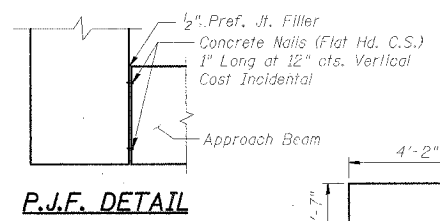
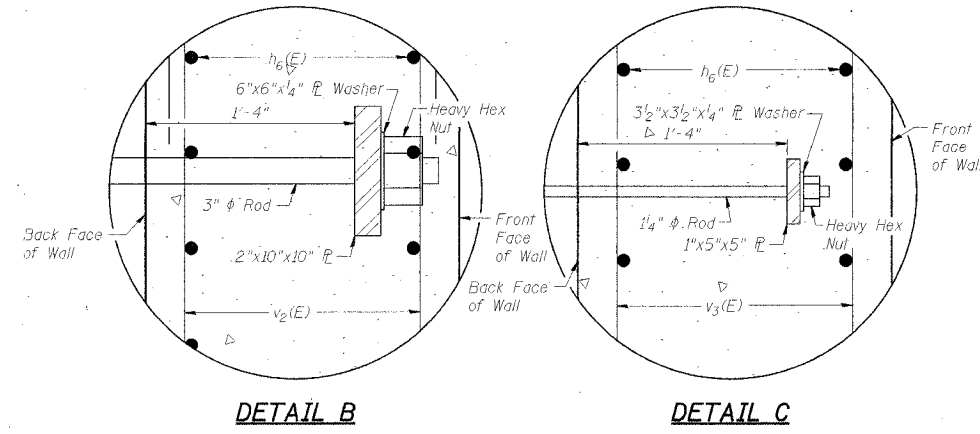


PROJECT	SECTION	COUNTY	SHEET	TOTAL SHEETS
245	98-20101-00-BR	BUREAU	65	53
FED. ROAD DIST. NO. 7		ELLIPS	FED. AID PROJECT-BROS-OH(62)	

STRUCTURAL SHEET 20 OF 25
BILL OF MATERIAL - W. ABUT.

Bar	No.	Size	Length	Shape
h(E)	14	#9	37'-6"	U
h ₁ (E)	12	#7	36'-8"	U
h ₂ (E)	28	#9	11'-6"	J
h ₃ (E)	24	#7	6'-10"	J
h ₄ (E)	16	#6	35'-0"	—
h ₅ (E)	14	#5	35'-0"	—
h ₆ (E)	112	#5	39'-2"	—
h ₇ (E)	20	#5	26'-4"	—
h ₈ (E)	8	#9	33'-6"	U
h ₉ (E)	9	#6	31'-0"	—
n(E)	334	#5	4'-10"	U
s(E)	32	#5	21'-9"	J
s ₁ (E)	2	#5	19'-3"	J
s ₂ (E)	6	#5	16'-9"	J
s ₃ (E)	30	#4	11'-5"	J
t	80	#5	3'-8"	—
t ₁	104	#5	5'-8"	—
t ₂	50	#5	12'-3"	J
u(E)	74	#4	3'-5"	J
u ₁ (E)	28	#5	4'-0"	J
u ₂ (E)	12	#6	8'-6"	J
v(E)	72	#5	19'-6"	—
v ₁ (E)	10	#5	15'-1"	—
v ₂ (E)	212	#5	12'-0"	—
v ₃ (E)	212	#4	14'-5"	—
v ₄ (E)	22	#5	19'-6"	—
v ₅ (E)	25	#5	22'-0"	—
v ₆ (E)	20	#6	4'-0"	—
v ₇ (E)	6	#5	26'-4"	—
v ₈ (E)	32	#5	5'-0"	L
w	22	#5	46'-8"	—
w ₁	8	#5	27'-2"	—
w ₂	10	#5	37'-0"	—

