RAIL STATION PROJECT NOTES

CONTRACT	COUNTY	F.A.P. NO.	SHEET NO.	TOTAL SHTS.
99-512-01	NEW CASTLE		35	110

CHURCHMAN'S CROSSING RAIL STATION AND TRACK A IMPROVEMENTS

REVISIONS

PROJECT NOTES:

1. LOCATION

   PROPOSED COMMUTER RAIL PLATFORM ADJACENT TO AMTRAK, IN NEW CASTLE COUNTY, DELAWARE.

2. ELEVATION

   THE VERTICAL DATUM IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NGVD 88)

3. DESIGN CRITERIA

   1996 BOCA CODE, AREA 1997, ACI 318-95, ANSI/AF&PA NDS-1997

4. LOADING

   LIVE LOAD = 85 PSF
   SNOW LOAD = 20 PSF

5. SUB-SOIL BORINGS/ TEST PITS

   THIS BORING INFORMATION, THE ACCURACY OF WHICH THE STATE DOES NOT GUARANTEE, IS PRESENTED ON THESE PLANS TO THE CONTRACTOR FOR HIS INFORMATION ONLY. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF SUB-SOIL CONDITIONS, WHICH MAY EFFECT METHOD OR COST OF CONSTRUCTION. SOIL BORING LOCATIONS ARE DENOTED THUS: ⊕. TEST PIT LOCATIONS ARE DENOTES THUS: ⊕. FOR DETAILS, SEE SHEET NO. 32.

6. PORTLAND CEMENT CONCRETE

   STRUCTURAL ELEMENTS OF PORTLAND CEMENT CONCRETE SHALL BE AS NOTED: (F'c = 28 DAY COMPRESSIVE STRENGTH)

   CLASS A - PILE CAPS AND LANDINGS (F'c = 4500 P.S.I.)

   PRECAST ELEMENTS (GRADE BEAMS, PLATFORM PANELS, STAIRWAY AND RAMPS) - F'c = 5000 P.S.I.

   MIX REQUIREMENTS SHALL CONFORM TO SECTION 812 OF THE SPECIFICATIONS AND THE SPECIAL PROVISIONS AS REQUIRED. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾" UNLESS OTHERWISE NOTED.

7. BAR REINFORCEMENT

   ALL REINFORCEMENT STEEL SHALL CONFORM TO ASTM A 615, GRADE 60. ALL REINFORCING STEEL SHALL HAVE A CLEAR COVER OF 2" UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL REINFORCING STEEL SHALL BE PROTECTED WITH FUSION BONDED EPOXY. EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM D 3963, AND IS DENOTED WITH A SUFFIX 'E'.

8. AUGERED PRESSURE GROUTED (A.P.G.) PILES

   FOUNDATION DESIGN AND QUANTITIES ARE BASED ON A STUDY OF THE SUB-SOIL BORINGS MADE AT THE SITE.

   THE DESIGN LOAD IS 37 TONS FOR ALL FOUNDATIONS EXCEPT P5 FOR WHICH THE DESIGN LOAD IS 41 TONS.

   FOR ESTIMATED PILE TIP ELEVATIONS, SEE SHEET NOS. 36 AND 50.

9. CONSTRUCTION JOINTS

   KEYED CONSTRUCTION JOINTS SHALL BE 2" X 4" OR AS NOTED. ALL EXPOSED CONSTRUCTION JOINT EDGES SHALL HAVE A ¾" V-NOTCH UNLESS OTHERWISE NOTED.

10. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE TOPSOILED, SEEDED AND MULCHED UNLESS THE FINAL SURFACE IS BALLAST, SUBBALLAST, OR PAVING. NO PAYMENT SHALL BE MADE FOR AREAS OUTSIDE THE LIMITS OF CONSTRUCTION.

11. HIGH BLOCK

    ALL MATERIAL SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

    NOMINAL SIZES FOR TIMBER MEMBERS ARE SPECIFIED ON THE PLANS.

12. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE FABRICATION OF THE PRECAST DECK PANELS. 1" CLEAR SHALL BE MAINTAINED AT ALL TIMES BETWEEN THE EXISTING CATENARY POLE @ STA. 12+78.48 AND THE PRECAST DECK PANELS.

