

**COUNTY OF MIDDLESEX
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENGINEERING
PLANS FOR
IMPROVEMENTS TO THE INTERSECTION OF
OAK TREE ROAD (C.R. 604), PLYMOUTH DRIVE
AND MAGNOLIA ROAD
WBR-019
LOCATED IN
TOWNSHIP OF WOODBRIDGE, MIDDLESEX COUNTY, NEW JERSEY
MAY 2022**

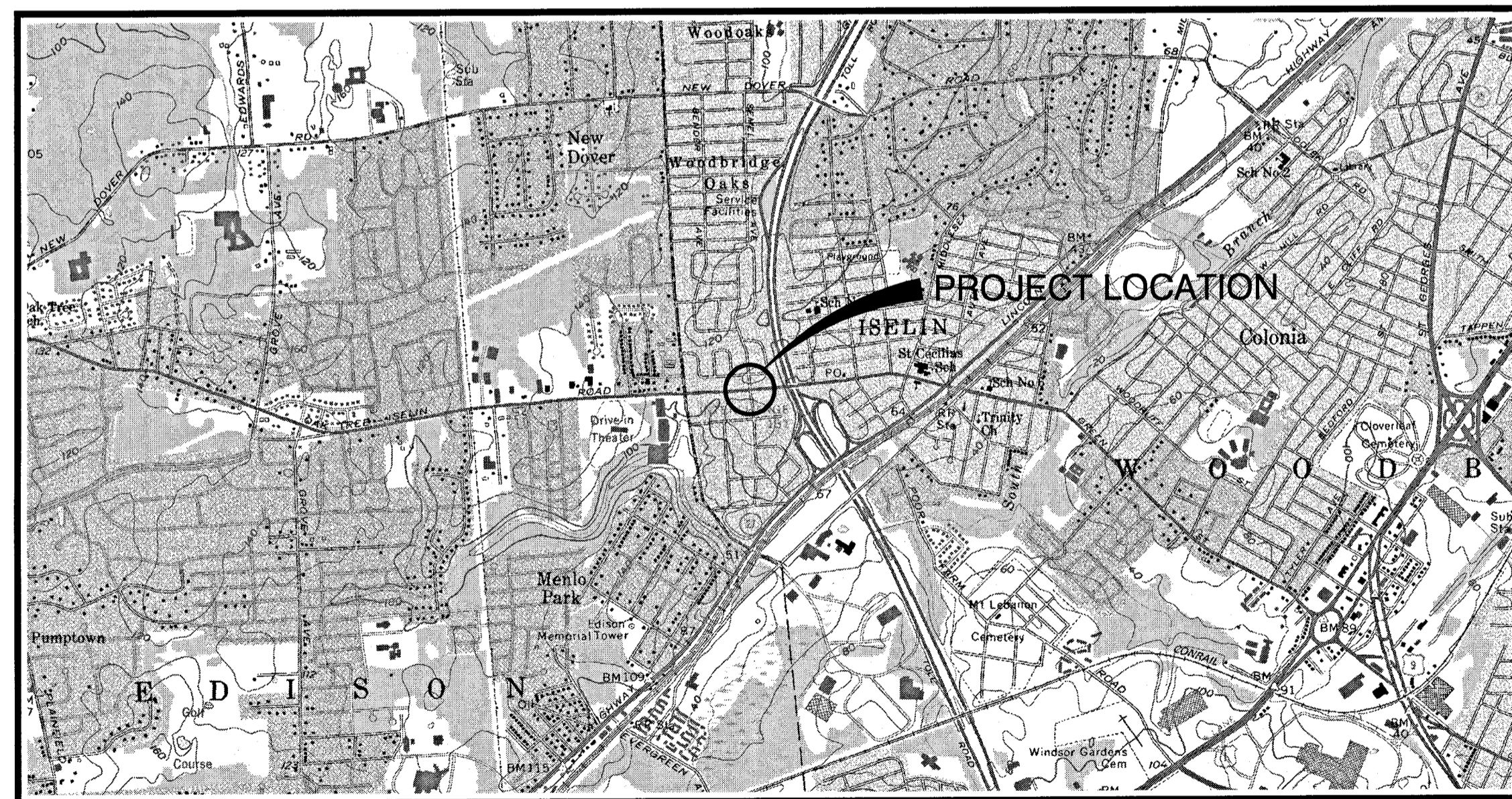
INDEX OF UTILITIES

GAS ELIZABETHTOWN GAS COMPANY 520 GREEN LANE UNION, NJ 07083 ATTN: GABRIEL SANCHEZ TEL. 732-850-2496	FIBER OPTICS CROWN CASTLE 9270 COMMERCE HWY PENNSAUKEN TOWNSHIP, NJ 08110 ATTN: DENNIS HERRMANN JOEMAX TELECOM, LLC 695 ROUTE 46W - SUITE 301 FAIRFIELD, NJ 07004 TEL. 609-331-2407
TELEPHONE VERIZON COMMUNICATIONS 999 WEST MAIN STREET FREEHOLD, NJ 07728 ATTN: ARTURO CABRERA TEL. 732-486-5886	CABLE T.V. COMCAST 800 RAHWAY AVENUE UNION, NJ 07083 ATTN: BOB KNOEPFEL TEL. 732-602-7444
ELECTRIC PUBLIC SERVICE ELECTRIC AND GAS COMPANY 472 WESTON CANAL ROAD SOMERSET, NJ 08873 ATTN: ROBERT J. BUCHANAN TEL. 732-764-3160	WATER MIDDLESEX WATER COMPANY 1500 RONSON ROAD, ISELIN, NJ 08830-3020 ATTN: BRIAN CARR TEL. 732-634-1500 EXT. 1241
SANITARY SEWER DIVISION OF ENGINEERING ONE MAIN STREET WOODBRIDGE, NJ 07095 ATTN: MICHAEL GELIN TEL. 732-602-6047	STORM SEWER DIVISION OF ENGINEERING ONE MAIN STREET WOODBRIDGE, NJ 07095 ATTN: MICHAEL GELIN TEL. 732-602-6047

ONE CALL One Call Underground Location Service
Plainfield, NJ 07063 1-800-272-1000

NOTE:
LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND IS NOT GUARANTEED AS TO EXACTNESS. THE CONTRACTOR IS TO CONTACT UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION AND DEPTH OF UTILITIES. THE CONTRACTOR SHALL USE THE UTILITY LOCATIONS SHOWN AS AN AID IN DETERMINING EXACT LOCATIONS.

FINAL PLANS



SOURCE: U.S.G.S. 7.5 MINUTE QUADRANGLE, PERTH AMBOY, NEW JERSEY

KEY MAP

SCALE: 1" = 2000'

NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF 2019 (US CUSTOMARY ENGLISH UNITS) AND MIDDLESEX COUNTY SUPPLEMENTARY SPECIFICATIONS SHALL GOVERN.

THE HEADING OF ARTICLES CONTAINED HEREIN CONFORM TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2019 AND ALL ADDENDA THERETO WHICH IS TO BE USED IN THE EXECUTION OF THIS CONTRACT.

THE NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS ROADWAY/TRAFFIC CONTROL/BRIDGE" BOOKLET DATED 2016 AND "STANDARD ELECTRICAL DETAILS" 2007 (US CUSTOMARY ENGLISH UNITS) TO GOVERN, EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

INDEX OF SHEETS

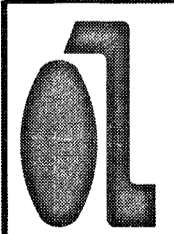
SHEET NO.	REF. NO.	DESCRIPTION
1	-	TITLE AND KEY MAP
2	EDQ-1	ESTIMATE AND DISTRIBUTION OF QUANTITIES
3	L-1	LEGEND
4-5	TS-1 TO TS-2	TYPICAL SECTIONS
6	C-1	CONSTRUCTION PLAN
7	P-1	PROFILE PLAN
8	T-1	TIE SHEET
9	G-1	GRADING PLAN
10-12	CR-1 TO CR-3	CURB RAMP CONSTRUCTION DETAILS
13-17	MPT-1 TO MPT-5	MAINTENANCE AND PROTECTION OF TRAFFIC PLANS
18-20	MPT-6 TO MPT-8	MAINTENANCE AND PROTECTION OF VEHICULAR TRAFFIC AND PEDESTRIAN PLANS
21	TSP-1	TRAFFIC SIGNAL PLAN
22-23	EL-1 TO EL-2	ELECTRICAL PLAN
24	TSS-1	TRAFFIC SIGNING AND STRIPING PLAN
25-26	CD-1	CONSTRUCTION DETAILS
27	U-1	UTILITY RELOCATION PLAN
28-35	X-1 TO X-8	CROSS SECTIONS
36-37	SEC-1 TO SEC-2	SOIL EROSION AND SEDIMENT CONTROL PLANS

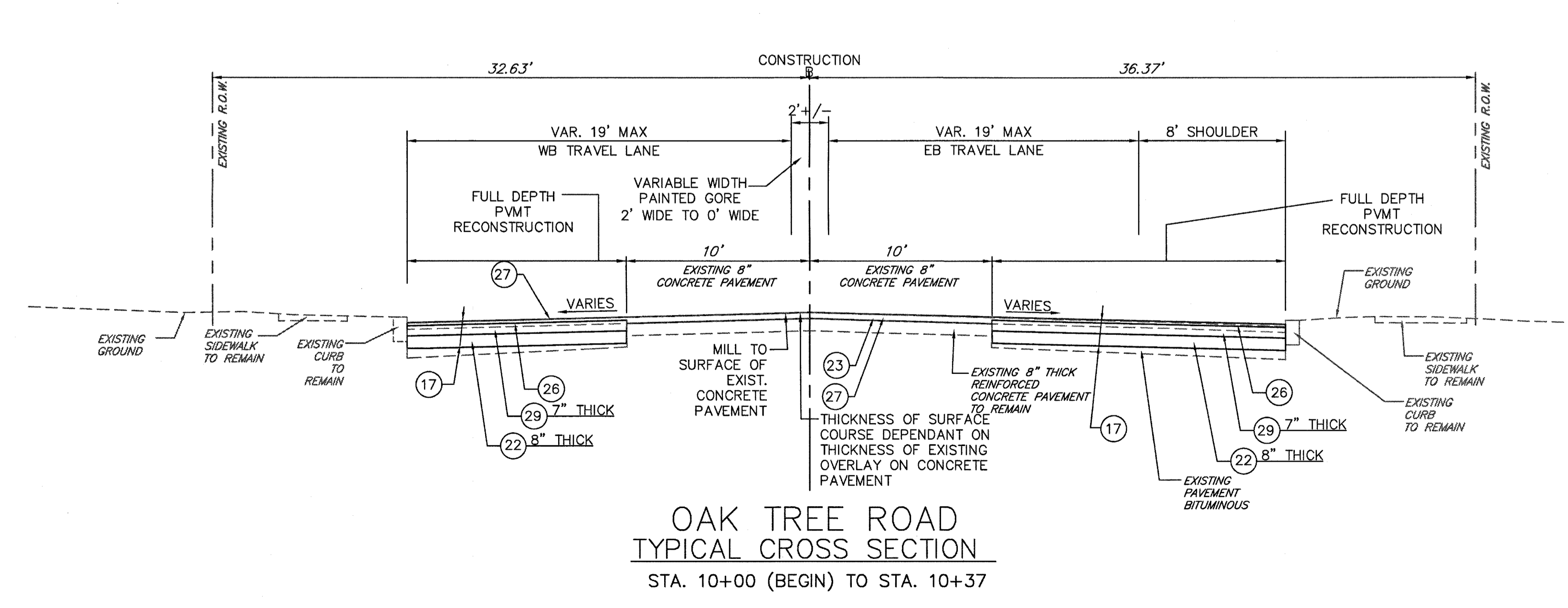
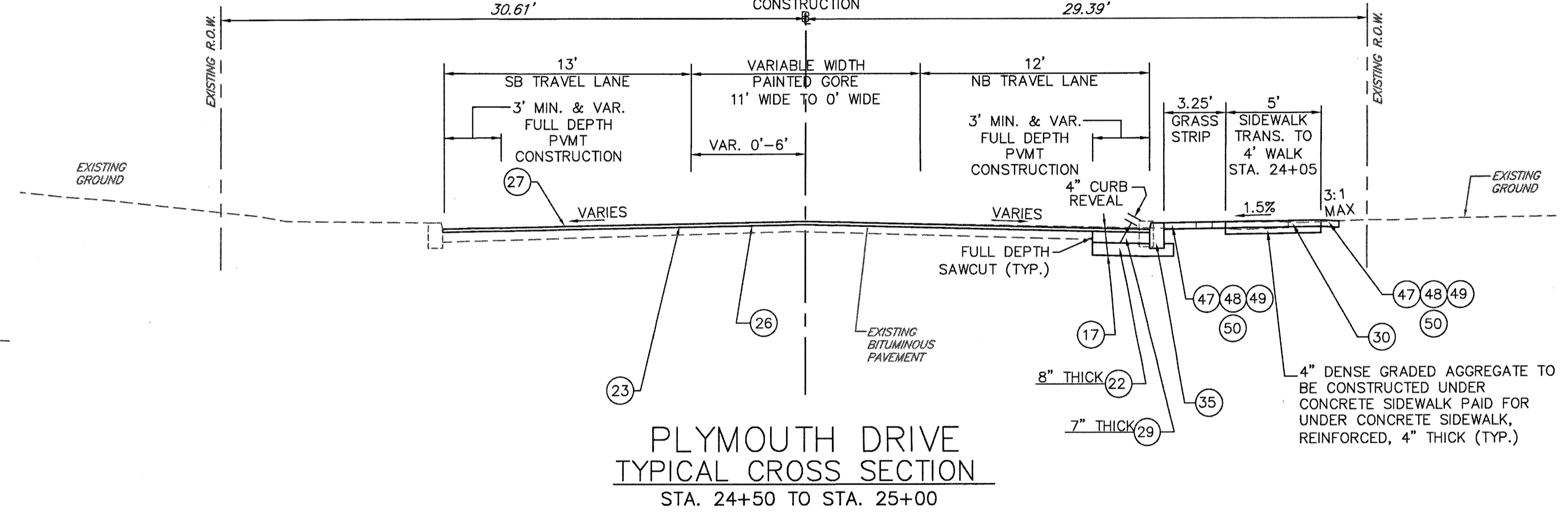
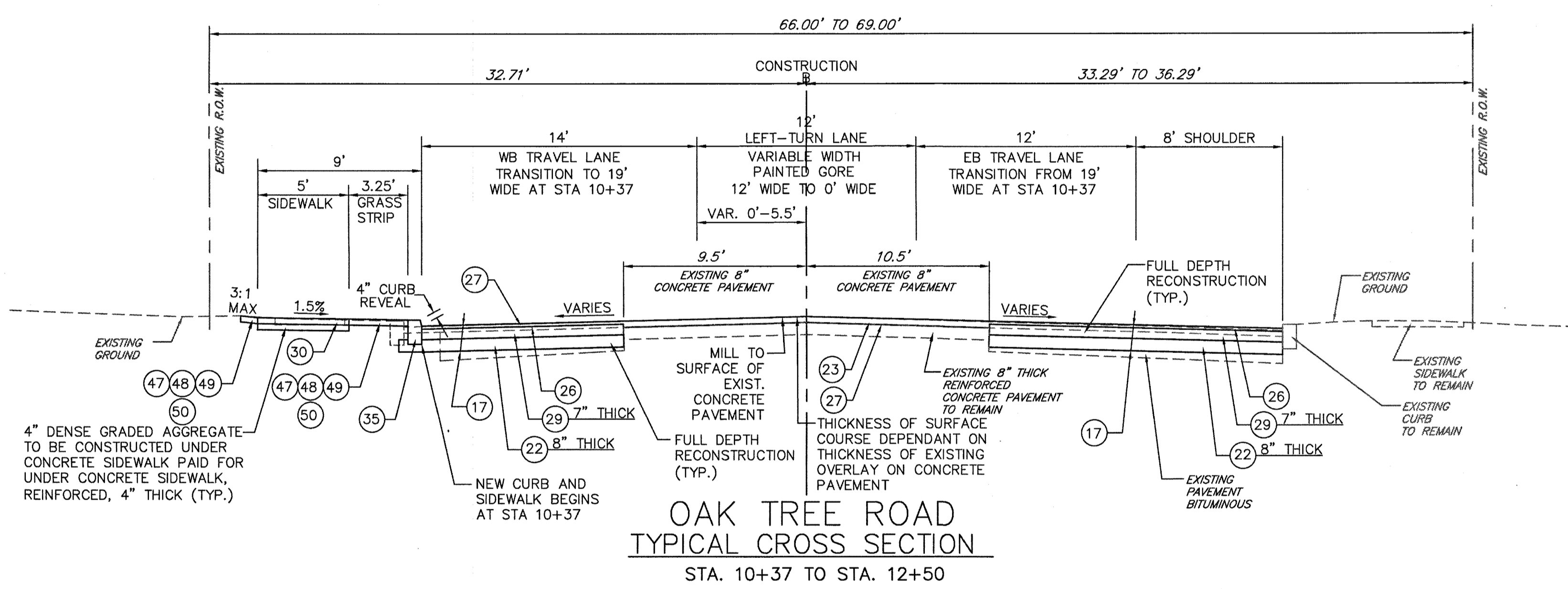
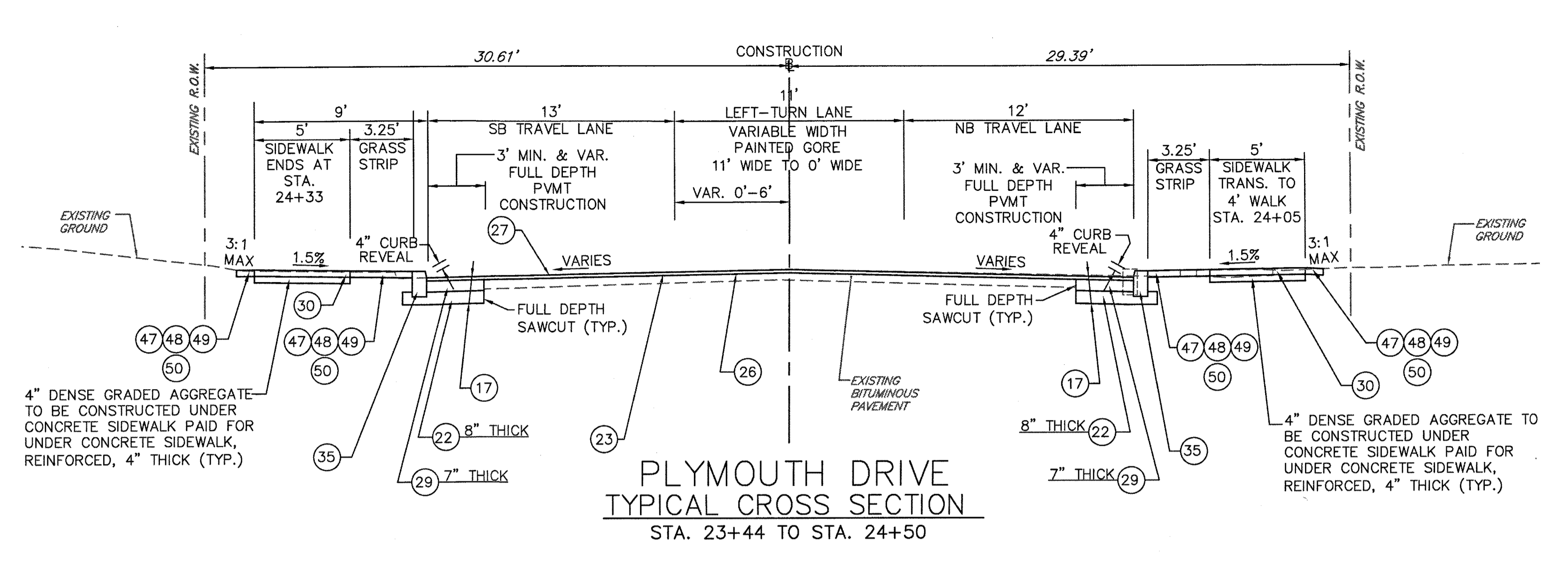
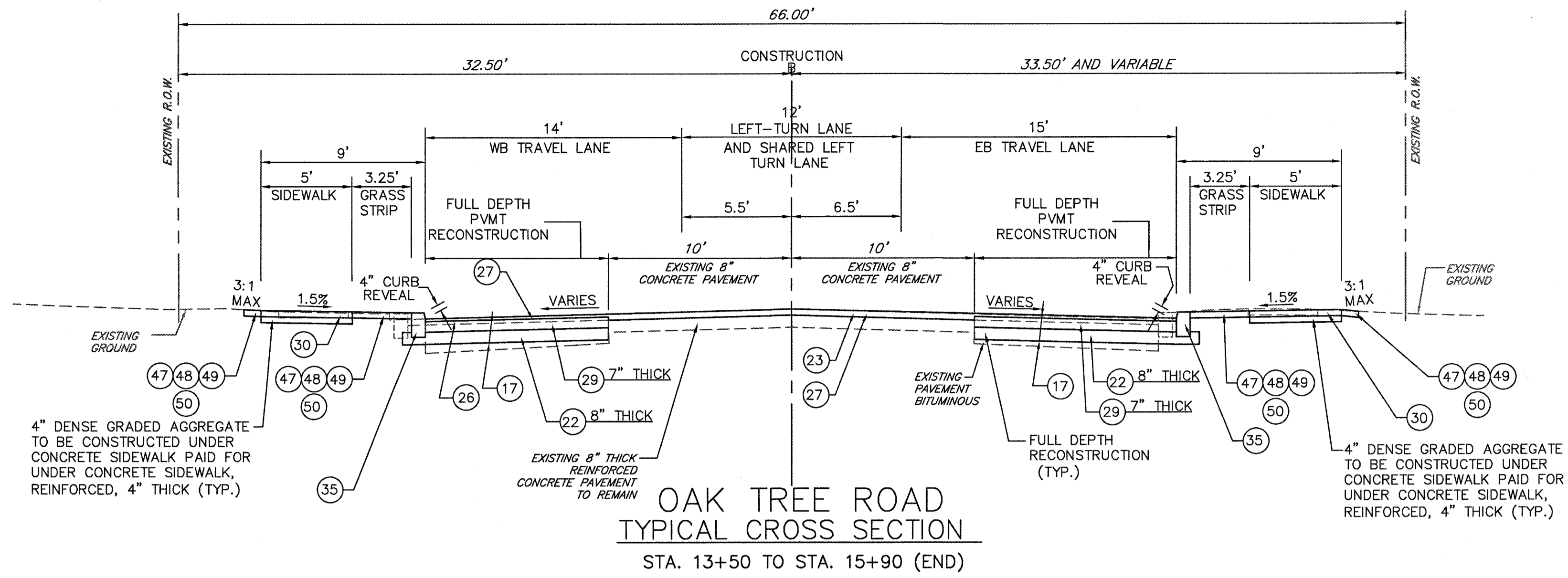
 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27989800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
	Approved: <i>[Signature]</i> DATE: 5/1/22	Designed By: AS/JJD Drawn By: AS/JJD Checked By: SM Dept. Head: ES
Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	Scale: AS NOTED Sheet No. 1 of 37 Date: MAY 2022	Ronald M. Sender County Engineer N.J. P.E. No. 24GE0302200

Path: E:\17\2022 11:09 AM Leaf saved: 4/25/2022 3:59 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-02-EDC.dwg

ITEM NUMBER	ITEM DESIG.	TO BE CONSTRUCTED	Unit	Total Project	If/Where Directed	Plan Sheet	CONST.	TIES	M&PT PLANS	ELECTRICAL	SIGNING AND STRIPING	SESC PLANS
							SHEET C-1	SHEET T-1	SHEET MPT	SHEET EL-1	SHEET TSS-1	SHEET SEC-1
1	M	FIELD OFFICE TYPE A	UNIT	1	1	0	---	---	---	---	---	---
2	M	MONUMENT	UNIT	7		7	---	7	---	---	---	---
3	M	SILT FENCE	LF	1,314		1,314	---	---	---	---	---	1,314
4	M	INLET FILTER TYPE 1	SF	16		16	---	---	---	---	---	16
5	M	POLICE TRAFFIC DIRECTORS	ALLOWANCE	1	1	0	---	---	---	---	---	---
6	M	BREAKAWAY BARRICADE	UNIT	40	40	0	---	---	---	---	---	---
7	M	DRUM	UNIT	45		45	---	---	45	---	---	---
8	M	TRAFFIC CONE	UNIT	80		80	---	---	80	---	---	---
9	M	CONSTRUCTION SIGNS	SF	192		192	---	---	192	---	---	---
10	M	PORTABLE VARIABLE MESSAGE SIGN	UNIT	3		3	---	---	3	---	---	---
11	M	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	3		3	---	---	3	---	---	---
12	M	REMOVEABLE WET WEATHER PAVEMENT MARKING TAPE	LF	13,000		13,000	---	---	13,000	---	---	---
13	M	FUEL PRICE ADJUSTMENT	DOLLAR	1	1	0	---	---	---	---	---	---
14	M	ASPHALT PRICE ADJUSTMENT	DOLLAR	1	1	0	---	---	---	---	---	---
15	P	CLEARING SITE	LS	1		0	---	---	---	---	---	---
16	M	EXCAVATION, TEST PIT	CY	1	1	0	---	---	---	---	---	---
17	M	EXCAVATION, UNCLASSIFIED	CY	914		914	914	---	---	---	---	---
18	M	HOT MIX ASPHALT DRIVEWAY, 6" THICK	SY	92		92	92	---	---	---	---	---
19	M	NIGHTTIME MILLING	NIGHT	3	3	0	---	---	---	---	---	---
20	M	NIGHTTIME PAVING	NIGHT	3	3	0	---	---	---	---	---	---
21	M	1-13 SOIL AGGREGATE	CY	10	10	0	---	---	---	---	---	---
22	M	DENSE-GRADED AGGREGATE BASE COURSE, 8" THICK	SY	2,087		2,087	2,087	---	---	---	---	---
23	M	HMA MILLING, 3" OR LESS	SY	2,479		2,479	2,479	---	---	---	---	---
24	M	HOT MIX ASPHALT PAVEMENT REPAIR	SY	10	10	0	---	---	---	---	---	---
25	M	POLYMERIZED JOINT ADHESIVE	LF	2,841		2,841	2,841	---	---	---	---	---
26	M	TACK COAT	GAL	341		341	341	---	---	---	---	---
27	M	HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE, 2" THICK	TON	670		670	670	---	---	---	---	---
28		NO BID ITEM					---	---	---	---	---	---
29	M	HOT MIX ASPHALT 19 M 64 BASE COURSE, 7" THICK	TON	865		865	865	---	---	---	---	---
30	M	CONCRETE SIDEWALK, REINFORCED, 4" THICK	SY	782		782	782	---	---	---	---	---
31	M	CONCRETE DRIVEWAY, REINFORCED, 6" THICK	SY	135		135	135	---	---	---	---	---
32	M	RECONSTRUCTED MANHOLE, USING NEW CASTING	UNIT	3		3	3	---	---	---	---	---
33	M	DETECTABLE WARNING SURFACE	SY	8		8	8	---	---	---	---	---
34	M	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING	UNIT	1		1	1	---	---	---	---	---
35	M	9" X 16" CONCRETE VERTICAL CURB	LF	1,603		1,603	1,603	---	---	---	---	---
36	M	TRAFFIC STRIPES, LONG LIFE, THERMOPLASTIC 4"	LF	3,367		3,367	---	---	---	3,367	---	---
37	M	TRAFFIC STRIPES, LONG LIFE, THERMOPLASTIC 8"	LF	402		402	---	---	---	---	402	---
38	M	TRAFFIC STRIPES, LONG LIFE, THERMOPLASTIC 24"	LF	223		223	---	---	---	---	223	---
39	M	TRAFFIC MARKINGS, THERMOPLASTIC	SF	480		480	---	---	---	---	480	---
40	M	RPM, MONO-DIRECTIONAL, WHITE LENS	UNIT	12		12	---	---	---	---	12	---
41	M	RPM, MONO-DIRECTIONAL, AMBER LENS	UNIT	24		24	---	---	---	---	24	---
42	M	RPM, B/DIRECTIONAL, AMBER LENS	UNIT	15		15	---	---	---	---	15	---
43	M	REGULATORY AND WARNING SIGN	SF	121		121	---	---	---	---	121	---
44	M	96" X 60" PROJECT IDENTIFICATION SIGN FABRICATION	UNIT	2	2	---	---	---	---	---	---	---
45	M	96" X 60" PROJECT IDENTIFICATION SIGN INSTALLATION	UNIT	2	2	---	---	---	---	---	---	---
46	M	DISPOSAL OF REGULATED MATERIAL	TON	100	100	---	---	---	---	---	---	---
47	P	TOPSOILING, 4" THICK	SY	533		533	533	---	---	---	---	---
48	P	FERTILIZING AND SEEDING, TYPE G	SY	533		533	533	---	---	---	---	---
49	P	STRAW MULCHING	SY	1,066		1,066	1,066	---	---	---	---	---
50	P	FERTILIZING AND SEEDING, TYPE A-3	SY	533		533	533	---	---	---	---	---
51	M	REFLECTORIZED MAST ARM STREET NAME SIGNS	SF	31		31	---	---	31	---	---	---
52	M	2" RIGID METALLIC CONDUIT	LF	60		60	---	---	60	---	---	---
53	M	3" RIGID METALLIC CONDUIT	LF	490		490	---	---	490	---	---	---
54	M	18" X 36" JUNCTION BOX	UNIT	8		8	---	---	8	---	---	---
55	M	FOUNDATION, TYPE P-MC(MOD)	UNIT	1		1	---	---	1	---	---	---
56	M	FOUNDATION, TYPE SPF	UNIT	9		9	---	---	9	---	---	---
57	M	FOUNDATION, TYPE SFK	UNIT	4		4	---	---	4	---	---	---
58	M	METER CABINET, TYPE T	UNIT	1		1	---	---	1	---	---	---
59	P	GROUND WIRE, NO. 8 AWG	LF	725		725	---	---	725	---	---	---
60	P	SERVICE WIRE, NO. 6 AWG	LF	120		120	---	---	120	---	---	---
61	M	CONTROLLER, 8 PHASE W/ GENERATOR AUXILIARY CABINET AND UPS	UNIT	1		1	---	---	1	---	---	---
62	M	TRAFFIC SIGNAL STANDARD, ALUMINUM	UNIT	4		4	---	---	4	---	---	---
63	M	TRAFFIC SIGNAL MAST ARM, ALUMINUM	UNIT	4		4	---	---	4	---	---	---
64	M	PEDESTRIAN SIGNAL STANDARD	UNIT	9		9	---	---	9	---	---	---
65	P	TRAFFIC SIGNAL CABLE, 2 CONDUCTOR	LF	1,600		1,600	---	---	1,600	---	---	---
66	P	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR	LF	1,550		1,550	---	---	1,550	---	---	---
67	P	TRAFFIC SIGNAL CABLE, 10 CONDUCTOR	LF	2,150		2,150	---	---	2,150	---	---	---
68	M	TRAFFIC SIGNAL HEAD	UNIT	12		12	---	---	12	---	---	---
69	M	PEDESTRIAN SIGNAL HEAD	UNIT	8		8	---	---	8	---	---	---
70	M	PUSH BUTTON ASSEMBLIES, TYPE APS	UNIT	8		8	---	---	8	---	---	---
71	M	IMAGE DETECTION SYSTEM	LS	1		1	---	---	1	---	---	---
72	M	TEMPORARY TRAFFIC SIGNAL SYSTEM, INCLUDING MANUAL CONTROL	LS	1		1	---	---	1	---	---	---
73	M	CONTROLLER TURN-ON	UNIT	1		0	---	---	---	---	---	---
74	M	OIL-ONLY EMERGENCY SPILL KIT, TYPE 1	UNIT	1		0	---	---	---	---	---	---
75	P	CONCRETE WASHOUT SYSTEM	LS	1		0	---	---	---	---	---	---
76	P	COMMUNICATIONS SERVICE, LOCATION NO.	LS	1		0	---	---	---	---	---	---
77	P	CTSS INTEGRATION	LS	1		0	---	---	---	---	---	---

EDO-1
EDO-1

 <p> RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J. </p>	Revisions NO. DATE BY			County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901	
	Approved: <i>Richard A. Alaimo</i> DATE: 6-7-22			IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY	
Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001			ESTIMATE AND DISTRIBUTION OF QUANTITIES		
Designed By AS/LJD	Drawn By AS/LJD	Checked By SM	Dept. Head ES	Scale: N/A Sheet No. 2 of 37 Date: MAY 2022	Ronald M. Sender County Engineer N.J. P.E. NO. 24QE03162200



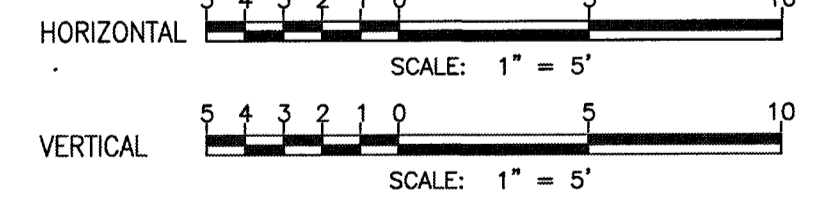
TO BE CONSTRUCTED ITEMS LEGEND

- (17) EXCAVATION, UNCLASSIFIED
- (22) DENSE GRADED AGGREGATE BASE COURSE, 8" TH.
- (23) HMA MILLING, 3" OR LESS
- (26) TACK COAT
- (27) HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK
- (29) HOT MIX ASPHALT 19M64 BASE COURSE, 7" THICK
- (30) CONCRETE SIDEWALK, REINFORCED, 4" THICK
- (31) CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- (35) 9"x16" CONCRETE VERTICAL CURB
- (47) TOPSOILING, 4" TH.
- (48) FERTILIZING AND SEEDING, TYPE G
- (49) STRAW MULCHING
- (50) FERTILIZING AND SEEDING, TYPE A-3

NOTES:

1. SEE TRAFFIC SIGNING AND STRIPING PLANS FOR TRAFFIC STRIPING, LANE CONFIGURATION AND LANE WIDTHS (TSS-1).
2. SEE GRADING PLAN FOR ROADWAY CROSS-SLOPES AND GRADING (G-1).
3. SEE CONSTRUCTION DRAWINGS FOR PROPOSED CONSTRUCTION (C-1).

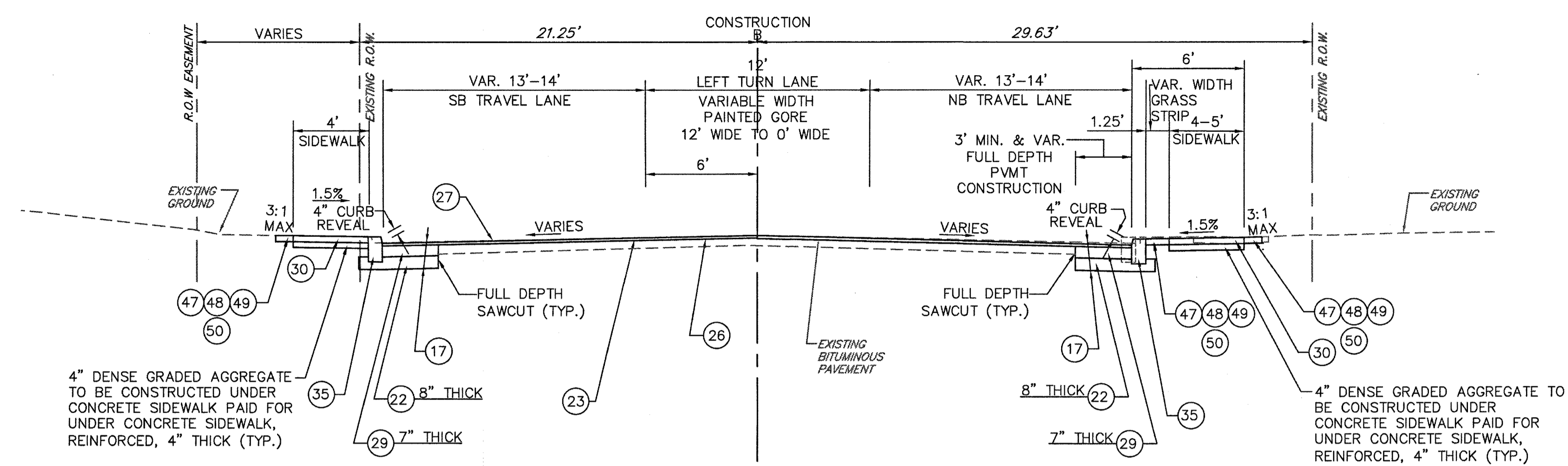
SCALE:



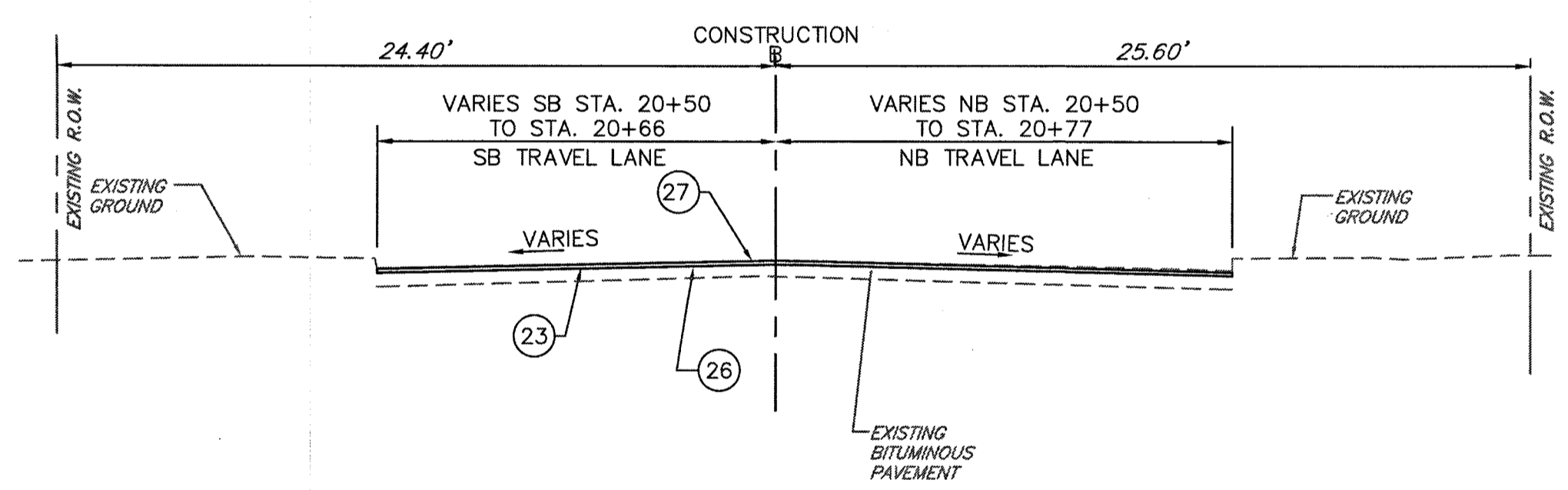
<p>RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJICA 24GA27989800 200 HIGH STREET, MOUNT HOLLY, N.J. 2 MARKET STREET, PATERSON, N.J.</p>	<p>Revisions</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	BY										<p>County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901</p>
	NO.	DATE	BY												
<p>APPROVED: <i>Richard A. Alaimo</i> DATE: 6-7-22</p> <p>Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195</p>	<p>IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY</p> <p>TYPICAL SECTIONS</p>														
<p>RAA PROJECT NO. B01450077001</p>	<p>Designed By AS/LJD Checked By SM</p> <p>Drawn By AS/LJD Dept. Head ES</p>	<p>Scale: 1" = 5' Sheet No. 4 of 37 Date: MAY 2022</p>	<p>Ronald M. Sandler County Engineer N.J. P.E. No. 24GE0382200</p>												

Plotted: 5/24/2022 5:51 PM Last saved: 1/19/2022 1:57 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-04-05 TYPICAL SECTIONS.dwg

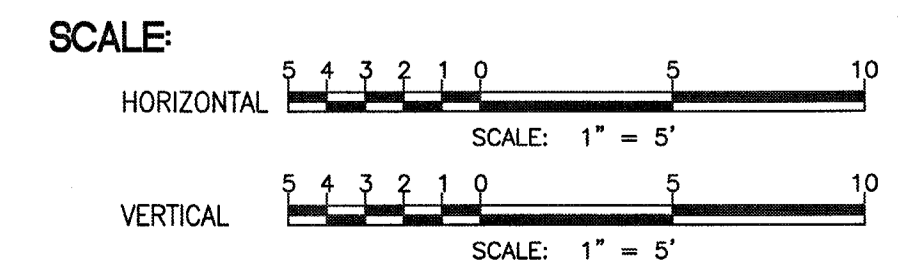
Project: 5/24/2022 3:31 PM Last saved: 1/19/2022 1:57 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-04-05 TYPICAL SECTIONS.dwg



