

Toms River Township

PLANS OF

ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES

TOWNSHIP OF TOMS RIVER

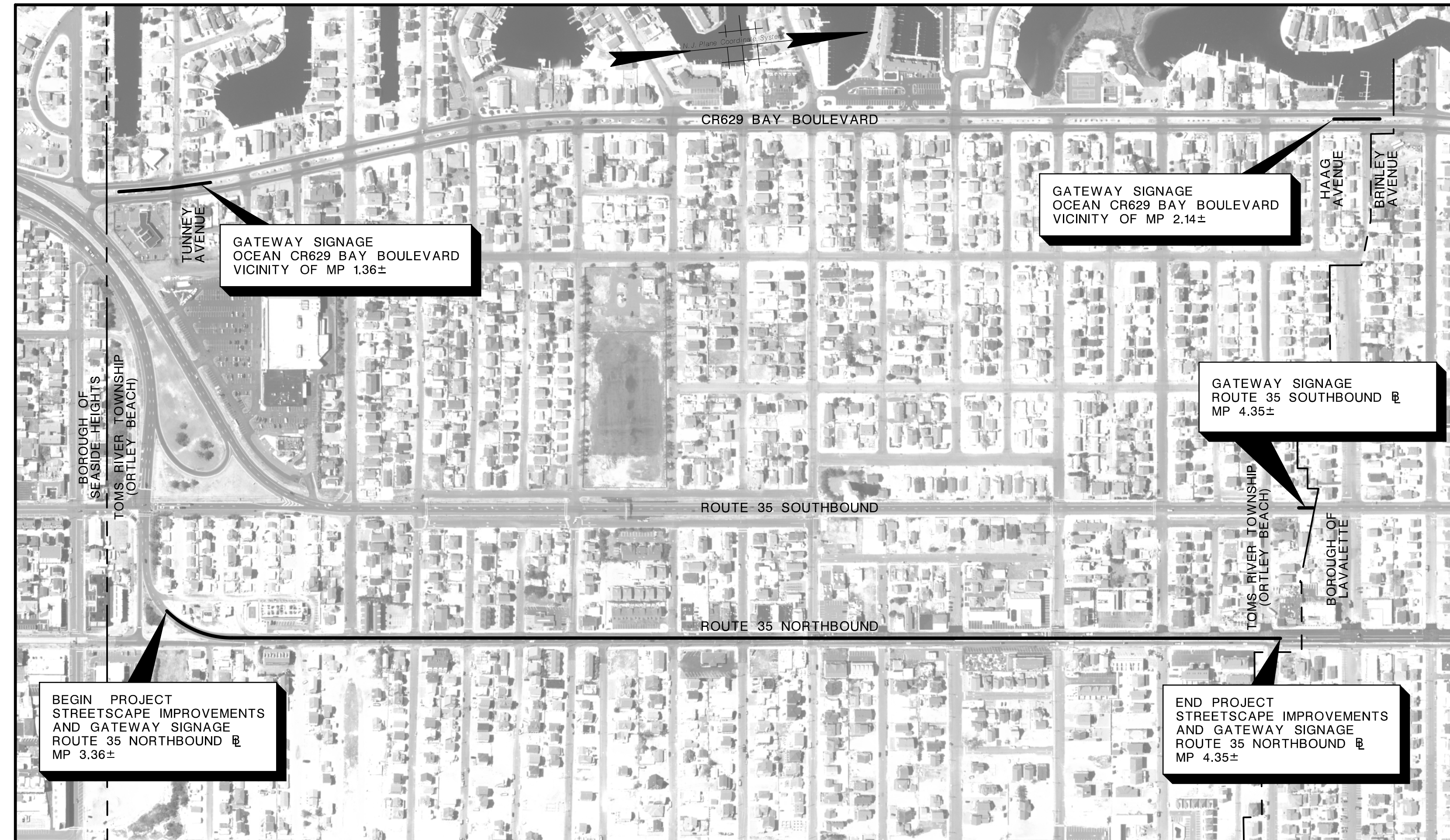
OCEAN COUNTY

SCALES AS INDICATED

JULY 2023

UTILITIES	
CABLE	CABLEVISION
ELECTRIC	JERSEY CENTRAL POWER AND LIGHT (JCP&L)
GAS	NEW JERSEY NATURAL GAS
SANITARY SEWER	TOMS RIVER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY
	OCEAN COUNTY UTILITIES AUTHORITY
TELEPHONE	VERIZON NEW JERSEY, INC.
WATER	NEW JERSEY AMERICAN WATER

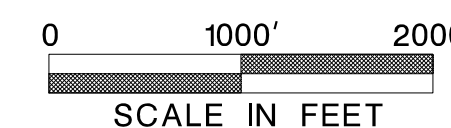
INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
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2	ESTIMATE - DISTRIBUTION OF QUANTITIES
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4	CONSTRUCTION LEGEND
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STANDARD ROADWAY CONSTRUCTION - TRAFFIC CONTROL - BRIDGE CONSTRUCTION DETAILS BOOKLET 2016, STANDARD ELECTRICAL DETAILS BOOKLET, 2007, AND ALL SUBSEQUENT BDC UPDATES, EXCEPT FOR THOSE CONTAINED HEREIN, SHALL GOVERN.

MID-POINT OF PROJECT
 LATITUDE: 40° 30' 49.67" N
 LONGITUDE: 74° 48' 01.91" W

KEY MAP

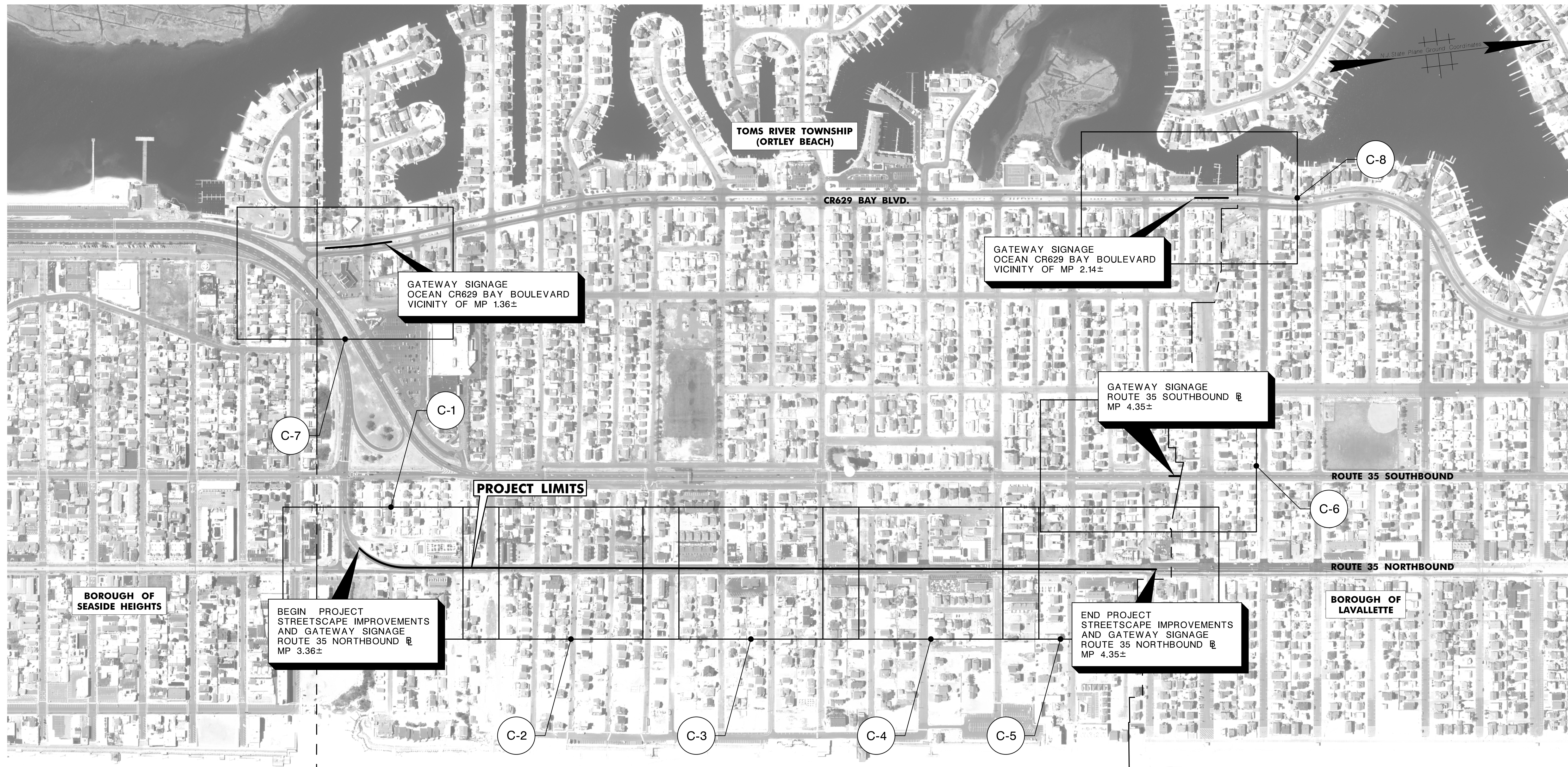


"CHANGES MADE TO THESE PLANS SINCE SIGNATURE BY THE CONSULTANT MAY BE DETERMINED BY COMPARISON OF THE PLANS FILED AT THE DEPARTMENT WITH THOSE FILED AT THE OFFICE OF THE CONSULTANT"

NV5, INC.

DREW F. MARKIEWICZ
 NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300

TOTAL LENGTH OF THE PROJECT = 5,227 LIN. FT. OR 0.99 MILES
TOTAL LENGTH OF FEDERAL PROJECT NO. XXXXXXXX = 5,227 LIN. FT. OR 0.99 MILES
2019 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE SUBSEQUENT BDC UPDATES, AND ALL AMENDMENTS INCLUDED HEREIN SHALL GOVERN



PSI-1
PSI-1

TOMS RIVER TOWNSHIP

PLAN SHEET INDEX

ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES

NVS, INC.
 CERTIFICATE OF AUTHORIZATION NO. 24GA27930500
 DREW F. MARKEWICZ
 NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300

REVISION	BY	C'K'D	DATE

PLOT BY: Opeku
 DATE: 7/24/2023
 FILE NAME: F:\project\6829-00002501 - Ortley Beach TAP Technical\01-CADD\Plan Sheet Index\PSI-1.dgn

STANDARD LEGEND

Linear Features

Existing	PROPOSED	Description
W	W	Water Main (Size)
G	G	Gas Main (Size)
T	T	Telephone Conduit
E	E	Electric Conduit (Highway or Utility)
CTV	CTV	Cable TV
FO	FO	Fiber Optic
ITS	ITS	Intelligent Transportation System (Wires & Cables)
(Size & Type)	(SIZE & TYPE)	Sanitary Sewers or Storm Drains
		Pavements (Concrete or Bituminous)
		Shoulders
		Curbs
		Slopes (Cut & Fill)
		Base Line
		Twsp., City, County Lines
		Right of Way Lines (Access Permitted)
		Right of Way Lines (No Access)
		Easements
		Property Line
		Fence (Size & Type)
		Reset Fence
		Beam Guide Rail
		Reset Beam Guide Rail
		Noise Walls
		Wetland Limit Line
		Silt Fence
		Ditches
		Railroad Tracks
		Tree Line

Topographical Features

Existing	PROPOSED	Description
		Inlets (Label Type)
		Inlets (Type ES)
		Manholes (Label Type or Utility)
		Reset (Inlets or Manholes)
		Reconstructed (Inlets or Manholes)
		Cast Iron Extension (Inlet or Manhole)
		New Manhole Casting, Square Frame, Circular Cover
		R.C. End Section or C.M. Headwall
		Headwalls
		Headwalls & Aprons
		Water Gate Valves
		Reset Water Gate Valves
		Gas Gate Valves
		Reset Gas Gate Valves
		Hydrants
		Reset Hydrants
		Utility Pole (Type & Number)
		Temporary Utility Pole
		Traffic Signal
		Junction Box
		Fiber Optic Junction Box
		Junction Box Foundation
		Signs
		Vertical Panels
		Camera (With Blind Spot)
		Dynamic Message Sign (DMS)

Topographical Features

Existing	PROPOSED	Description
		Guide Rail End Terminals
		Beam Guide Rail Anchorages
		Monuments
		ROW Monument (ROW Control)
		TEST PIT NUMBER
		Test Pit
		BORING NUMBER
		Borings (Boring Number)
		Deciduous Tree (Size, Kind)
		Evergreens
		Bush
		Hedges
		Swamp

Double Reference Codes

EDQR	ESTIMATE AND DISTRIBUTION OF QUANTITIES - ROADWAY
TS	TYPICAL SECTIONS
PSI	PLAN SHEET INDEX
C	CONSTRUCTION PLANS
EP	ENVIRONMENTAL PLANS & SOIL EROSION & SEDIMENT CONTROL PLANS
D	DRAINAGE PLANS
DTL	CONSTRUCTION DETAILS
P	PROFILES
T	TIES
G	GRADES
TC	TRAFFIC CONTROL AND STAGING PLANS
TSP	TRAFFIC SIGNAL PLANS
E	ELECTRICAL PLANS
HL	HIGHWAY LIGHTING PLANS
ITS	INTELLIGENT TRANSPORTATION SYSTEM PLANS
SL	SIGN LOCATION PLANS
TSS	TRAFFIC SIGNING AND STRIPING PLANS
STD	SIGN TEXT DETAILS
L	LANDSCAPE PLANS
LD	LANDSCAPE DETAILS
MS	METHOD OF CROSS SECTIONS
X	CROSS SECTIONS
EQB	ESTIMATE OF QUANTITIES - BRIDGE
B	BRIDGE PLANS

Miscellaneous Symbols

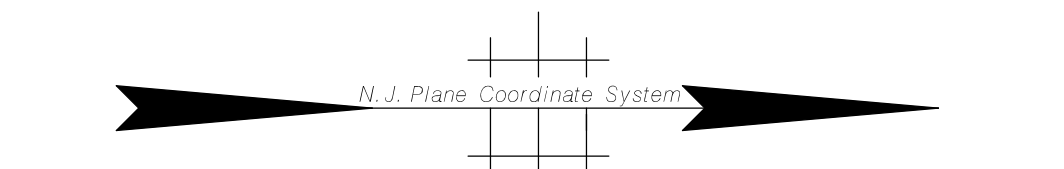
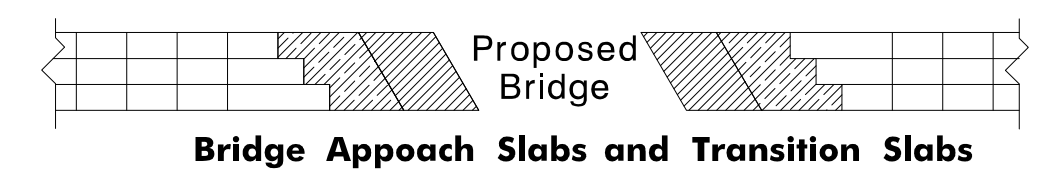
○	Items With No Alternate
□ OR □	Alternate Items
■	For Alternate Pipe Items (C) = Concrete (M) = Metal
■	Milling
ELECTRICAL PLAN GRAPHICAL LEGEND:	
9E-10-3	9E - LOAD CENTER DESIGNATION
10	10 - LAMP NUMBER
3	3 - CIRCUIT NUMBER
9E-10D-7	9E - LOAD CENTER DESIGNATION
10D	10D - DUPLEX OUTLET NUMBER
7	7 - CIRCUIT NUMBER
○	EXISTING UTILITY POLE (FOR ELECTRICAL CONNECTION)
⊠	METER CABINET
⊠	JUNCTION BOX
---	PROPOSED CONDUIT
PROFILE LEVEL LINE	B.M. Bench Mark
↕	High Point
↕	Low Point
+	GATEWAY SIGNAGE
+	PEDESTRIAN LIGHT WITH BANNER IN SIDEWALK
+	PEDESTRIAN LIGHT WITH BANNER AND PLANTINGS
+	EXISTING ROADWAY LIGHT MOUNTED TO EXIST. UP
+	EXISTING FLOOD LIGHT MOUNTED TO EXIST. UP
+	EXISTING MONGOOSE LIGHT MOUNTED TO TRAFFIC SIGNAL POLE
+	BENCH
+	WASTE AND RECYCLING CONTAINERS
+	BIKE RACKS
+	NEWSPAPER RACK
+	LANDSCAPE AREA

ABBREVIATIONS USED IN THIS CONTRACT

AH., BK.	AHEAD, BACK	J.B.	JUNCTION BOX	RCP, R.C.P.	REINFORCED CONCRETE PIPE
B.L.	BASELINE	LT., RT.	LEFT, RIGHT	RMC, R.M.C.	RIGID METALLIC CONDUIT
B.M.	BENCH MARK	L.O.P.	LIMIT OF PAVEMENT (PAVING)	RNMC, R.N.M.C.	RIGID NON-METALLIC CONDUIT
B.T.	BELL TELEPHONE	L.O.M.	LIMIT OF MILLING	ROW, R.O.W.	RIGHT OF WAY
BIT., BITUM.	BITUMINOUS	M.B.	MAILBOX	R.R.	RAILROAD
BLDG.	BUILDING	M.P.	MILE POST	RTE., RT.	ROUTE
C.L.	CENTERLINE	MAX.	MAXIMUM	SAN.	SANITARY
C.I.P.	CAST IRON PIPE	MIN.	MINIMUM	SDWK.	SIDEWALK
C.M.P.	CORRUGATED METAL PIPE	NO.	NUMBER	S.H.D.	STATE HIGHWAY DEPARTMENT
CONC.	CONCRETE	N.T.S.	NOT TO SCALE	SHLD.	SHOULDER
CULV.	CULVERT	PAV.T.	PAVEMENT	S.L.	SURVEY LINE
D, DIA.	DIAMETER	PERF.	PERFORATED	S.O.D.	SUBBASE OUTLET DRAIN
D.C.	DROP CURB	P.G.L.	PROFILE GRADE LINE	STY.	STORY
DE	DITCH EXCAVATION	P.L.	PROPERTY LINE, PROFILE LINE	T	TANGENT
DEP., DP	DEPRESSED CURB	PK	PARKER KAYLON MASONRY NAIL	TBA	TO BE ABANDONED
DH	DRILL HOLE	POC, P.O.C.	POINT ON CURVE	TBR	TO BE REMOVED
DWY	DRIVEWAY	POL, P.O.L.	POINT ON LINE	TEL.	TELEPHONE
E.B., W.B., N.B., S.B.	EASTBOUND, WESTBOUND	POT, P.O.T.	POINT ON TANGENT	TEMP.	TEMPORARY
		PRC, P.R.C.	POINT OF REVERSE CURVE	THK., TH.	THICK
		PROP.	PROPOSED	TYP.	TYPICAL
		PT, P.T.	POINT OF TANGENCY	U.D.	UNDERDRAIN
		PVC, P.V.C.	POLYVINYL CHLORIDE PIPE,	UP, U.P.	UTILITY POLE
			POINT OF VERTICAL CURVATURE	VAR.	VARIABLE, VARIES
		PVI, P.V.I.	POINT OF VERTICAL INTERSECTION	W.C.V.C.	WHITE CONCRETE VERTICAL CURB
		PVT, P.V.T.	POINT OF VERTICAL TANGENCY, PAVEMENT	WM	WATER METER
		R	RADIUS	X-SECT	CROSS SECTION
		RCCP, R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE		

ELECTRICAL PLAN ABBREVIATIONS

CF	CUTOFF LUMINAIRE, TYPE
E	EXPRESSWAY LUMINAIRE
ID	IMAGE DETECTOR
IDC	IMAGE DETECTOR CABLE
JBF	JUNCTION BOX FOUNDATION
L	LUMINAIRE
LMA-A	LIGHTING MAST ARM, ALUMINUM
LMA-S	LIGHTING MAST ARM, STEEL
LSA	LIGHTING STANDARD, ALUMINUM
LSF	LIGHTING STANDARD, FIBERGLASS
LSS	LIGHTING STANDARD, STEEL
MAS	MAST ARM SIGN
MSC II	MEDIUM SEMI-CUTOFF LUMINAIRE, TYPE 2
MSC III	MEDIUM SEMI-CUTOFF LUMINAIRE, TYPE 3
PB	PUSH BUTTON
PSH	PEDESTRIAN SIGNAL HEAD
PSS	PEDESTRIAN SIGNAL STANDARD
TSH	TRAFFIC SIGNAL HEAD
T SMA-A	TRAFFIC SIGNAL MAST ARM, ALUMINUM
T SMA-S	TRAFFIC SIGNAL MAST ARM, STEEL
TSS-C	TRAFFIC SIGNAL STANDARD, ALUMINUM "C"
TSS-K	TRAFFIC SIGNAL STANDARD, ALUMINUM "K"
TSS-S	TRAFFIC SIGNAL STANDARD, STEEL
TSS-SC	TRAFFIC SIGNAL STANDARD, STEEL COMBINATION
TSS-T	TRAFFIC SIGNAL STANDARD, ALUMINUM "T"
UL-P	UNDERDECK LIGHTING, TYPE "P"
UL-W	UNDERDECK LIGHTING, TYPE "W"
V	VERTICAL LUMINAIRE



North Arrow To Be Used On Standard Construction Sheets Where Bearings Refer To N. J. Plane Coordinate System

N.T.S.

TOMS RIVER TOWNSHIP

CONSTRUCTION LEGEND

ORTLEY BEACH STREETSCAPE AND GATEWAY TRANSPORTATION ALTERNATIVES

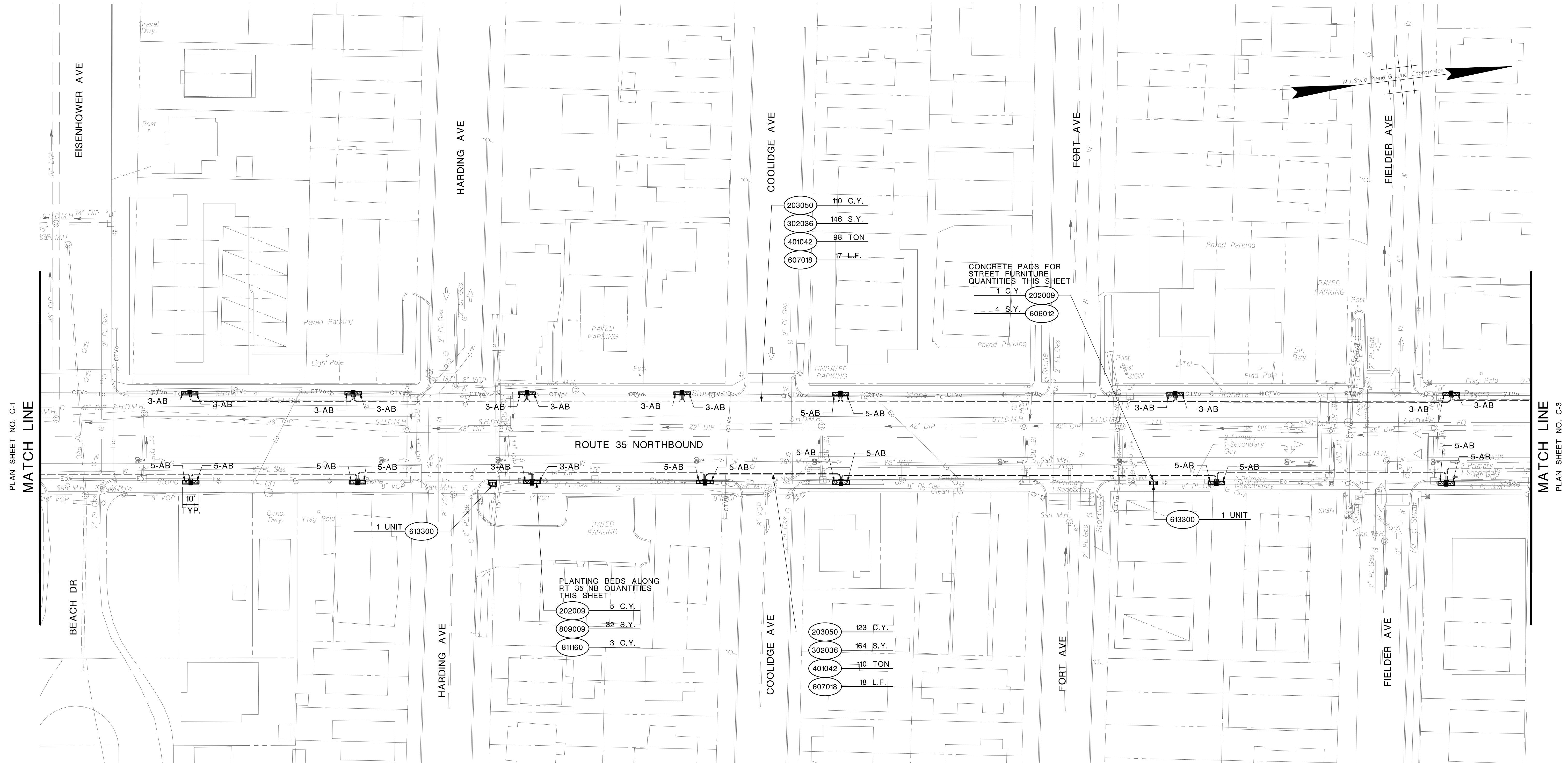
NVS, INC.
CERTIFICATE OF AUTHORIZATION NO. 24GA27930500

DREW F. MARKEWICZ
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300

REVISION	BY	C'K'D	DATE

TOWNSHIP OF TOMS RIVER

COUNTY OF OCEAN



PLAN SHEET NO. C-1
MATCH LINE

MATCH LINE
PLAN SHEET NO. C-3

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
202009P	EXCAVATION, UNCLASSIFIED	6 C.Y.
203050M	CONTROLLED LOW STRENGTH MATERIAL	233 C.Y.
302036P	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	310 S.Y.
401042M	HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE	208 TON
606012P	CONCRETE SIDEWALK, 4" THICK	4 S.Y.
607018P	9" X 16" CONCRETE VERTICAL CURB	35 L.F.
613300M	WASTE AND RECYCLING CONTAINERS	2 UNIT
809009M	STONE MULCHING	32 S.Y.
811160P	TOPSOIL	3 C.Y.

