

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

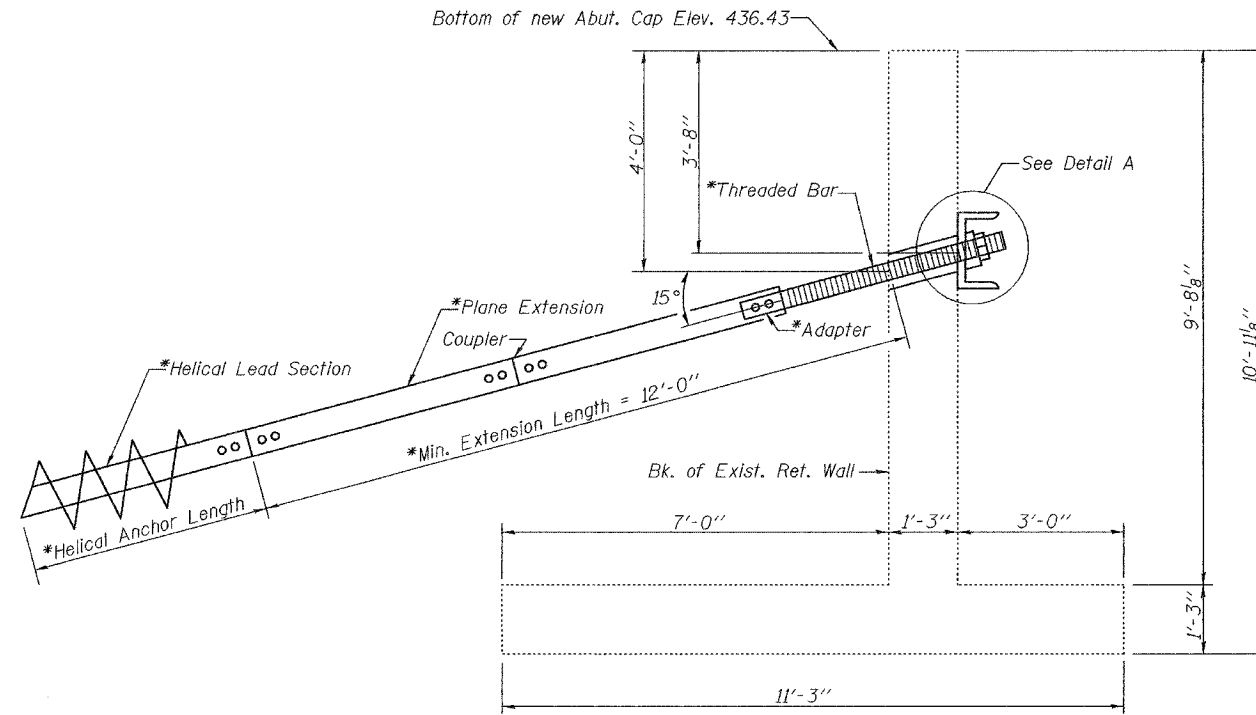
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 11 12 SHEETS
F.A.U. 9177	44-IBR	St. Clair	29	26	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

Contract #76566

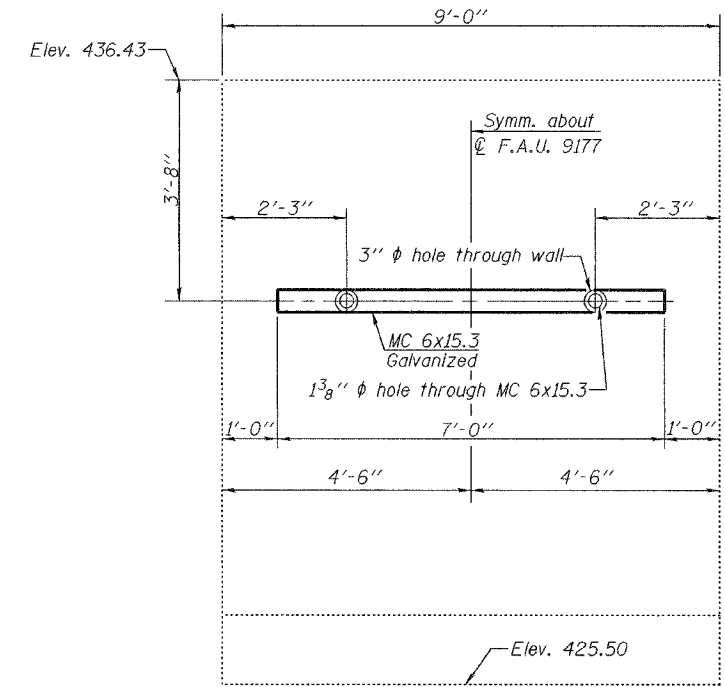
*See Helical Anchor supplier shop drawing for design and details of Anchor