**MAGNOLIA ROAD
TYPICAL CROSS SECTION
STA. 20+60 TO 22+50**



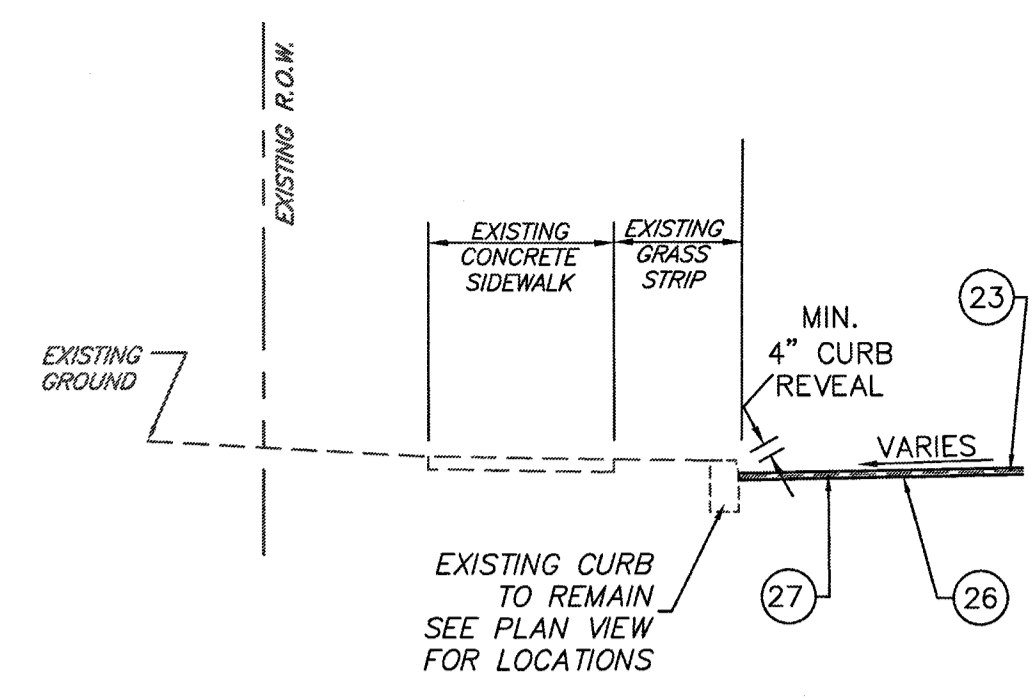
**MAGNOLIA ROAD
TYPICAL CROSS SECTION - MILL/PAVE ONLY**
 STA 20+50 TO STA 20+60 LT SIDE (PROPOSED CURB AND SIDEWALK BEGINS)
 STA 20+50 TO STA 20+77.51 RT SIDE (PROPOSED CURB AND SIDEWALK BEGINS)



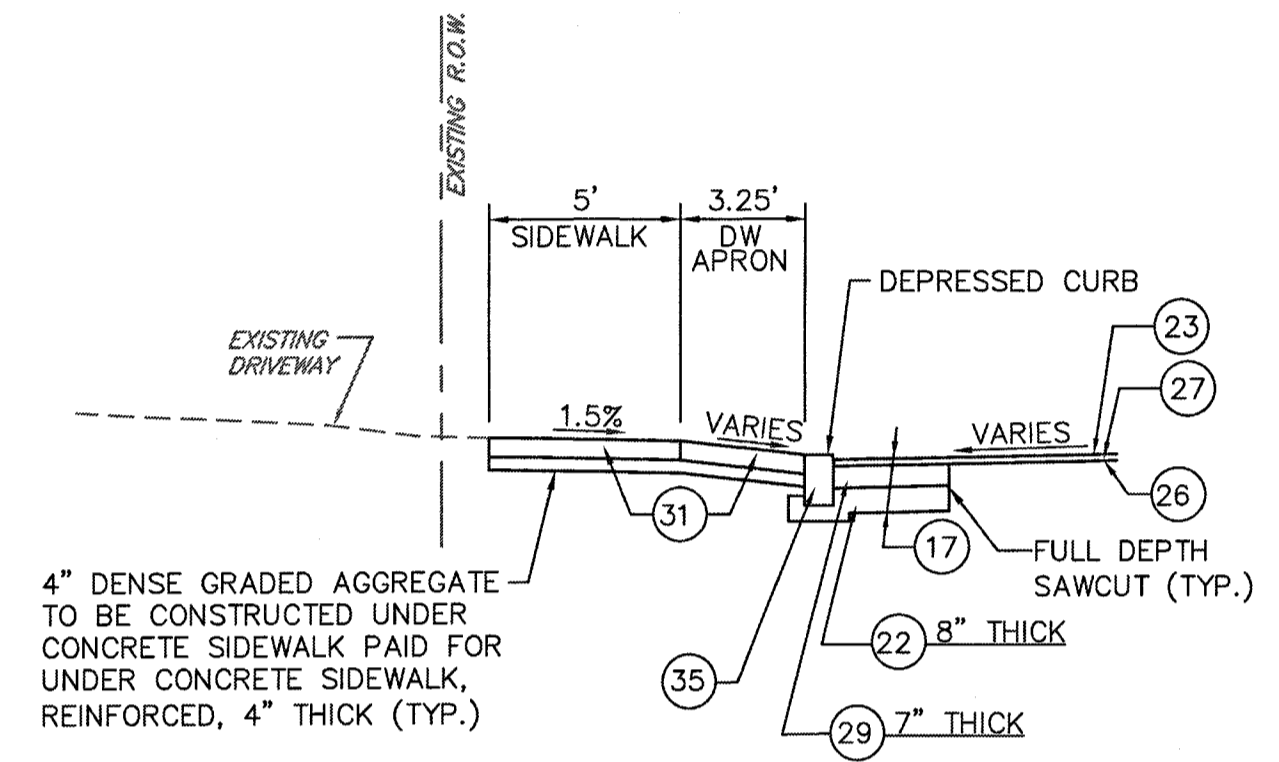
TO BE CONSTRUCTED ITEMS LEGEND

- 17 EXCAVATION, UNCLASSIFIED
- 22 DENSE GRADED AGGREGATE BASE COURSE, 8" TH.
- 23 HMA MILLING, 3" OR LESS
- 26 TACK COAT
- 27 HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK
- 29 HOT MIX ASPHALT 19M64 BASE COURSE, 7" THICK
- 30 CONCRETE SIDEWALK, REINFORCED, 4" THICK
- 31 CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- 35 9"x16" CONCRETE VERTICAL CURB
- 47 TOPSOILING, 4" TH.
- 48 FERTILIZING AND SEEDING, TYPE G
- 49 STRAW MULCHING
- 50 FERTILIZING AND SEEDING, TYPE A-3

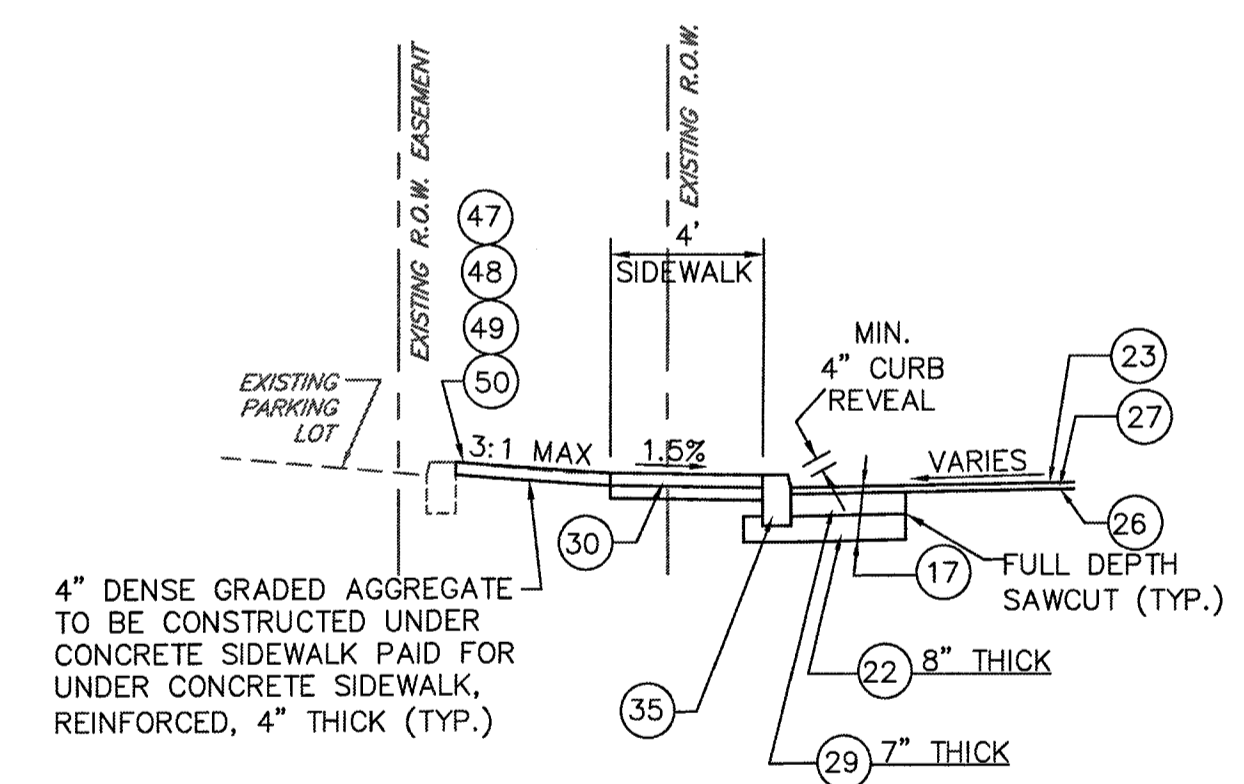
- NOTES:**
- SEE TRAFFIC SIGNING AND STRIPING PLANS FOR TRAFFIC STRIPING, LANE CONFIGURATION AND LANE WIDTHS (TSS-1).
 - SEE GRADING PLAN FOR ROADWAY CROSS-SLOPES AND GRADING (G-1).
 - SEE CONSTRUCTION DRAWINGS FOR PROPOSED CONSTRUCTION (C-1).



**ALL LOCATIONS
EXISTING CURB TO REMAIN
VARIOUS LOCATIONS**



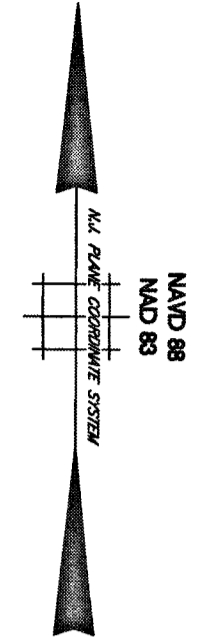
**ALL LOCATIONS
DRIVEWAY DETAIL
VARIOUS LOCATIONS**



**MAGNOLIA ROAD
NEW CURB-FLUSH SIDEWALK
LEFT SIDE ONLY
STA. 20+67 TO 22+76**

TS-2
TS-2

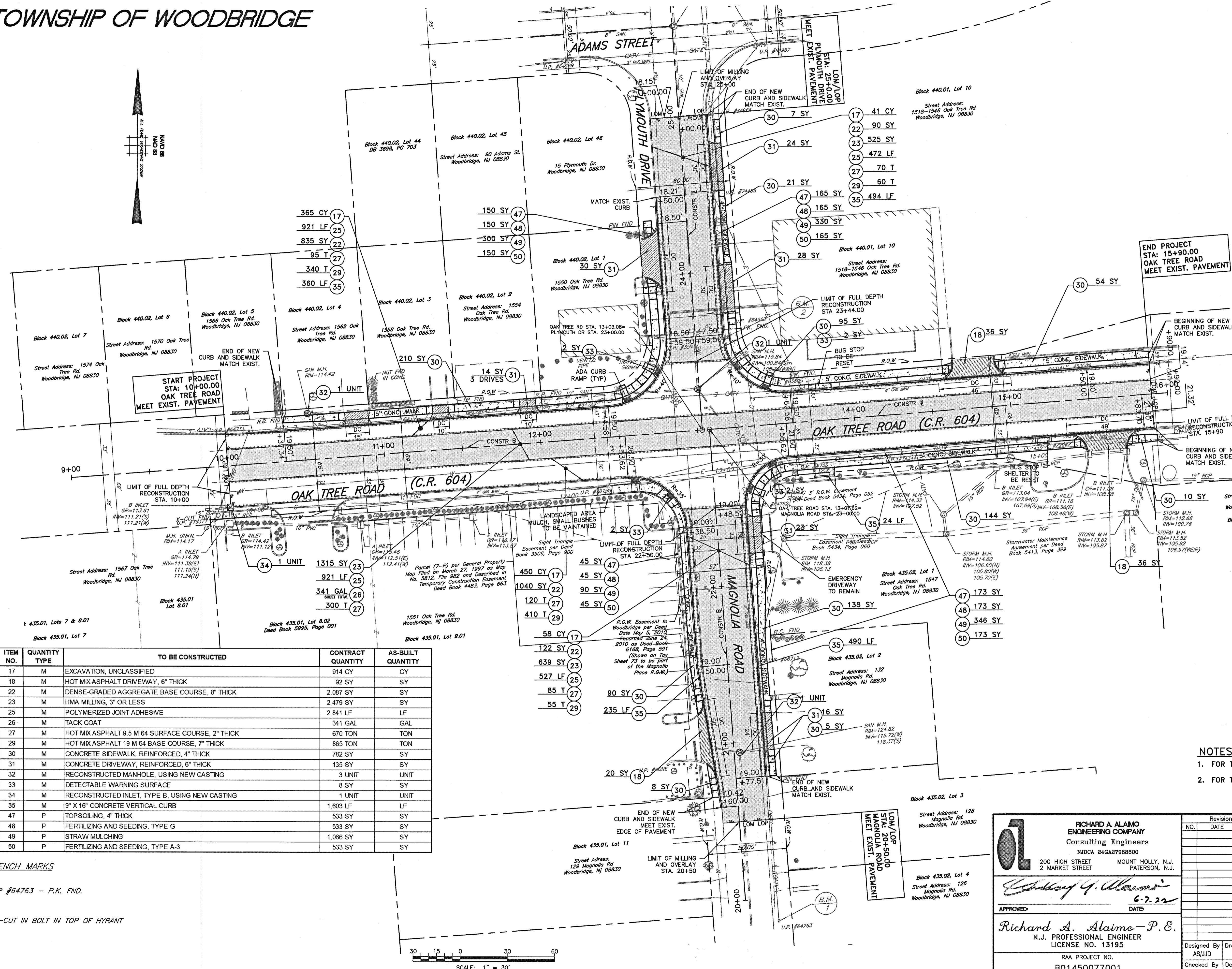
<p>RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJPCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.</p> <p><i>Richard A. Alaimo</i> APPROVED: DATE: 6-7-22</p> <p>Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195</p> <p>RAA PROJECT NO. B01450077001</p>	<p>Revisions</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	BY													<p>County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901</p>
	NO.	DATE	BY														
<p>IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY</p> <p>TYPICAL SECTIONS</p>	<p>Scale: 1" = 5'</p> <p>Sheet No. 5 of 37</p> <p>Date: MAY 2022</p> <p>Ronald M. Sender County Engineer N.J. P.E. No. 240E03182200</p>																



UTILITY NOTES:

- LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND IS NOT GUARANTEED AS TO EXACTNESS. ANY CONTRACTOR THAT IS TO WORK IN THIS VICINITY IS TO CONTACT UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION AND DEPTH OF UTILITIES. THE CONTRACTOR SHALL USE THE UTILITY LOCATIONS SHOWN ON THIS PLAN AS AN AID IN DETERMINING EXACT LOCATIONS.
- EXISTING UNDERGROUND UTILITIES ARE SHOWN VIA RAAEC FIELD SURVEY AND UTILITY AS-BUILTS. RAAEC FIELD SURVEY FOUND FIELD PAINT MARKS FOR THE FOLLOWING UTILITIES: GAS, COMMUNICATIONS, WATER SERVICE AND SANITARY.
- THE FOLLOWING (8) UTILITY POLES AT THE INTERSECTION MUST BE RELOCATED AND REPLACED WITH TALLER POLES TO ELIMINATE VERTICAL CONFLICTS BETWEEN OVERHEAD UTILITIES AND THE NEW TRAFFIC SIGNAL EQUIPMENT AND TO PROVIDE THE REQUIRED VERTICAL CLEARANCE.

UTILITY POLE NUMBERS: 64730, OAK TREE ROAD STA. 11+50 LT
 64729, OAK TREE ROAD STA. 12+40 LT
 63805, OAK TREE ROAD STA. 13+67 LT
 63084, OAK TREE ROAD STA. 15+27 LT
 72967, OAK TREE ROAD STA. 15+27 RT
 64762, MAGNOLIA ROAD STA. 22+47 RT
 66712, MAGNOLIA ROAD STA. 21+50 RT
 64963, PLYMOUTH DRIVE STA. 23+65 RT



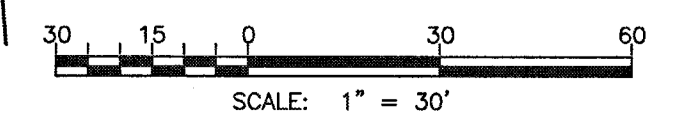
ITEM NO.	QUANTITY	TO BE CONSTRUCTED	CONTRACT QUANTITY	AS-BUILT QUANTITY
17	M	EXCAVATION, UNCLASSIFIED	914 CY	CY
18	M	HOT MIX ASPHALT DRIVEWAY, 6" THICK	92 SY	SY
22	M	DENSE-GRADED AGGREGATE BASE COURSE, 8" THICK	2,087 SY	SY
23	M	HMA MILLING, 3" OR LESS	2,479 SY	SY
25	M	POLYMERIZED JOINT ADHESIVE	2,841 LF	LF
26	M	TACK COAT	341 GAL	GAL
27	M	HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE, 2" THICK	670 TON	TON
29	M	HOT MIX ASPHALT 19 M 64 BASE COURSE, 7" THICK	865 TON	TON
30	M	CONCRETE SIDEWALK, REINFORCED, 4" THICK	782 SY	SY
31	M	CONCRETE DRIVEWAY, REINFORCED, 6" THICK	135 SY	SY
32	M	RECONSTRUCTED MANHOLE, USING NEW CASTING	3 UNIT	UNIT
33	M	DETECTABLE WARNING SURFACE	8 SY	SY
34	M	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING	1 UNIT	UNIT
35	M	9" X 16" CONCRETE VERTICAL CURB	1,603 LF	LF
47	P	TOPSOLLING, 4" THICK	533 SY	SY
48	P	FERTILIZING AND SEEDING, TYPE G	533 SY	SY
49	P	STRAW MULCHING	1,066 SY	SY
50	P	FERTILIZING AND SEEDING, TYPE A-3	533 SY	SY

BENCH MARKS
 B.M. 1 UP #64763 - P.K. FND.
 B.M. 2 X-CUT IN BOLT IN TOP OF HYRANT

LEGEND:

- PROPOSED MONUMENTATION
- PROPOSED CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- PROPOSED REINFORCED CONCRETE 4" THICK SIDEWALK
- BITUMINOUS DRIVEWAY
- FULL DEPTH RECONSTRUCTION (FOR TYPICAL SECTIONS SEE SHEET TS-1 & TS-2)
- HMA MILLING, 3" OR LESS

- NOTES:**
- FOR TRAFFIC SIGNAL PLAN SEE SHEET 21 OF 37, TSP-1
 - FOR TRAFFIC STRIPING AND SIGNING PLANS SEE SHEET 23 OF 37, TSS-1.



RICHARD A. ALAIMO ENGINEERING COMPANY
 Consulting Engineers
 NJDCA 24GA27988800
 200 HIGH STREET MOUNT HOLLY, N.J.
 2 MARKET STREET PATERSON, N.J.

Richard A. Alaimo
 APPROVED DATE: 6-7-22

Richard A. Alaimo - P.E.
 N.J. PROFESSIONAL ENGINEER
 LICENSE NO. 13195

RAA PROJECT NO. B01450077001

Revisions		
NO.	DATE	BY

County of Middlesex
 Department of Transportation
 Office of Engineering
 75 Bayard St., New Brunswick, NJ 08901

IMPROVEMENTS TO THE INTERSECTION OF
 OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD
 TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY

CONSTRUCTION PLAN

Designed By AS/JJD Drawn By AS/JJD
 Checked By SM Dept. Head ES

Scale: 1" = 30'
 Sheet No. 6 of 37
 Date: MAY 2022

Ronald M. Sender
 County Engineer
 N.J. P.E. No. 24GE03162200

Plotted: 6/14/2022 11:09 AM Last saved: 4/7/25/2022 4:26 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-06-CONSTRUCTION.dwg

POINT No.	DESCRIPTION	NORTHING	EASTING	BASELINE	STATION	OFFSET
500	Begin - Limit of Milling / Paving	633754.8735	538361.0139	Alignment - Oak Tree Road	9+99.96	-20.01' L
501	Begin - Curb Point	633757.2237	538398.3371	Alignment - Oak Tree Road	10+37.35	-19.50' L
502	Curb Point - PC	633773.0932	538604.9592	Alignment - Oak Tree Road	12+44.58	-19.50' L
503	Radius Point - 40'	633812.9758	538601.8961	Alignment - Oak Tree Road	12+44.58	-59.50' L
504	Curb Point - PC	633781.9764	538720.6186	Alignment - Oak Tree Road	13+60.58	-19.50' L
505	Radius Point - 40'	633821.8619	538717.5564	Alignment - Oak Tree Road	13+60.58	-59.50' L
506	Curb Point - PC	633789.2224	538814.9624	Alignment - Oak Tree Road	14+55.21	-19.50' L
507	Radius Point - 10'	633799.1930	538814.1966	Alignment - Oak Tree Road	14+55.21	-29.50' L
508	Curb Point - PT	633799.8957	538824.1719	Alignment - Oak Tree Road	14+65.21	-29.44' L
509	Curb Point - End	633801.8908	538824.0313	Alignment - Oak Tree Road	14+65.22	-31.44' L
510	Curb Point Begin	633804.0179	538850.0746	Alignment - Oak Tree Road	14+91.35	-31.56' L
511	Curb Point - PC	633802.0228	538850.2151	Alignment - Oak Tree Road	14+91.34	-29.56' L
512	Radius Point - 10'	633802.7255	538860.1904	Alignment - Oak Tree Road	15+01.33	-29.50' L
513	Curb Point - PT	633792.7549	538860.9562	Alignment - Oak Tree Road	15+01.33	-19.50' L
514	Curb Point	633796.4818	538909.4783	Alignment - Oak Tree Road	15+50.00	-19.50' L
515	Curb Point - End	633799.1899	538949.3681	Alignment - Oak Tree Road	15+90.00	-19.14' L
516	Curb Point - End	633758.8415	538952.4871	Alignment - Oak Tree Road	15+90.00	21.32' R
517	Curb Point - PT	633758.1829	538946.2211	Alignment - Oak Tree Road	15+83.70	21.50' R
518	Radius Point - 12.50'	633745.7196	538947.1783	Alignment - Oak Tree Road	15+83.70	34.00' R
519	Curb Point - PC	633745.8567	538934.6791	Alignment - Oak Tree Road	15+71.25	32.91' R
520	Curb Point - PC	633743.4528	538910.5108	Alignment - Oak Tree Road	15+46.97	33.45' R
521	Radius Point - 12.50'	633741.9502	538898.1014	Alignment - Oak Tree Road	15+34.48	34.00' R
522	Curb Point - PT	633754.4135	538897.1442	Alignment - Oak Tree Road	15+34.48	21.50' R
523	Curb Point - PC	633740.7929	538719.8023	Alignment - Oak Tree Road	13+56.62	21.50' R
524	Radius Point - 30'	633710.8810	538722.0997	Alignment - Oak Tree Road	13+56.62	51.50' R
525	Radius Point - 35'	633693.0228	538620.1679	Alignment - Oak Tree Road	12+53.62	61.50' R
526	Curb Point - PC	633727.9200	538617.4876	Alignment - Oak Tree Road	12+53.62	26.50' R
527	Edge of Pavement	633708.7719	538366.4205	Alignment - Oak Tree Road	10+01.82	26.37' R
528	Begin - Limit of Milling / Paving	633710.6793	538364.5455	Alignment - Oak Tree Road	10+00.10	24.32' R

POINT No.	DESCRIPTION	NORTHING	EASTING	BASELINE	STATION	OFFSET
529	Curb Point - PT	633816.0387	538641.7786	Alignment - Plymouth Drive	23+59.50	-18.50' L
530	Curb Point - PC	633845.8232	538639.4912	Alignment - Plymouth Drive	23+89.37	-18.50' L
531	Radius Point - 7.50'	633845.2489	538632.0132	Alignment - Plymouth Drive	23+89.37	-26.00' L
532	Curb Point - PT / PC	633849.9113	538637.8880	Alignment - Plymouth Drive	23+93.57	-19.79' L
533	Radius Point - 15'	633840.5865	538626.1385	Alignment - Plymouth Drive	23+85.17	-32.21' L
534	Curb Point - PT	633855.3718	538628.6677	Alignment - Plymouth Drive	23+99.72	-28.56' L
535	Curb Point - PC	633879.2127	538626.2023	Alignment - Plymouth Drive	24+23.68	-29.19' L
536	Radius Point - 15'	633893.8685	538623.0071	Alignment - Plymouth Drive	24+38.54	-31.26' L
537	Curb Point - PT / PC	633884.0060	538634.3089	Alignment - Plymouth Drive	24+27.84	-20.74' L
538	Radius Point - 7.50'	633888.9372	538628.6580	Alignment - Plymouth Drive	24+33.19	-26.00' L
539	Curb Point - PT	633889.5115	538636.1360	Alignment - Plymouth Drive	24+33.19	-18.50' L
540	Curb Point - End	633906.2953	538635.1360	Alignment - Plymouth Drive	24+50.00	-18.21' L
541	End - Limit of Milling / Paving	633956.1531	538631.3663	Alignment - Plymouth Drive	25+00.00	-18.15' L
542	Curb Point - End	633958.8880	538666.9139	Alignment - Plymouth Drive	25+00.00	17.50' R
543	Curb Point - PC	633818.7985	538677.6729	Alignment - Plymouth Drive	23+59.50	17.50' R

BENCH MARKS

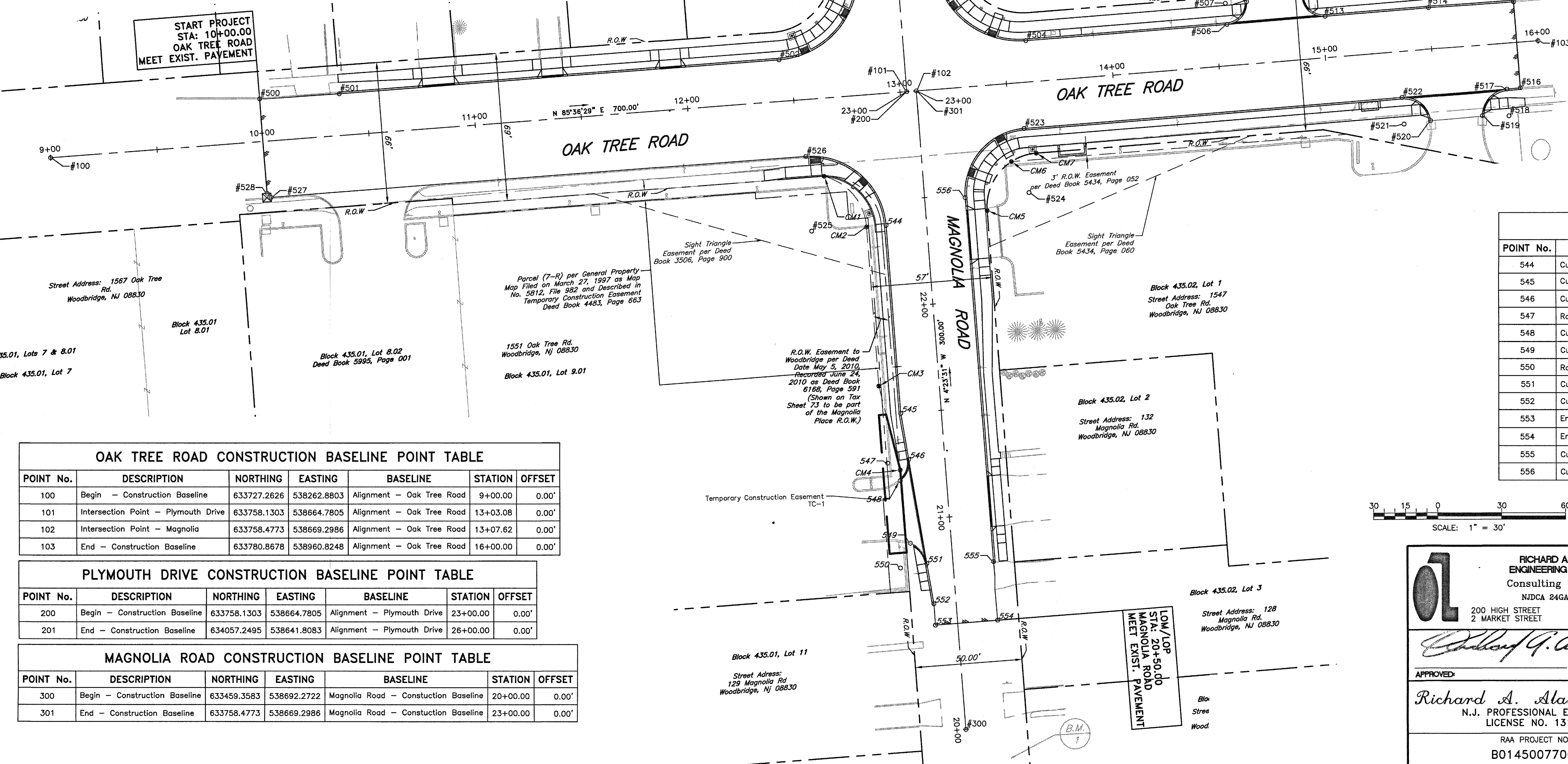
B.M. 1 UP #64763 - P.K. FND. STA. 09+85.54 - 28.0' RT., MAGNOLIA RD B ELEVATION = 128.62

B.M. 2 X-CUT IN BOLT IN TOP OF HYDRANT STA. 13+57.53 - 19.4' RT., PLYMOUTH DR B ELEVATION = 117.94

B.M. 3 X-CUT IN BOLT IN TOP OF HYDRANT STA. 15+82.78 - 35.1' LT., PLYMOUTH DR B ELEVATION = 118.19

POINT No.	DESCRIPTION	NORTHING	EASTING	BASELINE	STATION	OFFSET
CM1	Concrete Monument	633718.6617	538626.0244	Magnolia Road - Construction Baseline	22+63.62	-46.20' L
CM2	Concrete Monument	633694.9206	538645.8883	Magnolia Road - Construction Baseline	22+38.42	-28.21' L
CM3	Concrete Monument	633620.3218	538651.5805	Magnolia Road - Construction Baseline	21+63.61	-28.25' L
CM4	Concrete Monument	633580.9709	538661.6036	Magnolia Road - Construction Baseline	21+23.60	-21.27' L
CM5	Concrete Monument	633702.4317	538702.4809	Magnolia Road - Construction Baseline	22+41.58	28.79' R
CM6	Concrete Monument	633725.3666	538713.8946	Magnolia Road - Construction Baseline	22+63.57	41.93' R
CM7	Concrete Monument	633729.2613	538725.5063	Magnolia Road - Construction Baseline	22+66.57	53.81' R

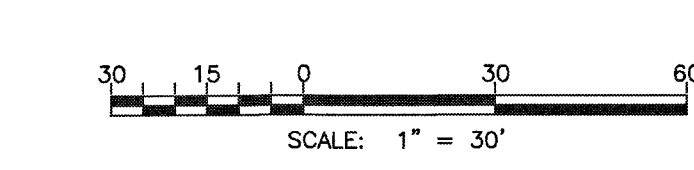
POINT No.	DESCRIPTION	NORTHING	EASTING	BASELINE	STATION	OFFSET
544	Curb Point - PT	633695.7028	538655.0651	Magnolia Road - Construction Baseline	22+38.50	-19.00' L
545	Curb Point - Angle	633607.4722	538661.8412	Magnolia Road - Construction Baseline	21+50.01	-19.00' L
546	Curb Point - PC	633585.8977	538665.5822	Magnolia Road - Construction Baseline	21+28.21	-16.92' L
547	Radius Point - 10'	633584.1897	538655.7291	Magnolia Road - Construction Baseline	21+27.26	-26.88' L
548	Curb Point - PT	633576.1007	538661.6086	Magnolia Road - Construction Baseline	21+18.75	-21.63' L
549	Curb Point - PC	633546.7685	538666.3211	Magnolia Road - Construction Baseline	20+89.14	-19.18' L
550	Radius Point - 12.50'	633535.1606	538661.6898	Magnolia Road - Construction Baseline	20+77.92	-24.69' L
551	Curb Point - PT	633537.2956	538674.0061	Magnolia Road - Construction Baseline	20+79.11	-12.24' L
552	Curb Point - End	633518.3800	538677.2851	Magnolia Road - Construction Baseline	20+60.00	-10.42' L
553	End - Limit of Milling / Paving	633508.4064	538678.0080	Magnolia Road - Construction Baseline	20+50.00	-10.47' L
554	End - Limit of Milling / Paving	633510.6530	538707.2129	Magnolia Road - Construction Baseline	20+50.00	18.82' R
555	Curb Point - End	633538.0719	538705.2830	Magnolia Road - Construction Baseline	20+77.49	19.00' R
556	Curb Point - PT	633708.5838	538692.1878	Magnolia Road - Construction Baseline	22+48.50	19.00' R



POINT No.	DESCRIPTION	NORTHING	EASTING	BASELINE	STATION	OFFSET
100	Begin - Construction Baseline	633727.2626	538262.8803	Alignment - Oak Tree Road	9+00.00	0.00'
101	Intersection Point - Plymouth Drive	633758.1303	538664.7805	Alignment - Oak Tree Road	13+03.08	0.00'
102	Intersection Point - Magnolia	633758.4773	538669.2986	Alignment - Oak Tree Road	13+07.62	0.00'
103	End - Construction Baseline	633780.8678	538960.8248	Alignment - Oak Tree Road	16+00.00	0.00'

POINT No.	DESCRIPTION	NORTHING	EASTING	BASELINE	STATION	OFFSET
200	Begin - Construction Baseline	633758.1303	538664.7805	Alignment - Plymouth Drive	23+00.00	0.00'
201	End - Construction Baseline	634057.2495	538641.8083	Alignment - Plymouth Drive	26+00.00	0.00'

POINT No.	DESCRIPTION	NORTHING	EASTING	BASELINE	STATION	OFFSET
300	Begin - Construction Baseline	633459.3583	538692.2722	Magnolia Road - Construction Baseline	20+00.00	0.00'
301	End - Construction Baseline	633758.4773	538669.2986	Magnolia Road - Construction Baseline	23+00.00	0.00'



RICHARD A. ALAIMO ENGINEERING COMPANY
Consulting Engineers
NJICA 24GA27988900

200 HIGH STREET MOUNT HOLLY, N.J.
2 MARKET STREET PATERSON, N.J.

Richard A. Alaimo
APPROVED: DATE: 6-7-22

Richard A. Alaimo - P.E.
N.J. PROFESSIONAL ENGINEER
LICENSE NO. 13195

RAA PROJECT NO.
B01450077001

County of Middlesex
Department of Transportation
Office of Engineering
75 Bayard St., New Brunswick, NJ 08901

IMPROVEMENTS TO THE INTERSECTION OF
OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD
TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY

TIE SHEET

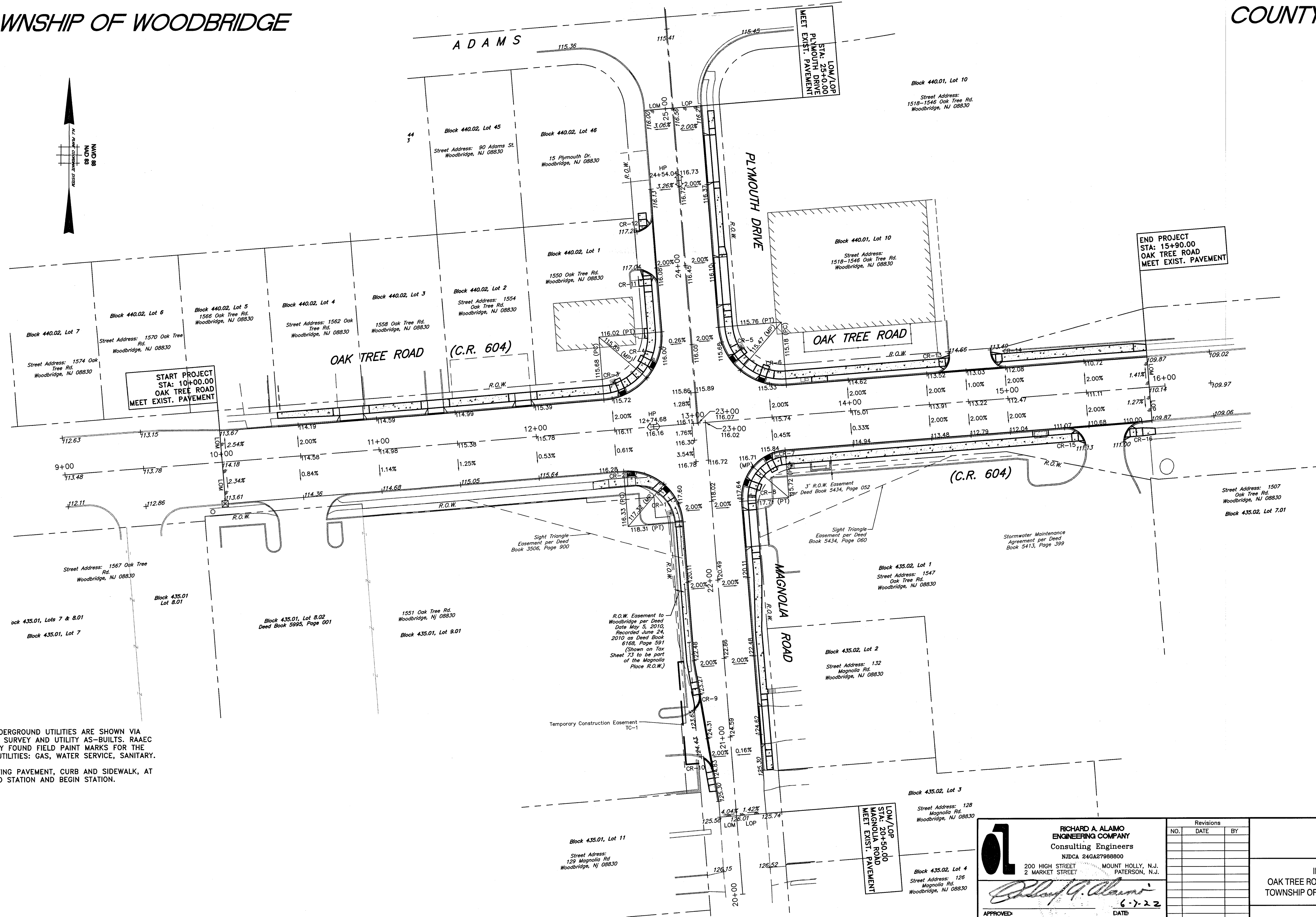
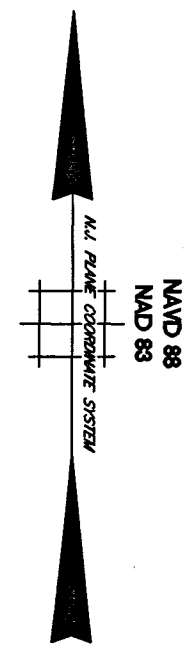
Revisions:
NO. DATE BY

Designed By AS/JUD Drawn By AS/JUD
Checked By SM Dept. Head ES

Scale: 1" = 30'
Sheet No. 8 of 37
Date: MAY 2022

Ronald M. Sender
County Engineer
N.J. P.E. No. 24AEC03162200

Plotted: 6/14/2022 11:09 AM Last saved: 4/26/2022 8:41 AM File Name: K:\Projects\B01450077001\Drawings\LOC-SHT-08 TIE-SHT.dwg

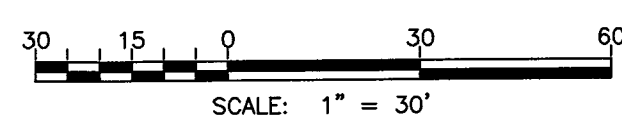


START PROJECT
STA: 10+00.00
OAK TREE ROAD
MEET EXIST. PAVEMENT

END PROJECT
STA: 15+90.00
OAK TREE ROAD
MEET EXIST. PAVEMENT

NOTES:

- EXISTING UNDERGROUND UTILITIES ARE SHOWN VIA RAAEC FIELD SURVEY AND UTILITY AS-BUILTS. RAAEC FIELD SURVEY FOUND FIELD PAINT MARKS FOR THE FOLLOWING UTILITIES: GAS, WATER SERVICE, SANITARY.
- MATCH EXISTING PAVEMENT, CURB AND SIDEWALK, AT PROJECT END STATION AND BEGIN STATION.



Plotted: 6/14/2022 11:51 AM Last saved: 4/28/2022 3:20 PM File Name: K:\Projects\B01450077001\Drawings\AUC-SHT-09-GRADDES.dwg

RICHARD A. ALAIMO ENGINEERING COMPANY
Consulting Engineers
NIDCA 246A27988800
200 HIGH STREET MOUNT HOLLY, N.J.
2 MARKET STREET PATERSON, N.J.

