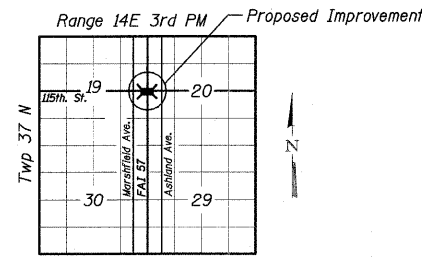


Bench Mark:  
No. 384 El. 185.482 120th Street and Justine Street  
2.682 m West of East Line of Justine Street and 6.645 m South of South Line of 120th Street

Existing Structure: S.N. 016-2037 a two span continuous steel beam structure with a back to back length of 57.022 m and out to out width of 25.3 m with a minimum horizontal clearance of 2.667 m at the East Abutment and a minimum vertical underclearance of 4.664 m, supported on closed abutments and pier with no skew. Built as FAI Route 57, Section 068-1919.2-CF in 1965. Traffic shall be maintained during the rehabilitation of the structure by staged construction.

Note:  
All dimensions are in millimeters (mm) except as noted.



LOCATION SKETCH

**DESIGN SPECIFICATIONS**

1996 AASHTO Standard Specifications for Highway Bridges, including 1997, 1998 & 1999 Interims

**LOADING MS18**

Allow 1.2 kN/m<sup>2</sup> for future wearing surface.

**DESIGN STRESSES**

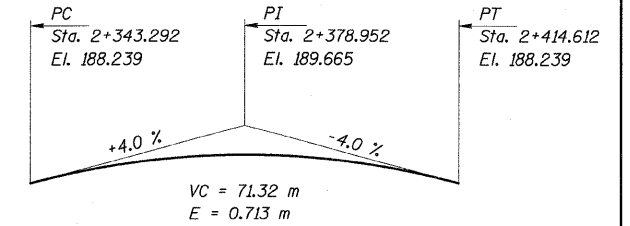
$f'_c = 24 \text{ MPa}$  (Existing & Proposed)  
 $f_y = 276 \text{ MPa}$  (Reinf. Existing)  
 $f_y = 400 \text{ MPa}$  (Reinf. Proposed)  
 $f_y = 345 \text{ MPa}$  (M 270M Grade 345) (Proposed)  
 $f_y = 250 \text{ MPa}$  (M 270M Grade 250) (Existing & Proposed)

**SEISMIC DATA**

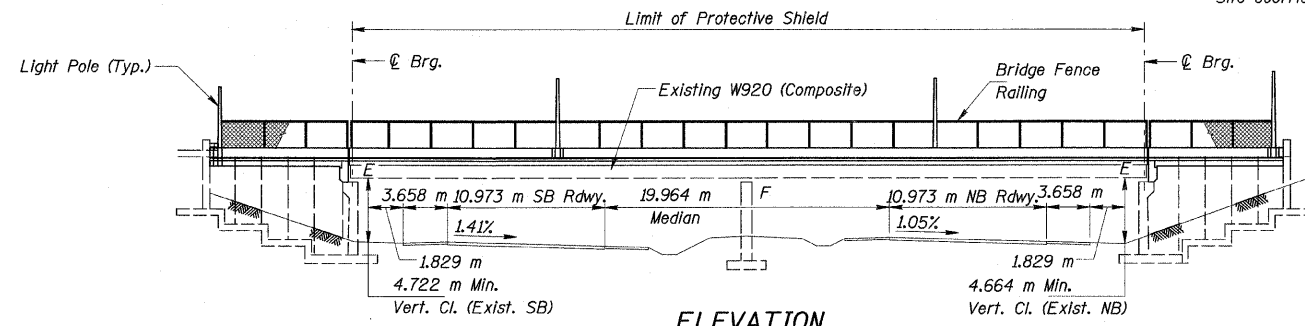
Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.04g  
Site coefficient (S) = 1.0

|                       |          |                  |                |           |
|-----------------------|----------|------------------|----------------|-----------|
| ROUTE NO.             | SECTION  | COUNTY           | TOTAL SHEETS   | SHEET NO. |
| FAU 1584              | *        | COOK             | 119            | 74        |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT |                |           |
| * 068-1919.2-CF       |          |                  | CONTRACT 60371 |           |

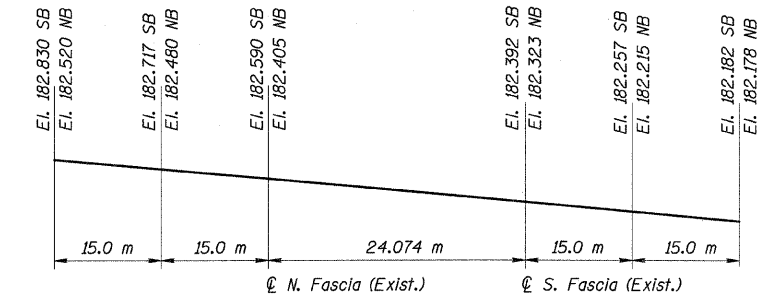
SHEET NO. 51  
S23 SHEETS



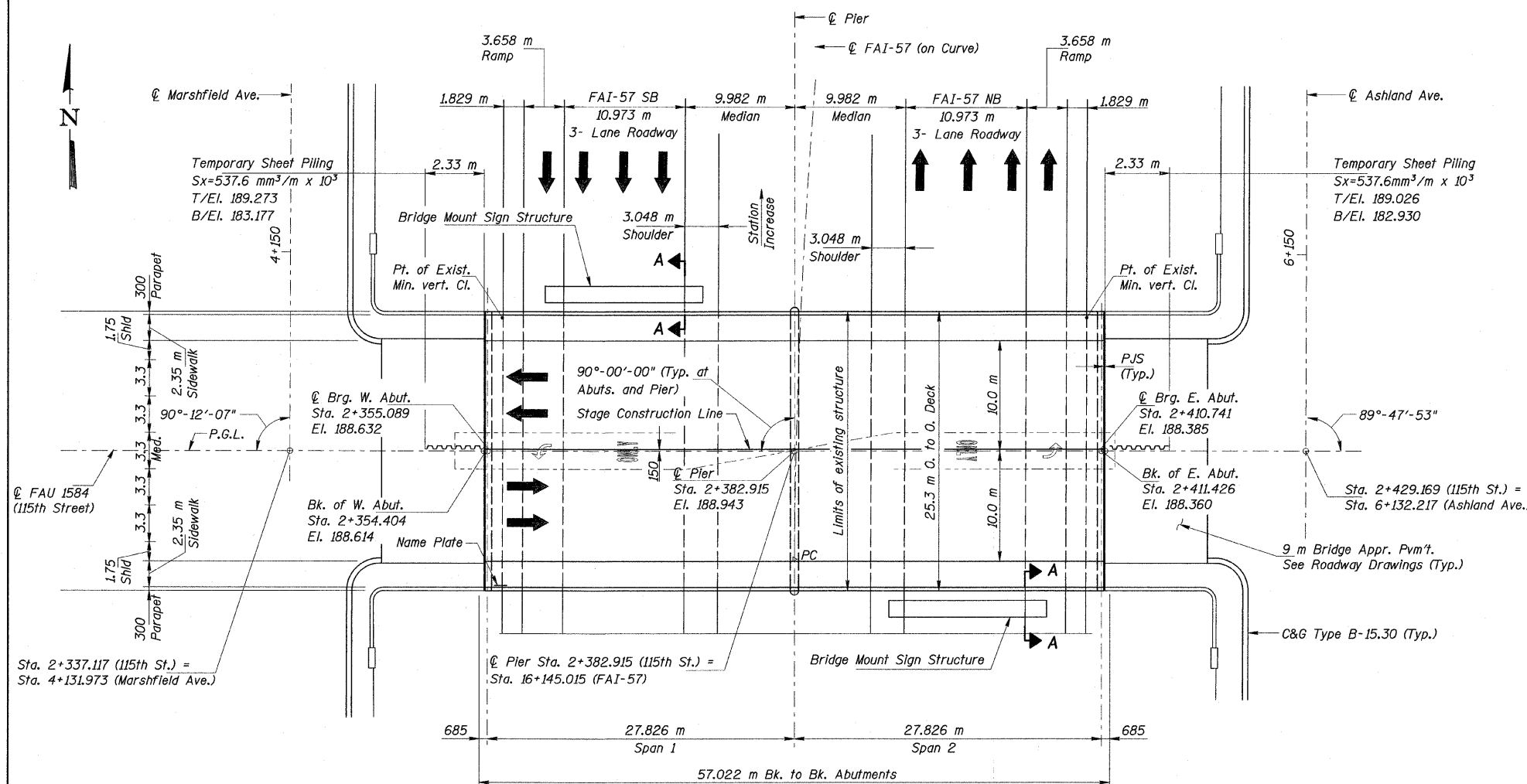
PROFILE GRADE 115TH STREET  
(Along  $\bar{C}$  115th Street)



ELEVATION



(MAX.) TOP OF PAVEMENT EDGE ELEVATIONS  
(I-57 Outside Edge of Pavement)



PLAN

STATION 2+382.915  
RE-BUILT 200 BY  
STATE OF ILLINOIS  
F.A.U. RT. 1584 SEC 068-1919.2-CF  
LOADING MS18  
STR. NO. 016-2037

**NAME PLATE**

See Std. 515001  
Clean and relocate existing name plate adjacent to new name plate. Cost included with name plates.

Vertical clearance shall be verified by Contractor prior to construction. This work shall not be measured for payment and shall be included in the cost for Construction Layout.

Notes:  
Protective shield is currently in place. Contractor shall remove and deliver protective shield to IDOT District One Bridge Office. See note on sheet S2.

For Section A-A see Bridge Mounted Sign Structure Connection Details on sheet No. S23 of S23.

**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY

*Robert E. Anderson (TJD)*  
ENGINEER OF BRIDGES AND STRUCTURES



| REVISIONS |      |
|-----------|------|
| NAME      | DATE |
|           |      |
|           |      |
|           |      |
|           |      |
|           |      |

ILLINOIS DEPARTMENT OF TRANSPORTATION  
115 TH. STREET OVER FAI 57  
FAU RTE. 1584 SEC. 068-1919.2-CF  
COOK COUNTY  
STATION 2+382.915  
STRUCTURE NO. 016-2037

**GENERAL PLAN & ELEVATION**

DRAWN BY KAC  
CHECKED BY ERB/DGS  
DATE JANUARY 16, 2009

**COLLINS ENGINEERS**  
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