ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 342	2011-026-I	COOK & LAKE	71	60

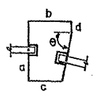
CONTRACT NO. 60P26

EAST WALL (RIGHT)
POST DIMENSIONS AT BENDS

STATION	ANGLE θ	a	b	c	d
4+00	85.08°	11½"	7"	6.06"	0.51"
7+25.70	87.22°	10⅝"	7"	6.51"	0.51"
23+19.73	77.77°	11¾"	10¼"	8.08	1.73
32+74.61	80.63°	12"	8¾"	6.96"	1.15"

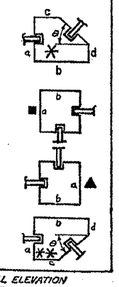
EAST WALL (RIGHT)

STATION	ANGLE θ	a	b	c	d
5+89.96	88.73°	10⅝"	6½"	6.03"	0.25"
8+25.48	87.61°	10⅝"	6½"	6.08"	0.51"
22+82.71	74.91°	12"	9½"	6.9"	2.34"
27+02.41	82.43°	13"	9¾"	8.17"	1.1"
35+08.85	55.56°	13¼"	12¾"	6.81"	4.59"
36+33.78	40.05°	16"	16¾"	5.65"	6.67"
37+41.60	63.08°	17"	14"	7.13"	3.63"
39+46.02	83.03°	14½"	9¾"	8.11"	1.1"
41+46.54	89.05°	12¼"	8¼"	8.05"	0.25"



WEST WALL (LEFT)

STATION	ANGLE θ	a	b	c	d
256+61.64*	68.41°	11½"	10¼"	6.75"	2.67"
259+33.4**	87.27°	8½"	6½"	6.12"	0.51"
263+61.25*	65.61°	14½"	12¼"	7.29"	3.57"
264+47.54*	79.46°	12½"	10"	7.99"	1.69"
216+87.56*	86.96°	12½"	8¾"	8.11"	0.52"
219+57.35▲		9.5"	9.5"		
219+88■		14"	14"		
225+78.46*	87.45°	13½"	8¾"	8.17"	0.51"

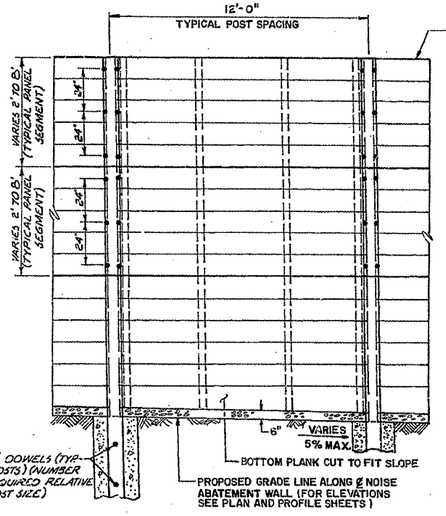


EAST WALL (RIGHT)
POST SPACINGS OTHER THAN 12'-0" CENTERS

STATION FROM	STATION TO	POST SPACING	BATTENS NO.	BATTENS SPACING
0+00	0+08.00	8.0	1	
3+92.00	4+00.00	8.0	1	
5+80.00	5+89.96	9.96	2	3'-4"
5+89.96	5+98.00	8.04	1	
7+18.00	7+25.70	7.70	1	
7+25.70	7+33.7	8.0	1	
8+17.70	8+25.48	7.78	1	
8+25.48	8+32.48	7.00	1	
16+12.48	16+20.1	7.62	1	
16+20.1	16+27.1	7.0	1	
21+19.10	21+26.30	7.20	1	
21+26.30	21+32.30	6.0	1	
22+76.30	22+82.71	6.41	1	
22+82.71	22+89.71	7.0	1	
23+13.71	23+19.73	6.02	1	
26+91.73	27+02.41	10.68	2	3'-7"
32+66.41	32+74.61	8.20	1	
35+02.61	35+08.85	6.24	1	
35+08.85	35+16.85	8.0	1	
36+24.85	36+33.78	8.93	1	
37+29.78	37+41.60	11.82	4	3'-7"
37+41.60	37+47.60	6.0	1	
39+39.6	39+46.02	6.42	1	
41+38.02	41+46.54	8.52	1	
42+90.54	42+96.54	6.0	1	
44+40.54	44+46.74	6.20	1	
44+46.74	44+54.74	8.0	1	
49+82.74	49+91.28	8.54	1	

