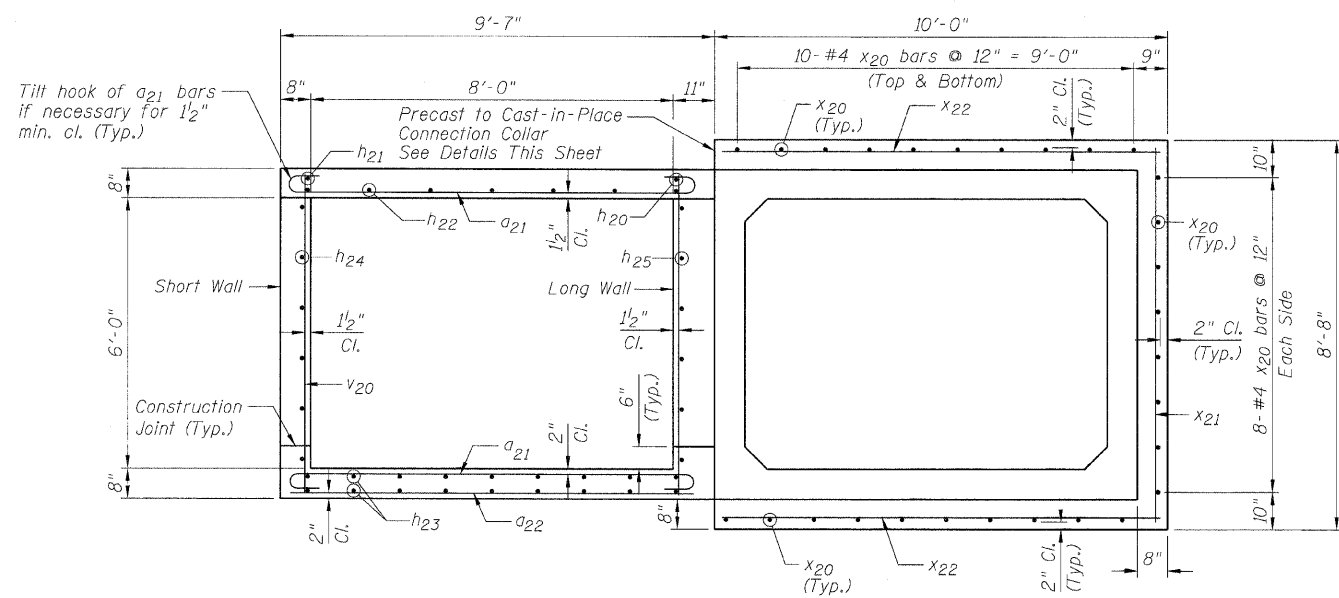


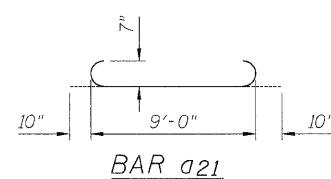
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	30
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

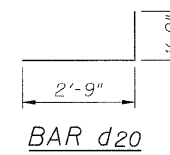
*(3)BR-1,2,3 & (4)BR Contract #66741



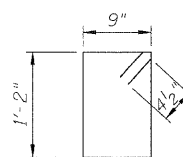
SECTION A-A



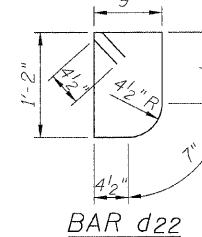
BAR a21



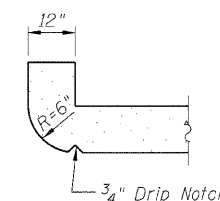
BAR d20



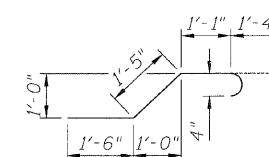
BAR d21



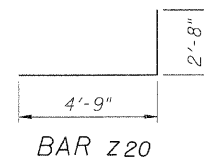
BAR d22



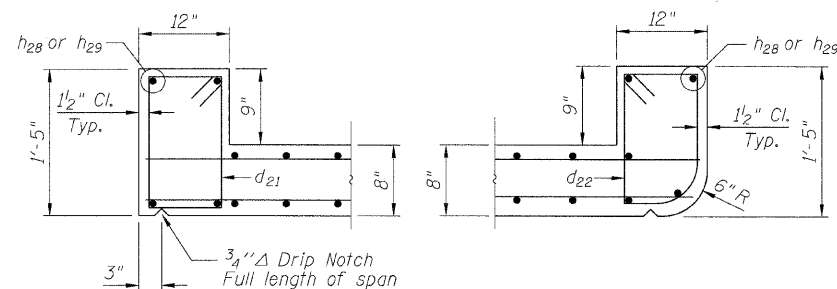
SECTION THRU HEADWALL
(Up Stream End Only)