ADA - FACILITIES ACCESSIBILITY REQUIREMENTS

ALTHOUGH THIS PROJECT HAS BEEN DESIGNED TO COMPLY WITH ADA REQUIREMENTS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT ALL FACILITIES WITHIN ADA REGULATIONS REGARDLESS OF CONSTRUCTION TOLERANCES WHICH MAY BE SPECIFIED ELSEWHERE IN THESE CONTRACT DRAWINGS OR IN THE SPECIFICATIONS. A LISTING OF ADA REQUIREMENTS APPLICABLE TO THIS PROJECT INCLUDES, BUT MAY NOT BE LIMITED TO, THE FOLLOWING:

RAMPS	ADA REFERENCE	
	Handbook	Regulations
Every part of the accessible path shall be equipped with a ramp when a slope is steeper than 1:20.	3.1.1.6	4.8.1
Every ramp shall have a slope no steeper than 1:12.	3.1.1.6	4.8.2
All ramps shall rise no more than 30 inches.	3.1.1.6	4.8.2
All ramps shall have a minimum clear width of 36 inches.	3.1.1.6	4.8.3
All ramps shall have landings at the top and bottom.	3.1.1.6	4.8.4
All landings shall have a width at least as wide as the ramp.	3.1.1.6	4.8.4
All landings shall have a length of at least 60 inches.	3.1.1.6	4.8.4
All ramps with a rise higher than 6 inches, or a horizontal run of more than 72 inches, shall be equipped with handrails.	3.1.1.6	4.8.5
The handrails shall meet all requirements.	3.1.1.6	4.8.5
The cross-slope on all ramps shall be no steeper than 1:50.	3.1.1.6	4.8.6

PLATFORMS	ADA REFERENCE	
	Handbook	Regulations
All platform and high block edges shall be equipped with a detectable warning surface if not bordered by platform screens or guard rails.	5.2.1	10.3.1
The detectable warning surface shall meet all requirements for texture, color, and resiliency.	5.2.1	10.3.1
The detectable warning surface shall be 24 inches wide and extend the full length of the platform.	5.2.1	10.3.1
The cross slope on all platforms shall be no steeper than 1:50.	5.2.1	10.3.1

