



CONSTRUCTION LEADERS

LETTER OF TRANSMITTAL	
DATE: June 17, 2015	PCL JOB NO: 5515002
ATTN: Chris Barker	TRANSMITTAL NO: 079

To: **State of Vermont Agency of Transportation**
 One National Life Drive
 Montpelier, VT 05633-5001
 (802) 828-0053

Re: Hartford Lateral Slide
 Project No.: IM 091-2(79)
 Contract ID.: 12A132

County: Windsor PCL FILE NO: 5515002-044.3

WE ARE SENDING Attached Under separate cover via **Email & SP** the following:
 Shop drawings Prints Plans Samples Specifications
 Copy of Letter Change Order Other

COPIES	SPEC.	REVISION	DESCRIPTION
1	Spec. Prov. #109	3	Contractor-Fabricated Pre-Cast Concrete Structures

TRANSMITTED for as checked below:

For approval Approved as submitted Resubmit **1** Copies for approval
 For your use Approved as noted Submit Copies for distribution
 As requested Returned for corrections Return Corrected prints
 For review and comment

Remarks:

The included sheets have been revised per comments from the Agency dated 6/16/2015. The procedure to correct the leveling slabs has been removed from the QC processes and is included with the responses to the review comments.

Please return an email of this approved submittal to Erich Heymann (ewheymann@pcl.com) and Jeremy Mackling (jmackling@pcl.com).

We request the review and return of this submittal within **1 Day** . Please advise if this request cannot be met so we can plan accordingly.

By: **Erich Heymann**, Project Engineer

COPY TO: Project Files



CONSTRUCTION LEADERS

SUBMITTAL NO. : 44.3
Contractor-Fabricated Pre-Cast Concrete Structures

Item No.	Specification	Description
1	Spec. Prov. #109	Contractor-Fabricated Pre-Cast Concrete Structures

PROJECT:
HARTFORD LATERAL SLIDE
PROJECT NO.: IM 091-2(79)
CONTRACT ID.: 12A132

OWNER:
STATE OF VERMONT AGENCY OF TRANSPORTATION

ENGINEER OF RECORD:
STATE OF VERMONT AGENCY OF TRANSPORTATION

CONTRACTOR:
PCL CIVIL CONSTRUCTORS, INC.

JUNE 17, 2015

Approach Slab Quality Control Processes

1. Concrete Production

Prior to pouring of the permanent concrete for the approach slabs, concrete leveling slabs will be poured as bases. The approach slabs will be poured on top of a smooth surface.



Prior to concrete placement a pre-production meeting will be held between the Contractor, Resident Engineer and all inspection staff.

Concrete will be supplied by Carroll Concrete. The approved mix design is included for reference. Concrete will be inspected at the plant and again when it arrives on site to ensure that it meets all requirements of the specifications.

VTrans will be responsible for Quality Assurance Testing.

The Contractor will be responsible for making additional cylinders for early breaks. Cylinders will be broken by S.W. Cole Engineering, Inc.

Each approach slab will be marked with its unit number and date of casting.

Approach slabs will be inspected by both the Contractor and the Resident Engineer and documented.

- Minor defects will be repaired using an approved patch material from the VTrans APL. Minor defects are defined as holes, honeycombing, or spalls, which are 6" or less in diameter, that do not penetrate deeper than 1" into the concrete.
- Surface voids or "bugholes" that are less than 5/8" in diameter and less than 1/4" deep are not required to be repaired.
- Cracks less than .01" in width shall be sealed by a method approved by the Engineer. Cracks in excess of .01" may be cause for rejection.

Concrete tolerances: length – $\pm 1/4$ ", width – $\pm 1/4$ ", skew/squareness (plan) – $\pm 1/2$ ", depth – $\pm 1/4$ "



2. Formwork

Prior to pouring concrete all formwork will be inspected by the Contractor and Resident Engineer to ensure that it is installed per plan. Drawings and calculations are included for reference.



Formwork will be thoroughly cleaned and free of extraneous material such as dirt, loose chips, and dust from concrete surface. If compressed air is used, it will be free of oil.

Note: Prior to removal of forms the concrete must achieve 85% of design strength (4,250 PSI). Cure must be maintained for 7 days.



3. Reinforcing Steel

Prior to pouring concrete all reinforcing steel will be inspected by the Contractor and Resident Engineer to ensure that it is installed per the approved drawings.

All reinforcing steel will be clean from foreign material.



Reinforcing Steel Tolerances: reinforcing placement – $\pm 1/4$ ", cover – $\pm 1/4$ ", bar Spacing – ± 1 "

Note: All approach slab reinforcing steel shall be Level II or higher.

4. Concrete Finishing

The top surface of the approach slabs are to receive a "tined" finish.

5. Concrete Curing

Curing will take place immediately upon completion of finishing of the top surface. The approach slabs will be wetted and covered with visqueen/burlap for a minimum of 7 days.

6. Installation Procedure

The approach slabs will be cast on site in the medians between I-91 NB & I-91 SB. Drawings are included for reference.

Prior to installation, the keyways & surfaces to be bonded will be cleaned to remove any foreign material. 

During the closure weekend, the cranes will pick the approach slabs (one at a time) and walk down the medians back towards the abutments. Calculations for the lifting attachments and analysis of the approach slabs are included.

The cranes will then walk from the medians onto I-91 (NB/SB). Pending on the slope between the medians & I-91 (NB/SB), the approach slabs may need to be set down prior to walking onto the roadway. The cranes will then walk (with the approach slabs) towards the abutments and the approach slabs will be set in their final position.

 Note: Prior to moving the approach slabs the concrete must achieve 28 day design strength (5,000 PSI) and complete 7 day cure.

Note: Prior to setting the approach slabs the surface elevation of the backfill we be checked to ensure that it is level and at proper grade.