TO BE PLANTED						
ITEM NO.	DESCRIPTION	SYMBOL	PLANT NAME	SPACING	CONTRACT QUANTITY	AS-BUILT QUANTITY
811120M	PERENNIAL, 2" PLUG	AB	AMMOPHILA BREVIULGULATA	12" O.C.	112	

NOTES:
 1. PAYMENT FOR REMOVAL OF CURB AND SIDEWALK FOR INSTALLATION OF LIGHTING FOUNDATION TO BE MADE UNDER "CLEARING SITE".
 2. PRIOR TO CONSTRUCTION, EXISTING BENCHES, STREET FURNITURE, TRASH RECEPTACLES, AND OTHER INCIDENTAL AMENITIES THAT ENCROACH WITHIN NJDOT RIGHT-OF-WAY SHALL BE REMOVED BY OTHERS.

GENERAL NOTES:
 1. FOR PEDESTRIAN LIGHTING ITEMS AND QUANTITIES, REFERENCE ELECTRICAL PLANS.
 2. DIMENSIONS FOR LANDSCAPE AND SIGNAGE PLACEMENT ARE PROVIDED FOR GENERAL LOCATION. CONTRACTOR SHALL PROVIDE FIELD LAYOUT OF SIGN AND PLANTINGS FOR REVIEW AND APPROVAL BY THE RESIDENT ENGINEER PRIOR TO BEGINNING WORK.

REVISION	BY	C'K'D	DATE



TOMS RIVER TOWNSHIP

CONSTRUCTION PLANS

ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES

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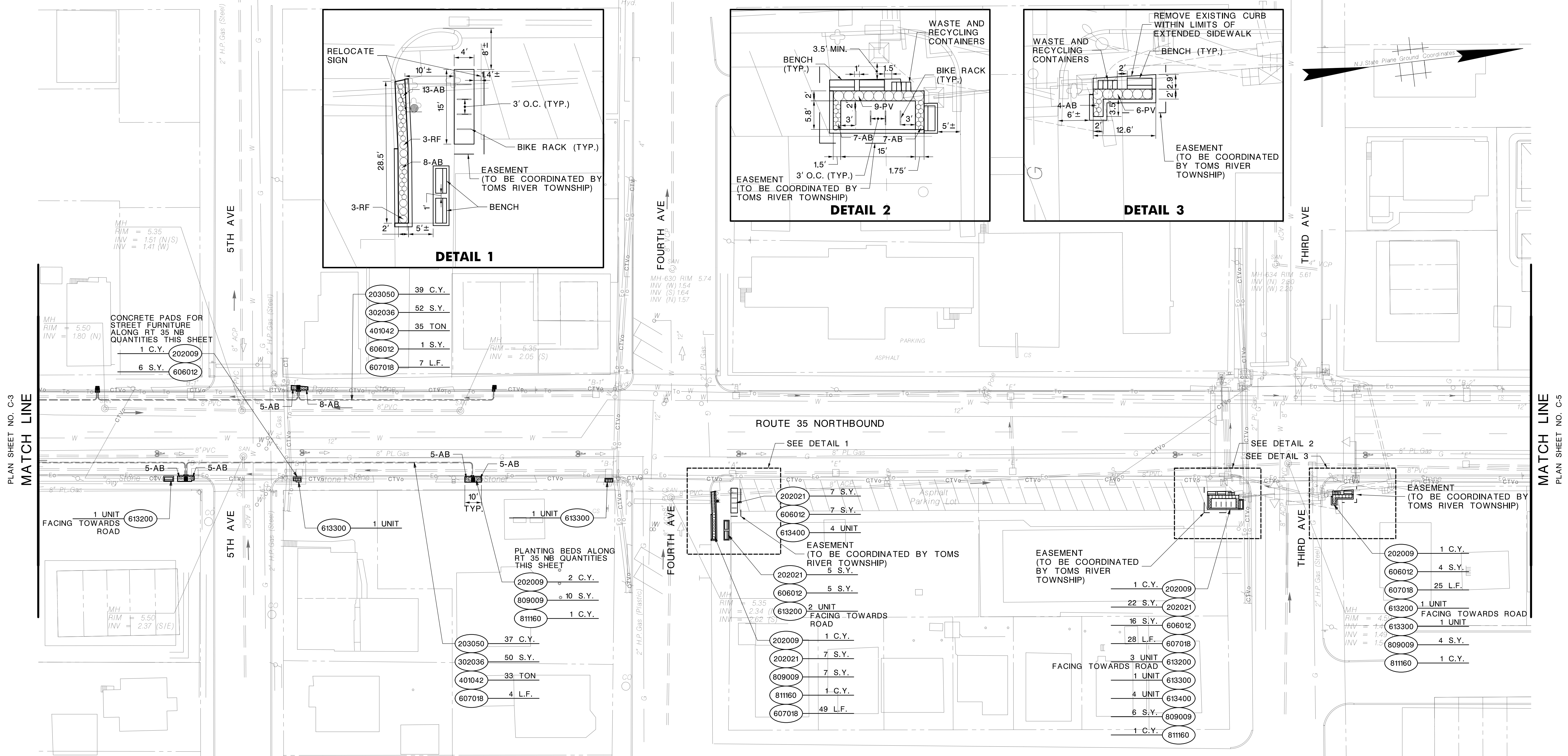
DREW: F. MARKEWICZ
 NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300

6
29

PLOT BY: Dpp8U
 DATE: 7/24/23
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TOWNSHIP OF TOMS RIVER

COUNTY OF OCEAN



ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
202009P	EXCAVATION, UNCLASSIFIED	6 C.Y.
202021P	REMOVAL OF PAVEMENT	41 S.Y.
203050M	CONTROLLED LOW STRENGTH MATERIAL	76 C.Y.
302036P	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	102 S.Y.
401042M	HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE	68 TON
606012P	CONCRETE SIDEWALK, 4" THICK	39 S.Y.
607018P	9" X 16" CONCRETE VERTICAL CURB	113 L.F.
613200M	BENCH	7 UNIT
613300M	WASTE AND RECYCLING CONTAINERS	4 UNIT
613400M	BIKE RACK	8 UNIT
809009M	STONE MULCHING	27 S.Y.
81160P	TOPSOIL	4 C.Y.

ITEM NO.	DESCRIPTION	SYMBOL	PLANT NAME	SPACING	CONTRACT QUANTITY	AS-BUILT QUANTITY
811120M	PERENNIAL, 2" PLUG	AB	AMMOPHILA BREVIULIGULATA	12" O.C.	72	
811111M	PERENNIAL, #1 CONTAINER	RF	RUDBECKIA FULGIDA VAR. SULLIVANTII 'LITTLE GOLDSTAR'	1.5' O.C.	6	
811111M	PERENNIAL, #1 CONTAINER	PV	PANICUM VIRGATUM	2' O.C.	15	

NOTES:
 1. PAYMENT FOR REMOVAL OF CURB AND SIDEWALK FOR INSTALLATION OF LIGHTING FOUNDATION TO BE MADE UNDER "CLEARING SITE".
 2. PRIOR TO CONSTRUCTION, EXISTING BENCHES, STREET FURNITURE, TRASH RECEPTACLES, AND OTHER INCIDENTAL AMENITIES THAT ENCR OACH WITHIN NJDOT RIGHT-OF-WAY SHALL BE REMOVED BY OTHERS.

GENERAL NOTES:
 1. FOR PEDESTRIAN LIGHTING ITEMS AND QUANTITIES, REFERENCE ELECTRICAL PLANS.
 2. DIMENSIONS FOR LANDSCAPE AND SIGNAGE PLACEMENT ARE PROVIDED FOR GENERAL LOCATION. CONTRACTOR SHALL PROVIDE FIELD LAYOUT OF SIGN AND PLANTINGS FOR REVIEW AND APPROVAL BY THE RESIDENT ENGINEER PRIOR TO BEGINNING WORK.

REVISION	BY	C'K'D	DATE

TOMS RIVER TOWNSHIP

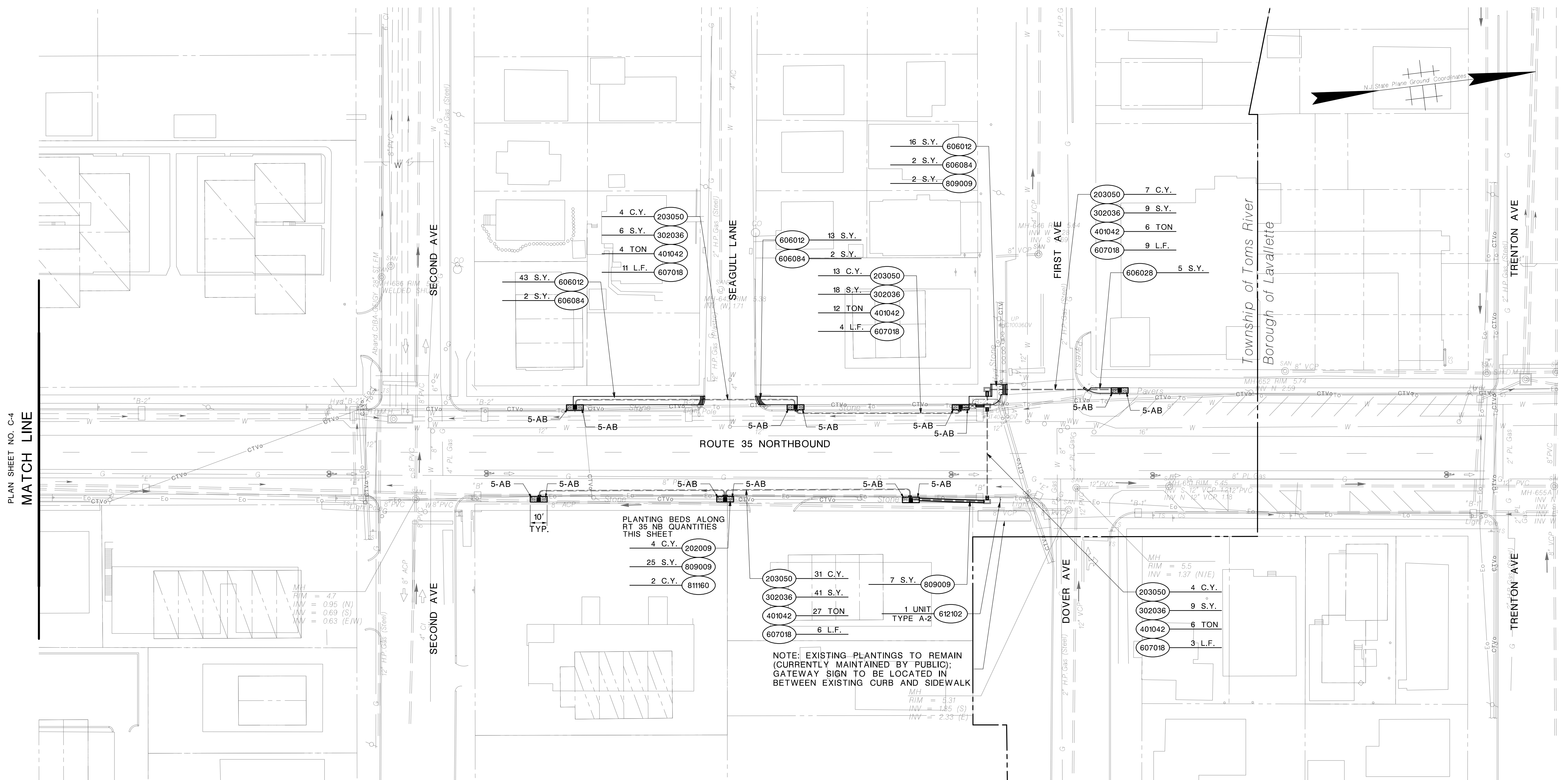
CONSTRUCTION PLANS

ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES

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PLOT BY: Dpp8u
 DATE: 7/24/23
 FILE NAME: F:\proj\2023\00002501 - Only Beach TAP\TAP\Construction\CA.dgn



PLAN SHEET NO. C-4
MATCH LINE

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
202009P	EXCAVATION, UNCLASSIFIED	4 C.Y.
203050M	CONTROLLED LOW STRENGTH MATERIAL	59 C.Y.
302036P	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	83 S.Y.
401042M	HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE	55 TON
606012P	CONCRETE SIDEWALK, 4" THICK	72 S.Y.
606028P	RESET PRECAST CONCRETE PAVERS	5 S.Y.
606084P	DETECTABLE WARNING SURFACE	6 S.Y.
607018P	9" X 16" CONCRETE VERTICAL CURB	33 L.F.
612102M	GATEWAY SIGN, TYPE A-2	1 UNIT
809009M	STONE MULCHING	34 S.Y.
811160P	TOPSOIL	2 C.Y.

ITEM NO.	DESCRIPTION	SYMBOL	PLANT NAME	SPACING	CONTRACT QUANTITY	AS-BUILT QUANTITY
811120M	PERENNIAL, 2" PLUG	AB	AMMOPHILA BREVIULGULATA	12" O.C.	70	

NOTE:
 1. PAYMENT FOR REMOVAL OF CURB AND SIDEWALK FOR INSTALLATION OF LIGHTING FOUNDATION TO BE MADE UNDER "CLEARING SITE".
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GENERAL NOTES:
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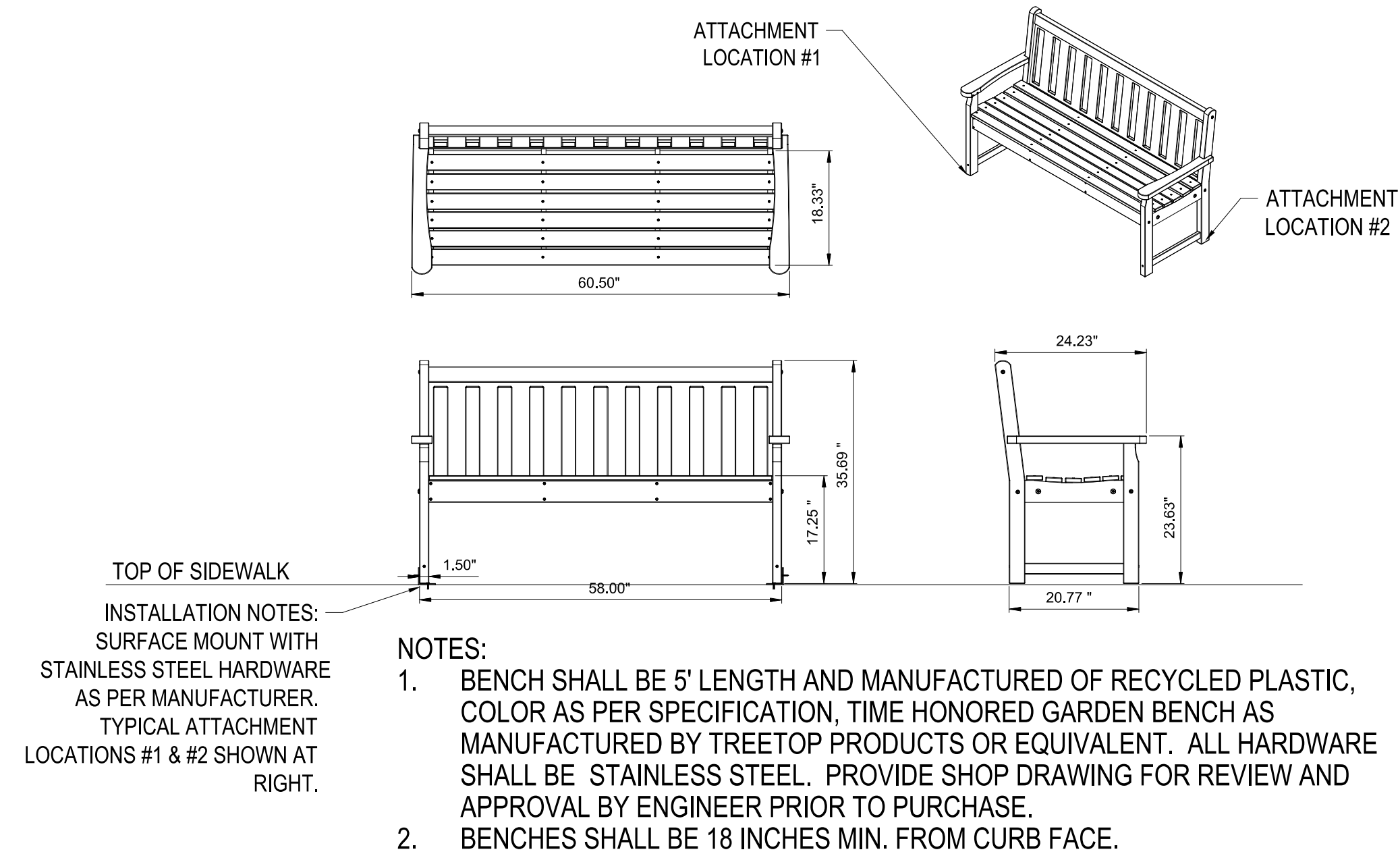
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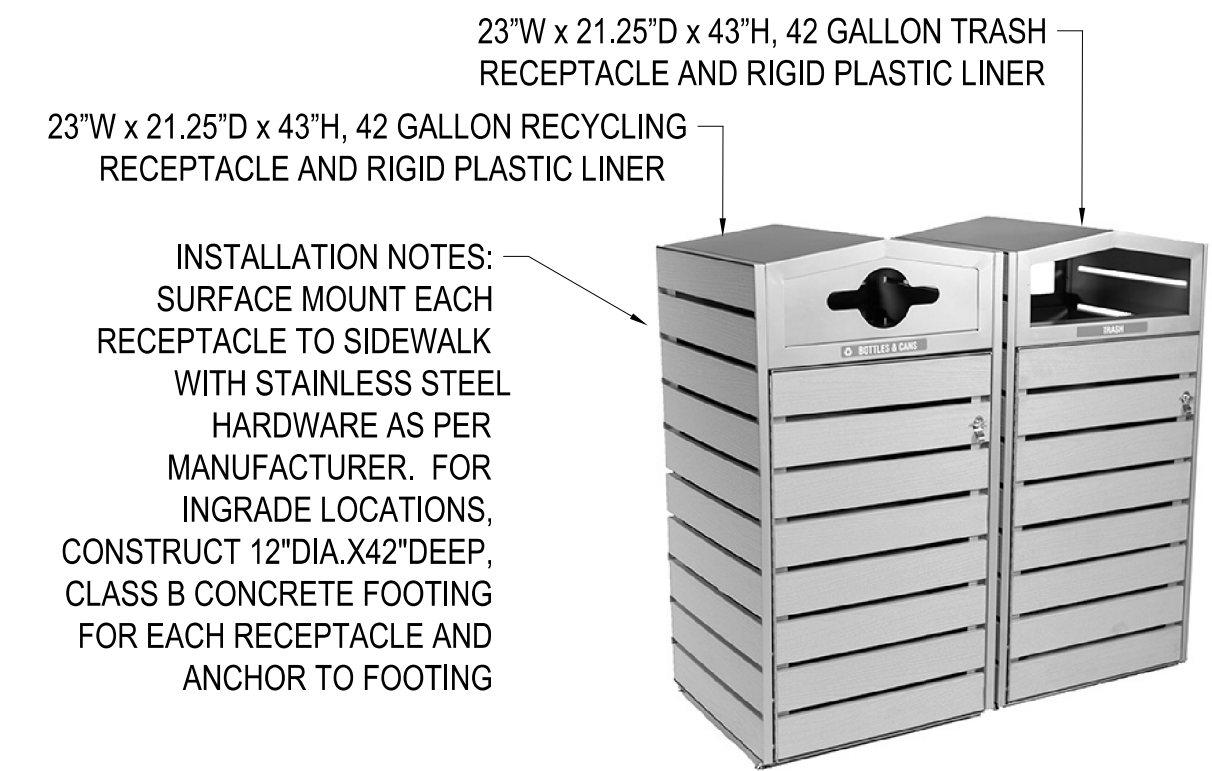
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PLOT BY: Dp8uU
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BENCH DETAIL

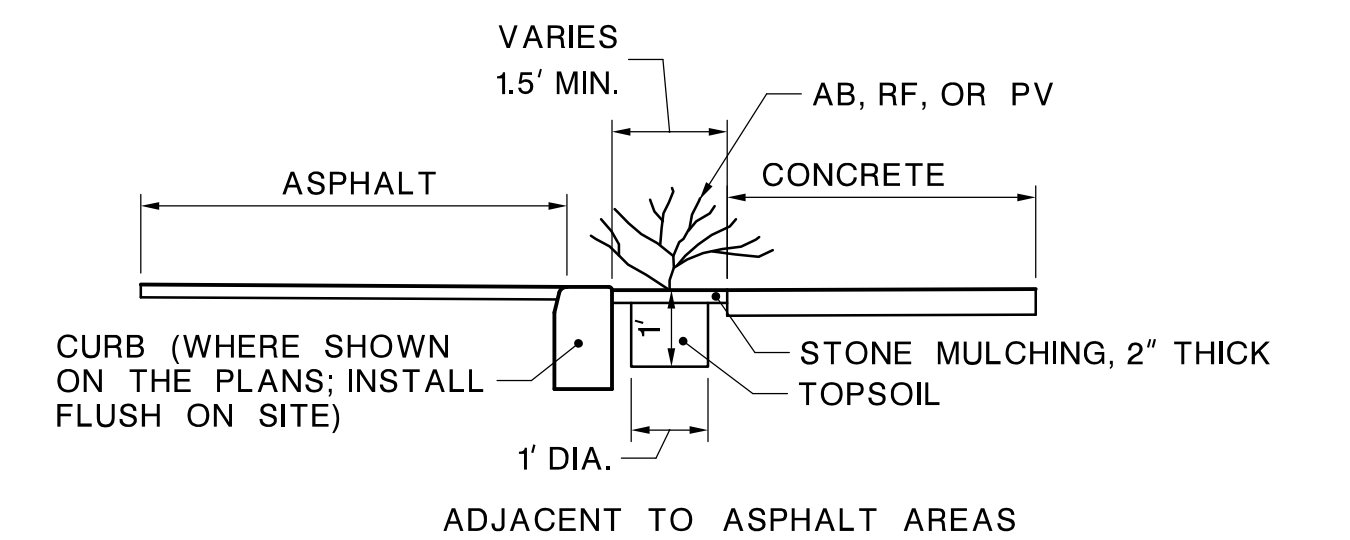
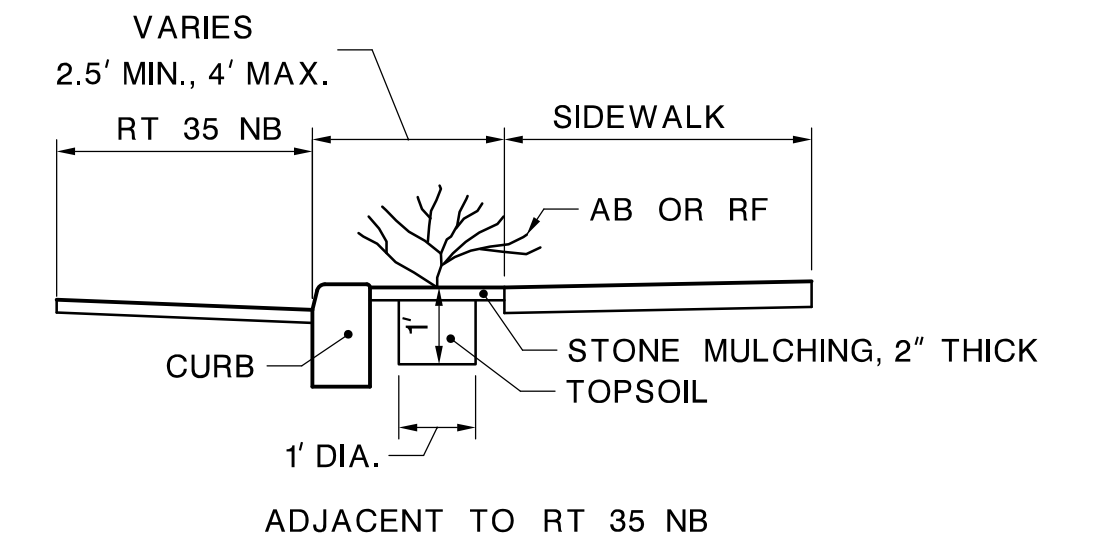
NTS



NOTES: WASTE/RECYCLING CONTAINERS COMBO WOODVIEW SERIES MODEL DC-736572 & DC-736672 MANUFACTURED OF RECYCLED PLASTIC AND STAINLESS STEEL AS MANUFACTURED BY BELSON OUTDOOR PRODUCTS OR EQUIVALENT. ALL HARDWARE SHALL BE STAINLESS STEEL. COLOR AS PER SPECIFICATIONS. PROVIDE SHOP DRAWING FOR REVIEW AND APPROVAL BY ENGINEER PRIOR TO PURCHASE.