DESIGN _____ CHKD. _____

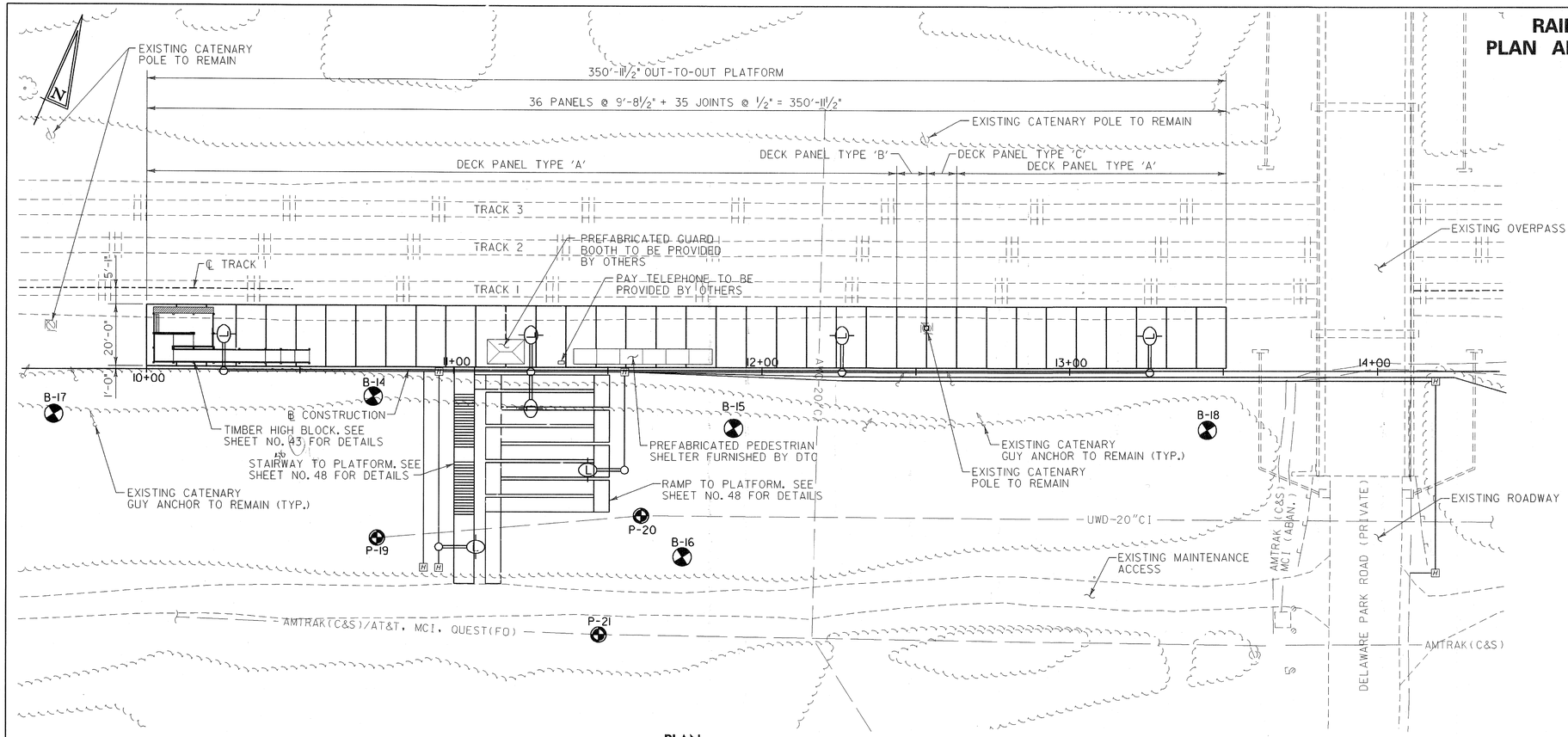
PREL. TRACING _____

CONTRACT	COUNTY	F.A.P. NO.	SHEET NO.	TOTAL SHTS.
99-512-01	NEW CASTLE		36	110

CHURCHMAN'S CROSSING RAIL STATION AND TRACK A IMPROVEMENTS

REVISIONS

RAIL STATION PLAN AND ELEVATION

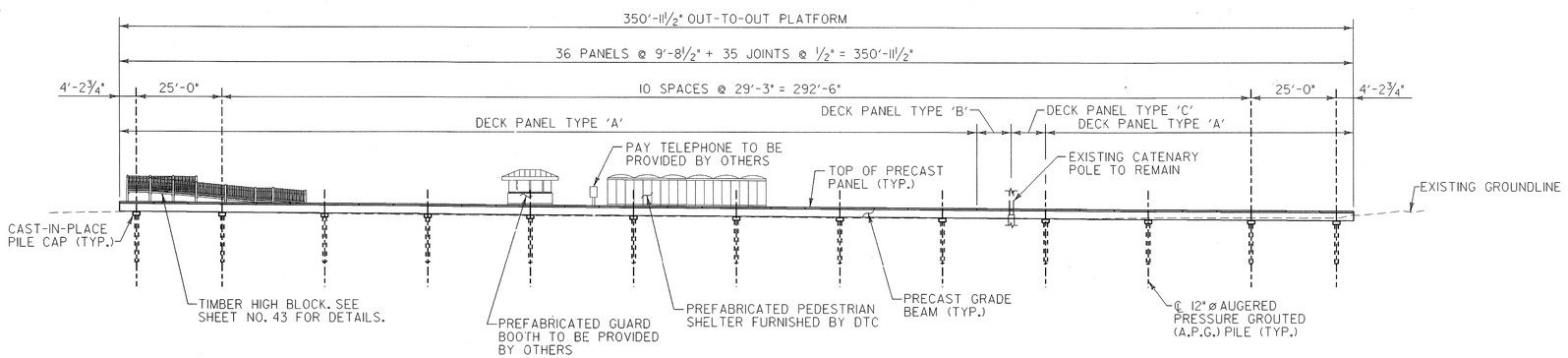


PLAN

SCALE: 1"=20'-0"

NOTES:

1. PRECAST GRADE BEAMS, CAST-IN-PLACE PILE CAPS, AND 12" ø AUGERED PRESSURE GROUTED (A.P.G.) PILES NOT SHOWN FOR CLARITY.
2. CHAIN-LINK FENCE NOT SHOWN FOR CLARITY.
3. RAMP AND STAIRWAY GUARD RAILS AND HANDRAILS NOT SHOWN FOR CLARITY.



ELEVATION

SCALE: 1"=20'-0"

NOTES:

