NJDOT FY2021 MUNICIPAL AID PROGRAM

TOWNSHIP OF WILLINGBORO, BURLINGTON COUNTY, NEW JERSEY

PENNYPACKER DRIVE STA. 0+62 TO 14+90

PREPARED FOR:

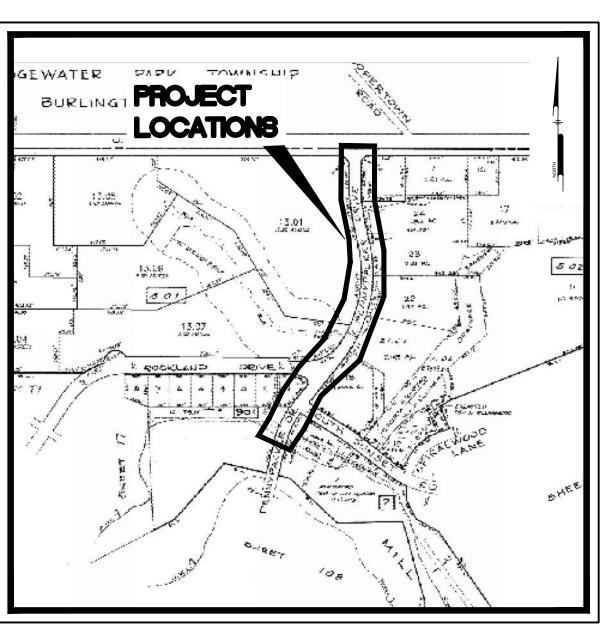
OWNER

TOWNSHIP OF WILLINGBORO

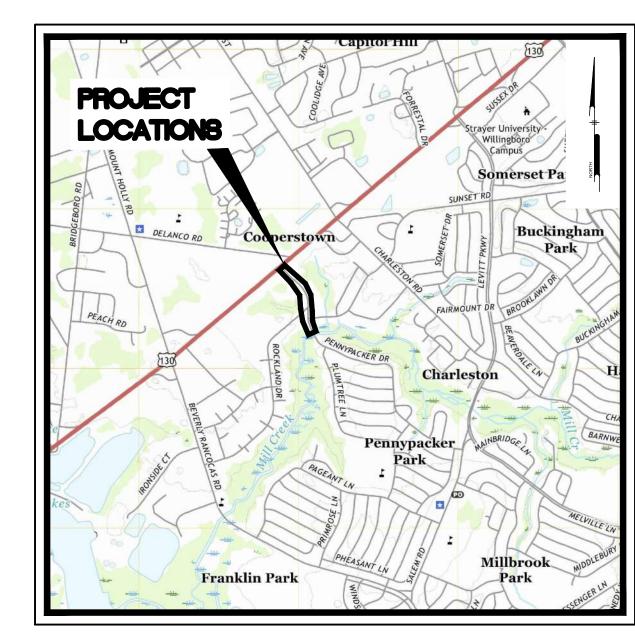
1 REV DR MARTIN LUTHER KING JR DRIVE WILLINGBORO, NJ 08046



SOILS MAP
Scale: NTS



LOCATION MAP
Scale: NTS



USGS MAP Scale: 1" = 2000'

PREPARED BY:
PENNONI ASSOCIATES INC.



515 Grove Street, Suite 1B Haddon Heights, NJ 08035 **T** 856.547.0505 **F** 856.547.9174



CALL BEFORE YOU DIG 1-800-272-1000

CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE REQUIREMENTS OF THE NEW JERSEY ONE-CALL DAMAGE PREVENTION SYSTEM AS STATED IN THE "UNDERGROUND FACILITY PROTECTION ACT".

Pennoni

SH J. DOUGHERTY
PROFESSIONAL ENGINEER

W JERSEY LICENSE NO. GE34634

HUGH PRO NEW JEF

VER SHEET/ KEY PLAN

1/2022 1 NJDOT REVIEW COMMENTS SWR
DATE NO. REVISIONS BY

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FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES
ARISING OUT OF OR RESULTING THEREFROM.

ROJECT WTCEX21027

ATE DECEMBER 14, 2021

RAWING SCALE AS NOTED

DRAWN BY SMR

APPROVED BY HJD

CM0001
SHEET 1 OF 10

LEGEND

PROPOSED BASE REPAIR
PROPOSED CONCRETE
PROPOSED PAVING
FENCE
CURB
DEPRESSED CURB
SIGN
SIGN POST AND BOARD
CONTOUR
RIGHT-OF-WAY LINE
ADD ALTERNATE AND BASI

 RIGHT-OF-WAY LINE

 ADD ALTERNATE AND BASE BID MEET
 6.

 ALIGNMENT CENTER LINE

 WATER LINE
 7.

 SANITARY SEWER
 7.

 D
 D
 D

 STORM SEWER
 3

UTILITY POLE

WATER VALVE

UNIDENTIFIED MANHOLE

GENERAL NOTES:

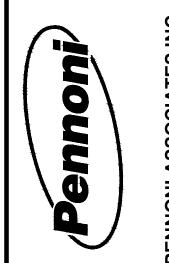
- 1. CURB RAMPS AND SIDEWALKS THAT ARE CONSTRUCTED NOT IN COMPLIANCE WITH ADA ACCESSIBILITY REQUIREMENTS INCLUDING MAXIMUM RUNNING SLOPES, MAXIMUM CROSS SLOPES, LANDING AREA LOCATION AND SIZE, DIVERGING SIDEWALK DROP OFF PROTECTION, BLENDED TRANSITIONS, BLENDED TRANSITION RUNNING SLOPES AND CROSS SLOPES, FLARE WIDTHS, GRADE BREAKS AND GRADE BREAK DIRECTIONS, CLEAR SPACE SIZE AND LOCATION, WILL NOT BE ACCEPTED.
- 2. NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2019 AND CURRENT AND SUPPLEMENTARY SPECIFICATIONS THERETO GOVERN.
- 3. SUPPLEMENTARY SPECIFICATIONS FOR STATE AID PROJECTS APPLY.
- 4. REFER TO CURRENT "NJDOT STANDARD ROADWAY CONSTRUCTION—TRAFFIC CONTROL—BRIDGE CONSTRUCTION DETAILS 2019" FOR ADDITIONAL GUIDANCE.
- 5. ALL DIMENSIONS, QUANTITIES AND EXISTING PHYSICAL CHARACTERISTICS OF THE WORK AREA SHALL BE REVIEWED AND FIELD VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING A BID, MATERIAL ORDERING OR FABRICATION OF ANY PART OF THE WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - PRIOR TO THE START OF ANY OF THE CONSTRUCTION THE CONTRACTOR SHALL CALL THE "ONE CALL" NUMBER (1-800-272-1000) FOR UTILITY MARKOUT LOCATION AND NOTIFICATION. THE CONFIRMATION NUMBER SHALL BE GIVEN TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF THE CONSTRUCTION.
- 7. IT IS THE OBLIGATION AND COST OF THE CONTRACTOR TO CONDUCT HIS OWN SUBSURFACE INVESTIGATIONS AS HE MAY DEEM NECESSARY. THIS INVESTIGATION SHALL BE COMPLETED PRIOR TO BID SUBMITTAL TO DETERMINE ANY UNIQUE CONDITIONS OR MATERIALS THAT MAY EXIST WHICH COULD EFFECT THE CONSTRUCTION OR COST. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY SUCH FINDINGS.
- 8. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK PREMOLDED BITUMINOUS IMPREGNATED MATERIAL FOR THE FULL DEPTH OF THE THINNER MATERIAL. COST FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT COST OF EITHER SIDEWALK, CURB, OR APRON, WHICHEVER APPROPRIATE, IN THE BID PROPOSAL.
- WHERE NEW SIDEWALK IS TO BE INSTALLED ADJACENT TO EXISTING SIDEWALK, DRIVEWAY, POLE, ETC., AN EXPANSION JOINT SHALL BE PLACED BETWEEN EACH AND THE NEW SIDEWALK ELEVATION SHALL MATCH THAT OF THE EXISTING IMPROVEMENT.
- 10. EXISTING ITEMS NOTED ON THE PLANS FOR REMOVAL ARE INTENDED TO BEGIN AND TERMINATE AT EXISTING JOINTS HOWEVER, WHERE A JOINT DOES NOT EXIST THEN THE CONTRACTOR WILL BE REQUIRED TO "SAW CUT" TO MAKE AN EVEN, STRAIGHT LINE SEPARATION. THE COST OF THIS ITEM SHALL BE INCLUDED IN THE COST FOR EACH UNIT LISTED IN THE APPROPRIATE BID PROPOSAL ITEM.
- 11. EXTREME CARE SHALL BE EXERCISED BY THE CONTRACTOR WHEN REMOVING EXISTING SIDEWALK, CURB OR DRIVEWAY MATERIAL SO AS NOT TO DISTURB ADJACENT IMPROVEMENTS. ADJACENT IMPROVEMENTS DISTURBED DURING REMOVAL OF THE NOTED ITEMS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- 12. ALL CONCRETE SHALL BE 28 DAY AIR ENTRAINED (3% TO 5%) CONCRETE. CONCRETE COMPRESSIVE STRENGTH OF (F'C) 4000 PSI MINIMUM SHALL BE DEVELOPED UNLESS NOTED OTHERWISE.
- 13. ALL EDGES (VERTICAL/HORIZONTAL) BETWEEN EXISTING PAVEMENT OR NEW/EXISTING CURB AND NEW PAVEMENT SHALL HAVE TACKCOAT APPLIED. COST FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT COST FOR HMA SURFACE COURSE LISTED IN THE BID PROPOSAL.
- 14. MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) AS DEFINED AND DESCRIBED IN THE SPECIFICATION'S SHALL BE STRICTLY FOLLOWED. A DETOUR PLAN SHALL NOT BE PERMITTED. COST FOR THIS ITEM SHALL BE INCLUDED IN THE COST FOR EACH UNIT LISTED IN THE BID PROPOSAL.
- 15. SANITARY SEWER CLEANOUTS IN CONCRETE REPLACEMENT/INSTALLATION AREAS SHALL RECEIVE A CAST IRON STREET BOX WITH "SEWER" LETTERED IN THE LID.
- 16. EXISTING UTILITIES INCLUDING PRIVATE LAWN SPRINKLER HEADS, WATER METER(S), VALVE BOXES, CLEAN OUTS, CURB STOPS, ETC. SHALL BE ADJUSTED TO MATCH THE FINISHED GRADE BY THE CONTRACTOR; COST FOR THIS ITEM SHALL BE INCLUDED IN AND DISTRIBUTED AMONG THE ITEMS IN THE BID PROPOSAL. WHERE UTILITIES OCCUR IN THE CONCRETE AREAS, THE ITEM SHALL BE EITHER "BOXED OUT" AND GROUTED WITH NON—SHRINK GROUT OR RAISED TO FINISHED GRADE THEN THE CONCRETE POURED. THE END RESULT REQUIRED IS THAT NO CHANGE IN ELEVATION SHALL REMAIN AFTER THE CONSTRUCTION IS COMPLETED.
- 17. SIDEWALK AREAS THAT SHALL BE REMOVED AND REPLACED ARE GENERALLY NOTED PHYSICALLY WITH A PAINT SPLOTCH. PRIOR TO THE REMOVAL OF ANY SIDEWALK THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER OR HIS REPRESENTATIVE THE EXACT EXTENT AND QUANTITY.
- 18. CONCRETE SIDEWALK ADJACENT TO PROPOSED HANDICAP RAMPS SHALL BE REPLACED AS NEEDED TO PROVIDE AN ADA—COMPLIANT RAMP.
- 19. CONTRACTOR IS RESPONSIBLE FOR SAW CUTTING ANY EXISTING CONCRETE (EX: FACE FORM POURS) THAT PROTRUDES INTO NEW ROADWAY.
- 20. CONTRACTOR SHALL ENSURE THAT STORMWATER WILL NOT BECOME TRAPPED AT EXISTING DRIVEWAY APRONS.

	<u>LEGEND</u>					<u>LEGEND</u>		
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× × ×	FENCE	xx		5	TJB	TELEPHONE JUNCTION BOX		ŢJB
	CURB DEPRESSED CURB		<u> </u>					
	SIDEWALK		<u> </u>	(T)	TELEPHONE MANHOLE		(T)
	CONCRETE				<u>TPB</u>	TELEPHONE PANEL BOX		TPB
	MILL/OVERLAY PAVEMENT							
	FULL DEPTH PAVEMENT REPLACEMENT/BASE REPAIR			(TELEPHONE PEDESTAL		
	GRASS INFILL AREA	* * * * * * * * * * * * * * * * * * * *		Œ	CS)	EMERGENCY CALL STATION		
	INLET PROTECTION/REPAIR							
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ST	STEAM MANHOLE	\bigcirc			UPB	UNIDENTIFIED PANEL BOX		
	STORM DRAIN CLEANOUT							
(D)	STORM DRAIN MANHOLE	(D)				UNIDENTIFIED PEDESTAL		
	STORM DRAIN FLARED END SECTION					UNIDENTIFIED VALVE		
П	STORM DRAIN HEADWALL		Item			Description		Quantity
	STORM DRAIN ID			ypacker		II, Minimum 2" Thick		5,794 SY
	OTOTAL BIOLINIE		2	HMA 9	9.5M64 Surfac	ce Course, 2" Thick		5,794 SY
	STORM DRAIN INLET		4	Detec	Repair, 8" Thio	g Surface		581 SY 32 SF
D	STORM ROOF DRAIN	D	5 6	Concr	ete Sidewalk,		Directed)	419 LF 36 SY
	STORM STAND PIPE	0	7 8		ete Drive apr ete Slope Gut	on, 8" Thick tter, 8" Thick		120 SY 58 LF
	STORM DRAIN WING WALL	1	9	-	ete Swale, 8" ce "B" Inlet C	'Thick Casting with "ECO" Head and Bicycle-safe	grate	320 SF
4			10	(Inclu	des Concrete	and Asphalt Restorations) uble Yellow, 4" Wide		2 UN 1,312 LF
			12	Therm	noplastic, Wh			164 LF 17 LF
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			15	Allow	ance for Asph	halt Price Adjustment for Hot Mix Asphal	t, if needed	1 LS
		5	SHEET # CN	+	TITLE	T/VEV DI ANI		LAST REVISED
			2 CN	/10002	COVER SHEET GENERAL NO	TES	12/14/2021	1/11/2022 1/11/2022
		-				ER - SITE PLAN 1 ER - SITE PLAN 2	12/14/2021 12/14/2021	1/11/2022 1/11/2022
					PENNYPACKE CONSTRUCTION	ER - ADA GRADING PLAN ON DETAILS	12/14/2021 12/14/2021	
			7 CN	/16002	CONSTRUCTION		12/14/2021	1/11/2022

