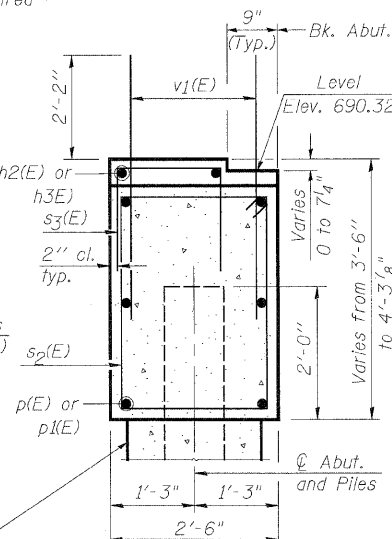


**ELEVATION NORTH ABUTMENT**  
 (Looking North perpendicular to skew)

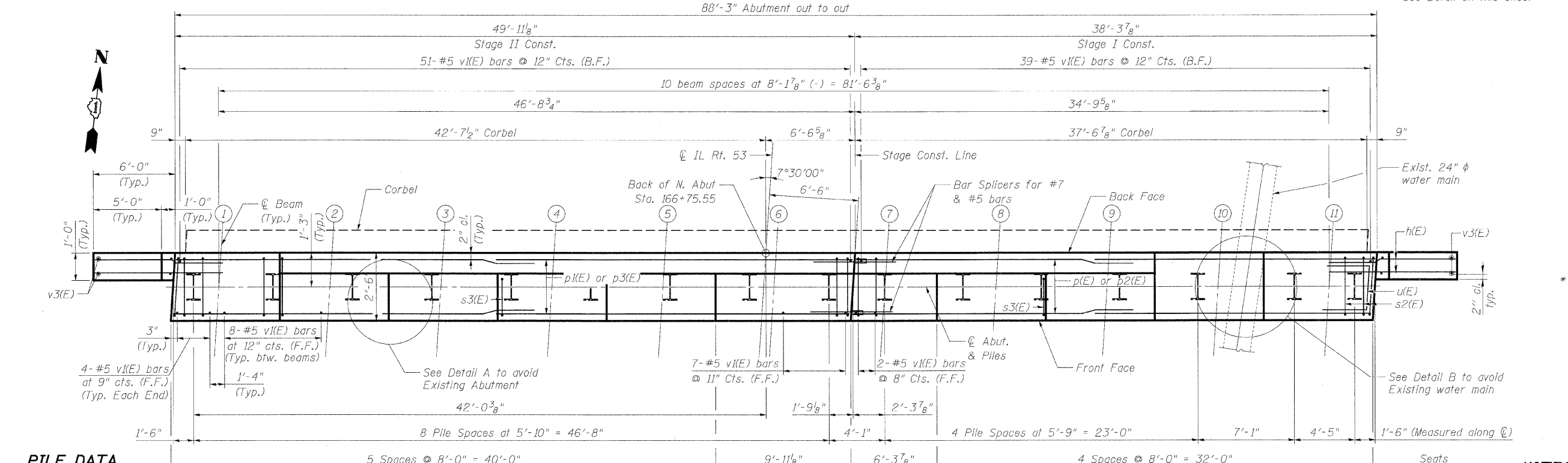


**SECTION THRU ABUTMENT**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	20	# 5	7'-8"	—
h1(E)	24	# 5	8'-7"	—
h2(E)	2	# 5	13'-10"	—
h3(E)	2	# 5	25'-7"	—
p(E)	12	# 7	20'-4"	—
p1(E)	12	# 7	26'-4"	—
s2(E)	93	# 4	11'-5"	□
s3(E)	42	# 4	5'-5"	□
u(E)	8	# 6	6'-2"	┌
v1(E)	179	# 5	4'-4"	—
v3(E)	14	# 5	12'-2"	—
* Porous Granular Embankment, Special Structure Excavation				Cu. Yd. 119
Concrete Structures				Cu. Yd. 101
Reinforcement Bars, Epoxy Coated				Cu. Yd. 34.3
Furnishing Steel Piles HP12x53				Pound 3,520
Driving Piles				Foot 1,024
Bar Splicers				Each 8
Pile Shoes				Each 16

\* See Special Provisions

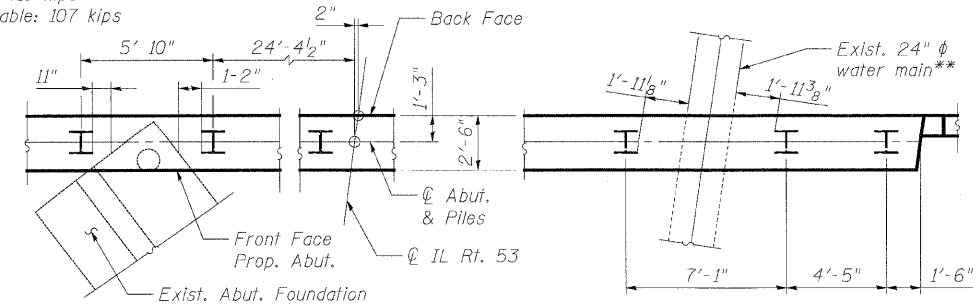


**PLAN**

\*\* Water main shall be exposed before driving piles.

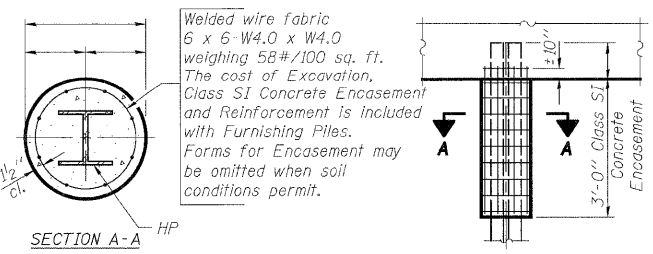
**PILE DATA**

Type: Steel HP 12x53 with Pile Shoes  
 Nominal Required Bearing: 419 kips  
 Allowable Resistance Available: 107 kips  
 Est. Length: 64 ft  
 No. Production Piles: 16



**DETAIL A**

**DETAIL B**



**PILE ENCASEMENT DETAIL**

**ANCHOR BOLT DETAIL**

BAR SIZE	MIN. LAP SPLICE
#4	1'-4"
#5	1'-8"
#6	2'-0"
#7	2'-9"

REVISIONS	
NAME	DATE

**NOTES:**

1. Pour steps monolithically with cap.
2. For v3(E) cutting diagram & bar bending diagrams see sheet S12.
3. For Bar Splicer Details see sheet S15.

ILLINOIS DEPARTMENT OF TRANSPORTATION

**NORTH ABUTMENT**  
 ILLINOIS ROUTE 53 OVER  
 SPRING BROOK CREEK  
 FAU 2578 SECTION 532B-1  
 STRUCTURE NO. 022-0189  
 DUPAGE COUNTY STATION 166+46.79

SCALE: NONE DRAWN BY: M.T. / E.M.  
 DATE: 6/12/09 CHECKED BY: A. YARGICOLU

P:\Projects\Rawdy\_Lisle\6/10/2009\G:\101\3556\_A0\_IL531\_Springbrook\Drawings\STRUCT\N2\_N.abut.dgn  
 5/10/09 5:04 PM  
 Patrick Engineering Inc. Lisle, Illinois