1. STAIRWAY AND RAMP TO PLATFORM NOT SHOWN FOR CLARITY.
2. CHAIN-LINK FENCE NOT SHOWN FOR CLARITY.

DESIGN ____ CHKD. ____

PREL. TRACING ____

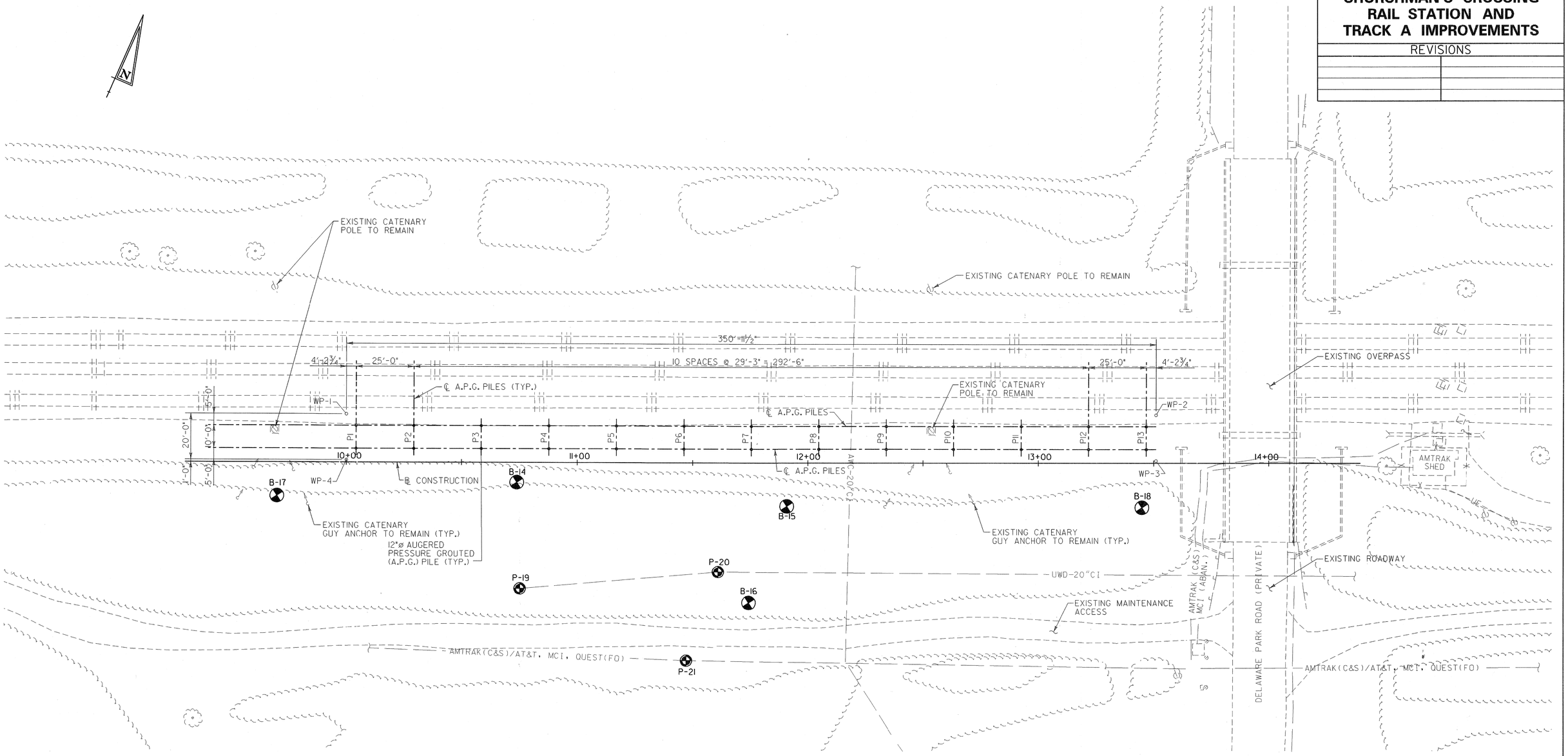
FEBRUARY 16, 1999

CONTRACT	COUNTY	F.A.P. NO.	SHEET NO.	TOTAL SHTS.
99-512-01	NEW CASTLE		37	110

CHURCHMAN'S CROSSING RAIL STATION AND TRACK A IMPROVEMENTS

REVISIONS	

RAIL STATION FOUNDATION PLAN



FOUNDATION PLAN

SCALE: 1"=20'-0"

WORK POINT SCHEDULE

WORKING POINT	STATION	OFFSET	NORTHING	EASTING
WP-1	10+00.00	21.00' LT.	617216.0923	583947.8491
WP-2	13+50.96	21.00' LT.	617356.5264	584269.4856
WP-3	13+50.96	1.00' LT.	617338.1973	584277.4884
WP-4	10+00.00	1.00' LT.	617197.7633	583955.8519

NOTE:

SEE SHEET NO. 50 FOR THE STAIRWAY AND RAMP FOUNDATION PLAN.