8 CM6501 TRAFFIC CONTROL NOTES

9 CM6502 TRAFFIC CONTROL DETAILS

10 CM8501 | SOIL EROSION AND SEDIMENT CONTROL PLAN



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GH J. DOUGHERT
PROFESSIONAL ENGINEER

EW JERSEY LICENSE NO. GE34634

HUGH J. I
PROFESSI
NEW JERSEY I

GENERAL NOTES
WILLINGBORO TOWNSHIP
TREV DR MARTIN LUTHER KING JR RD

/11/2022 1 NJDOT REVIEW COMMENTS SWR
DATE NO. REVISIONS BY

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PROJECT WTCEX21027

DATE DECEMBER 14, 2021

DRAWING SCALE AS NOTED

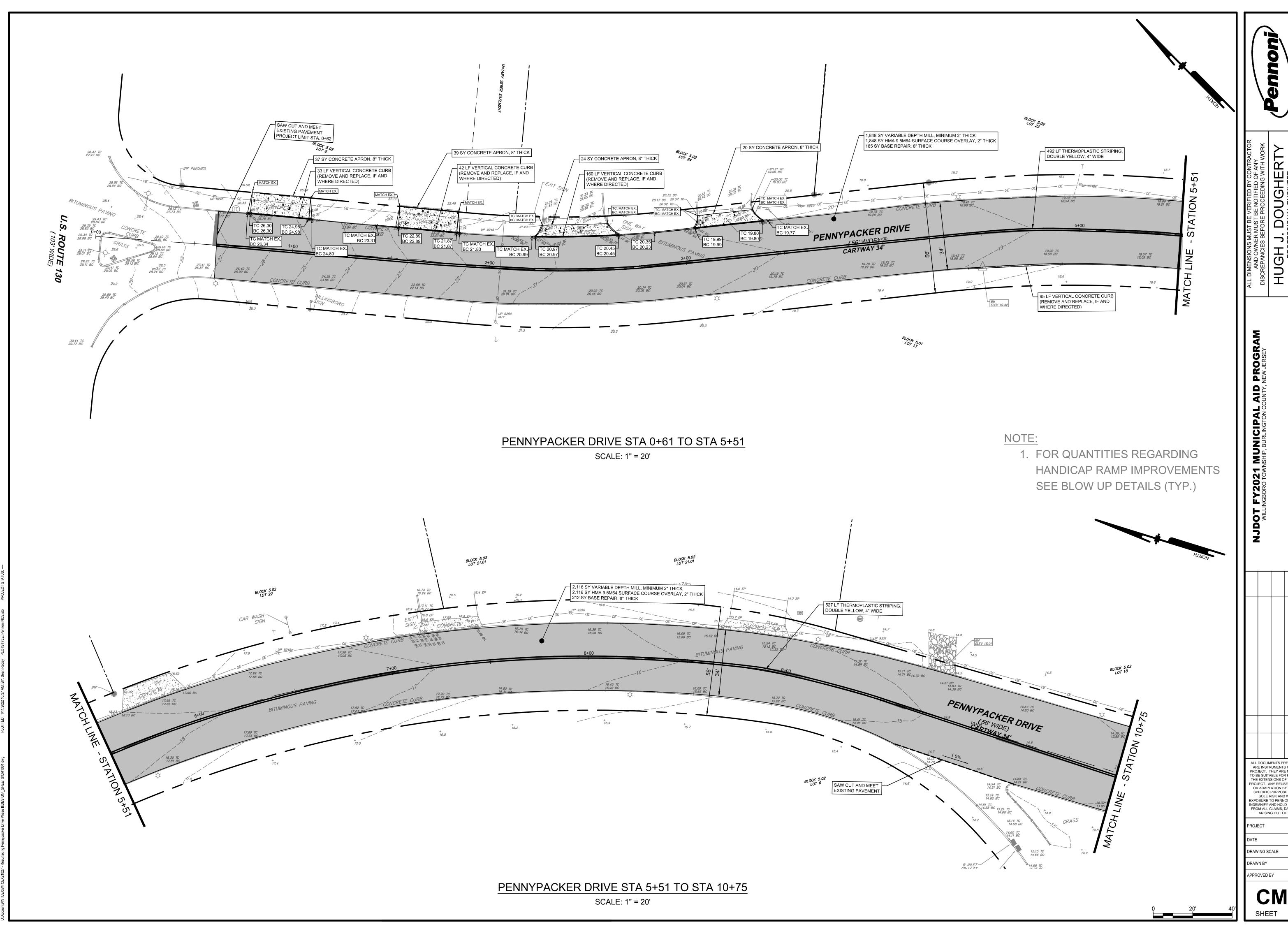
APPROVED BY HJE

SHEET 2 OF 10

DRAWN BY

12/14/2021 1/11/2022 12/14/2021 1/11/2022

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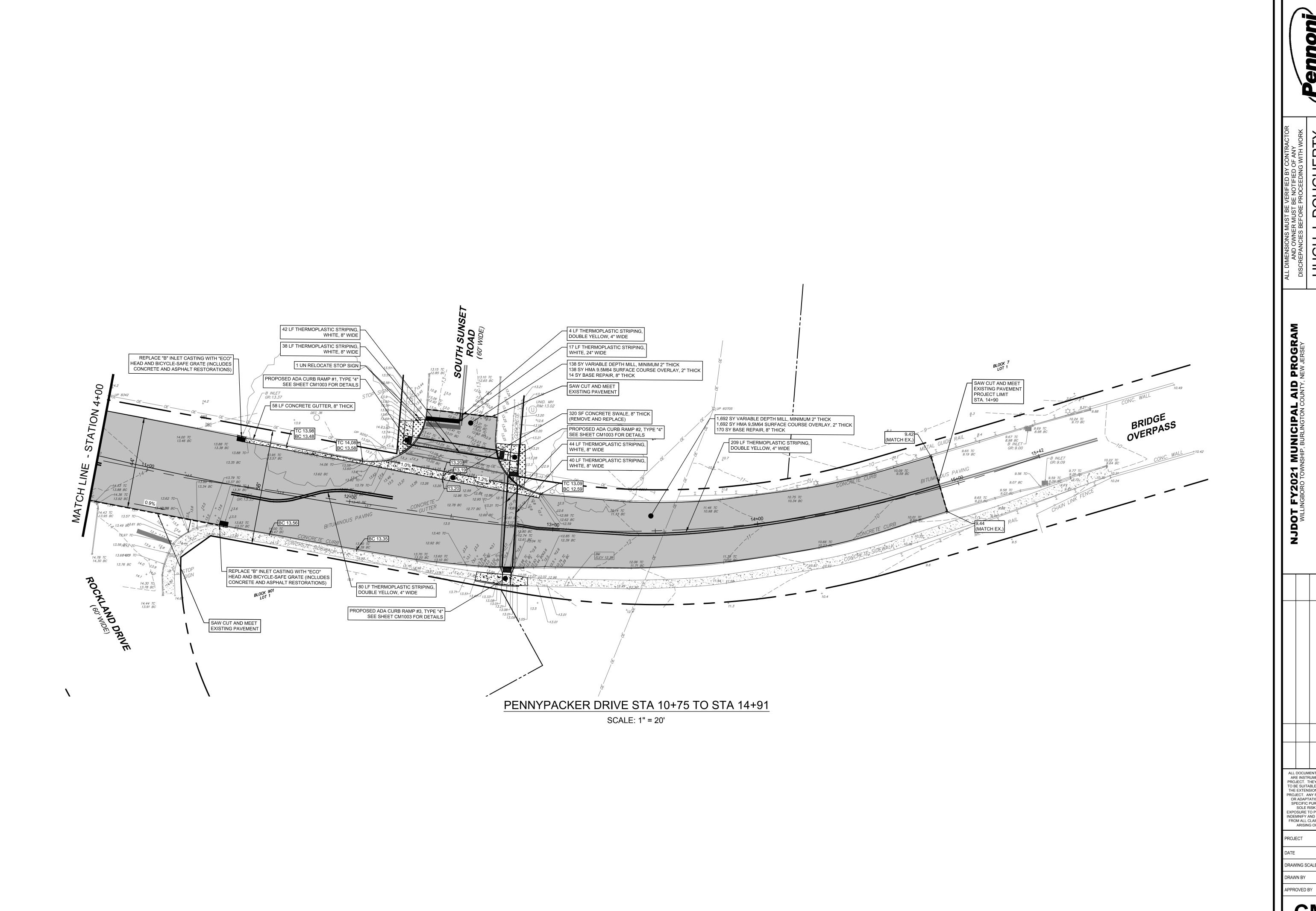