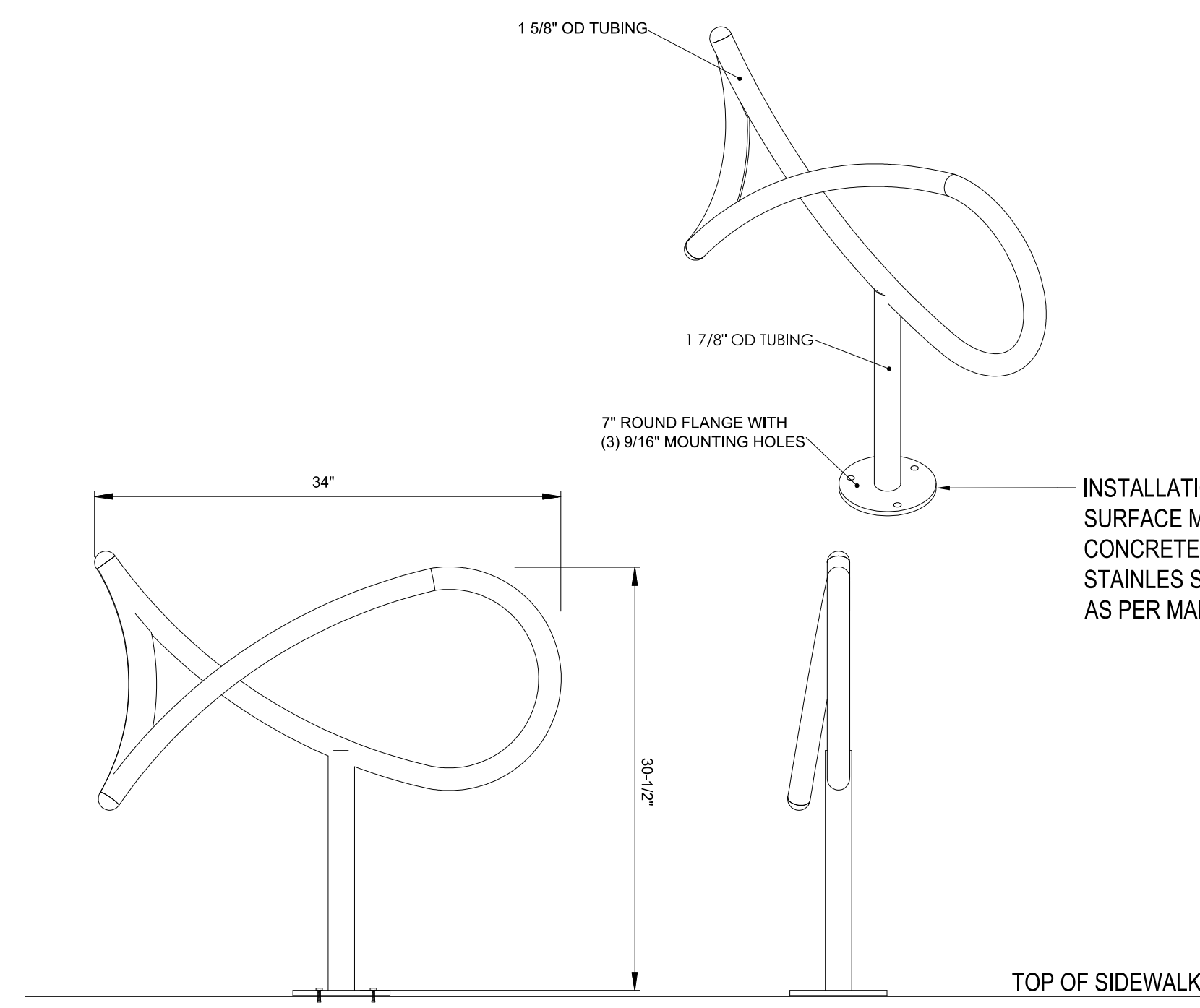
WASTE AND RECYCLING CONTAINERS DETAIL

NTS



PLANTING BED DETAILS

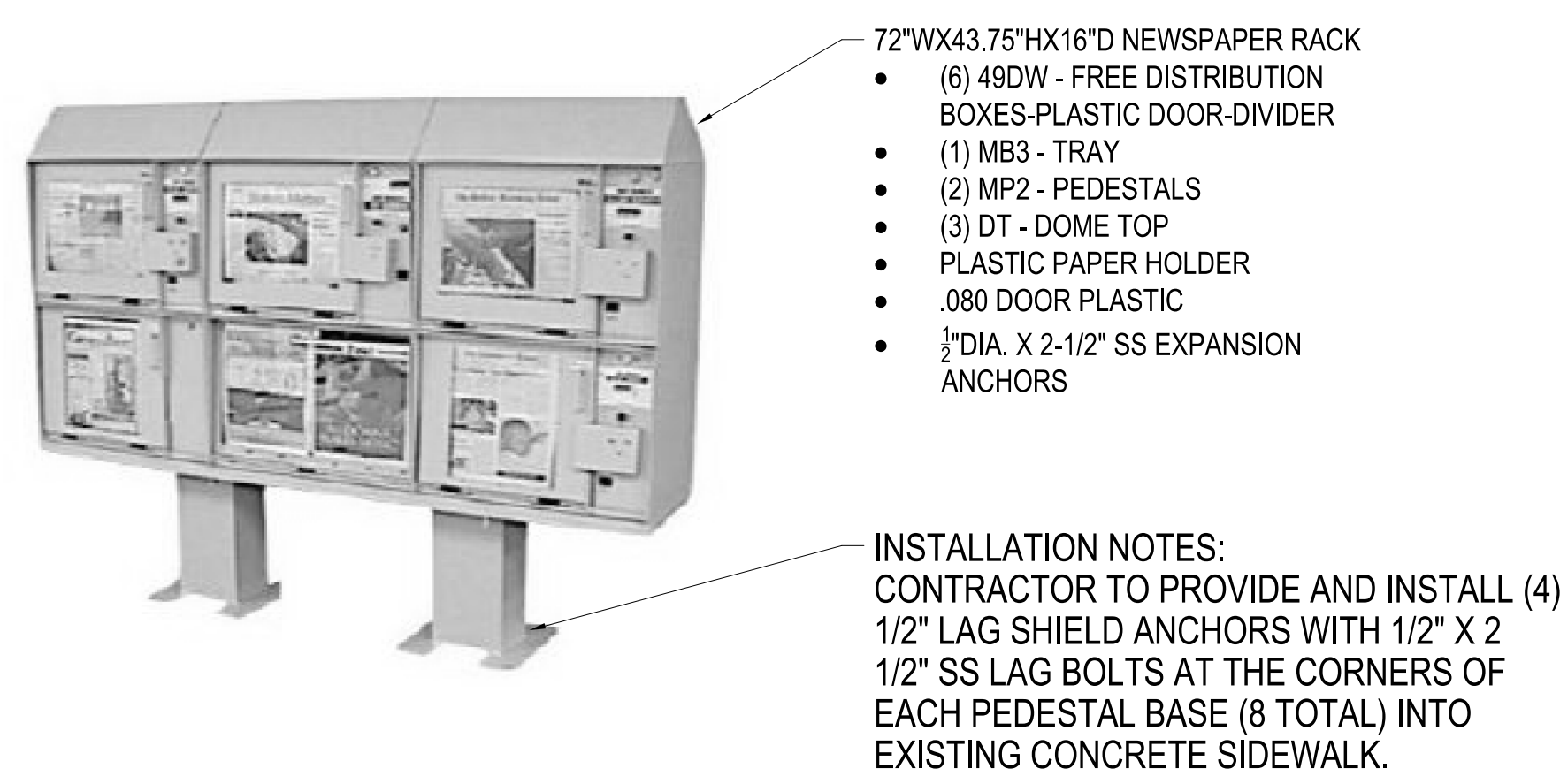
NTS



NOTES: BIKE RECEPTACLE SHALL BE THE MADRAX FISH RACK, MEDIUM SIZE (MODEL # THR-FISHMED), POWDERCOATED COLOR FINISH, COLOR AS PER SPECIFICATIONS, AS MANUFACTURED BY GRABER MANUFACTURING OR EQUIVALENT. ALL HARDWARE SHALL BE STAINLESS STEEL. PROVIDE SHOP DRAWING FOR REVIEW AND APPROVAL BY ENGINEER PRIOR TO PURCHASE.

BIKE RACK DETAIL

NTS



NOTES: NEWSPAPER RACK SHALL BE HAVANA BID NEWSPAPER RACK (MODEL # NPB-HBID-GMER) AS PROVIDED BY STREETSCAPES, INC. OR EQUIVALENT, POWDERCOATED COLOR FINISH, COLOR AS PER SPECIFICATIONS. ALL HARDWARE SHALL BE STAINLESS STEEL. PROVIDE SHOP DRAWING FOR REVIEW AND APPROVAL BY ENGINEER PRIOR TO PURCHASE.

NEWSPAPER RACK DETAIL

NTS

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TOMS RIVER TOWNSHIP

CONSTRUCTION DETAILS

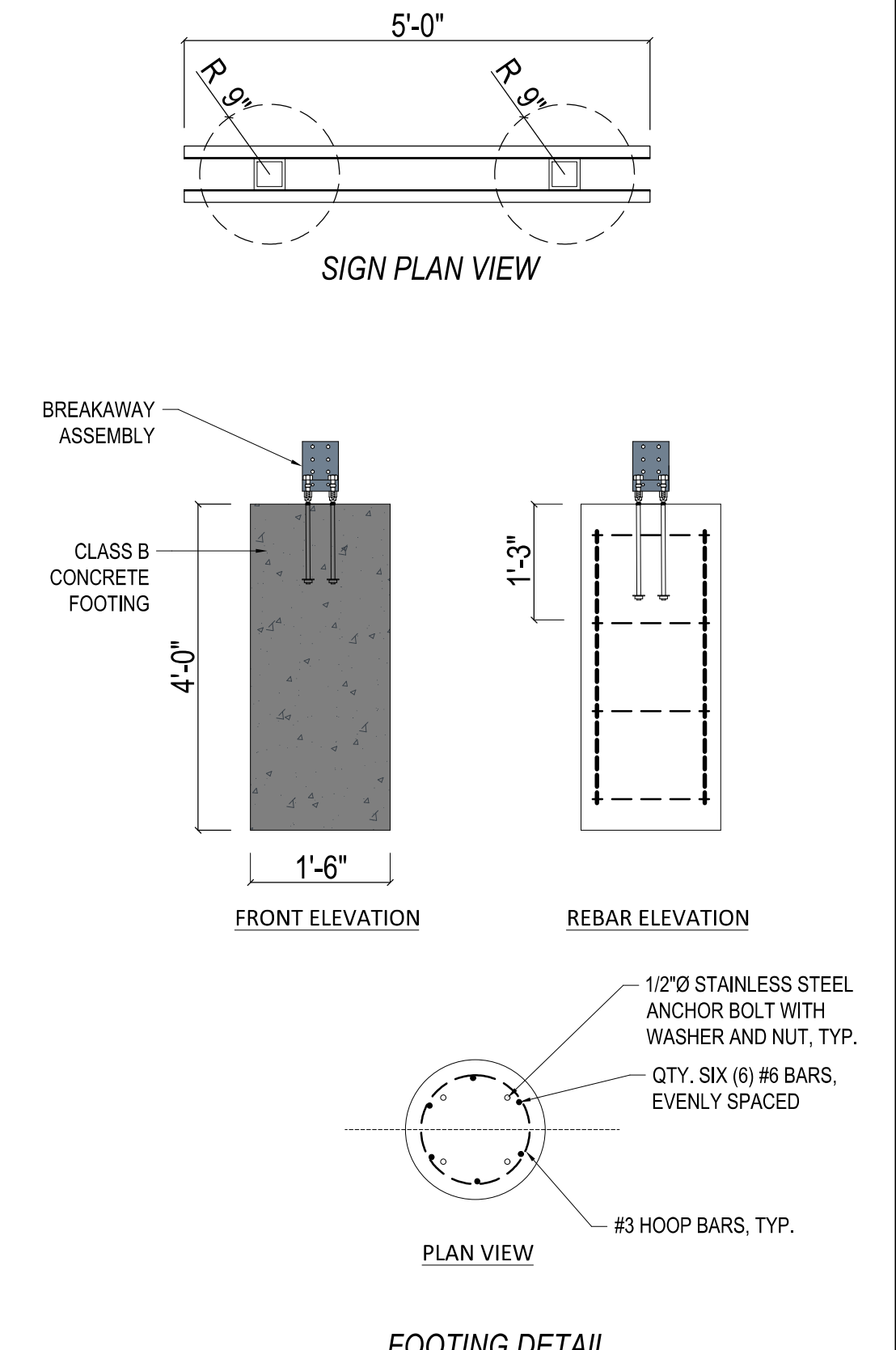
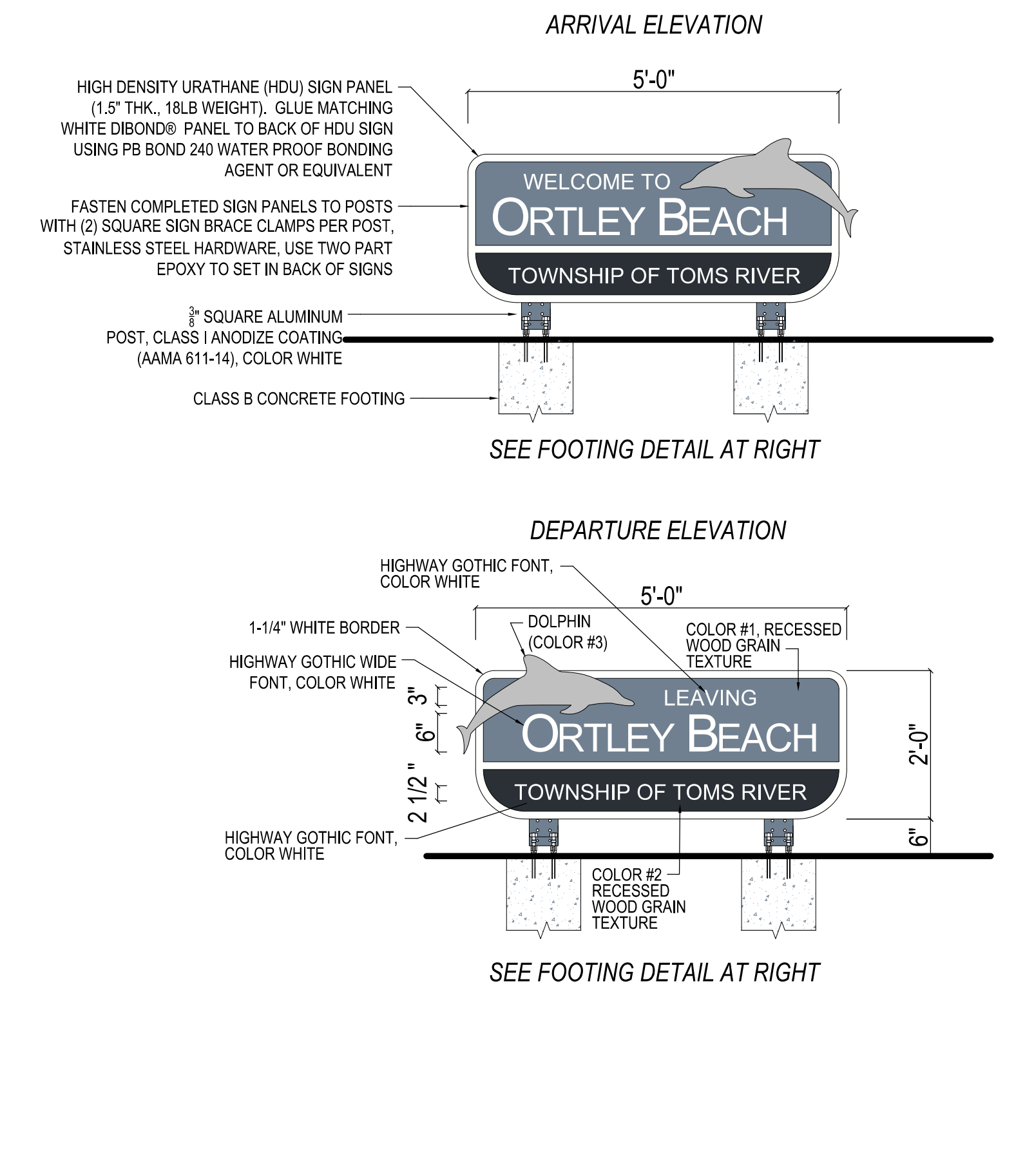
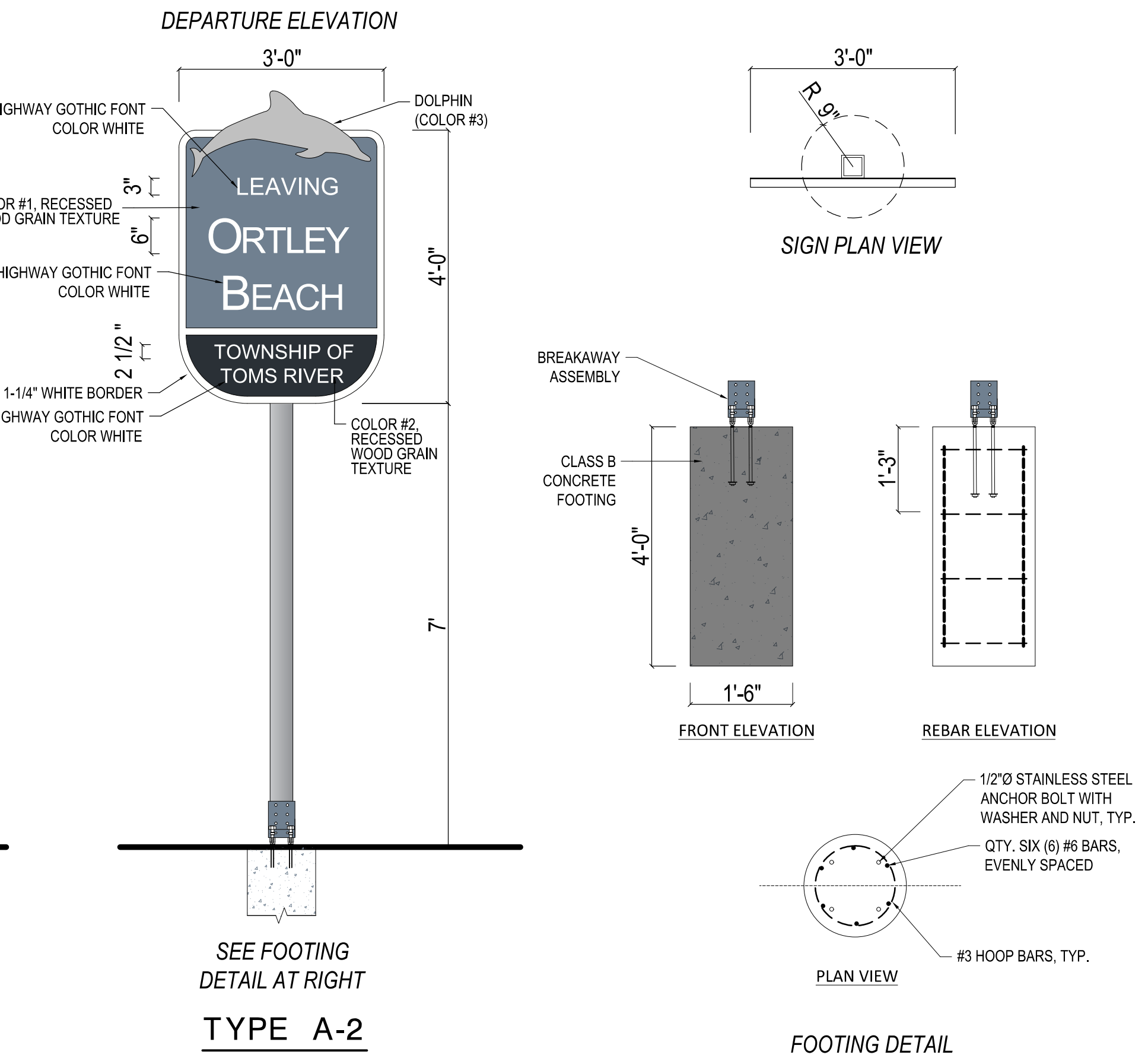
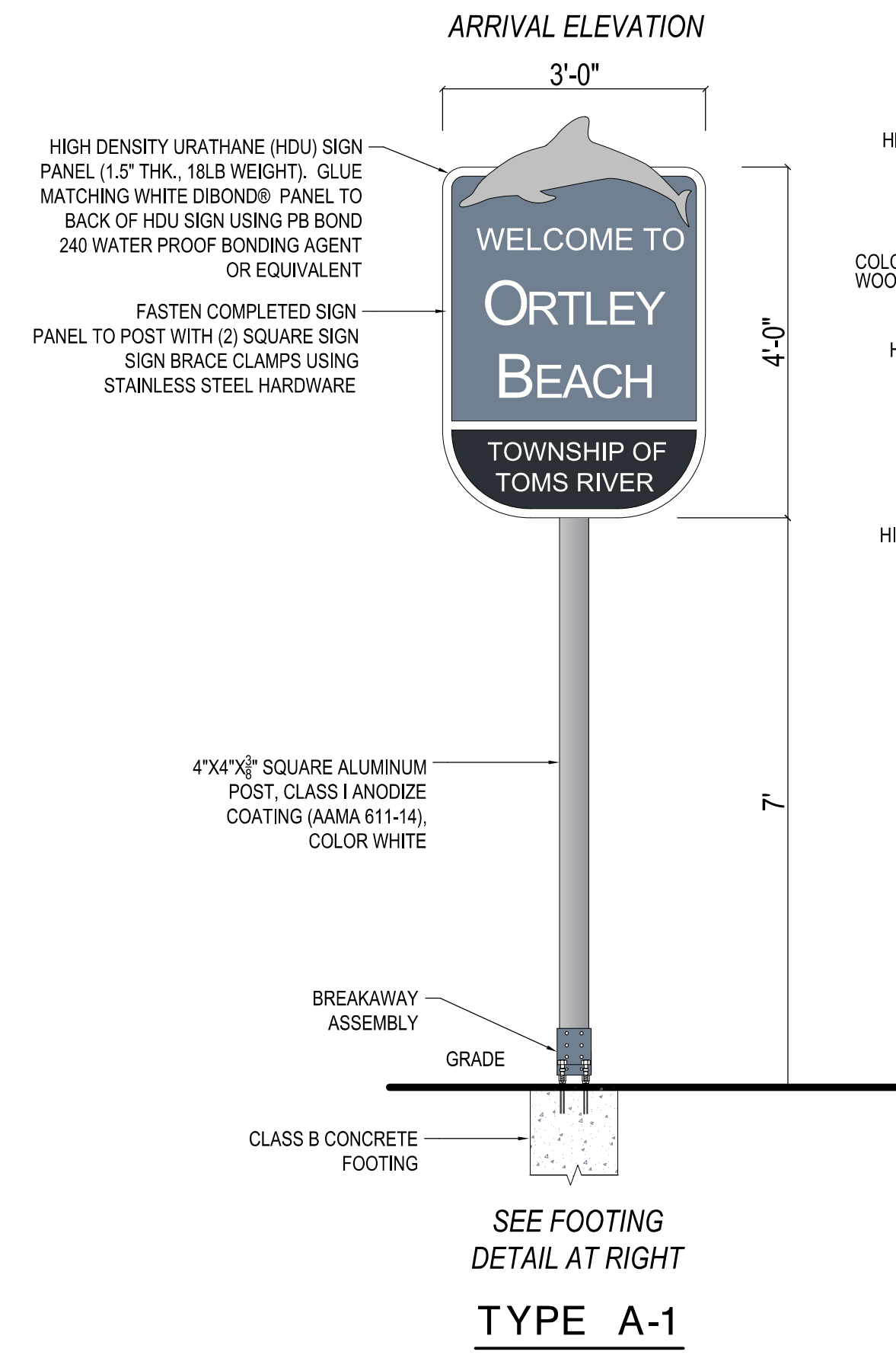
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CERTIFICATE OF AUTHORIZATION NO. 24GA27930500

DREW F. MARKEWICZ
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300

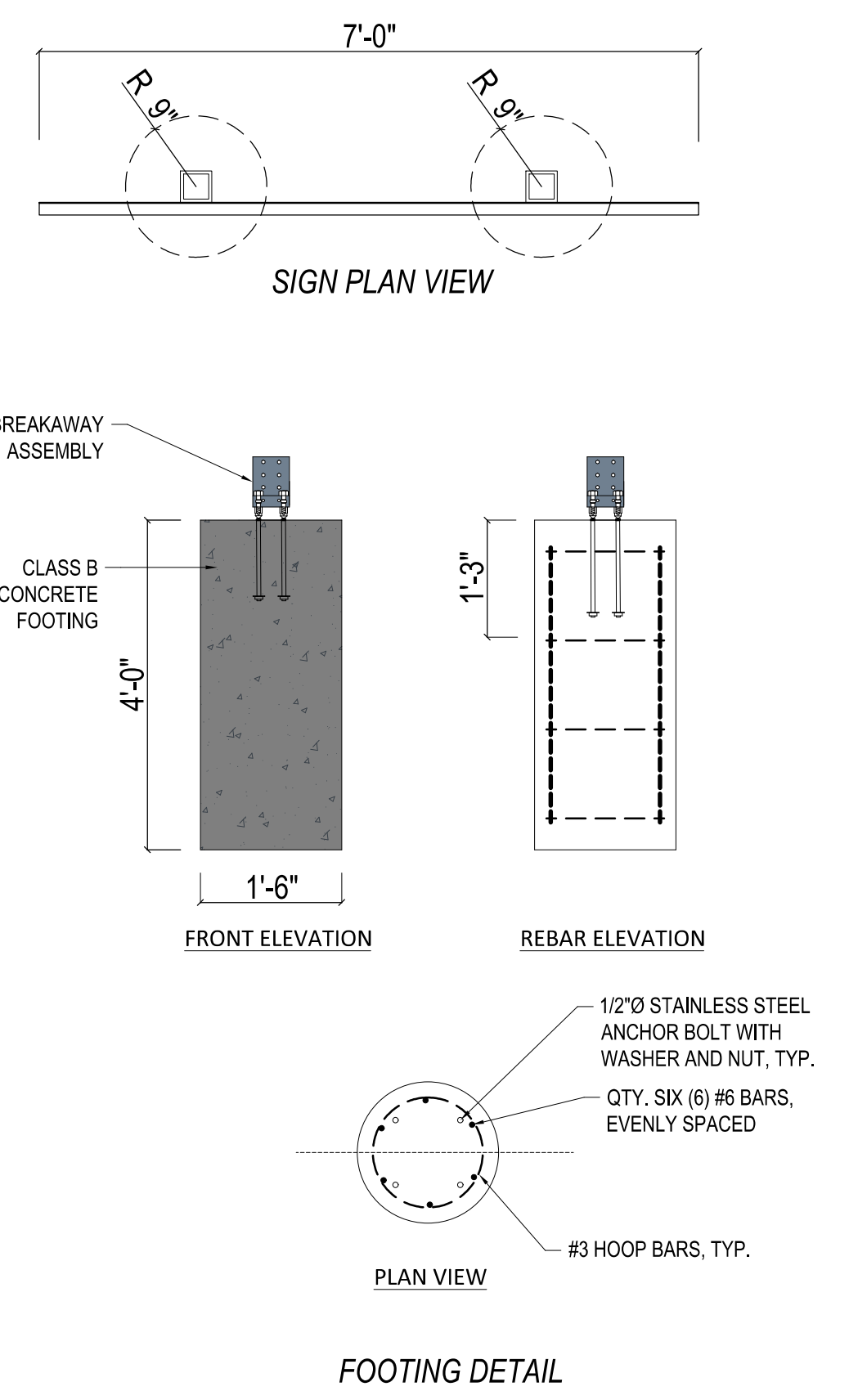
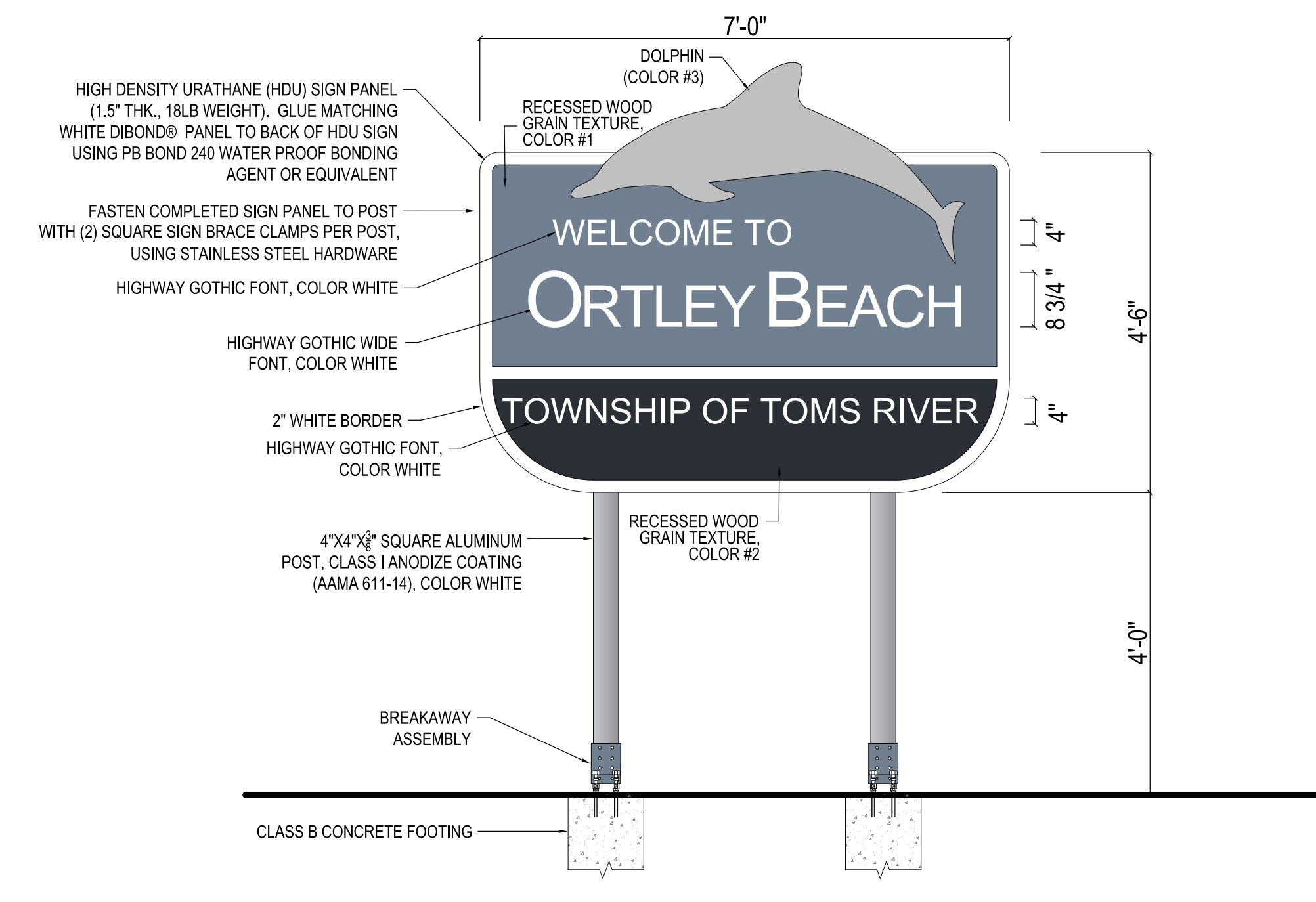
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 DATE: 7/24/23
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ORTLEY BEACH COMMUNITY WAYFINDING SIGN TYPE 'A'

NTS



NOTES:
SIGN PANELS TO HAVE (3) COLORS PLUS WHITE LETTERS AND BORDER.

