

BICYCLE PATH DETAIL GEOTEXTILE LINER SEE PLAN FOR DIMENSIONS AND ELEVATIONS 6" BOTTOM SAND LAYER NATURAL OR REPLACEMENT SOIL NOTES: 1) BOTTOM SAND LAYER MUST CONSIST OF K5 SAND WITH A MAXIMUM OF 15% FINES AND A MINIMUM PERMEABILITY RATE OF 20 INCHES PER HOUR. 2) BASIN CONSTRUCTION MUST NOT COMPACT SOILS BELOW BASIN BOTTOM. 3) BOTTOM OF SAND LAYER TO BE AT LEAST TWO FEET ABOVE THE SEASONAL HIGH WATER ELEVATION.

INFILTRATION SAND DETAIL

NOTES:

1. BEDDING, HAUNCH, INITIAL BACKFILL AND COVER SHALL BE CLASS 1 MATERIAL. CLASS 1 MATERIAL MUST BE EVENLY SPREAD INTO THE HAUNCH AND BETWEEN CORRUGATIONS. IF CLASS 1A MATERIAL IS USED, THE CLASS 1A MATERIAL SHOULD BE SPREAD IN 6-INCH-THICK LIFTS AND NOMINALLY COMPACTED USING A HAND-OPERATED COMPACTION EQUIPMENT. IF CLASS 1B MATERIAL IS USED, THE CLASS 1B MATERIAL SHOULD BE SPREAD IN 6-INCH-THICK LIFTS AND COMPACTED TO AT LEAST 95% OF THE MATERIALS MAX DRY DENSITY.

HDPE PIPE BACKFILL DETAIL

- 2. FINAL BACKFILL MATERIAL SHALL BE EITHER CLASS I (A OR B) OR CLASS II MATERIAL. THESE MATERIALS CAN EITHER BE IMPORTED OR PROCESSED FROM ONSITE MATERIAL GENERATED DURING
- 3. FINAL BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY A MODIFIED PROCTOR COMPACTION TEST (ASTM D1557).
- 4. THE SEPARATOR FABRIC IS REQUIRED UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER. THE NEED FOR A SEPARATOR FABRIC TO PREVENT SOIL PARTICLE MIGRATION SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER ONCE GRADATION DATA IS PROVIDED FOR ALL PROPOSED BACKFILL MATERIALS.

GENERAL NOTES:

- 1. MATERIALS: UNLESS OTHERWISE SPECIFIED ON THE PLANS OR HEREIN, CORRUGATED POLYETHYLENE PIPE SHALL CONFORM TO AASHTO M-294, LATEST EDITION, STANDARD SPECIFICATION FOR CORRUGATED POLYETHYLENE
- 2 RESINS: CORRUGATED POLYETHYLENE PIPE SHALL BE MANUFACTURED FROM HIGH DENSITY POLYETHYLENE VIRGIN COMPOUNDS, AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3350 FOR THE CELL CLASSIFICATION
- 3 COUPLING BANDS: EXCEPT AS OTHERWISE REQUIRED HEREIN, COUPLING BANDS AND OTHER HARDWARE FOR CORRUGATED POLYETHYLENE PIPE SHALL DEMONSTRATE THAT THEY MEET THE SOIL TIGHTNESS REQUIREMENTS OF AASHTO SECTION 26 "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES."

 COUPLING BANDS SHALL LAP EQUALLY ON EACH OF THE PIPES BEING CONNECTED TO FORM A TIGHTLY CLOSED JOINT AFTER INSTALLATION.

 THE CORRUGATIONS IN THE BAND SHALL INDEX THE CORRUGATIONS IN THE PIPE ENDS TO ENGAGE AT LEAST TWO FULL CORRUGATIONS FROM THE END OF EACH PIPE.

 WHEN INFILTRATION OR EXFILTRATION IS A CONCERN, THE COUPLING BANDS MAY BE REQUIRED TO HAVE GASKETS. THE GASKET MATERIAL SHALL BE CLOSED—CELL EXPANDED RUBBER OR NEOPRENE.