DESIGN _____ CHKD. _____

PREL. TRACING _____

FEBRUARY 16, 1999

CONTRACT	COUNTY	F.A.P. NO.	SHEET NO.	TOTAL SHTS.
99-512-01	NEW CASTLE		60	110

RAIL STATION PLATFORM BORING LOGS

CHURCHMAN'S CROSSING RAIL STATION AND TRACK A IMPROVEMENTS

REVISIONS

B-14

STATION: 10+73.85
OFFSET: 8.61' RT.
EXISTING GROUND SURFACE ELEVATION: 44.2
DATE: 10-29-98

SAMPLE NO.	DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	REMARKS	CLASS
1	1.0'	4	SATURATED FIRM REDDISH BROWN SILTY CLAY W/SOME FINE		A-6(10)
		3	SAND, TRACE OF COARSE SAND AND GRAVEL		
	2.5'	3			
			8" RECOVERY		
2	3.5'	3	WET STIFF REDDISH BROWN SILTY FINE SANDY CLAY	WATER @ 4.5'	A-6(6)
		5	W/TRACE OF COARSE SAND		
	5.0'	5			
			12" RECOVERY		
3	6.5'	4	WET VERY STIFF GRAYISH BROWN SILTY CLAY W/SOME FINE		A-6(9)
		8	SAND, TRACE OF COARSE SAND		
	8.0'	11			
			10" RECOVERY		
4	8.5'	4	WET FIRM BROWNISH GRAY FINE SANDY SILT W/SOME CLAY		A-4(3)
		2	AND COARSE SAND, TRACE OF GRAVEL		
	10.0'	4			
			9" RECOVERY		
5	13.5'	6	WET VERY STIFF BROWNISH GRAY FINE SANDY SILT W/SOME		A-4(1)
		10	CLAY AND COARSE SAND		
	15.0'	11			
			14" RECOVERY		
6	18.5'	4	WET STIFF GRAY FINE TO COARSE SANDY SILT W/SOME CLAY		A-4(0)
		5			
	20.0'	6			
			16" RECOVERY		

B-15

STATION: 11+90.87
OFFSET: 18.84' RT.
EXISTING GROUND SURFACE ELEVATION: 49.4
DATE: 10-28-98

SAMPLE NO.	DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	REMARKS	CLASS
1	1.0'	12	WET HARD BROWN COARSE TO FINE SANDY SILT W/SOME CLAY		A-4(0)
		26	AND GRAVEL		
	2.5'	30			
			5" RECOVERY		
2	3.5'	3	NO SIEVE ANALYSIS - INDICATION OF WET STIFF BROWNISH		------
		8	GRAY SILT W/SOME CLAY		
	5.0'	6			
			3" RECOVERY		
3	6.5'	4	WET VERY STIFF MULTICOLORED FINE SANDY SILT W/SOME		A-4(0)
		7	CLAY, TRACE OF COARSE SAND		
	8.0'	10			
			13" RECOVERY		
4	8.5'	5	WET MEDIUM DENSE MULTICOLORED FINE SAND W/SOME	WATER @ 8.5'	A-2-4(0)
		9	COARSE SAND AND CLAY		
	10.0'	9			
			12" RECOVERY		
5	13.5'	9	NO SIEVE ANALYSIS - INDICATION OF WET VERY STIFF		------
		11	MULTICOLORED FINE SANDY SILT W/SOME CLAY		
	15.0'	15			
			2" RECOVERY		
6	18.5'	7	WET VERY STIFF REDDISH BROWN CLAYEY FINE SILT W/SOME		A-4(2)
		12	COARSE SAND		
	20.0'	16			
			9" RECOVERY		
7	23.5'	4	SATURATED VERY STIFF BROWNISH GRAY FINE SANDY SILT		A-4(3)
		5	W/SOME CLAY, TRACE OF COARSE SAND AND GRAVEL		
	25.0'	10			
			16" RECOVERY		
8	28.5'	4	SATURATED VERY STIFF BROWNISH GRAY CLAYEY COARSE		A-5(2)
		7	SANDY SILT W/SOME FINE SAND, TRACE OF GRAVEL		
	30.0'	10			
			15" RECOVERY		
9	33.5'	6	SATURATED HARD BROWNISH GRAY COARSE SANDY SILT W/SOME		A-4(1)
		13	CLAY, FINE SAND AND GRAVEL		
	35.0'	28			
			13" RECOVERY		
10	38.5'	9	SATURATED VERY STIFF GRAYISH GREEN GRAVELLY SILT		A-5(3)
		12	W/SOME COARSE TO FINE SAND AND CLAY		
	25.0'	16			
			16" RECOVERY		
11	43.5'	4	SATURATED VERY STIFF GRAY CLAY W/SOME FINE SAND, TRACE		A-7-6(16)
		10	OF COARSE SAND		
	45.0'	15			
			18" RECOVERY		
12	48.5'	5	SATURATED VERY STIFF BROWNISH GRAY FINE SANDY SILT		A-5(4)
		11	W/SOME CLAY AND COARSE SAND, TRACE OF GRAVEL		
	50.0'	14			
			14" RECOVERY		
13	53.5'	11	SATURATED HARD MULTICOLORED FINE SANDY SILT W/SOME		A-4(3)
		19	CLAY AND COARSE SAND		
	55.0'	22			
			16" RECOVERY		
14	58.5'	12	SATURATED HARD BROWNISH GRAY CLAY W/SOME FINE SAND,		A-7-5(14)
		20	TRACE OF COARSE SAND		
	60.0'	29			
			16" RECOVERY		