BAR x20



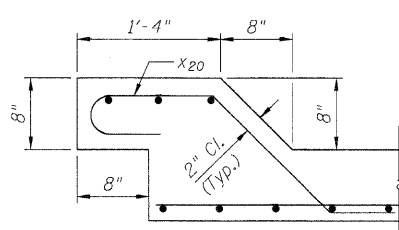
BAR z20



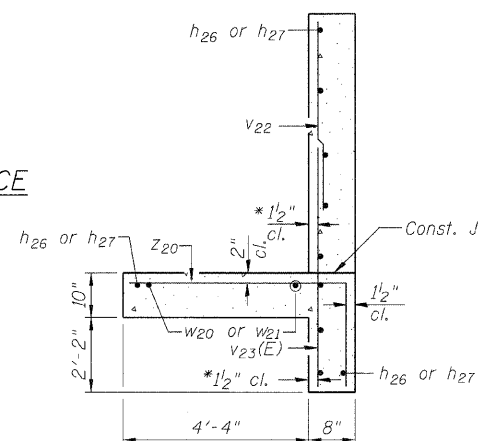
DOWNSTREAM

UPSTREAM

HEADWALL DETAILS



PRECAST TO CAST-IN-PLACE
CONNECTION COLLAR



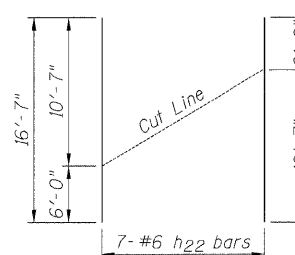
SECTION A-A

* v bars shall not be placed more than 1/2" cl. from back face of wingwall.

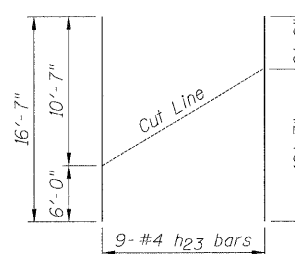
DESIGN STRESSES

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

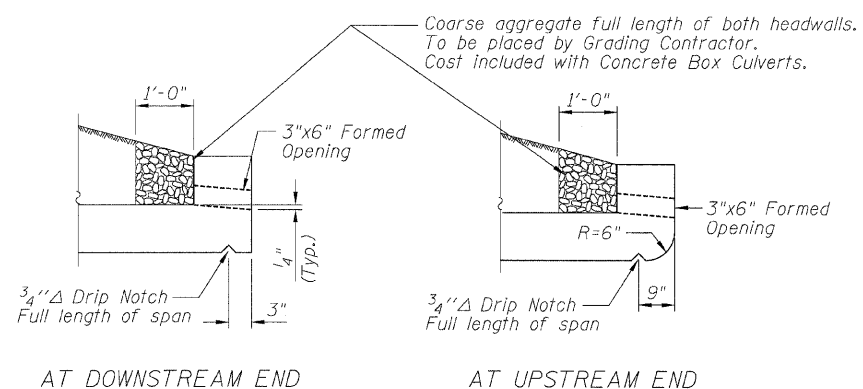
Max. Soil Pressure under footing = 2,655 psf



BAR h22
CUT DIAGRAM



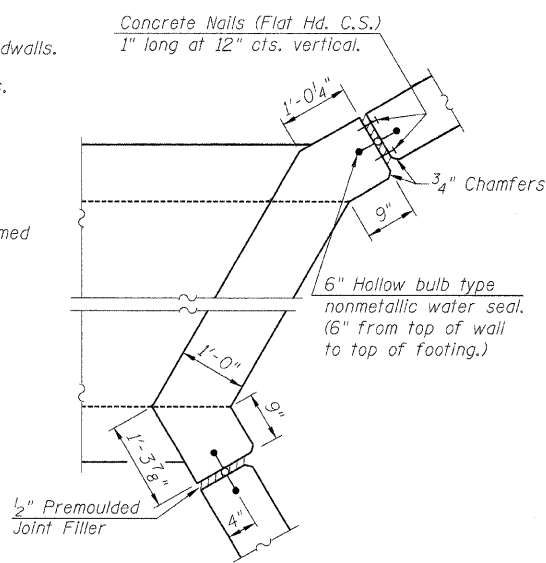
BAR h23
CUT DIAGRAM



AT DOWNSTREAM END

AT UPSTREAM END

DRAIN DETAIL



CORNER DETAIL

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a21	124	#7	10'-8"	U
a22	22	#4	9'-0"	—
a23	4	#4	11'-7"	—
d20	40	#4	4'-6"	L
d21	23	#4	4'-7"	U
d22	23	#4	4'-5"	U
h20	4	#6	10'-7"	—
h21	4	#6	6'-0"	—
h22	14	#6	16'-7"	—
h23	36	#4	16'-7"	—
h24	24	#5	6'-0"	—
h25	24	#5	10'-7"	—
h26	22	#4	13'-8"	—
h27	22	#4	8'-2"	—
h28	8	#6	9'-10"	—
h29	8	#6	9'-3"	—
v20	100	#4	7'-0"	—
v21	8	#4	10'-1"	—
v22	46	#4	5'-0"	—
v23(E)	50	#4	6'-10"	—
w20	14	#5	16'-7"	—
w21	14	#5	11'-0"	—
x20	112	#4	5'-4"	U
x21	12	#4	8'-4"	—
x22	24	#4	9'-8"	—
z20	78	#6	7'-5"	—
Item	Unit	Quantity		
Concrete Box Culverts	Cu. Yd.	60.6		
Reinforcement Bars	Pound	7,510		
Reinforcement Bars (Epoxy Coated)	Pound	230		

NOTES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Reinforcement bars designated (E) shall be epoxy coated.

All construction joints shall be bonded.

CULVERT DETAILS
IL 71 OVER MISSION CREEK
FAP ROUTE 311
SECTION (3)BR-1,2,3 & (4)BR
LASALLE COUNTY
STA. 683+27.88
S.N. 050-2048