OTHER COUPLINGS MAY BE BELL & SPIGOT AND CONFORM TO THE

- REQUIREMENTS OF AASHTO M294.

 4. DESIGNATION OF TYPE: THE PIPE MAY BE ONE OR BOTH OF THE FOLLOWING TYPE:
- TYPE S: THIS PIPE WILL HAVE A FULL CIRCULAR CROSS—SECTION, WITH AN OUTER CORRUGATED PIPE WALL AND A SMOOTH INNER LINER.

 TYPE D: THIS PIPE SHALL CONSIST OF AN ESSENTIALLY SMOOTH WATERWAY BRACED CIRCUMFERENTIALLY WITH CIRCULAR RIBS WHICH ARE FORMED SIMULTANEOUSLY WITH A SMOOTH OUTER WALL.
- (5) INSTALLATION: CORRUGATED POLYETHYLENE PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TABLE 1 AND ASTM D-2321, LATEST EDITION, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS."

HIGH DENSITY CORRUGATED POLYETHYLENE PIPE

H-20 AND E-80 LIVE LOADS							
NOMINAL	DIAMETER	MINIMUM COVER IN. & (MM)					
IN.	(MM)	H-20	E-80				
12	(300)	12 (300)	24 (600)				
15	(375)	12 (300)	24 (600)				
18	(450)	12 (300)	24 (600)				
24	(600)	12 (300)	24 (600)				
30	(750)	12 (300)	24 (600)				
36	(900)	12 (300)	24 (600)				
42	(1050)	12 (300)	24 (600)				
48	(1200)	12 (300)	24 (600)				

60 (1500) 24 (600) 24 (600)

CLASSES OF EMBEDMENT AND BACKFILL MATERIALS

		SOIL GROUP		PERCENTAGE PASSING SIEVE SIZES			
CLASS	TYPE	SYMBOL D 2487	DESCRIPTION	1 1/2 IN. (40 MM)	NO. 4 (4.75 MM)	NO. 200 (0.075 MM)	
IA	MANUFACTURED AGGREGATES OPEN-GRADED, CLEAN.	NONE	ANGULAR, CRUSHED STONE OR ROCK, CRUSHED GRAVEL, BROKEN CORAL, CRUSHED SLAG, CINDERS OR SHELLS: LARGE VOID CONTENT, CONTAIN LITTLE OR NO FINES.	100 %	≤10 %	<5 %	
ΙΒ	MANUFACTURED, PROCESSED AGGREGATES; DENSE— GRADED, CLEAN	NONE	ANGULAR, CRUSHED STONE (OR OTHER CLASS IA MATERIALS) AND STONE/SAND MIXTURES WITH GRADATIONS SELECTED TO MINIMIZE MIGRATION OF ADJA— CENT SOILS; CONTAIN LITTLE OR NO FINES (SEE X1.8.).	100 %	≤50 %	<5 %	
II	COARSE-GRAINED SOILS, CLEAN	GW	WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES; LITTLE OR NO FINES.	100 %	< 50 % "COARSE FRACTION"	DARSE	
		GP	POORLY-GRADED GRAVELS AND GRAVEL-SAND MIXTURES; LITTLE OR NO FINES.				
		SW	WELL-GRADED SANDS AND GRAV- ELY SANDS; LITTLE OR NO FINES.		>50 % OF "COARSE FRACTION"		
		SP	POORLY-GRADED SANDS AND GRAVEL SANDS; LITTLE OR NO FINES.				
	COARSE-GRAINED SOILS, BORDERLINE CLEAN TO W/ FINES	E.G. GW-GC SP-SM.	SANDS AND GRAVELS WHICH ARE BORDERLINE BETWEEN CLEAN AND WITH FINES.	100 %	VARIES	5 % TO 12 %	
III	COARSE-GRAINED SOILS, WITH FINES	GM	SILTY GRAVELS, GRAVEL—SAND SILT MIXTURES.	100 %	<50 % OF "COARSE _	12 % TO 50 %	
		GC	CLAYEY GRAVELS, GRAVEL—SAND— CLAY MIXTURES.		FRACTION"		
		SM	SILTY SANDS, SAND-SILT MIXTURES.		> 50 % OF "COARSE FRACTION"		
		sc	CLAYEY SANDS, SAND—CLAY MIX— TURES.		TRACTION		

MAXIMUM COVER	FOR ADS	AND N	MEGAGREEN	PIPES	(PER	ASTM	F2648)	, FT(MM)
	CLASS	4		CLAS				CLASS 3

DIAMETER	0E DIDE	CLA:	SS 1		CLA	SS 2		CLA	SS 3
DIAMETER	OF PIPE	COMP	ACTED	95	5%	9	0%	95	5%
IN.	(MM)	FT.	(M)	FT.	(M)	FT.	(M)	FT.	(M)
12	(300)	27	(8.2)	21	(6.4)	14	(4.3)	12	(3.6)
15	(375)	27	(8.2)	21	(6.4)	14	(4.3)	13	(3.9)
18	(450)	25	(7.6)	18	(5.5)	13	(3.9)	11	(3.3)
24	(600)	22	(6.7)	16	(4.8)	11	(3.3)	12	(3.6)
30	(750)	16	(4.8)	12	(3.6)	8	(2.4)	6	(1.8)
36	(900)	21	(6.4)	15	(4.5)	10	(3.0)	10	(3.0)
42	(1050)	17	(5.2)	13	(3.9)	9	(2.7)	7	(2.1)
48	(1200)	18	(5.5)	13	(3.9)	9	(2.7)	10	(3.0)
60	(1500)	20	(6.0)	15	(4.5)	10	(3.0)	10	(3.0)

RECOMMENDED TRENCH WIDTH							
DIAMETER	O.D.	TRENCH WIDTH					
12"	14.45"	31"					
15"	17.65"	34"					
18"	21.10"	39"					
24"	28.30"	48"					
30"	36.10"	66"					
36"	42.25"	78"					
42"	47.00"	83"					
48"	53.00"	89"					
60"	66.30"	102"					
The trench width must be wide enough to							

accomodate compaction equipment.

CROSSWALK DETAIL

CONCRETE CURB

NO PARKING - FIRE LANE

4" WIDE YELLOW STRIPE (TYP.)

1. ALL SIGNS AND PAVEMENT STRIPING SHALL BE IN COMPLIANCE WITH THE CURRENT MUTCD.

CROSSWALK DETAIL

YELLOW LETTERING SHALL HAVE A HEIGHT IF 24" AND A MINIMUM BRUSH STROKE OF 4" (TYP.)

