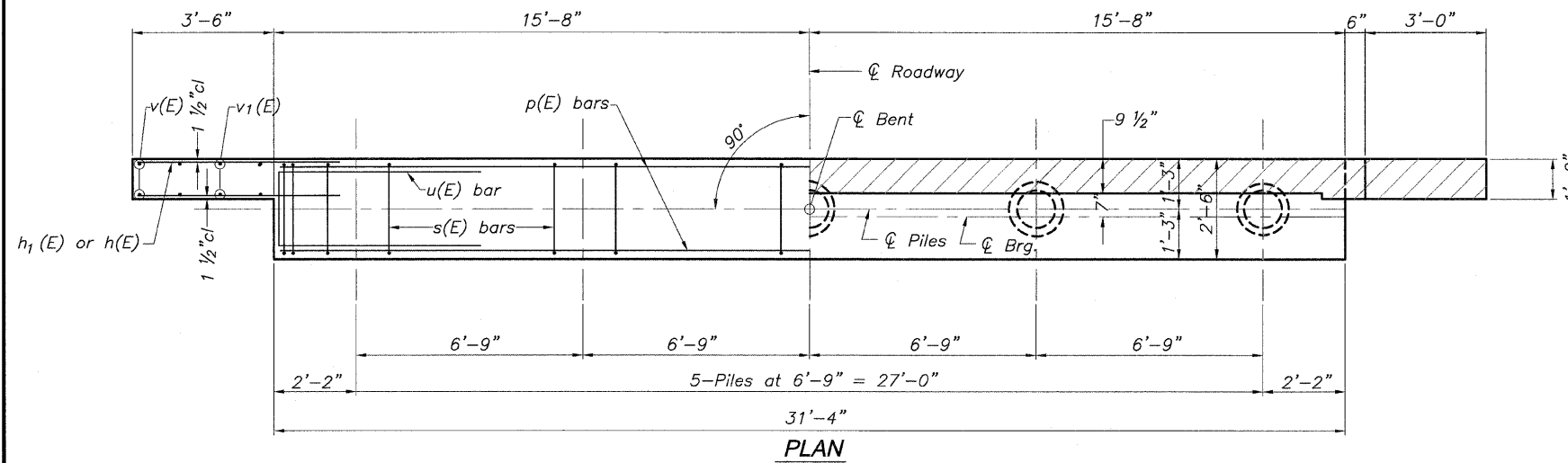
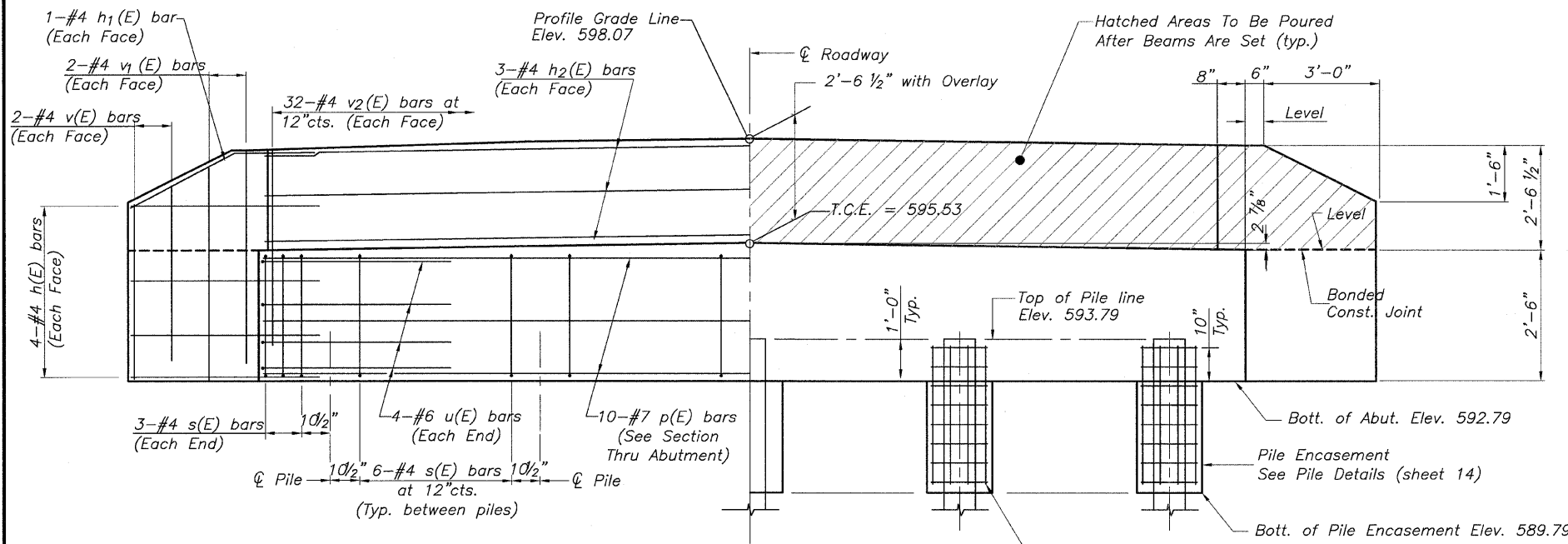


| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------------|---------|--------|--------------|-----------|
| F.A.S. 214 | * | MERCER | 16 | 10 |
| FED. ROAD DIST. NO. 7 ILLINOIS | | | 89387 | |

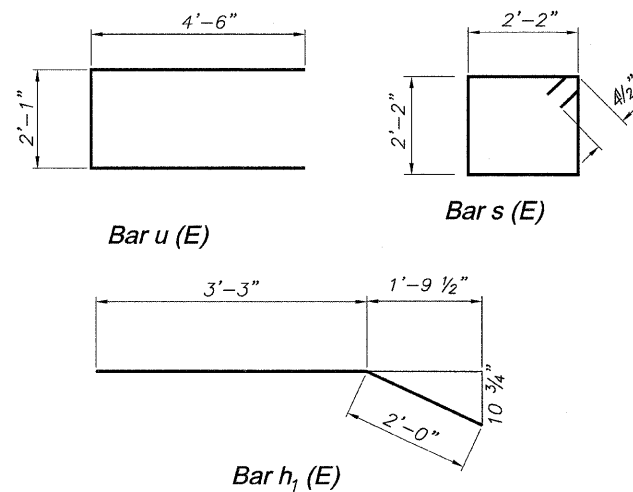
*05-00023-02-BR



PLAN



ELEVATION



| | |
|----------|-----|
| DESIGNED | MHM |
| CHECKED | JBF |
| DRAWN | MHM |
| CHECKED | JBF |

Welded Wire Fabric 6x6-w4.0xw4.0 Weighing 58#/100 Sq. Ft. The Cost Of Excavation And Reinforcement Is Included With Concrete Encasement. Forms For Encasement May Be Omitted When Soil Conditions Permit.

GENERAL NOTES:
The backwall and the portion of the wingwalls above the bonded construction joint shall be cast against the in-place beam.

