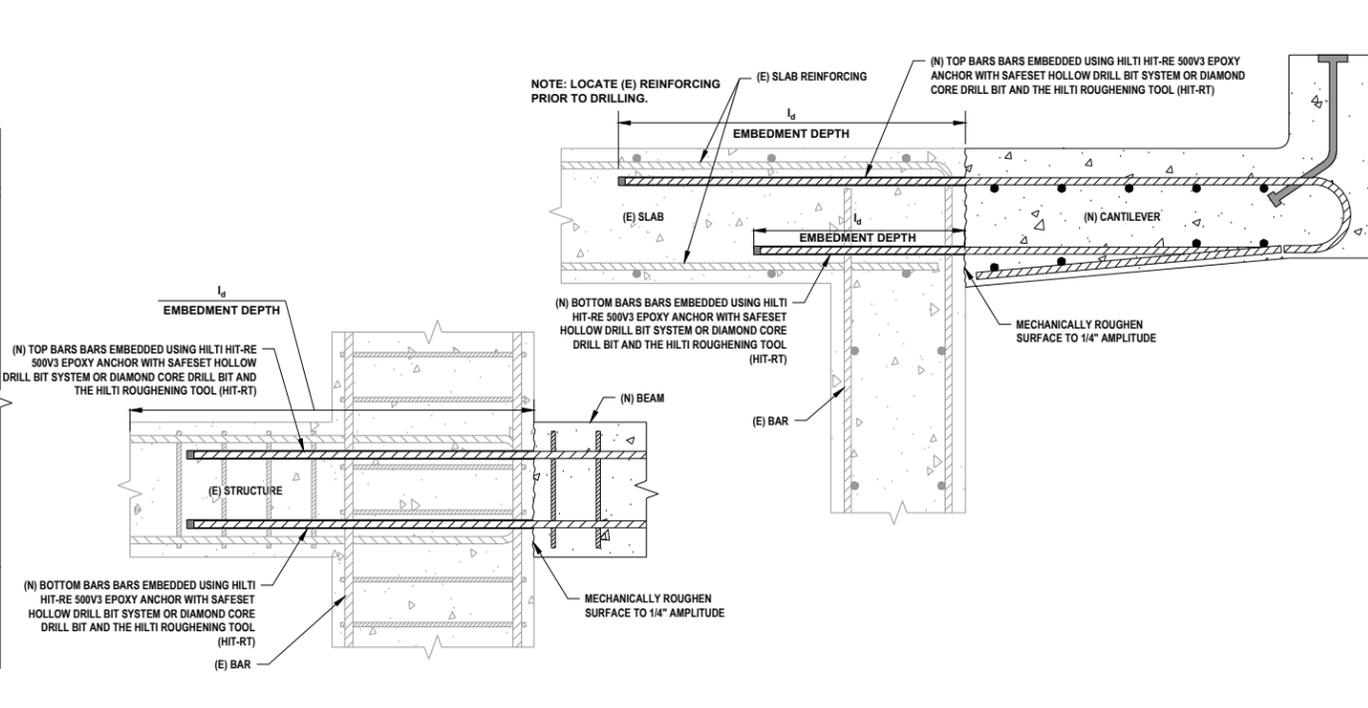
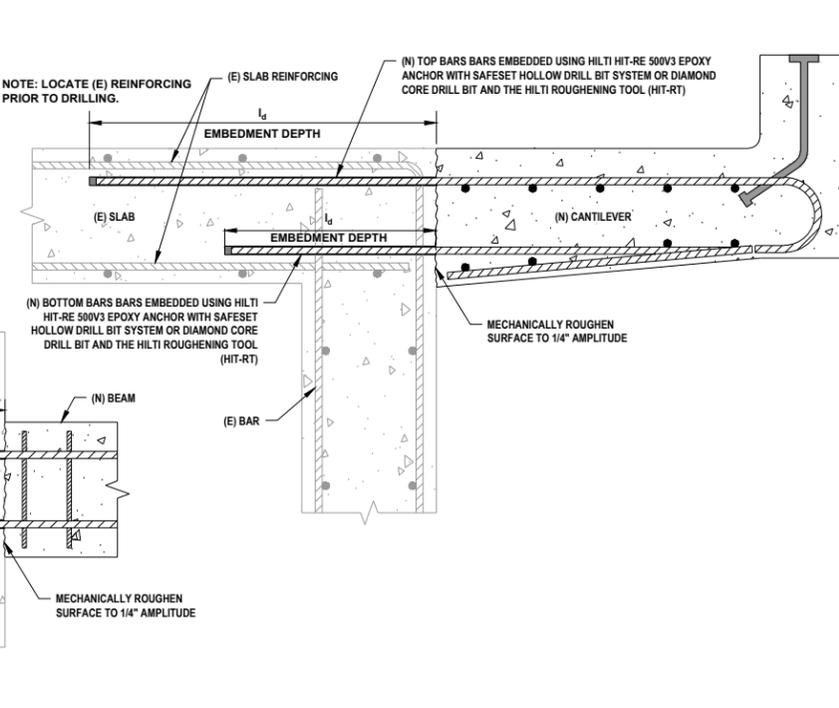


