPECIFICATION AND MIX DESIGN SHALL CONFORM TO VERMONT SPEC. **PC-40.02** AND **PC-40.05** RESPECTIVELY.  
 DESIGN MIX: J.P.C. BRIDGE MIX #445 M5CC  
 AIR: 5% - 8%  
 SLUMP: 20" - 28"  
 APPROVAL DATE: FEB. 22, 2017
  - QUALITY CONTROL PROCEDURES ARE IN ACCORDANCE WITH PCI REQUIREMENTS. J.P. CARRARA & SONS, INC. IS A PCI CERTIFIED PLANT.
  - CURING METHOD: AS SOON AS THE TOP OF THE ABUTMENTS ARE FINISHED A COVER OF POLY WILL BE PLACED OVER THE UNITS IN A MANNER THAT WILL NOT DISTURB THE FINISH. THE TEMPERATURE SHALL BE RECORDED BY AUTOMATIC SENSOR INSTRUMENT ON GRAPH CHART AND WILL CONTINUE UNTIL DESIGN STRENGTH IS ACHIEVED. THE CHART SHALL BE MARKED AND PROVIDED TO THE QA INSPECTOR. THE UNITS SHALL NOT BE EXPOSED TO A TEMPERATURE DIFFERENTIAL BETWEEN THE SURFACE OF THE HARDENED CONCRETE AND THE AMBIENT STORAGE ENVIRONMENT OF GREATER THAN 40°F AT ANY TIME. UNITS SHALL NOT BE EXPOSED TO AMBIENT TEMPERATURES LESS THAN 36°F UNTIL THE DESIGN STRENGTH IS ACHIEVED.
  - ABUTMENT POST-TENSIONING SEQUENCE:  
 A. ERECT PRECAST CONCRETE ABUTMENTS, AND POST-TENSION CENTER TENDON TO APPROXIMATELY 5,000 LBS.  
 B. GROUT SHEAR KEY.  
 C. ONCE SHEAR KEY GROUT HAS ATTAINED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI; POST-TENSION TENDONS TO 32,000 LBS.
  - DUNNAGE IS LOCATED UNDER LIFTER POSITIONS.
  - THE CORRUGATED STEEL PIPE SHALL MEET THE REQUIREMENTS OF SUBSECTION 71.01 AND SHALL BE GALVANIZED PER SUBSECTION 726.05 OF THE VACT STANDARD SPECIFICATIONS.

- ### WING WALL GENERAL NOTES
- MIN. CONCRETE STRENGTH AT 28 DAYS SHALL BE 5,000 PSI.
  - MIN. CONCRETE STRENGTH FOR HANDLING SHALL BE 3,500 PSI (UNLESS NOTED OTHERWISE).
  - REINFORCING STEEL SHALL BE GR-250, ASTM A955 M, STAINLESS STEEL (2304 DUPLEX UNS-S32304) (AS NOTED ON SHOP DRAWINGS).
  - THE TOP OF WING WALLS SHALL RECEIVE A SMOOTH SCREED FINISH (UNLESS NOTED OTHERWISE).
  - WING WALLS SHALL BE HANDLED AND ERECTED USING THE LIFTING INSERTS ONLY. THE MINIMUM SLING ANGLE FROM THE HORIZONTAL SHALL BE 60°. WING WALLS SHALL BE STORED & TRANSPORTED WITH TIMBER SUPPORTS AT 8th POINTS, UNLESS APPROVED BY J.P. CARRARA & SONS, INC.
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  - DUNNAGE IS LOCATED UNDER LIFTER POSITIONS.

Vermont Agency of Transportation  
**RECEIVED**

CK'D BY \_\_\_\_\_ OK'D BY G. ROY  
 March 14, 2017  
 RESUBMIT NO \_\_\_\_\_ Approved  
 BY C. CARLSON DATE 03/15/2017

3/14/17 REVISED AS PER ENGINEERS COMM. T.D.  
 2/24/17 REVISED AS PER ENGINEERS COMM. T.D.

APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer <small>2164 CASE ST., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010</small>	A.L. ST. ONGE CONTRACTOR MONTGOMERY, VERMONT
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF ORANGE		DATE: DEC. 21, 2016
TOWN OF BRADFORD VT 25B (RURAL MAJOR COLLECTOR) BRIDGE NO.: 1 PROJECT NO.: BF 0191 (29)		SCALE: NOTED
PRECAST ABUTMENT & WING WALL LAYOUT		CHKD: _____ DFTM: T.D. JOB NO: 23506-016
		DWG. NO: F1