WEST WALL (LEFT)
POST SPACINGS OTHER THAN 12'-0" CENTERS

STATION FROM	STATION TO	POST SPACING	BATTENS NO.	BATTENS SPACING
210+85.01	211+0.56	15.55	5	3'-7½"
215+92.56	216+15.56	23.0	7	3'-8"
216+87.56	216+96.35	8.79	2	3'-0"
219+48.35	219+57.35	9.0	2	3'-0"
219+57.35	219+64.00	6.65	1	
220+00	220+07.46	7.46	1	
225+71.46	225+78.46	7.0	1	
225+78.46	225+88.12	9.66	2	3'-3"
227+68.12	227+76.12	8.0	2	2'-8"
227+76.12	227+83.41	7.29*	1	
228+55.41	228+66.7	11.29	4	3'-5"
236+82.70	236+92.86	10.16	2	3'-4½"
247+48.86	247+62.79	13.93	4	4'-3½"
247+62.79	247+73.51	10.72	2	3'-7"
253+25.51	253+34.55	9.04	2	3'-0"
255+50.55	255+58.55	8.0	2	2'-8"
255+58.55	255+65.64	7.09	1	
256+61.64	256+69.41	7.77	1	
259+33.41	259+41.25	7.84	1	
263+61.25	263+67.54	6.29	1	
264+39.54	264+47.54	8.00	2	2'-8"
264+47.54	264+53.82	6.28	1	
271+49.82	271+55.82	6.00	1	

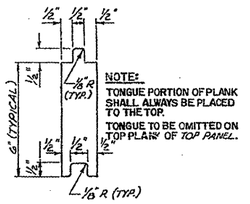


NOTES:

1. ALL POST SPACINGS ARE 12'-0" EXCEPT AT STATIONS GIVEN IN THE TABLE ON THIS SHEET.
2. ALL PLANKS ARE 1½" THICK EXCEPT BETWEEN POSTS AT STA. 215+92.56 AND STA. 216+15.56 WHERE THE PLANKS ARE 2" THICK.
3. BOTTOM PLANKS SHALL BE CUT TO FOLLOW GROUND SLOPE EXCEPT BETWEEN POSTS AT STA. 219+57.35 AND STA. 220+00 .
4. BOTTOM OF WALLS SHALL BE 6" ABOVE GROUND EXCEPT
   a) FROM STA. 215+92.56 TO STA. 216+15.56 WHERE THE BOTTOM PLANKS WOULD REST OVER THE GROUND.
   b) FROM STA. 219+88 TO STA. 220+00 FOR DITCH CROSSING.
   c) FROM STA. 38+31.60 TO STA. 49+91.28 WHERE THE BOTTOM PLANKS WOULD REST OVER THE GROUND.
5. AT DITCH CROSSING BETWEEN POSTS AT STA. 219+88 AND STA. 220+00 STOPS SHOULD BE PROVIDED IN THE POST GROOVES AND OR THE BOTTOM PLANKS SHOULD BE SCTIED TO THE POSTS AS NOT TO PERMIT ANY DOWNWARD MOVEMENT OF THE WALL BELOW THE ELEVATION SHOWN.
6. ALL WOOD DIMENSIONS ARE NET, NOT NOMINAL. AL. DOWELS SHALL BE ASTM A36 STEEL. GALVANIZED
7. SYSTEM IS DESIGNED FOR A WIND PRESSURE OF 30 PSF.
8. POSTS, PLANKS AND BATTENS SHALL BE HARDWOOD MATERIAL (SEE SPECIFICATIONS).

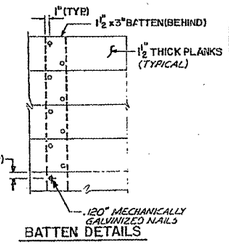
* PROPERTY OWNER SIDE.