COLOR #1 (DARK BLUE):
HEX#: 005C90
CMYK: 96, 65, 20, 4

COLOR #2 (MAROON):
HEX#: 840715
CMYK: 28, 100, 100, 35

COLOR #3 (LIGHT BLUE):
HEX#: B4D9F3
CMYK: 27, 5, 0, 0

PROVIDE SHOP DRAWINGS AND COLOR CHIPS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

TOMS RIVER TOWNSHIP

CONSTRUCTION DETAILS

ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES

NVS, INC.
CERTIFICATE OF AUTHORIZATION NO. 24GA27930500










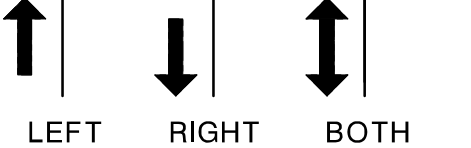

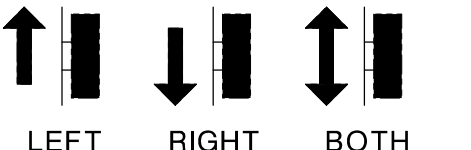



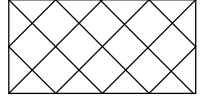
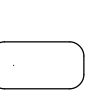
DREW: F. MARKEWICZ
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 DATE: 7/24/2023
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DTL-2
DTL-2

LEGEND

-  BREAKAWAY BARRICADES
-  BREAKAWAY BARRICADES WITH SIGN
-  CONSTRUCTION SIGNS
-  DRUMS
-  CONE
-  CONSTRUCTION BARRIER CURB (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)
-  EXIT/ENTRANCE RAMP & GORE WORK ZONE PER TCD-18 OR TCD-20
-  WORK AREA
-  PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

GENERAL NOTES:

1. ADVANCE WARNING SIGNS DISTANCES AND TAPER LENGTHS MAY BE EXTENDED, AT DIRECTION OF THE DEPARTMENT, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
 2. THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED AS APPROVED BY RE 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 CLOSINGS AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.
 3. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES ARE TO BE IN PLACE.
 4. RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN ARE TO BE PROVIDED WITH AT LEAST ONE W20-1F SIGN (ROAD WORK AHEAD) AS A MINIMUM.
 5. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS, AND / OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN ARE TO BE COVERED, REMOVED, OR RELOCATED AS DIRECTED BY THE RE.
 6. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY, OR PROPOSED TRAFFIC SIGNAL SYSTEMS ARE TO BE BAGGED OR COVERED.
 7. MAINTENANCE AND PROTECTION OF TRAFFIC TO 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.
 8. CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) TO BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
 9. A W1-6 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH TO BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.
 10. CONSTRUCTION SIGNS R11-4 (ROAD CLOSED TO THRU TRAFFIC) TO BE PLACED AT THE INTERSECTING STREETS WHICH ARE CLOSED TO TRAFFIC BECAUSE OF CONSTRUCTION.
 11. CONSTRUCTION SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-14A (GROOVED PAVEMENT) TO BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST.
 12. MOVING WORK AREAS IN A LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING ARROW TO REMAIN AT THE END OF THE TAPER, THE TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION THAT IS TO MOVE WITH THE WORK AREAS TO KEEP A 70 FEET MIN. AND 150 FEET MAX. BUFFER IN ADVANCE OF EACH WORK AREA.
 13. THE CONTRACTOR TO 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 TO BE SUBMITTED TO THE RE AS SPECIFIED IN THE SPECIFICATIONS.
 14. BACKFILL ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY AND PLACE ON AT LEAST 6H:1V SLOPE BEFORE THE END OF EACH WORK DAY. OTHER EXCAVATED AREA WITHIN THE CLEAR ZONE ARE TO BE BACKFILLED.
 15. WHERE REQUIRED, THE CONTRACTOR IS TO MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE RE.
 16. BITUMINOUS CONCRETE PLACED DURING THE VARIOUS CONSTRUCTION STAGES TO 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.
 17. THE PLACEMENT AND / OR RELOCATION OF CONSTRUCTION BARRIER CURB TO BE DONE DURING ALLOWABLE LANE CLOSURE HOURS.
 18. CONSTRUCTION ZONE SPEED LIMIT WILL BE DETERMINED BY THE BUREAU OF TRAFFIC ENGINEERING, REGIONAL TRAFFIC ENGINEER - WORK ZONE, AT THE TIME OF OR DURING CONSTRUCTION, AS REQUESTED BY THE RE.
 19. THE SPEED LIMIT, R2-1 (BLACK ON WHITE) WITH ADDED WORK ZONE PLATE (BLACK ON ORANGE) SIGNS TO BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE BUREAU OF TRAFFIC ENGINEERING, REGIONAL TRAFFIC ENGINEER - WORK ZONE.
 20. THE REDUCED SPEED AHEAD SIGN, W3-5(S) (BLACK ON ORANGE) TO BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
 21. TRAFFIC FINES DOUBLED IN WORK AREA R(NJ)5-17(S), 4 FEET BY 2.5 FEET SIGN TO BE LOCATED 500 FEET AFTER THE FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN TO ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS IN WHICH CASE THE SIGN IS TO BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.
 22. DO NOT CONSTRUCT THE FINAL HMA SURFACE PAVEMENT UNTIL THE FINAL STAGE OF THE PROJECT UNLESS OTHERWISE DIRECTED BY THE RE OR INDICATED ON THE PLANS. SET MANHOLES AND INLETS TO FINISHED GRADE AND CONSTRUCT TEMPORARY PAVEMENT RAMPS 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.
23. PLACE TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. AS SHOWN ON PLANS. NO SIGNS ARE TO BE PLACED WITHOUT ACTUAL LANE CLOSURES AND REMOVE IMMEDIATELY UPON REMOVAL OF THE CLOSURES.
 24. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE RE.
 25. TRAFFIC IMPACT NOTICES AND CHANGES
 - A. TERMS:
WHEN THE FOLLOWING TERMS ARE USED, THE INTENT AND MEANING IS AS FOLLOWS:
 - i. IMPACTS TO NORMAL TRAFFIC FLOW - WORK THAT REQUIRES A PORTION OF THE PAVED ROADWAY BEING BLOCKED OR CLOSED WITH SAFETY DEVICES OR VEHICLES, INCLUDING, BUT NOT LIMITED TO, FULL OR PARTIAL LANE CLOSURES, FULL OR PARTIAL RAMP CLOSURES, SHOULDER CLOSURES, MOVING OPERATIONS SUCH AS TRAFFIC STRIPING OR SWEEPING, LANE SHIFTS, OR ALTERNATING TRAFFIC. THIS APPLIES EVEN WHEN DETOURS ARE PROVIDED.
 - ii. TEMPORARY LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH IS ROUTINELY SET UP AND REMOVED ON A DAILY BASIS.
 - iii. PERMANENT LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH REMAINS IN PLACE CONTINUOUSLY FOR 24 HOURS OR MORE.
 - B. ADVANCE NOTICES
FOR THE INITIAL START OF WORK THAT REQUIRES "IMPACTS TO NORMAL TRAFFIC FLOW", THE CONTRACTOR IS TO NOTIFY THE RE IN WRITING, ON THE ADVANCE FORM TO-103 PROVIDED BY THE DEPARTMENT, OF THE PROPOSED DATE. THE NOTICE IS TO BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, BEFORE THE PROPOSED DATE. START OF WORK THAT IMPACTS NORMAL TRAFFIC FLOW WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR IS TO CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE SEVEN (AND/OR FOURTEEN) CALENDAR DAYS BEFORE STARTING THE ESTABLISHMENT OF THE TRAFFIC CONTROL MEASURES FOR THE TRAFFIC IMPACT. THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CANNOT BE COMPLETED ON THE PROPOSED DATE.

FOR A "PERMANENT LANE CLOSURE", THE CONTRACTOR IS TO NOTIFY THE RE IN WRITING, ON ADVANCE FORM TO-103, OF THE PROPOSED DATE A NEW TRAFFIC PATTERN WILL BE ESTABLISHED. THE NOTICE IS TO BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, IN ADVANCE OF THE PROPOSED DATE. START OF A NEW TRAFFIC PATTERN WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR IS TO CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE OF THE NEW TRAFFIC PATTERN SEVEN (AND/OR FOURTEEN) DAYS BEFORE STARTING TRAFFIC CONTROL MEASURES FOR THE ESTABLISHMENT OF THE NEW PATTERN. THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CANNOT BE COMPLETED ON THE PROPOSED DATE.

STARTING THE ESTABLISHMENT OF A NEW PERMANENT TRAFFIC PATTERN IS TO BEGIN NO EARLIER THAN 11:00 PM FRIDAY AND BE COMPLETED AND READY FOR OPERATIONS BY 6:00 PM THE FOLLOWING SUNDAY. THE ESTABLISHMENT IS TO BE COMPLETED IN ACCORDANCE WITH THE LANE CLOSURE HOURS SPECIFIED IN THE CONTRACT.

ADVANCE NOTICES SENT PRIOR TO THE PRE-CONSTRUCTION MEETING ARE TO BE ADDRESSED TO THE CONTACT PERSON AS SPECIFIED IN SUBSECTION 101.04 OF THE SPECIAL PROVISIONS.
 - C. PROGRESS NOTICES
ALL "IMPACTS TO NORMAL TRAFFIC FLOW" SCHEDULED FOR THE SEVEN DAY PERIOD STARTING ON THE FOLLOWING MONDAY ARE TO BE SUBMITTED TO THE RE BY 9:00 AM OF EACH FRIDAY ON WEEKLY FORM TO-100 PROVIDED BY THE DEPARTMENT.

EACH DAY OF "TEMPORARY LANE CLOSURES" ARE TO BE SUBMITTED TO THE RE BY 9:00 AM THE DAY IN ADVANCE OF THE START OF THOSE OPERATIONS ON DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.

"TEMPORARY LANE CLOSURES" FOR WEEKENDS ARE TO BE SUBMITTED TO THE RE BY 9:00 AM ON THE IMMEDIATELY PRECEDING FRIDAY ON THE DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.
 - D. CHANGES TO THE SCHEDULED CLOSURES
REQUEST FOR A CHANGE TO THE TRAFFIC CONTROL REQUIREMENTS IN THE CONTRACT DOCUMENTS ARE TO BE SUBMITTED IN WRITING TO THE RE AS FOLLOWS:

CHANGES TO THE SCHEDULED HOURS FOR "TEMPORARY LANE CLOSURES" ARE TO BE SUBMITTED TO THE RE AT LEAST EIGHT CALENDAR DAYS IN ADVANCE OF WHEN THE CHANGE IS PROPOSED TO START.

OTHER PROPOSED CHANGES TO "TEMPORARY LANE CLOSURES" AND ALL CHANGES TO "PERMANENT LANE CLOSURES" ARE TO BE SUBMITTED TO THE RE AS SPECIFIED IN THE SPECIFICATIONS.
 26. WHERE FINAL HMA PAVING IS PERFORMED AND THE LANE IS TO BE RE-OPENED TO TRAFFIC AND THE ITEM TRAFFIC STRIPES IS UNABLE TO BE APPLIED, APPLY THE ITEM TRAFFIC STRIPES, LATEX. ENSURE THAT THE ITEM TRAFFIC STRIPES IS APPLIED WITHIN 14 DAYS.

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TC-1
TC-2

TOMS RIVER TOWNSHIP

TRAFFIC CONTROL AND STAGING PLANS

ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES

NVS, INC.
 CERTIFICATE OF AUTHORIZATION NO. 24GA27930500

DREW F. MARKEWICZ
 NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300

REVISION	BY	C'K'D	DATE

ALLOWABLE WORKING HOURS

ROUTE 35 NORTH AND SOUTH (TWO LANES PER DIRECTION)

ALL LANES MAINTAINED (EACH DIRECTION)
MONDAY THROUGH FRIDAY 6:00 AM TO 9:00 AM and
 4:00 PM TO 7:00 PM
SATURDAY 7:00 AM TO 6:00 PM
SUNDAY 8:00 AM TO 6:00 PM

NO WORK WILL BE PERMITTED BETWEEN THE HOURS OF 10 PM AND 6 AM.

MONDAY THRU SUNDAY: ONE LANE AND ONE SHOULDER MUST BE MAINTAINED IN EACH DIRECTION AT ALL TIMES.

SHOULDER CLOSURE WILL BE PERMITTED ANYTIME, WITH NO RESTRICTIONS DUE TO HOLIDAYS.

TRAFFIC SHIFTS, MAINTAINING ALL EXISTING THRU LANES PER DIRECTION, WILL BE ALLOWED AT ANY TIME, WITH NO RESTRICTIONS DUE TO HOLIDAYS.

ACCESS TO ALL DRIVEWAYS AND FIRE LANES MUST BE MAINTAINED AT ALL TIMES DURING BUSINESS HOURS AND ONE DRIVEWAY AND ALL FIRE LANES MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

NO WORK WILL BE PERMITTED ON THE FOLLOWING HOLIDAYS:

- EASTER SUNDAY (INCLUDING 6:00 AM SATURDAY UNTIL NOON MONDAY)
- MEMORIAL DAY (SEE NOTE BELOW)
- JULY 4TH (SEE NOTE BELOW)
- LABOR DAY (SEE NOTE BELOW)
- ELECTION DAY (6:00 AM UNTIL 8:00 PM THE DAY OF)
- THANKSGIVING DAY (SEE NOTE BELOW)
- CHRISTMAS DAY (SEE NOTE BELOW)
- NEW YEARS DAY (SEE NOTE BELOW)

NOTE:

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

NO WORK SHALL BE PERFORMED ALONG RT 35 NORTHBOUND FROM MEMORIAL DAY THRU LABOR DAY. EXISTING LANE AND SHOULDER CONFIGURATIONS SHALL BE MAINTAINED DURING THIS PERIOD.

REGULATORY APPROACH SPEED OF TRAFFIC MILE/HOUR	RECOMMENDED SIGHT DISTANCE TO BEGINNING OF CHANNELIZING TAPERS		
	DESIRABLE		MINIMUM
	RURAL FEET	URBAN FEET	RURAL AND 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	875	1150	550
60	1000	1275	650
65	1050		725

NOTES:

1. AVOIDANCE MANEUVER IS FOR A SPEED, PATH, AND / OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
2. RECOMMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES ARE DOUBLE THE VALUES SHOWN ABOVE.
3. RURAL AND URBAN ROAD DESIGNATIONS ARE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
4. PROVIDE DESIRABLE VALUES 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, PAY SPECIAL ATTENTION TO THE USE OF SUITABLE TRAFFIC CONTROL DEVICES WHEN PROVIDING ADVANCED WARNING OF THE CONDITIONS THAT ARE LIKELY TO BE ENCOUNTERED.
5. LOCATE TAPERS TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.

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	MAXIMUM DEVICE (D) SPACING ALONG TANGENTS IN FEET
		10'	11'	12'		
25	10.5:1	105	115	125	25	50
30	15:1	150	165	180	30	60
35	20.5:1	205	225	245	35	70
40	27:1	270	300	325	40	80
45	45:1	450	495	540	45	90
50	50:1	500	550	600	50	100
55	55:1	550	605	660	55	110
60	60:1	600	660	720	60	120
65	65:1	650	715	780	65	130

NOTE:

THE MAXIMUM DEVICE SPACING ALONG CURVES IS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.

UTILIZE DAILY LANE AND SHOULDER CLOSURES PER NJDOT STANDARD DETAILS TCD-14 & TCD-15. PERFORM WORK AT INTERSECTIONS PER NJDOT STANDARD DETAILS TCD-5 & TCD-7.

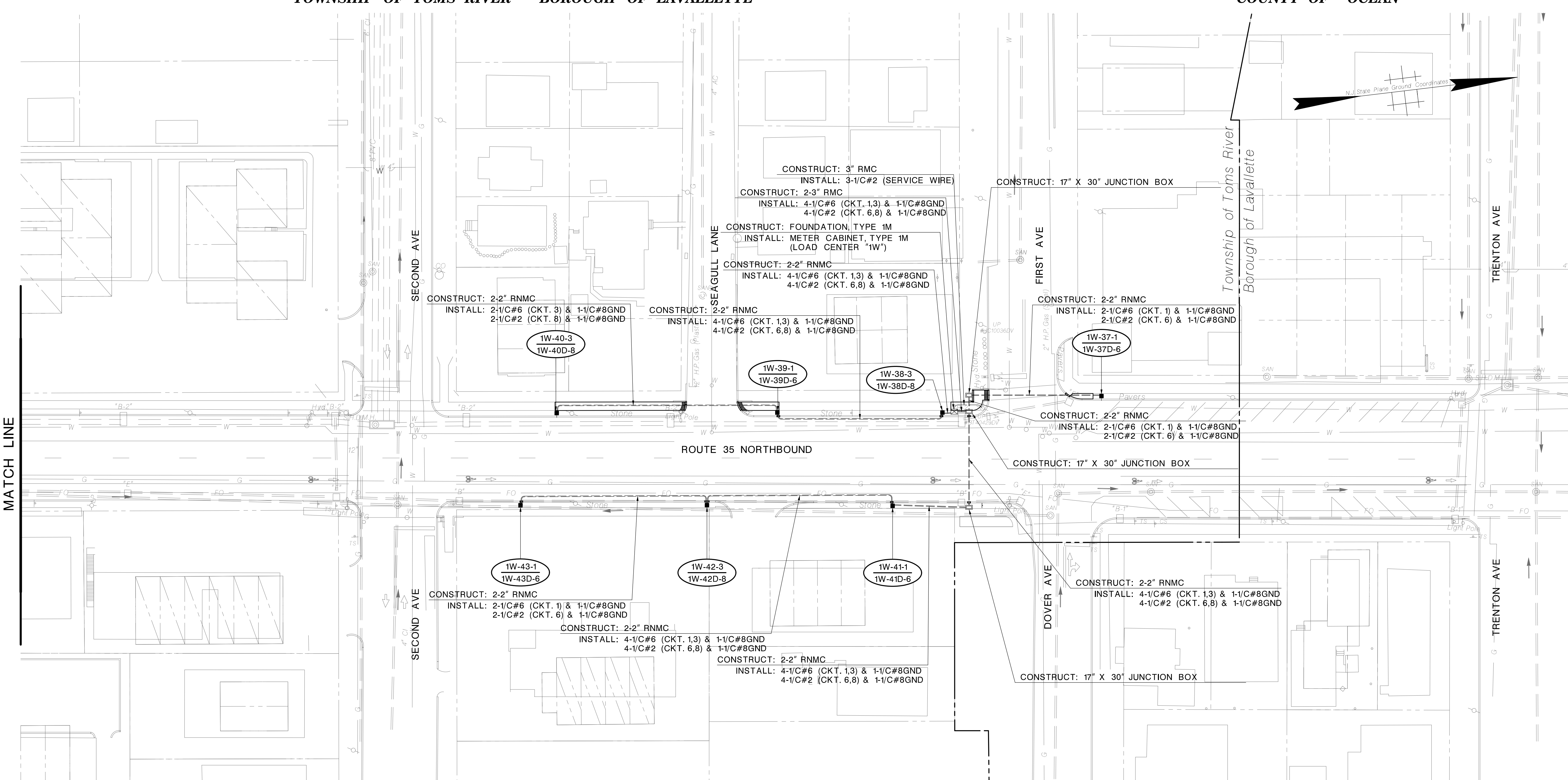
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TOMS RIVER TOWNSHIP	
TRAFFIC CONTROL AND STAGING PLANS	
ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES	
<small>NVS, INC.</small> <small>CERTIFICATE OF AUTHORIZATION NO. 24GA27930500</small>	
<small>DREW F. MARKEWICZ</small> <small>NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300</small>	

TC-2
TC-2

PLAN SHEET NO. E-4
MATCH LINE



ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
701021P	3" RIGID METALLIC CONDUIT	32 L.F.
701099M	17" x 30" JUNCTION BOX	3 UNIT
701153M	FOUNDATION, TYPE 1M	1 UNIT
701174M	METER CABINET, TYPE 1M	1 UNIT
701192P	GROUND WIRE, NO. 8 AWG	1434 L.F.
701195P	MULTIPLE LIGHTING WIRE, NO. 2 AWG	2462 L.F.
701198P	MULTIPLE LIGHTING WIRE, NO. 6 AWG	2462 L.F.
701210P	SERVICE WIRE, NO. 2 AWG	159 L.F.
701600P	2 - 2" RIGID NONMETALLIC CONDUIT	711 L.F.
701601M	PEDESTRIAN LIGHTING FOUNDATION	7 UNIT
703100M	PEDESTRIAN LIGHTING ASSEMBLY	7 UNIT



TOMS RIVER TOWNSHIP
ELECTRICAL PLANS
ORTLEY BEACH STREETScape AND GATEWAY
TRANSPORTATION ALTERNATIVES

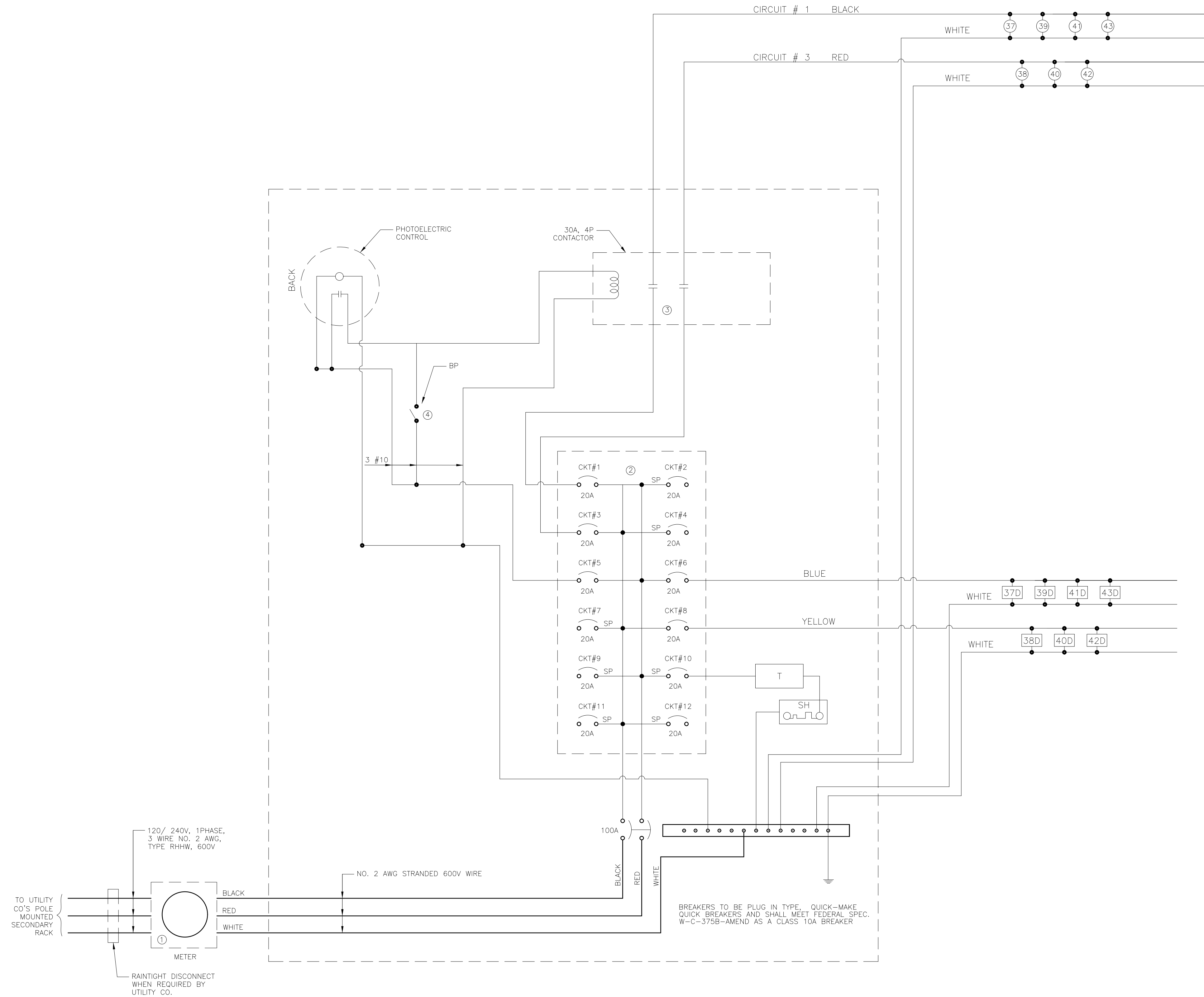
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REVISION	BY	C'K'D	DATE

E-5

21
29

PLOT BY: Dpp8U
 DATE: 7/24/2023
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LUMINAIRE LEGEND:

SYMBOL	DESCRIPTION
	70W. LED LUMINAIRE
	15A. DUPLEX OUTLET (GFCI)

ITEM

- ① METER SOCKET-INSTALLED BY CONTRACTOR-PROVIDED BY UTILITY COMPANY ON REQUEST. (IN JCP&L CO. AREA METER SOCKET IS TO BE INSTALLED AND FURNISHED BY CONTRACTOR)
- ② 12 CIRCUIT LOAD CENTER WITH ENCLOSURE COMPLETE WITH 12-20A, 1P, 120V CIRCUIT BREAKERS AND 100A, 2P, 240V MAIN BREAKER
- ③ MAGNETIC CONTACTOR, 30 AMP, 120 VOLT COIL NEMA 1 ENCLOSURE
- ④ PHOTOELECTRIC CONTROL UNIT 10 AMP TOGGLE SWITCH (BY-PASS) IN 2" X 4" HANDY BOX OR EQUIVALENT

LOAD CENTER 1W
SCHEMATIC WIRING DIAGRAM: 120/240 VOLT
N.T.S.