NOTES:

1. THE INFORMATION SHOWN ON THIS SHEET IS BASED ON LIMITED INVESTIGATIONS, AND IS IN NO WAY WARRANTED TO BE INDICATIVE OF ACTUAL CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION.
2. BORING LOGS MADE BY DELAWARE DIVISION OF HIGHWAYS AS A RESULT OF THEIR SUBSURFACE EXPLORATIONS ON OCTOBER 28 AND OCTOBER 29, 1998.
3. LOCATIONS OF BORINGS REFERENCED TO CONSTRUCTION BASELINE.
4. CASING: 3¼" DIA. HOLLOW AUGER.
5. SOIL SAMPLING: 2" DIA. SPLIT SPOON SAMPLER, DRIVEN WITH A 140 LB. HAMMER FALLING 30" ("W/H" DENOTES WEIGHT OF HAMMER).
6. REFERENCE: FOR LOCATIONS OF THE STRUCTURAL BORINGS, REFER TO THE ROADWAY OR STRUCTURAL PLAN SHEETS. STRUCTURAL BORINGS ARE DENOTED THUS: B-X

PREL. TRACING ____ DESIGN ____ CHKD. ____

CONTRACT	COUNTY	F.A.P. NO.	SHEET NO.	TOTAL SHTS.
99-512-01	NEW CASTLE		61	110

RAIL STATION PLATFORM BORING LOGS

CHURCHMAN'S CROSSING RAIL STATION AND TRACK A IMPROVEMENTS

REVISIONS

B-16

STATION: 11+74.31
OFFSET: 61.04' RT.
EXISTING GROUND SURFACE ELEVATION: 65.5
DATE: 10-26-98

SAMPLE NO.	DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	REMARKS	CLASS
1	1.0'	6	MOIST VERY STIFF BROWN COARSE TO FINE SANDY SILT		A-4(0)
		12	W/SOME CLAY, TRACE OF GRAVEL		
	2.5'	14			
			12" RECOVERY		
2	3.5'	4	MOIST MEDIUM DENSE BROWN SILTY FINE TO COARSE SAND		A-2-4(0)
		10	W/TRACE OF GRAVEL		
	5.0'	10			
			12" RECOVERY		
3	6.5'	11	WET STIFF GRAYISH BROWN SILT W/SOME FINE SAND, TRACE		A-4(1)
		8	OF COARSE SAND, GRAVEL AND CLAY		
	8.0'	7			
			14" RECOVERY		
4	8.5'	8	WET HARD GRAY GRAVELLY SILT W/SOME FINE SAND, TRACE		A-4(0)
		19	OF COARSE SAND AND CLAY		
	10.0'	27			
			12" RECOVERY		
5	13.5'	3	NO SIEVE ANALYSIS - INDICATION OF WET STIFF BROWN SILTY		------
		5	CLAY		
	15.0'	6			
			3" RECOVERY		
6	18.5'	6	WET VERY STIFF REDDISH BROWN SILTY CLAY W/SOME FINE		A-6(7)
		7	SAND, TRACE OF COARSE SAND		
	20.0'	8			
			9" RECOVERY		
7	23.5'	5	WET MEDIUM DENSE BROWNISH GRAY COARSE TO FINE SAND		A-2-4(0)
		6	W/SOME CLAY, TRACE OF GRAVEL		
	25.0'	11			
			14" RECOVERY		
8	28.5'	6	WET VERY STIFF BROWNISH GRAY FINE TO COARSE SANDY CLAY		A-7-6(4)
		8	W/SOME GRAVEL		
	30.0'	9			
			9" RECOVERY		
9	33.5'	3	SATURATED STIFF GRAYISH BROWN SILTY FINE SANDY CLAY		A-6(7)
		4	W/TRACE OF COARSE SAND		
	35.0'	6			
			18" RECOVERY		
10	38.5'	4	SATURATED STIFF REDDISH BROWN CLAY W/SOME FINE SAND,		A-7-6(16)
		5	TRACE OF COARSE SAND		
	40.0'	9			
			18" RECOVERY		
11	43.5'	5	SATURATED HARD GRAY FINE SANDY SILT W/SOME COARSE	WATER @ 44.8'	A-4(0)
		12	SAND, TRACE OF GRAVEL		
	45.0'	19			
			12" RECOVERY		
12	48.5'	3	SATURATED STIFF GRAYISH BROWN FINE TO COARSE SANDY SILT		A-4(1)
		6	W/SOME CLAY, TRACE OF GRAVEL		
	50.0'	9			
			18" RECOVERY		