** FOR ALIGNMENT SEE PLAN AND PROFILE SHEETS.

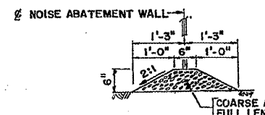


NOTE:
TONGUE PORTION OF PLANK SHALL ALWAYS BE PLACED TO THE TOP.
TONGUE TO BE OMITTED ON TOP PLANK OF *TOP PANEL*.

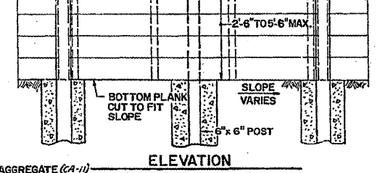
PLANK DETAILS



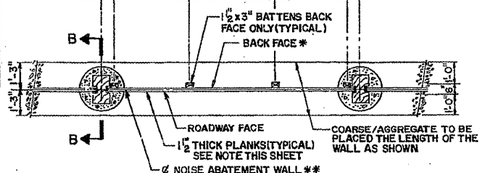
BATTEN DETAILS



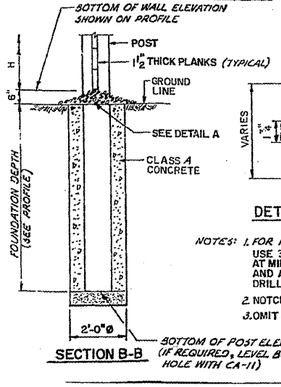
DETAIL A



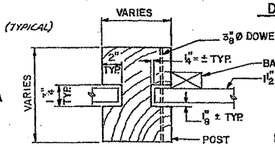
ELEVATION
POST ELEVATION OF EAST WALL FROM STA. 38+31.60 TO STA. 49+91.28



PLAN VIEW

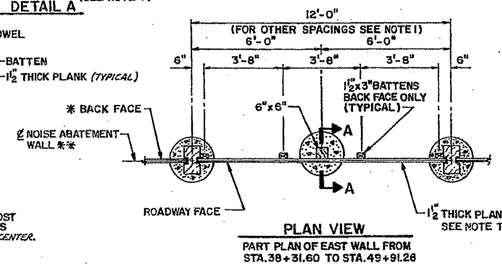


SECTION B-B



DETAILS-STANDARD POST

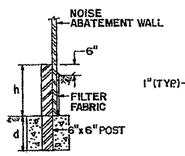
NOTES: 1. FOR PANEL SEGMENTS, USE 3/8"ø DOWEL TO FASTEN PANEL TO POST AT MID WIDTH OF TOP AND BOTTOM PLANKS AND AT MID WIDTH OF PLANKS AT 24" ON CENTER. DRILL 3/8"ø HOLE IN PLANKS, AND POST.
2. NOTCH TO EXTEND FULL HEIGHT OF POST.
3. OMIT ONE NOTCH IN END POST.



PLAN VIEW
PART PLAN OF EAST WALL FROM STA. 38+31.60 TO STA. 49+91.28

POST SIZES

WALL HEIGHT (H)	POST SIZE
UPTO 6'-0"	6"x6"
ABOVE 6'-0" TO 8'-0"	6"x7½"
ABOVE 8'-0" TO 10'-0"	7"x8"
ABOVE 10'-0" TO 12'-0"	8"x9"
ABOVE 12'-0" TO 14'-0"	8"x10¼"
ABOVE 14'-0" TO 16'-0"	8"x11½"
ABOVE 16'-0" TO 18'-0"	8"x12¾"
ABOVE 18'-0" TO 20'-0"	8"x14"
ABOVE 20'-0" TO 22'-0"	8"x15½"
ABOVE 22'-0" TO 24'-0"	8½"x16½"
ABOVE 24'-0" TO 25'-0"	8½"x17"



SECTION A-A

NOTE:
h VARIES FROM 2'-6" MIN. TO 5'-6" MAX.
$d = \frac{h}{3} + 2'\text{-}0"$

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILL RTE 53
EXISTING PLANS
SHEET OF 19