Richard A. Alaimo
APPROVED DATE: 6-7-22

Richard A. Alaimo - P.E.
N.J. PROFESSIONAL ENGINEER
LICENSE NO. 13195

RAA PROJECT NO.
B01450077001

Revisions		
NO.	DATE	BY

County of Middlesex
Department of Transportation
Office of Engineering
75 Bayard St., New Brunswick, NJ 08901

IMPROVEMENTS TO THE INTERSECTION OF
OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD
TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY

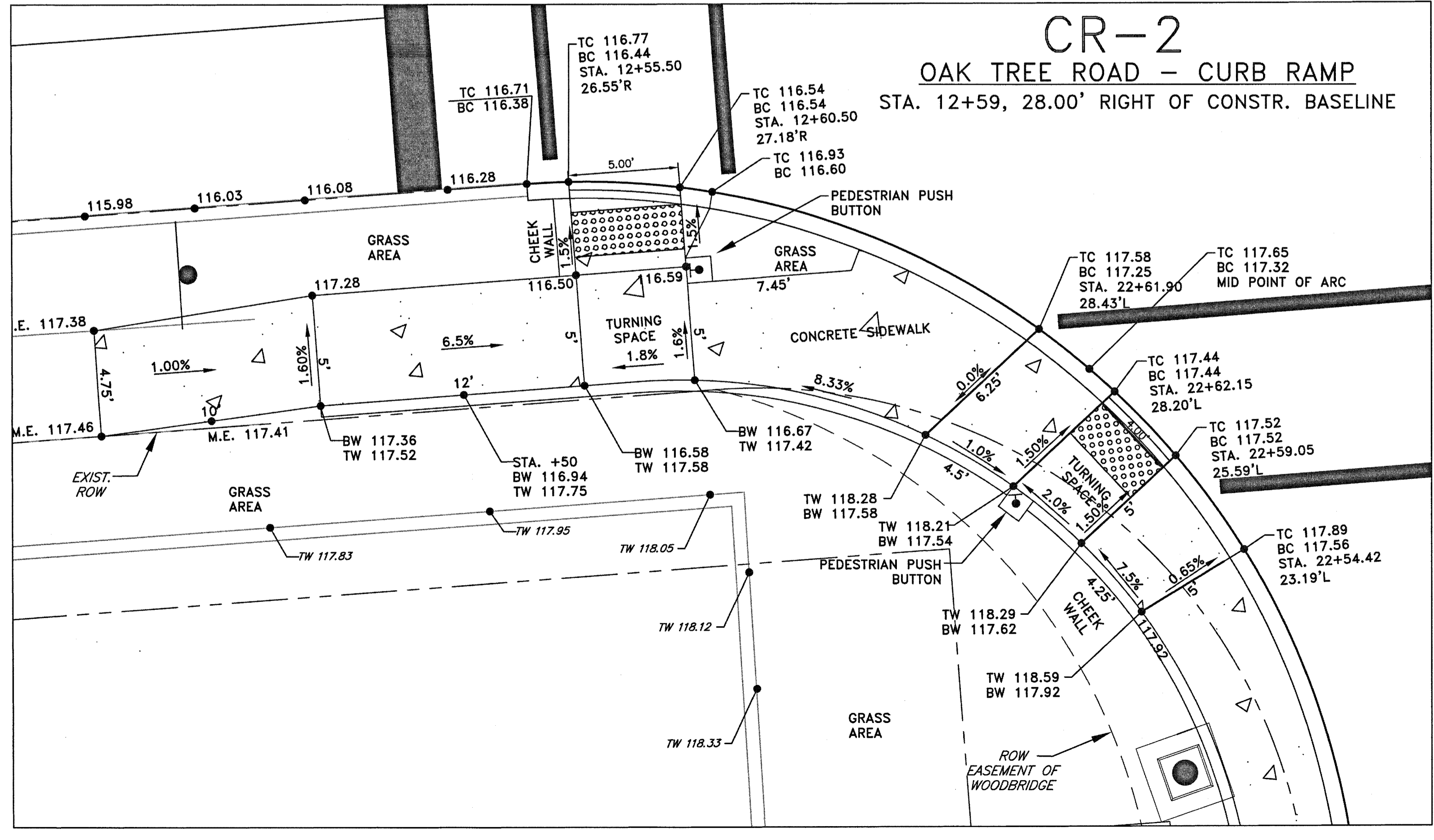
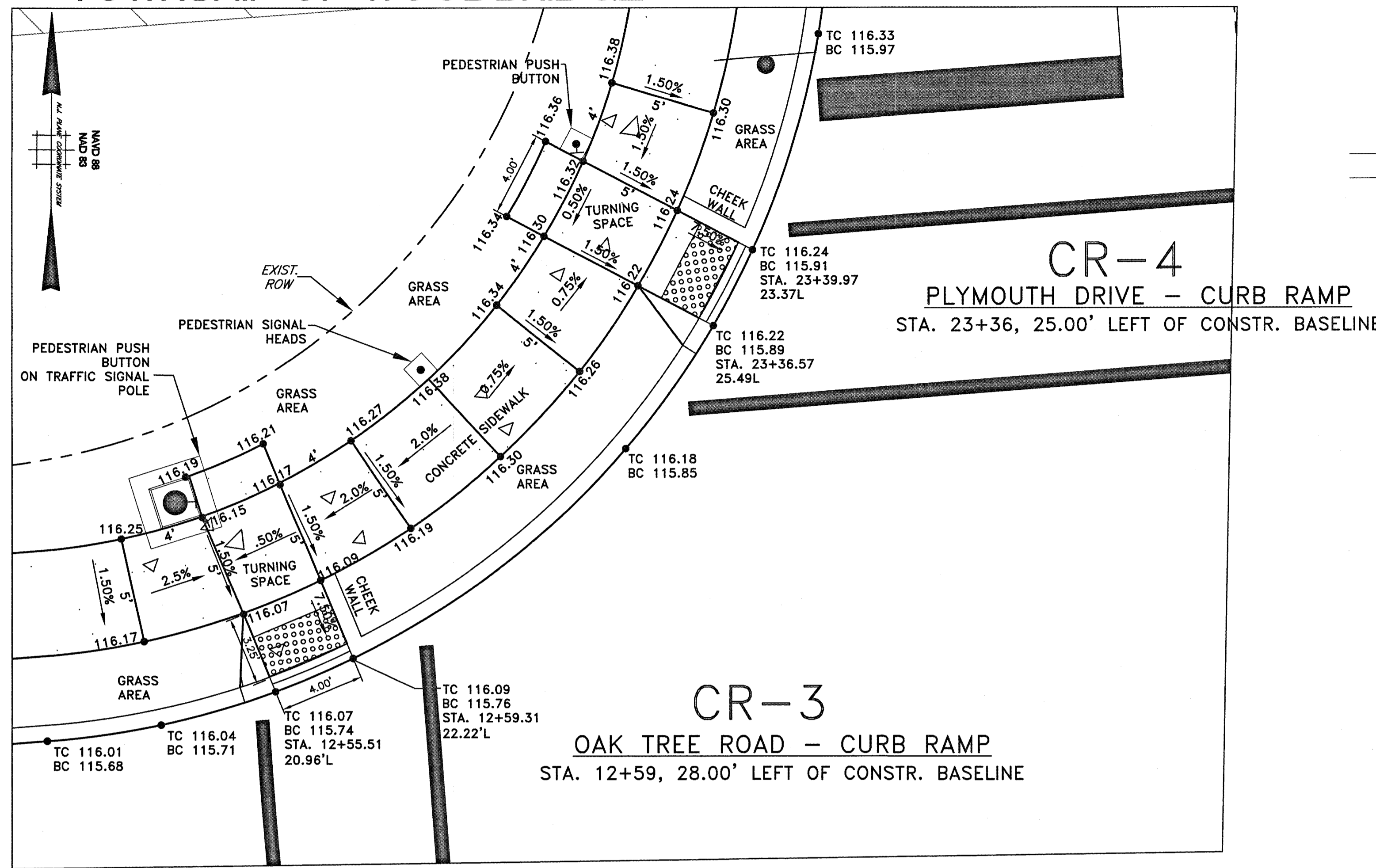
GRADING PLAN

Scale: 1" = 30'
Sheet No. 9 of 37
Date: MAY 2022

Ronald M. Sender
County Engineer
N.J. P.E. No. 246E0382200

G-1
G-1

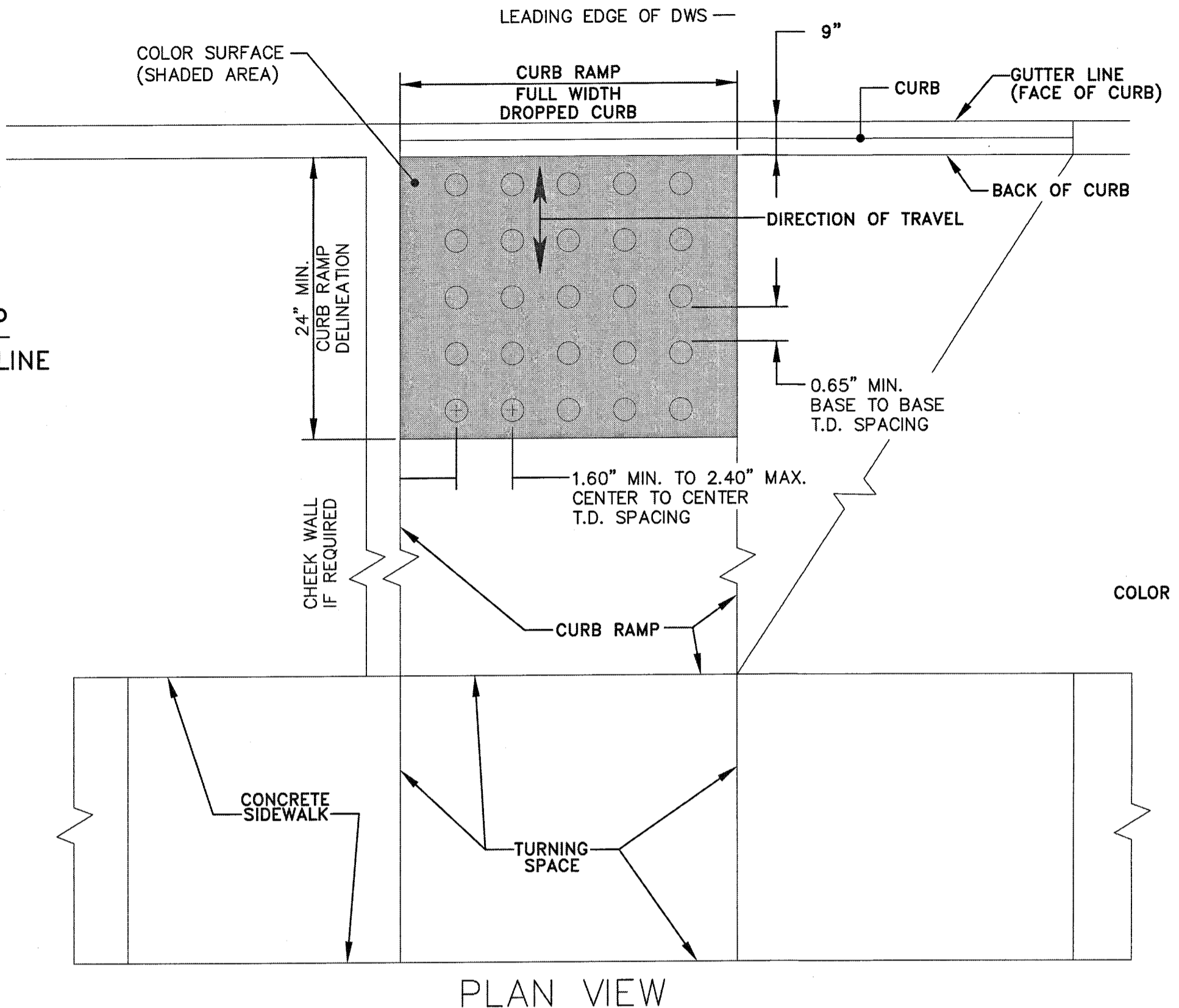
TOWNSHIP OF WOODBRIDGE



COUNTY OF MIDDLESEX

NOTES:

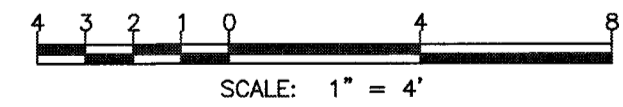
1. NJDOT CONSTRUCTION DETAIL SHEET CD-606-1 IS NOT TO BE USED FOR THIS PROJECT.
2. SEE GRADING SHEETS FOR PROPOSED FINISHED GRADES, ROADWAY CROSS SLOPES AND CURB ELEVATIONS.
3. PEDESTRIAN PUSH BUTTONS SHALL BE AT A MOUNTING HEIGHT OF APPROXIMATELY 42 INCHES, BUT NOT MORE THAN 48 INCHES (MAXIMUM) ABOVE FINISHED GRADE (SIDEWALK).
4. PEDESTRIAN PUSH BUTTONS (APS) SHALL BE 8 INCHES MAXIMUM (HORIZONTALLY) FROM THE EDGE OF SIDEWALK TO BASE STATION (BUTTON). PEDESTRIAN PUSH BUTTON FOUNDATIONS SHALL BE INSTALLED FLUSH WITH TO TOP OF CHEEK WALLS.
5. ALL CURBING AT CURB RAMPS IS 9" (0.75 FEET) WIDE UNLESS OTHERWISE NOTED.



DETECTABLE WARNING SURFACE (DWS)
N.T.S.

LEGEND:

- EXIST ROW = EXISTING RIGHT-OF-WAY LINE
- PROP. TEMP. CONSTR. ESMT. = PROPOSED TEMPORARY CONSTRUCTION EASEMENT
- PROP. PERM. SIGNAL ESMT = PROPOSED TRAFFIC SIGNAL EASEMENT
- LOD = LIMIT OF DISTURBANCE
- SLOPE ARROW POINTS DOWNSLOPE
- DROPPED CURB AT CURB RAMP
- DETECTABLE WARNING SURFACE (DWS)
- CONCRETE SIDEWALK
- TC XX.XX PROPOSED TOP OF CURB ELEVATION
- BC XX.XX PROPOSED BOTTOM OF CURB ELEVATION
- XX.XX PROPOSED FINISHED GRADE
- PEDESTRIAN PUSH BUTTON



RICHARD A. ALAIMO ENGINEERING COMPANY
Consulting Engineers
NJCA 2462798800
200 HIGH STREET MOUNT HOLLY, N.J.
2 MARKET STREET PATERSON, N.J.

Richard A. Alaimo
APPROVED: DATE: 6-7-22

Richard A. Alaimo - P. E.
N.J. PROFESSIONAL ENGINEER
LICENSE NO. 13195

RAA PROJECT NO.
B01450077001

Revisions		
NO.	DATE	BY

County of Middlesex
Department of Transportation
Office of Engineering
75 Bayard St., New Brunswick, NJ 08901

IMPROVEMENTS TO THE INTERSECTION OF
OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD
TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY

CURB RAMP CONSTRUCTION DETAILS

Scale: 1" = 4'
Sheet No. 10 of 37
Date: MAY 2022

Ronald M. Sender
County Engineer
N.J. P.E. No. 2462798800

Plotted: 5/24/2022 3:32 PM Lant saved: 4/25/2022 4:42 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-10-12-CURB_RAMPS.dwg

GENERAL MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

- PRIOR TO THE START OF ANY ROAD WORK WITHIN THE COUNTY RIGHT OF WAY, THE CONTRACTOR MUST OBTAIN A ROAD OPENING PERMIT FROM THE COUNTY ROAD SUPERVISOR (P.O. BOX 7356), APPLE ORCHARD ROAD, NORTH BRUNSWICK, NEW JERSEY 08902. PRIOR TO ISSUANCE OF THE FIRST PAYMENT TO THE CONTRACTOR, A COPY OF THE ROAD OPENING PERMIT MUST BE PRESENTED TO THE COUNTY, DEPARTMENT OF INFRASTRUCTURE MANAGEMENT, OFFICE OF THE ENGINEER.
- ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED, AT DIRECTION OF THE ENGINEER, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
- THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED TO ADJUST FOR VISIBILITY DUE TO HORIZONTAL OR VERTICAL CURVATURE OF THE ROADWAY OR TO POSITION AT A SAFER LOCATION. ILLUMINATED FLASHING ARROW BOARDS ARE TO BE USED FOR TEMPORARY LANE CLOSURES AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.
- PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
- RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-IF SIGN (ROAD WORK AHEAD) AS A MINIMUM.
- ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR FLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER.
- CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY, OR PROPOSED TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
- MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART VI "STANDARDS AND GUIDES FOR TRAFFIC CONTROL FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS", UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE ENGINEER.
- CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
- A W1-6 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH SHALL BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.
- CONSTRUCTION SIGNS R11-4 (ROAD CLOSED TO THRU TRAFFIC) SHALL BE PLACED AT THE INTERSECTING STREETS WHICH ARE CLOSED TO TRAFFIC BECAUSE OF CONSTRUCTION. IT IS UNDERSTOOD THAT CLOSURE OF ROADWAYS IS NOT CONDONED BY THE COUNTY OF MIDDLESEX EXCEPT IN EXTREME SITUATIONS TO PROTECT THE SAFETY OF THE TRAVELING PUBLIC.
- SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-14A (GROOVED PAVEMENT) SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST. THE PLACEMENT OF THESE SIGNS SHALL BE AS DIRECTED BY THE ENGINEER.
- MOVING WORK AREAS IN A PERMANENT LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING TRUCK MOUNTED CRASH CUSHION THAT SHALL MOVE WITH THE WORK AREAS TO KEEP A 75 FOOT MINIMUM AND 175 FOOT MAXIMUM BUFFER IN ADVANCE OF EACH WORK AREA.
- THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE SAFE ACCESS OF CONSTRUCTION VEHICLES THROUGHOUT THE WORK SITE WHERE SPACE CONSTRAINTS PREVENT THE USE OF LANE CLOSURES. THE PLAN SHALL BE SUBMITTED TO THE ENGINEER IN ACCORDANCE WITH NJDOT 2007 SECTION 159 OF THE STANDARD SPECIFICATIONS.
- TRAFFIC SAFETY SERVICES SHALL BE USED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL, NJDOT 159.
- ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 6H : 1V SLOPE PRIOR TO THE END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE EITHER BACKFILLED OR A PRECAST CONCRETE CURB CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC. CONSTRUCTION ZONE MUST MEET O.S.H.A AND NJDOT REQUIREMENTS.
- WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING FACILITIES IN AN ADA COMPLIANT FASHION AND AS DIRECTED BY THE ENGINEER.
- BITUMINOUS CONCRETE PLACED DURING THE VARIOUS CONSTRUCTION STAGES SHALL BE TRANSITIONED ON A MINIMUM 20H : 1V SLOPE TO MEET THE ADJACENT EXISTING GRADE AT THE LONGITUDINAL AND TRANSVERSE LIMITS OF THE STAGE CONSTRUCTION AREAS UNLESS OTHERWISE NOTED ON THE STAGE CONSTRUCTION PLANS.
- THE PLACEMENT AND OR RELOCATION OF PRECAST CONCRETE CURB, CONSTRUCTION BARRIER SHALL BE DONE DURING APPROVED OFF-PEAK HOURS WHEN TRAFFIC MAY BE REDUCED TO ONE LANE IN EACH DIRECTION.
- A 25 MPH CONSTRUCTION ZONE SPEED LIMIT IS SUGGESTED. HOWEVER, FLEXIBILITY IN THE FIELD IS ALLOWED TO BE DETERMINED BY THE ENGINEER AT THE TIME OF OR DURING CONSTRUCTION, AS REQUESTED BY THE RESIDENT ENGINEER.
- THE SPEED LIMIT, R2-1 (BLACK ON WHITE) SIGN SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE ENGINEER. A 25 MPH SIGN IS SUGGESTED.
- THE REDUCED SPEED AHEAD SIGN, W3-5 SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
- TRAFFIC FINES DOUBLED IN WORK AREA R(NJ)5-17(S) , 4 FEET BY 2.5 FEET SIGN SHALL BE LOCATED 500 FEET AFTER THE FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN SHALL ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS IN WHICH CASE THE SIGN SHALL BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.
- IF THE EXISTING TRAFFIC SIGNAL IS EQUIPPED WITH PEDESTRIAN PUSH BUTTONS AND/OR VEHICULAR DETECTION THEN ACTIVE PEDESTRIAN PUSH BUTTONS AND VEHICULAR DETECTIONS SHALL BE IN PLACE THROUGHOUT THE CONSTRUCTION PERIOD. THE TRAFFIC SIGNAL CANNOT BE PLACED IN FIXED MODE.
- THE FINAL BITUMINOUS CONCRETE SURFACE PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL THE FINAL STAGE OF THE PROJECT. MANHOLES AND INLETS SHALL BE SET TO FINISHED GRADE AND TEMPORARY PAVEMENT RAMPS ARE TO BE CONSTRUCTED AROUND THEM WITH A MINIMUM 20H : 1V SLOPE IN ALL DIRECTIONS USING HOT MIX ASPHALT PAVEMENT. THIS TEMPORARY MATERIAL WILL BE REMOVED IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE.
- TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
- CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE ENGINEER.
- THE CONTRACTOR SHALL COORDINATE WITH POLICE DURING ALL PHASES OF TRAFFIC CONTROL.
- THE MIDDLESEX COUNTY ENGINEERING OFFICE IS TO BE NOTIFIED A MINIMUM OF 72 HOURS BEFORE ANY LANE CLOSURE TAKES PLACE. TRAFFIC INTERFERENCE REPORT (TIR) HAS TO BE FAXED TO THE MIDDLESEX COUNTY ENGINEERING OFFICE 3 DAYS IN ADVANCE.
- ON A WEEKLY BASIS, ALL PLANNED LANE AND/OR SHOULDER CLOSURES AND OTHER TRAFFIC IMPACTS FOR THE SEVEN (7) DAY PERIOD STARTING ON THE FOLLOWING MONDAY SHALL BE SUBMITTED TO THE COUNTY ENGINEER BY 8:00AM OF EACH FRIDAY ON FORMS PROVIDED BY THE DEPARTMENT. THIS SUBMITTAL SHALL INCLUDE ALL TEMPORARY AND PERMANENT CLOSURES AND IMPACTS THAT WILL BE CONTINUOUSLY IN PLACE FOR AT LEAST 24 HOURS.
- EACH DAY OF TEMPORARY CLOSURES SHALL BE SUBMITTED TO THE COUNTY ENGINEER AT LEAST 24 HOURS IN ADVANCE OF THE CLOSURE OR TRAFFIC IMPACT ON DAILY FORMS PROVIDED BY THE DEPARTMENT.
- ALL TEMPORARY WEEKEND CLOSURES SHALL BE SUBMITTED TO THE COUNTY ENGINEER BY 8:00AM ON THE IMMEDIATELY PRECEDING FRIDAY USING THE SAME FORMS FOR THE DAILY SUBMITTALS.
- ANY DEVIATION FROM THE LANE CLOSURE SCHEDULE AND TRAFFIC PATTERNS PROVIDED IN THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO : CHANGE IN HOURS, USE OF LANE SHIFTS, SHOULDER CLOSURES, ALTERNATING TRAFFIC PATTERNS, MOVING OPERATIONS AND TRAFFIC SLOW DOWNS, SHALL BE SUBMITTED IN WRITING TO THE COUNTY ENGINEER AT LEAST EIGHT (8) DAYS IN ADVANCE OF THE PROPOSED CHANGE.
- ANY LANE CLOSURES ON COUNTY ROUTE 604 MUST BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

ALLOWABLE SINGLE LANE CLOSURES:
 MONDAY - THURSDAY: 9:00AM TO 3:30PM AND 8:00PM TO 6:00AM (NEXT DAY)
 FRIDAY: 9:00AM TO 3:30PM AND 9:00PM TO 6:00AM (THE NEXT MONDAY)

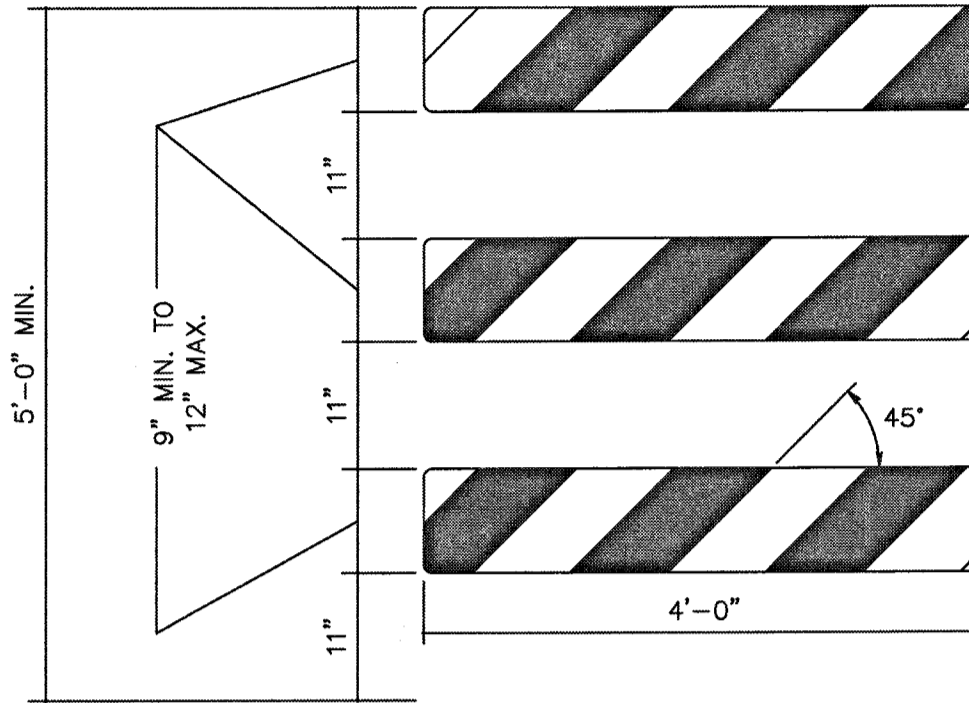
IN ADDITION, SINGLE LANE CLOSURES WILL NOT BE PERMITTED ON THE FOLLOWING HOLIDAYS:
 EASTER SUNDAY (INCLUDING 6:00AM SATURDAY UNTIL NOON ON MONDAY);
 MEMORIAL DAY (SEE NOTE BELOW);
 JULY 4TH (SEE NOTE BELOW);
 LABOR DAY (SEE NOTE BELOW);
 ELECTION DAY (6:00AM UNTIL 8:00PM THE DAY OF);
 THANKSGIVING DAY (SEE NOTE BELOW);
 CHRISTMAS DAY (SEE NOTE BELOW);
 NEW YEAR'S DAY (SEE NOTE BELOW).

IN ADDITION, SINGLE LANE CLOSURES WILL NOT BE PERMITTED ON THE FOLLOWING HOLIDAYS:
 MARTIN LUTHER KING'S BIRTHDAY (SEE NOTE BELOW);
 PRESIDENT'S DAY (SEE NOTE BELOW);
 GOOD FRIDAY (SEE NOTE BELOW);
 JUNETEENTH (SEE NOTE BELOW);
 COLUMBUS DAY (SEE NOTE BELOW);
 ELECTION DAY (SEE NOTE BELOW);
 VETERAN'S DAY (SEE NOTE BELOW);

NOTE:	
IF HOLIDAY FALLS ON	NO LANE CLOSURE PERMITTED
SUNDAY OR MONDAY	6:00AM FRIDAY UNTIL NOON TUESDAY
TUESDAY	6:00AM FRIDAY UNTIL NOON WEDNESDAY
WEDNESDAY	6:00AM TUESDAY UNTIL NOON THURSDAY
THURSDAY	6:00AM WEDNESDAY UNTIL NOON MONDAY
FRIDAY OR SATURDAY	6:00AM THURSDAY UNTIL NOON MONDAY

ALL TRAFFIC RESTRICTIONS, INCLUDING LANE WIDTH REDUCTIONS, LANE CLOSURES AND DETOURS ARE SUBJECT TO THE APPROVAL OR THE MIDDLESEX COUNTY ENGINEERING OFFICE.

- EACH CONSTRUCTION STAGE MUST BE COMPLETED BEFORE THE NEXT STAGE BEGINS.



NOTES: TYPE III BARRICADE - FRONT VIEW

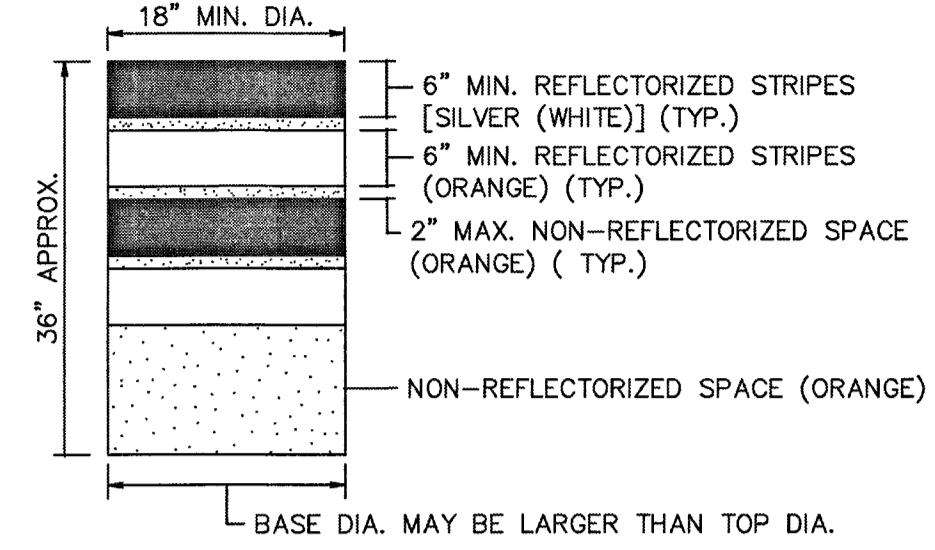
- THE 9" MIN. x 48", OR 12" MAX. x 48" BARRICADE RAILS SHALL BE FABRICATED FROM 0.125" MAX. PLASTIC SHEETING AND SHALL BE ATTACHED, 4 PER RAIL, WITH 1 INCH NO. 14 PAN HEAD METAL SCREWS OR PLASTIC RIVETS. ALL CORNERS SHALL BE ROUNDED.
- ORANGE AND SILVER (WHITE) STRIPES SHALL BE RETROREFLECTIVE SHEETING, ASTM D 4956 TYPE III, AS SHOWN FOR CONSTRUCTION SIGNS. ALTERNATE ORANGE AND SILVER (WHITE) STRIPES 6" WIDE SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION TRAFFIC IS TO PASS.
- IF NECESSARY, THE SANDBAGS SHALL BE FABRICATED AND PLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.
- THE FRAMING FOR BARRICADE PANELS SHALL BE NCHRP-350 CRASHED TESTED AND FHWA APPROVED. SEE SPECIFICATION NJDOT 2007 SUBSECTION 159.03.

BREAKAWAY BARRICADES

REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS				RECOMMENDED SPACING ALONG TANGENTS
	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	MINIMUM TAPER LENGTH L - FOR LANE WIDTHS		MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	
		11'	12'		
25	10.5:1	105	115	125	25
30	15:1	150	165	180	30
35	20.5:1	205	225	245	35
40	27:1	270	300	325	40
45	45:1	450	495	540	45
50	50:1	500	550	600	50
55	55:1	550	605	660	55
60	60:1	600	660	720	60
65	65:1	650	715	780	65

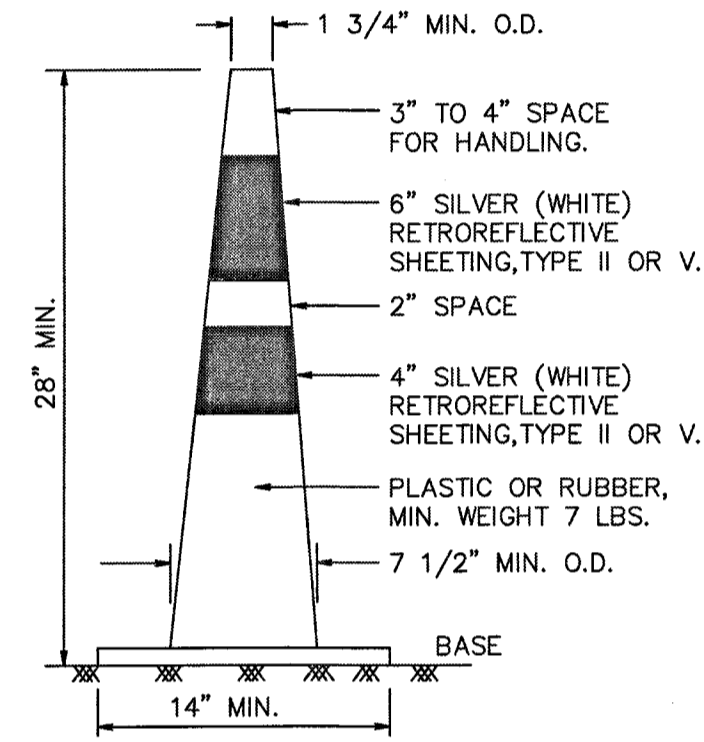
NOTE: THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.
 MINIMUM LANE WIDTH FOR DEDICATED LEFT TURN LANES WITHIN WORK ZONE IS TO BE 10 FEET.

DRUMS SHALL BE MADE OF ORANGE PLASTIC WITH A MINIMUM OF FOUR ALTERNATE ORANGE AND SILVER (WHITE) REFLECTORIZED STRIPES. IF THERE ARE NON-REFLECTORIZED SPACES BETWEEN THE STRIPES, THEY SHALL BE NO MORE THAN 2" WIDE. STRIPES SHALL BE REFLECTIVE SHEETING, TYPE III-B. THE TOP OF THE DRUM SHALL NOT BE OPEN. DRUMS SHALL BE CONSTRUCTED TO INHIBIT ROLLING IF KNOCKED OVER. THE REFLECTORIZED AREA OF THE DRUMS SHALL BE ROUNDED EXCEPT THAT OTHER SHAPES, WHICH PROVIDE THE SAME VISIBILITY AS A 18" DIAMETER ROUND DRUM REGARDLESS OF ORIENTATION, MAY BE USED IF APPROVED BY THE BUREAU OF MATERIALS.



WHEN BALLAST IS REQUIRED BY THE ENGINEER, SAND SHALL BE USED. THE MAXIMUM WEIGHT OF THE BALLAST SHALL BE 50 LBS. AND BE LOCATED APPROXIMATELY AT GROUND LEVEL.

DRUMS



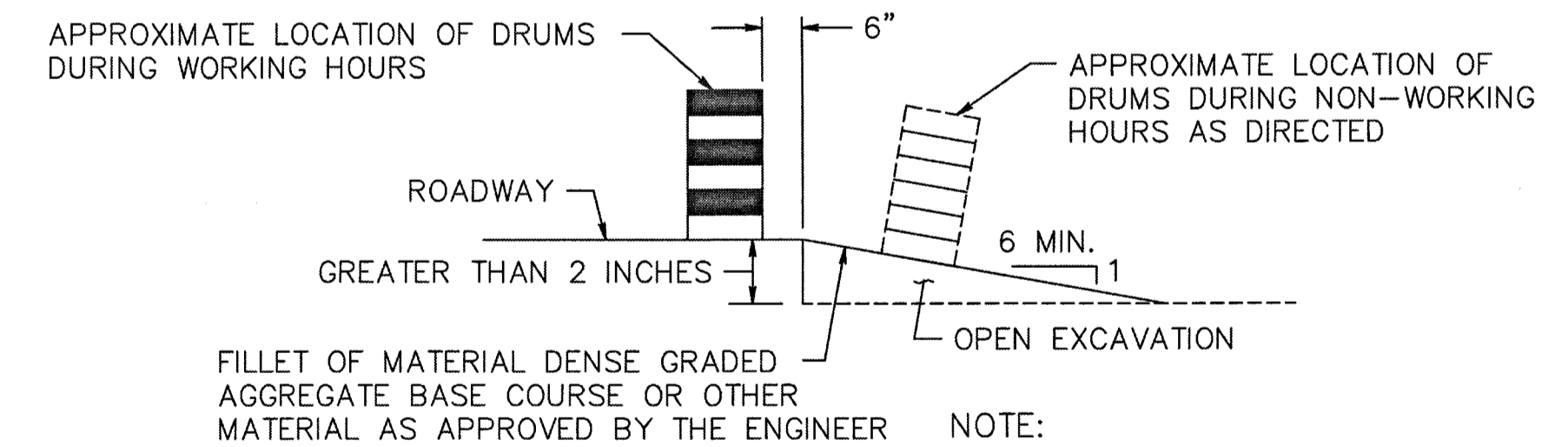
TRAFFIC CONES

NOTES:

TRAFFIC CONES SHALL BE PREDOMINATELY ORANGE IN COLOR.

BASES MAY BE OF BREAKAWAY BALLASTED TYPE.

MINOR MANUFACTURER'S VARIATIONS MAY BE ACCEPTABLE UPON APPROVAL OF THE ENGINEER.



NOTE:

ESCAPE RAMPS MUST BE CONSTRUCTED AND MAINTAINED DURING NON-WORKING HOURS WHERE A VERTICAL DROP GREATER THAN 2 INCHES EXISTS ADJACENT TO TRAVELED LANE.

ESCAPE RAMP DETAIL

LEGEND

- BREAKAWAY BARRICADES
- BREAKAWAY BARRICADES WITH SIGN (LIGHT STOCK SIGN 0.024")
- CONSTRUCTION SIGNS
- DRUMS
- CONES
- PRECAST CONCRETE CURB CONSTRUCTION BARRIER (TYPE SPECIFIED)
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DIRECTOR, FLAGGER
- TRAILER MOUNTED MOUNTED ARROW BOARD SHOWING CAUTION MODE
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN (Left, Right, Both)
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN (Left, Right, Both)
- TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM
- TEMPORARY CRASH CUSHION, (all other approved)
- BUFFER ZONE
- WORK AREA
- PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	RECOMMENDED SIGHT DISTANCE TO BEGINNING OF CHANNELIZING TAPERS			
	DESIRABLE		MINIMUM	
	RURAL FEET	URBAN FEET	RURAL AND URBAN FEET	URBAN FEET
25	375	525	150	
30	450	625	200	
35	525	725	250	
40	600	825	325	
45	675	925	400	
50	750	1025	475	
55	825	1150	550	
60	1000	1275	650	
65	1050		725	

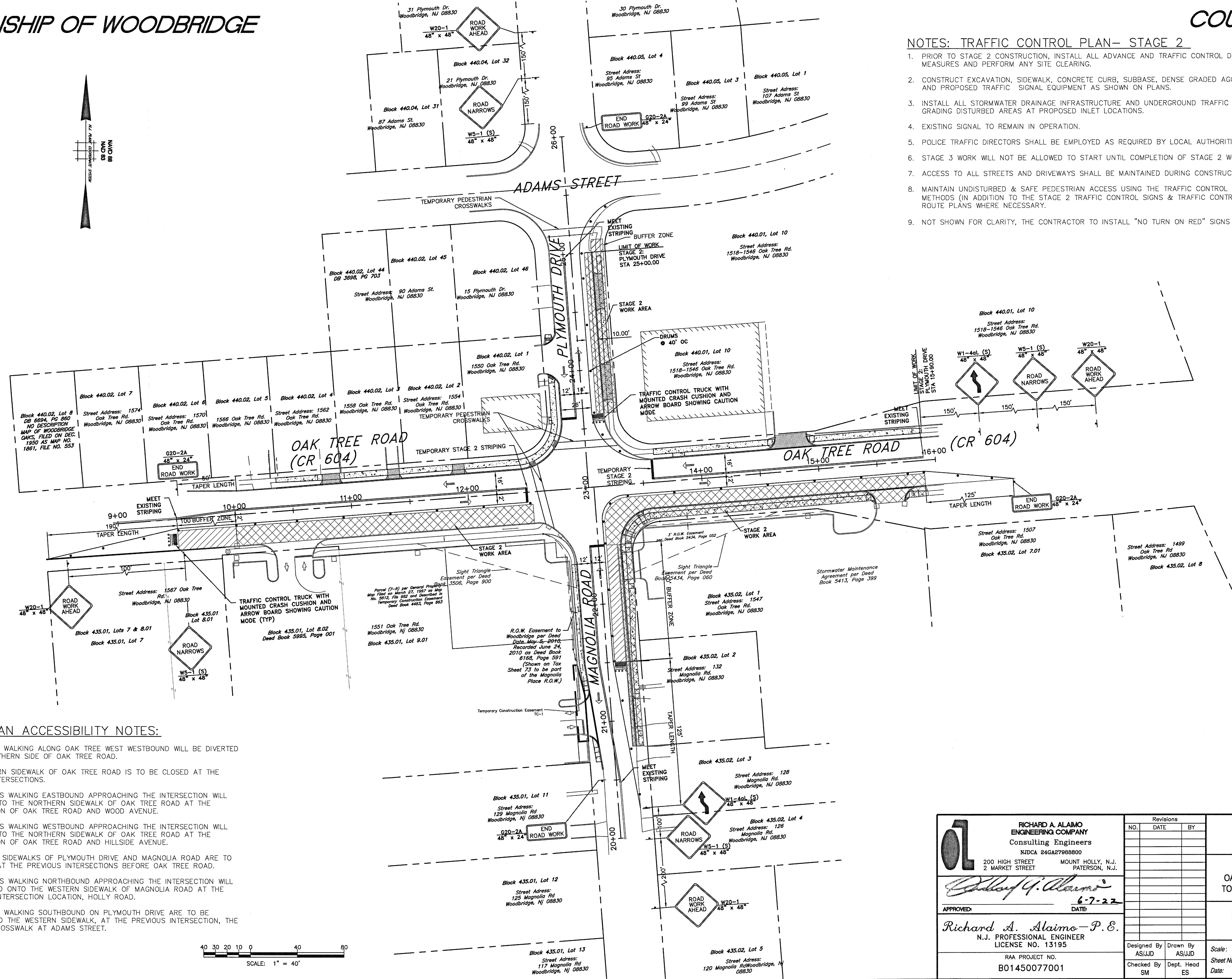
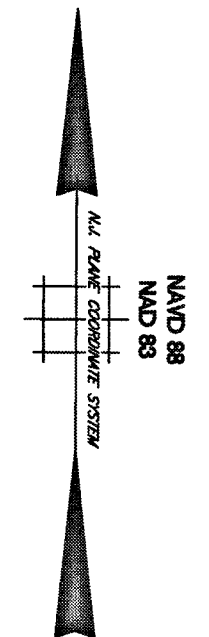
NOTES:

- AVOIDANCE MANUEVER IS FOR A SPEED, PATH, AND/OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
- RECOMMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES SHALL BE DOUBLE THE VALUES SHOWN ABOVE.
- RURAL AND URBAN ROAD DESIGNATIONS SHALL BE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
- DESIRABLE VALUES SHALL BE PROVIDED WHEREVER POSSIBLE. IF IT IS NOT FEASIBLE OR PRACTICAL TO PROVIDE DESIRABLE VALUES BECAUSE OF HORIZONTAL OR VERTICAL CURVATURE OR IF RELOCATION OF THE TAPER IS NOT POSSIBLE, THEN MINIMUM VALUES CAN BE APPLIED. WHEN MINIMUM VALUES ARE USED, SPECIAL ATTENTION SHOULD BE GIVEN TO THE USE OF SUITABLE TRAFFIC CONTROL DEVICES FOR PROVIDING ADVANCED WARNING OF THE CONDITIONS THAT ARE LIKELY TO BE ENCOUNTERED.
- TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.