TOMS RIVER TOWNSHIP

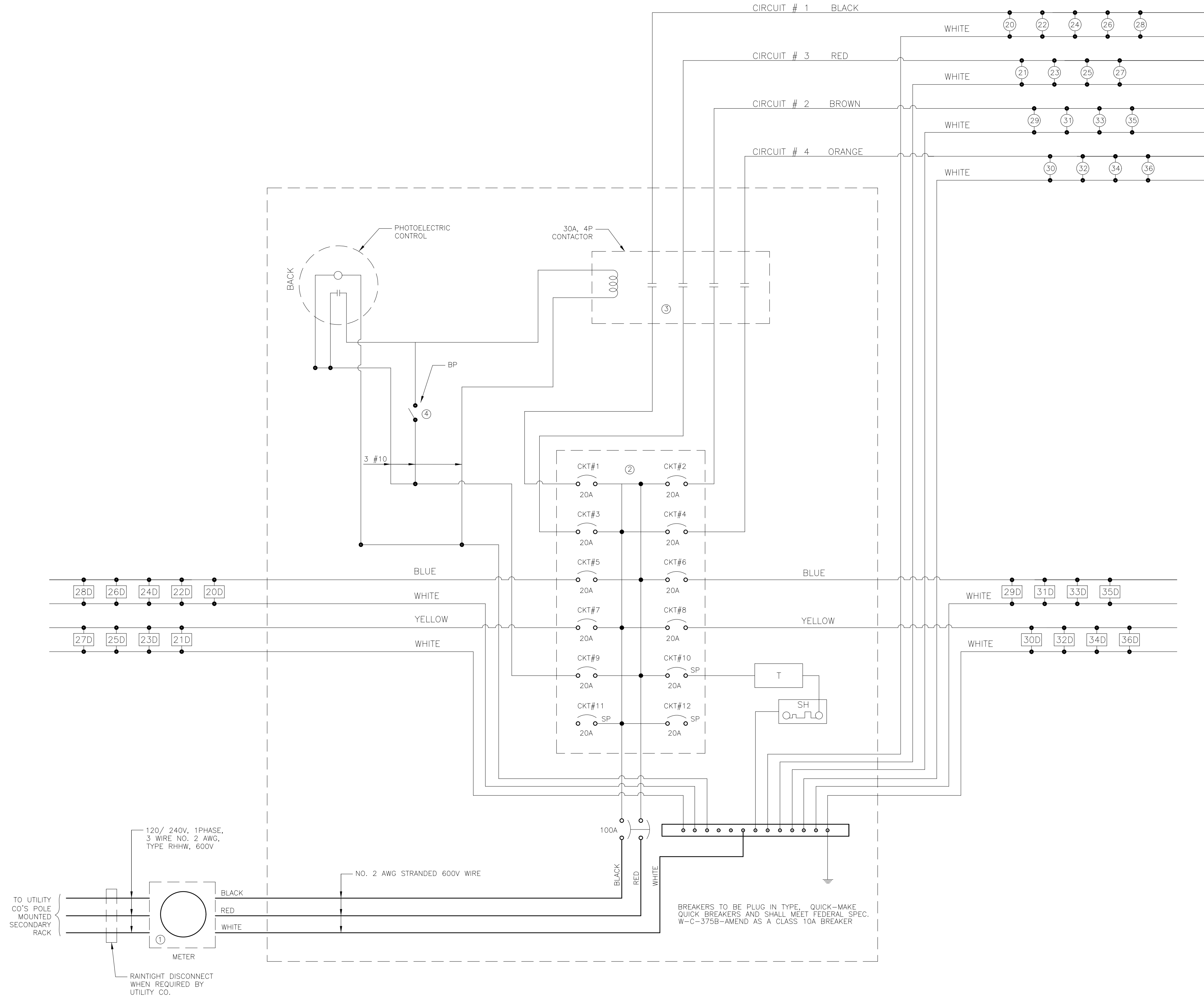
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ED-2
ED-6



LUMINAIRE LEGEND:

SYMBOL	DESCRIPTION
	70W, LED LUMINAIRE
	15A, DUPLEX OUTLET (GFCI)

ITEM

- ① METER SOCKET-INSTALLED BY CONTRACTOR-PROVIDED BY UTILITY COMPANY ON REQUEST. (IN JCP&L CO. AREA METER SOCKET IS TO BE INSTALLED AND FURNISHED BY CONTRACTOR)
- ② 12 CIRCUIT LOAD CENTER WITH ENCLOSURE COMPLETE WITH 12-20A, 1P, 120V CIRCUIT BREAKERS AND 100A, 2P, 240V MAIN BREAKER
- ③ MAGNETIC CONTACTOR, 30 AMP, 120 VOLT COIL NEMA 1 ENCLOSURE
- ④ PHOTOELECTRIC CONTROL UNIT 10 AMP TOGGLE SWITCH (BY-PASS) IN 2" X 4" HANDY BOX OR EQUIVALENT

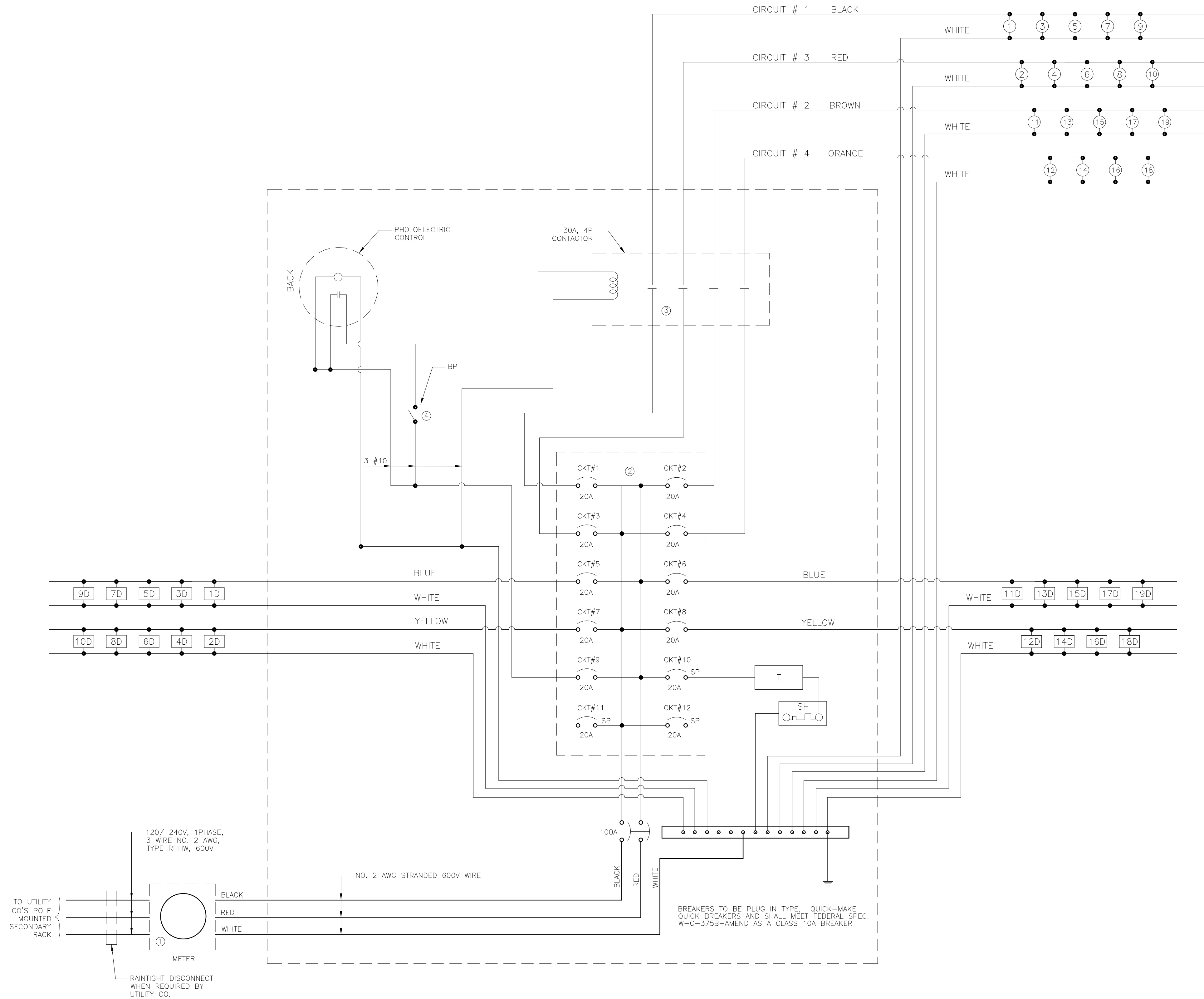
LOAD CENTER 8W
SCHEMATIC WIRING DIAGRAM: 120/240 VOLT
N.T.S.

TOMS RIVER TOWNSHIP	
ELECTRICAL DETAILS	
ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES	
<small>NVS, INC.</small> CERTIFICATE OF AUTHORIZATION NO. 24GA27930500	
<small>DREW F. MARKEWICZ</small> NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300	

REVISION	BY	C'K'D	DATE

ED-3
ED-6

24
29



LUMINAIRE LEGEND:

SYMBOL	DESCRIPTION
⊙	70W. LED LUMINAIRE
□D	15A, DUPLEX OUTLET (GFCI)

ITEM

- ① METER SOCKET—INSTALLED BY CONTRACTOR—PROVIDED BY UTILITY COMPANY ON REQUEST. (IN JCP&L CO. AREA METER SOCKET IS TO BE INSTALLED AND FURNISHED BY CONTRACTOR)
- ② 12 CIRCUIT LOAD CENTER WITH ENCLOSURE COMPLETE WITH 12—20A, 1P, 120V CIRCUIT BREAKERS AND 100A, 2P, 240V MAIN BREAKER
- ③ MAGNETIC CONTACTOR, 30 AMP, 120 VOLT COIL NEMA 1 ENCLOSURE
- ④ PHOTOELECTRIC CONTROL UNIT 10 AMP TOGGLE SWITCH (BY-PASS) IN 2" X 4" HANDY BOX OR EQUIVALENT

BREAKERS TO BE PLUG IN TYPE, QUICK-MAKE QUICK BREAKERS AND SHALL MEET FEDERAL SPEC. W-C-375B—AMEND AS A GLASS 10A BREAKER

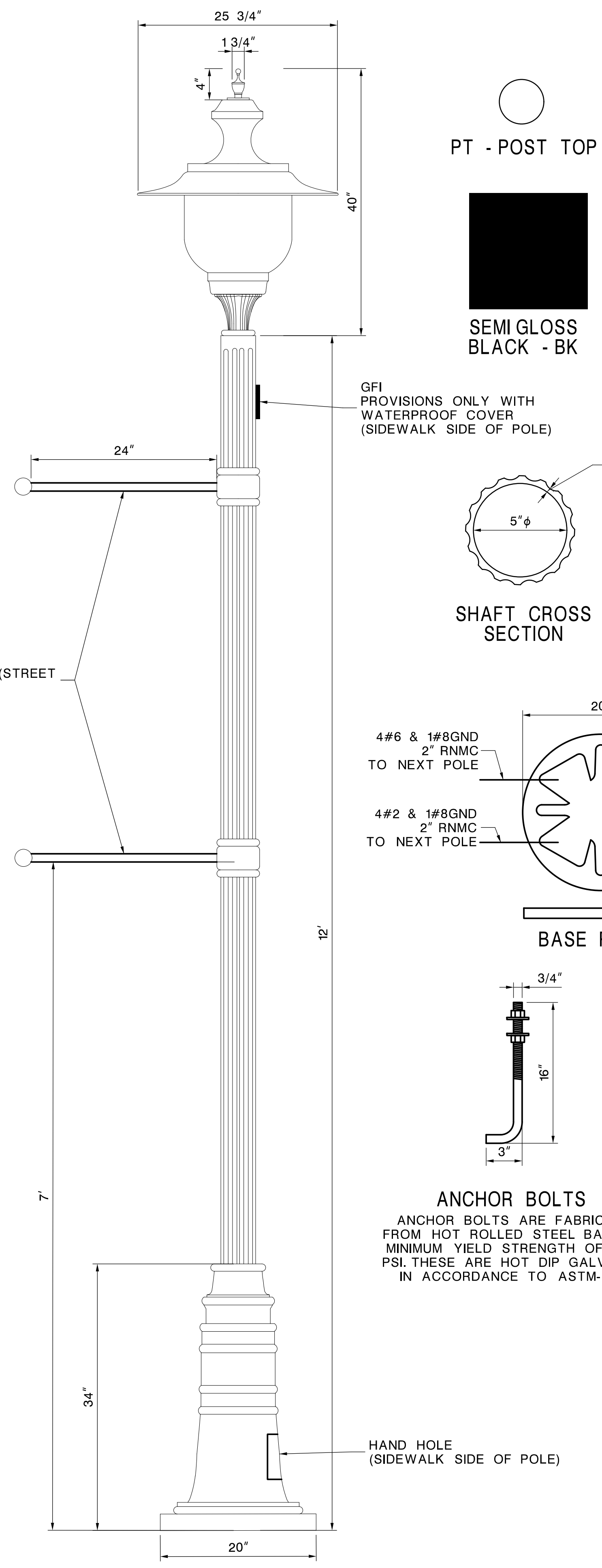
LOAD CENTER 9E
SCHEMATIC WIRING DIAGRAM: 120/240 VOLT
 N.T.S.

PLOT BY: Dpp8U
 DATE: 7/24/2023
 FILE NAME: P:\project\9820-000625.01 - Only Beach TAP\Technical\01-CADD\Electrical\EDM4 - Schematic - Load Center 9E Wiring Diagram.dgn

TOMS RIVER TOWNSHIP	
ELECTRICAL DETAILS	
ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES	
NVS, INC. CERTIFICATE OF AUTHORIZATION NO. 24GA27930500	
DREW F. MARKEWICZ NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300	

REVISION	BY	C'K'D	DATE

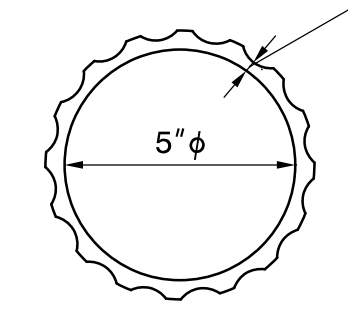
ED-4
ED-6



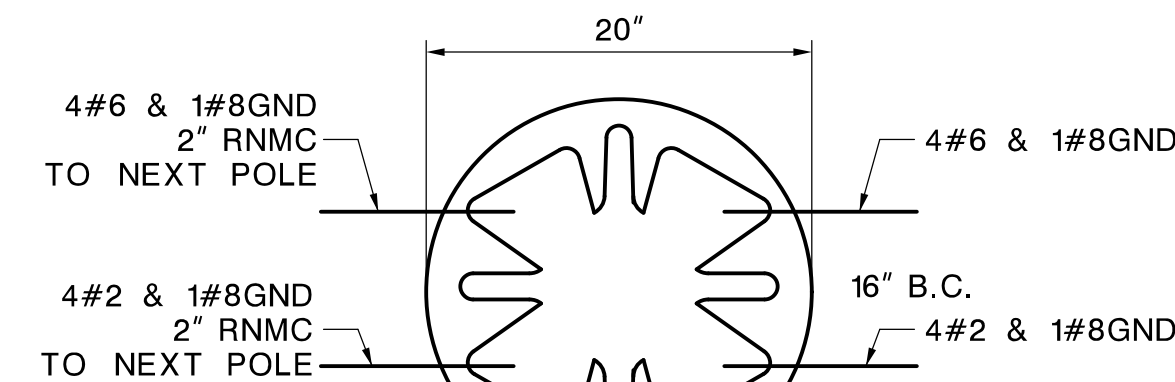
PT - POST TOP

SEMI GLOSS BLACK - BK

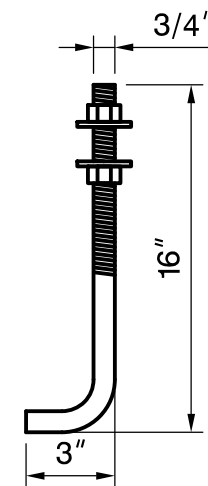
GFI PROVISIONS ONLY WITH WATERPROOF COVER (SIDEWALK SIDE OF POLE)



SHAFT CROSS SECTION



BASE PLATE



ANCHOR BOLTS

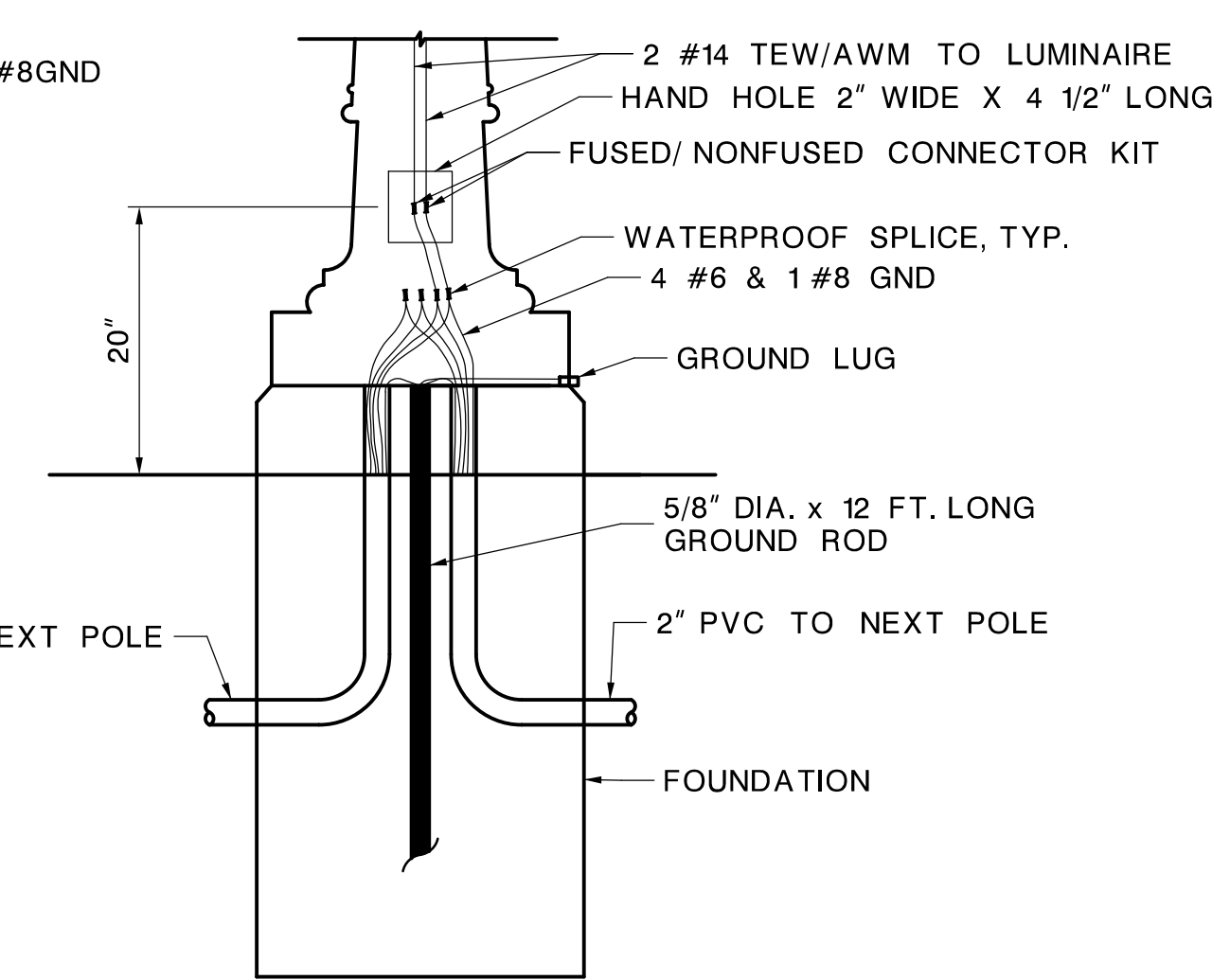
ANCHOR BOLTS ARE FABRICATED FROM HOT ROLLED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 50,000 PSI. THESE ARE HOT DIP GALVANIZED IN ACCORDANCE TO ASTM-A-153.

HAND HOLE (SIDEWALK SIDE OF POLE)

PEDESTRIAN LIGHTING POLE ASSEMBLY
N.T.S.

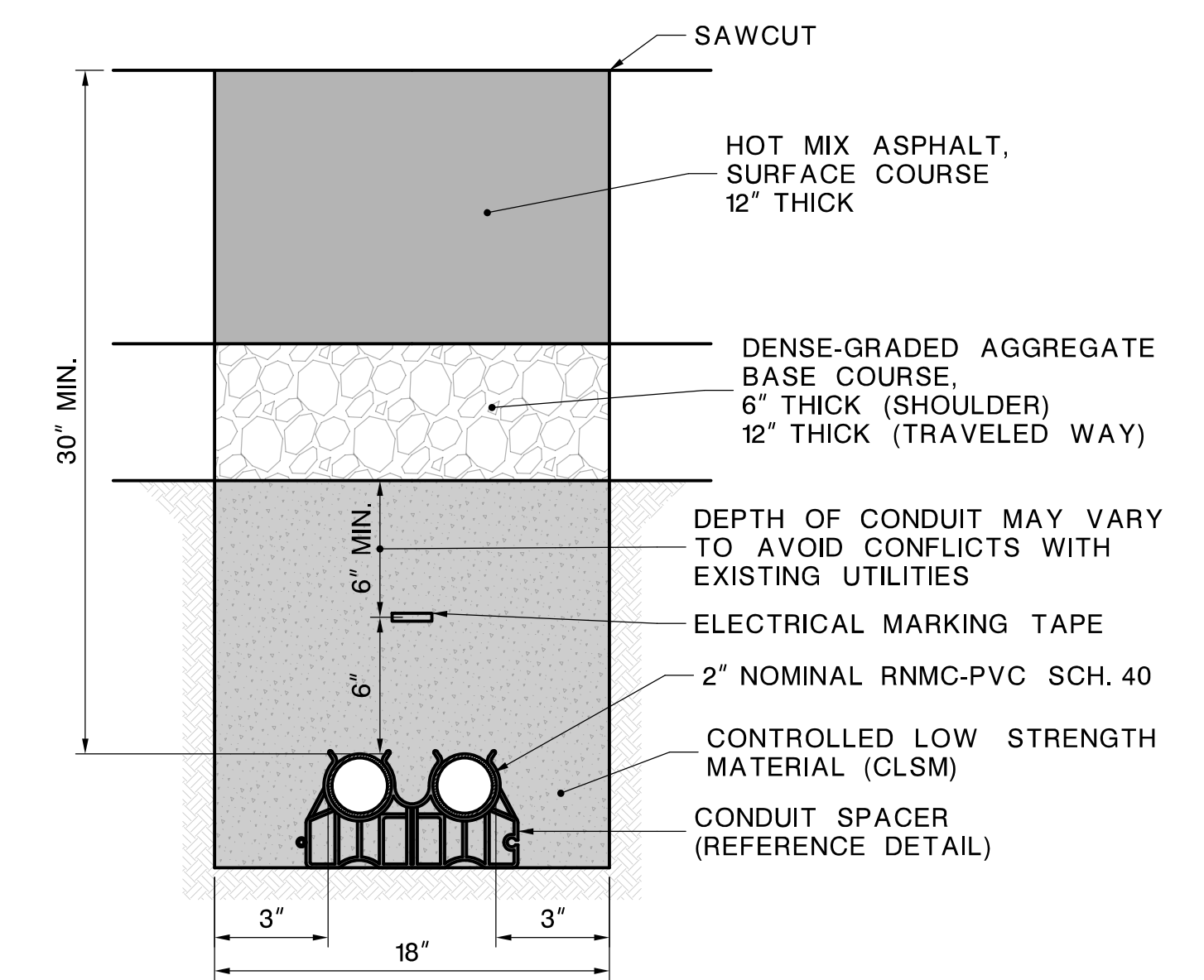
SPECIFICATIONS	
HOUSING:	CORROSION RESISTANT, CAST A356 ALUMINUM ALLOY, .188" MIN. WALL THICKNESS AND HEAVY GAUGE ALUMINUM HOOD.
LED:	75 WATTS, MULTI-TAP.
LENS:	INJECTION MOLDED CLEAR PRISMATIC POLYCARBONATE
OPTICS:	TYPE 3 LIGHT DISTRIBUTION.
POLE:	ONE PIECE ALUMINUM POLE CONSTRUCTED WITH A 5" DIA X 3/16" SHAFT (6063-T6 ALLOY) WITH A DURABLE CORROSION RESISTANT, CAST ALUMINUM DECORATIVE BASE WITH HAND HOLE AND COVER.
FINISH:	BLACK POLYESTER POWDER FUSE COATING.
OPTIONS:	GFI - GROUND FAULT INTERRUPTOR. BA - BANNER ARM.

