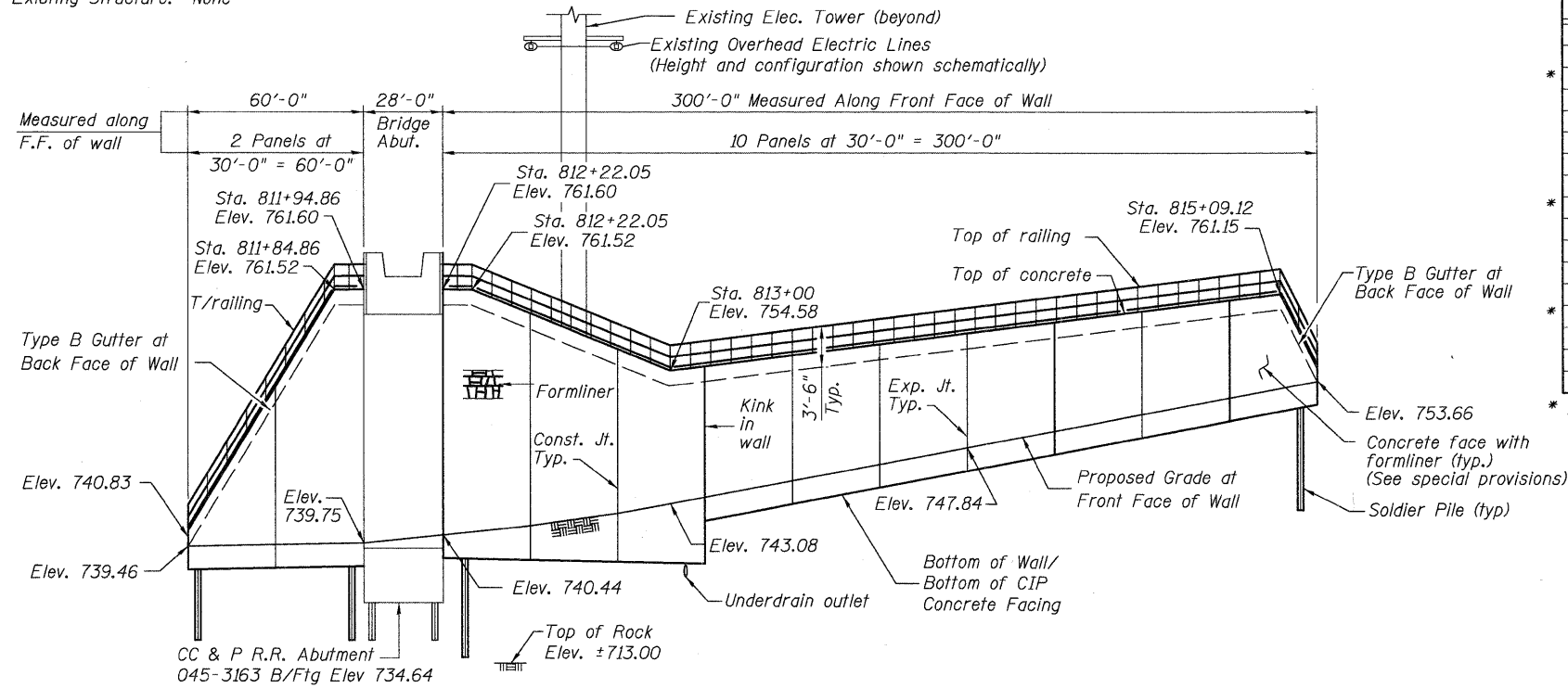


Benchmark RM-12:
 A Standard US Geological Survey Disk set in the south headwall of a culvert located on State Route 31, about 130 feet west of McLean Boulevard. Elevation of 710.37 (NGVD of 1929) as shown on Firm Community Panel Number 170896 0040A, effective date March 1, 1982. (Also known as NGS-K19, RESET 1967.)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
TOTAL BILL OF MATERIAL