B-17

STATION: 9+69.85
OFFSET: 14.56' RT.
EXISTING GROUND SURFACE ELEVATION: 49.8
DATE: 10-30-98

SAMPLE NO.	DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	REMARKS	CLASS
1	1.0'	6	MOIST MEDIUM DENSE BROWN FINE TO COARSE SAND AND		A-1-b(0)
		6	GRAVEL W/SOME SILT		
	2.5'	10			
			12" RECOVERY		
2	3.5'	3	WET MEDIUM DENSE BROWN SILTY FINE TO COARSE SAND		A-2-4(0)
		5	W/SOME GRAVEL		
	5.0'	9			
			6" RECOVERY		
3	6.5'	6	WET MEDIUM DENSE BROWNISH GRAY COARSE TO FINE SAND		A-1-b(0)
		6	W/SOME SILT, TRACE OF GRAVEL		
	8.0'	9			
			16" RECOVERY		
4	8.5'	4	WET LOOSE BROWNISH GRAY COARSE TO FINE SAND W/SOME	WATER @ 8.5'	A-2-4(0)
		3	CLAY, TRACE OF GRAVEL		
	10.0'	3			
			12" RECOVERY		
5	13.5'	4	WET VERY STIFF BROWNISH GRAY FINE SANDY SILT W/SOME		A-4(2)
		10	CLAY AND COARSE SAND		
	15.0'	10			
			10" RECOVERY		
6	18.5'	48	SATURATED VERY STIFF BROWN SILTY FINE SANDY CLAY		A-6(5)
		14	W/SOME COARSE SAND, TRACE OF GRAVEL		
	20.0'	12			
			12" RECOVERY		
7	23.5'	3	SATURATED STIFF BROWNISH GRAY FINE SANDY SILT W/SOME		A-5(3)
		5	COARSE SAND AND CLAY, TRACE OF GRAVEL		
	25.0'	8			
			9" RECOVERY		
8	28.5'	4	SATURATED VERY STIFF MULTICOLORED CLAY W/SOME GRAVEL,		A-7-5(9)
		6	TRACE OF COARSE TO FINE SAND		
	30.0'	10			
			6" RECOVERY		
10	38.5'	3	SATURATED STIFF BROWNISH GRAY CLAY W/TRACE OF FINE TO		A-7-5(22)
		5	COARSE SAND AND GRAVEL		
	40.0'	7			
			16" RECOVERY		
11	43.5'	3	SATURATED STIFF BROWNISH GRAY CLAY W/TRACE OF		A-7-5(32)
		6	FINE TO COARSE SAND		
	45.0'	10			
			18" RECOVERY		
12	48.5'	3	SATURATED VERY STIFF BROWNISH GRAY CLAY W/TRACE OF		A-7-6(36)
		6	FINE TO COARSE SAND		
	50.0'	10			
			18" RECOVERY		
13	53.5'	8	SATURATED STIFF MULTICOLORED CLAY W/TRACE OF		A-7-5(33)
		10	FINE TO COARSE SAND		
	55.0'	12			
			18" RECOVERY		
14	58.5'	9	SATURATED HARD BROWNISH GRAY CLAY W/TRACE OF		A-7-5(20)
		15	FINE TO COARSE SAND		
	60.0'	19			
			18" RECOVERY		

NOTES:

1. THE INFORMATION SHOWN ON THIS SHEET IS BASED ON LIMITED INVESTIGATIONS, AND IS IN NO WAY WARRANTED TO BE INDICATIVE OF ACTUAL CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION.
2. BORING LOGS MADE BY DELAWARE DIVISION OF HIGHWAYS AS A RESULT OF THEIR SUBSURFACE EXPLORATIONS ON OCTOBER 26 AND OCTOBER 30, 1998.
3. LOCATIONS OF BORINGS REFERENCED TO CONSTRUCTION BASELINE.
4. CASING: 3¼" DIA. HOLLOW AUGER.
5. SOIL SAMPLING: 2" DIA. SPLIT SPOON SAMPLER, DRIVEN WITH A 140 LB. HAMMER FALLING 30" ("W/H" DENOTES WEIGHT OF HAMMER).
6. REFERENCE: FOR LOCATIONS OF THE STRUCTURAL BORINGS, REFER TO THE ROADWAY OR STRUCTURAL PLAN SHEETS. STRUCTURAL BORINGS ARE DENOTED THUS: B-X

