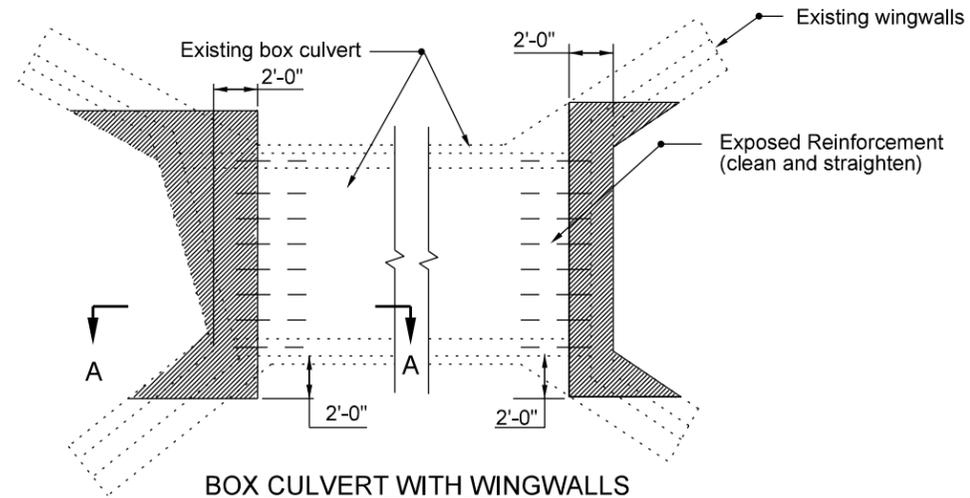
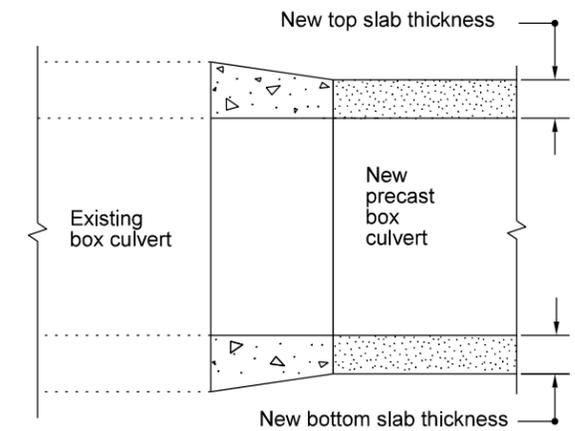


SECTION A-A CONNECTION VIEW

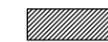


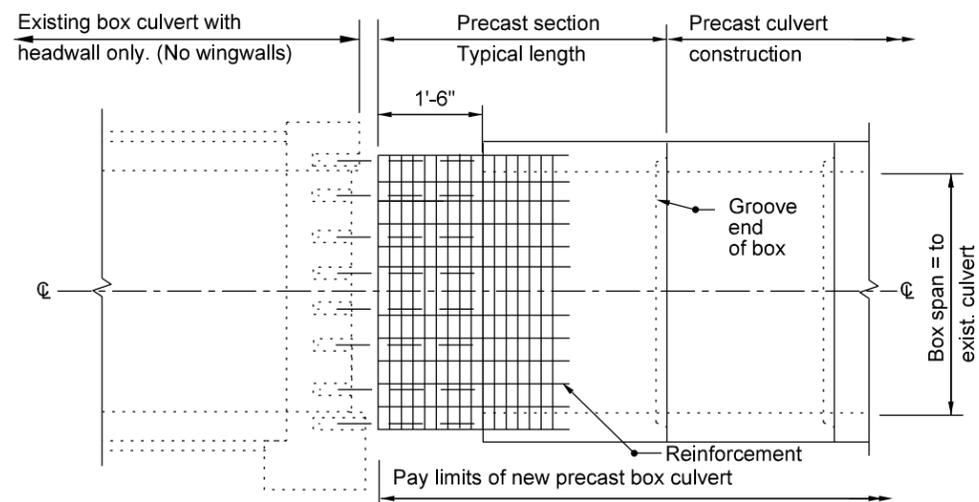
**BOX CULVERT WITH WINGWALLS
EXTENSION PREPARATION**



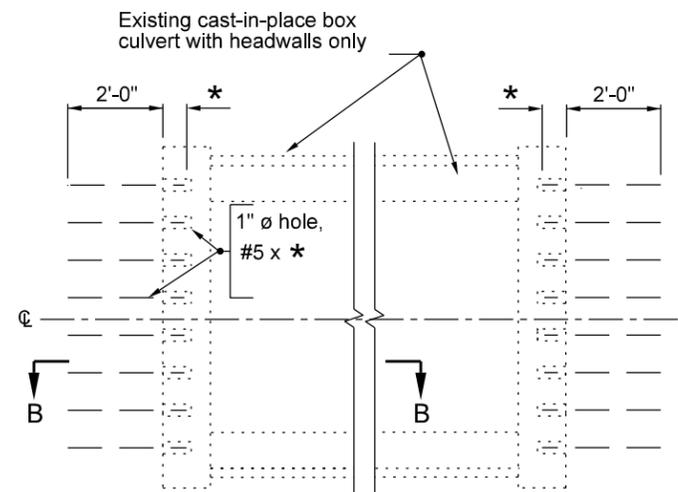
**SECTION A-A AND B-B
(Showing cast-in-place section)**