HUGH J. DOUGHER
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE3463 SITE

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WTCEX21027 DECEMBER 14, 2021



Pennoni ASSOCIATES INC.

HUGH J. DOUGHERTY
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE34634

NYPACKER - SITE PLAN 2

OT REVIEW COMMENTS
SMR

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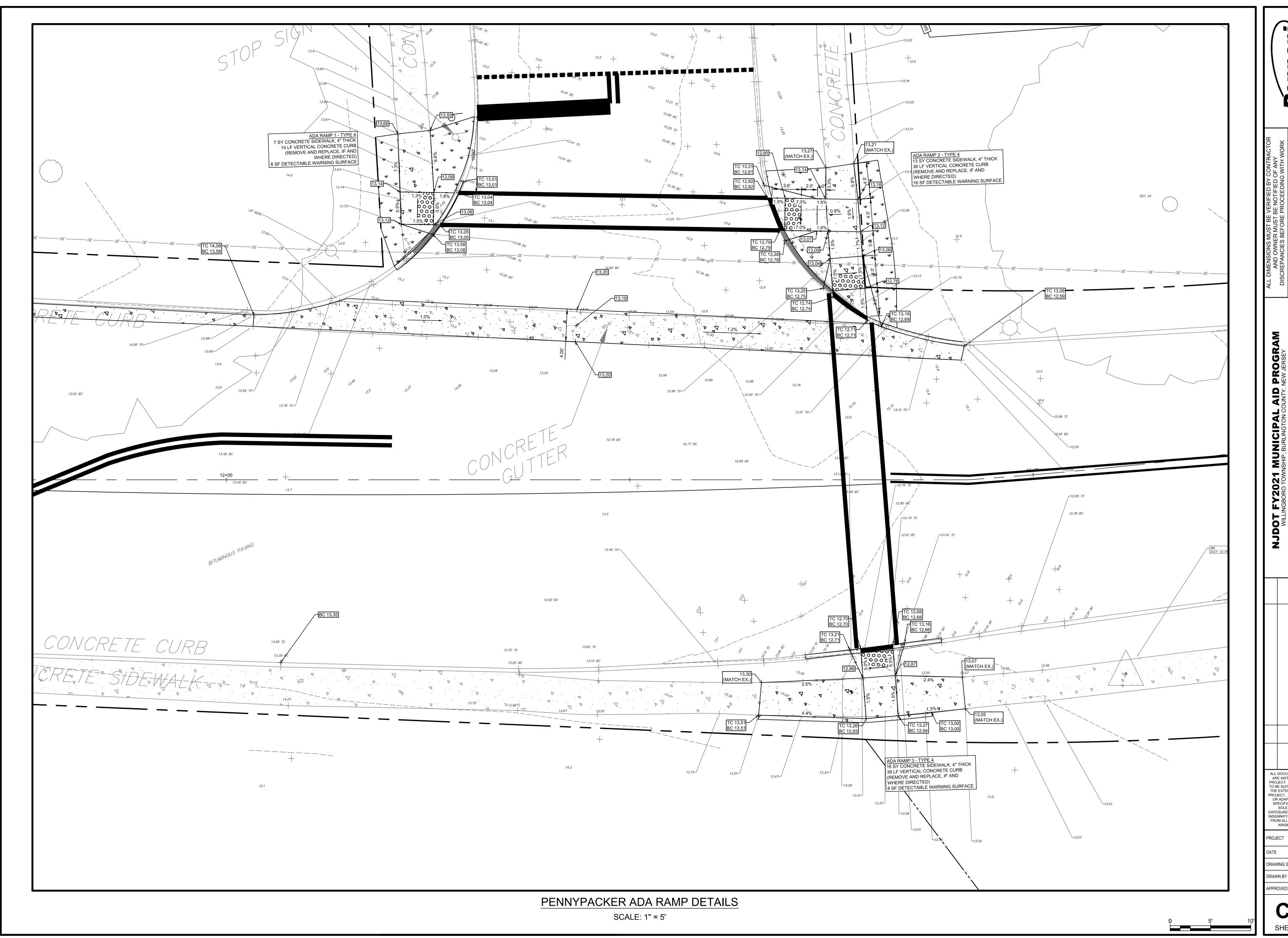
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DECEMBER 14, 2021

G SCALE 1"=20'

