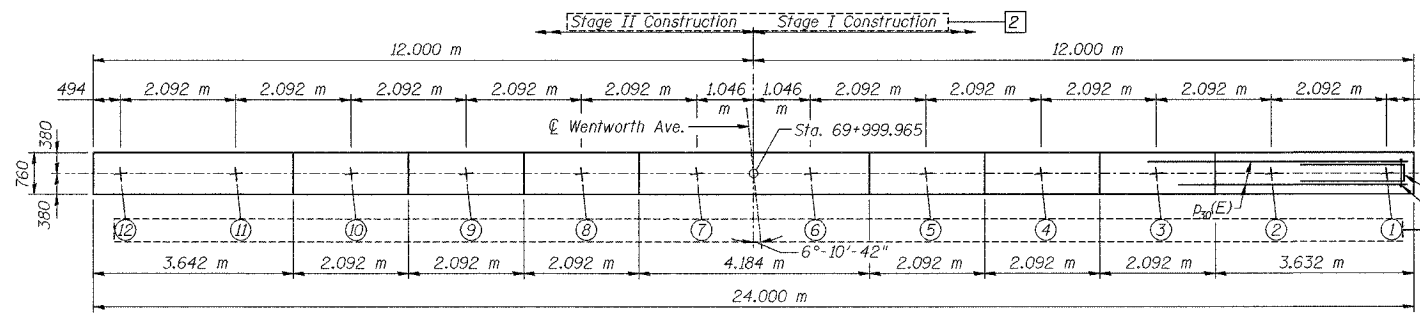
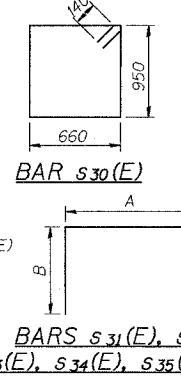


**BEARING SEAT ELEVATIONS**

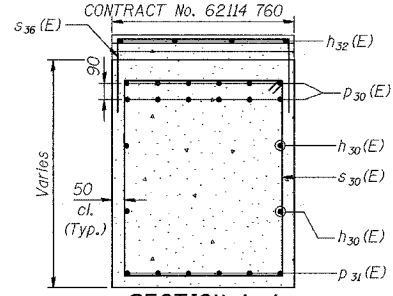
Beam	Elevation
1	188.428
2	188.428
3	188.476
4	188.519
5	188.553
6	188.587
7	188.587
8	188.561
9	188.533
10	188.495
11	188.456
12	188.456



**TOP PLAN**



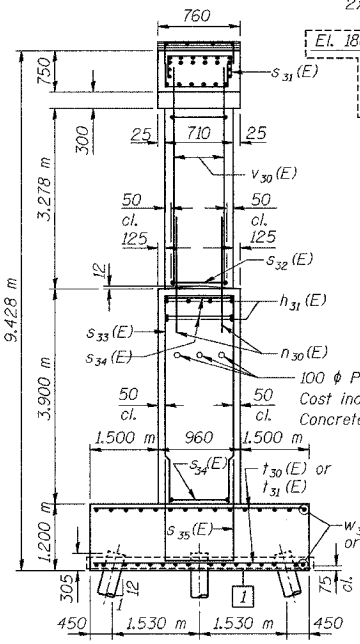
BAR  $s_{30}(E)$   
 BARS  $s_{31}(E), s_{32}(E), s_{33}(E), s_{34}(E), s_{35}(E), s_{36}(E)$



**SECTION A-A**

**BILL OF MATERIAL**

Bar	No.	Size	Length (m)	Shape
$h_{30}(E)$	8	15	11.95	
$h_{31}(E)$	60	15	9.93	
$h_{32}(E)$	8	15	4.08	
$n_{30}(E)$	96	20	1.85	
$p_{30}(E)$	24	30	11.95	
$p_{31}(E)$	12	30	9.97	
$p_{32}(E)$	12	30	1.98	
$s_{30}(E)$	120	20	3.50	
$s_{31}(E)$	76	20	1.96	
$s_{32}(E)$	144	15	2.81	
$s_{33}(E)$	106	20	8.46	
$s_{34}(E)$	28	15	2.14	
$s_{35}(E)$	106	20	4.80	
$s_{36}(E)$	28	15	1.94	
$t_{30}(E)$	246	20	3.86	
$t_{31}(E)$	17	20	2.36	
$u_{30}(E)$	8	20	2.24	
$v_{30}(E)$	96	20	4.10	
$w_{30}(E)$	57	20	10.95	
$w_{31}(E)$	13	20	4.15	
$w_{32}(E)$	13	20	5.20	
Structure Excavation		$m^3$	260	
Concrete Structures		$m^3$	217.6	
Reinforcement Bars Epoxy Coated		kg	14,440	
Furnishing Metal Pile Shells, 356 $\phi$		m	899.0	
Driving and Filling Shells		m	899.0	
Test Pile Metal Shells		Each	1	
Bar Splicers		Each	87	



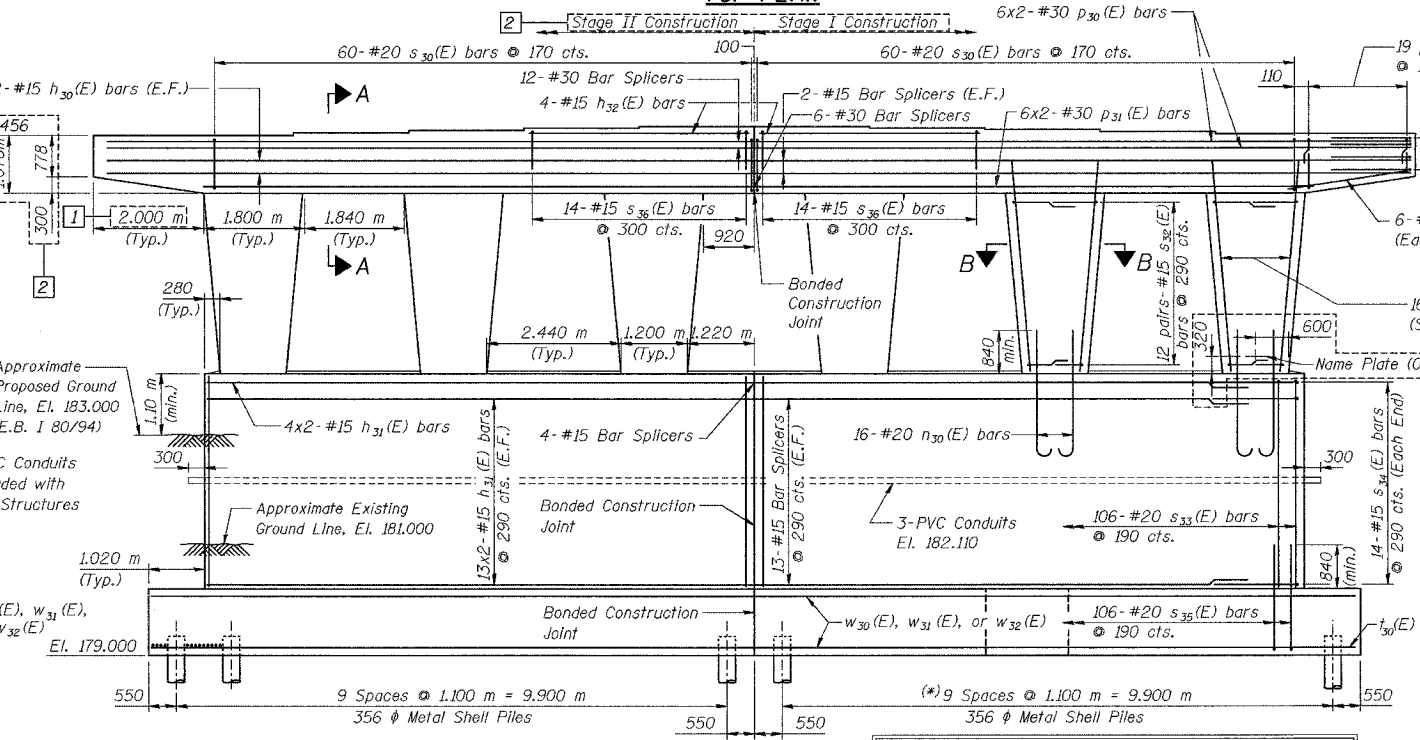
**END VIEW (Looking East)**

**PILE DATA**

Type - 356  $\phi$  Metal Shell  
 Capacity - 400 kN  
 Est. Length - 15.5 m  
 No. Req'd. - 58  
 Test Piles - 1