PREL. TRACING ____ DESIGN ____ CHKD. ____

FEBRUARY 16, 1999

CONTRACT	COUNTY	F.A.P. NO.	SHEET NO.	TOTAL SHTS.
99-512-01	NEW CASTLE		62	110

RAIL STATION PLATFORM BORING LOGS

CHURCHMAN'S CROSSING RAIL STATION AND TRACK A IMPROVEMENTS

REVISIONS

B-18

STATION: 13+44.87
OFFSET: 19.51' RT.
EXISTING GROUND SURFACE ELEVATION: 48.9
DATE: 10-27-98

SAMPLE NO.	DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	REMARKS	CLASS
1	10.0'	3	WET STIFF REDDISH BROWN FINE SANDY SILT W/SOME COARSE		A-4(0)
		6	SAND		
	11.5'	8			
			8" RECOVERY		
2	14.5'	10	WET MEDIUM DENSE REDDISH BROWN SILTY FINE TO COARSE	WATER @ 13.7'	A-2-4(0)
		9	SAND		
	16.0'	12			
			16" RECOVERY		
3	19.0'	5	WET VERY STIFF BROWNISH GRAY FINE SANDY SILT W/SOME		A-4(0)
		8	COARSE SAND		
	20.5'	11			
			12" RECOVERY		
4	24.0'	3	SATURATED STIFF GRAY FINE SANDY SILT W/SOME COARSE		A-4(0)
		5	SAND, TRACE OF GRAVEL		
	25.5'	7			
			12" RECOVERY		
5	29.0'	4	SATURATED VERY STIFF GRAY FINE TO COARSE SANDY SILT		A-4(0)
		7	W/TRACE OF GRAVEL		
	30.5'	10			
			16" RECOVERY		
6	34.0'	4	SATURATED VERY STIFF GREENISH GRAY FINE SANDY SILT		A-5(1)
		6	W/TRACE OF COARSE SAND		
	35.5'	11			
			14" RECOVERY		
7	39.0'	4	SATURATED VERY STIFF GREENISH GRAY SILT W/SOME FINE		A-5(2)
		9	SAND, TRACE OF COARSE SAND		
	40.5'	12			
			16" RECOVERY		
8	44.0'	7	SATURATED HARD GREENISH GRAY FINE SANDY SILT		A-5(0)
		14	W/SOME COARSE SAND		
	45.5'	22			
			14" RECOVERY		
9	49.0'	14	SATURATED HARD GREENISH GRAY FINE TO COARSE SANDY SILT		A-5(0)
		16			
	50.5'	21			
			16" RECOVERY		
10	54.0'	10	SATURATED HARD GREENISH GRAY FINE TO COARSE SANDY SILT		A-5(0)
		23			
	55.5'	30			
			14" RECOVERY		
11	58.5'	13	SATURATED HARD GREENISH GRAY FINE SANDY CLAY,		A-7-5-(22)
		21	TRACE OF COARSE SAND AND GRAVEL		
	60.0'	29			
			16" RECOVERY		

NOTES:

1. THE INFORMATION SHOWN ON THIS SHEET IS BASED ON LIMITED INVESTIGATIONS, AND IS IN NO WAY WARRANTED TO BE INDICATIVE OF ACTUAL CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION.
2. BORING LOGS MADE BY DELAWARE DIVISION OF HIGHWAYS AS A RESULT OF THEIR SUBSURFACE EXPLORATIONS ON OCTOBER 27, 1998.
3. LOCATIONS OF BORINGS REFERENCED TO CONSTRUCTION BASELINE.
4. CASING: 3¼" DIA. HOLLOW AUGER.
5. SOIL SAMPLING: 2" DIA. SPLIT SPOON SAMPLER, DRIVEN WITH A 140 LB. HAMMER FALLING 30" ("W/H" DENOTES WEIGHT OF HAMMER).
6. REFERENCE: FOR LOCATIONS OF THE STRUCTURAL BORINGS, REFER TO THE ROADWAY OR STRUCTURAL PLAN SHEETS. STRUCTURAL BORINGS ARE DENOTED THUS: B-X

PREL. TRACING ____ DESIGN ____ CHKD. ____