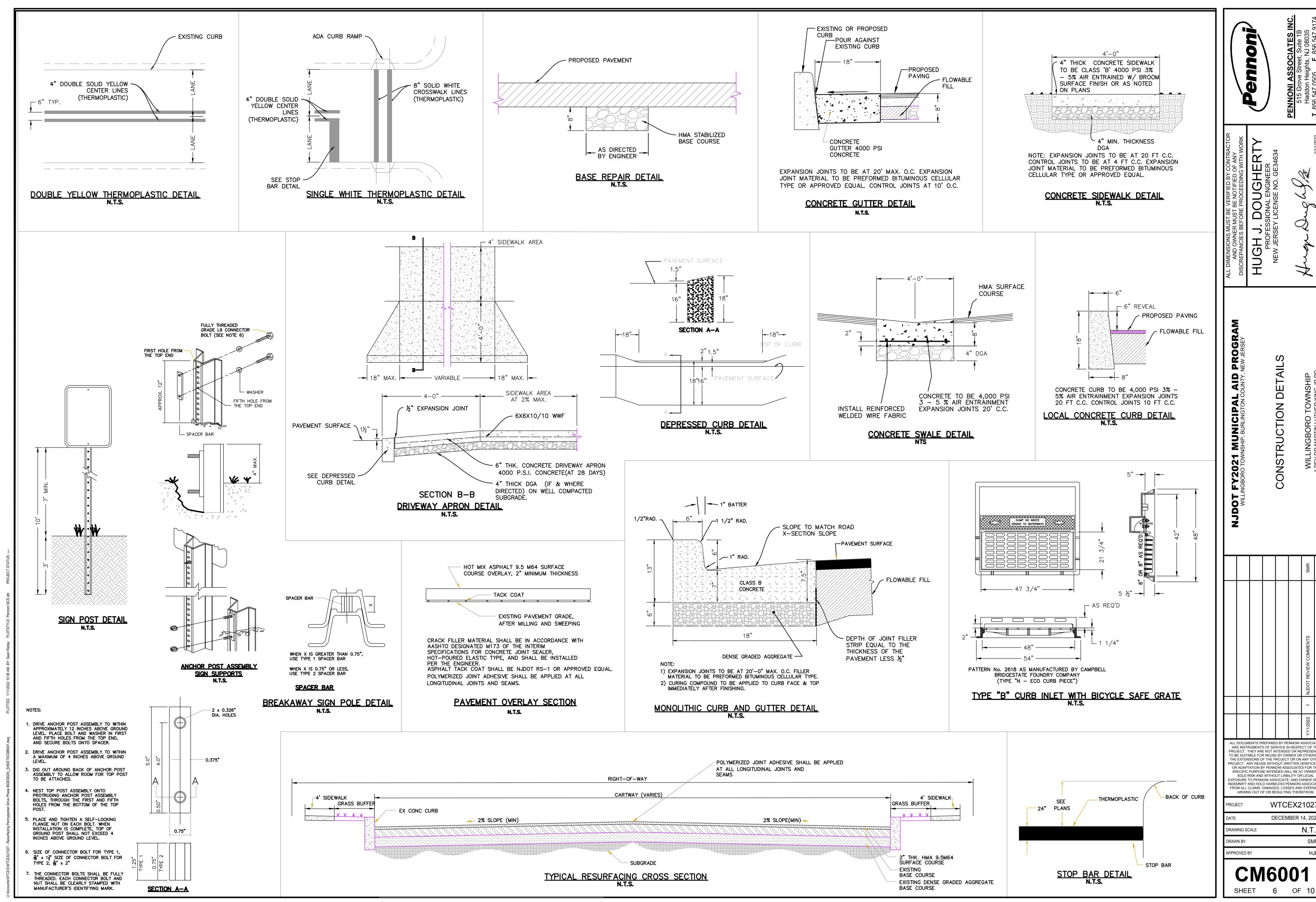
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> WTCEX21027 DECEMBER 14, 2021

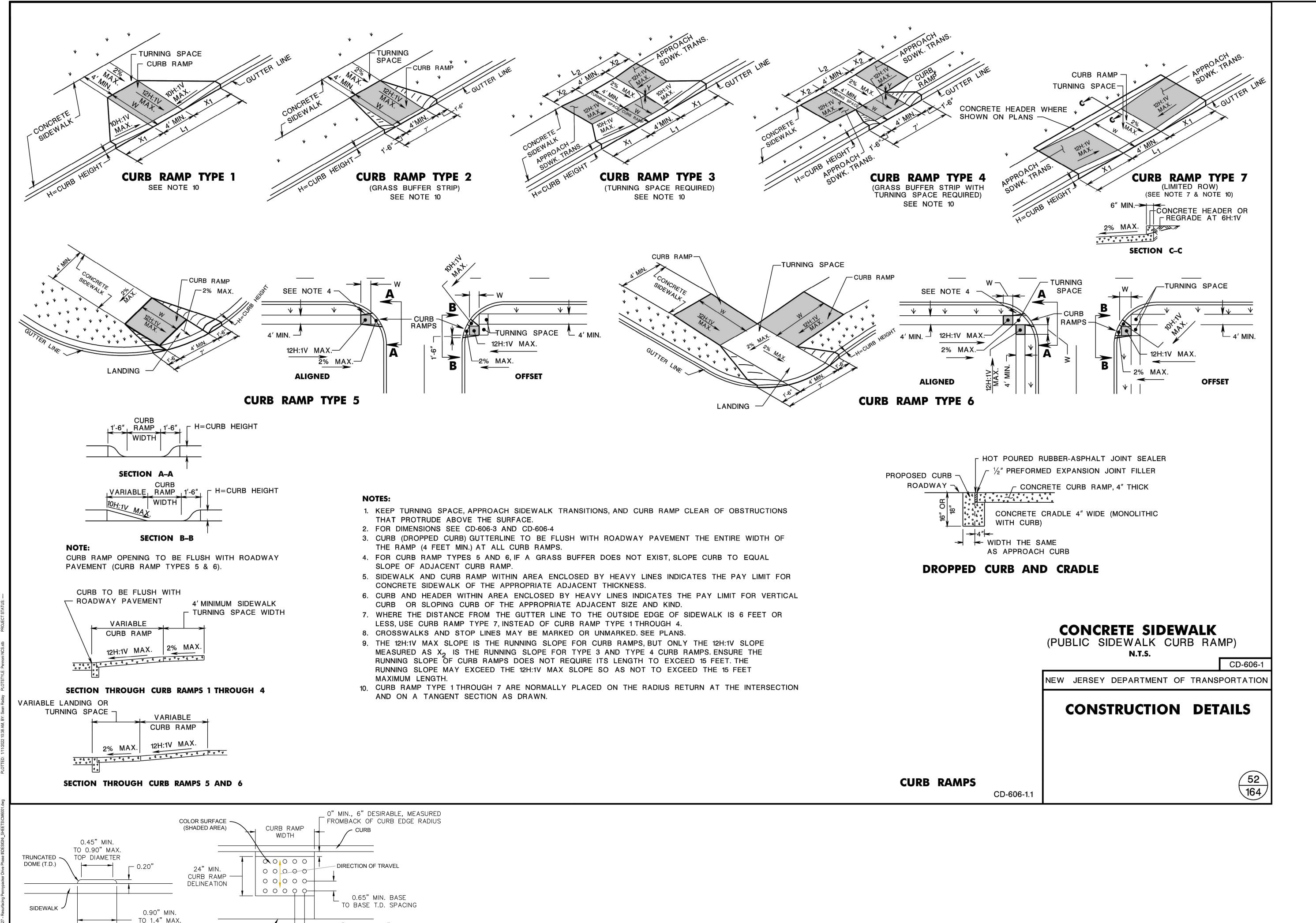


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> WTCEX21027 DECEMBER 14, 2021 N.T.S SMR

> > HJD



1.6" MIN. TO 2.4" MAX.

CENTER TO CENTER

T.D. SPACING

BASE DIAMETER

DETECTABLE WARNING SURFACE

- SIDEWALK -

PLAN VIEW

CO **O** ≥ ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL NDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATE ARISING OUT OF OR RESULTING THEREFROM. PROJECT WTCEX21027 DECEMBER 14, 2021 N.T.S DRAWING SCALE DRAWN BY PPROVED BY **CM6002**

LEGEND

LEFT RIGHT BOTH

LEFT RIGHT BOTH

BREAKAWAY BARRICADES BREAKAWAY BARRICADES WITH SIGN CONSTRUCTION SIGNS DRUMS CONE CONSTRUCTION BARRIER CURB (TYPE SPECIFIED)

TRAFFIC DIRECTOR, FLAGGER

WORK AREA

DIRECTION OF TRAFFIC FLOW

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, (ALL OTHER APPROVED)

PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

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. TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM

> 11. CONSTRUCTION SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-14A (GROOVED PAVEMENT) TO BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST.

GENERAL NOTES:

AHEAD) AS A MINIMUM.