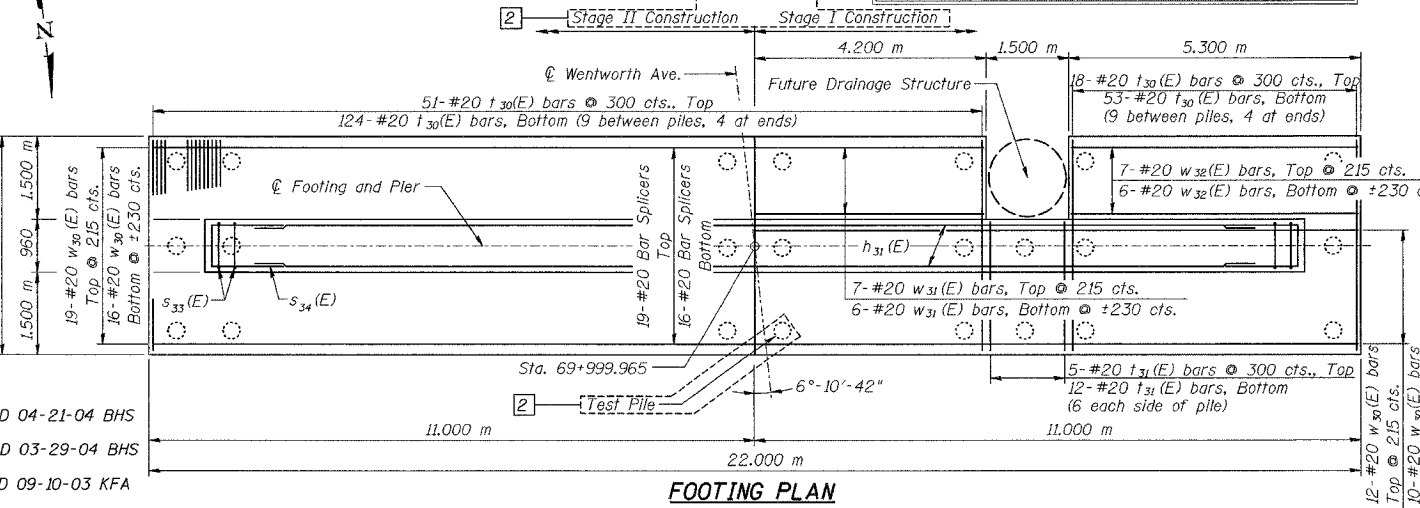
DESIGNED	DJG
CHECKED	GSP
DRAWN	MJB
CHECKED	GSP

- 3 REVISED 04-21-04 BHS
- 2 REVISED 03-29-04 BHS
- 1 REVISED 09-10-03 KFA

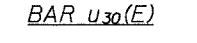


**ELEVATION (Looking South)**

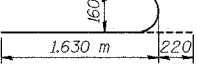
(\*NOTE: Omit pile at cut-out in footing. Adjust adjacent piles to provide 230 clear (Min.) between piles and edge of concrete.



**FOOTING PLAN**



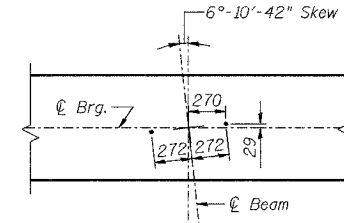
BAR  $u_{30}(E)$



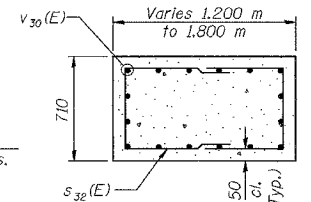
BAR  $n_{30}(E)$

**A & B DIMENSIONS**

Bar	A	B
$s_{31}(E)$	660	650
$s_{32}(E)$	610	1.10m
$s_{33}(E)$	860	3.80m
$s_{34}(E)$	860	640
$s_{35}(E)$	860	1.97m
$s_{36}(E)$	660	640
$u_{30}(E)$	660	790



**ANCHOR BOLT LAYOUT**



**SECTION B-B**

**LEGEND**

E.F. = Each Face

**MINIMUM BAR LAPS**

- #15 bars = 640
- #20 bars = 790
- #25 bars = 1320
- #30 bars = 1850

NOTES: Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap. All dimensions are in millimeters (mm) except as noted. Reinforcement bars designated (E) shall be epoxy coated. Bars indicated thus 20x3-#6 etc. indicates 20 lines of bars with 3 lengths per line.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. ROUTE 80/94 (KINGERY EXPRESSWAY) UNDER WENTWORTH AVE  
**PIER PLAN, ELEVATION AND DETAILS SECTION 2626.1B**  
 COOK COUNTY  
 STATION 7+579.488  
 STRUCTURE NO. 016-2790  
 DATE 07/05  
**AMERICAN CONSULTING ENGINEERS**

FOR INFORMATION ONLY