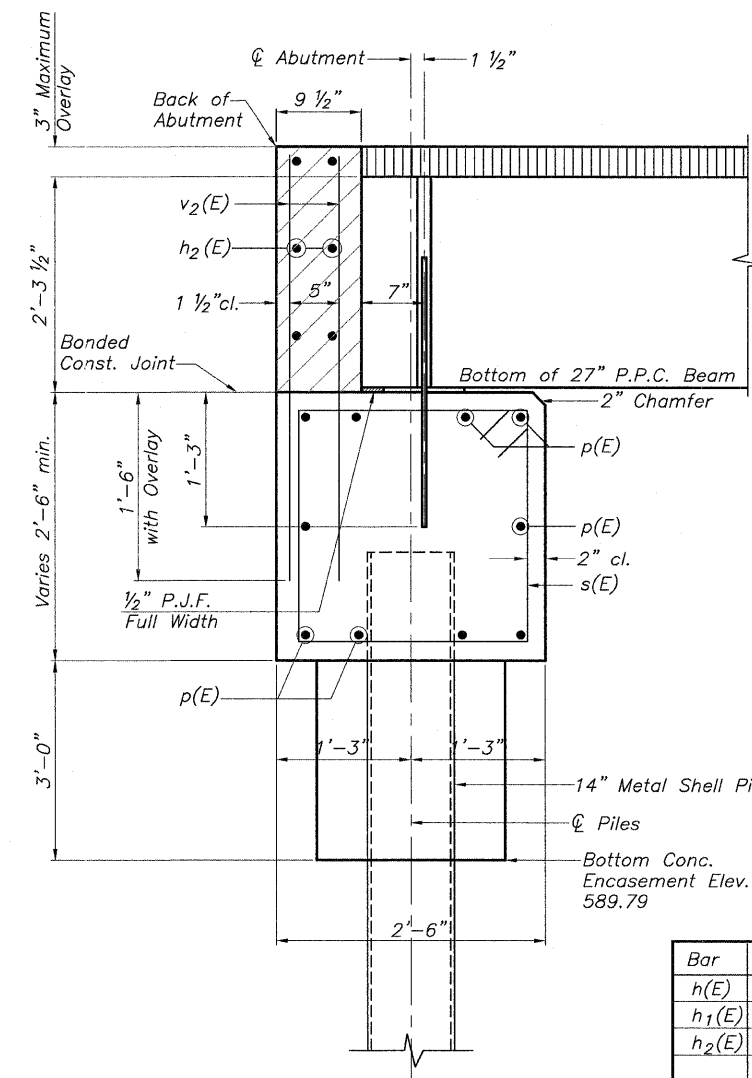
Reinforcement bars shall conform to ASTM A 706 (IL MOD), Grade 60

Space reinforcement in cap to miss anchor bolts. All edges shall have standard 3/4" chamfers unless otherwise noted.

The Metal Shell Piles shall be According to ASTM A 252 Grade 3.

The Test Pile(s) shall be driven to 110 Percent of the Nominal Required Bearing Indicated in the Pile Data Information.

DESIGN STRESSES
fy = 60,000 psi
fc = 3,500 psi



SECTION THRU ABUTMENT

PILE DATA

| | |
|------------------------------|--|
| Type & Size | Metal Shell-14 In. Dia. x 0.312 In. Walls |
| Nominal Required Bearing | 270 Kips |
| Allowable Resistance Bearing | 90 Kips |
| Estimated Length | 40 Feet (N. Abut.) 40 Feet (S. Abut.) |
| Quantity | 4+1 Test Pile (N. Abut.) 4+1 Test Pile (S. Abut.) |

Bill of Material For Two Abutments

| Bar | No. | Size | Length | Shape |
|--|-----|------|--------|-------|
| h(E) | 32 | #4 | 5'-0" | — |
| h1(E) | 8 | #4 | 5'-3" | — |
| h2(E) | 12 | #4 | 31'-0" | — |
| p(E) | 20 | #7 | 31'-0" | — |
| s(E) | 60 | #4 | 9'-5" | □ |
| u(E) | 16 | #6 | 11'-1" | C |
| v(E) | 16 | #4 | 3'-2" | — |
| v1(E) | 16 | #4 | 4'-2" | — |
| v2(E) | 128 | #4 | 3'-8" | — |
| Structure Excavation | | | Cu.Yd. | 4.9 |
| Concrete Structures | | | Cu.Yd. | 22.2 |
| Concrete Encasement | | | Cu.Yd. | 5.5 |
| Reinforcement Bars Epoxy Coated | | | Pound | 2700 |
| Furnishing Metal Shell Piles, 14"x0.312" | | | Feet | 320 |
| Driving Piles | | | Feet | 320 |
| Test Pile Metal Shells | | | Each | 2 |

ABUTMENT DETAILS

SECTION 05-00023-02-BR
F.A.S. 214, STA. 70+40
MERCER COUNTY
STRUCTURE NO. 066-3043