LED ENGINE INFORMATION	
LUMINOUS FLUX	11073
WATTAGE	75
COLOR TEMPERATURE	4000K
CRI	>70
MILLIAMPS	530
OVERHEATING PROTECTION	YES
OPERATING POSITION	UNIVERSAL
AVERAGE LIFETIME 10% FAILURE	50000 HOURS
DIODE MANUFACTURER	PHILIPS
LUMEN MAINTENANCE AT END OF LIFE	70%
INPUT VOLTAGE	120-277

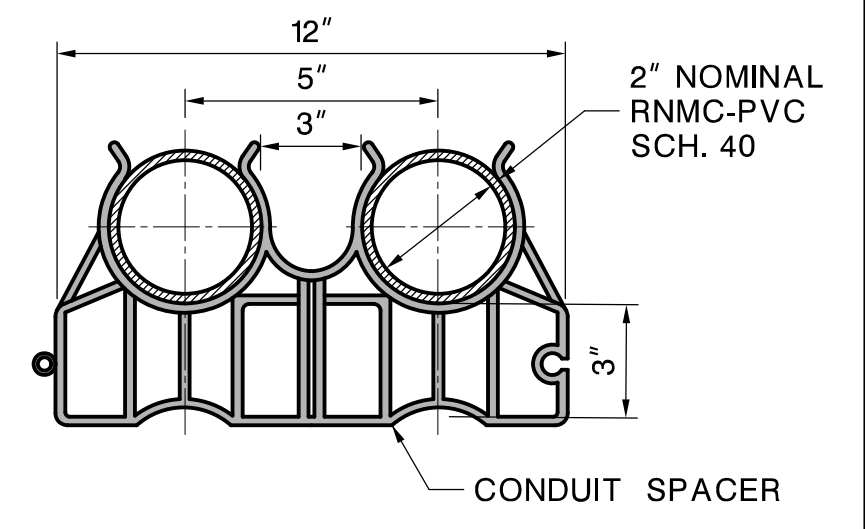


ELECTRICAL CONNECTION TO WALKWAY POLES (PLC STD)
N.T.S.

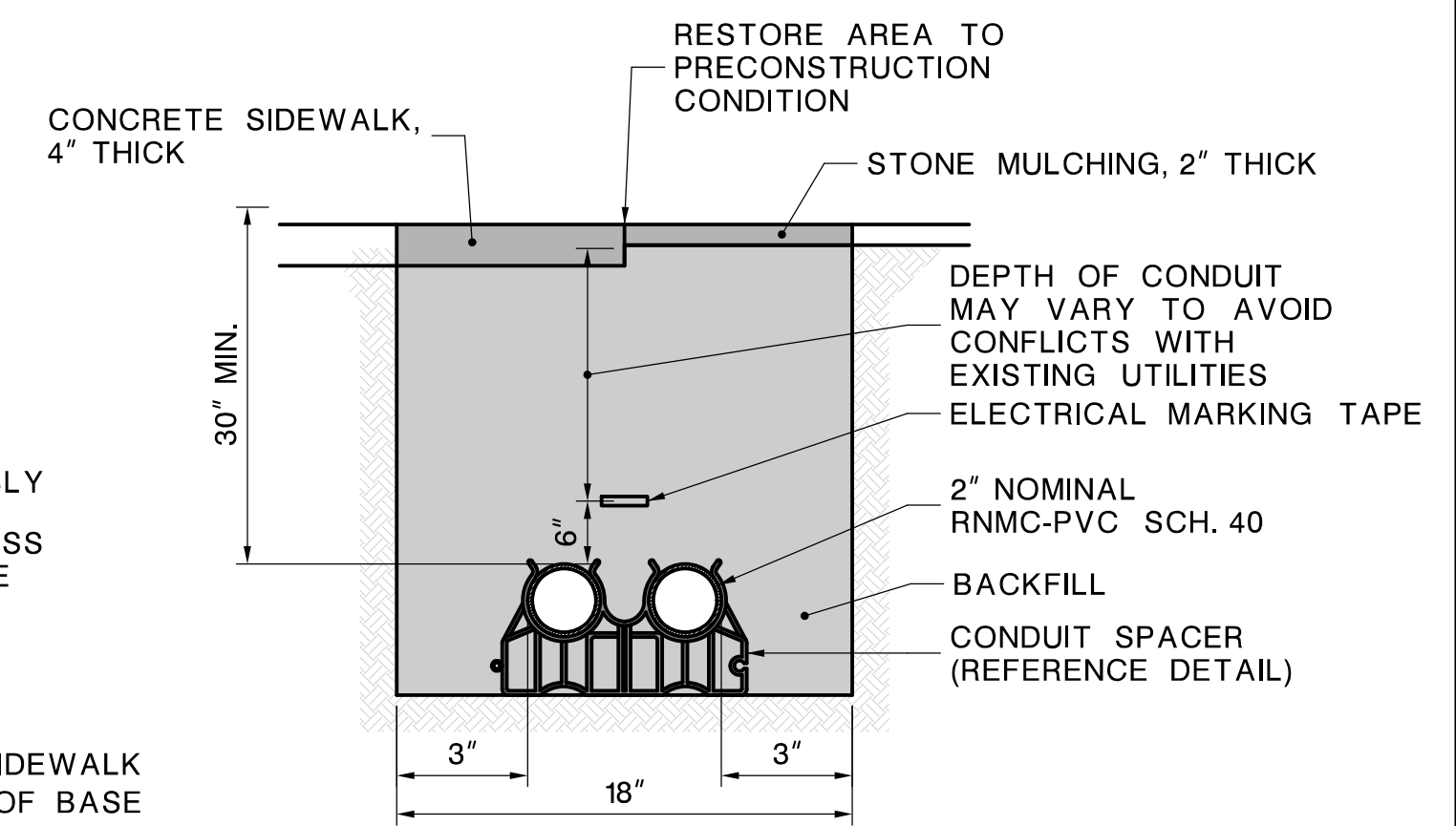
- NOTES:
1. PEDESTRIAN LIGHTING POLE ASSEMBLY SHALL BE CATALOG NUMBER [LOM-75-LED-MT-5-4-III-PT-DBK-5F-12-BK-(2)BA-1A-(1)GFI]. THE COLOR PER SPECIFICATIONS, AS MANUFACTURED BY PACIFIC LIGHTING & STANDARDS COMPANY OR EQUIVALENT. PROVIDE SHOP DRAWING FOR REVIEW AND APPROVAL BY ENGINEER PRIOR TO PURCHASE.
 2. THE STREET SIDE OF THE LUMINAIRE MUST BE INSTALLED FACING THE SIDEWALK.
 3. PROVIDE AND INSTALL CABLE CONNECTORS (FUSED AND NONFUSED), AND 2 NO. 10 AWG COLOR-CODED, MULTIPLE LIGHTING WIRES EXTENDING FROM THE LUMINAIRE TO THE DISTRIBUTION WIRES IN THE BASE OF THE STANDARD.
 4. PROVIDE AND INSTALL 2 NO. 10 1WG COLOR CODED, MULTIPLE LIGHTING WIRES EXTENDING FROM THE OUTLET TO THE DISTRIBUTION WIRES IN THE BASE OF THE STANDARD.
 5. THE FUSED/NON-FUSED CONNECTOR KITS ARE INSTALLED INSIDE THE POLE BEHIND THE HAND HOLE COVER. THE FUSED CONNECTOR IS FOR THE HOT LEG AND THE NON-FUSED CONNECTOR IS FOR THE NEUTRAL. THE FUSED/NON-FUSED CONNECTOR KITS ARE ONLY TO BE CONNECTED TO THE LUMINAIRE WIRES.
 6. THE SPLICES IN THE POLE SHALL BE INSTALLED INSIDE THE POLE BEHIND THE HAND HOLE COVER.



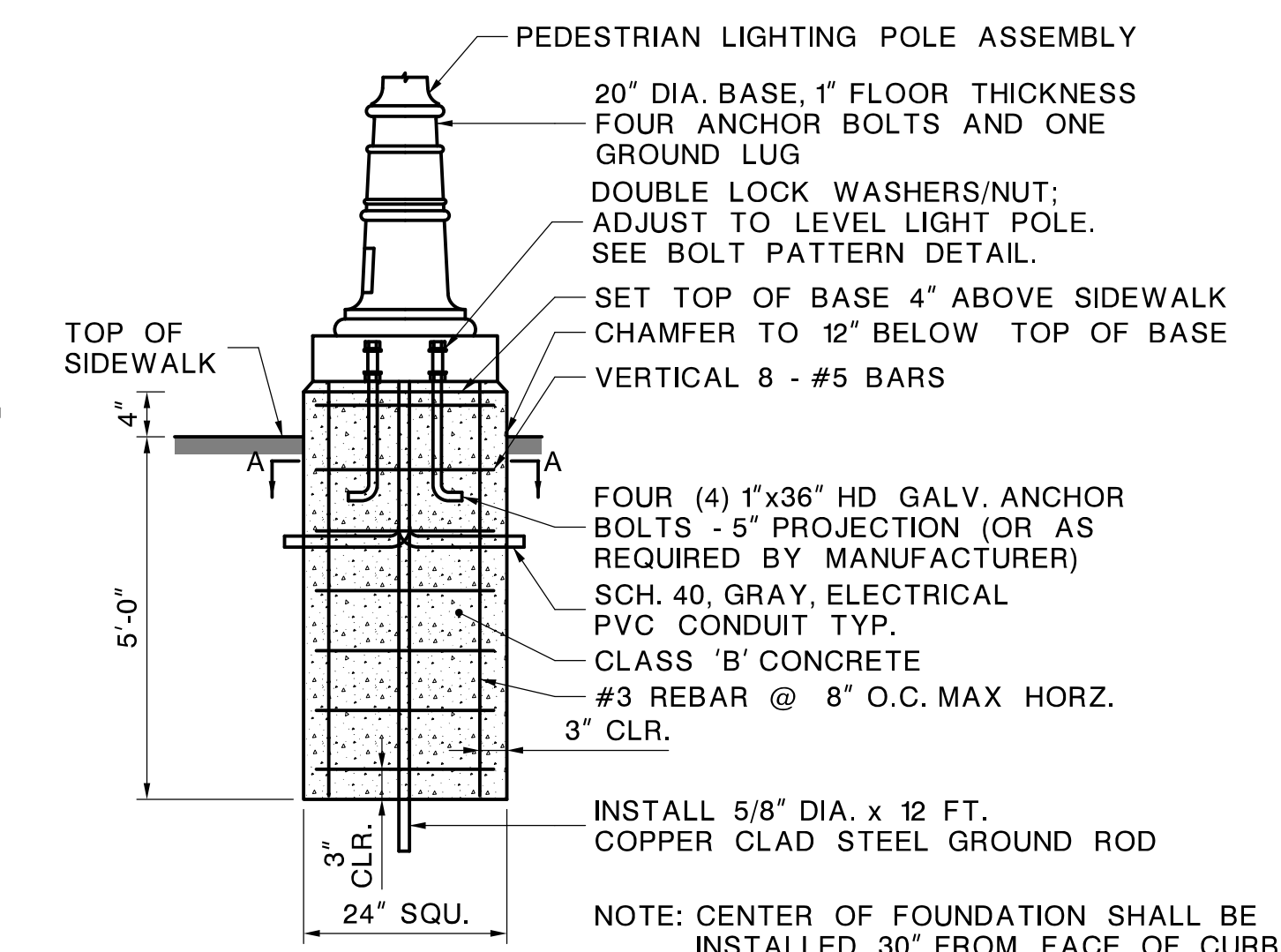
CONDUIT TRENCH IN ROADWAY DETAIL
N.T.S.



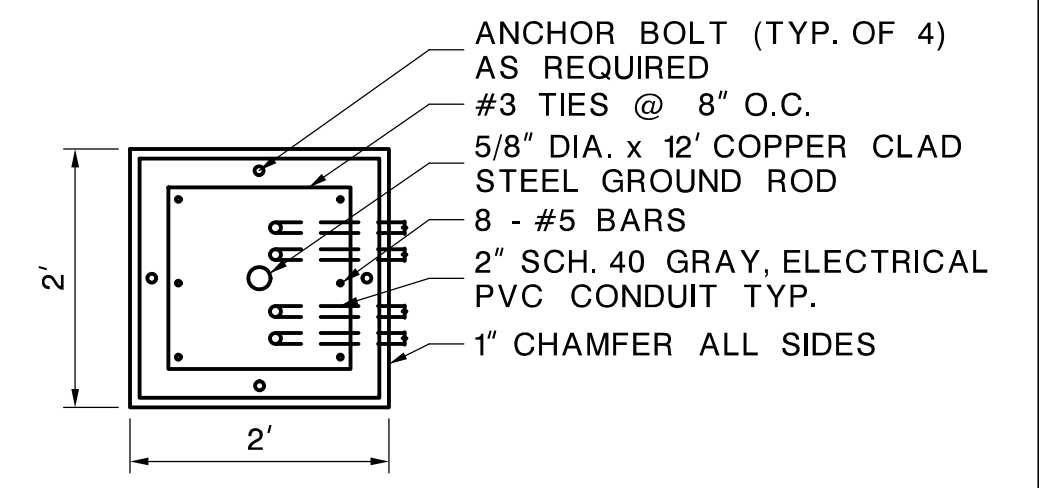
CONDUIT SPACER DETAIL
N.T.S.



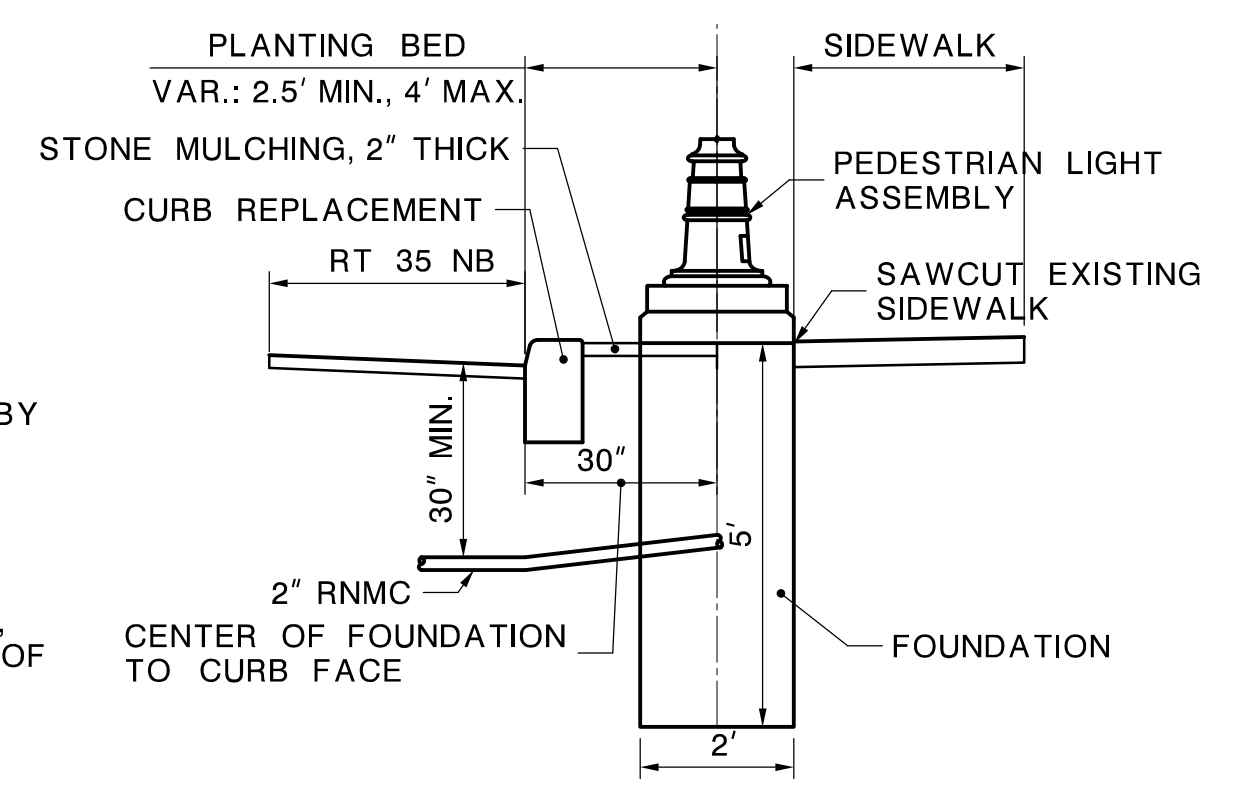
CONDUIT TRENCH IN BORDER AREA DETAIL
N.T.S.



PEDESTRIAN LIGHTING FOUNDATION
N.T.S.



SECTION A-A
N.T.S.



PEDESTRIAN LIGHTING POLE ASSEMBLY LOCATION
N.T.S.

TOMS RIVER TOWNSHIP

ELECTRICAL DETAILS

ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES

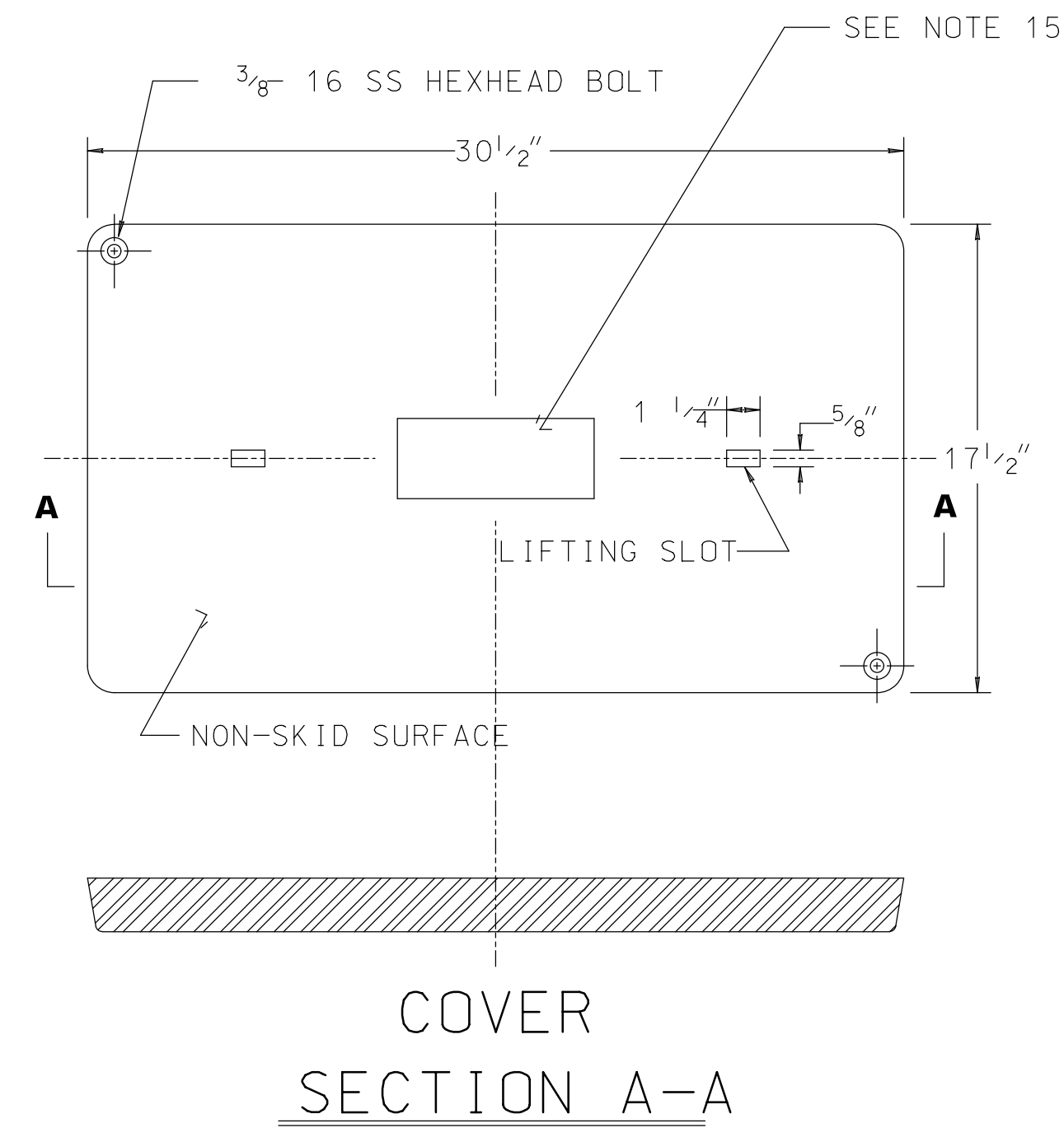
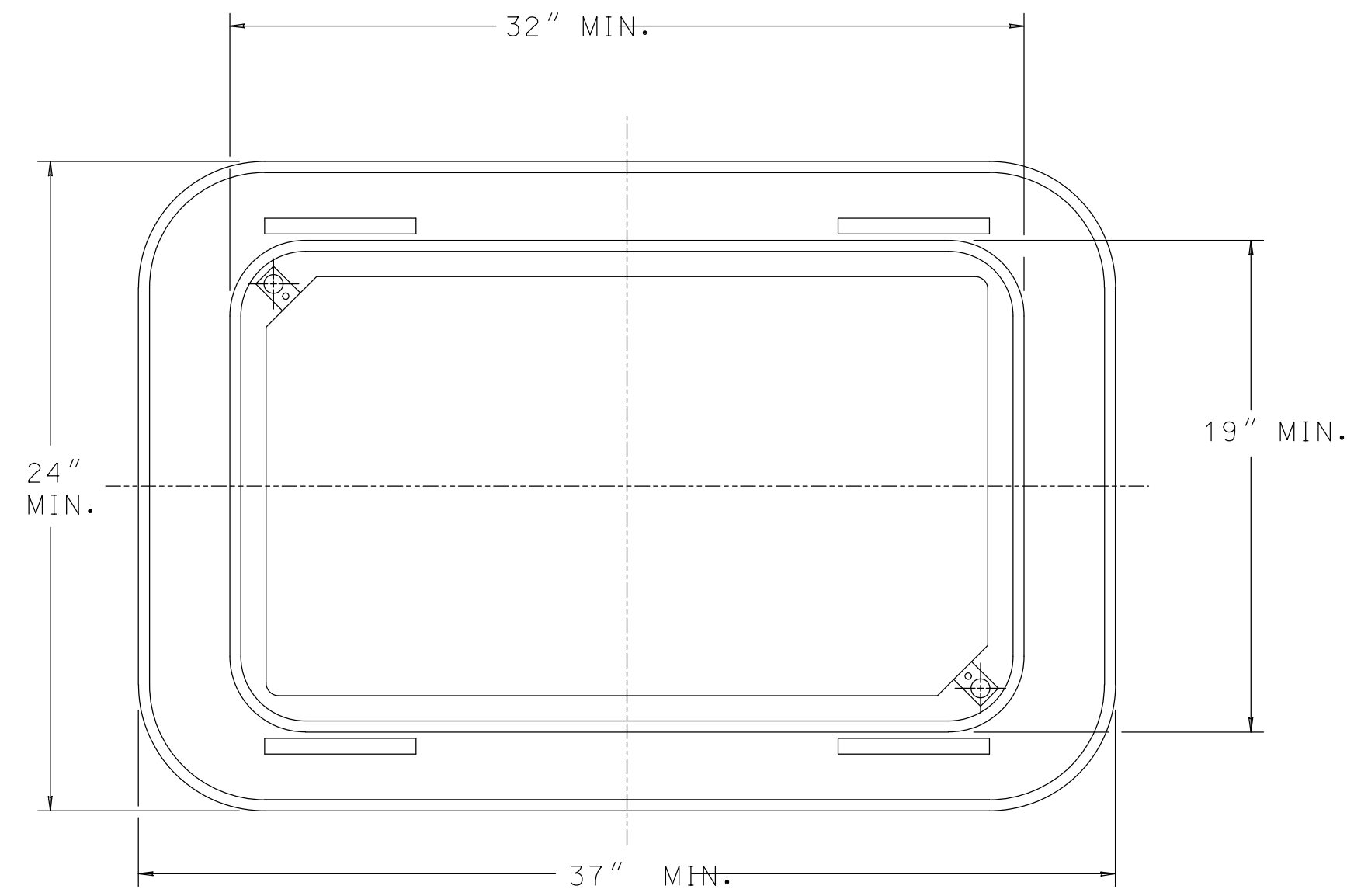
NVS, INC.
CERTIFICATE OF AUTHORIZATION NO. 24GA27930500