THE PLANS AND SPECIFICATIONS.

ADVANCE OF PROJECT LIMITS.

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.

ADVANCE WARNING SIGNS DISTANCES AND TAPER LENGTHS MAY BE EXTENDED, AT

DIRECTION OF THE DEPARTMENT, TO ADJUST FOR REDUCED VISIBILITY DUE TO

2. THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED AS

4. RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE

5. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS, AND / OR PLOWABLE PAVEMENT

6. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING,

TEMPORARY,OR PROPOSED TRAFFIC SIGNAL SYSTEMS ARE TO BE BAGGED OR

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

9. A W1-6 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON

MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.

THE CLOSED WIDTH TO BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR

8. CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) TO BE LOCATED 200 FEET IN

BE COVERED, REMOVED, OR RELOCATED AS DIRECTED BY THE RE.

WARNING SIGN ARE TO BE PROVIDED WITH AT LEAST ONE W20-IF SIGN (ROAD WORK

REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN ARE TO

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

3. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES ARE TO BE IN PLACE.

HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.

LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.

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

^{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.

THE BUREAU OF TRAFFIC ENGINEERING, REGIONAL TRAFFIC ENGINEER - WORK 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

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

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 MILLING OR HMA PAVING IS PERFORMED AND THE LANE IS TO BE RE-OPENED TO TRAFFIC EACH DAY. APPLY TRAFFIC STRIPES AS DIRECTED BY THE RE.

TCD-1

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS



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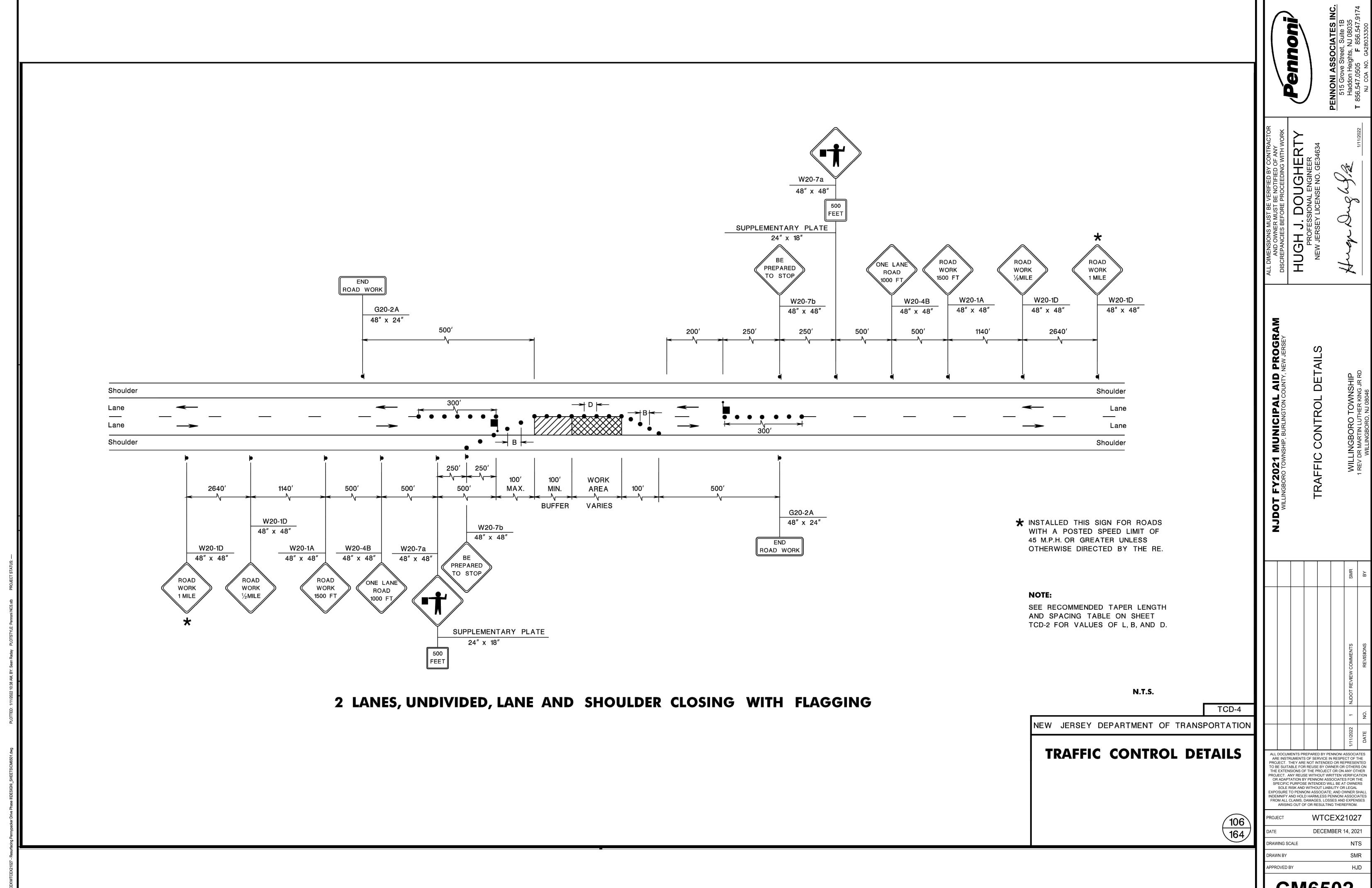
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ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE ROJECT. THEY ARE NOT INTENDED OR REPRESENT O BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL DEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI ARISING OUT OF OR RESULTING THEREFROM.

WTCEX21027 **DECEMBER 14, 2021**

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PRIOR TO A SUSPENSION OF CONSTRUCTION OPERATIONS FOR A PERIOD OF 20 DAYS OR MORE, ANY AREA THAT HAS BEEN DISTURBED AND LEFT EXPOSED SHALL RECEIVE TEMPORARY

WHEN BORROW MATERIAL IS OBTAINED FROM OTHER THAN COMMERCIALLY OPERATED SOURCES. EROSION OF THE BORROW SITE SHALL BE SO CONTROLLED BOTH DURING AND AFTER COMPLETION OF THE WORK THAT EROSION WILL BE MINIMIZED AND SEDIMENT WILL NOT ENTER STREAMS OR OTHER BODIES OF WATER. WASTE OR DISPOSAL AREAS AND CONSTRUCTION ROADS SHALL BE LOCATED AND CONSTRUCTED IN A MANNER THAT WILL KEEP SEDIMENT FROM ENTERING STREAMS.

FREQUENT FORDING OF LIVE STREAMS WILL NOT BE PERMITTED; THEREFORE, TEMPORARY BRIDGES OR OTHER STRUCTURES SHALL BE USED WHEREVER AN APPRECIABLE NUMBER OF STREAM CROSSINGS ARE NECESSARY. UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEERS, MECHANIZED EQUIPMENT SHALL BE NOT OPERATED IN LIVE STREAMS.

WHEN WORK AREAS OR GRAVEL PITS ARE LOCATED IN OR ADJACENT TO LIVE STREAMS, SUCH AREAS SHALL BE SEPARATED FROM THE MAIN STREAM BY A DIKE OR OTHER BARRIER TO KEEP SEDIMENT FROM ENTERING A FLOWING STREAM. CARE SHALL BE TAKEN DURING THE CONSTRUCTION AND REMOVAL OF SUCH BARRIERS TO MINIMIZE THE MUDDYING OF A STREAM. WATER FROM AGGREGATE WASHING OR OTHER OPERATIONS CONTAINING SEDIMENT SHALL BE TREATED BY FILTRATION, A SETTLING BASIN OR OTHER MEANS SUFFICIENT TO REDUCE THE SEDIMENT CONTENT TO NOT MORE THAN THAT OF THE STREAM INTO WHICH IT IS DISCHARGED.