NOTES

1. Helical Anchor shall be designed by manufacturer. (See Special Provisions).
2. The Contractor shall submit design calculations and shop drawing for the proposed Helical Ground Anchor to the Engineer for review and approval.
3. Helical Anchor design load = 5 K/Anchor.
4. Cost of channel MC 6x15.3, washers and nuts included in the cost of Helical Ground Anchors.
5. Installation of the Helical Ground Anchors shall be done prior to Stage I Construction



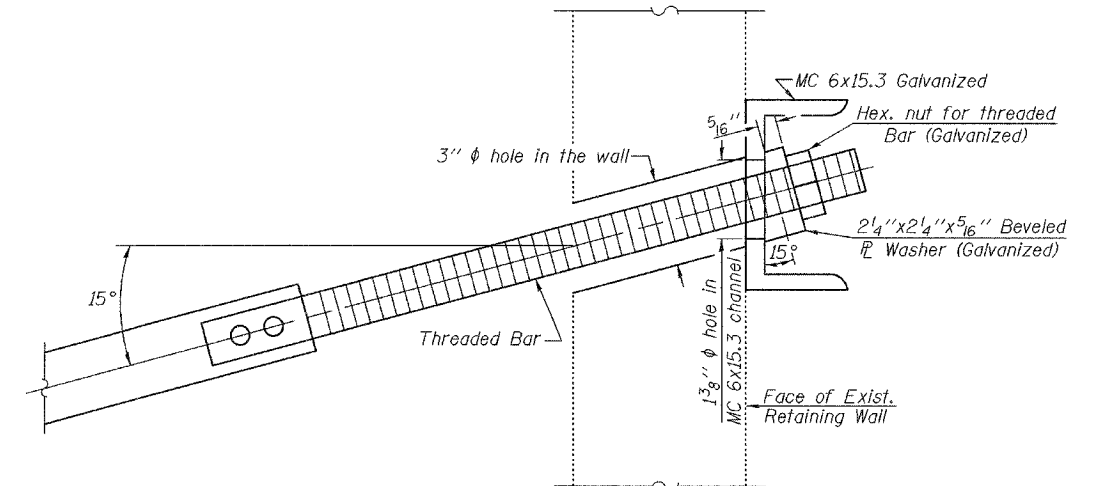
CROSS SECTION



ELEVATION
(South Abutment Looking South)

CONSTRUCTION SEQUENCE

1. Drill holes in existing retaining wall at the location shown in the plans.
2. Excavate behind the retaining wall to approximate elevation of the holes. The excavation shall be limited to only that which is necessary for installation of the helical ground anchor. Cost included with Helical Anchors.
3. Install the first plane extension thru holes and connect to helical lead section placed behind the wall.
4. Rotate the plane extension to install helical lead section until the first extension approaches to the front face of the wall.
5. Attach second plane extension and repeat step #4 until the the number of plane extensions reach beyond the min. extension length of 12'-0" as shown on the plans.
6. Place thread bar adapter, thread bar and connect to plane extension. Connect channel, washers and nut.
7. Backfill and compact soil behind the wall to the ground surface. Cost included with Helical Anchors.
8. Test the anchors. (See Special Provisions).



DETAIL A

HELICAL GROUND ANCHOR DETAILS
F.A.U. ROUTE 9177-SECTION 44-IBR
ST. CLAIR COUNTY
STATION 100+00.00 (NB)
STATION 200+00.00 (SB)
S.N. 082-0096 (NB) & 082-0097 (SB)

DESIGNED	Nicholas Barnett
CHECKED	Ray Ahanchi
DRAWN	R. Sommer
CHECKED	NRB/GRA

EXAMINED	Thomas J. Domagala ENGINEER OF BRIDGE DESIGN
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

November 2 2006