Existing Structure: None



REFLECTED ELEVATION - RETAINING WALL STRUCTURE NO. 2039

Pay Item	Unit	Quantity
Structure Excavation	Cu Yd	1,006
Concrete Structures	Cu Yd	188
* Form Liner Textured Surface	Sq Ft	4,353
Stud Shear Connectors	Each	1,120
Untreated Timber Lagging	Sq Ft	4,053
Reinforcement Bars, Epoxy Coated	Pound	27,720
Steel Railing	Foot	403
Furnishing Soldier Piles (HP Section)	Foot	76
* Furnishing Soldier Piles (Built-Up Section)	Foot	1,059
Name Plate	Each	1
Geocomposite Wall Drain	Sq Yd	451
Pipe Underdrains For Structures 4"	Foot	397
Concrete Gutter, Type B	Foot	403
* Permanent Ground Anchor	Each	60
Drilling And Setting Soldier Piles (In Soil)	Cu Ft	3,213
Drilling And Setting Soldier Piles (In Rock)	Cu Ft	20.0

* Special Provisions

NOTES:

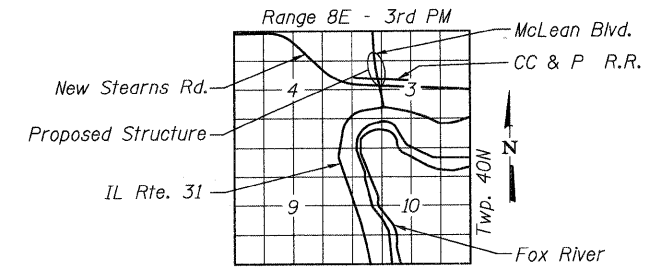
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 deformed bars.
- Reinforcement bars designated (E) shall be epoxy coated.
- All exposed concrete edges shall have a 3/4" x 45 degree chamfer.
- It shall be the contractor's responsibility to verify the location of all utilities prior to starting construction. Contact J.U.I.E. at 800-892-0123.
- See drainage sheets for location of drainage structures for connection of underdrain system.
- Contractor shall be responsible for design of timber lagging (per special provisions). Lagging design shall be submitted to engineer for approval. Quantity shown in bill of materials is an estimate for bidding purposes only.
- See special provision "Permanent Ground Anchor" for installation and testing of permanent ground anchors.
- Paved ditches shall have transverse joints cut 1/3" deep every 10'. Joints shall then be sealed with hot poured joint sealer. Paved ditch construction shall conform to Section 606. Joint sealer shall be in accordance with Section 420.14 and Section 1050.02.
- If the Contractor elects to use form ties, only fiberglass ties shall be allowed. See special provisions.

INDEX OF SHEETS

EW1	General Plan and Notes
EW2-EW4	Pile and Anchor Locations
EW5	Pile and Anchor Schedule
EW6-EW7	Concrete Facing Details
EW8	Sections & Details
EW9	Railing Details
EW10-EW13	Soil Boring Logs

STATION 811+62.99
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.U. RT. 2509 SEC. 06-00214-02-BR
 STRUCTURE NO. 045-2039

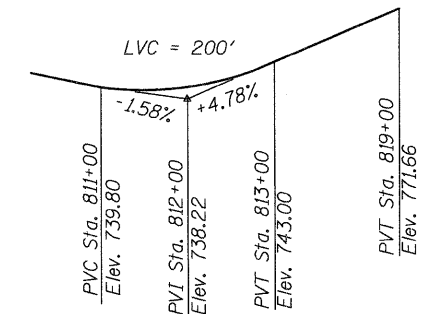
NAME PLATE
 See STD 515001



LOCATION SKETCH

LEGEND

- Soil Boring Location
- Pile Number



**PROFILE GRADE
 McLEAN BOULEVARD**

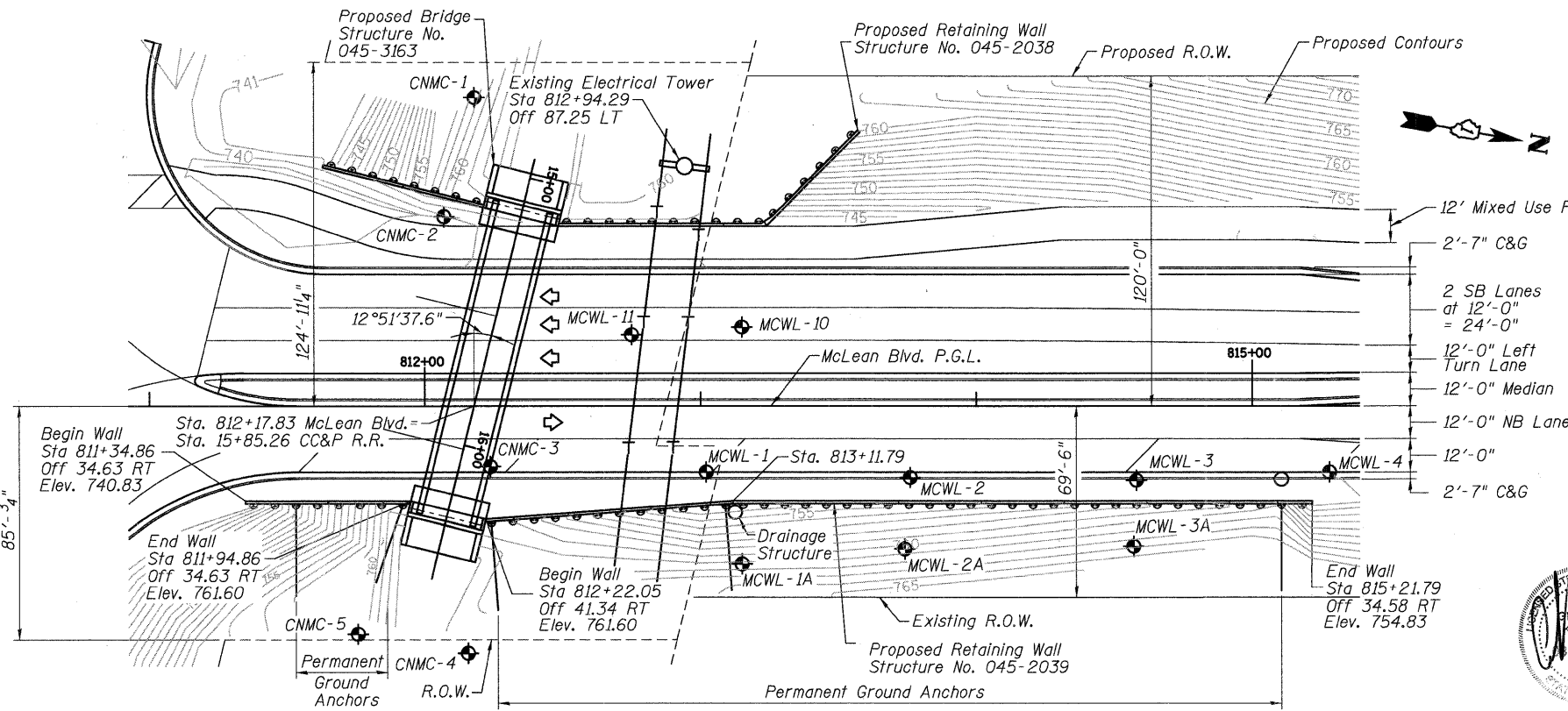
DESIGN SPECIFICATIONS
 2002 AASHTO Standard Specifications

DESIGN STRESSES

FIELD UNITS

- f_s (Anchor Strands) = 270,000 psi
- f_{sj} (Anchor Strands) = 201,900 psi
- f_y (Piles) = 36,000 psi (AASHTO M270 Gr. 36)
- f_y (Anchor Bearing R_s 's) = 36,000 psi
- f_y (Reinforcement) = 60,000 psi
- f'_c (Concrete) = 3,500 psi
- f'_c (Grout) = 4,000 psi
- f'_c (Encasement) = 4,000 psi

**GENERAL PLAN
 DRILLED SOLDIER PILE WALL
 McLEAN BOULEVARD
 SECTION 06-00214-02 BR
 KANE COUNTY
 STA 811+34.86 TO STA 815+21.79
 STRUCTURE NO. 045-2039**



PLAN

Note: Offsets are measured from @ to the Front Face of wall



Exp: 11/30/2010

DESIGNED	JCE/KJH
CHECKED	PMH
DRAWN	JCE/PMH
CHECKED	KJH

McDonough Associates Inc.
 Engineers / Architects
 130 East Randolph Street
 Chicago, Illinois 60601
 (312) 946-8600

SHEET NO. EW1	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	EW13 SHEETS	361	06-00214-02-BR	KANE	219
CONTRACT NO. 63073					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					