1. ALL SIGNS AND PAVEMENT STRIPING SHALL BE IN COMPLIANCE WITH THE CURRENT MUTCD.

· SEE SITE PLAN —

ALL SIGNS AND PAVEMENT STRIPING SHALL BE IN COMPLIANCE

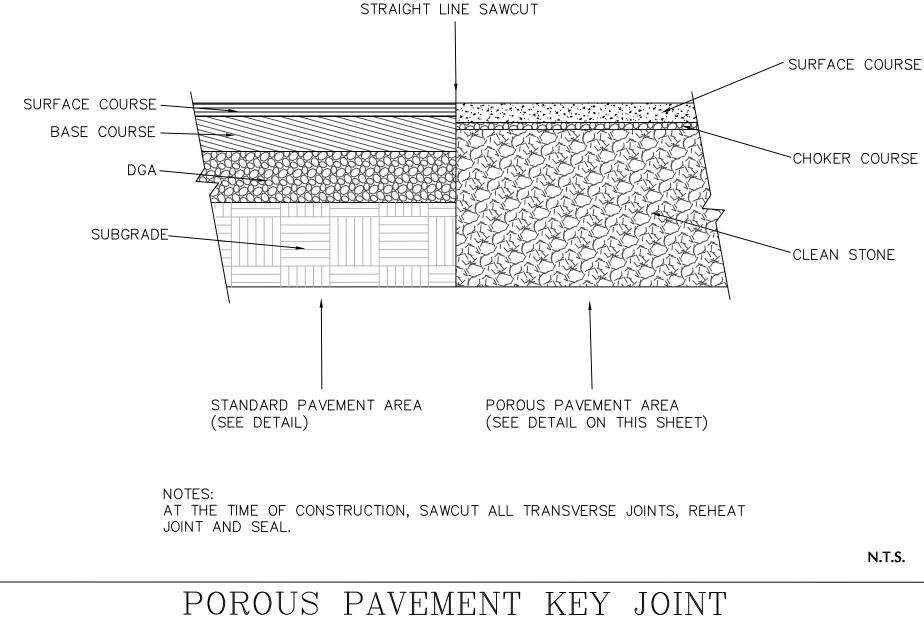
WITH THE CURRENT MUTCD.

HAIRPIN STRIPING DETAIL 2. STRIPING SHALL BE LONG LIFE, EPOXY RESIN. FIRE LANE STRIPING PERVIOUS PAVING-SURFACE COURSE 3" (COMPACTED THICKNESS) CHOKER COURSE: AASHTO NO. -57- 1" MAX. SUFFICIENT TO LEVEL SURFACE FOR PAVING CLEAN, UNFIRMLY GRADED COARSE AGGREGATE, AASHTO NO. 2 OR APPROVED EQUAL NON-WOVEN-SUBGRADE GEOTEXTILE FABRIC PRIOR TO THE RELEASE OF THE PERFORMANCE BOND. THE PAVEMENT AND UNCOMPACTED SUBGRADE ARE INFILTRATION RATE SHALL BE TESTED IN AT LEAST THREE LOCATIONS TO ENSURE THAT IT IS TWICE THE DESIGN RATE REQUIRED FOR THAT AREA.

" STRIPE (TYP.)-

STRIPING SHALL BE IN COMPLIANCE WITH THE CURRENT MUTCD. 2. STRIPING SHALL BE LONG LIFE, -4" WIDE WHITE 2' O.C. SPACING EPOXY RESIN. STRIPE (TYP.) (TYP.) NO PARKING ZONE PAVEMENT SURFACE - TOP OF CURB CURB PAVEMENT SURFACE CURB FLUSH WITH PAVEMENT SECTION A-A FLUSH CURB

ALL SIGNS AND PAVEMENT



POROUS PAVEMENT CONSTRUCTION SEQUENCE

1. THE POROUS PAVEMENT SHOULD BE INSTALLED TOWARD THE END OF THE CONSTRUCTION PERIOD.

POROUS PAVEMENT SECTION

2. THE EXCAVATION OF THE FINAL DESIGN ELEVATION OF THE STORAGE BED MAY ONLY OCCUR AFTER ALL CONSTRUCTION WITHIN ITS DRAINAGE AREA IS COMPLETED AND THE DRAINAGE AREA IS STABILIZED. IF CONSTRUCTION OF PERVIOUS PAVING SYSTEM CANNOT BE DELAYED, DURING ALL PHASES OF CONSTRUCTION ALL FLOWS MUST BE DIVERTED AWAY FROM THE PERVIOUS PAVING SYSTEM. THE DIVERSIONS MAY NOT BE REMOVED UNTIL ALL CONSTRUCTION WITHIN THE DRAINAGE AREA IS COMPLETED AND THE AREA STABILIZED.

N.T.S.

- 3. THE EXISTING SUBGRADE UNDER THE STONE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED INSTALLATION. CONTRACTOR TO UTILIZE LOW GROUND PRESSURE EQUIPMENT.
- 4. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A
- MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHALL BE DONE BY HAND.