POLLUTANTS SUCH AS FUELS. LUBRICANTS. BITUMENS. RAW SEWAGE AND OTHER HARMFUL MATERIALS SHALL NOT BE DISCHARGED INTO OR NEAR RIVERS, STREAMS AND IMPOUNDMENTS OR INTO NATURAL OR MANMADE CHANNELS LEADING THERETO. WASH WATER OR WASTE FROM CONCRETE MIXING OPERATIONS SHALL NOT BE ALLOWED TO ENTER LIVE STREAMS. ALL APPLICABLE REGULATIONS OF FISH AND WILDLIFE AGENCIES AND STATUTES RELATING TO THE PREVENTION AND ABATEMENT OF POLLUTION SHALL BE COMPLIED WITH IN THE PERFORMANCE OF THE CONTRACT.

ALL WATERWAYS SHALL BE CLEARED AS SOON AS PRACTICABLE OF FALSEWORK, PILING, DEBRIS OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS AND NOT A PART OF THE FINISHED WORK.

SEDIMENTATION COLLECTED IN THE DETENTION BASIN SHALL BE REMOVED AFTER IT HAS BUILT UP TO THE ELEVATION OF THE BEGINNING OF THE PERFORATIONS IN THE RISER PIPE. ALL SILT COLLECTED SHALL BE PLACED BACK UP ON THE SITE. SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED, AS NECESSARY, AND THEN RESEEDED. ADDITIONAL HAY MULCHING SHALL BE APPLIED TO RETAIN THE SEED UNTIL IT HAS A CHANCE TO ROOT PROPERLY.

AREAS THAT CONTAIN SOD SHALL BE CHECKED VERY CAREFULLY TO ENSURE THAT JOINTS BETWEEN THE SOD STRIPS ARE TIGHT AND SECURE. WHERE JOINT SEPARATION IS IN EVIDENCE, A CAREFUL INSPECTION OF EACH JOINT SHALL BE MADE TO DETERMINE WHETHER UNDERMINING OF THE STRIPS IS OCCURRING. IF IT IS, THE STRIPS SHALL BE ROLLED UP, THE SUBSURFACE SHALL BE FILLED AND GRADED, AS REQUIRED, AND THE SOD STRIPS SHALL BE RELAID WITH THE PROPER JOINTS AND PEGGING. THE ABOVE PROCEDURE FOR SEEDED AND SODDED AREAS SHALL BE REPEATED AFTER EACH

RUNOFF PRODUCING RAIN UNTIL NO MORE SIGNS OF EROSION ARE EVIDENT.

A GOOD STAND OF VEGETATION SHALL BE DEFINED AS THE MANUFACTURER'S RECOMMENDED

SHOULD UNFORESEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. SPECIAL ATTENTION SHOULD BE GIVEN TO FROZEN SLOPES. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION. DURING CONSTRUCTION THE CONTRACTOR WILL BE RESPONSIBLE FOR SOIL EROSION CONTROL

MAINTENANCE. AFTER CONSTRUCTION THE OWNER WILL BE RESPONSIBLE FOR MAINTAINING

TEMPORARY EROSION AND SEDIMENTATION CONTROL

TEMPORARY INLET PROTECTION SHALL BE APPLIED TO EACH INLET. THEY SHALL REMAIN IN PLACE UNTIL A GOOD STAND OF VEGETATION HAS ESTABLISHED.

SEED SHALL BE APPLIED ACCORDING TO THE ENCLOSED CHART. THE CONTRACTOR SHALL ADHERE TO THE RECOMMENDED SEEDING DATES WHEN SELECTING TEMPORARY SEED TYPES. FERTILIZE, LIME AND MULCH IN ACCORDANCE WITH RATES AND MATERIALS INDICATED IN PERMANENT STABILIZATION SECTION.

TEMPORARY SEEDINGS AND SEEDING DATES

Г	SEEDING RATES		SEEDING DATES	
CROP	PER ACRE	PER 1000 S.F.	SOUTH JERSEY	
OATS (SPRING)	86 LBS.	2 LBS.	BEFORE APR. 1	
RYE (WINTER CEREAL)	112 LBS.	2.8 LBS.	AUG. 1-NOV. 15	
BARLEY (WINTER)	96 LBS.	2.2 LBS.	AUG. 15-OCT. 1	
RYEGRASSES (PERENNIAL)	100 LBS.	I.O LBS.	BEFORE MAY 15 AUG. 15-OCT. 1	
MILLET (GERMAN OR HUGARIAN)	30 LBS.	0.5 LB	MAY 1-AUG. 15	
MILLET (PEARL)	20 LBS.	0.7 LB.	MAY 1-AUG. 15	
WEEPING LOVEGRASS	3 LBS.	0.1 LB.	MAY 1-AUG. 15	

DUST CONTROL SHALL BE ACCOMPLISHED BY PERIODIC SPRINKLING OF DISTURBED AREAS, AS REQUIRED.

PERMANENT STABILIZATION

ALL EXPOSED EARTH SURFACES SHALL BE PERMANENTLY STABILIZED AFTER COMPLETION OF CONSTRUCTION OF ALL SITE IMPROVEMENTS.

PERMANENT STABILIZATION SHALL BE ACCOMPLISHED BY THE FOLLOWING MATERIALS AND METHODS.

MATERIALS	TYPE	APPLICATION RATES
LIME	PULVERIZED DOLOMETIC 50% CaO MgO	2 TONS/ACRE
FERTILIZER	Po 10 10	600 LB./ACRE
SEED	1) TURFTYPE TALL FESCUE 2) KENTUCKY BLUEGRASS 3) TURFTYPE PERENNIAL RYEGRASS	80% BY WEIGHT 208 LB./ACRE 10% BY WEIGHT 26 LB./ACRE 10% BY WEIGHT 26 LB./ACRE
MULCH	STRAW MULCH	1.5 TO 2 TONS/ACRE
MULCH BINDE	R: ORGANIC AND VEGETABLE BINDERS	BASED AS RECOMMENDED BY MANUFACTURER

METHODS

- WORK LIME AND FERTILIZER INTO SOIL WITH A SPRING TOOTH OR DISC HARROW. APPLY SEED AT THE GIVEN RATE AND FIRM WITH A ROLLER OR LIGHT DRAG.
- APPLY STRAW MULCH IN AN UNIFORM FASHION UNTIL 80% OF THE GROUND IS COVERED; A SLIGHTLY HEAVIER APPLICATION IS NECESSARY ON STEEP SLOPES.
- 4. ANCHOR STRAW MULCH IN PLACE BY SPRAYING MULCH BINDER AT GIVEN RATES.
- HYDROSEEDING: OPTIMUM GROWING SEASONS AND FLAT SLOPES ONLY.
- (A) HYDRO SEEDING SHALL NOT BE PERMITTED FOR PERMANENT STABILIZATION OF THE MULTI-PURPOSE FIELD.
- (B) AS AN ALTERNATIVE TO THE PRECEDING, AREAS TO RECEIVE PERMANENT VEGETATIVE COVER CAN BE HYDROSEEDED USING THE PREVIOUS FERTILIZATION, SEEDING, AND LIMING RATES.
- (C) PAPER MULCH: 1500 LBS/ACRE NOT TO BE MIXED IN TANK WITH SEED SLURRY.
- (D) SLOPED AREAS OR SEEDING OUTSIDE THE OPTIMUM FALL AND SPRING SEASONS WILL REQUIRE RHE APPLICATION OF STRAW MULCH AND MULCH ANCHOR,

4" OF CLEAN TOP SOIL SHALL BE PROVIDED ON ALL AREAS OF DISTURBANCE WHERE TOP SOIL DOES NOT EXIST.