<p>RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27988600 200 HIGH STREET, 2 MARKET STREET, MOUNT HOLLY, N.J., PATERSON, N.J.</p>	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
	Approved: <i>Richard A. Alaimo</i> DATE: 6-7-22	
Richard A. Alaimo - P. E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001		Scale: Sheet No. 13 of 37 Date: MAY 2022
IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY		MAINTENANCE AND PROTECTION OF TRAFFIC PLANS
Ronald M. Sender County Engineer N.J. P.E. No. 24CE0192200		

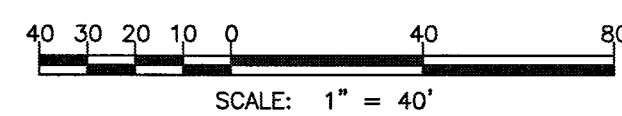
NOTES: TRAFFIC CONTROL PLAN- STAGE 2

1. PRIOR TO STAGE 2 CONSTRUCTION, INSTALL ALL ADVANCE AND TRAFFIC CONTROL DEVICES, SOIL EROSION AND SEDIMENT CONTROL MEASURES AND PERFORM ANY SITE CLEARING.
2. CONSTRUCT EXCAVATION, SIDEWALK, CONCRETE CURB, SUBBASE, DENSE GRADED AGGREGATE, BITUMINOUS CONCRETE BASE COURSE AND PROPOSED TRAFFIC SIGNAL EQUIPMENT AS SHOWN ON PLANS.
3. INSTALL ALL STORMWATER DRAINAGE INFRASTRUCTURE AND UNDERGROUND TRAFFIC SIGNAL ITEMS. PROVIDE POSITIVE DRAINAGE BY GRADING DISTURBED AREAS AT PROPOSED INLET LOCATIONS.
4. EXISTING SIGNAL TO REMAIN IN OPERATION.
5. POLICE TRAFFIC DIRECTORS SHALL BE EMPLOYED AS REQUIRED BY LOCAL AUTHORITIES.
6. STAGE 3 WORK WILL NOT BE ALLOWED TO START UNTIL COMPLETION OF STAGE 2 WORK.
7. ACCESS TO ALL STREETS AND DRIVEWAYS SHALL BE MAINTAINED DURING CONSTRUCTION.
8. MAINTAIN UNDISTURBED & SAFE PEDESTRIAN ACCESS USING THE TRAFFIC CONTROL SIGNS, TRAFFIC CONTROL DEVICES AND METHODS (IN ADDITION TO THE STAGE 2 TRAFFIC CONTROL SIGNS & TRAFFIC CONTROL DEVICES) FROM PEDESTRIAN ALTERNATE ROUTE PLANS WHERE NECESSARY.
9. NOT SHOWN FOR CLARITY, THE CONTRACTOR TO INSTALL "NO TURN ON RED" SIGNS THROUGH OUT THE INTERSECTION.



PEDESTRIAN ACCESSIBILITY NOTES:

1. PEDESTRIANS WALKING ALONG OAK TREE WEST WESTBOUND WILL BE DIVERTED TO THE NORTHERN SIDE OF OAK TREE ROAD.
2. THE SOUTHERN SIDEWALK OF OAK TREE ROAD IS TO BE CLOSED AT THE PREVIOUS INTERSECTIONS.
 - a. PEDESTRIANS WALKING EASTBOUND APPROACHING THE INTERSECTION WILL BE MOVED TO THE NORTHERN SIDEWALK OF OAK TREE ROAD AT THE INTERSECTION OF OAK TREE ROAD AND WOOD AVENUE.
 - b. PEDESTRIANS WALKING WESTBOUND APPROACHING THE INTERSECTION WILL BE MOVED TO THE NORTHERN SIDEWALK OF OAK TREE ROAD AT THE INTERSECTION OF OAK TREE ROAD AND HILLSIDE AVENUE.
3. THE EASTERN SIDEWALKS OF PLYMOUTH DRIVE AND MAGNOLIA ROAD ARE TO BE CLOSED AT THE PREVIOUS INTERSECTIONS BEFORE OAK TREE ROAD.
 - a. PEDESTRIANS WALKING NORTHBOUND APPROACHING THE INTERSECTION WILL BE DIVERTED ONTO THE WESTERN SIDEWALK OF MAGNOLIA ROAD AT THE PREVIOUS INTERSECTION LOCATION, HOLLY ROAD.
 - b. PEDESTRIANS WALKING SOUTHBOUND ON PLYMOUTH DRIVE ARE TO BE DIRECTED TO THE WESTERN SIDEWALK, AT THE PREVIOUS INTERSECTION, THE EXISTING CROSSWALK AT ADAMS STREET.

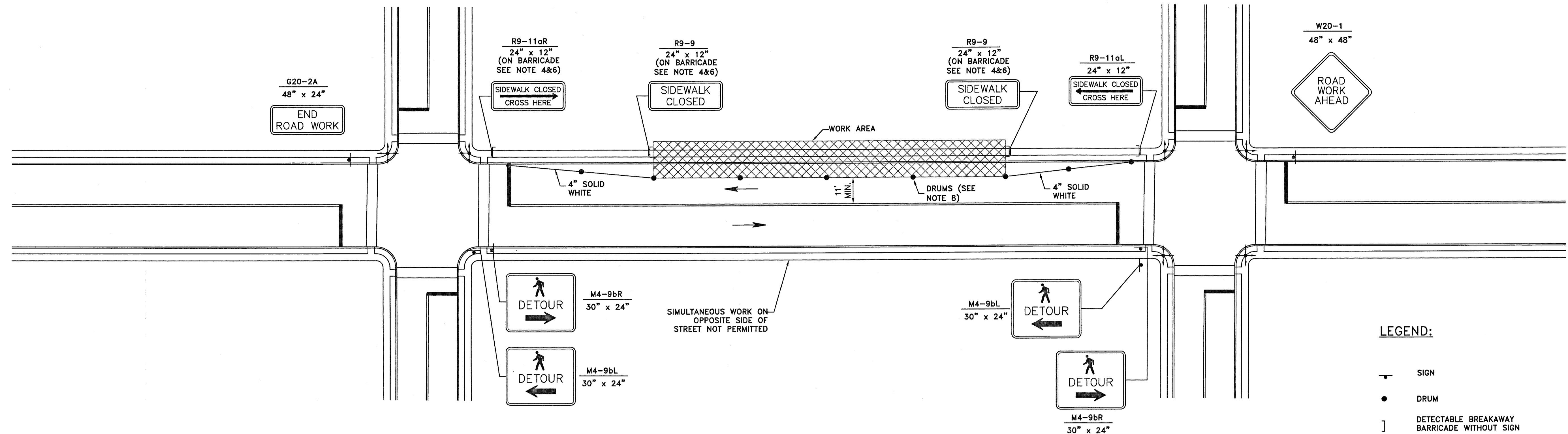


Path: 5/24/2022 3:32 PM Last saved: 9/2/2021 1:40 PM File Name: K:\Projects\001450077001\Drawings\EIC-SHT-15-WF-STAGE 2.dwg

MPT-3
MPT-8

<p>RICHARD A. ALAIMO CONSULTING ENGINEERS NJCA 24GA27968800 200 HIGH STREET, 2 MARKET STREET, MOUNT HOLLY, N.J., PATERSON, N.J.</p> <p><i>Richard A. Alaimo</i> APPROVED: DATE: 6-7-22</p> <p>Richard A. Alaimo - P. E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195</p> <p>RAA PROJECT NO. B01450077001</p>	Revisions NO. DATE BY		County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
	Designed By AS/JJD	Drawn By AS/JJD	
IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY		MAINTENANCE AND PROTECTION OF TRAFFIC PLAN STAGE 2	
Ronald M. Sender County Engineer N.J. P.E. No. 24CE0162200			

TYPICAL MID-BLOCK SIDEWALK CLOSING
(PEDESTRIAN ACCESS ROUTE USING
OPPOSITE SIDEWALK)



- LEGEND:**
- SIGN
 - DRUM
 -] DETECTABLE BREAKAWAY BARRICADE WITHOUT SIGN
 -] DETECTABLE BREAKAWAY BARRICADE WITH SIGN
 - ← DIRECTION OF VEHICULAR TRAFFIC
 - ⊕ DIRECTION OF PEDESTRIAN TRAFFIC

NOTES:

1. THIS DRAWING SHALL BE USED IN COMBINATION WITH THE TRAFFIC CONTROL DETAIL AND GENERAL NOTES AND CONSTRUCTION STAGING PLANS WHEREVER APPLICABLE.
2. PEDESTRIANS SHOULD NOT BE LED INTO CONFLICTS WITH VEHICLES MOVING THRU OR AROUND WORKSITE, EQUIPMENT AND OPERATIONS.
3. A 5 FOOT MINIMUM WIDTH PEDESTRIAN PATH / ALTERNATE PEDESTRIAN PATH SHALL BE MAINTAINED WHERE POSSIBLE. WHERE A 5 FOOT MIN. WIDTH CANNOT BE ACHIEVED, A MINIMUM WIDTH OF 36 INCHES SHALL BE PROVIDED WITH PASSING ZONES (60 IN X 60 IN) AT LEAST EVERY 175 FEET TO ALLOW INDIVIDUALS IN WHEELCHAIRS TO PASS.
4. BLOCKED ROUTES, ALTERNATE CROSSINGS, AND SIGN AND SIGNAL INFORMATION SHOULD BE COMMUNICATED TO PEDESTRIANS WITH VISUAL DISABILITIES BY PROVIDING DEVICES SUCH AS AUDIBLE INFORMATION DEVICES, ACCESSIBLE PEDESTRIAN SIGNALS, OR BARRIERS AND CHANNELIZING DEVICES THAT ARE DETECTABLE TO THE PEDESTRIANS TRAVELING WITH THE AID OF LONG CANE OR WHO HAVE LOW VISION.
5. TEMPORARY RAMPS SHALL HAVE A SLOPE OF 12:1 MAX. THE PEDESTRIAN PATH AND RAMP SHALL BE CONSTRUCTED OF HOT MIX ASPHALT OR OTHER MATERIAL THAT CAN PROVIDE SMOOTH, HARD SURFACE & WILL MAINTAIN 12:1 SLOPE. THE GEOMETRY AND ALIGNMENT OF THE FACILITY SHOULD MEET THE APPLICABLE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)".
6. DETECTABLE BARRICADES SHALL EXTEND AT LEAST 36 INCHES ABOVE THE PATHWAY WITH THE BOTTOM OF THE BARRICADE NO MORE THAN 1/2 INCHES ABOVE THE PATHWAY, AND SHALL EXTEND THE FULL WIDTH OF THE CLOSURE.
7. PEDESTRIAN TRAFFIC SIGNAL DISPLAYS CONTROLLING CLOSED CROSSWALKS SHOULD BE COVERED OR DEACTIVATED.
8. FOR RECOMMENDED TAPER LENGTHS AND SPACING OF DRUMS REFER TRAFFIC CONTROL DETAILS.
9. ALL TEMPORARY PEDESTRIAN ROUTES ESTABLISHED THROUGH OR AROUND WORK AREAS SHALL MAINTAIN THE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY BEING DISRUPTED. THE CONTRACTOR SHALL PROVIDE TEMPORARY CURB RAMPS, RAMPS AND DETECTABLE WARNING DEVICES ON ALL TEMPORARY FACILITIES AT NO ADDITIONAL COST.
10. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING PROPERTIES/DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.
11. ALL REQUIRED CONSTRUCTION WITHIN A WORK AREA ON A SIDEWALK SECTION/BLOCK SHALL BE COMPLETED PRIOR TO REMOVING THE TRAFFIC CONTROL DEVICES EXCEPT FOR THE FINAL MILLING AND PAVING OPERATIONS WITHIN THE STREET.

Plotted: 5/24/2022 3:35 PM Last saved: 9/2/2021 2:30 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SRT-18-30-MPT-FED-DETAILS.dwg

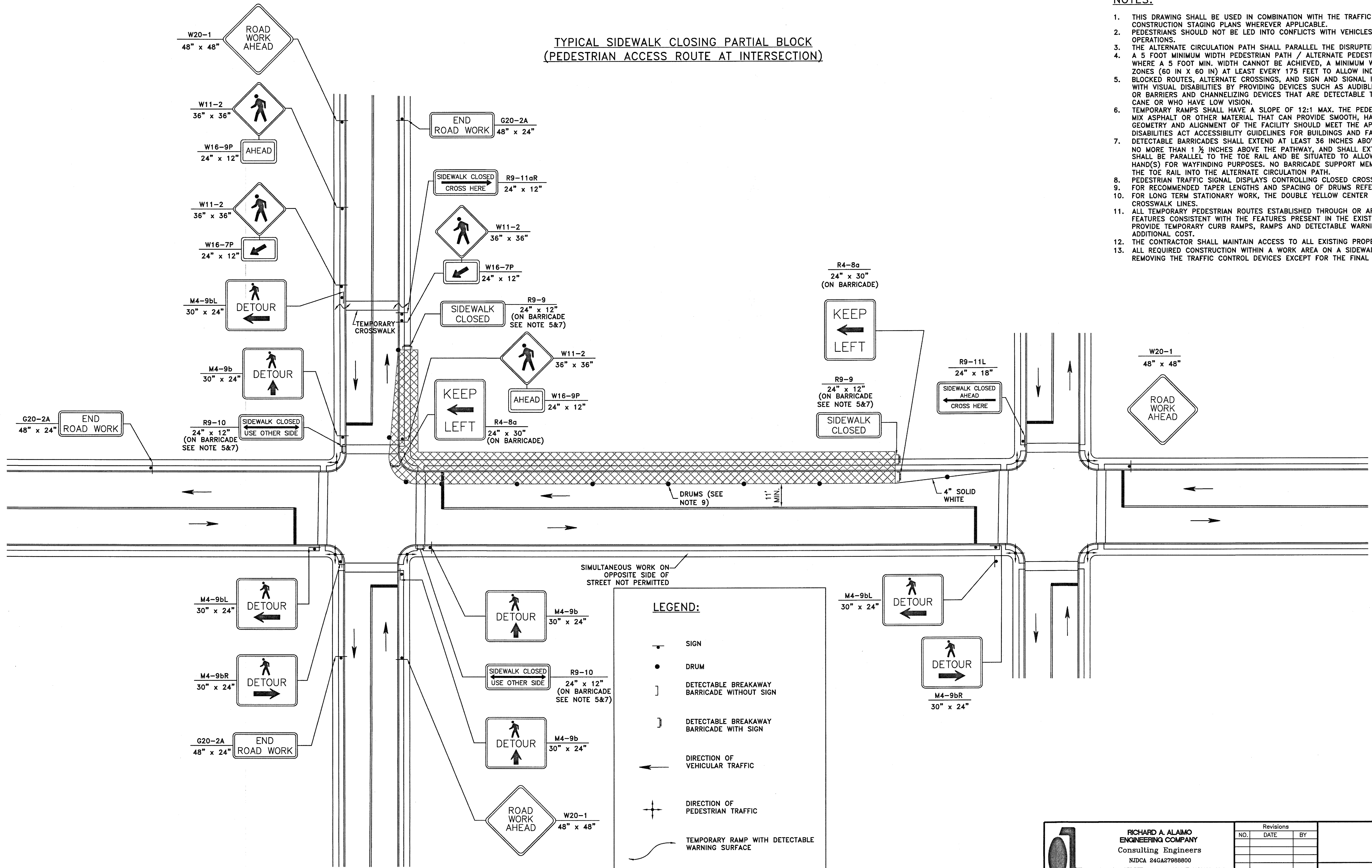
MPT-6
MPT-8

RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27968800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J. APPROVED: DATE: 6-7-22 Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	Revisions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DATE	BY																															County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901 IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY MAINTENANCE AND PROTECTION OF VEHICULAR TRAFFIC AND PEDESTRIAN PLANS
	NO.	DATE	BY																																
Designed By AS/JJD Checked By SM	Drawn By AS/JJD Dept. Head ES	Scale: N/A Sheet No. 18 of 37 Date: MAY 2022 <div style="text-align: right;"> Ronald M. Senderfer County Engineer N.J. P.E. No. 24CE03162200 </div>																																	

TYPICAL SIDEWALK CLOSING PARTIAL BLOCK
(PEDESTRIAN ACCESS ROUTE AT INTERSECTION)

NOTES:

1. THIS DRAWING SHALL BE USED IN COMBINATION WITH THE TRAFFIC CONTROL DETAILS AND GENERAL NOTES AND CONSTRUCTION STAGING PLANS WHEREVER APPLICABLE.
2. PEDESTRIANS SHOULD NOT BE LED INTO CONFLICTS WITH VEHICLES MOVING THRU OR AROUND WORKSITE, EQUIPMENT AND OPERATIONS.
3. THE ALTERNATE CIRCULATION PATH SHALL PARALLEL THE DISRUPTED PEDESTRIAN ACCESS ROUTE.
4. A 5 FOOT MINIMUM WIDTH PEDESTRIAN PATH / ALTERNATE PEDESTRIAN PATH SHALL BE MAINTAINED WHERE POSSIBLE. WHERE A 5 FOOT MIN. WIDTH CANNOT BE ACHIEVED, A MINIMUM WIDTH OF 36 INCHES SHALL BE PROVIDED WITH PASSING ZONES (60 IN X 60 IN) AT LEAST EVERY 175 FEET TO ALLOW INDIVIDUALS IN WHEELCHAIRS TO PASS.
5. BLOCKED ROUTES, ALTERNATE CROSSINGS, AND SIGN AND SIGNAL INFORMATION SHOULD BE COMMUNICATED TO PEDESTRIANS WITH VISUAL DISABILITIES BY PROVIDING DEVICES SUCH AS AUDIBLE INFORMATION DEVICES, ACCESSIBLE PEDESTRIAN SIGNALS, OR BARRIERS AND CHANNELIZING DEVICES THAT ARE DETECTABLE TO THE PEDESTRIANS TRAVELING WITH THE AID OF LONG CANE OR WHO HAVE LOW VISION.
6. TEMPORARY RAMPS SHALL HAVE A SLOPE OF 12:1 MAX. THE PEDESTRIAN PATH AND RAMP SHALL BE CONSTRUCTED OF HOT MIX ASPHALT OR OTHER MATERIAL THAT CAN PROVIDE SMOOTH, HARD SURFACE & WILL MAINTAIN 12:1 SLOPE. THE GEOMETRY AND ALIGNMENT OF THE FACILITY SHOULD MEET THE APPLICABLE REQUIREMENTS OF THE 'AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)'.
7. DETECTABLE BARRICADES SHALL EXTEND AT LEAST 36 INCHES ABOVE THE PATHWAY WITH THE BOTTOM OF THE BARRICADE NO MORE THAN 1 1/2 INCHES ABOVE THE PATHWAY, AND SHALL EXTEND THE FULL WIDTH OF THE CLOSURE. THE TOP RAIL SHALL BE PARALLEL TO THE TOE RAIL AND BE SITUATED TO ALLOW PEDESTRIANS TO USE THE RAIL AS A GUIDE FOR THEIR HAND(S) FOR WAYFINDING PURPOSES. NO BARRICADE SUPPORT MEMBER SHALL PROTRUDE MORE THAN 4 INCHES BEYOND THE TOE RAIL INTO THE ALTERNATE CIRCULATION PATH.
8. PEDESTRIAN TRAFFIC SIGNAL DISPLAYS CONTROLLING CLOSED CROSSWALKS SHOULD BE COVERED OR DEACTIVATED.
9. FOR RECOMMENDED TAPER LENGTHS AND SPACING OF DRUMS REFER TRAFFIC CONTROL DETAILS.
10. FOR LONG TERM STATIONARY WORK, THE DOUBLE YELLOW CENTER LINE/OR LANE LINES SHOULD BE REMOVED BETWEEN THE CROSSWALK LINES.
11. ALL TEMPORARY PEDESTRIAN ROUTES ESTABLISHED THROUGH OR AROUND WORK AREAS SHALL MAINTAIN THE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY BEING DISRUPTED. THE CONTRACTOR SHALL PROVIDE TEMPORARY CURB RAMPS, RAMPS AND DETECTABLE WARNING DEVICES ON ALL TEMPORARY FACILITIES AT NO ADDITIONAL COST.
12. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING PROPERTIES/DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.
13. ALL REQUIRED CONSTRUCTION WITHIN A WORK AREA ON A SIDEWALK SECTION/BLOCK SHALL BE COMPLETED PRIOR TO REMOVING THE TRAFFIC CONTROL DEVICES EXCEPT FOR THE FINAL MILLING AND PAVING OPERATIONS WITHIN THE STREET.



LEGEND:

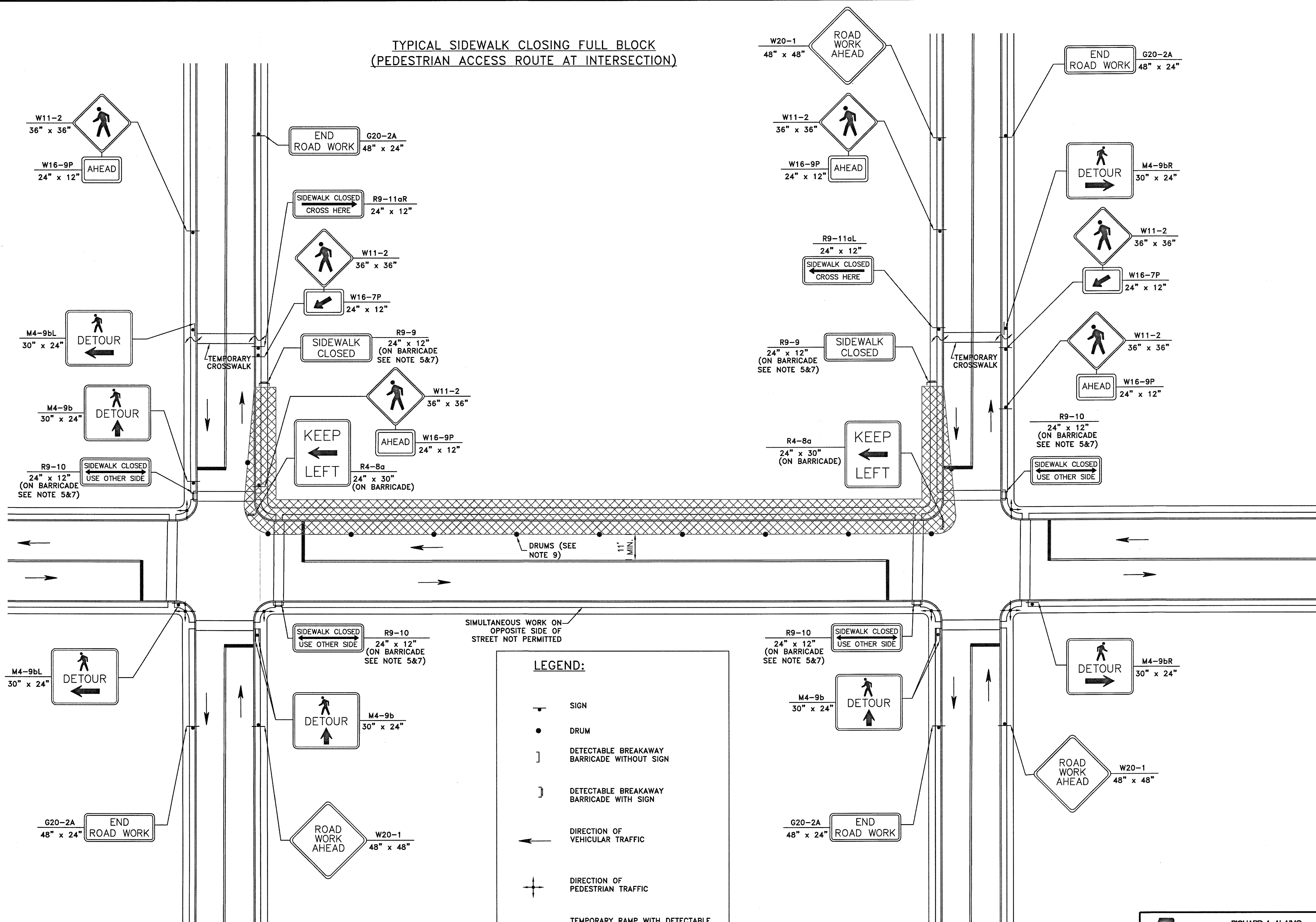
- SIGN
- DRUM
-] DETECTABLE BREAKAWAY BARRICADE WITHOUT SIGN
-] DETECTABLE BREAKAWAY BARRICADE WITH SIGN
- ← DIRECTION OF VEHICULAR TRAFFIC
- + DIRECTION OF PEDESTRIAN TRAFFIC
- TEMPORARY RAMP WITH DETECTABLE WARNING SURFACE

<p>RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJCA 24GA27988600 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.</p> <p><i>Richard A. Alaimo</i> APPROVED: DATE: 6-7-22</p> <p>Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195</p> <p>RAA PROJECT NO. B01450077001</p>	<p>Revisions</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	BY													<p>County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901</p>
	NO.	DATE	BY														
<p>IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY</p> <p>MAINTENANCE AND PROTECTION OF VEHICULAR TRAFFIC AND PEDESTRIAN PLANS</p>	<p>Scale: N/A Sheet No. 19 of 37 Date: MAY 2022</p>	<p>Ronald M. Sandler County Engineer N.J. P.E. No. 24GE03162200</p>															

Plotted: 5/24/2022 3:33 PM Last saved: 9/2/2021 2:30 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-18-20-MPT-FED DETAILS.dwg

MPT-7
MPT-8

TYPICAL SIDEWALK CLOSING FULL BLOCK
(PEDESTRIAN ACCESS ROUTE AT INTERSECTION)



LEGEND:

- SIGN
- DRUM
-] DETECTABLE BREAKAWAY BARRICADE WITHOUT SIGN
-] DETECTABLE BREAKAWAY BARRICADE WITH SIGN
- ← DIRECTION OF VEHICULAR TRAFFIC
- ↕ DIRECTION OF PEDESTRIAN TRAFFIC
- TEMPORARY RAMP WITH DETECTABLE WARNING SURFACE

NOTES:

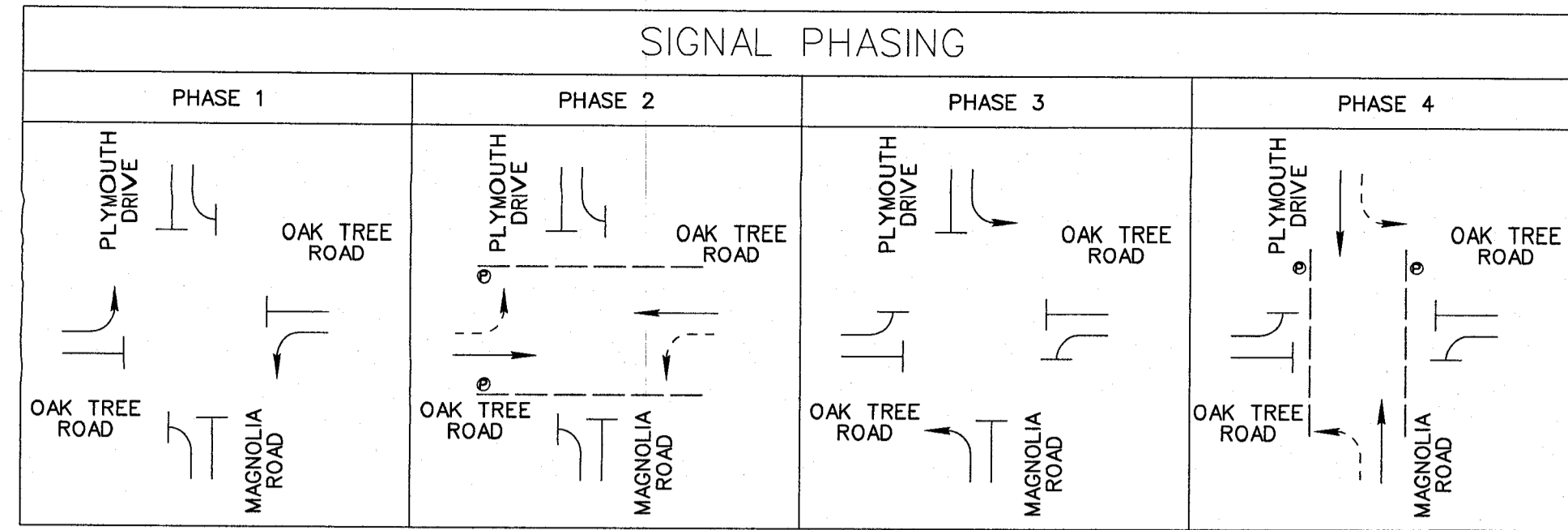
1. THIS DRAWING SHALL BE USED IN COMBINATION WITH THE TRAFFIC CONTROL DETAIL AND GENERAL NOTES AND CONSTRUCTION STAGING PLANS WHEREVER APPLICABLE.
2. PEDESTRIANS SHOULD NOT BE LED INTO CONFLICTS WITH VEHICLES MOVING THRU OR AROUND WORKSITE, EQUIPMENT AND OPERATIONS.
3. THE ALTERNATE CIRCULATION PATH SHALL PARALLEL THE DISRUPTED PEDESTRIAN ACCESS ROUTE
4. A 5 FOOT MINIMUM WIDTH PEDESTRIAN PATH / ALTERNATE PEDESTRIAN PATH SHALL BE MAINTAINED WHERE POSSIBLE. WHERE A 5 FOOT MIN. WIDTH CANNOT BE ACHIEVED, A MINIMUM WIDTH OF 36 INCHES SHALL BE PROVIDED WITH PASSING ZONES (60 IN X 60 IN) AT LEAST EVERY 175 FEET TO ALLOW INDIVIDUALS IN WHEELCHAIRS TO PASS.
5. BLOCKED ROUTES, ALTERNATE CROSSINGS, AND SIGN AND SIGNAL INFORMATION SHOULD BE COMMUNICATED TO PEDESTRIANS WITH VISUAL DISABILITIES BY PROVIDING DEVICES SUCH AS AUDIBLE INFORMATION DEVICES, ACCESSIBLE PEDESTRIAN SIGNALS, OR BARRIERS AND CHANNELIZING DEVICES THAT ARE DETECTABLE TO THE PEDESTRIANS TRAVELING WITH THE AID OF LONG CANE OR WHO HAVE LOW VISION.
6. TEMPORARY RAMPS SHALL HAVE A SLOPE OF 12:1 MAX. THE PEDESTRIAN PATH AND RAMP SHALL BE CONSTRUCTED OF HOT MIX ASPHALT OR OTHER MATERIAL THAT CAN PROVIDE SMOOTH, HARD SURFACE & WILL MAINTAIN 12:1 SLOPE. THE GEOMETRY AND ALIGNMENT OF THE FACILITY SHOULD MEET THE APPLICABLE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)".
7. DETECTABLE BARRICADES SHALL EXTEND AT LEAST 36 INCHES ABOVE THE PATHWAY WITH THE BOTTOM OF THE BARRICADE NO MORE THAN 1 1/2 INCHES ABOVE THE PATHWAY, AND SHALL EXTEND THE FULL WIDTH OF THE CLOSURE. THE TOP RAIL SHALL BE PARALLEL TO THE TOE RAIL AND BE SITUATED TO ALLOW PEDESTRIANS TO USE THE RAIL AS A GUIDE FOR THEIR HAND(S) FOR WAYFINDING PURPOSES. NO BARRICADE SUPPORT MEMBER SHALL PROTRUDE MORE THAN 4 INCHES BEYOND THE TOE RAIL INTO THE ALTERNATE CIRCULATION PATH.
8. PEDESTRIAN TRAFFIC SIGNAL DISPLAYS CONTROLLING CLOSED CROSSWALKS SHOULD BE COVERED OR DEACTIVATED.
9. FOR RECOMMENDED TAPER LENGTHS AND SPACING OF DRUMS REFER TRAFFIC CONTROL DETAILS.
10. FOR LONG TERM STATIONARY WORK, THE DOUBLE YELLOW CENTER LINE/OR LANE LINES SHOULD BE REMOVED BETWEEN THE CROSSWALK LINES.
11. ALL TEMPORARY PEDESTRIAN ROUTES ESTABLISHED THROUGH OR AROUND WORK AREAS SHALL MAINTAIN THE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY BEING DISRUPTED. THE CONTRACTOR SHALL PROVIDE TEMPORARY CURB RAMPS, RAMPS AND DETECTABLE WARNING DEVICES ON ALL TEMPORARY FACILITIES AT NO ADDITIONAL COST.
12. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING PROPERTIES/DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.
13. ALL REQUIRED CONSTRUCTION WITHIN A WORK AREA ON A SIDEWALK SECTION/BLOCK SHALL BE COMPLETED PRIOR TO REMOVING THE TRAFFIC CONTROL DEVICES EXCEPT FOR THE FINAL MILLING AND PAVING OPERATIONS WITHIN THE STREET.

Plotted: 5/24/2022 3:33 PM Last saved: 9/2/2021 2:30 PM File Name: K:\Projects\601450077001\Drawings\EUC-SHT-16-20-MPT-RED-DETAILS.dwg

MPT-8
MPT-8

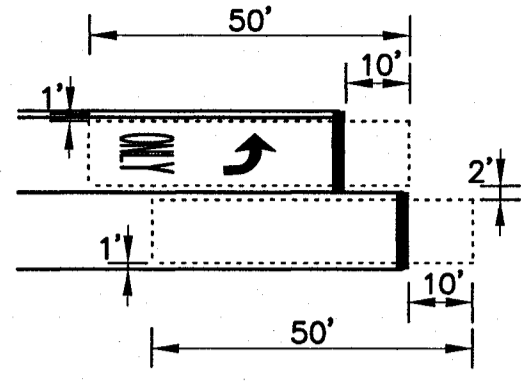
RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 246A27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901 IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY MAINTENANCE AND PROTECTION OF VEHICULAR TRAFFIC AND PEDESTRIAN PLANS
	Approved: <i>Richard A. Alaimo</i> DATE: 6-7-22 Richard A. Alaimo - P. E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	

REVISION NUMBER	REVISIONS	DATE	BY

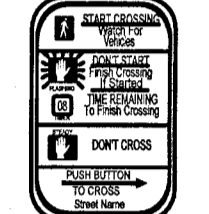
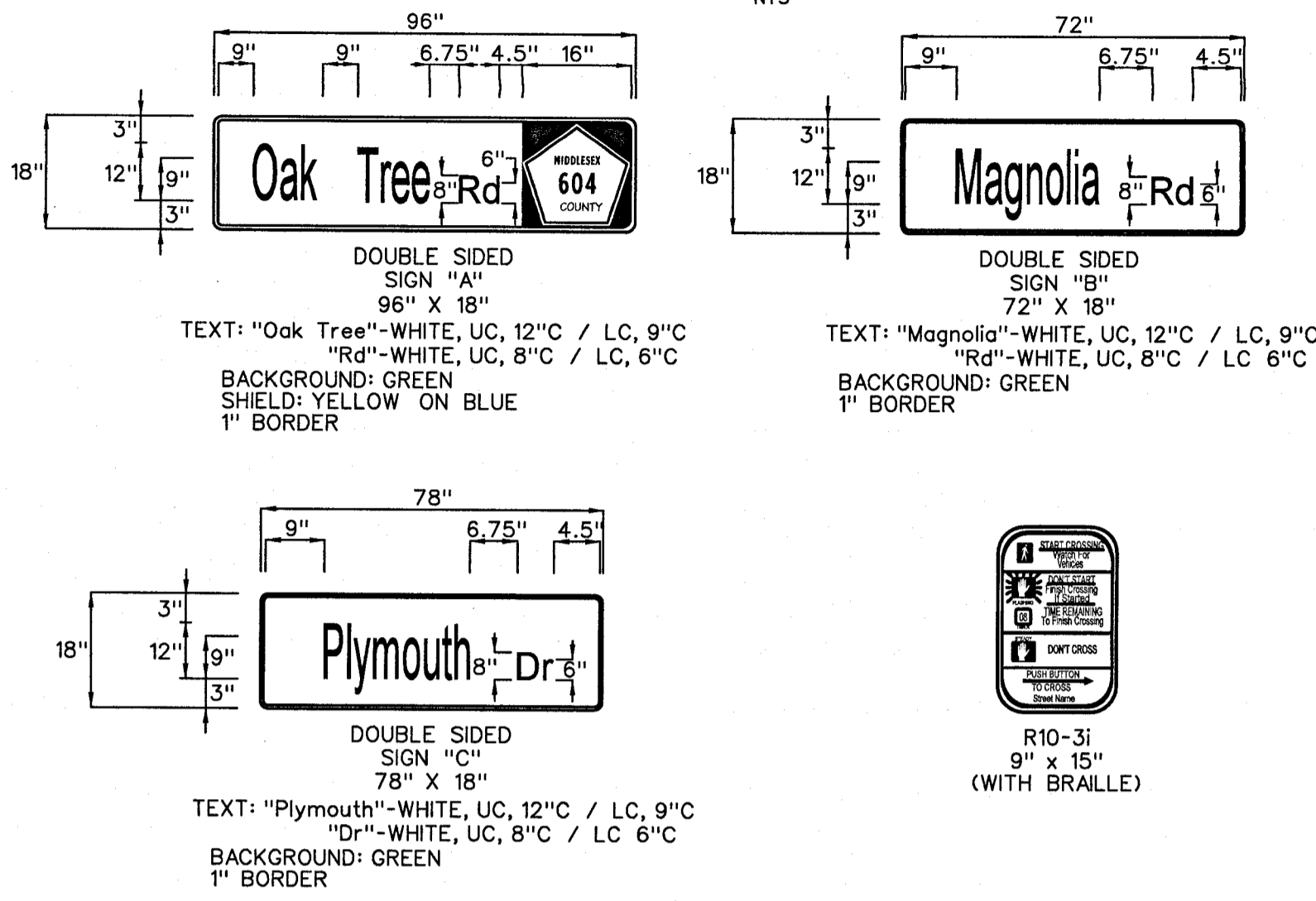


*PEDESTRIAN PHASE UPON ACTUATION

AREA OF DETECTION DETAIL

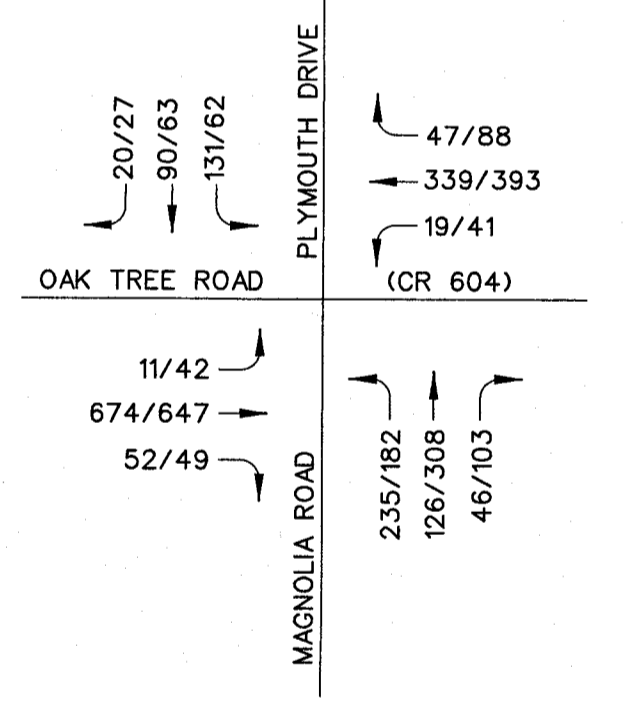


SIGN LEGEND

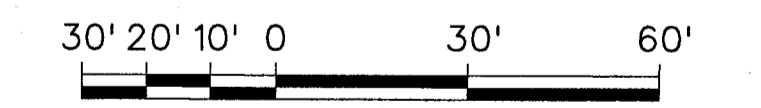


MUTCD SIGNS

R2-1	SPEED LIMIT (25 MPH)	24" x 30"
R3-8	LANE USE CONTROL	30" x 30"
R10-12	LEFT TURN YIELD ON GREEN	30" x 36"
R12-1	WEIGHT LIMIT (4 TONS)	24" x 30"
M1-6	COUNTY ROUTE	24" x 24"
M3-2	EAST	24" x 12"



2015 PEAK HOUR VOLUMES AM / PM

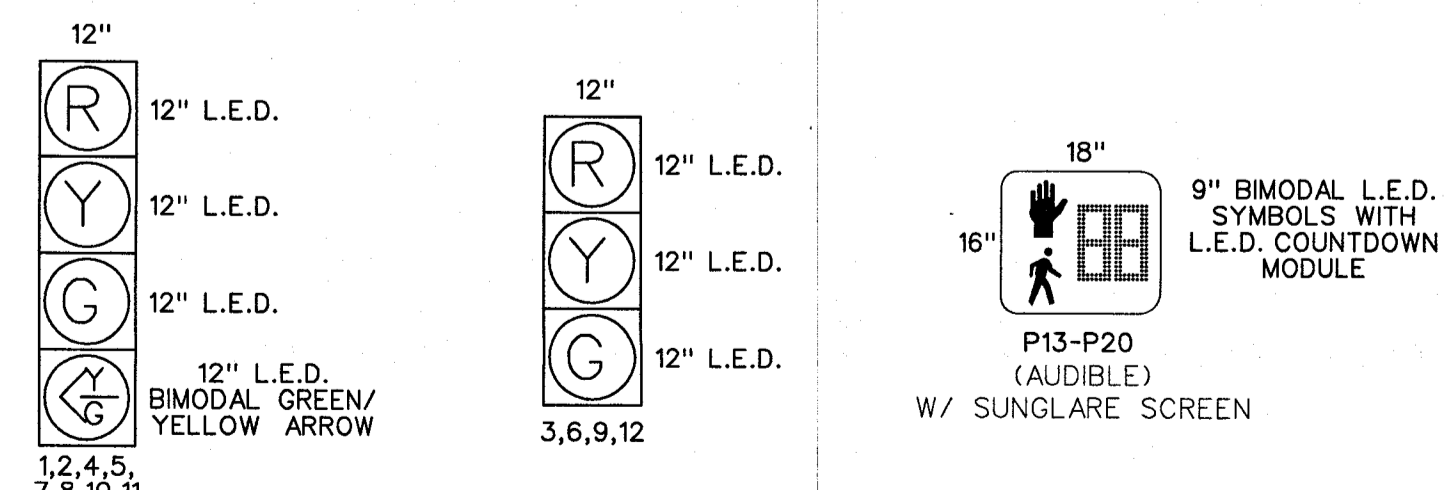


NOTES:

- ALL SIGNS, SIGNALS AND MARKINGS ARE TO BE IN ACCORDANCE WITH THE CURRENT MUTCD.
- REFER TO TRAFFIC SIGNAL PLAN FOR SIGNING AND STRIPING INFORMATION.
- PUSH BUTTONS ARE PART OF AN ACCESSIBLE PEDESTRIAN SYSTEM (APS) AND SHALL BE ALIGNED PARALLEL TO THE DIRECTION OF TRAVEL ON THE ASSOCIATED CROSSWALK AT A MOUNTING HEIGHT BETWEEN 3.5' (42") AND NOT MORE THAN 4' (48") ABOVE THE SIDEWALK.
- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING, INCLUDING BRACKETS, NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK. IF PEDESTRIAN SIGNAL HEADS ARE MOUNTED ON THE SAME STANDARD AS TRAFFIC SIGNAL HEADS, THERE SHALL BE A PHYSICAL SEPARATION BETWEEN THEM.
- ALL STANDARD CLAMPED SIGNAL FACES SHALL BE MOUNTED AT A HEIGHT OF 10 FEET.
- UNOBSTRUCTED HORIZONTAL SIDE REACH TO APS PUSH BUTTON TO BE 10" OR LESS. UNOBSTRUCTED HORIZONTAL FORWARD REACH TO APS PUSH BUTTON TO BE 0". EXTENSION ARMS MAY BE REQUIRED TO ENSURE UNOBSTRUCTED HORIZONTAL REACHES TO APS PUSH BUTTON.
- ALL SIGNAL HEADS SHALL BE EQUIPPED WITH VISORS AND BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP ON THE OUTSIDE BORDER.
- INTERSECTION EQUIPPED WITH ACCESSIBLE PEDESTRIAN SYSTEM WITH THE FOLLOWING FEATURES:
 - A TACTILE ARROW. THE TACTILE ARROW SHALL BE ALIGNED PARALLEL TO THE CROSSING AND VIBRATE DURING THE WALK INDICATION.
 - A PUSHBUTTON LOCATOR TONE. THE LOCATOR TONE SHALL HAVE A DURATION OF 0.15 SECONDS AND REPEAT AT 1-SECOND INTERVALS. SHALL BE INTENSITY RESPONSIVE TO AMBIENT SOUND AND AUDIBLE FROM 6 TO 12 FEET FROM THE PUSHBUTTON.
 - AN AUDIBLE PERCUSSIVE TONE FOR THE WALK INDICATION. THE AUDIBLE TONE SHALL CONSIST OF 8 TO 10 RAPID TICKS PER SECOND IF MORE THAN 10' OF SEPARATION BETWEEN PUSHBUTTONS.
- JUNCTION BOXES SHALL BE FLUSH WITH PROPOSED AND/OR EXISTING SIDEWALK.
- GROUND WIRE (GND, #8AWG, INSULATED, COLORED GREEN) SHALL BE INSTALLED CONTINUOUSLY THROUGHOUT THE TRAFFIC SIGNAL SYSTEM AND SECURED TO ALL GROUND RODS, CABINETS, AND TRAFFIC SIGNAL BASES.
- ALL CONFLICTING SIGNS ARE TO BE REMOVED PRIOR TO THE TRAFFIC SIGNAL "FULL" MODE ACTIVATION OF THE NEW SIGNALS.
- ANY TRAFFIC CONTROL REQUIRED SHALL FOLLOW THE NJDOT'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, 2019.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH LOCAL POWER COMPANY TO PROVIDE POWER.
- THE EXISTING SIGNAL SHALL REMAIN IN OPERATION WHILE THE NEW SIGNAL IS BEING CONSTRUCTED. THE EXISTING SIGNAL SHALL NOT BE OPERATED IN FIXED MODE, BUT REMAIN ACTUATED.
- THE PROPOSED HEADS SHALL BE BAGGED UNTIL THE PROPOSED TRAFFIC SIGNAL SYSTEM IS READY TO BE TURNED ON.
- IN CASE OF POWER FAILURE THE TRAFFIC SIGNAL SHALL OPERATE IN FULL OPERATION MODE FOR FOUR (4) HOURS AND THEREAFTER IN FLASH MODE.
- IN CONJUNCTION WITH THE TRAFFIC SIGNAL WORK AT THIS LOCATION, MINIMUM CLEARANCES BETWEEN OVERHEAD POWER LINES AND TRAFFIC SIGNAL EQUIPMENT AND/OR HIGHWAY LIGHTING EQUIPMENT SHALL BE MAINTAINED BASED ON THE FOLLOWING:

POWER LINE VOLTAGES	MINIMUM CLEARANCES	
	LATERAL	VERTICAL
COMMUNICATION	3 FT.	2 FT.
SECONDARY	5 FT.	5 FT.
PRIMARY - 750V-50KV	10 FT.	10 FT.
ABOVE 50KV	REFER TO NJDOT UTILITY ACCOMMODATION	
- THE LOCATION OF ALL EXISTING UTILITIES DEPICTED ON THE PLANS ARE TO BE CONSIDERED APPROXIMATE AND ARE BASED ON AVAILABLE DATA AS PROVIDED BY THE ALAMO GROUP. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING UTILITY LOCATIONS PRIOR TO EXCAVATION AND INFORMING THE ENGINEER OF ANY IN-FIELD ADJUSTMENTS.
- BASE MAP INFORMATION TAKEN FROM PLAN PREPARED BY RICHARD A. ALAIMO ENGINEERING COMPANY CADD FILE RECEIVED ON OCTOBER 31, 2018.

SIGNAL INDICATIONS



- NOTES:
- ALL OVERHEAD SIGNAL HEADS SHALL BE RIGID MOUNTED.

SIGNAL EQUIPMENT LEGEND

- NTS
- (S) - TRAFFIC / PEDESTRIAN SIGNAL HEAD NUMBER
 - (→) - TRAFFIC SIGNAL HEAD
 - (|) - PEDESTRIAN SIGNAL HEAD
 - (-|) - ADVANCED PUSH BUTTON
 - (-|) - IMAGE DETECTION CAMERA
 - (□) - SIGNAL POLE FOUNDATION
 - (A) - SIGNAL POLE IDENTIFIER

RICHARD A. ALAIMO ENGINEERING COMPANY
Consulting Engineers
NJPCA 246A27988800

200 HIGH STREET MOUNT HOLLY, N.J.
2 MARKET STREET PATERSON, N.J.

Richard A. Alaimo - P.E.
N.J. PROFESSIONAL ENGINEER
LICENSE NO. 13195

RAEC PROJECT NO.
B-0145-0077-001

APPROVED: *Robert Hoffman* DATE: 6-7-22

TPD
TRAFFIC PLANNING AND DESIGN, INC.

www.TrafficPD.com | 610.326.3100 | TPD@TrafficPD.com

Robert Hoffman
ROBERT HOFFMAN
PROFESSIONAL ENGINEER
N.J. P.E. No. 246E0428600

TPD JOB NO: MICO.C.00010

County of Middlesex
Department of Transportation
Office of Engineering
75 Bayard St., New Brunswick, NJ 08901

IMPROVEMENTS TO THE INTERSECTION OF
OAK TREE ROAD (C.R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD
TOWNSHIP OF WOODBRIDGE, MIDDLESEX COUNTY, NEW JERSEY

TRAFFIC SIGNAL PLAN

Scale: 1"=30'
Sheet No. 21 of 37
Date: MAY 2022

Ronald M. Sender
County Engineer
N.J. P.E. No. 246E03162200

c:\pwork\ing\proj\1648\1648.dwg 11:42:56 AM 11/30/2005
 5/26/2022
 111-42156 AM
 11/30/2005

REVISION NUMBER	REVISIONS	DATE	BY

Timing and Operation
Oak Tree Road & Plymouth Drive/Magnolia Road
Woodbridge Township/Middlesex County

NORMAL OPERATION

Phase/ROW	Signal Faces								Time	
	1, 2	3,6	4,5	7,8	9,12	10,11	P13, P14, P15, P16	P17, P18, P19, P20	TIME 1 90 s	TIME 2 Free
A Oak Tree Road Left Turns	<-G-/R	R	<-G-/R	R	R	R	DW	DW	8	8
Change	<-Y-/R	R	<-Y-/R	R	R	R	DW	DW	3	3
B Oak Tree Road ROW	G	G	G	R	R	R	DW	DW	52-8	31-8
Change	Y	Y	Y	R	R	R	DW	DW	3	3
Clearance	R	R	R	R	R	R	DW	DW	3	3
C Plymouth Drive/Magnolia Road Left Turns	R	R	R	<-G-/R	R	<-G-/R	DW	DW	6-12	6-9
Change	R	R	R	<-Y-/R	R	<-Y-/R	DW	DW	3	3
D Plymouth Drive/Magnolia Road ROW	R	R	R	G	G	G	DW	DW	6-44	6-12
Change	R	R	R	Y	Y	Y	DW	DW	3	3
Clearance	R	R	R	R	R	R	DW	DW	3	3
Emergency Flash Mode	Y	Y	Y	R	R	R	OFF	OFF		

PEDESTRIAN OPERATION

Phase/ROW	Signal Faces								Time	
	1, 2	3,6	4,5	7,8	9,12	10,11	P13, P14, P15, P16	P17, P18, P19, P20	TIME 1 90 s	TIME 2 Free
A Oak Tree Road Left Turns	<-G-/R	R	<-G-/R	R	R	R	DW	DW	8	8
Change	<-Y-/R	R	<-Y-/R	R	R	R	DW	DW	3	3
B Oak Tree Road ROW	G	G	G	R	R	R	W	DW	16	16
Pedestrian Clearance	G	G	G	R	R	R	FDW	DW	14	14
Change	Y	Y	Y	R	R	R	DW	DW	3	3
Clearance	R	R	R	R	R	R	DW	DW	3	3
C Plymouth Drive/Magnolia Road Left Turns	R	R	R	<-G-/R	R	<-G-/R	DW	DW	6	6
Change	R	R	R	<-Y-/R	R	<-Y-/R	DW	DW	3	3
D Plymouth Drive/Magnolia Road ROW	R	R	R	G	G	G	DW	W	14	14
Pedestrian Clearance	R	R	R	G	G	G	DW	FDW	14	14
Change	R	R	R	Y	Y	Y	DW	DW	3	3
Clearance	R	R	R	R	R	R	DW	DW	3	3
Emergency Flash Mode	Y	Y	Y	R	R	R	OFF	OFF		

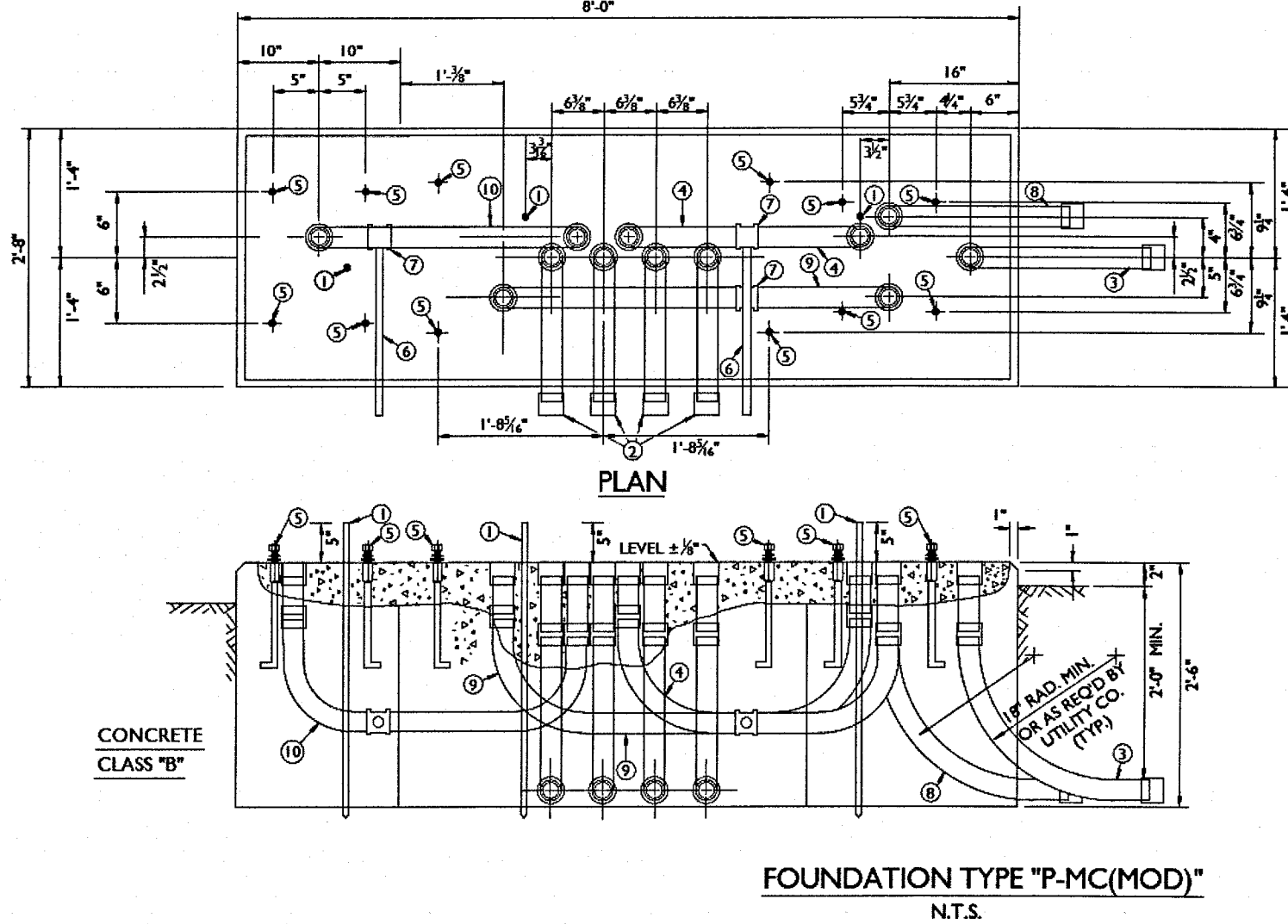
Timing Notes:

- Manual control shall be disconnected; the memory circuit shall be disconnected.
- The vehicle interval is to be set at 2 seconds.
- The detection delay shall set to 3 seconds for Oak Tree Road left-lanes and 5 seconds for Plymouth Drive and Magnolia Road.
- Time 1 shall be in operation Monday through Friday from 7:00 AM to 9:00 AM and from 3:00 PM to 7:00 PM.
- Time 2 shall be in operation all other times.
- Phase A can only follow Phase D.
- Phase B must follow Phase A actuation, Phase D must follow Phase C actuation
- Phases not actuated shall be capable of being skipped.
- The signal shall rest in Phase B (soft recall)
- The left-turn slots shall be wired separately but concurrently timed should actuation occur in the opposing left-turn lane. Each left-turn lane also shall have the capability of terminating or extending independently of each other thereby reverting the timing to the non-conflicting Phase B or Phase D movement.

NOTES:

- ALL SIGNS, SIGNALS AND MARKINGS ARE TO BE IN ACCORDANCE WITH THE CURRENT MUTCD.
- REFER TO TRAFFIC SIGNAL PLAN FOR SIGNING AND STRIPING INFORMATION.
- PUSH BUTTONS ARE PART OF AN ACCESSIBLE PEDESTRIAN SYSTEM (APS) AND SHALL BE ALIGNED PARALLEL TO THE DIRECTION OF TRAVEL ON THE ASSOCIATED CROSSWALK AT A MOUNTING HEIGHT BETWEEN 3.5' (42") AND NOT MORE THAN 4' (48") ABOVE THE SIDEWALK.
- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING, INCLUDING BRACKETS, NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK. IF PEDESTRIAN SIGNAL HEADS ARE MOUNTED ON THE SAME STANDARD AS TRAFFIC SIGNAL HEADS, THERE SHALL BE A PHYSICAL SEPARATION BETWEEN THEM.
- ALL STANDARD CLAMPED SIGNAL FACES SHALL BE MOUNTED AT A HEIGHT OF 10 FEET.
- UNOBSTRUCTED HORIZONTAL SIDE REACH TO APS PUSH BUTTON TO BE 10" OR LESS. UNOBSTRUCTED HORIZONTAL REACH TO APS PUSH BUTTON TO BE 0". EXTENSION ARMS MAY BE REQUIRED TO ENSURE UNOBSTRUCTED HORIZONTAL REACHES TO APS PUSH BUTTON.
- ALL SIGNAL HEADS SHALL BE EQUIPPED WITH VISORS AND BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP ON THE OUTSIDE BORDER.
- INTERSECTION EQUIPPED WITH ACCESSIBLE PEDESTRIAN SYSTEM WITH THE FOLLOWING FEATURES:
 - A TACTILE ARROW. THE TACTILE ARROW SHALL BE ALIGNED PARALLEL TO THE CROSSING AND VIBRATE DURING THE WALK INDICATION.
 - A PUSHBUTTON LOCATOR TONE. THE LOCATOR TONE SHALL HAVE A DURATION OF 0.15 SECONDS AND REPEAT AT 1-SECOND INTERVALS, SHALL BE INTENSITY RESPONSIVE TO AMBIENT SOUND, AND AUDIBLE FROM 6 TO 12 FEET FROM THE PUSHBUTTON.
 - AN AUDIBLE PERCUSSIVE TONE FOR THE WALK INDICATION. THE AUDIBLE TONE SHALL CONSIST OF 8 TO 10 RAPID TICKS PER SECOND IF MORE THAN 10' OF SEPARATION BETWEEN PUSHBUTTONS).
- JUNCTION BOXES SHALL BE FLUSH WITH PROPOSED AND/OR EXISTING SIDEWALK.
- GROUND WIRE (GND, #8AWG, INSULATED, COLORED GREEN) SHALL BE INSTALLED CONTINUOUSLY THROUGHOUT THE TRAFFIC SIGNAL SYSTEM AND SECURED TO ALL GROUND RODS, CABINETS, AND TRAFFIC SIGNAL BASES.
- ALL ACCESS DOORS FOR PROPOSED CABINETS, TRAFFIC SIGNAL POLES, PUSHBUTTON POLES, ETC. MUST FACE AWAY FROM THE ROAD. IF THAT IS NOT FEASIBLE DUE TO AN OBSTRUCTION, THEN THE ACCESS DOOR MUST FACE AWAY FROM THE DIRECTION OF TRAFFIC.
- ALL CONFLICTING SIGNS ARE TO BE REMOVED PRIOR TO THE TRAFFIC SIGNAL "FULL" MODE ACTIVATION OF THE NEW SIGNALS.
- ANY TRAFFIC CONTROL REQUIRED SHALL FOLLOW THE NJDOT'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, 2019.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH LOCAL POWER COMPANY TO PROVIDE POWER.
- THE EXISTING SIGNAL SHALL REMAIN IN OPERATION WHILE THE NEW SIGNAL IS BEING CONSTRUCTED. THE EXISTING SIGNAL SHALL NOT BE OPERATED IN FIXED MODE, BUT REMAIN ACTUATED.
- THE PROPOSED HEADS SHALL BE BAGGED UNTIL THE PROPOSED TRAFFIC SIGNAL SYSTEM IS READY TO BE TURNED ON.
- IN CASE OF POWER FAILURE THE TRAFFIC SIGNAL SHALL OPERATE IN FULL OPERATION MODE FOR FOUR (4) HOURS AND THEREAFTER IN FLASH MODE.
- IN CONJUNCTION WITH THE TRAFFIC SIGNAL WORK AT THIS LOCATION, MINIMUM CLEARANCES BETWEEN OVERHEAD POWER LINES AND TRAFFIC SIGNAL EQUIPMENT AND/OR HIGHWAY LIGHTING EQUIPMENT SHALL BE MAINTAINED BASED ON THE FOLLOWING:

POWER LINE VOLTAGES	MINIMUM CLEARANCES
COMMUNICATION	LATERAL 3 FT. VERTICAL 2 FT.
SECONDARY	5 FT. 5 FT.
PRIMARY, 750V-50kV	10 FT. 10 FT.
ABOVE 50kV	REFER TO NJDOT UTILITY ACCOMMODATION
- THE LOCATION OF ALL EXISTING UTILITIES DEPICTED ON THE PLANS ARE TO BE CONSIDERED APPROXIMATE AND ARE BASED ON AVAILABLE DATA AS PROVIDED BY THE ALAIMO GROUP. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING UTILITY LOCATIONS PRIOR TO EXCAVATION AND INFORMING THE ENGINEER OF ANY IN-FIELD ADJUSTMENTS.
- BASE MAP INFORMATION TAKEN FROM PLAN PREPARED BY RICHARD A. ALAIMO ENGINEERING COMPANY CADD FILE RECEIVED ON OCTOBER 31, 2018.

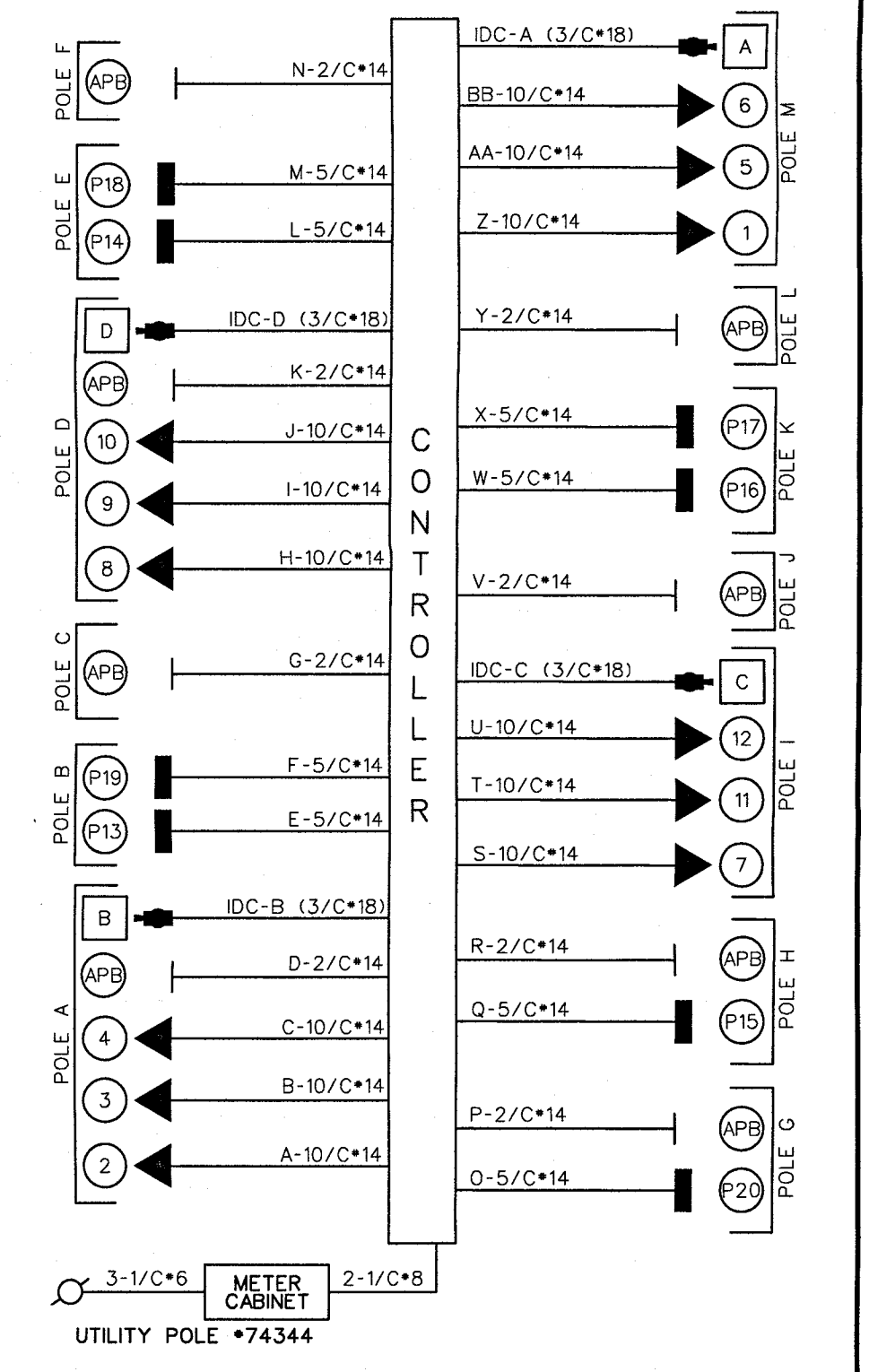


- ITEMS**
- 1/2" x 12" L.G. GROUND ROD.
 - 3/4" DIA. RIGID METALLIC CONDUIT (ALL SHALL EXTEND TO JUNCTION BOX/FORTH CONDUIT SHALL BE INSTALLED ONLY WHEN SPECIFIED IN PLAN DRAWING).
 - 1" DIA. RIGID METALLIC CONDUIT (SERVICE CONDUIT). SEE GENERAL PLAN FOR DIRECTION AND SIZE.
 - 2" DIA. RIGID METALLIC CONDUIT (SERVICE CONDUIT).
 - 3/2" DIA. ANCHOR BOLTS (SEE NJDOT STANDARD ELECTRICAL DETAILS).
 - DRAIN 1" DIA. RIGID METALLIC CONDUIT (PITCH TO JUNCTION BOX).
 - 2" x 2" x 1/2" GALV. TIE FITTING.
 - 3/4" DIA. RIGID METALLIC CONDUIT INTERCONNECT CONDUIT - FOR FUTURE USE AND 1" INNERDUCT (ORANGE IN COLOR).
 - 2" DIA. RIGID METALLIC CONDUIT (INTERCONNECT CONDUIT).
 - 2" DIA. RIGID METALLIC CONDUIT (UPS CABINET).
- NOTES**
- ALL CONDUIT SHALL BE INSTALLED SO THAT COUPLINGS ARE SPACED FLUSH AND FLUSH WITH TOP OF CONCRETE FOUNDATION.
 - 4-BOLT MUST BE INSERTED 1/2" INTO 3" COUPLING.
 - FOUNDATION SHALL BE POLISHED MONOLITHIC.
 - CONTRACTOR SHALL CONFIRM THAT THE BOLT PATTERN MATCHES EQUIPMENT BEFORE ADVANCING ANY CONSTRUCTION OF THE FOUNDATION. IF THE BOLT PATTERN DOES NOT MATCH, THE ENGINEER SHOULD BE CONTACTED IMMEDIATELY FOR DIRECTION.
 - THE ORIENTATION OF THE FOUNDATION IS DEPENDENT ON THE SERVICE LINE LOCATIONS OF THE GENERATOR, AUXILIARY CABINET AND THE METER CABINET. THE CONTRACTOR SHALL CONFIRM POSITIONING PRIOR TO ADVANCING FOUNDATION CONSTRUCTION.
 - THE SERVICE CONDUIT AND CABLES TO BE PLACED OUTSIDE OF THE METER CABINET AND ATTACHED TO THE BOTTOM OF THE METER PAN WHICH IS MOUNTED ON THE OUTSIDE OF THE METER CABINET.
 - INTERCONNECT SERVICE PROVIDER (ISP) CABLE SHALL BE INSTALLED WITHIN THE 1" INNERDUCT (ORANGE IN COLOR) WHICH IS LOCATED WITHIN THE 3/4" DIA. RIGID METALLIC INTERCONNECT CONDUIT.

TO BE CONSTRUCTED

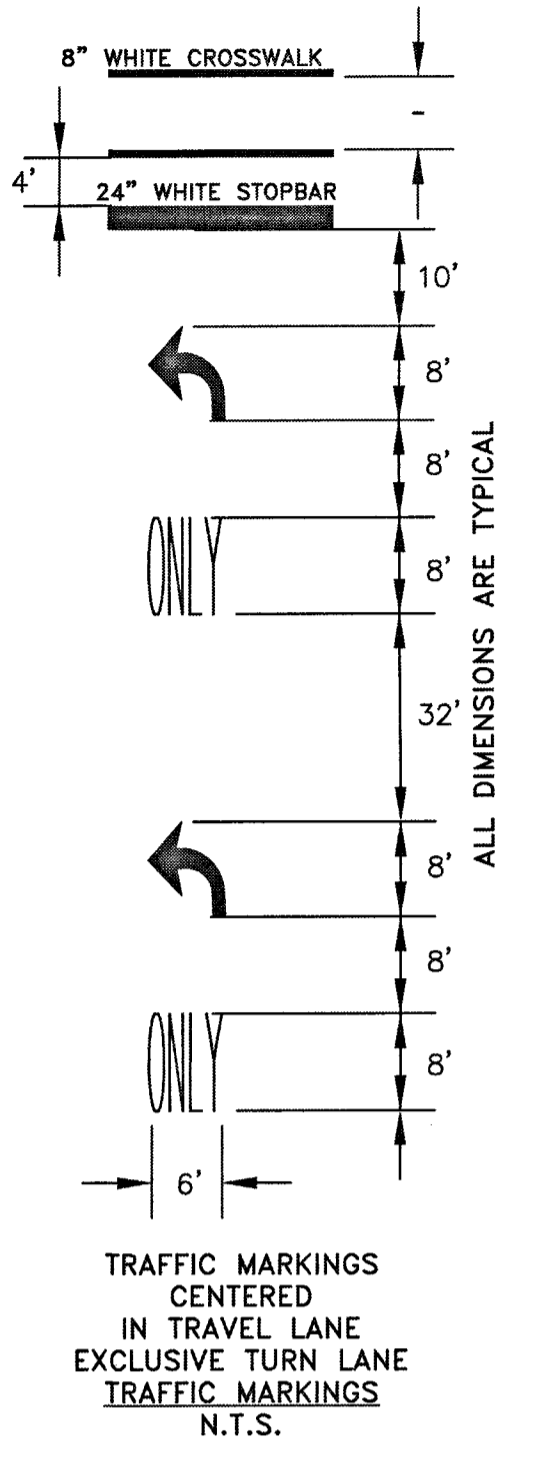
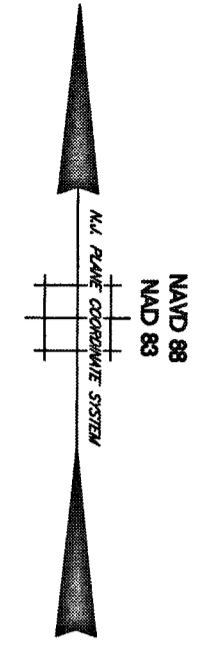
PAY ITEM NUMBER	QUANTITY	DESCRIPTION	UNIT	CONTRACT QUANTITY
51	M	REFLECTORIZED MAST ARM STREET NAME SIGNS	SF	31
52	M	2" RIGID METALLIC CONDUIT	LF	60
53	M	3" RIGID METALLIC CONDUIT	LF	490
54	M	18"x36" JUNCTION BOX	UNIT	8
55	M	FOUNDATION, TYPE P-MC(MOD)	UNIT	1
56	M	FOUNDATION, TYPE SPF	UNIT	9
57	M	FOUNDATION, TYPE SFK	UNIT	4
58	M	METER CABINET, TYPE T	UNIT	1
59	P	GROUND WIRE, NO. 8 AWG	LF	725
60	P	SERVICE WIRE, NO. 6 AWG	LF	120
61	M	CONTROLLER, B PHASE W/ GENERATOR AUXILIARY CABINET AND UPS	UNIT	1
62	M	TRAFFIC SIGNAL STANDARD, ALUMINUM	UNIT	4
63	M	TRAFFIC SIGNAL MAST ARM, ALUMINUM	UNIT	4
64	M	PEDESTRIAN SIGNAL STANDARD	UNIT	9
65	P	TRAFFIC SIGNAL CABLE, 2 CONDUCTOR	LF	1600
66	P	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR	LF	1550
67	P	TRAFFIC SIGNAL CABLE, 10 CONDUCTOR	LF	2125
68	M	TRAFFIC SIGNAL HEAD	UNIT	12
69	M	PEDESTRIAN SIGNAL HEAD	UNIT	8
70	M	PUSH BUTTON ASSEMBLIES, TYPE APS	UNIT	8
71	M	IMAGE DETECTION SYSTEM	LS	1
72	M	TEMPORARY TRAFFIC SIGNAL SYSTEM	LS	1

BLOCK WIRING DIAGRAM



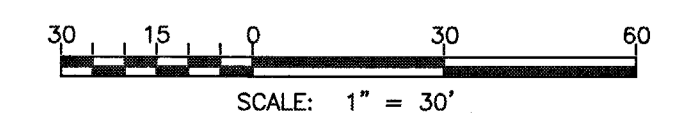
c:\pwork\hnp\proj\act\11\hwh\hwh\m\00114648\oak tree-magnolia.e102.dgn
 5/26/2022 11:41:09 AM 11:20:00:14 jba@hwh.com

 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J. APPROVED: <i>Richard A. Alaimo</i> DATE: 6-7-22 Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAEC PROJECT NO. B-0145-0077-001	 TRAFFIC PLANNING AND DESIGN, INC. www.TrafficPD.com 610.326.3100 TPD@TrafficPD.com ROBERT HOFFMAN PROFESSIONAL ENGINEER N.J. P.E. No. 24GE04728600 TPD JOB NO: MICO.C.00010	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St, New Brunswick, NJ 08901
		IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C.R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE, MIDDLESEX COUNTY, NEW JERSEY
Scale: 1"=20' Sheet No. 23 of 37 Date: MAY 2022		Ronald M. Sender County Engineer N.J. P.E. No. 24GE03162200



ITEM NO.	QUANTITY	TYPE	TO BE CONSTRUCTED	CONTRACT QUANTITY	AS-BUILT QUANTITY
36	M		TRAFFIC STRIPES, LONG LIFE, THERMOPLASTIC 4"	3,367 LF	LF
37	M		TRAFFIC STRIPES, LONG LIFE, THERMOPLASTIC 8"	402 LF	LF
38	M		TRAFFIC STRIPES, LONG LIFE, THERMOPLASTIC 24"	223 LF	LF
39	M		TRAFFIC MARKINGS, THERMOPLASTIC	480 SF	SF
40	M		RPM, MONO-DIRECTIONAL, WHITE LENS	12 UNIT	UNIT
41	M		RPM, MONO-DIRECTIONAL, AMBER LENS	24 UNIT	UNIT
42	M		RPM, BI-DIRECTIONAL, AMBER LENS	15 UNIT	UNIT
43	M		REGULATORY AND WARNING SIGN	121 SF	SF

- NOTES:**
- MATCH EXISTING STRIPING AT PROJECT END STATION AND BEGIN STATION.
 - TRAFFIC STRIPES AND MARKINGS SHALL CONFORM TO THE CURRENT N.J.D.O.T. STANDARD SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - THE NEAREST PEDESTRIAN CROSSWALK LINE TO BE A MINIMUM OF 4' FROM THE EDGE OF A STOP LINE.
 - ALL EXISTING SIGNS, TREES AND OTHER OBSTRUCTIONS IN CONFLICT WITH THE PROPOSED SIGNS AND SIGNALS SHALL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. THE COST FOR THIS ACTIVITY WILL BE INCLUDED IN THE COST FOR CLEARING SITE.

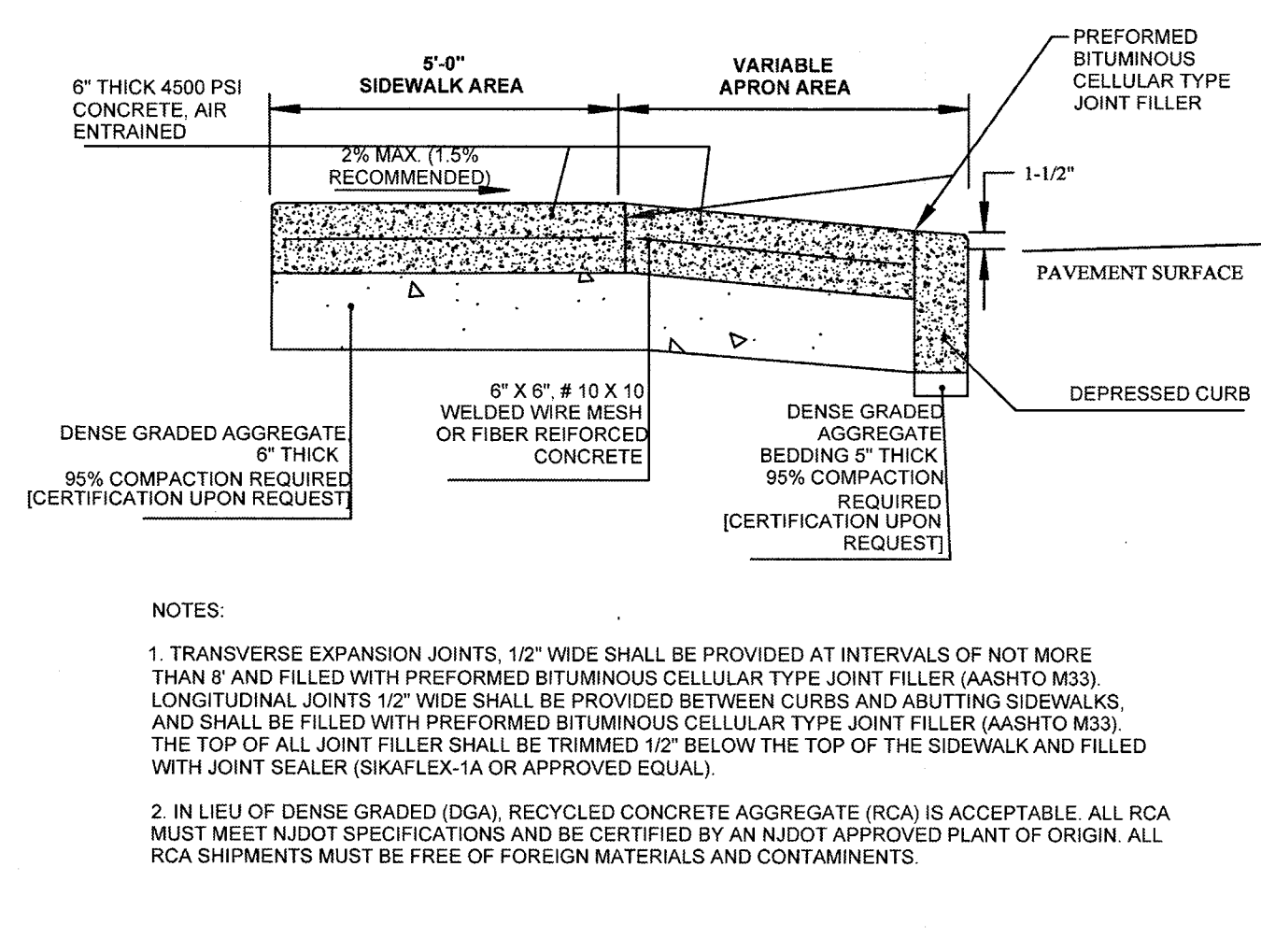


- STRIPING LEGEND**
- ① - 4" SOLID WHITE LINE
 - ② - 4" SOLID DOUBLE YELLOW LINE
 - ③ - 4" DOTTED WHITE LINE (2' STRIPE, 4' GAP)
 - ④ - 24" SOLID WHITE LINE
 - ⑤ - 24" SOLID YELLOW LINE (12' C TO C @ 45')
 - ⑥ - 8" SOLID WHITE LINE
 - ⑦ - 4" BROKEN YELLOW LINE (10' STRIPE, 30' GAP)
 - ⑧ - 4" BROKEN WHITE LINE (10' STRIPE, 30' GAP)
 - ⑨ - TRAFFIC MARKING, SYMBOLS
- LEGEND**
- - RPM, MONO-DIRECTIONAL, AMBER LENS
 - - RPM, MONO-DIRECTIONAL, WHITE LENS
 - - RPM, BI-DIRECTIONAL, AMBER LENS
- NOTE:**
1. ALL STRIPING TO BE LONG LIFE, THERMOPLASTIC.

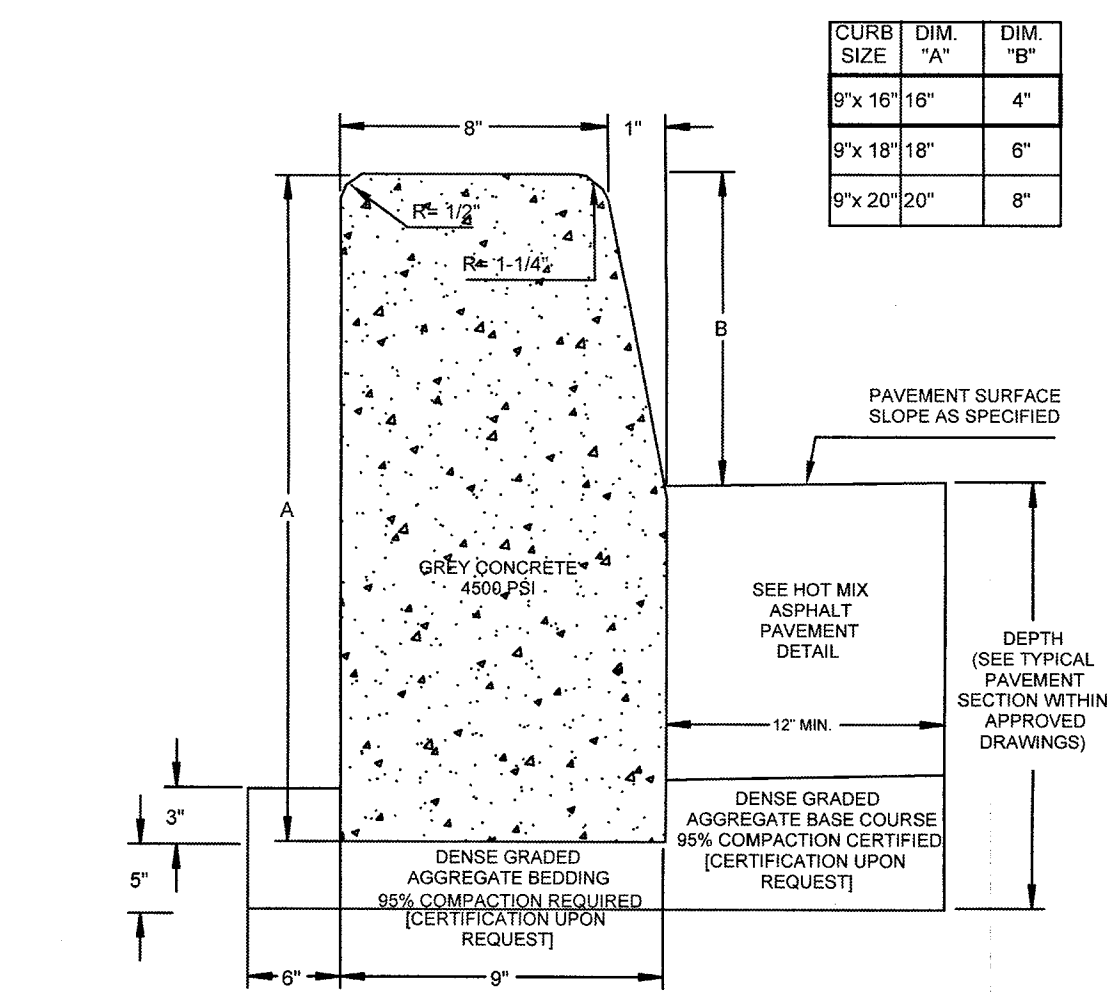
NOTE: INSTALL PLOWABLE PAVEMENT REFLECTORS IN ACCORDANCE WITH CD-610-2 OF THE NJDOT STANDARD ROADWAY CONSTRUCTION DETAILS.

<p>RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJPCA 24GA27988900 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.</p> <p><i>Richard A. Alaimo</i> APPROVED DATE 6-7-22</p> <p>Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001</p>	<p>Revisions</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	BY				<p>County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901</p>
	NO.	DATE	BY					
<p>Designed By AS/JJD Checked By SM</p>	<p>Drawn By AS/JJD Dept. Head ES</p>	<p>IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY</p> <p>TRAFFIC SIGNING AND STRIPING PLAN</p> <p>Scale: 1" = 30' Sheet No. 24 of 37 Date: MAY 2022</p> <p>Ronald M. Sender County Engineer N.J. P.E. No. 24CE03162200</p>						

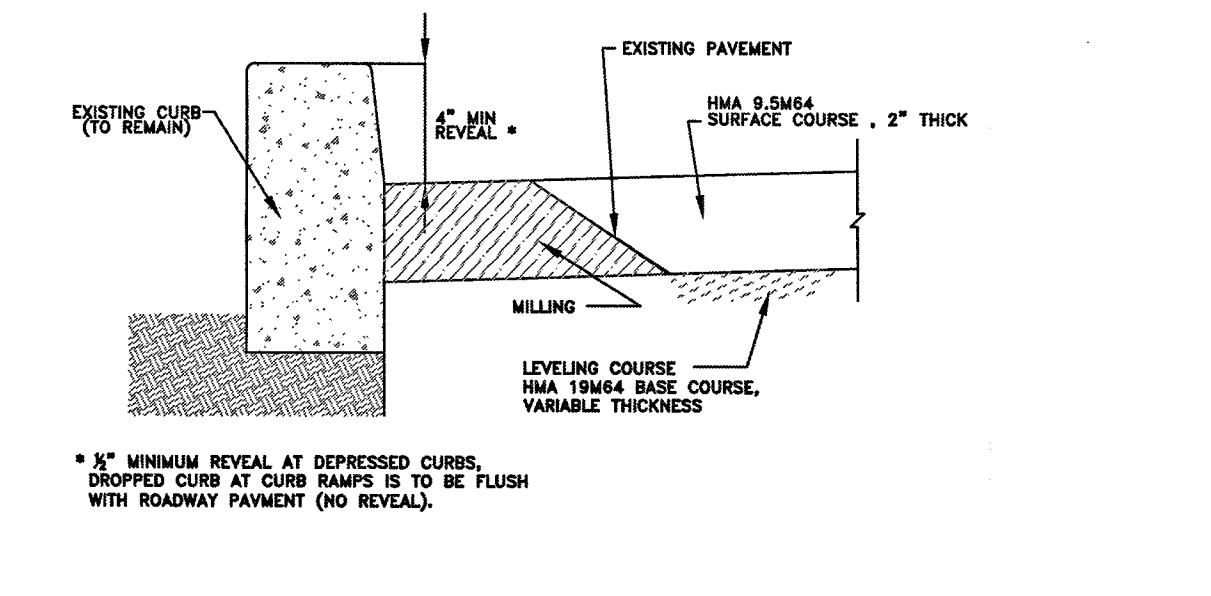
Path: E:\17\2022 11:20 AM. File Name: C:\Projects\B01450077001\Drawings\TSS-24-STRIPING.dwg
 Date: 6/17/2022 11:10 AM. Last saved: 6/13/2022 11:20 AM.



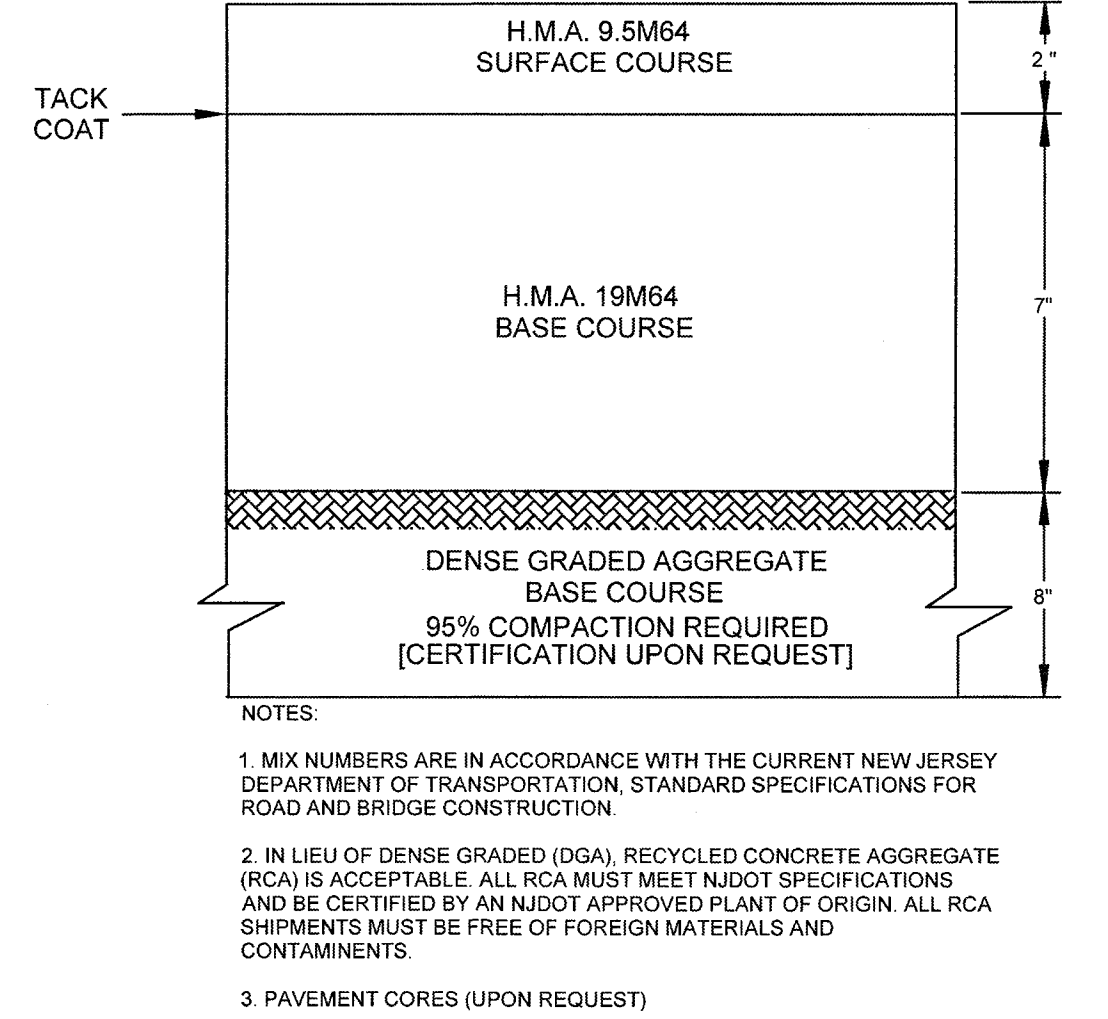
DETAIL 1 CONCRETE DRIVEWAY, REINFORCED 6" THICK
N.T.S.



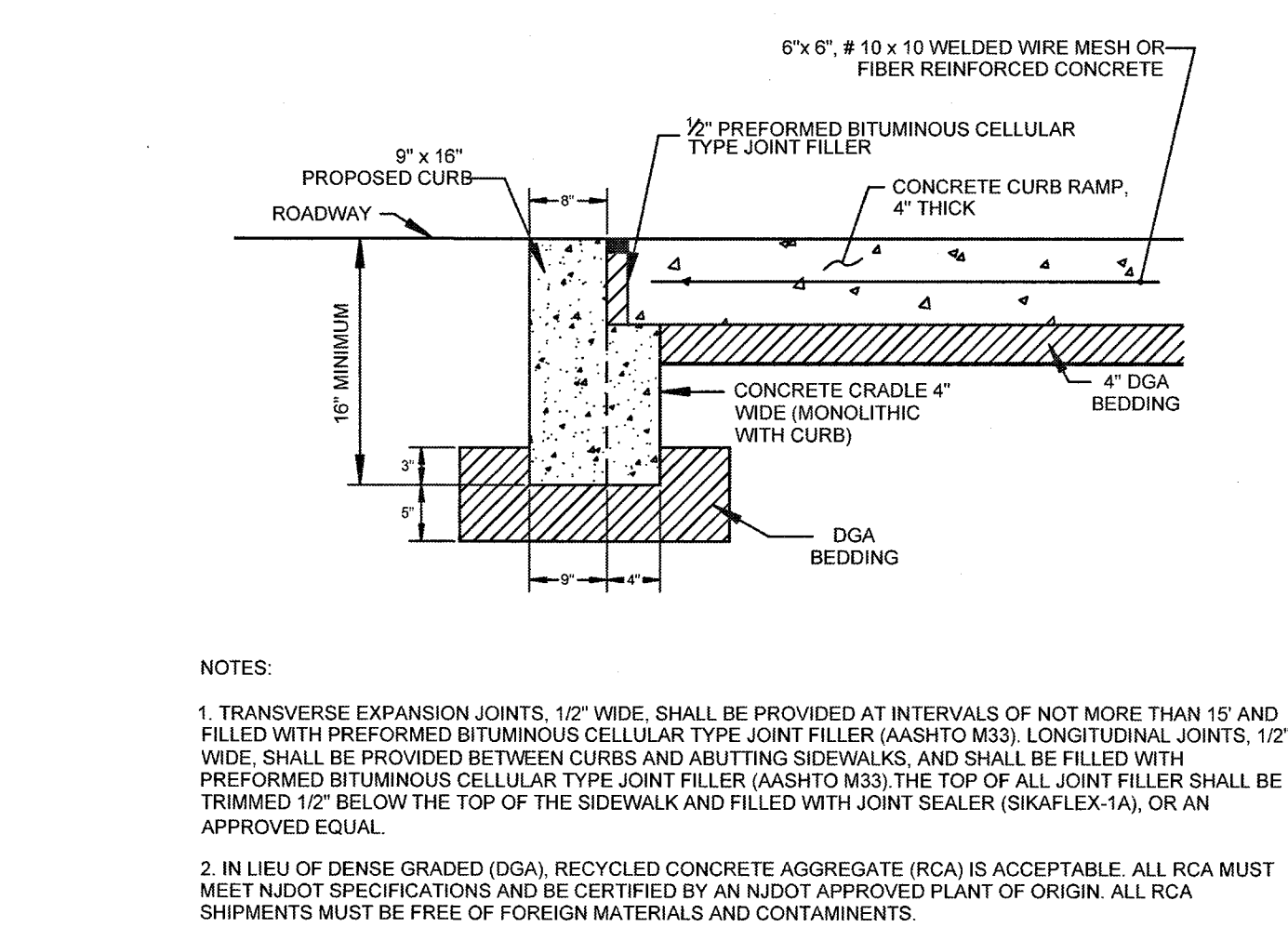
DETAIL 5 STANDARD GRAY CONCRETE VERTICAL CURB DETAIL
N.T.S.



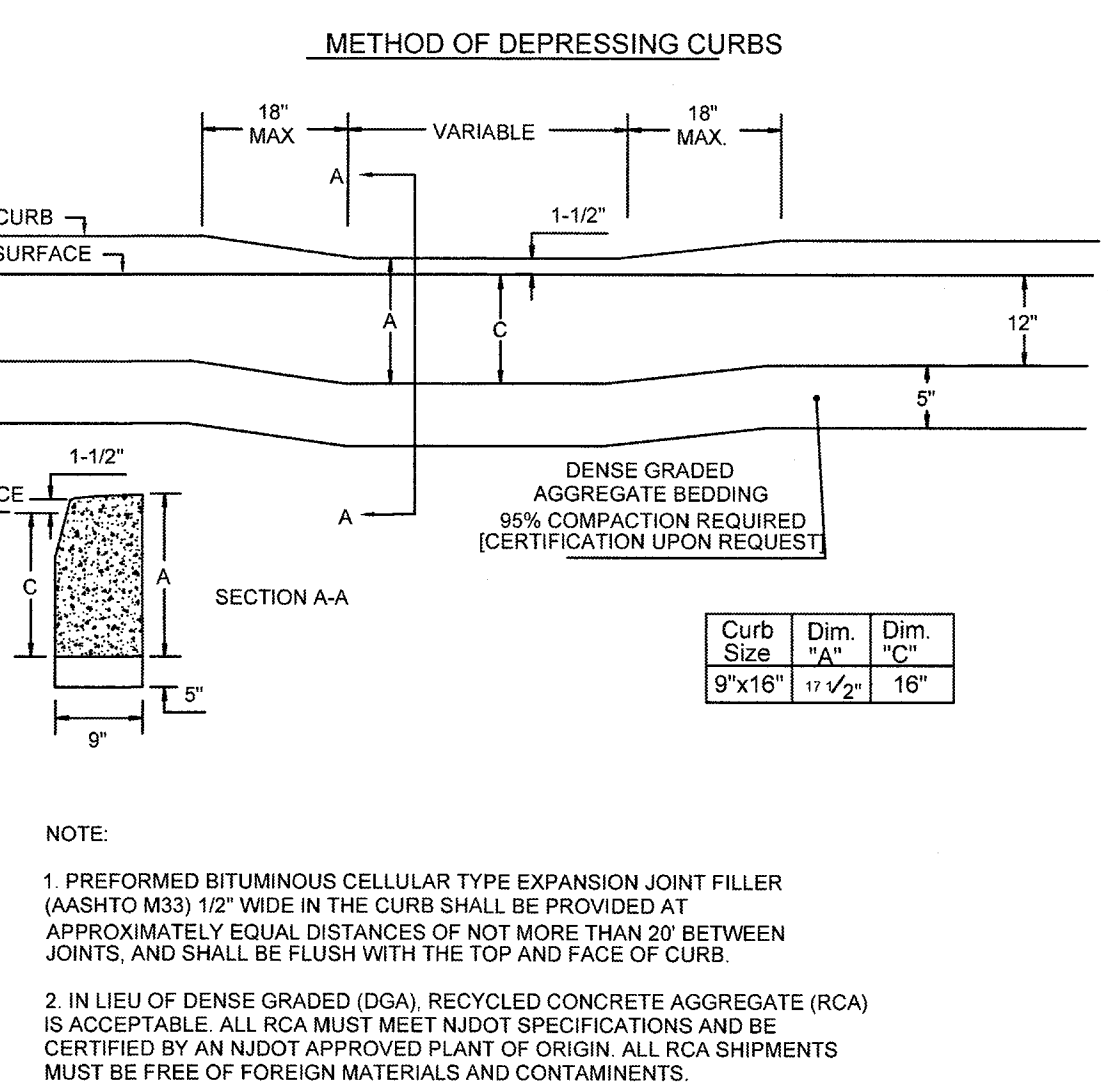
DETAIL 8 MILLING AND RESURFACING DETAIL
N.T.S.



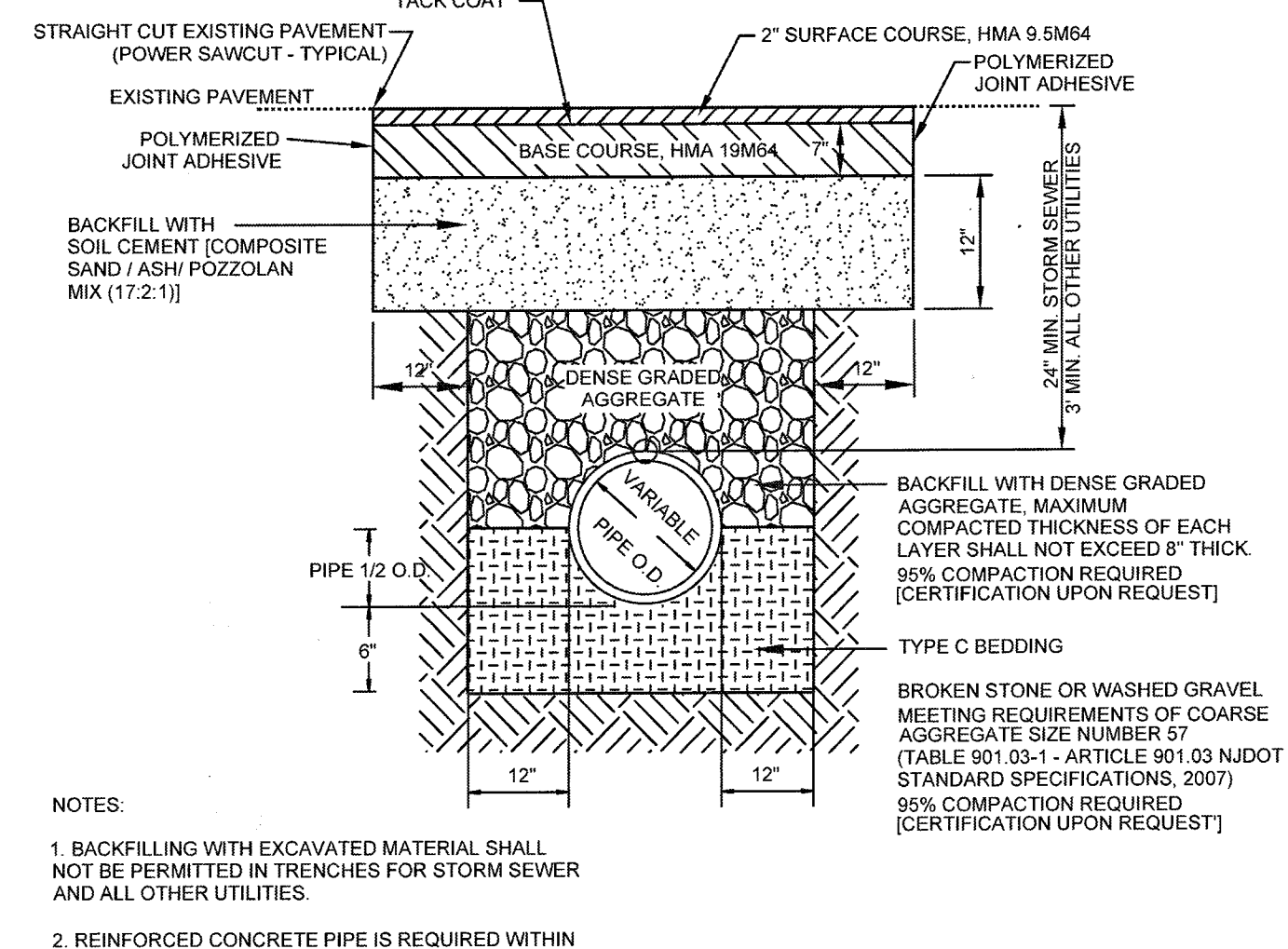
DETAIL 2 HOT MIX ASPHALT PAVEMENT DETAIL
N.T.S.



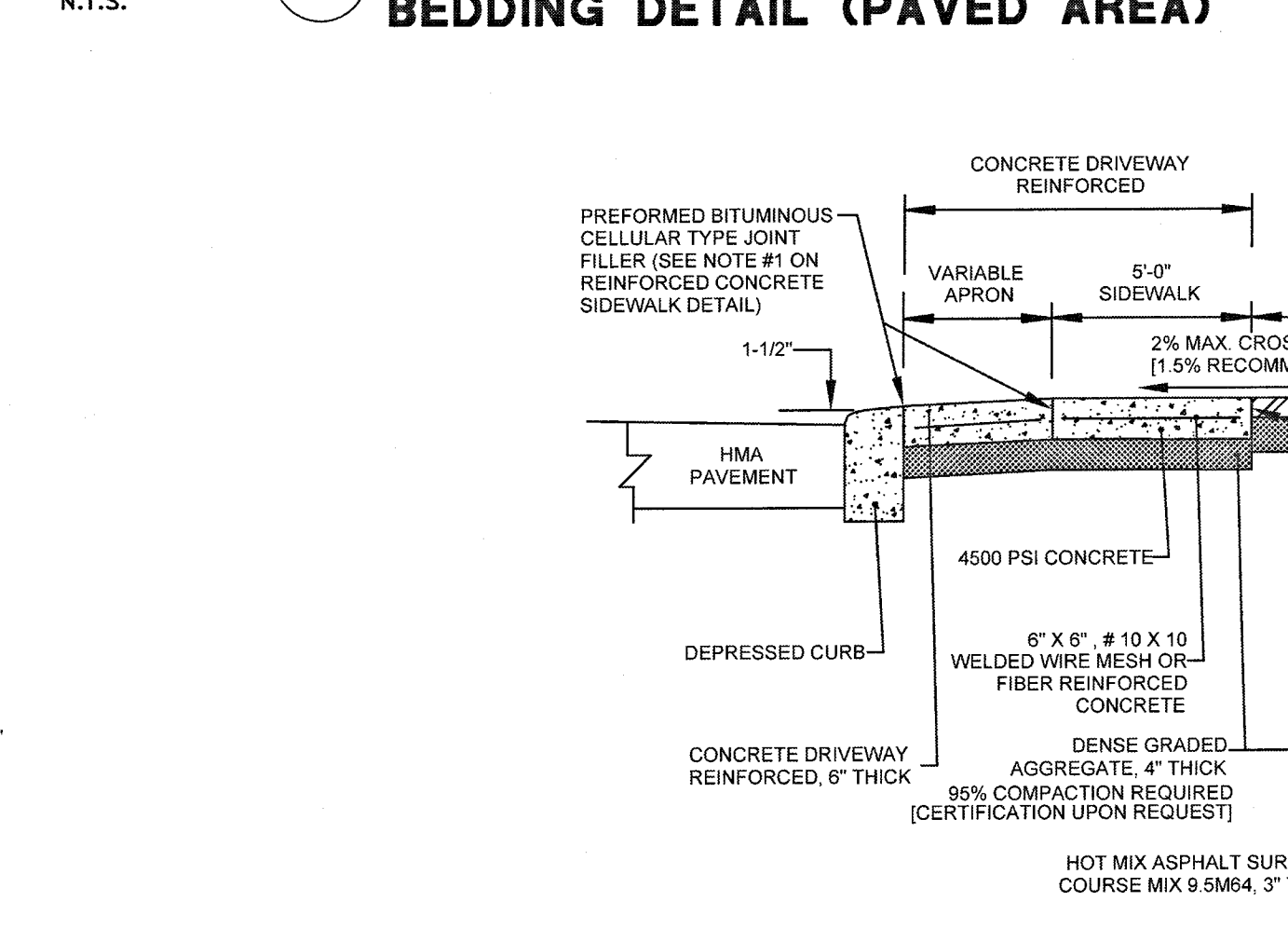
DETAIL 6 DROPPED CURB AND CRADLE
N.T.S.



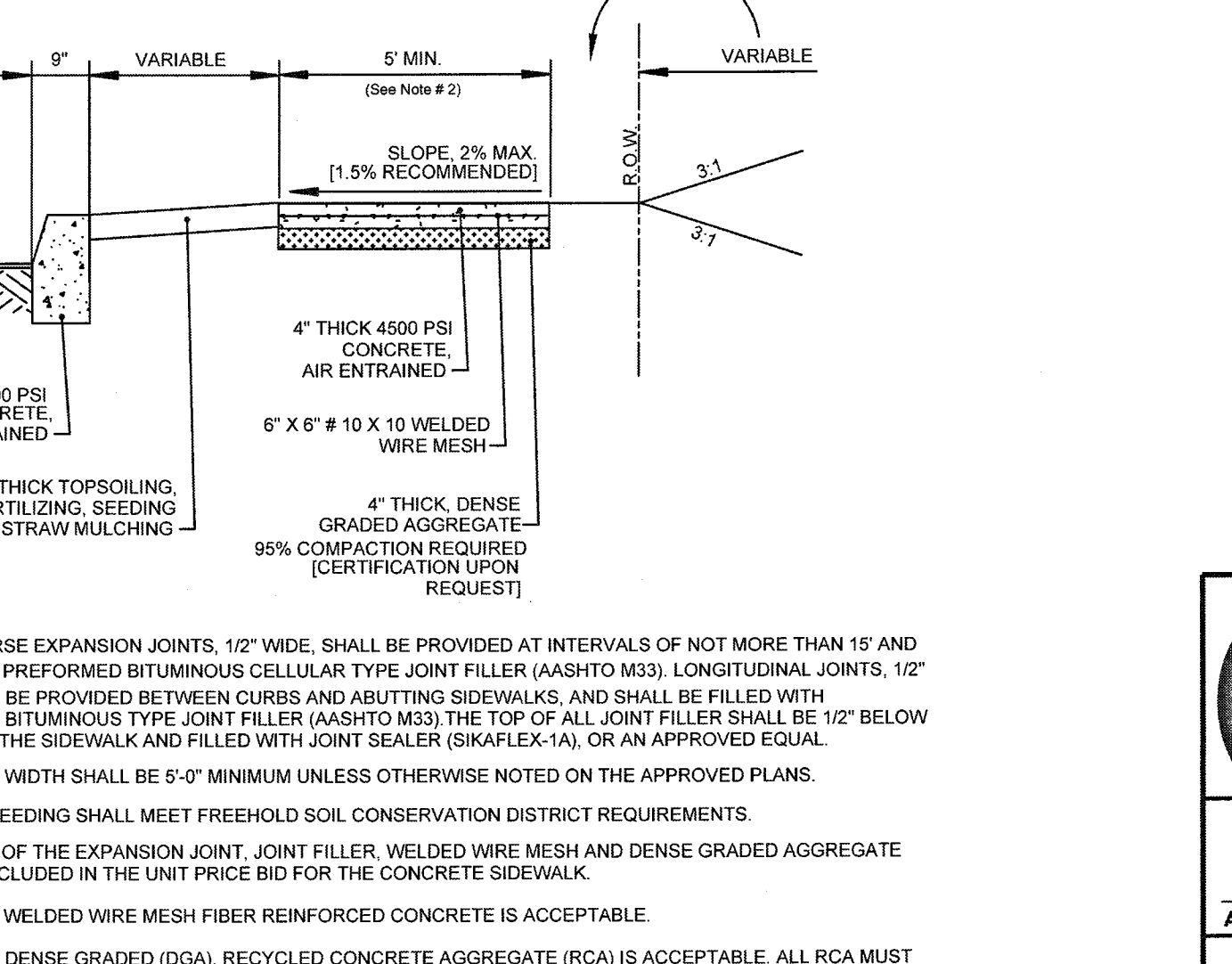
DETAIL 9 DEPRESSED CURB DETAIL
N.T.S.



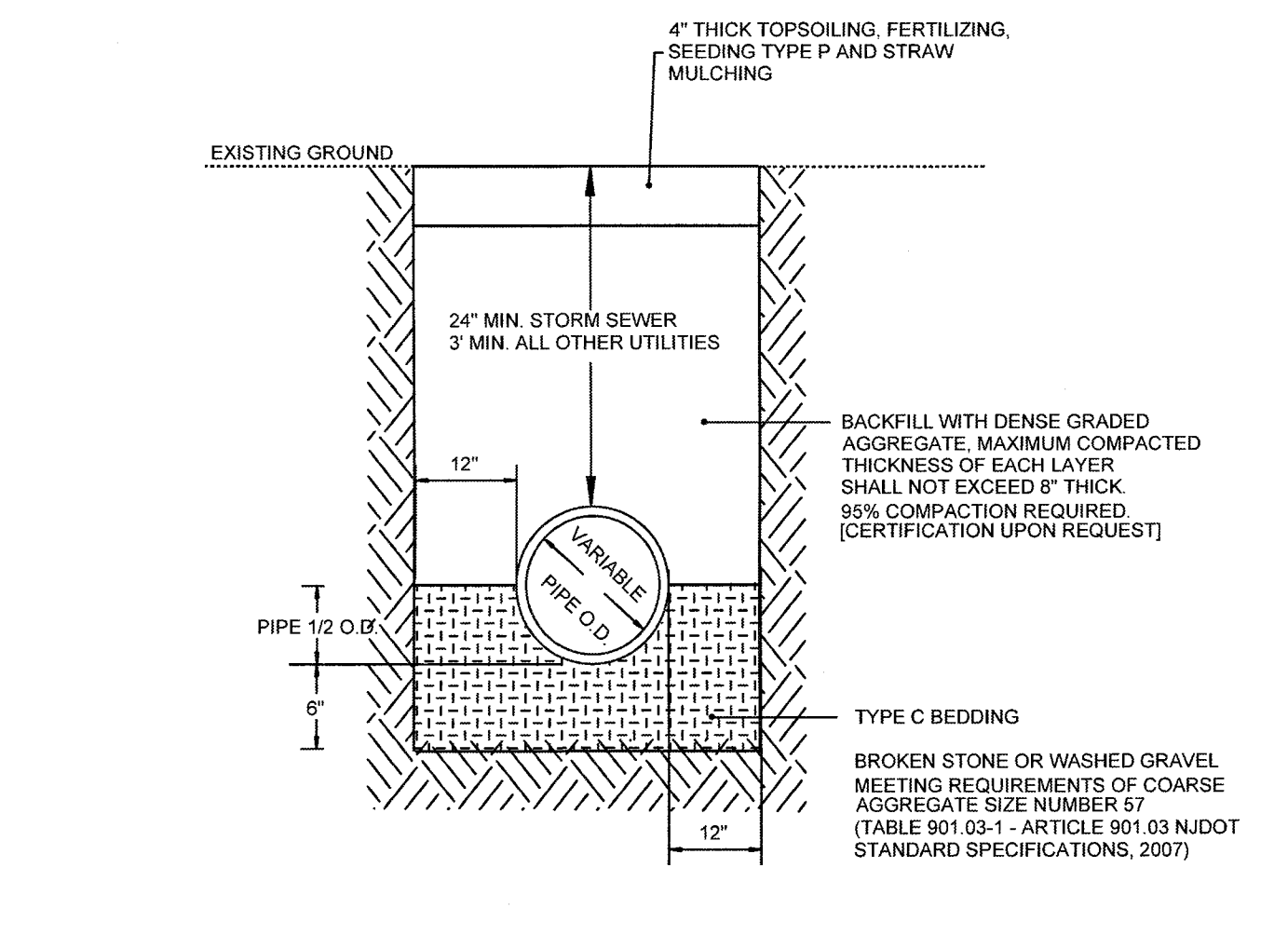
DETAIL 3 STORM SEWER TRENCH AND BEDDING DETAIL (PAVED AREA)
N.T.S.



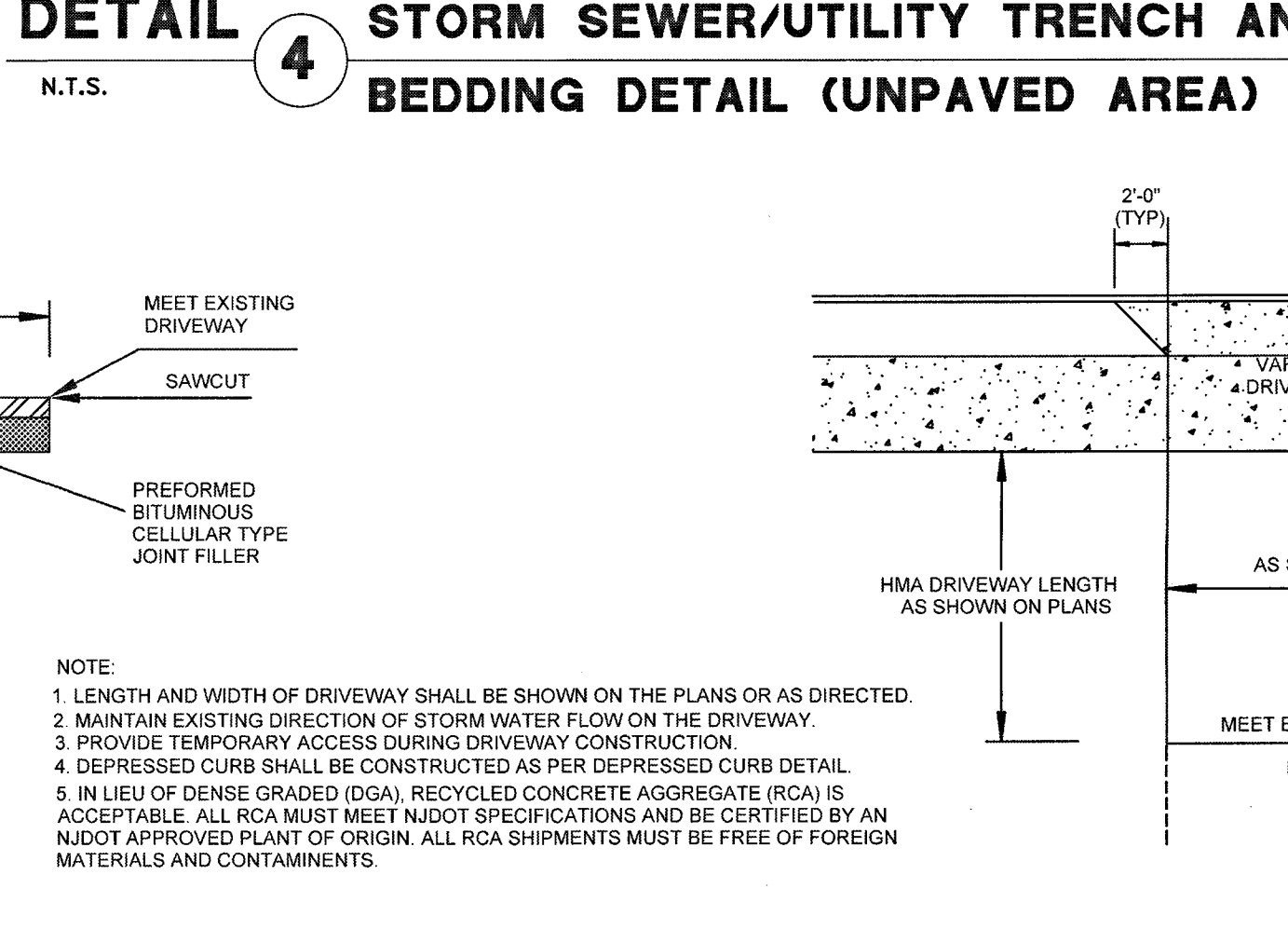
DETAIL 7 HOT MIX ASPHALT TYPICAL DRIVEWAY SECTION ADJACENT TO REINFORCE CONCRETE SIDEWALK AND APRON
N.T.S.



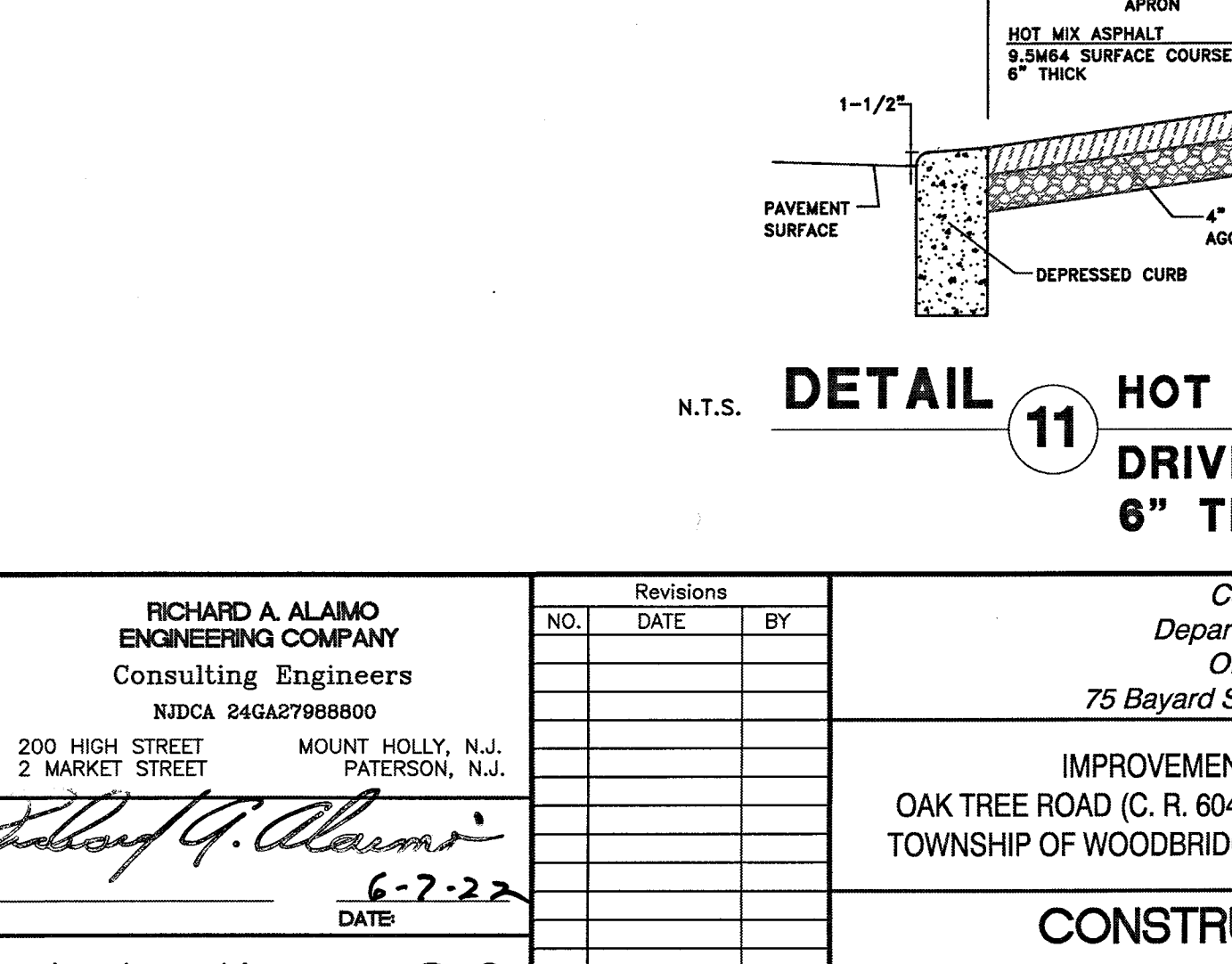
DETAIL 10 CONCRETE SIDEWALK, REINFORCED 4\"/>



DETAIL 4 STORM SEWER/UTILITY TRENCH AND BEDDING DETAIL (UNPAVED AREA)
N.T.S.



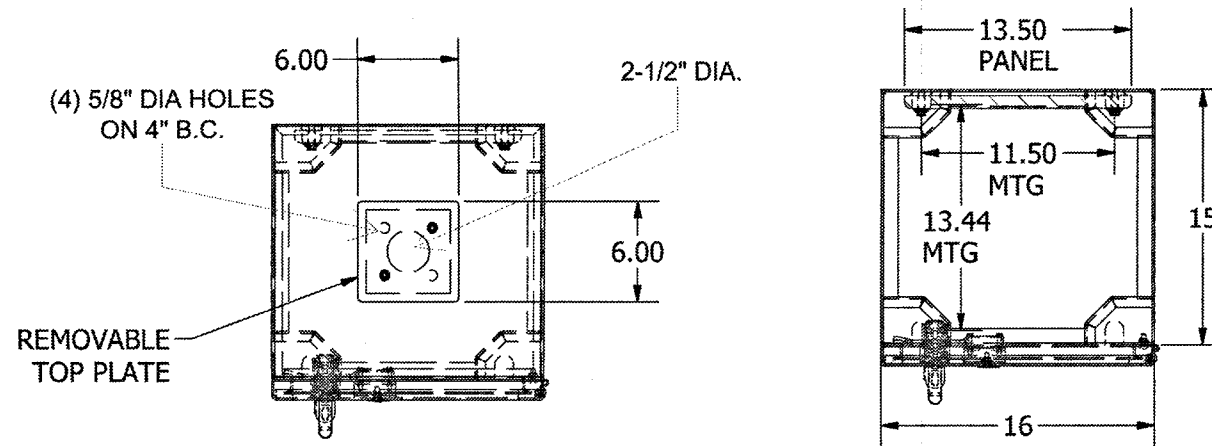
DETAIL 11 HOT MIX ASPHALT DRIVEWAY APRON 6\"/>



DETAIL 1 CONCRETE DRIVEWAY, REINFORCED 6\"/>

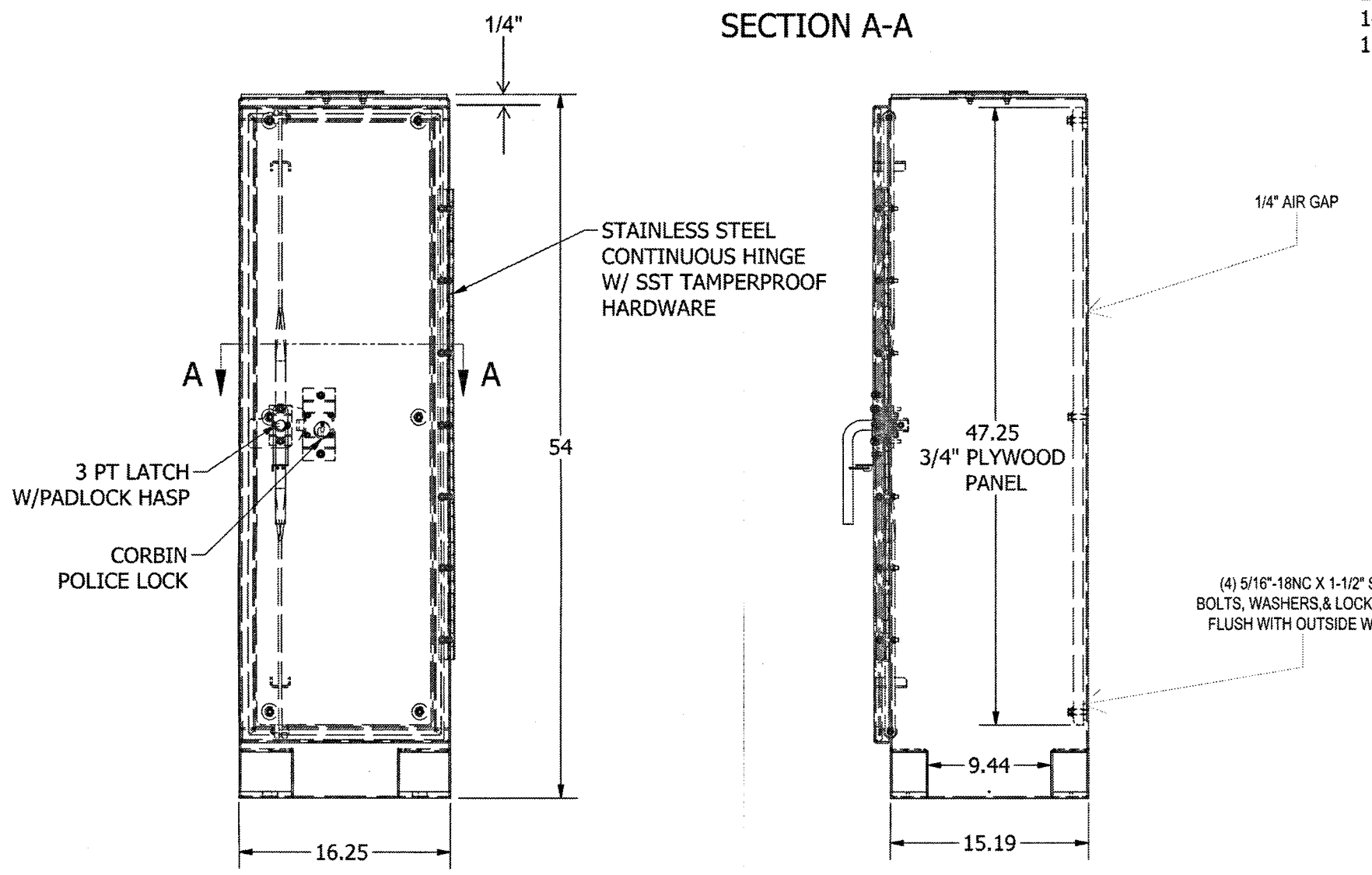
<p>RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJPCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.</p> <p><i>Richard A. Alaimo - P.E.</i> N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001</p>	<p>Revisions</p> <table border="1"> <tr><th>NO.</th><th>DATE</th><th>BY</th></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	NO.	DATE	BY										<p>County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901</p>
	NO.	DATE	BY											
<p>APPROVED: <i>Richard A. Alaimo</i> DATE: 6-7-22</p>	<p>Designed By: AS/JJD Checked By: SM</p> <p>Drawn By: AS/JJD Dept. Head: ES</p> <p>Scale: N/A Sheet No. 25 of 37 Date: MAY 2022</p>	<p>IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY</p> <p>CONSTRUCTION DETAILS</p> <p><i>Ronald M. Sandler</i> County Engineer N.J. P.E. No. 24CE03162200</p>												

Plotted: 5/24/2022 3:53 PM Last saved: 4/26/2022 8:56 AM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-25-26-CON-DETAILS.dwg



SECTION A-A

- NOTES:
- ENCLOSURE: TCPE541615A1253R
 - MATERIAL: .125 ALUM 5052-H32
 - FINISH: NATURAL MILL FINISH
 - UL LISTED, TYPE 3R
 - 3-POINT MAIN DOOR LATCHING SYSTEM
 - 3/4" DIA STAINLESS STEEL HANDLE, WITH PADLOCK HASP
 - CORBIN - POLICE LOCK- R357SGS
 - CONTINUOUS DOOR HINGE, STAINLESS STEEL
 - VANDAL PROOF SST HARDWARE
 - CLOSED CELL NEOPRENE GASKET FOR WEATHERTIGHT SEAL
 - 3/4" WEATHERPROOF PLYWOOD PANEL, PAINTED BLACK ON REAF
 - REMOVABLE TOP ACCESS PLATE
 - PAD MOUNTING-13.5 x 11.5, .5in THK.
 - ALL WELD SIZES ARE 1/8"
 - STAINLESS STEEL GROUNDING FASTENER, PROVIDED BY OTHERS



DETAIL 12 TCPE541615A1253R-NJ DOT SPECS
N.T.S.

iCCU-S2: iNtelligent Central Control Unit for Shelf Mount



The iCCU-S2 replaces the iCCU-S and is designed to work with all style cabinets as the intelligent control unit for Polara's iN2/iN2S2 accessible push button stations (PBS). The system includes an interconnect board (PN: iN2-ICB sold separately) to facilitate connection of up to 16 PBS. Each PBS connects via two wires in parallel, and do not have a polarity requirement. A 2-wire BUTTON-PLC-CABLE is included with each unit and is used to connect the iCCU-S2 to the iN2-ICB.

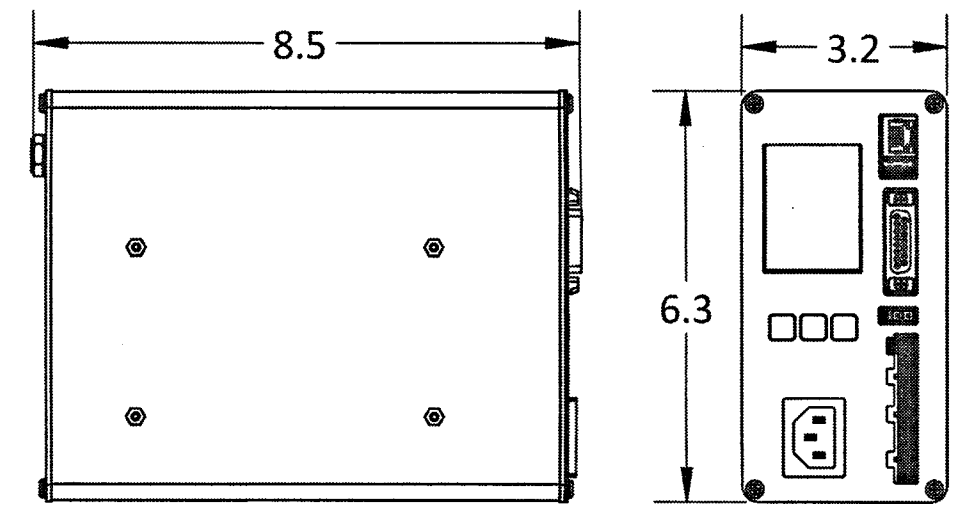
This model utilizes four separate cable assemblies (A/B/C/D) to provide all the features/functions of the legacy 50 pin cable harness, allowing selection of just the features needed, at reduced cost. If just standard functions are needed, only Cables A and C are needed. For Preemption, Cable B is needed. For General Purpose Input functions, Cable D is needed.

This model also supports SDLC communication in TS1 and TS2 cabinets when a TS2 controller operating in TS2 mode, with an MMU, is utilized (there must be an MMU). If just PED Walk/Don't Walk interval information is communicated via SDLC, just Cable C would be needed. If both PED interval information and call placements are communicated through SDLC, Cables A and C would not be needed. The included CABLE-C-LG is necessary to ensure proper grounding when using the iCCU-S2 in this BIU mode. Cables B and D would only be needed if Preemption or General Input functions are needed.

The iCCU-S2 front panel includes a backlit LCD for displaying system status information. Front panel buttons are used during setup, placing test calls, and to enable Wi-Fi. All setup functions can be performed via Ethernet or Wi-Fi using a PC. Setup and configuration is also supported using an iPhone, iPad or Android device via Wi-Fi. In addition, configuration via Bluetooth is supported by pairing with any connected PBS using a PC with an iN-DGL (purchased separately), or iOS/Android mobile device. All of the connection options provide full access to setup and configuration options of both the iCCU-S2 and all connected PBSs. Polara provides free apps for Windows PCs (Windows 7+), iOS (9.0+) devices, and Android (5.0+) devices.

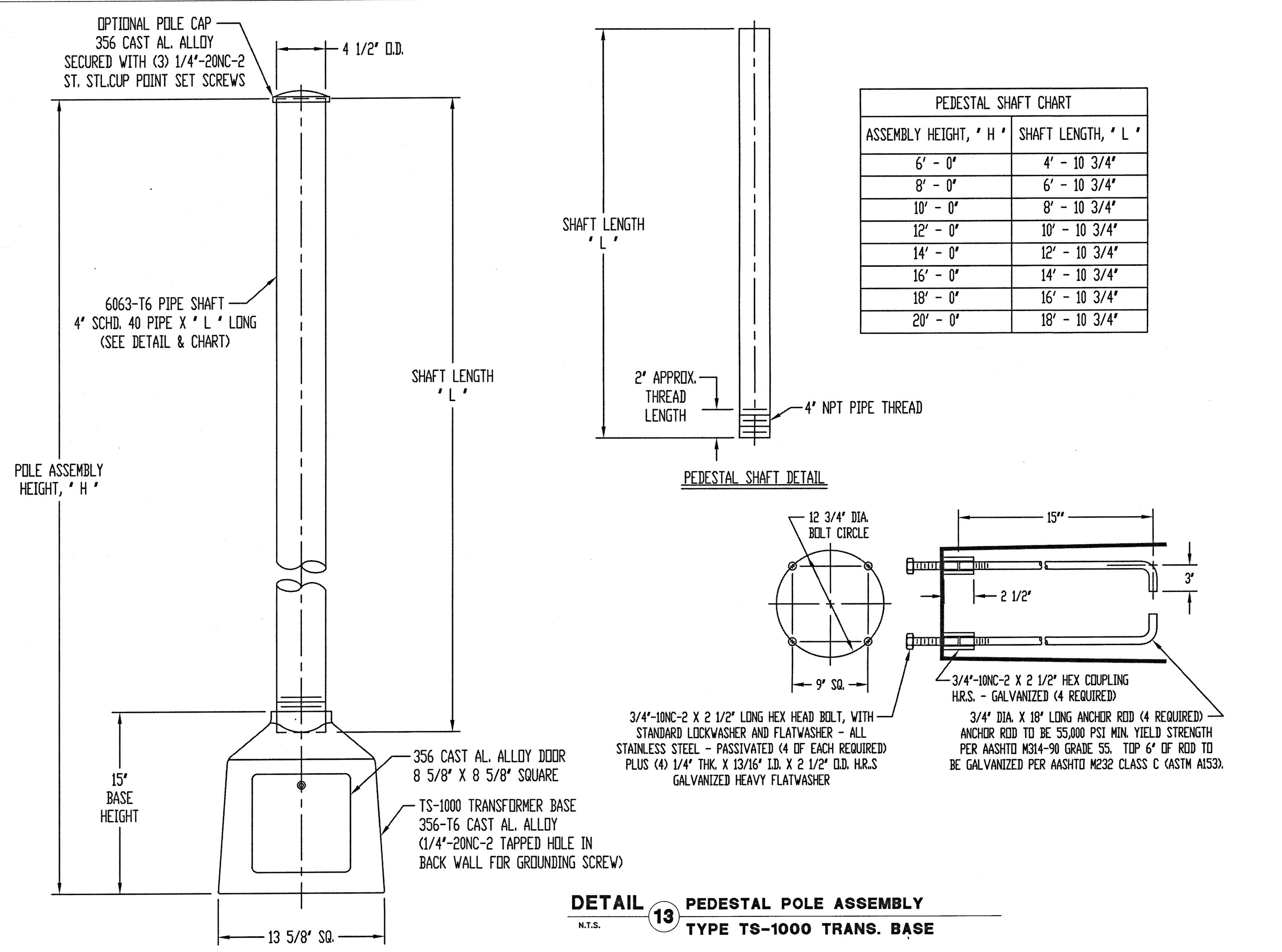
Multiple configurations are supported, with the ability to change operational features based on time of day. General purpose inputs are available for options such as voice message on emergency vehicle preemption. The system has downloadable internal conflict monitoring and health log data capture that contains extensive status/fault reporting. Remote Monitoring can be done over Ethernet.

- Optional SDLC:
PN: iN2-SDLC-YCABLE for 4 ft "Y" cable (order separately if needed)
PN: iN2-SDLC-CABLE for Straight Cable (order separately if needed)
- Ped Walk / Don't Walk Inputs (from load switches):
Optically isolated 80-150 Volts AC/DC, 5 mA max.
- Ped Call Outputs (to traffic controller):
Optically isolated 36 Volts AC/DC peak
300 mA Solid State Fused Contact Closure
- PBS Power Output:
Nominal 24 VDC, Short Circuit Protected - Auto Recovering
- General Purpose Inputs:
10-36 Volt AC/DC peak, 10 mA max, Optically Isolated
- Environmental:
Operating: -34 °C (-30 °F) to +74 °C (+165 °F) - LCD temperature range is limited to -20 °C to +70 °C
Storage: -45 °C (-50 °F) to +85 °C (+185 °F)
Warranty: 3 year limited



Dimensions are in inches.

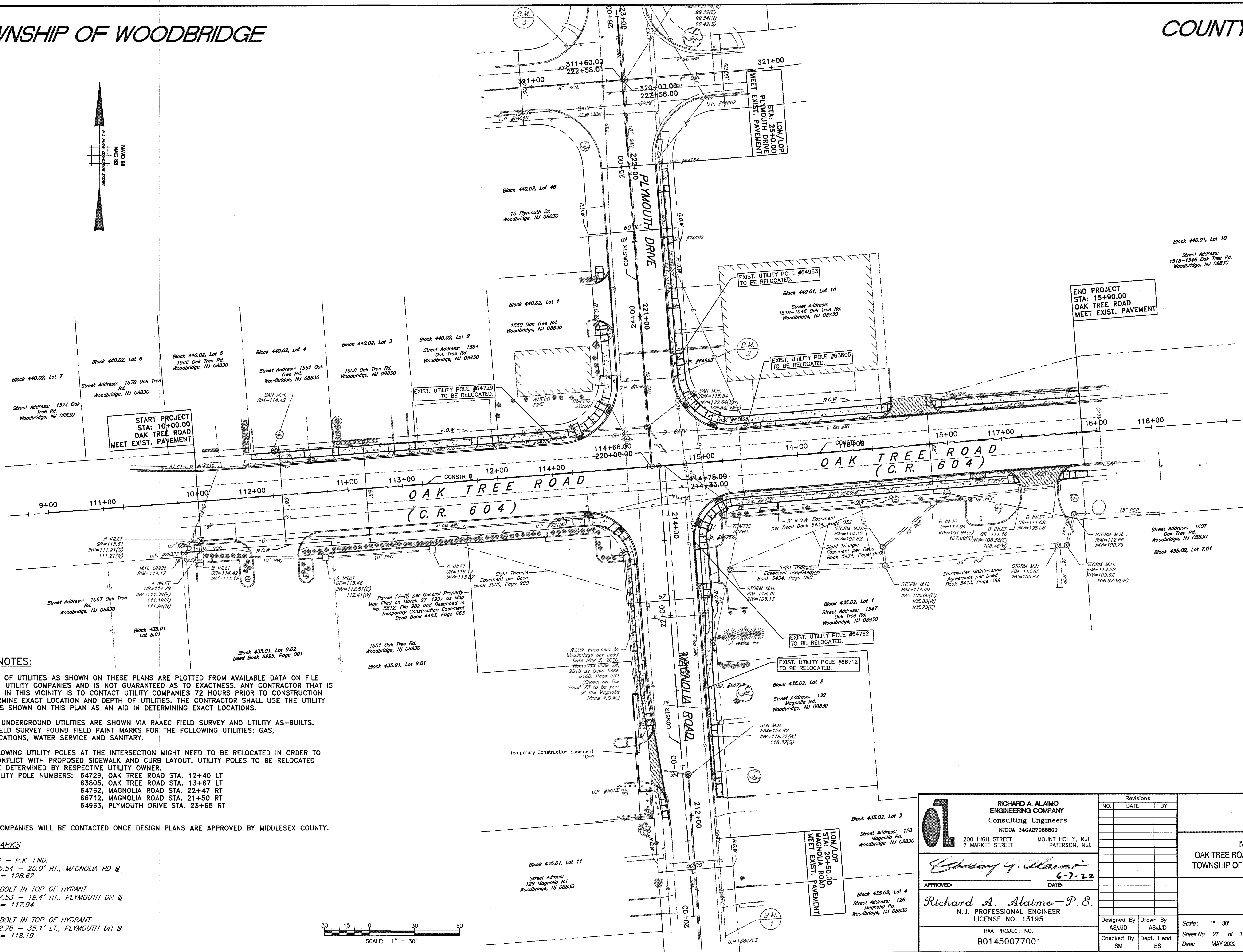
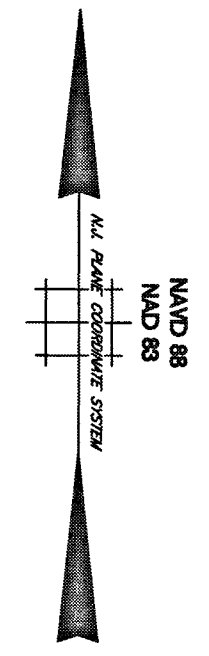
DETAIL 14 iCCU-S2: iNtelligent CENTRAL CONTROL UNIT FOR SHELF MOUNT
N.T.S.



DETAIL 13 PEDESTAL POLE ASSEMBLY TYPE TS-1000 TRANS. BASE
N.T.S.

 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J. <i>Richard A. Alaimo</i> APPROVED: DATE: 6-7-22 Richard A. Alaimo - P. E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
	Designed By AS/JJD Checked By SM	Drawn By AS/JJD Dept. Head ES
CONSTRUCTION DETAILS IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY Ronald M. Sandler County Engineer N.J. P.E. No. 24QE0362200		

Path: 5/24/2022 3:33 PM Unit saved: 4/26/2022 8:56 AM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-25-26-CON-DETAILS.dwg

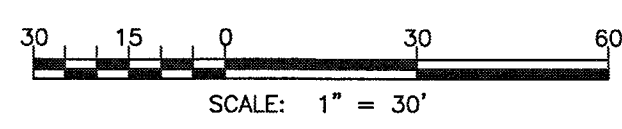


UTILITY NOTES:

1. LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND IS NOT GUARANTEED AS TO EXACTNESS. ANY CONTRACTOR THAT IS TO WORK IN THIS VICINITY IS TO CONTACT UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION AND DEPTH OF UTILITIES. THE CONTRACTOR SHALL USE THE UTILITY LOCATIONS SHOWN ON THIS PLAN AS AN AID IN DETERMINING EXACT LOCATIONS.
2. EXISTING UNDERGROUND UTILITIES ARE SHOWN VIA RAEC FIELD SURVEY AND UTILITY AS-BUILTS. RAEC FIELD SURVEY FOUND FIELD MARKS FOR THE FOLLOWING UTILITIES: GAS, COMMUNICATIONS, WATER SERVICE AND SANITARY.
3. THE FOLLOWING UTILITY POLES AT THE INTERSECTION MIGHT NEED TO BE RELOCATED IN ORDER TO AVOID CONFLICT WITH PROPOSED SIDEWALK AND CURB LAYOUT. UTILITY POLES TO BE RELOCATED SHALL BE DETERMINED BY RESPECTIVE UTILITY OWNER.
UTILITY POLE NUMBERS: 64729, OAK TREE ROAD STA. 12+40 LT
63805, OAK TREE ROAD STA. 13+67 LT
64762, MAGNOLIA ROAD STA. 22+47 RT
66712, MAGNOLIA ROAD STA. 21+50 RT
64963, PLYMOUTH DRIVE STA. 23+65 RT
4. UTILITY COMPANIES WILL BE CONTACTED ONCE DESIGN PLANS ARE APPROVED BY MIDDLESEX COUNTY.

BENCH MARKS

- B.M. 1 UP #64763 - P.K. FND. STA. 19+85.54 - 20.0' RT., MAGNOLIA RD @ ELEVATION = 128.62
- B.M. 2 X-CUT IN BOLT IN TOP OF HYDRANT STA. 23+57.53 - 19.4' RT., PLYMOUTH DR @ ELEVATION = 117.94
- B.M. 3 X-CUT IN BOLT IN TOP OF HYDRANT STA. 25+82.78 - 35.1' LT., PLYMOUTH DR @ ELEVATION = 118.19



Path: 6/14/2022 11:10 AM Leaf saved: 6/14/2021 10:09 AM File Name: K:\Projects\01\65077001\Drawings\EUC-SRF-27-UTILITY RELOCATION.dwg

RICHARD A. ALAIMO ENGINEERING COMPANY
 Consulting Engineers
 NJDCA 24GA27968800
 200 HIGH STREET MOUNT HOLLY, N.J.
 2 MARKET STREET PATERSON, N.J.

APPROVED: *Richard A. Alaimo* DATE: 6-7-22
 Richard A. Alaimo - P. E.
 N.J. PROFESSIONAL ENGINEER
 LICENSE NO. 13195
 RAA PROJECT NO.
 B01450077001

Revisions		
NO.	DATE	BY

County of Middlesex
 Department of Transportation
 Office of Engineering
 75 Bayard St., New Brunswick, NJ 08901

IMPROVEMENTS TO THE INTERSECTION OF
 OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD
 TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY

UTILITY RELOCATION PLAN

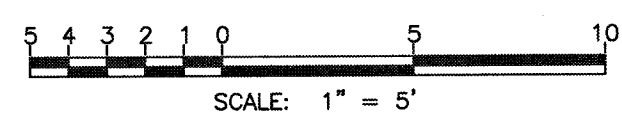
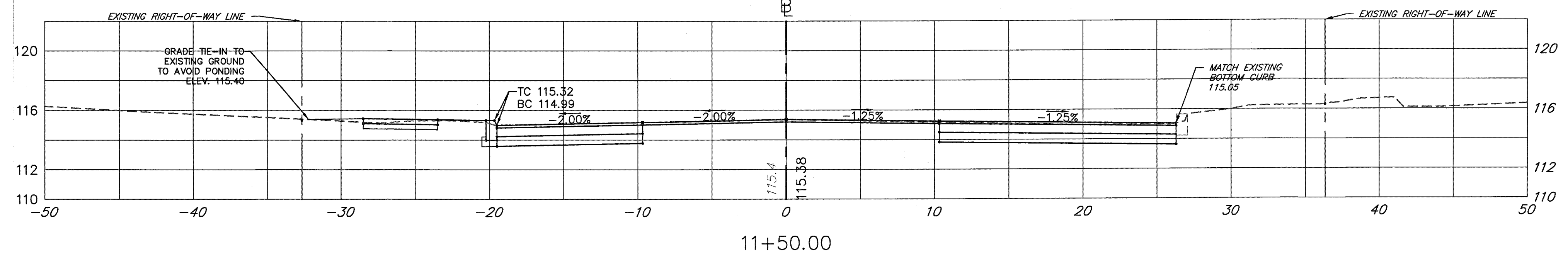
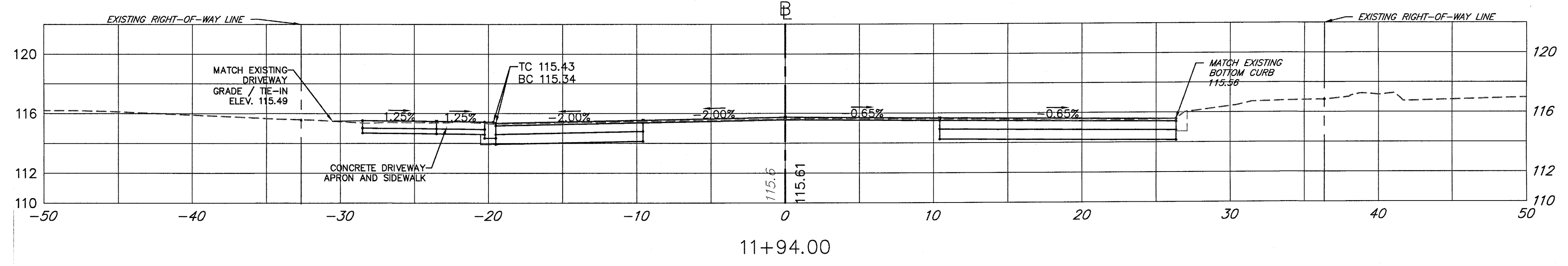
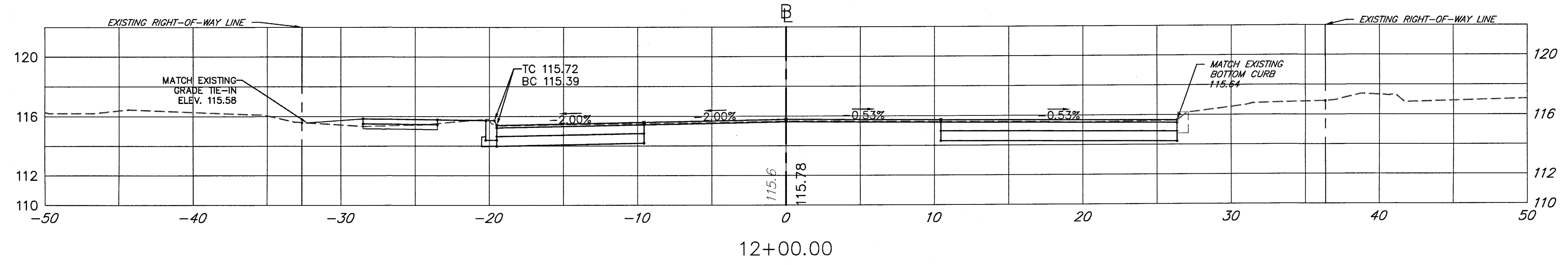
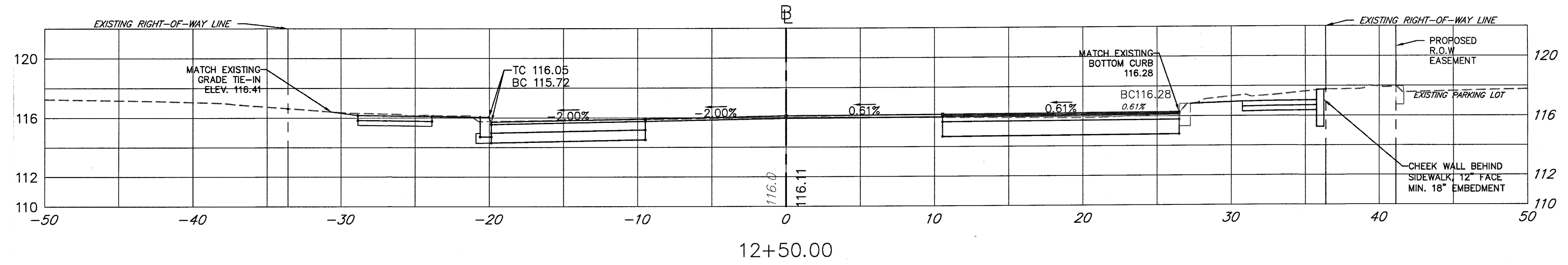
Designed By AS/JUD Drawn By AS/JUD
 Checked By SM Dept. Head ES

Scale: 1" = 30'
 Sheet No. 27 of 37
 Date: MAY 2022

Ronald M. Sender
 County Engineer
 N.J. P.E. No. 24CE0302200

U-1
 U-1

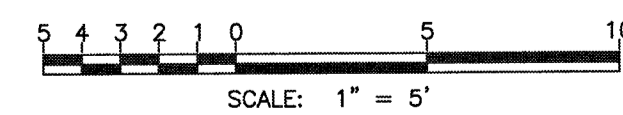
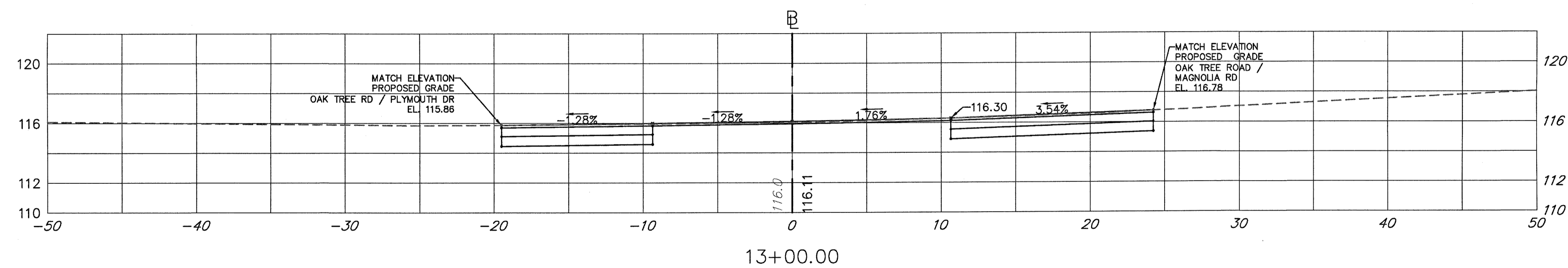
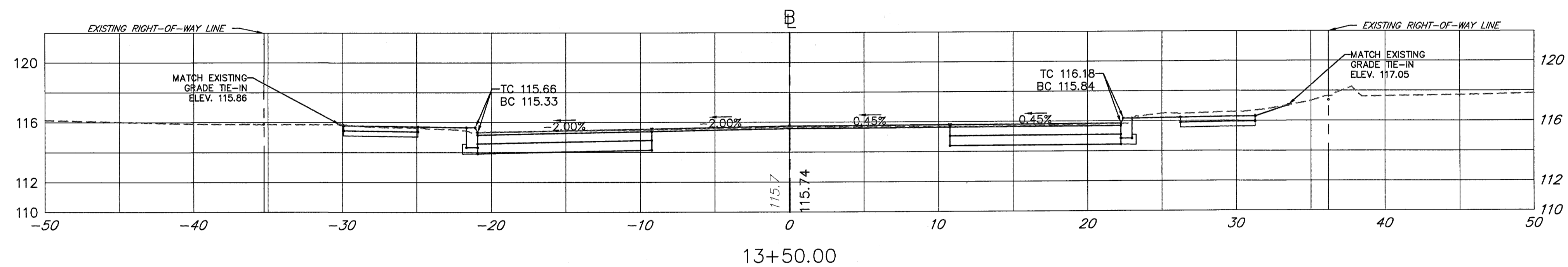
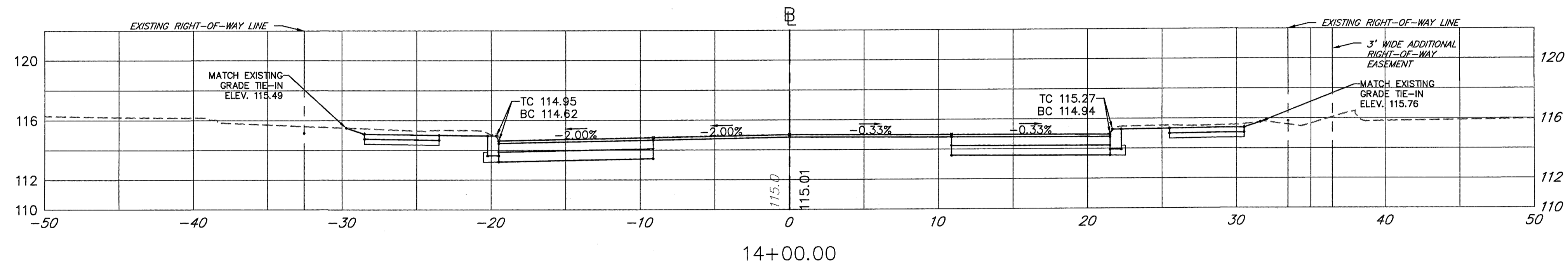
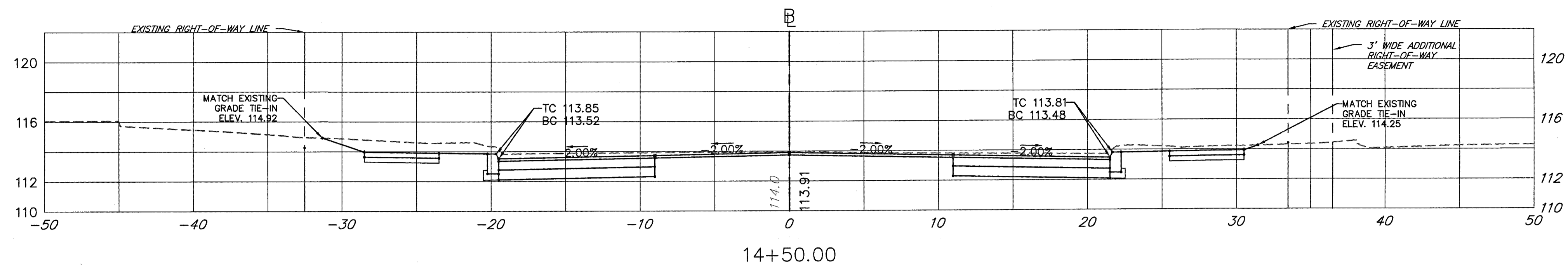
Plotted: 5/24/2022 3:54 PM Last saved: 12/15/2021 4:02 PM File Name: K:\Projects\B01450077001\Drawings\LOC-SHT-28-35-CROSS SECTIONS.dwg



X-2
X-8

 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
		IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY
APPROVED: Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	DATE 6-7-22	OAK TREE ROAD CROSS SECTIONS
	Designed By AS/JJD	Scale: 1" = 5' Sheet No. 29 of 37 Date: MAY 2022
	Checked By SM	Drawn By AS/JJD Dept. Head ES
		Ronald M. Sender County Engineer N.J. P.E. No. 24CE03162200

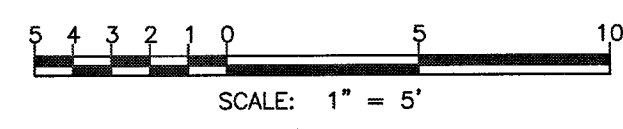
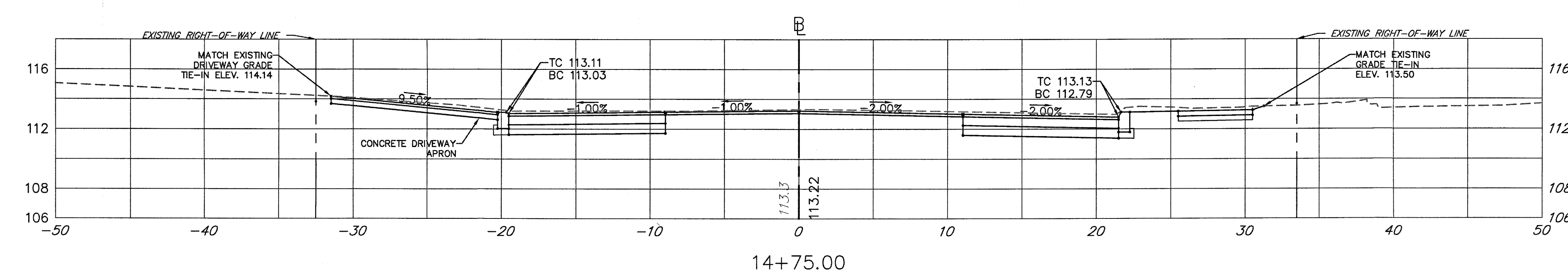
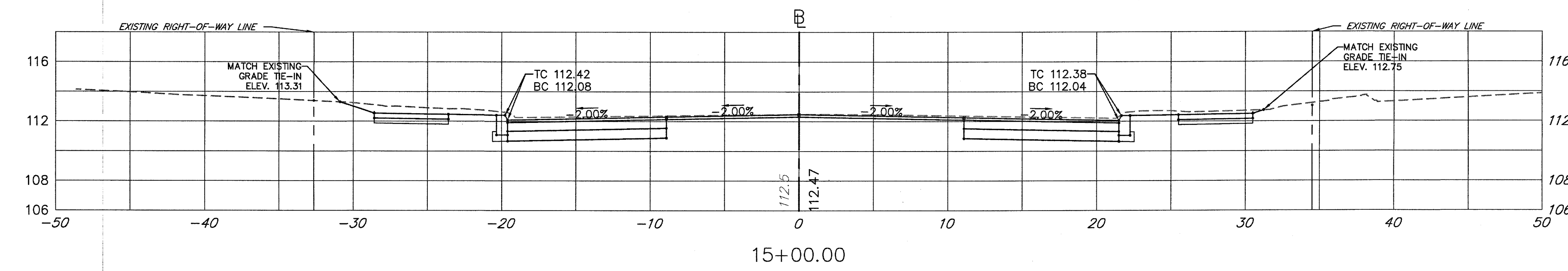
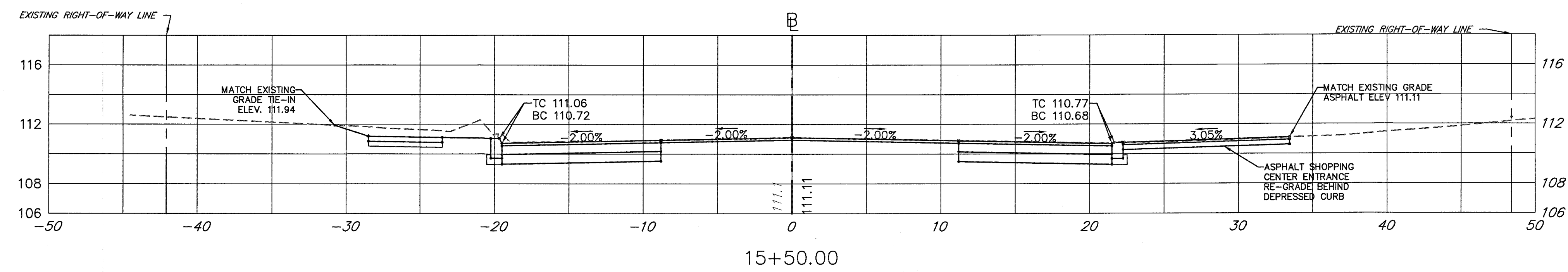
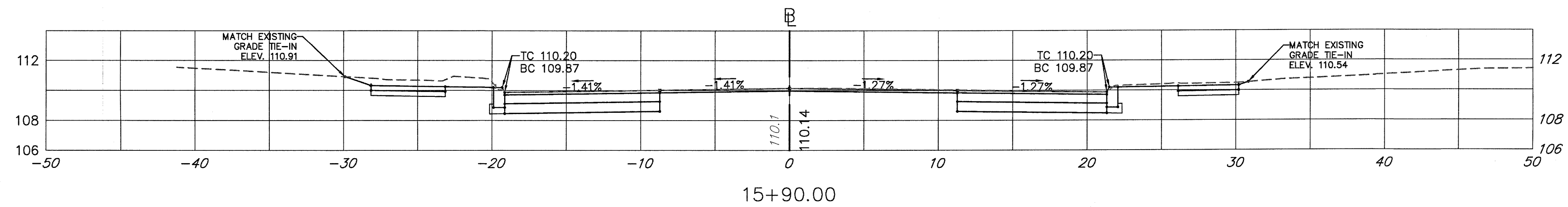
Plotted: 5/24/2022 3:34 PM Last saved: 12/15/2021 4:02 PM File Name: K:\Projects\B01450077001\Drawings\LOC-SHT-28-35-CROSS SECTIONS.dwg



X-3
X-8

 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 246A27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J. <i>Richard A. Alaimo</i> APPROVED: DATE: 6-7-22	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
		IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY
RAA PROJECT NO. B01450077001		OAK TREE ROAD CROSS SECTIONS
		Scale: 1" = 5' Sheet No. 30 of 37 Date: MAY 2022
		<i>Ronald M. Sender</i> County Engineer N.J. P.E. No. 246E03182200

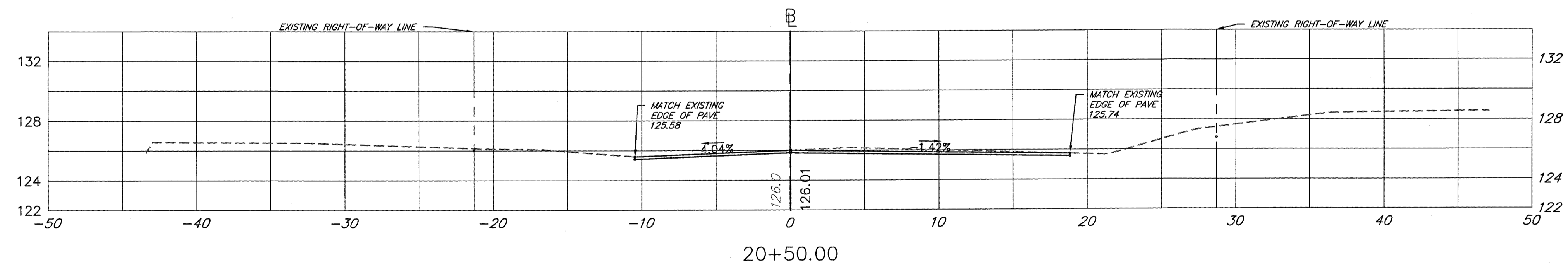
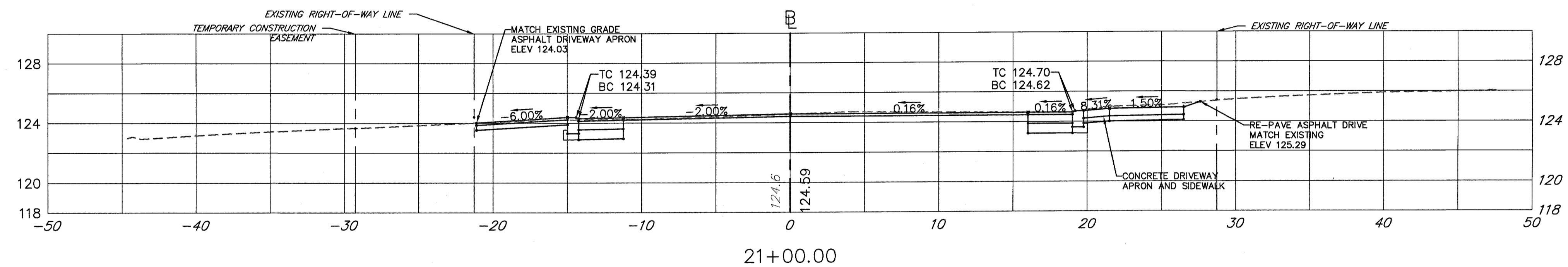
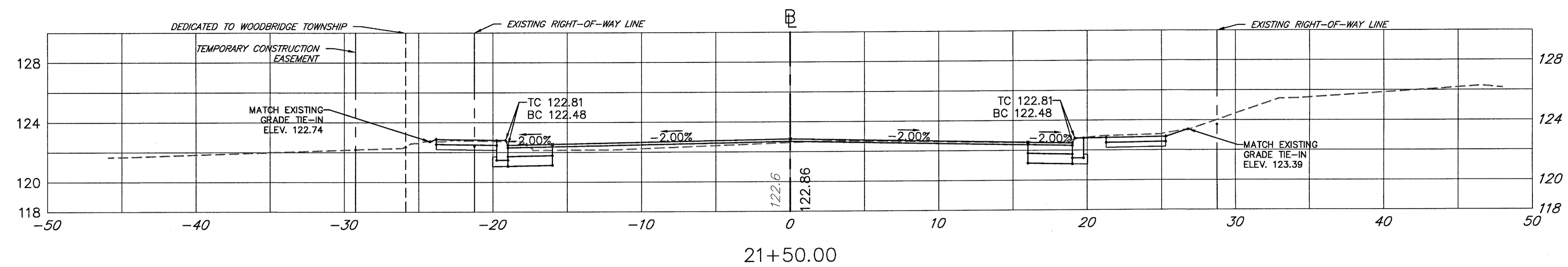
Plotted: 5/24/2022 3:34 PM Last saved: 12/15/2021 4:02 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SHT-2B-35-CROSS SECTIONS.dwg



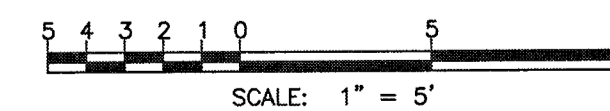
X-4
X-8

 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 246A27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
	APPROVED: <i>Richard A. Alaimo</i> Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	
Scale: 1" = 5' Sheet No. 31 of 37 Date: MAY 2022		OAK TREE ROAD CROSS SECTIONS
		<i>Ronald M. Sender</i> County Engineer N.J. P.E. No. 24QE0182200

Plotted: 5/24/2022 3:34 PM User: k1\Projects\B01450077001\Drawings\LOC-SHT-28-35-CROSS SECTIONS.dwg



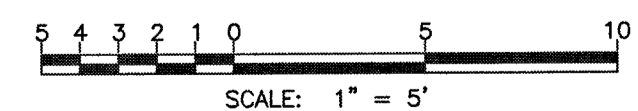
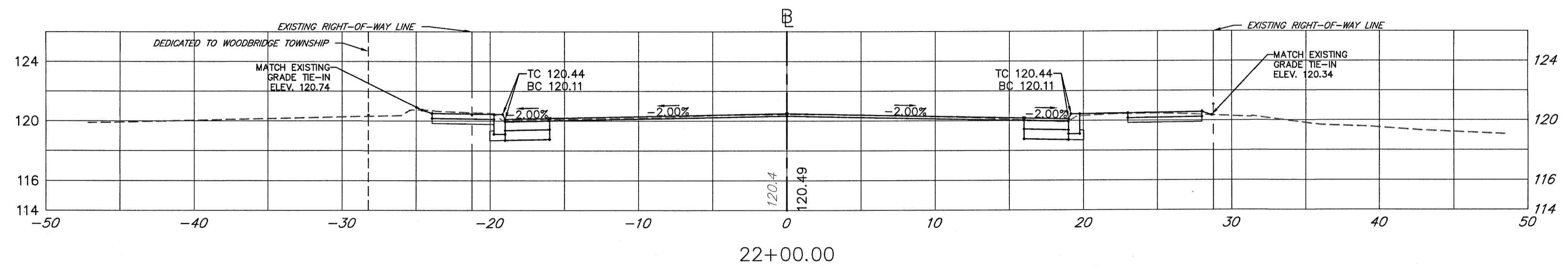
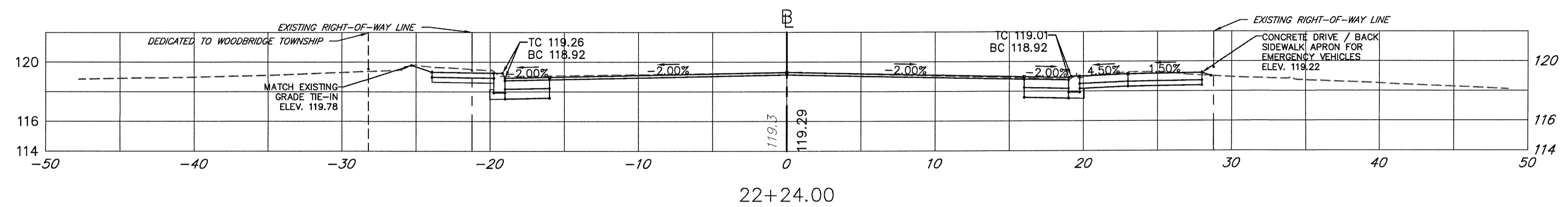
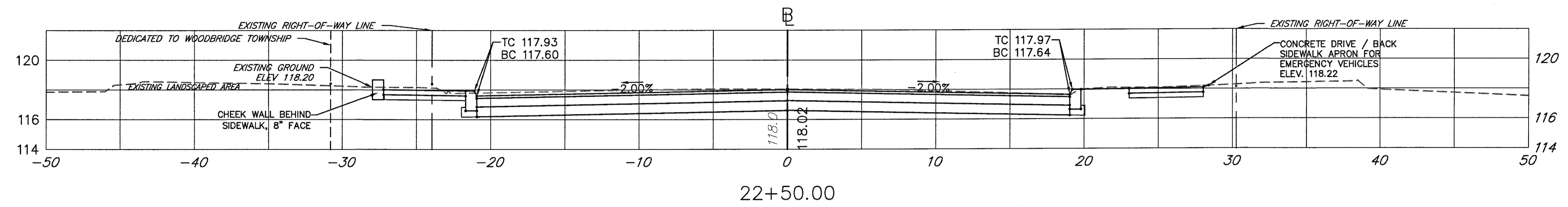
Magnolia Road								
Station	Existing Left Top of Curb	Existing Left Bottom of Curb	Existing Left Edge of Pmt	Existing Crown of Roadway	Existing Right Edge of Pmt	Existing Right Bottom of Curb	Existing Right Top of Curb	Existing Right Top of Curb
20+60	-	-	125.31	-	-	-	-	-
21+00	-	124.09	-	124.57	125.58	124.63	-	-
21+50	122.70	122.13	-	122.61	-	122.46	-	-
22+00	120.49	120.03	-	120.43	-	119.92	120.31	-
22+50	118.10	117.74	-	118.05	-	117.61	117.99	-



X-5
X-8

<p> RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J. </p>	Revisions NO. DATE BY		County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901	
	APPROVED: <i>Richard A. Alaimo</i> DATE: 6-7-22			IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY
Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001			Scale: 1" = 5' Sheet No. 32 of 37 Date: MAY 2022	
Designed By AS/JJD	Drawn By AS/JJD	Checked By SM		Dept. Head ES

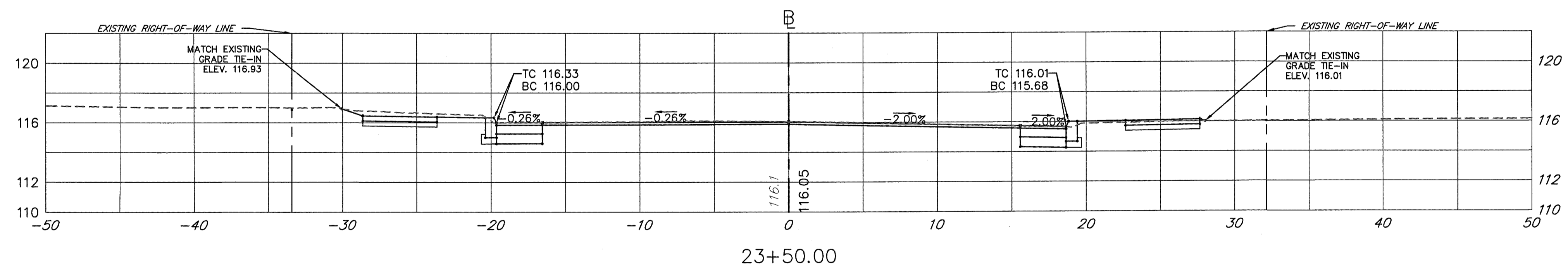
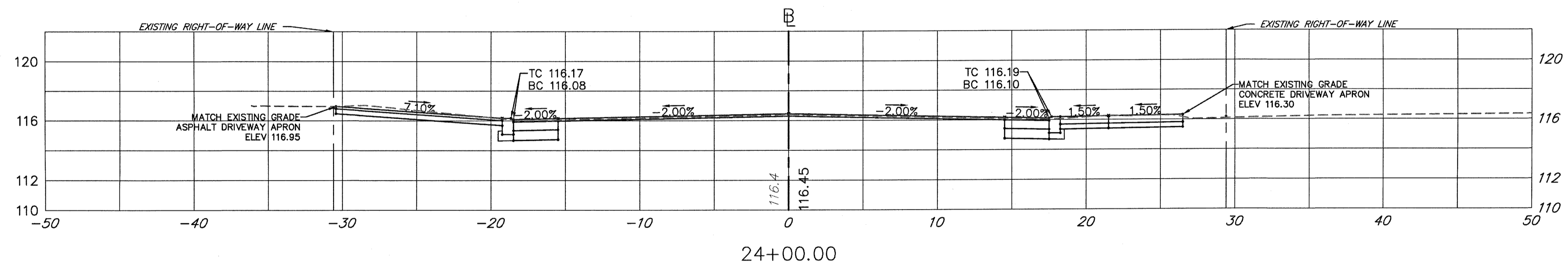
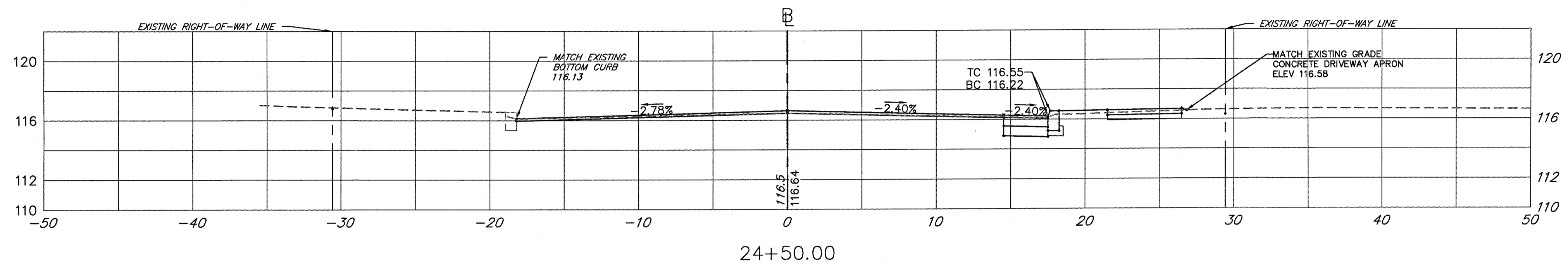
Plotted: 5/24/2022 3:54 PM Last saved: 12/15/2021 4:02 PM File Name: K:\Projects\01450077001\Drawings\EUC-SHT-2B-35-CROSS SECTIONS.dwg



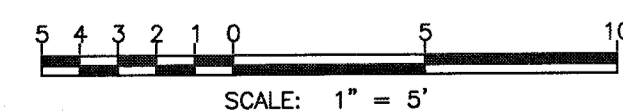
X-6
X-8

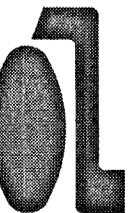

 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJPCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.	Revisions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">NO.</th> <th style="width: 15%;">DATE</th> <th style="width: 10%;">BY</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	BY																															County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
	NO.	DATE	BY																																	
APPROVED: Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	DATE: 6-7-22	IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY																																		
MAGNOLIA ROAD CROSS SECTIONS		Scale: 1" = 5' Sheet No. 33 of 37 Date: MAY 2022																																		
		Ronald M. Sender County Engineer N.J. P.E. No. 24CE0192200																																		

Path: 5/24/2022 3:54 PM Last saved: 12/15/2021 4:02 PM File Name: K:\Projects\01450077001\Drawings\01450077001\01450077001-28-35-CROSS SECTIONS.dwg



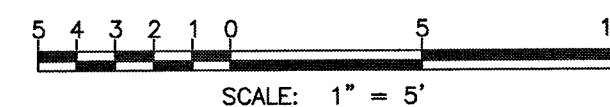
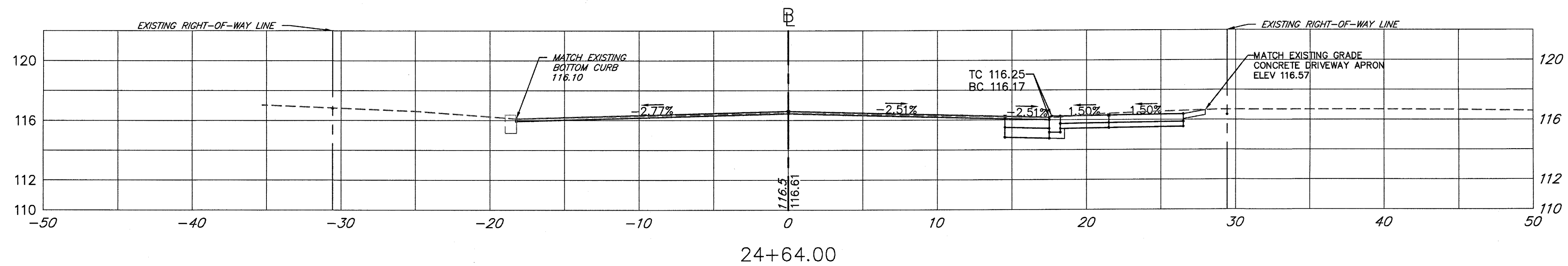
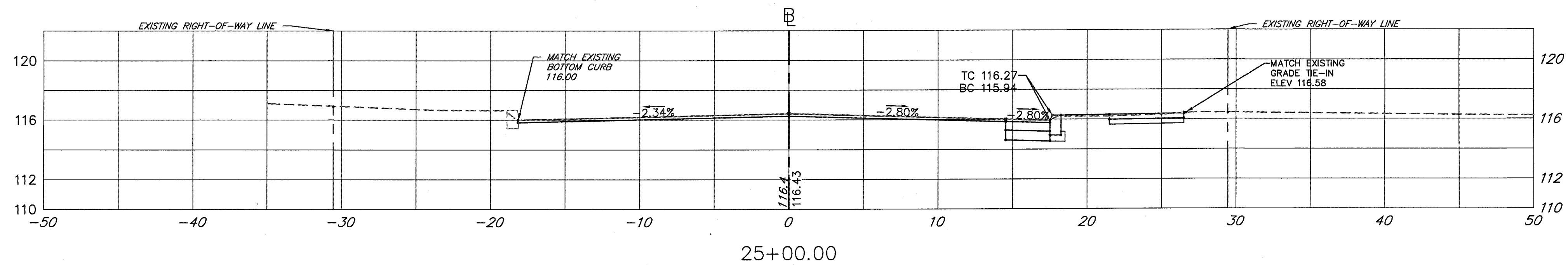
Plymouth Drive									
Station	Existing Left Top of Curb	Existing Left Bottom of Curb	Existing Left Edge of Pvm	Existing Crown of Roadway	Existing Right Edge of Pvm	Existing Right Bottom of Curb	Existing Right Top of Curb	Existing Right Edge of Pvm	Existing Right Top of Curb
23+50	116.35	115.99	-	116.03	-	115.62	115.87	-	115.87
24+00	-	115.98	-	116.38	-	116.04	-	-	-
24+50	116.56	116.12	-	116.47	-	116.11	116.34	-	116.34
25+00	116.64	116.01	-	116.43	-	115.89	116.31	-	116.31



 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
		IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY
APPROVED:  Richard A. Alaimo - P. E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	DATE 6-7-22	PLYMOUTH DRIVE CROSS SECTIONS
		Scale: 1" = 5' Sheet No. 34 of 37 Date: MAY 2022
		Ronald M. Sender Costly Engineer N.J. P.E. No. 24GE0382200

X-7
 X-8

Plotfile: 5/24/2022 3:54 PM Last saved: 12/15/2021 4:02 PM File Name: K:\Projects\01450077001\Drawings\EUC-SHT-25-35-CROSS SECTIONS.dwg



X-8
X-8

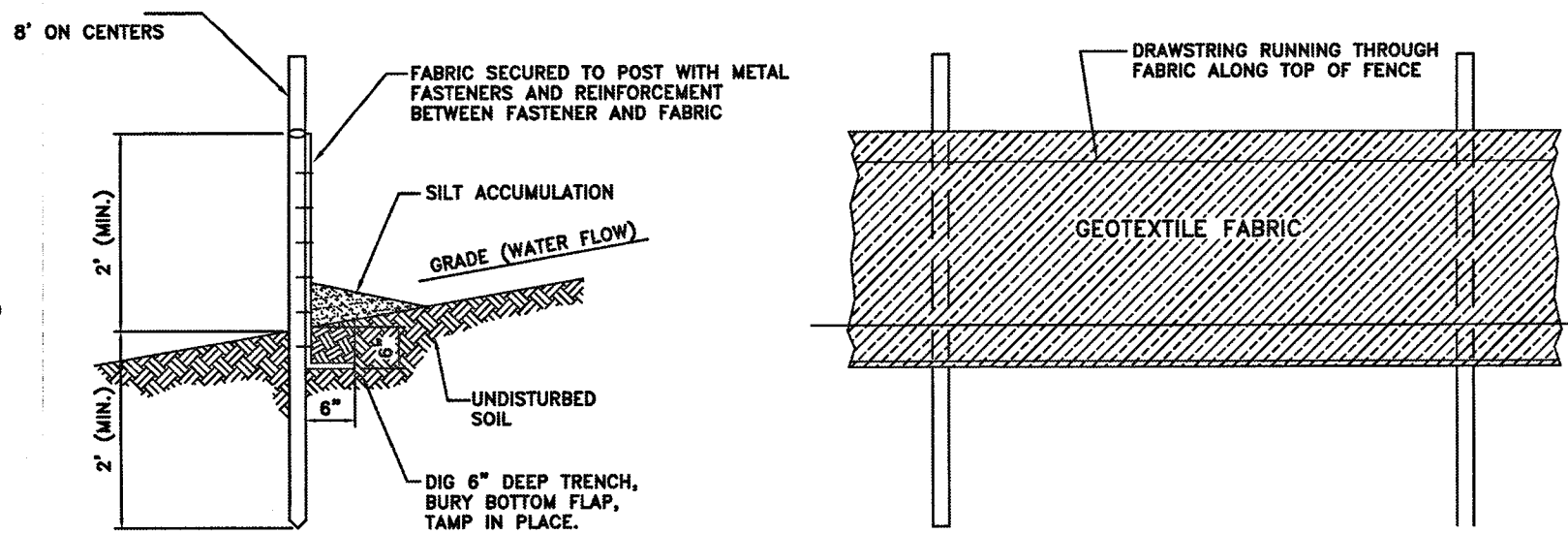
 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27988900 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.	Revisions NO. DATE BY	County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901
		IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY
APPROVED: Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195 RAA PROJECT NO. B01450077001	DATE 6-7-22	PLYMOUTH DRIVE CROSS SECTIONS
	Designed By AS/JJD Checked By SM	Drawn By AS/JJD Dept. Head ES
		Scale: 1" = 5' Sheet No. 35 of 37 Date: MAY 2022
		Ronald M. Sender County Engineer N.J. P.E. No. 24QE03182200

TOWNSHIP OF WOODBRIDGE

FENCE POSTS

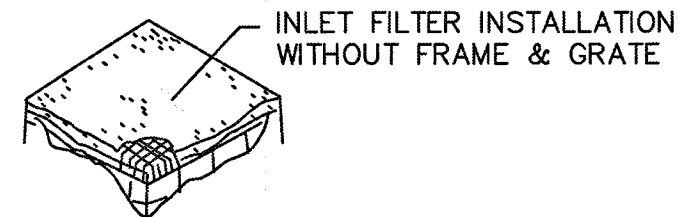
REQUIREMENTS FOR SILT FENCE

1. FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND. POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1 1/2 INCHES.
2. A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED, FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC WHERE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED.
3. A GEOTEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS ETC.) PLACED BETWEEN THE FASTENERS AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.



DETAIL 1 SILT FENCE

SCALE: N.T.S.



WRAP AROUND 2" x 4" LAID FLAT OR ON EDGE PLACED AGAINST VERTICAL FACE OF CURB PIECE TO ALLOW FILTERING FLOOD OVERFLOW. DO NOT COMPLETELY BLOCK VERTICAL OPENING

MOLD 2" x 4" AGAINST CURB WITH NO.2 COARSE AGGREGATE

CURB PIECE OPENING

HEM FOR 2" x 4"

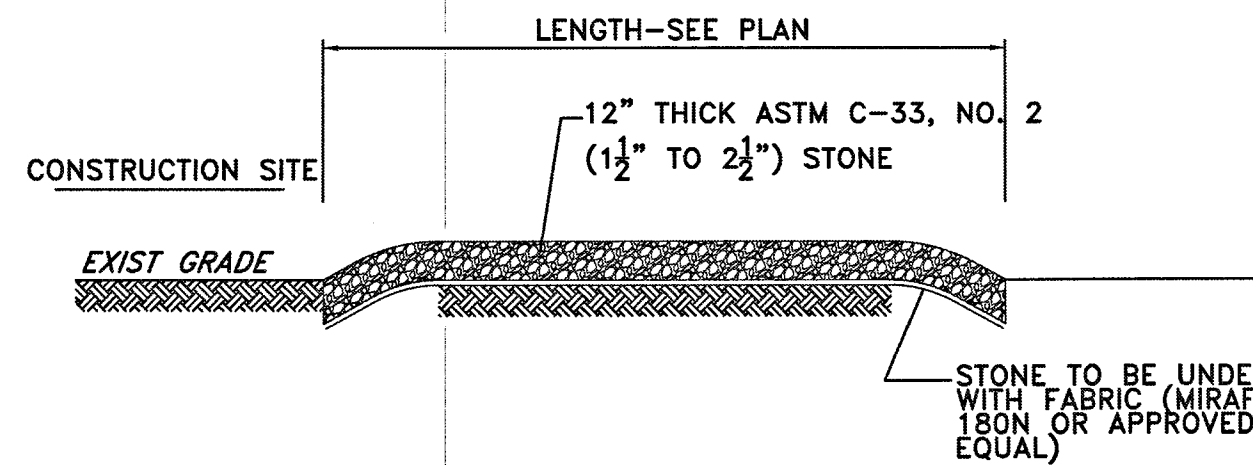
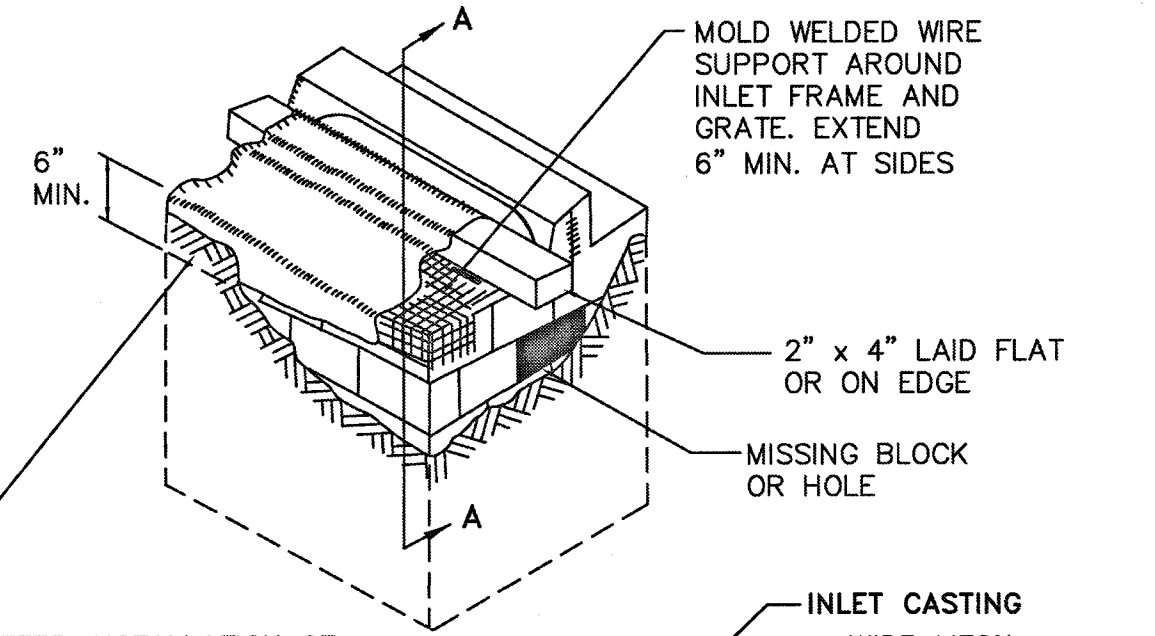
NOTE: INSERT REBAR INTO HEM PRIOR TO REMOVAL

EXISTING INLET

DETAIL 2 INLET FILTER, TYPE 1

SCALE: N.T.S.

NEW CONSTRUCTION



NOTES:
1. THE STONE CONSTRUCTION ENTRANCE SHALL BE WASHED DOWN OR REPLACED AS NECESSARY AND AS DIRECTED BY THE SOIL EROSION INSPECTOR TO PREVENT THE TRANSPORTATION OF SEDIMENT INTO THE SURROUNDING ROADWAYS.

DETAIL 3 STABILIZED CONSTRUCTION ACCESS

SCALE: N.T.S.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY (CONTACT INFORMATION BELOW).
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A. 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 1/2 TONS PER ACRE, ACCORDING TO STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE STABILIZED CONSTRUCTION ACCESS CONSISTING OF ONE INCH TO TWO INCH (1" - 2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE (OR 450 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A pH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

FREEHOLD SOIL CONSERVATION DISTRICT
4000 KOZLOSKI ROAD
FREEHOLD, NJ 07728
PH. (732) 683-8500
FAX (732) 683-9140

EROSION CONTROL MEASURES CONSTRUCTION SEQUENCE:

1. INSTALL SILT FENCE AND INLET PROTECTION AS SHOWN (1 WEEK)
2. INSTALL TEMPORARY SEEDING (1 WEEK)
3. CONSTRUCT IMPROVEMENTS (2 MONTHS)
4. INSTALL PERMANENT VEGETATIVE COVER IN ALL DISTURBED AREAS (2 WEEKS)
5. REMOVE SOIL EROSION MEASURES WHEN SITE IS STABILIZED AND APPROVED BY DISTRICT (1 WEEK)

ITEM NO.	QUANTITY TYPE	TO BE CONSTRUCTED	CONTRACT QUANTITY	AS-BUILT QUANTITY
3	M	SILT FENCE	1,314 LF	LF
4	M	INLET FILTER TYPE 1	16 SF	SF

DUST CONTROL

DUST CONTROL SHALL BE IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY. THE FOLLOWING METHODS WILL BE USED FOR CONTROLLING DUST.

1. APPLICATION OF MULCH AND/OR VEGETATIVE COVER AS SPECIFIED IN SEEDING, LIMING, FERTILIZING, AND MULCHING SPECIFICATIONS.
2. TILLAGE TO ROUGHEN THE SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. PROCEED FROM THE WINDWARD SIDE OF THE SITE WITH CHISEL TOOTH FLOWS, TWELVE INCHES (12") APART, OR SPRING TOOTHED HARROWS.
3. SPRINKLE SITE UNTIL SURFACE IS WET. SPRINKLING SHOULD BE DONE PERIODICALLY THROUGHOUT THE CONSTRUCTION PERIOD AS REQUIRED TO CONTROL DUST.

SEEDING, LIMING AND FERTILIZING RATES

1. SEED BED PREPARATION AND SEEDING:

- A. WORK APPROVED RATES OF LIME AND FERTILIZER INTO SOIL TO A DEPTH OF APPROXIMATELY FOUR INCHES (4") WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION MUST BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEED BED IS PREPARED.
- B. APPLY SEED UNIFORMLY BY GRAIN DRILL OR GRASS SEEDER TO A DEPTH OF APPROXIMATELY ONE-QUARTER TO ONE-HALF INCH (1/4" TO 1/2"), ONE-QUARTER INCH (1/4") DEEPER ON COARSE TEXTURED SOIL.

PERMANENT SEED MIXTURE:

ACCEPTABLE PLANTING DATES 3/1 THRU 10/15 (IRRIGATION REQUIRED DURING 5/1 - 8/14)

HARD FESCUE 4.0 LBS/1000 S.F.

PERENNIAL RYEGRASS 1.0 LBS/1000 S.F.

KENTUCKY BLUEGRASS (BLEND) 1.0 LBS/1000 S.F.

- C. AFTER SEEDING, FIRM THE SOIL WITH A CORRUGATED ROLLER, TO ASSURE GOOD SEED TO SOIL CONTACT, TO RESTORE CAPILLARITY AND IMPROVE SEEDLING EMERGENCE.

2. AREAS THAT ARE TEMPORARILY SEEDED SHALL BE PROTECTED BY PERENNIAL RYE GRASS AND MULCH. SEED SHALL BE APPLIED AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE.

3. ALL SEED BED AREAS SHALL BE LIMED AT THE RATE DETERMINED BY SOIL TESTING AND APPROVED BY THE ENGINEER.

4. ALL SEED AREAS SHALL BE FERTILIZED AT THE RATE DETERMINED BY SOIL ANALYSIS AND APPROVED BY THE ENGINEER OR THE DISTRICT, OR THE FOLLOWING RATE WILL APPLY, USING 10-20-10, OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN:
10-20-10 - @ 11 LBS/1000 SQ. FT.

5. MULCHING FOR TEMPORARY AND PERMANENT SEEDING SHALL BE AS FOLLOWS:

STRAW OR HAY - UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE APPLIED AT THE RATE OF 1-1/2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH.

MULCH SHALL BE ANCHORED IMMEDIATELY AFTER PLACEMENT BY ONE OF THE FOLLOWING METHODS:

VEGETABLE BASED GELS

NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN HARMLESS AND NOT RESULT IN A PHYTOXIC EFFECT OR IMPEDE GROWTH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS.

HIGH POLYMER SYNTHETIC PLASTIC EMULSION

MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

MULCH APPLICATION RATES SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

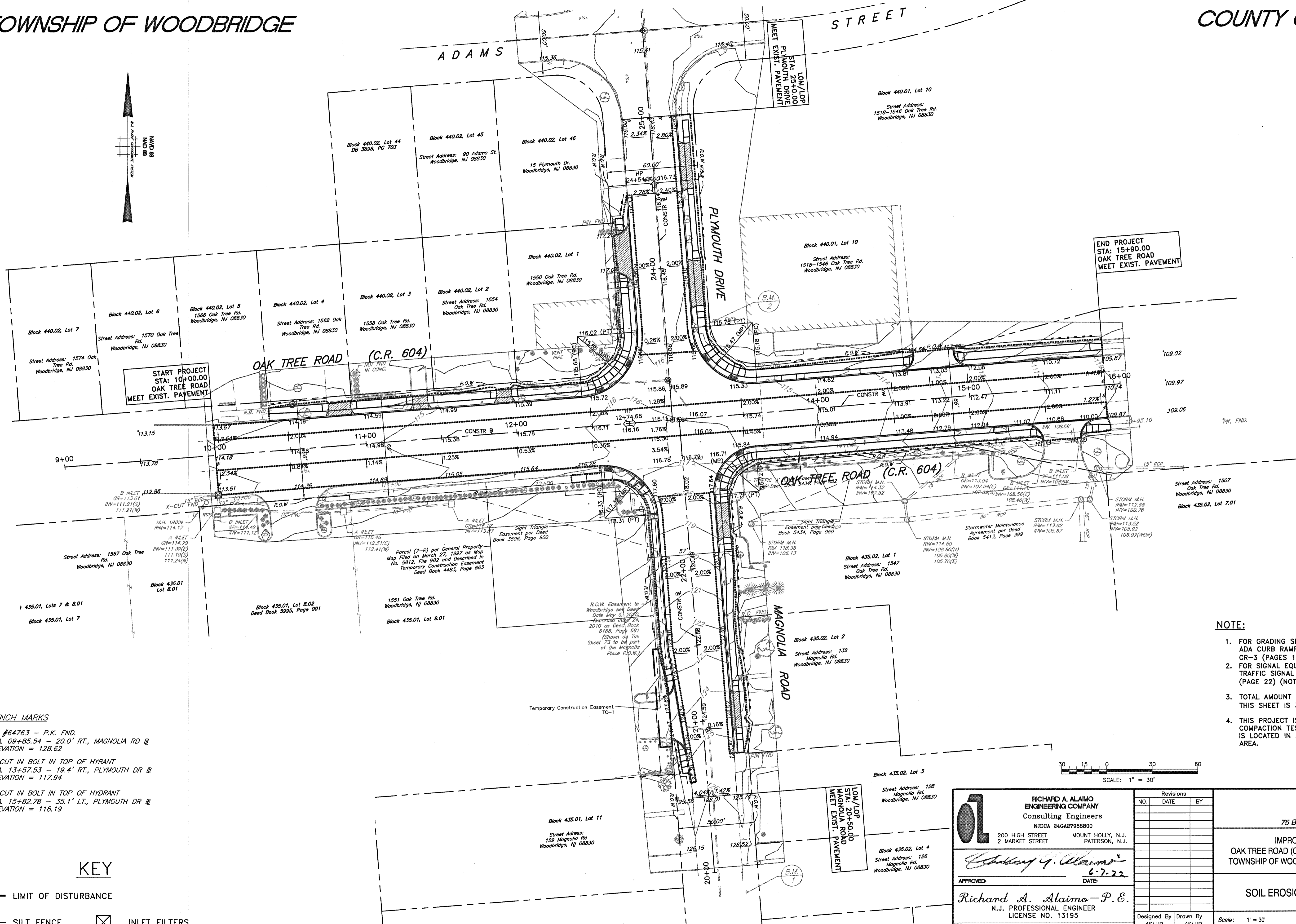
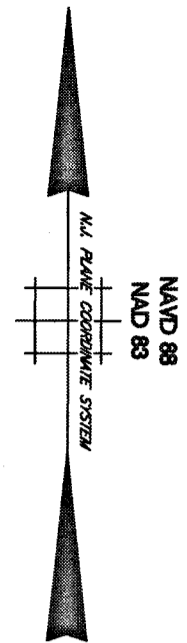
TEMPORARY VEGETATIVE STABILIZATION

SEEDING DATE	SEED TYPE	SEEDING RATE	OPTIMUM SEED DEPTH
3/15 - 5/15	PERENNIAL RYEGRASS	100 LBS/ACRE (1 LBS/1000 SF)	0.5 INCHES
5/15 - 8/15	PEARL MILLET	20 LBS/ACRE (0.5 LBS/1000 SF)	1.0 INCHES
8/15 - 10/1	PERENNIAL RYEGRASS	100 LBS/ACRE (1 LBS/1000 SF)	0.5 INCHES

NOTES:

1. SITE IS LOCATED IN USDA PLANT HARDINESS ZONE 6B.
2. OPTIMUM SEED DEPTHS SHALL BE DOUBLED FOR SANDY SOILS.

<p>RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJPCA 24627988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.</p> <p>APPROVED: <i>Richard A. Alaimo</i> DATE: 6-7-22</p> <p>Richard A. Alaimo - P.E. N.J. PROFESSIONAL ENGINEER LICENSE NO. 13195</p> <p>RAA PROJECT NO. B01450077001</p>	<p>Revisions</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	BY				<p>County of Middlesex Department of Transportation Office of Engineering 75 Bayard St., New Brunswick, NJ 08901</p>
	NO.	DATE	BY					
<p>Designed By AS/UD Checked By SM</p>	<p>Drawn By AS/UD Dept. Head ES</p>	<p>IMPROVEMENTS TO THE INTERSECTION OF OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY</p> <p>SOIL EROSION AND SEDIMENT CONTROL PLANS</p> <p>Scale: 1" = 30' Sheet No. 36 of 37 Date: MAY 2022</p> <p>Ronald M. Sender County Engineer N.J. P.E. No. 2462382200</p>						



START PROJECT
STA: 10+00.00
OAK TREE ROAD
MEET EXIST. PAVEMENT

END PROJECT
STA: 15+90.00
OAK TREE ROAD
MEET EXIST. PAVEMENT

NOTE:

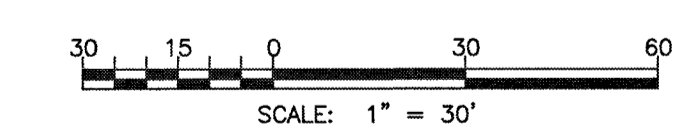
1. FOR GRADING SPECIFIC TO THE PROPOSED ADA CURB RAMP SEE SHEETS CR-1 THROUGH CR-3 (PAGES 10-12).
2. FOR SIGNAL EQUIPMENT W/ ELEVATION SEE TRAFFIC SIGNAL LAYOUT PLANS TSP-1 (PAGE 22) (NOT SHOWN FOR CLARITY).
3. TOTAL AMOUNT OF SOIL DISPLACEMENT FOR THIS SHEET IS 31366.65 SF (.72 ACRES).
4. THIS PROJECT IS EXEMPT FROM SOIL COMPACTION TESTING AND REMEDIATION AS IT IS LOCATED IN AN URBAN REDEVELOPMENT AREA.

BENCH MARKS

- B.M. 1 UP #64763 - P.K. FND. STA. 09+85.54 - 20.0' RT., MAGNOLIA RD @ ELEVATION = 128.62
- B.M. 2 X-CUT IN BOLT IN TOP OF HYDRANT STA. 13+57.53 - 19.4' RT., PLYMOUTH DR @ ELEVATION = 117.94
- B.M. 3 X-CUT IN BOLT IN TOP OF HYDRANT STA. 15+82.78 - 35.1' LT., PLYMOUTH DR @ ELEVATION = 118.19

KEY

- LIMIT OF DISTURBANCE
- SF — SILT FENCE
- ⊗ INLET FILTERS



RICHARD A. ALAIMO ENGINEERING COMPANY
Consulting Engineers
NJPCA 24GA27988800
200 HIGH STREET MOUNT HOLLY, N.J.
2 MARKET STREET PATERSON, N.J.

Richard A. Alaimo
APPROVED: DATE: 6-7-22

Richard A. Alaimo - P.E.
N.J. PROFESSIONAL ENGINEER
LICENSE NO. 13195
RAA PROJECT NO. B01450077001

Revisions		
NO.	DATE	BY

County of Middlesex
Department of Transportation
Office of Engineering
75 Bayard St., New Brunswick, NJ 08901

IMPROVEMENTS TO THE INTERSECTION OF
OAK TREE ROAD (C. R. 604), PLYMOUTH DRIVE AND MAGNOLIA ROAD
TOWNSHIP OF WOODBRIDGE MIDDLESEX COUNTY, NEW JERSEY

SOIL EROSION AND SEDIMENT CONTROL PLANS

Designed By: AS/JUD
Checked By: SM

Drawn By: AS/JUD
Dept. Head: ES

Scale: 1" = 30'
Sheet No. 37 of 37
Date: MAY 2022

Ronald M. Sender
County Engineer
N.J. P.E. No. 24A02012200

Printed: 6/14/2022 11:09 AM Leaf saved: 12/14/2021 1:44 PM File Name: K:\Projects\B01450077001\Drawings\EUC-SIT-56-37-SECS PLANS.dwg