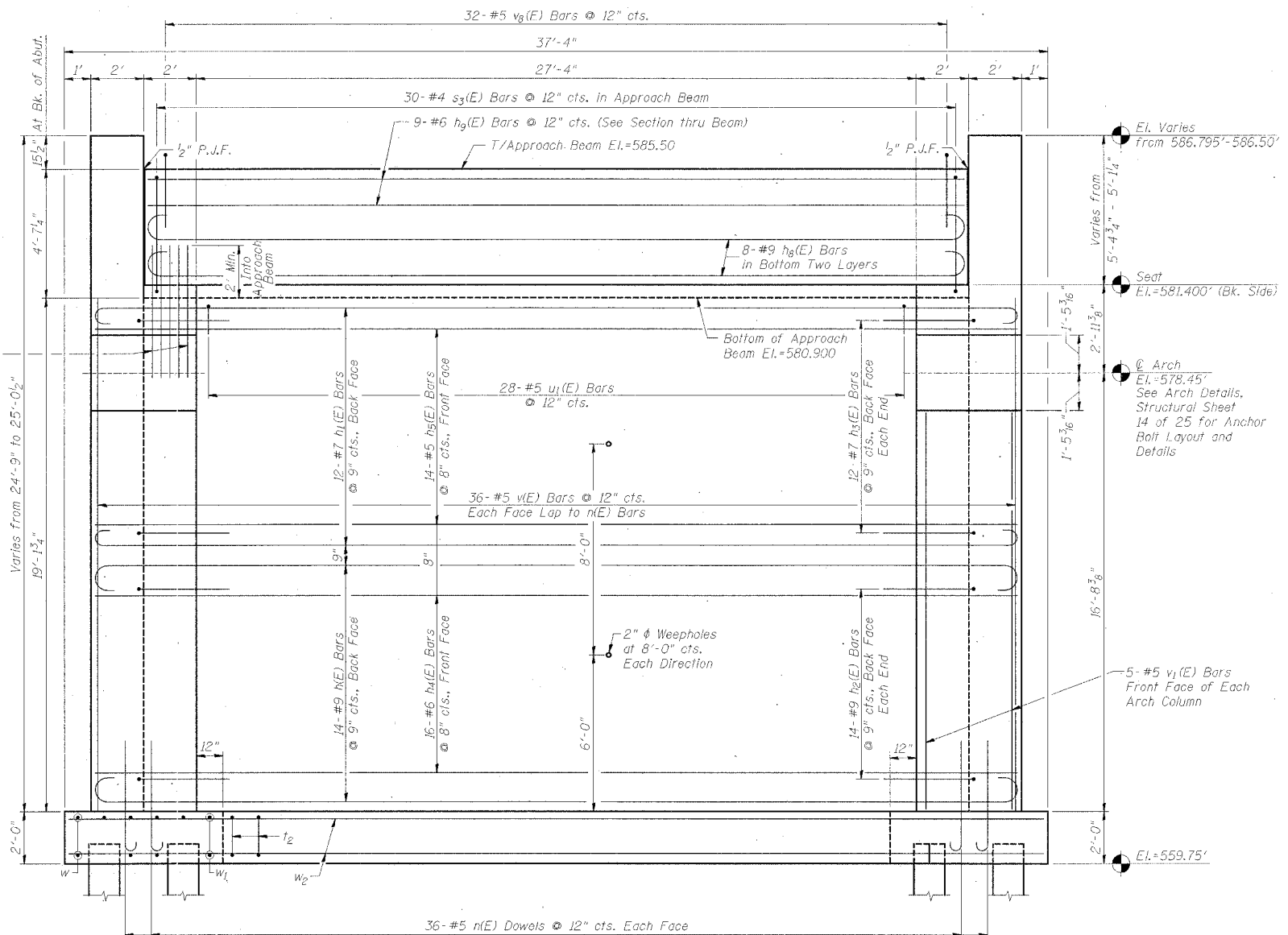
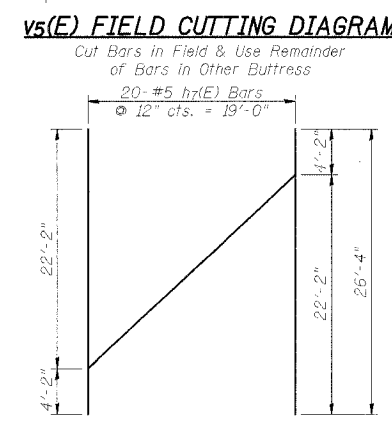
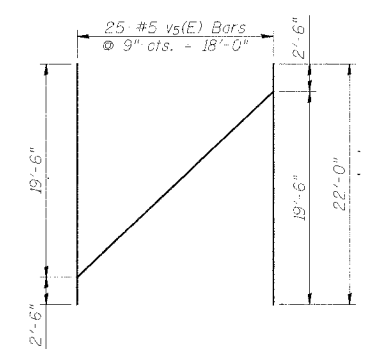
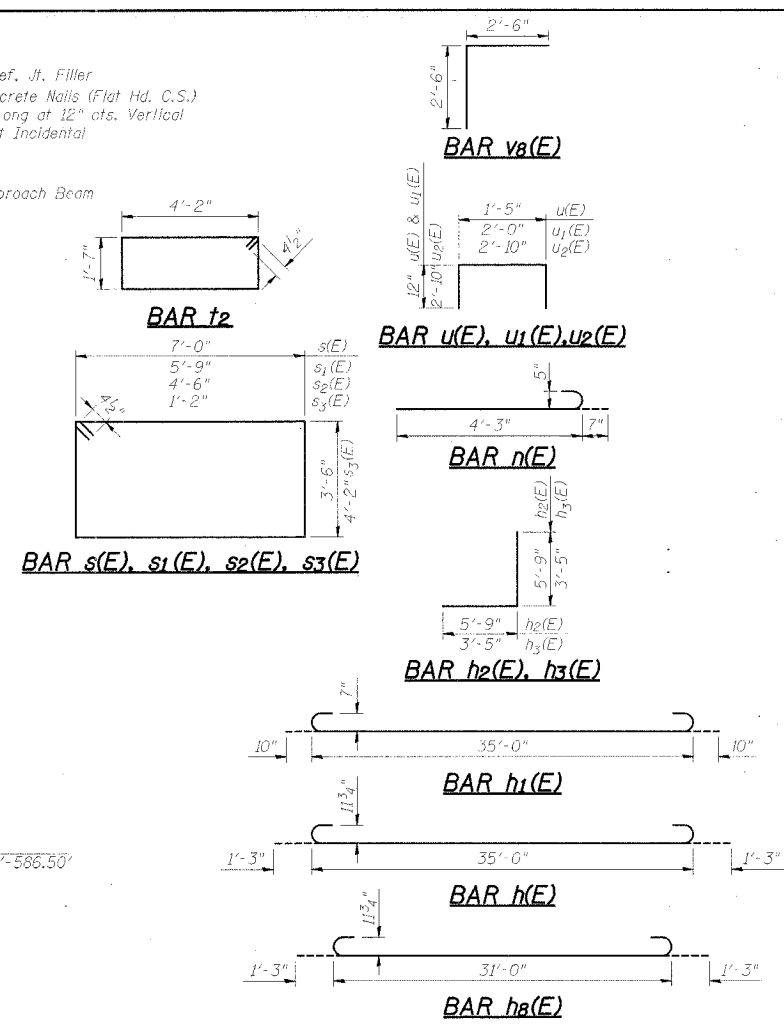
Porous Granular Backfill	Cu. Yd.	1041
Concrete Structures	Cu. Yd.	300.6
Furnishing & Erecting Structural Steel	L. Sum	1
Reinforcement Bars	Pound	3250
Reinforcement Bars, Epoxy Coated	Pound	22940
Cofferdams	Each	1
Hardware	Pound	5477
Furnishing Metal Pile Shells-14"	Foot	1225
Driving & Filling Shells	Foot	1225
Test Pile-14" Metal Shell	Each	1
Form Liner Textured Surface	Sq. Yd.	329
Cofferdam Excavation	Cu. Yd.	1211