DREW: F. MARKEWICZ
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300

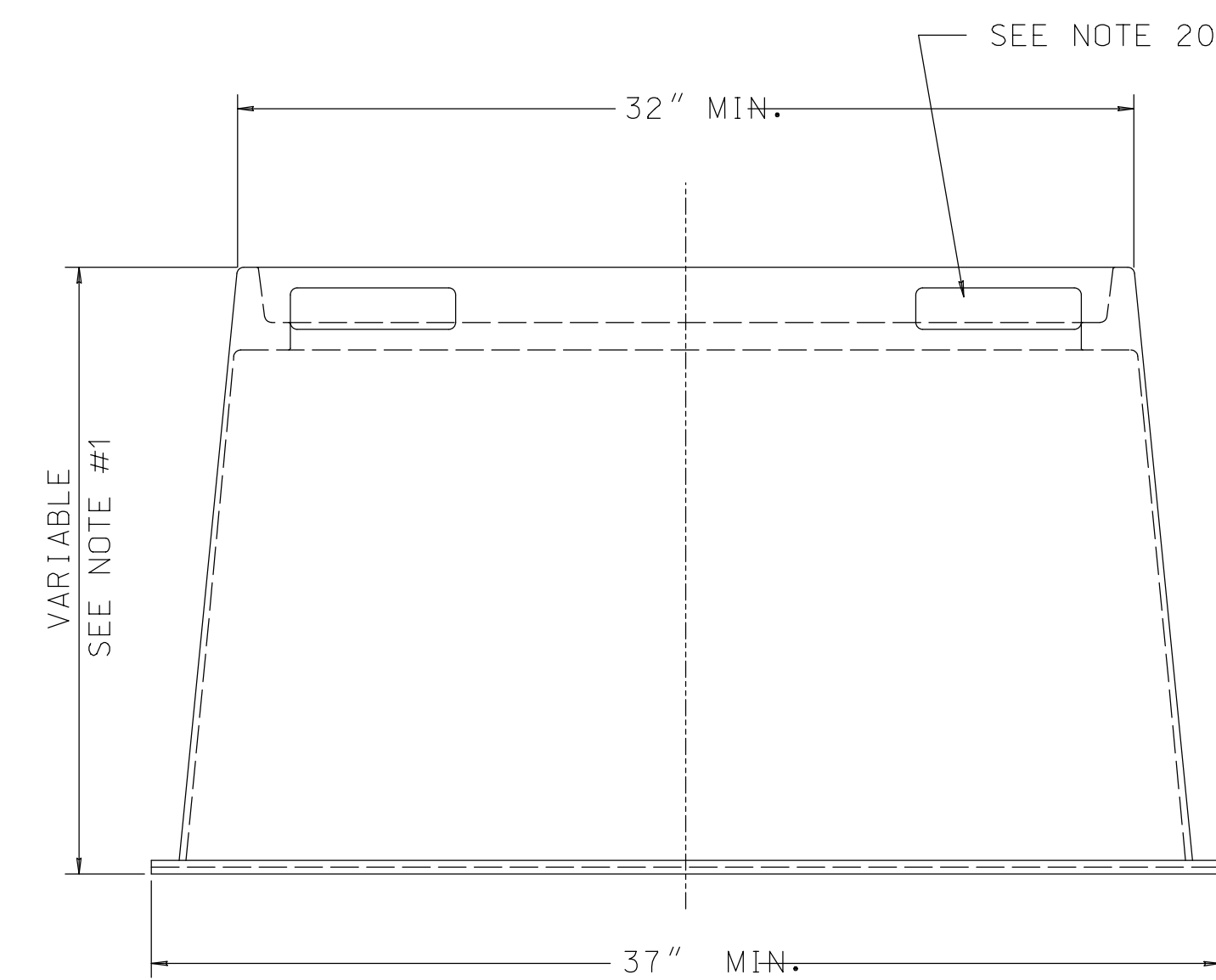
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ED-5
ED-6

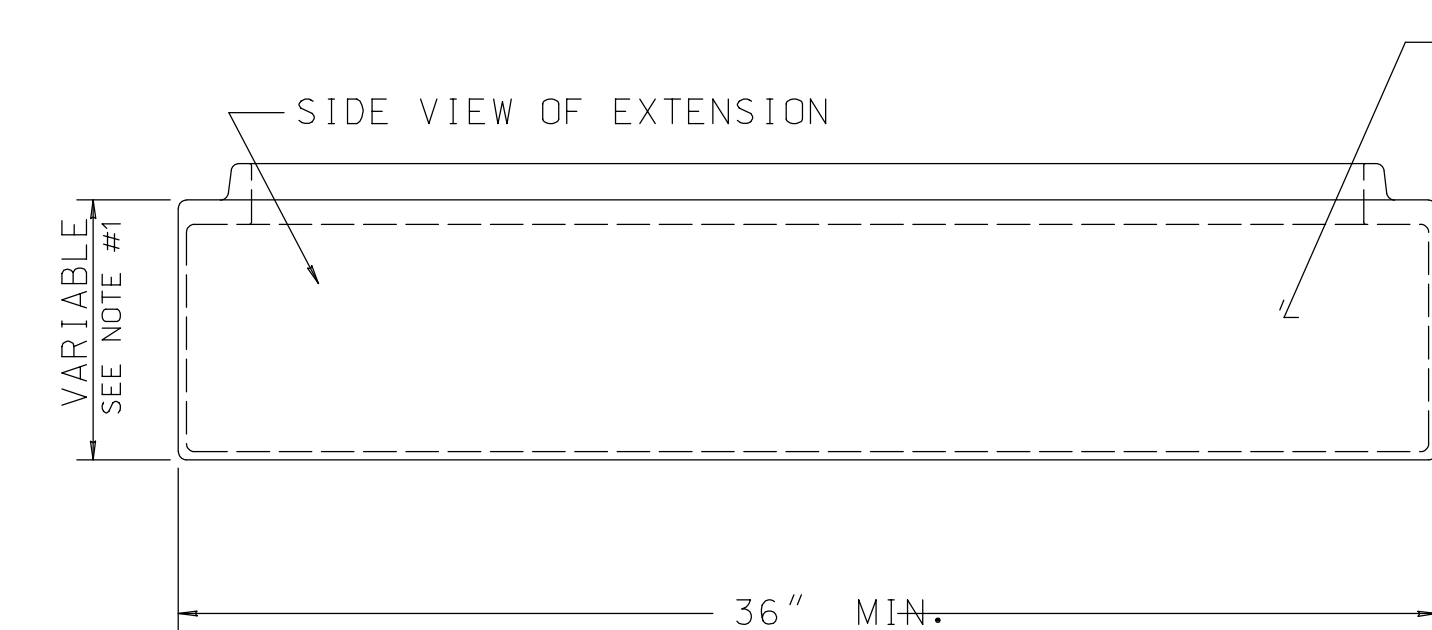
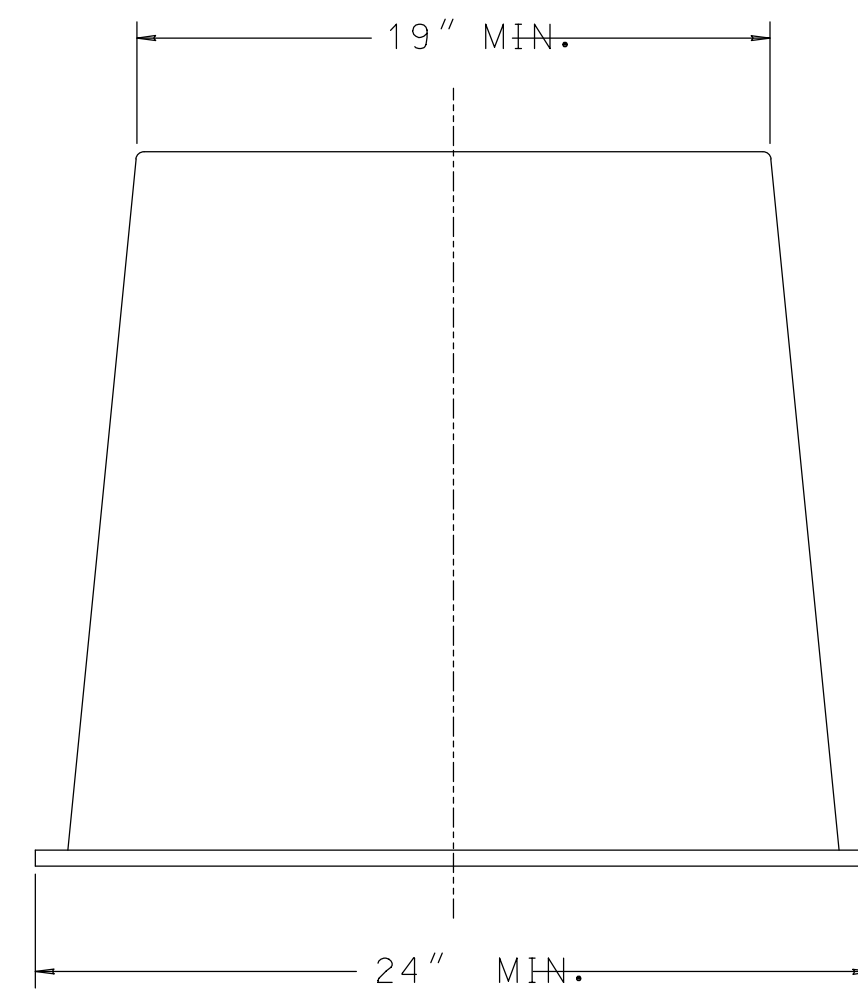
PLOT BY: Dpp8u
 DATE: 7/24/2023
 FILE NAME: F:\projects\2023\0000262501 - Only Beach TAP Technical\01-CADD\Electrical\ED05 - Lighting.dgn



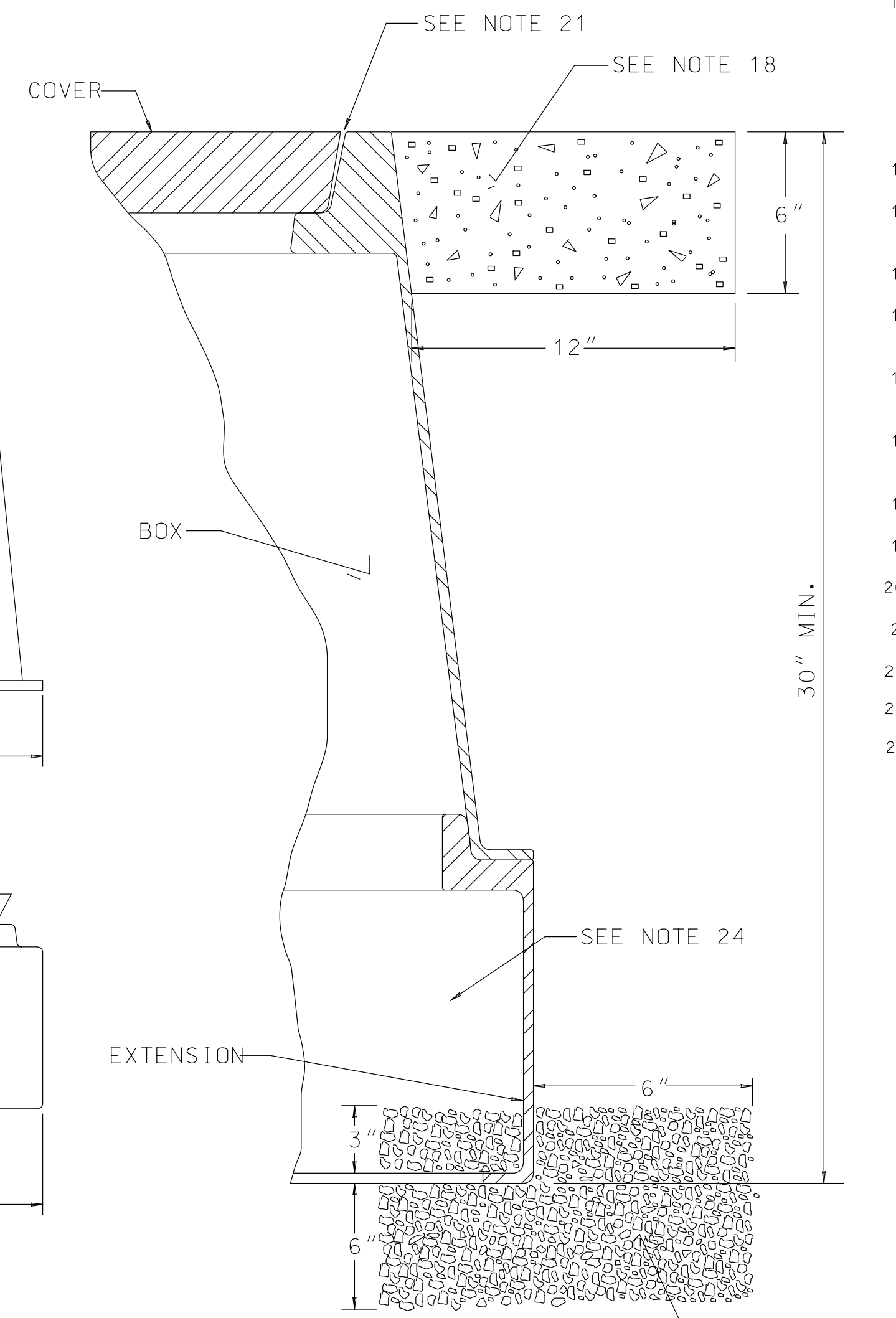
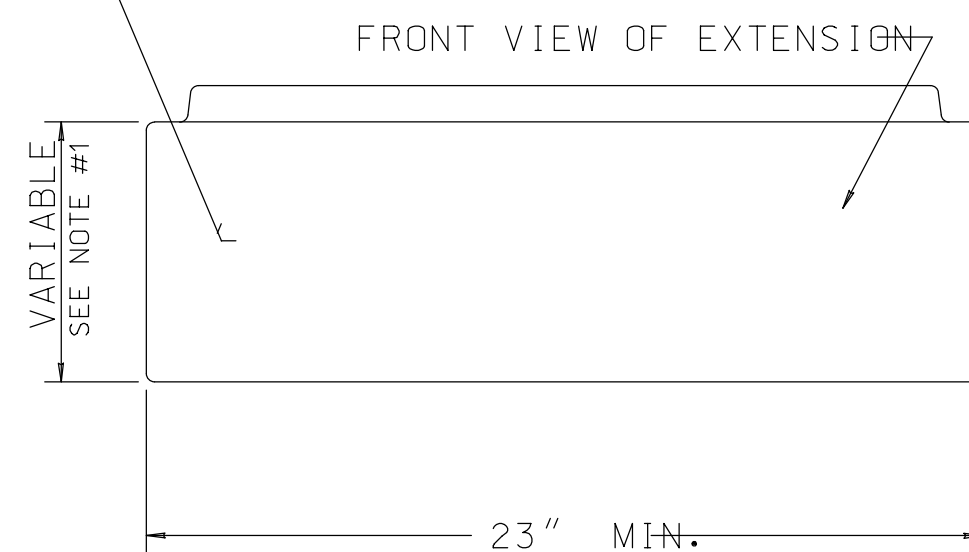
COVER SECTION A-A



SEE NOTE 20



SEE NOTES 16 & 17



BASIC WALL LAYOUT

NOTES:

1. THE BOX DEPTH SHALL BE 18" MINIMUM AND THE EXTENSION DEPTH SHALL BE 8" MINIMUM. THE COMBINATION OF BOX AND ONE EXTENSION SHALL HAVE A MINIMUM DEPTH OF 30". AS AN ALTERNATE, A SINGLE SECTION JUNCTION BOX MAY BE SUPPLIED.
2. THE BOX SIDES SHALL BE TAPERED INWARD TOWARD THE TOP FOR STABILITY. BOX SHALL BE PROVIDED WITH A BOTTOM FLANGE AT LEAST 1/4 INCH WIDE TO PREVENT SETTLING IN FIRM SOIL WHEN SUBJECTED TO SPECIFIED LOADS. TOP REGION OF THE BOX SHALL BE CONFIGURED TO PROVIDE "KEYING-IN" AND LOCK THE BOX IN CONCRETE OR BLACKTOP WHEN IT IS INSTALLED. THREADED INSERTS PROVIDED FOR SECURING THE LID SHALL BE STAINLESS STEEL.
3. THE COVER SHALL BE FASTENED TO THE BOX WITH TWO 3/8" -16NC STAINLESS STEEL HEX BOLTS, LOCATED AT OPPOSITE CORNERS OF THE COVER. BOLTS SHALL BE CAPTIVE TO LID.
4. COVER SURFACE SHALL BE SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5.
5. EXTENSION SHALL FIT THE BOTTOM OF THE BOX; ITS DESIGN SHALL BE SUCH AS TO REINFORCE THE BOX AGAINST SIDE LOADS WHEN THE TWO ARE STACKED TOGETHER.
6. THE BOX ASSEMBLY SHALL BE DESIGNED FOR A8 LOADING AS SPECIFIED IN ASTM C857-87 "MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES." THE MINIMUM ULTIMATE LOAD SHALL BE 20,800 LB. MINIMUM.
7. DESIGN SHALL BE BASED ON A MINIMUM SAFETY FACTOR OF 2.0 FOR WHEEL LOADS AND 2.0 FOR SOIL LOADS. COVER DEFLECTION AT DESIGN LOADS SHALL NOT EXCEED 0.5 INCHES OF NET COVER DEFLECTION WIDTH AND SIDE WALL DEFLECTION SHALL NOT EXCEED 0.25 INCHES PER FOOT OF COVER WIDTH AND SIDE WALL DEFLECTION SHALL NOT EXCEED 0.25 INCHES PER FOOT OF BOX LENGTH. COMPLIANCE TESTING, IF REQUIRED, SHALL BE PERFORMED ACCORDING TO CURRENT WESTERN UNDERGROUND COMMITTEE GUIDE No. 3.6, NON-CONCRETE ENCLOSURE.
8. ANY POINT ON THE COVER, BOX OR EXTENSION SHALL WITHSTAND A 70 FT. LBS. IMPACT ADMINISTERED WITH A C-TUP ACCORDING TO ASTM D-2444.
9. A MINIMUM OF 20 YEARS LIFE EXPECTANCY IS REQUIRED. ACCELERATED SERVICE TESTS IN ACCORDANCE WITH ASTM METHOD D-756-56 PROCEDURE E, SHALL BE ACCEPTED AS A SATISFACTORY ALTERNATIVE.
10. THE JUNCTION BOX SHALL BE MADE OF FIBER GLASS, RPM/FRP COMBINATION OR POLYMER CONCRETE AND THE COVER SHALL BE MADE OF FIBER GLASS REINFORCED POLYMER CONCRETE.
11. THE MATERIALS UTILIZED IN THE MANUFACTURE OF JUNCTION BOXES AND COVERS SHALL BE RESISTANT TO CHEMICALS COMMONLY FOUND IN THE SOIL OR IN THE OPERATING ENVIRONMENT. THEY MUST ALSO BE RESISTANT TO SUNLIGHT AND UV IN ACCORDANCE WITH ASTM D53. CHEMICAL RESISTANCE PROPERTIES SHALL BE DETERMINED USING ASTM D543 AND ASTM D570 FOR WATER ABSORPTION.
12. THE MATERIALS SHALL BE RESISTANT TO FIRE, INCLUDING DIRECT FLAME AND HEAT IN ACCORDANCE WITH ASTM D635.
13. THE JUNCTION BOX SHALL BE USABLE, WITHOUT ANY DETRIMENTAL EFFECT IN ANY KIND OF CLIMATE. IN A TEMPERATURE RANGE OF -40 F TO +199 F. SUDDEN TEMPERATURE CHANGES SHALL NOT AFFECT THE HANDHOLE INCLUDING ITS LIFE EXPECTANCY.
14. THE COLOR OF THE COVER AND THAT PART OF THE BOX THAT IS VISIBLE WHEN IT IS INSTALLED, SHALL BE "CONCRETE GREY."
15. IDENTIFICATION OF THE COVER SHALL BE PERMANENTLY MOLDED ON THE TOP SURFACE WITH DOT. JUNCTION BOX COVER WITHOUT D.O.T. LOGO SHALL BE UTILIZED FOR ALL LOCAL SIGNALIZED INTERSECTIONS AND BRIDGES ON LOCAL ROADS.
16. ALL CONDUIT ENTRANCES INTO THE JUNCTION BOX SHALL BE FIELD DRILLED WITH A HOLE SAW OR PUNCHED OUT USING A HYDRAULIC HOLE PUNCH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
17. ALL CONDUIT OPENINGS SHALL BE SANDED. AFTER THE CONDUITS ARE INSTALLED, ALL CONDUIT ENTRANCES SHALL BE SEALED WITH AN EPOXY PUTTY OR SILICON CAULK.
18. IN GRASS OR DIRT AREAS, A CONCRETE PAD, CLASS "B", SHALL BE POURED AROUND THE TOP OF THE JUNCTION BOX.
19. COMPACTED 3/4" GRAVEL OR BROKEN STONE REQUIRED.
20. A CONCRETE LOCK-IN FEATURE SHALL BE PROVIDED AT THE TOP OF THE BOX. ACTUAL DESIGN MAY VARY PER MANUFACTURER.
21. THE GAP FROM THE EDGE OF THE COVER TO THE INSIDE EDGE OF THE BOX SHALL BE A MAXIMUM OF 1/8" + 1/16".
22. TOP OF THE POLYMER CONCRETE COVER SHALL SET FLUSH WITH THE TOP OF THE JUNCTION BOX.
23. THIS BOX IS NOT ALLOWED IN THE TRAVELED WAY OR SHOULDERS.
24. A 5/8" DIA. X 12 FT. LONG GROUND ROD SHALL BE INSTALLED IN ONE CORNER OF THE BASE.

PLOT BY: Dpp8U
 DATE: 7/24/2023
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TOMS RIVER TOWNSHIP			
ELECTRICAL DETAILS			
ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES			
NVS, INC.			
CERTIFICATE OF AUTHORIZATION NO. 24GA27930500			
DREW F. MARKEWICZ			
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300			

REVISION	BY	C'K'D	DATE

26
29

CONSTRUCTION MATERIALS

- A. Limestone, apply at a rate of 90 lbs/1000sf, 2 tons/acre or as determined by a soil test, for permanent stabilization.
- B. Fertilizer, 10-10-10, apply at a rate of 500 lbs./acre for permanent stabilization. Fertilizer, 10-20-10, apply at a rate of 11 lbs./1000 square feet for temporary stabilization.
- C. Straw mulch shall be uniformly spread in a layer of 1 inch to 1½ inch thick at a rate of 70 to 90 lbs/1,000 sq. ft. for both permanent and temporary stabilization.
- D. Mulching Anchoring - for both permanent and temporary stabilization - should be accomplished immediately after placement of hay or straw mulch to minimize loss by wind and water. This may be done by one of the following methods, depending upon the size of the area and steepness of slopes.
 - 1. Peg and Twine - Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a crisscross and a square pattern. Secure twine around each peg with two or more round turns.
 - 2. Mulch Nettings - Staple paper, cotton or plastic netting over mulch. Use a degradable netting in areas to be mowed. Netting is usually available in rolls 4 feet wide and up to 300 feet long.
 - 3. Crimper Mulch Anchoring Coultter Tool - A tractor -drawn implement especially designed to punch and anchor mulch into the soil surface. This practice affords maximum erosion control, but its use is limited to those slopes upon which the tractor can operate safely. Soil penetration should be about 3 to 4 inches. On sloping land, the operation should be on the contour.
 - 4. Liquid Mulch-Binders
 - a. Applications should be heavier at edges where wind catches the mulch, in valleys and at crests of banks. Remainder of area should be uniform in appearance.
 - b. Use one of the following:
 - 1. Organic and Vegetable Based Binders - Naturally occurring, powder based, hydrophilic materials that mixed with water formulates a gel and when applied to mulch under satisfactory curing conditions will form membraned networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turf grass. Vegetable based gels shall be applied at rates and weather conditions recommended by the manufacturer.
 - 2. Synthetic Binders - High polymer synthetic 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 rate and weather conditions recommended by the manufacturer and remain tacky until germination of grass.
 - c. If construction occurs during the non-growing season, refer to the mulch only Note #6 of the Construction Notes.

E. TYPE B SEEDING MIXTURE

KIND OF SEED	MINIMUM PURITY, PERCENT	MINIMUM GERMINATION, PERCENT	PERCENT OF TOTAL WEIGHT OF MIXTURE
REDTOP	92	85	10
RED FESCUES (CREEPING OR CHEWINGS)	95	80	55
BLACKWELLS SWITCHGRASS	95	85	15
PERENNIAL RYEGRASS	98	85	5
KENTUCKY 31	95	80	15

- F. Temporary seeding mix to be perennial rye grass. Application rate shall be 1.0 pound/1000 square feet or 100 pounds/acre. The limestone application rate shall be 90 pounds/1000 square feet or 2 ton/acre. Recommended seeding periods are March 1 to May 15 and August 15 to October 1. Irrigation is provided to ensure successful germination.
- G. Stone for Wire-enclosed Riprap. Wire-enclosed riprap consists of mats or baskets fabricated from wire mesh, filled with 4" stone, connected together and anchored to the ground. A plastic filter cloth shall be placed on the prepared area where gabions are in contact with soil. Stone used for wire-enclosed riprap shall meet the requirements of dumped riprap except for size and gradation of stone. Stone used shall be well graded within the sizes available and 70 percent, by weight, and smallest stone shall exceed the wire mesh opening. The maximum size of stone, measured normal to the slope, shall not exceed the mat thickness.
- H. Wire for Wire-enclosed Riprap. All wire gauges are subject to a tolerance of +/- 2.50% of the manufacturer's stated specifications, the thickness of P.V.C. coating excluded.
- I. Geotextile roadway underlayment shall be woven or non-woven polypropylene or polyester fabric (Bidim C28, Mirafi 140, Supac 5-P, Staff M-1195 Permealiner or equivalent) meeting the following specifications: A.S.T.M.D. 1910, A.S.T.M.D. 1777, A.S.T.M.D. 1682, A.S.T.M.D. 2263 and A.S.T.M.D. 774-46 and having a minimum grab tensile strength of 130 pounds and a water permeability rate of at least 0.02 cm/sec.
- J. A 5" Average Depth of Topsoil is Required, Firmed in Place.
- K. Established Permanent Vegetation Means 80% Vegetative Coverage with the Specified Mixture for Seeded Area and Mowed Once.

