



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	412	#6	9'-0"	U
a2	54	#4	7'-3"	—
d	14	#4	4'-6"	L
h	16	#6	25'-0"	—
h1	32	#4	24'-8"	—
h2	16	#5	24'-8"	—
h3	7	#6	8'-0"	—
h4	12	#6	11'-1"	—
h5	16	#6	11'-11"	—
h6	8	#6	11'-9"	—
h7	8	#6	8'-0"	—
h8	7	#6	10'-9"	—
h10	16	#6	29'-0"	—
h11	32	#4	28'-8"	—
h12	16	#5	28'-8"	—
v	276	#4	4'-10"	—
v1	4	#4	9'-2"	—
v3	16	#4	2'-11"	—
v4	16	#4	2'-9"	—
v11	4	#4	8'-7"	—
v12	8	#4	5'-3"	—
v22	8	#4	6'-6"	—
Concrete Box Culvert		Cu. Yd.	62.1	
Reinforcement Bars		Pound	11296	
Pedestrian Railing		Foot	16	

NOTE
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans for lesser design requirements, then full design submittals with the required seals will be expected by the Department, for review and approval.

Temporary Sheet Piling
Top Elevation = 608.18
Bottom Elevation = 585.54
Embedment = 13.5 ft.
Minimum Section Modulus = 11.5 in³/ft.

DESIGN STRESSES

$f_y = 60,000$ psi
 $f'_c = 3,500$ psi

LOADING HS 20-44

DESIGNED	ATB/SL
CHECKED	PKC/JRS
DRAWN	CBR/RV
CHECKED	ATB/SL

SHOWING REINFORCEMENT PLAN SHOWING OUTLINES
(Headwall & Edge Beam @ Stage Construction Line Is Not Shown For Clarity Purpose.)

NOTES
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
All construction joints shall be bonded.
See MOT Drawings For Construction Staging.

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REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
US ROUTE 30 AT SUNNYLAND DRAIN
STA. 812+91.78
BOX CULVERT DETAILS
SHEET 2 OF 3
SCALE: NONE
DATE: MARCH 2005
DRAWN BY: CBR/RV
CHECKED BY: SL/PKC