LEGEND :

-  Removal
-  Existing structure
-  New element or structure



SECTION B-B CONNECTION VIEW



* length determined by manufacturer of chemical anchor system

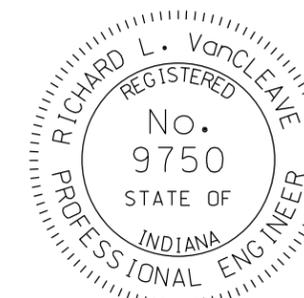
**BOX CULVERT WITH HEADWALLS ONLY
EXTENSION PREPARATION**

INDIANA DEPARTMENT OF TRANSPORTATION

PRECAST BOX-CULVERT EXTENSION

SEPTEMBER 2010

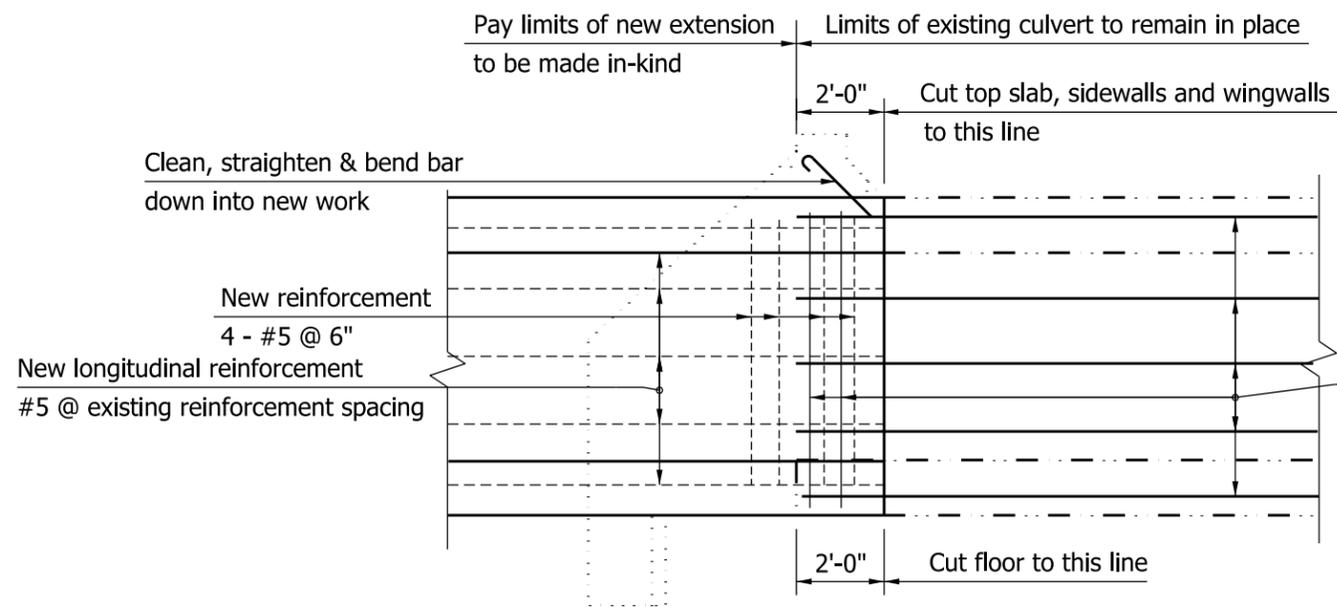
STANDARD DRAWING NO. E 714-BCEX-01



DESIGN STANDARDS ENGINEER

/s/ Richard L. VanCleave 09/01/10
DESIGN STANDARDS ENGINEER DATE

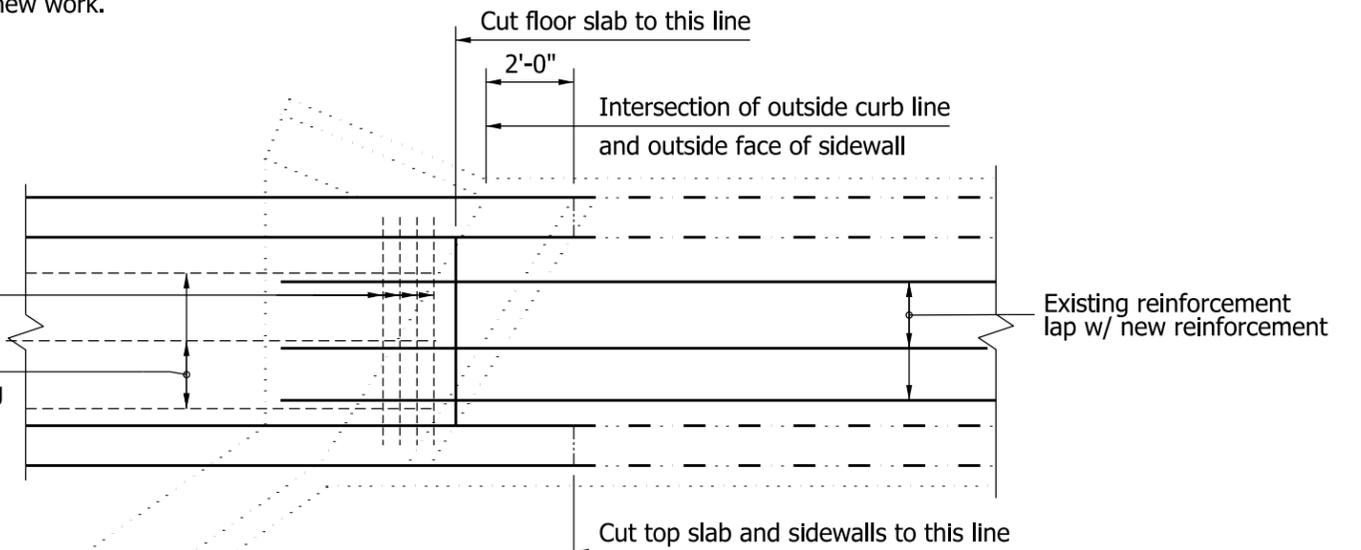
/s/ Mark A. Miller 09/01/10
CHIEF HIGHWAY ENGINEER DATE



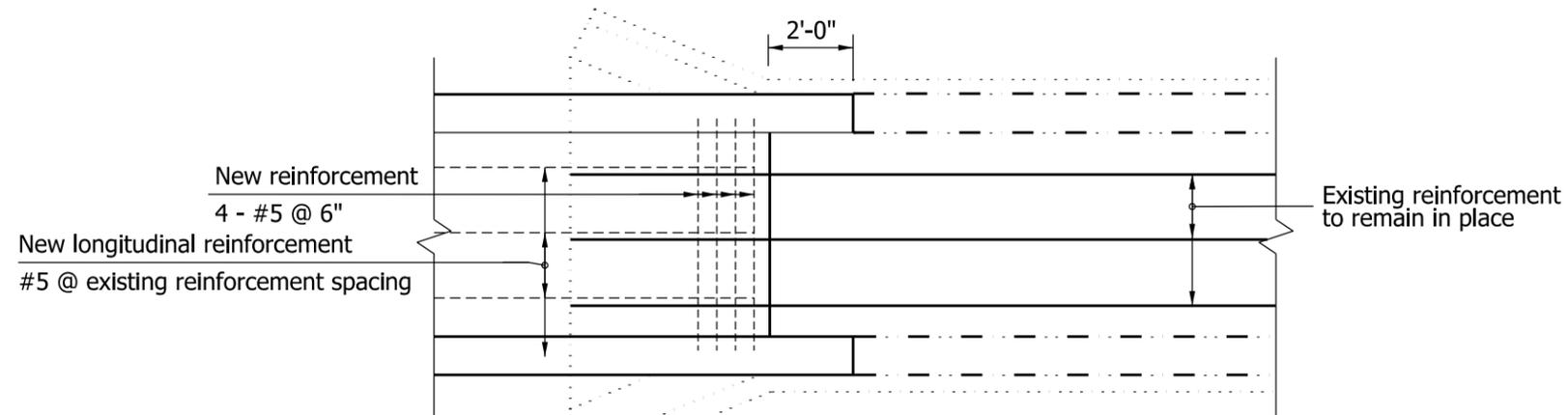
**LONGITUDINAL SECTION
FOR ALL CULVERTS**

All existing exposed longitudinal reinforcing and wall reinforcement shall remain in place and project into new work.

New reinforcement
4 - #5 @ 6"
New longitudinal reinforcement
#5 @ existing reinforcement spacing



**HORIZONTAL SECTION ABOVE FOOTING
FOR SKEWED CULVERTS**



**HORIZONTAL SECTION ABOVE FOOTING
FOR SQUARE CULVERTS**

NOTES:

1. Before removing existing concrete, saw around the perimeter of the removal areas on the interior and exterior of the culvert to a depth of 1".
2. New horizontal reinforcement shall be anchored into the culvert walls with bar hooks.

INDIANA DEPARTMENT OF TRANSPORTATION

CAST-IN-PLACE
BOX-CULVERT EXTENSION

SEPTEMBER 2010

STANDARD DRAWING NO. E 714-BCEX-02



DESIGN STANDARDS ENGINEER

/s/ Richard L. VanCleave 09/01/10
DESIGN STANDARDS ENGINEER DATE

/s/ Mark A. Miller 09/01/10
CHIEF HIGHWAY ENGINEER DATE