CONSTRUCTION NOTES

1. The Ocean County Soil Conservation District shall be notified forty-eight (48) hours in advance of any land disturbance.
2. All work is to be done in accordance with the State Standards for Soil Erosion and Sediment control in New Jersey.
3. All Soil Erosion and Sediment Control practices are to be installed prior to any major soil disturbance, or in their proper sequence, and maintained until permanent protection is established.
4. 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. The revised plans must meet all current "The Standards for Soil Erosion and Sediment Control and Sediment Control in New Jersey, 7th Edition, January 2014, Revised July 2017. Link to 2014 Standards: <http://www.state.nj.us/agriculture/divisions/anr/nrc/njerrosion.html>.
5. N.J.S.A. 4:24-39 et. seq. requires that no Certificates of Occupancy be issued before there has been compliance with provisions of a certified plan for permanent measures. All site work, and all work around individual lots in subdivisions, must be completed prior to the District issuing a Report of Compliance for the issuance of a Certificate of Occupancy by the Municipality.
6. Any disturbed area that will be left exposed for 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, within 14 days at a rate of 2 to 2½ tons per acre, according to State Standard for Stabilization with Mulch Only.
7. Immediately following initial disturbance or rough grading, all critical areas subject to erosion (i.e. steep slopes and roadway embankments) will receive temporary seeding in combination with straw mulch or a suitable equivalent, at a rate of 1½ to 2 tons per acre, according to State Standards.
8. 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.
9. Any steep slopes (3:1 or greater) or any existing roadways receiving pipeline installation will be backfilled and stabilized daily, as the installation continues.
10. The Standard for Stabilized Construction Access requires the installation of a stone pad using clean crushed angular stone (ASTM C-33, size No. 2 or 3) at all construction driveways where vehicles will access paved roadways from unpaved areas of the site.
11. All sediment washed, dropped, spilled, or tracked onto roadways (public or private) or other impervious surfaces will be removed immediately.
12. Permanent vegetation is to be seeded or sodded on all exposed areas within ten (10) days after final grading. At the time of the final inspection, the Contractor shall be required to provide confirmation that the proper type and amount of seed, lime, and fertilizer have been used for permanent stabilization work. Straw mulch is required on all seeding.
13. 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.
14. 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 covered with a minimum of twelve (12) inches of soil having a Ph of 5 or more prior to seedbed preparation. Areas where trees or shrubs are to be planted shall be covered with a minimum of twenty-four (24) inches of soil having a pH of 5 or more.
15. Conduit Outlet Protection must be installed at all required outfalls prior to the drainage system becoming operational. Conduit outlet protection is not required in basins acting as sediment basins during construction.
16. 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 Standards for Dewatering.
17. 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.
18. 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. The District reserves the right to determine when certification of a new and separate Soil Erosion and Sediment Control Plan will be required for these activities.
19. All soil stockpiles are to be temporarily stabilized in accordance with Soil Erosion and Sediment Control note #6. Stockpiles should be situated so as to not obstruct natural drainage or cause off-site environmental damage.
20. The Contractor shall be responsible for any erosion or sedimentation that may occur below stormwater outfalls or offsite as a result of construction of the project.
21. During the construction contract period, the Contractor, under the direction of the Ocean County Engineer, shall be responsible for the construction and maintenance of temporary and permanent soil erosion and sedimentation control devices, as required by the Standards for Soil Erosion and Sediment Control in New Jersey.
22. All disturbed areas resulting from soil stockpiles and construction yards shall be permanently stabilized prior to completing the project.
23. Immediately prior to topsoiling, the surface should be scarified 6" to 12" where there has been soil compaction. This will help ensure a good bond between the topsoil and subsoil.
24. The dry method and not the hydraulic method shall be the ONLY acceptable method to place seed and fertilizer due to the sandy nature of the subsoils in this project.
25. Inspect site just before seeding. If traffic has left the soil compacted, the area must be retilled and firmed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey.
26. All seed must be drilled or raked to a depth of ¼" to ½" below the surface of the soil.
27. The Standards for Soil Erosion and Sediment Control in New Jersey have specific requirements for topsoiling, the installation of sod, temporary and/or permanent vegetative cover, land grading, and construction of infiltration structures. The text found on pages 4-2 (sec. 2 C), 6-2 (Sec. 2 D), 7-1 (sec 1 C), 8-2 (sec. 3 D), 19-2 (last paragraph), 38-8 (4th paragraph), and 38-12 (1st paragraph) serve to help minimize soil compaction and reduce maintenance needs.
28. Additional measures will be required if erosion develops.
29. The Contractor shall be responsible for placing silt fence in areas that may be subject to sediment build up from construction, i.e. along swales, streams, wetlands, open bodies of water, etc. in accordance with the State Standards for Soil Erosion and Sediment Control in New Jersey.

SOIL COMPACTION MITIGATION NOTES

1. Procedures shall be used to mitigate excessive soil compaction prior to placement of topsoil and establishment of permanent vegetative cover.
2. Restoration of compacted soils shall be through deep scarification/tillage (6" minimum depth) where there is no danger to underground utilities (cables, irrigation systems, etc.). In the alternative, another method as specified by a New Jersey Licensed Professional Engineer may be substituted subject to District approval.
3. Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage 6" minimum depth) is proposed as part of the sequence of construction.

TOPSOILING NOTES

1. Topsoil should be handled only when it is dry enough to work without damaging soil structure.
2. A uniform application to an average depth of 5" (minimum 4") firmed in place is required.
3. Pursuant to the requirements in Section 7 of the Standard for Permanent Vegetative Stabilization, the contractor is responsible to ensure that permanent vegetative cover becomes established on at least 80% of the soils to be stabilized with vegetation. Failure to achieve the minimum coverage may require additional work to be performed.

CONSTRUCTION SEQUENCE

ITEM	DURATION (Working Days)
1. Install sediment control devices.	2 Days
2. Install electrical conduit.	40 Days
3. Install lighting assemblies, wiring, street furniture, gateway signage and plantings.	40 Days
4. Remove sediment control devices upon permanent stability of disturbed surfaces.	2 Days

PLOT BY: Dpp@u
 DATE: 7/24/23
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SE-1
SE-2

TOMS RIVER TOWNSHIP

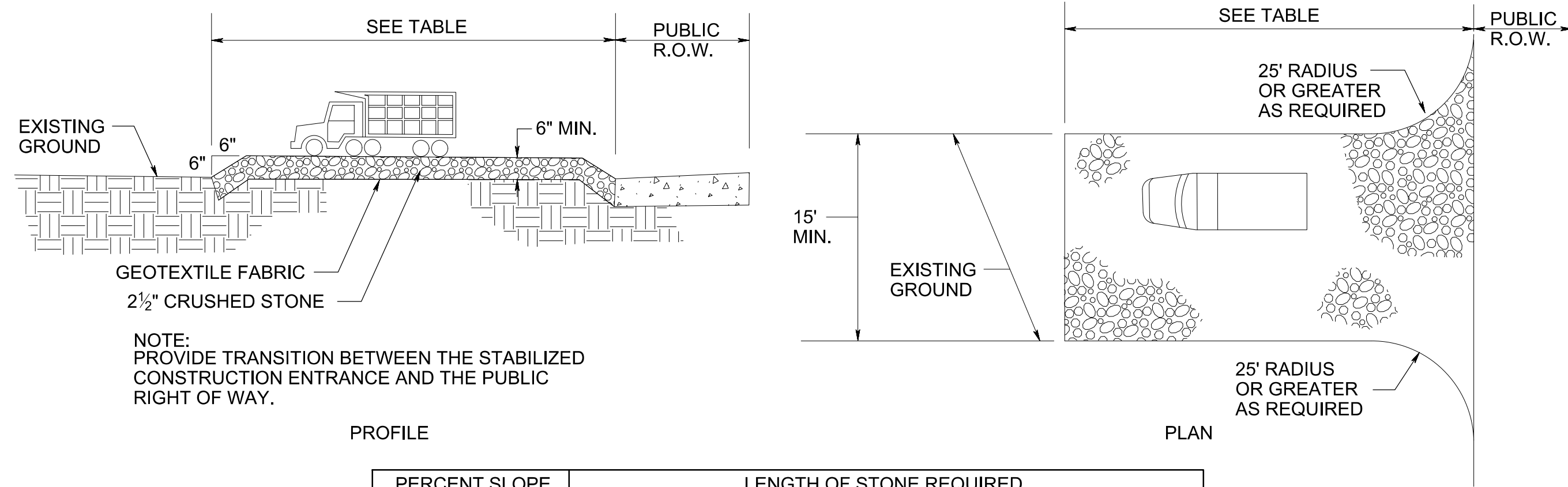
SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

ORTLEY BEACH STREETScape AND GATEWAY TRANSPORTATION ALTERNATIVES

NVS, INC.
 CERTIFICATE OF AUTHORIZATION NO. 24GA27930500

DREW F. MARKEWICZ
 NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE03476300

REVISION	BY	C'K'D	DATE

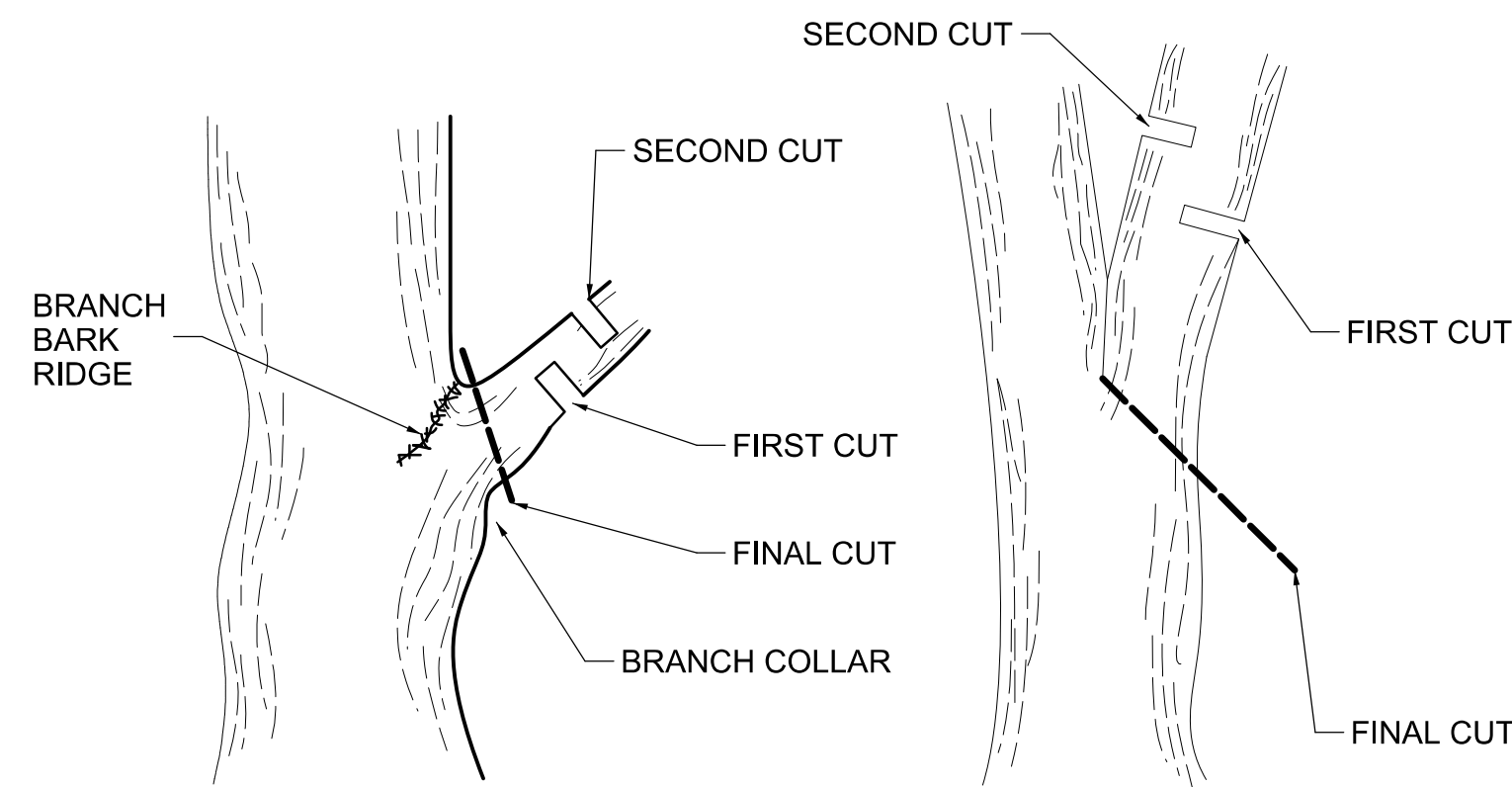


PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT.	100 FT.
2 TO 5%	100 FT.	200 FT.
> 5%	ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE*	

* AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

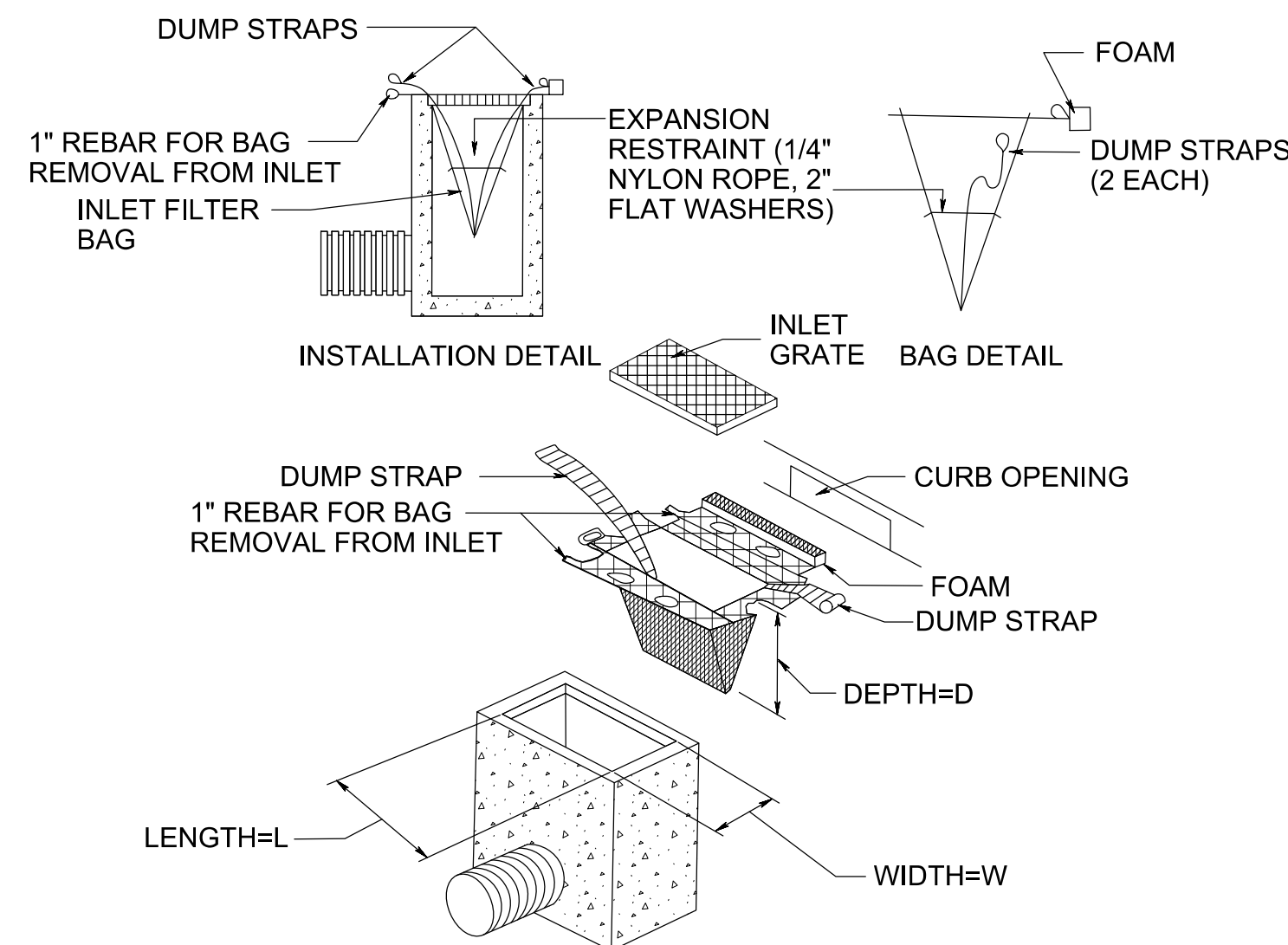
STABILIZED CONSTRUCTION DRIVEWAY

N.T.S.



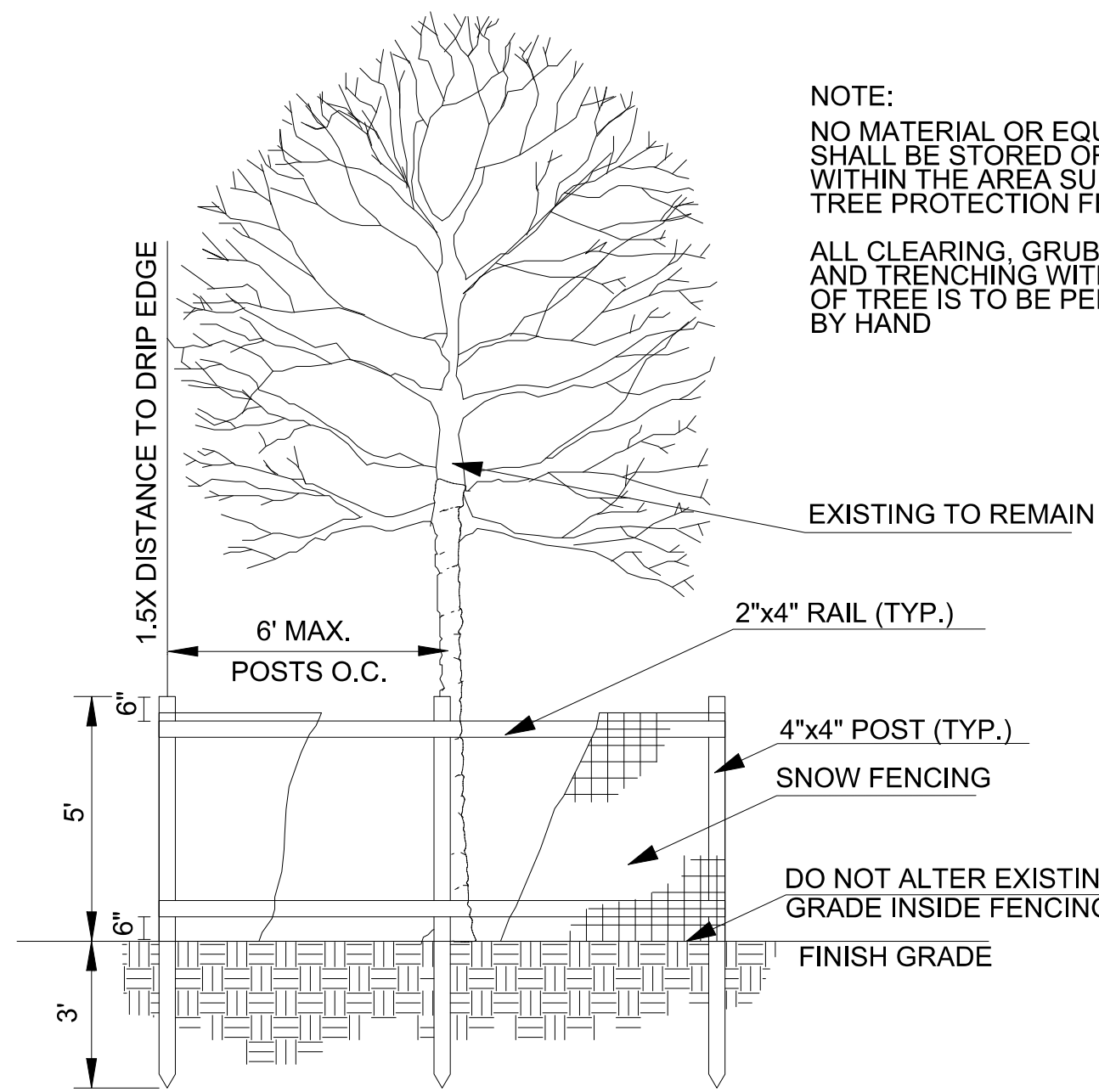
REMOVAL OF TREE LIMB

IF/WHERE DIRECTED
N.T.S.



INLET FILTER

N.T.S.

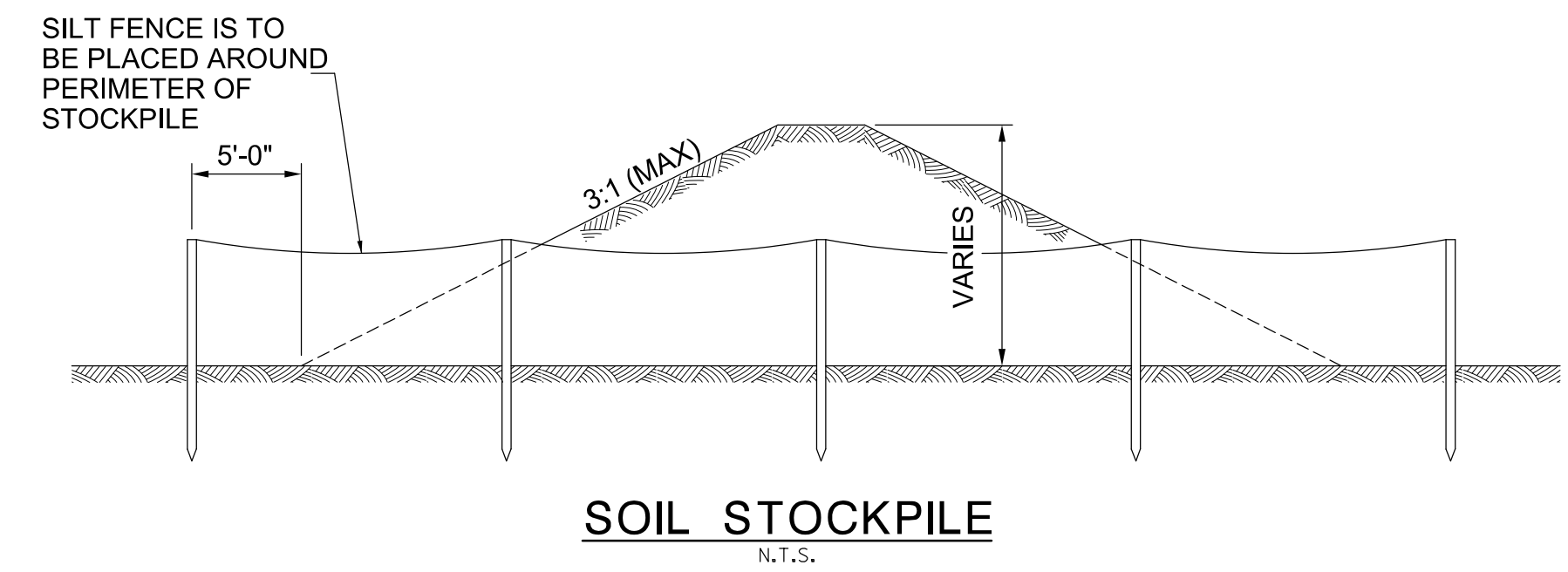


NOTE:
NO MATERIAL OR EQUIPMENT SHALL BE STORED OR STOCKPILED WITHIN THE AREA SURROUNDED BY TREE PROTECTION FENCING
ALL CLEARING, GRUBBING, GRADING AND TRENCHING WITHIN 15 FEET OF TREE IS TO BE PERFORMED BY HAND

NOTE:
ALL TREES BEYOND PROPOSED DISTURBANCE LIMIT ARE TO REMAIN, UNLESS PRIOR APPROVAL FOR REMOVAL IS RECEIVED FROM THE ENGINEER. ALL TREES (TO REMAIN) WITHIN 5' OF PROPOSED LAND DISTURBANCE SHALL RECEIVE TREE PROTECTION.

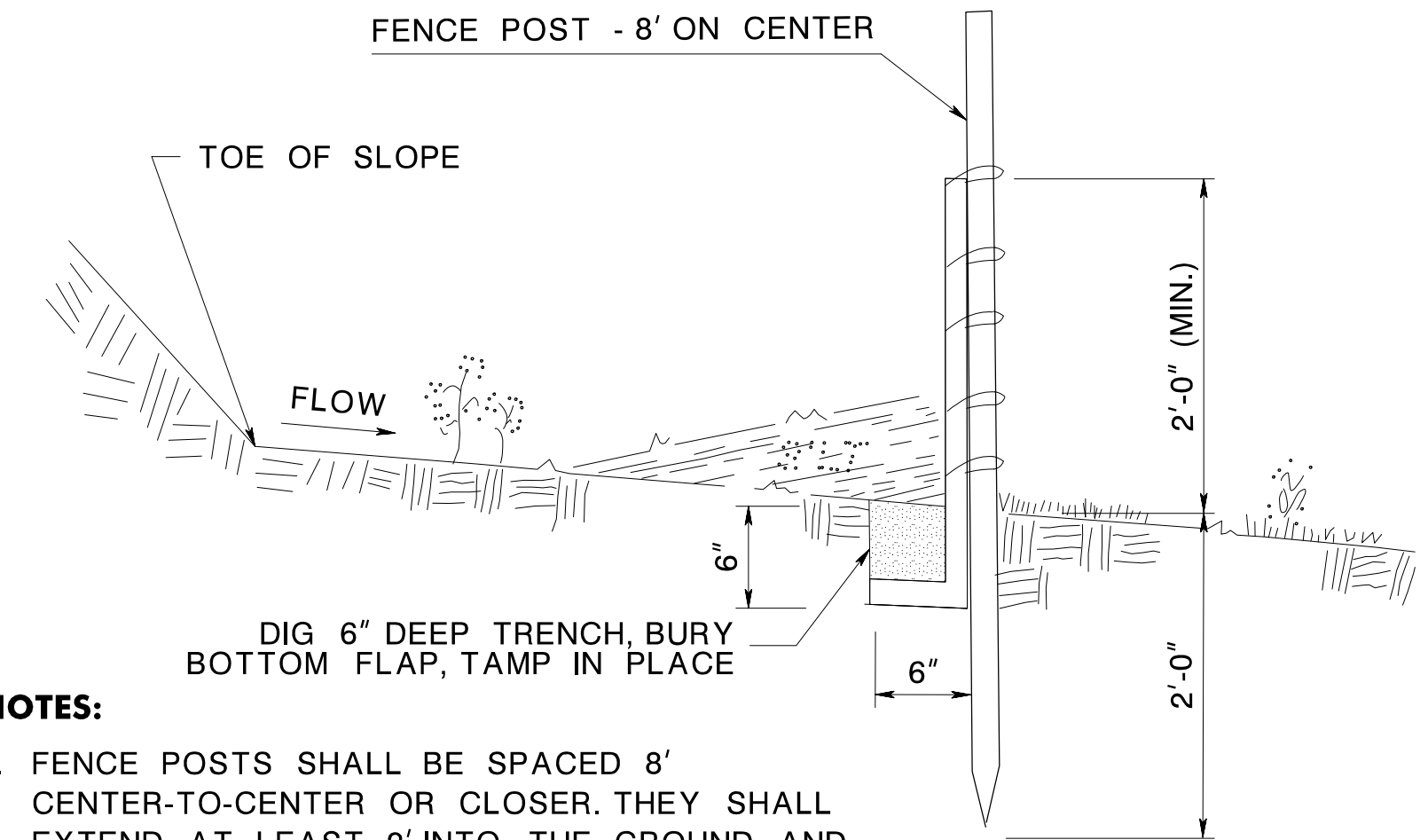
TREE PROTECTION

IF/WHERE DIRECTED
N.T.S.



SOIL STOCKPILE

N.T.S.



NOTES:

- FENCE POSTS SHALL BE SPACED 8' CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2' INTO THE GROUND AND EXTEND AT LEAST 2' ABOVE GROUND. POST SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1 1/2".
- A METAL FENCE WITH 6" OR SMALLER OPENINGS AND AT LEAST 2' 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.
- A GEOTEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6" DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2' 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 FASTENER 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.

SILT FENCE

N.T.S.

TOMS RIVER TOWNSHIP

SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

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SE-2
SE-2