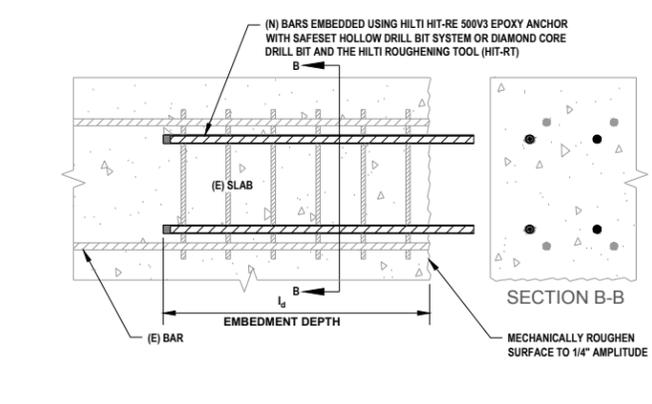
**1**  
R.0.1  
POST INSTALLED SHEAR DOWELS FOR NEW ONLAY SHEAR WALL  
NOT TO SCALE



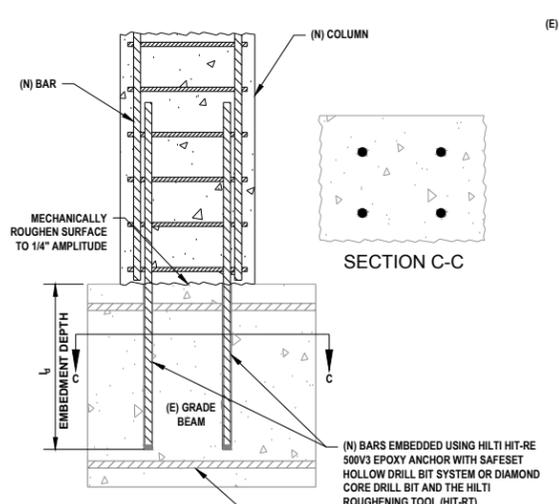
**2**  
R.0.1  
POST INSTALLED BAR DEVELOPMENT LENGTH IN SPECIAL MOMENT FRAME  
NOT TO SCALE



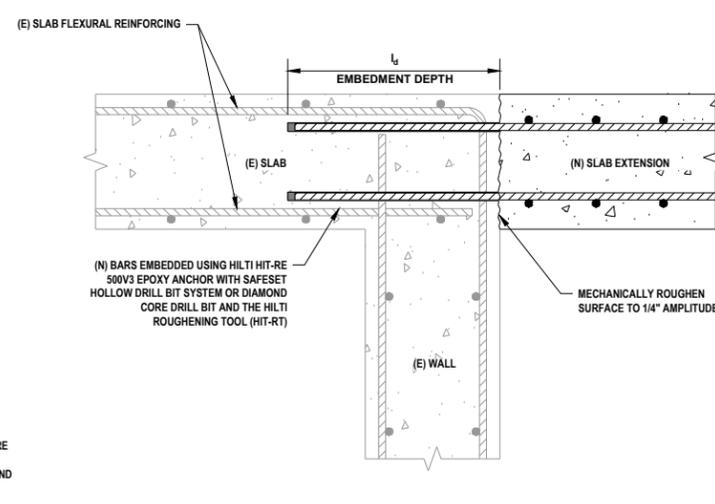
**3**  
R.0.1  
POST INSTALLED BAR TENSION LAP SPLICE FOR CANTILEVER SECTION  
NOT TO SCALE



**4**  
R.0.1  
POST INSTALLED BAR TENSION LAP SPLICE NEW SLAB TO EXIST SLAB  
NOT TO SCALE



**5**  
R.0.1  
STARTER BARS FOR COLUMN EXTENSION INTO EXISTING FOOTING  
NOT TO SCALE



**6**  
R.0.1  
TENSION LAP SPLICE FOR NEW SLAB INTO EXISTING SLAB/WALL  
NOT TO SCALE

**General Notes for Post-Installed Rebar**  
POST-INSTALLED REINFORCING BAR CONNECTIONS DESIGNED PER THE DEVELOPMENT AND SPLICE REQUIREMENTS OF CSA A23.3. POST-INSTALLED REINFORCING BAR CONNECTIONS SHALL CONSIST OF THE FOLLOWING EPOXY SYSTEMS AS PROVIDED BY HILTI, INC. CONTACT HILTI AT (800) 879-8000 FOR PRODUCT RELATED QUESTIONS.

1. POST-INSTALLED REINFORCING BAR CONNECTIONS IN CONCRETE.
  - a. EPOXY ANCHOR SYSTEMS WITH Safe Set™ TECHNOLOGY:
    - I. HILTI HIT-RE 500V3 SAFESET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD), AND HILTI VC 20/40/150/300 VACUUM POST-INSTALLED STEEL REINFORCING BARS INSTALLED PER ICC ESR-3814.
    - II. HILTI HIT-HY 200 SAFESET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD), AND HILTI VC 20/40/150/300 VACUUM WITH POST-INSTALLED STEEL REINFORCING BARS INSTALLED PER ICC ESR-3817.
2. THE DESIGN OF STRAIGHT POST-INSTALLED REINFORCING BARS SHALL BE PERFORMED PER THE DEVELOPMENT AND SPLICE REQUIREMENTS OF THE CSA A23.3 DESIGN OF CONCRETE STRUCTURES. THE POST-INSTALLED REINFORCING BAR SYSTEM IS AN ALTERNATIVE TO CAST-IN-PLACE REINFORCING BARS GOVERNED BY CSA A23.3 AND THE NBC OF CANADA.
3. THE EPOXY ANCHOR SYSTEM SHALL BE TESTED IN ACCORDANCE WITH THE ICC-ES ACCEPTANCE CRITERIA FOR POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE ELEMENTS (AC308), TABLE 3.8. TECHNICAL DATA SHALL BE PUBLISHED IN AN ICC-ES EVALUATION SERVICE REPORT.
  - a. ICC-ES ESR-3814 FOR HILTI HIT-RE 500V3 EPOXY ANCHORS AND POST-INSTALLED REINFORCING BAR CONNECTIONS IN CRACKED AND UNCRACKED CONCRETE.
  - b. ICC-ES ESR-3187 FOR HILTI HIT-HY-200 EPOXY ANCHORS AND POST-INSTALLED REINFORCING BAR CONNECTIONS IN CRACKED AND UNCRACKED CONCRETE.
4. POST-INSTALLED REINFORCING BAR INSTALLATION SHALL BE PERFORMED BY PERSONNEL TRAINED TO INSTALL THE SYSTEM PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), AS INCLUDED IN THE ANCHOR PACKAGING. THE CONTRACTOR SHALL ARRANGE FOR A MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR POST-INSTALLED REINFORCING BARS. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION PRIOR TO THE COMMENCEMENT OF INSTALLING THE BARS THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO WILL INSTALL POST-INSTALLED REINFORCING BARS HAVE BEEN TRAINED TO INSTALL THE SYSTEM PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII).
5. THE POSITION OF EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE SHALL BE LOCATED PRIOR TO POST-INSTALLING BARS. EXISTING BARS SHALL BE LOCATED USING HILTI FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS.

- NOTES TO THE ENGINEER OF RECORD:**
1. ENGINEER OF RECORD SHALL INDICATE POST-INSTALLED REBAR DOWEL SIZE, SPACING, EDGE DISTANCE, EMBEDMENT DEPTH AND PROTRUDING LENGTH ON CONSTRUCTION DOCUMENTS
  2. DOWELS SHALL BE CAN/CSA-G30.18 GR. 400
  3. ANCHORING SYSTEM: HILTI HIT-RE 500V3 EPOXY ANCHORING SYSTEM, INSTALL AS PER MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), PERMISSIBLE CONCRETE TEMPERATURE RANGE FOR INSTALLATION: -5°C-41°C, CONCRETE SHALL BE DRY DURING DOWEL INSTALLATION.
  4. DRILL HOLES USING THE HILTI HOLLOW DRILL BIT SAFESET TECHNOLOGY
  5. LOCATE EXISTING REINFORCING PRIOR TO DRILLING - DO NOT DAMAGE (E) REINFORCING WITHOUT PRIOR AUTHORIZATION OF THE ENGINEER OF RECORD.

<Notes to designer (delete this note after reading and replace with title block information)>  
 2. Details shown are up to date as of September 2015.

JOB NUMBER: \_\_\_\_\_

DRAWN: \_\_\_\_\_

CHECKED: \_\_\_\_\_

ISSUE DATE: \_\_\_\_\_

REVISIONS: \_\_\_\_\_

CONTENTS: \_\_\_\_\_

SHEET NAME: \_\_\_\_\_

**R.0.1**

SHEET NUMBER: \_\_\_\_\_