SOIL EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- 2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
- PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
- 5. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OF PRELIMINARY GRADING.
- 6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (ie.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE
- 7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (ie.: SLOPES GREATER THAN 3:1)
- 8. A CRUSHED STONE TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE RIP RAP PAD MUST BE 100 FEET IN LENGTH AND THE STONE MUST BE 1.5"-4" IN SIZE, PLACED 12" THICK AND FULL WIDTH OF THE ENTRANCE. IT SHOULD BE UNDERLAIN WITH A SUITABLE SYNTHETIC FILTER FABRIC AND MAINTAINED.
- 9. IN ACCORDANCE WITH THE STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, ANY SOIL HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A pH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION.
- 10. THE GLOUCESTER COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
- AT THE TIME WHEN THE 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 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. PRIOR TO THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL REQUEST, IN WRITING, A FINAL INSPECTION BY THE SOIL CONSERVATION DISTRICT. A SATISFACTORY REPORT OF COMPLIANCE IS MANDATORY PRIOR TO ANY PROJECT BEING DEEMED COMPLETE. (PURSUANT TO N.J.S.A. 4:24-39 ET SEQ.).
- CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- 14. 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.
- 15. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ALL SUBSEQUENT OWNERS.
- 16. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.
- 17. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.
- 18. THE SOIL EROSION CONTROL INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION
- MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.
- 19. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
- 20. ALL APPLICABLE EROSION CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.
- THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
- 22. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- 23. IT SHALL BE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION RATES AT THE REQUEST OF THE BURLINGTON COUNTY SOIL CONSERVATION DISTRICT.
- 24. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED
- 25. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH IN ACCORDANCE WITH THE <u>STANDARDS</u> IMMEDIATELY FOLLOWING ROUGH GRADING.
- 26. SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHOULD BE PROTECTED BY A HAY BALE BARRIER OR SEDIMENT FENCE.
- 27. ALL CATCH BASIN INLETS WILL BE PROTECTED DURING CONSTRUCTION (FILTER DETAILS APPEAR ON PLAN).
- 28. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTRATION DEVICE. THE SEDIMENT FILTER MUST BE PLACED SO AS NOT TO CAUSE EROSION OF THE DOWNSTREAM AREA. FIELD PLACEMENT AND USE OF THE STRUCTURE MUST BE APPROVED BY THE DISTRICT EROSION CONTROL INSPECTOR PRIOR TO COMMENCEMENT OF DEWATERING ACTIVITIES.
- IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING TOPSOIL, THE STOCKPILE SHALL BE SEEDED WITH TEMPORARY VEGETATION. STABILIZE TOPSOIL STOCKPILES WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE ESTABLISHMENT OF TEMPORARY SEED.

CONSTRUCTION SEQUENCE

PLACEMENT OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

3 WEEKS CONCRETE SIDEWALK, CURB, AND DRIVEWAY APRON INSTALLATION

2 WEEKS

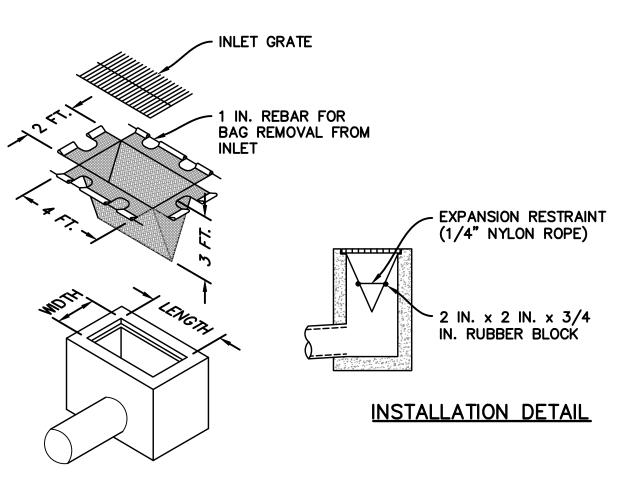
5 WEEKS

1 WEEK

MILL ROADWAY AND INSTALL SURFACE COURSE

TOPSOIL AND PROVIDE PERMENANT 1 WEEK STABILIZATION OF VEGATATED AREAS

REMOVE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. ONLY AFTER DISTURBED AREAS ARE **STABILIZED**



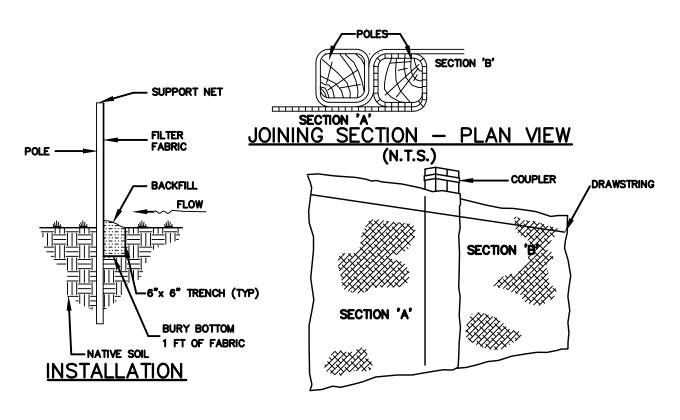
ISOMETRIC VIEW

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

AT A MINIMUM. THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION.

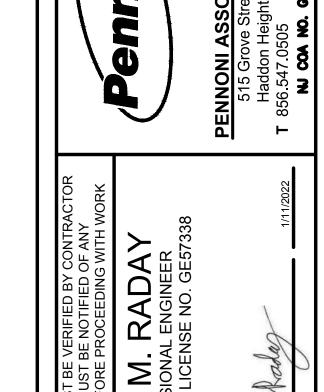
INLET FILTER BAG PROTECTION DETAIL N.T.S.



SILT FENCE TO BE USED ON SITE SHALL BE "ENVIROFENCE" PRECONSTRUCTED SILT FENCE OR EQUAL. SPECIFICATIONS ARE: LENGTH: 100 FT./FABRIC WIDTH: 3 FT./POLE LENGTH: 4.5 FT./POLE SPACING: 7.7 FT./INSTALLED HEIGHT: 2.5 FT./SEDIMENT FABRIC: MIRAFI 100/DRAWSTRING THROUGH FABRIC ALONG TOP OF FENCE.

THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS AND STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS, ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC.

SILT FENCE DETAIL



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ROJECT. THEY ARE NOT INTENDED OR REPRESENT O BE SUITABLE FOR REUSE BY OWNER OR OTHERS THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATI OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SOLE RISK AND WITHOUT LIABILITY OR LEGAL NDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI

ARISING OUT OF OR RESULTING THEREFROM.

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FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY