

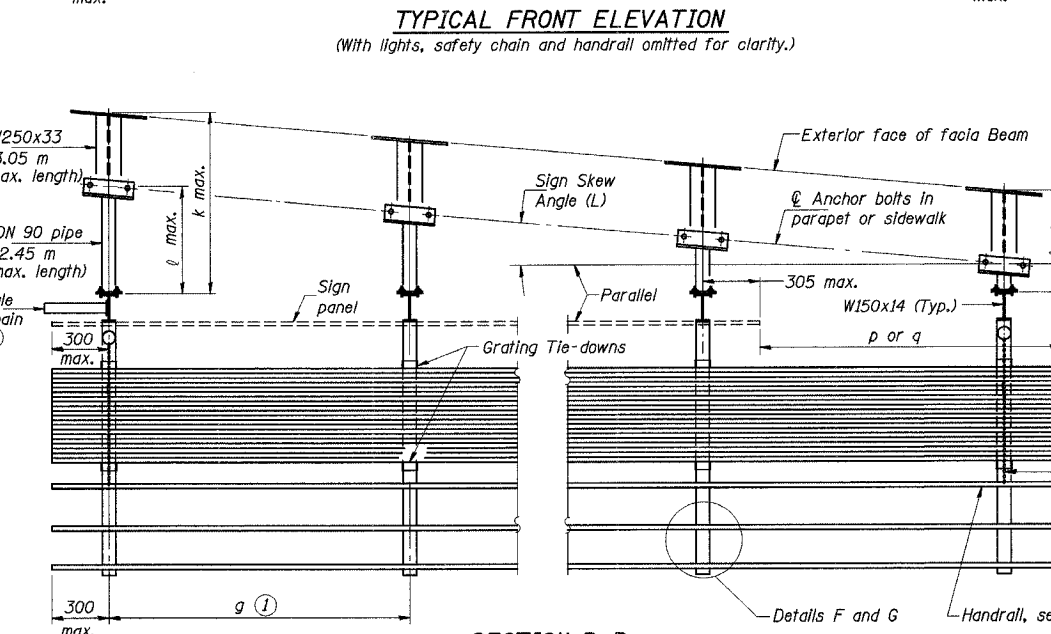
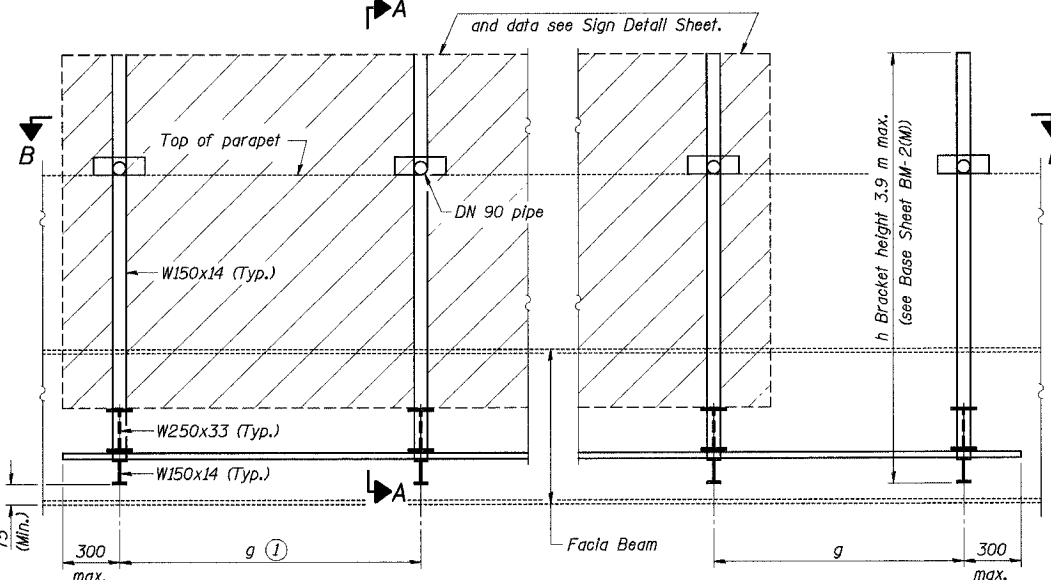
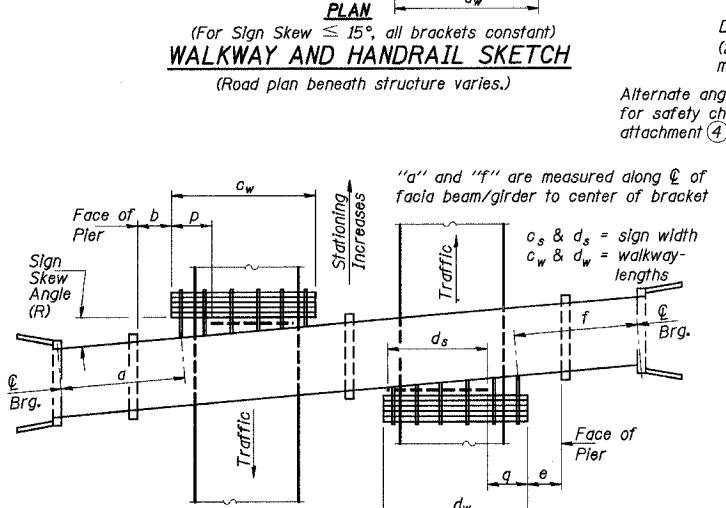
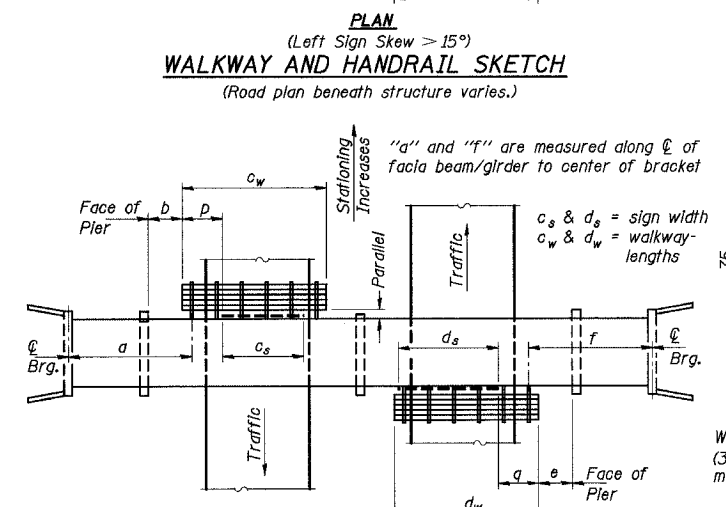
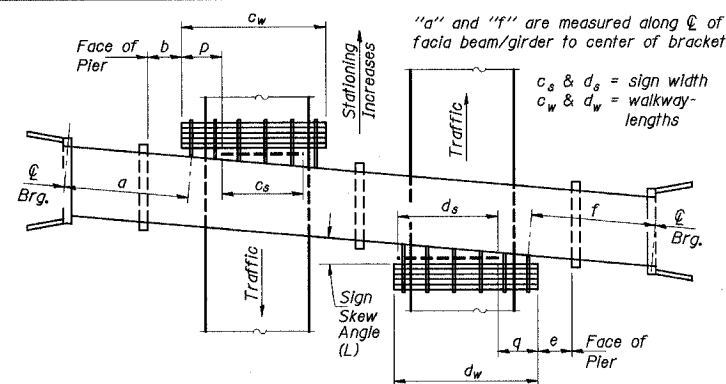
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET No.
F. A. I. 80/94	*	COOK	870	344
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	
* (0203.1 & 0312-708W) R3		CONTRACT NO. 62108		

GENERAL NOTES

SPECIFICATIONS:

- DESIGN:** AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications") (2)
- CONSTRUCTION:** Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")
- LOADING:** 130 km/h WIND VELOCITY PLUS 30% GUST FACTOR  
WIND LOADING: 1.7kPa normal to Sign Panel Area plus 2.3 kPa normal to truss elements not behind sign Loading Diagram.  
WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.
- MINIMUM CLEARANCE:** 75 mm greater than bridge members at all locations. (All Obstructions)
- WELDING:** All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code (Steel) and the Standard Specifications.
- MATERIALS:** All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 241 MPa, or A500 Grade B or C with a minimum yield of 319 MPa. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.  
All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 250 or Gr. 345 (M183, M223 Gr. 345).
- HIGH STRENGTH BOLTS:** All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307M unless noted as "H.S." which shall require AASHTO M164 (A325M), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.
- STEEL PIPE:** DN (Diameter Nominal) indicates standard pipe size
- GALVANIZING:** All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.
- ANCHOR RODS:** All-threaded rod conforming to ASTM A307M, 19mm  $\phi$  x 305 mm long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 230 mm.



- Bracket spacing  $g \leq 1.8$  m max. Spacing shall be uniform if possible but may vary  $\pm 150$  mm to miss existing obstruction, (rail post, light poles, web stiffeners, splice plates, etc.). Adjust bracket lengths accordingly on skewed structures.
- Any design modifications shall be based on the current version of applicable specifications and submitted for the Engineer's approval.
- Unit price includes grating, handrail, brackets, supports, anchor bolts, fasteners, fabrication, delivery, erection, field drilling and other necessary items. Limits of payment are based on grating length ( $c_w$ ,  $d_w$ ) unless otherwise specified. For Section A-A and dimensions  $k$  &  $i$ , see Base Sheet BM-2(M). For Safety Chain Details and Details D, F and G, see Base Sheet BM-4(M).
- If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Base Sheet BM-4(M).

NUMBER	REVISION	DATE

TOTAL BILL of MATERIAL

③ OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	m	7.00
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Structure Number	Sign Skew Angle (L) or (R)	Bridge Station	Bridge Structure Number	Contract Route Designation	a (m)	b (m)	$c_s$ (m)	$c_w$ (m)	$d_s$ (m)	$d_w$ (m)	e (m)	f (m)	g (m)	No. of Brackets (Total)	p (m)	q (m)	Total Grating/Hndrl. Lengths ( $c_w + d_w$ ) (m)
1B0161080R160.6	0	440+193.335	SN 016-2796		-	-	-	-	5.85	7.00	-	20.148	1.65	5	-	1.15	7.00

Dimensions a, b, e, f & g may vary as approved by the Engineer, see (1).  
When  $c_w < c_s$  and/or  $d_w < d_s$ , use alternate brackets without walkway supports where applicable, see (3).

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

BM-1(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION  
I-80/94/US 6 (KINGERY EXPRESSWAY)

BRIDGE MOUNT SIGN STRUCTURES  
GENERAL PLAN AND ELEVATION

DATE: JUL 18, 2005  
SCALE ---

HNTB

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