MINIMUM BAR LAPS

SIZE	LENGTH
#4	1'-8"
#5	2'-2"
#6	2'-7"
#7	3'-5"
#8	4'-6"
#9	5'-9"

NOTATIONS
 E.F. = Each Face
 B.F. = Back Face
 F.F. = Front Face
 W.W. = Wingwall



ABUTMENT ELEVATION - SECTION 5-5

NOTES:
 All Exposed Edges shall have 3/4" Chamfer.
 Reinforcement Bars Designated (E) shall be Epoxy Coated.
 Space Reinforcing to miss Anchor Bolts.
 All Hardware shall be Hot Dipped Galvanized in accordance with AASHTO M-232.
 Concrete Form Liner shall be placed on Front Face of All Abutment and Wingwall Regions except Approach Pavement Cross Beam. Concrete Form Liner shall also be Placed on Exposed Portions of the Back Face of All Wingwalls with Vertical Joint Locations Set to Match Front Face Form Liner. The Top of the Wingwalls shall have a Tooled Joint Across Their Width to Create the Look of a Limestone Block Wall.
 Contractor shall pour the Approach Pavement Cross Beam after Timber Structure has been Erected to ensure 1/2" Gap is maintained between Timber Bridge Deck and Concrete Cross Beam.
 Abutment shall be Backfilled with Porous Granular Backfill. Pay Limits for Porous Granular Backfill shall be the Area Enclosed From the Top of Footing & End of Wingwall.
 Steel Plates in Substructure Shall be Hot Dipped Galvanized in accordance with AASHTO M-232 and Paid for at the Lump Sum Price for "Furnishing and Erecting Structural Steel"
 * See Special Provisions.

WEST ABUTMENT DETAILS
 SECTION 98-20101-00-BR
 STA. 13+70, S.N. 006-4288
 T.R. 245 OVER BIG BUREAU CREEK
 BUREAU COUNTY
 WHA # 1104D04