 5. GEOTEXTILE AND STONE BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND
- RECOMMENDATIONS.

 6. CLEAN (WASHED) UNIFORMLY GRATED STONE AGGREGATE (AASHTO NO. 2) MUST BE PLACED IN LIFTS AND COMPACTED USING PLATE COMPACTORS ALONG CURB. THE MAXIMUM RECOMMENDED LOOSE LIFT THICKNESS IS

 6. INCLUSE WITH THE CONSTRUCTION FOLIDMENT KEPT OFF THE DEP. POTTOM AS MUCH AS DOSSIDLE ONE DASS WITH VIDEATION IS ALLOWABLE (LOW AND ITSUDE HIGH EDEOLIENCY). TO INTERLOCK ASCREGATES
- 6-INCHES. WITH THE CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE. ONE PASS WITH VIBRATION IS ALLOWABLE (LOW AMPLITUDE, HIGH FREQUENCY) TO INTERLOCK AGGREGATES.

 CONTINUOUTS VIBRATORY PASSES ARE NOT ALLOWED.
- 7. THE POROUS ASPHALT SHOULD BE PLACED DIRECTLY ON THE LEVELED STONE SUBBASE IN A SINGLE 4 INCH LIFT AND COMPACTED WITH ROLLERS SHALL BE OPERATED AT A SLOW, UNIFORM SPEED NOT EXCEEDING 2 2 MPH. IF NECESSARY TO PREVENT ADHESION OF THE POROUS ASPHALT TO THE ROLLERS, KEEP THE WHEELS MOISTENED WITH WATER MIXED WITH A VERY SMALL AMOUNT OF DETERGENT.
- 8. FOLLOWING INSTALLATION OF THE POROUS ASPHALT SURFACE COURSE, THE FINISHED SURFACE SHOULD BE KEPT FREE OF TRAFFIC FOR AT LEAST 48 HOURS TO ALLOW FOR ADEQUATE CURING.
- 9. THE PROPOSED POROUS PAVEMENT AREA OF THE SITE SHALL BE CORDONED OFF FROM HEAVY CONSTRUCTION EQUIPMENT AND THE STOCKPILING OF MATERIALS SHALL BE PROHIBITED.
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 10. DO NOT ALLOW TRAFFIC OR CONSTRUCTION EQUIPMENT ON THE POROUS ASPHALT UNTIL THE SURFACE TEMPERATURE IS LESS THAN 170 DEGREES FAHRENHEIT.
- 11. POST-CONSTRUCTION TESTING OF THE PERMEABLE ASPHALT SURFACE COURSE IS REQUIRED AND MUST CONFORM TO THE METHODS OF EITHER ASTM C1701: STANDARD TEST METHOD FOR INFILTRATION RATE OF IN-PLACE PERVIOUS CONCRETE OR ASTM C1781: STANDARD TEST METHOD FOR SURFACE INFILTRATION RATE OF PERMEABLE UNIT PAVEMENT SYSTEMS. AT LEAST THREE LOCATIONS MUST BE USED FOR THE TEST, AND THEY SHOULD BE SPACED EVENLY ACROSS THE PERVIOUS PAVING SYSTEM. FAILURE TO ACHIEVE THE MINIMUM DESIGN INFILTRATION RATE OF THE SURFACE COURSE AT ONE OR MORE LOCATIONS INDICATE THE SYSTEM CANNOT BE PUT IN SERVICE UNTIL THE SYSTEM IS CORRECTED TO YIELD ALL PASSING VALUES. UNLIKE TEST METHODOLOGY OUTLINED IN THE ASTM STANDARDS, THE TEST RESULT MUST NOT BE AVERAGED. THE MAINTENANCE PLAN MUST INCLUDE A LOG FOR RECORDING EACH LOCATION AND ITS TEST RESULT FOR THE FUTURE REFERENCE. PER THE NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES MANUAL SECTION 9.7, FOR A SYSTEM DESIGNED FOR THE WATER QUALITY DESIGN STORM, THE MINIMUM TEST INFILTRATION RATE OF THE SURFACE COURSE IS 6.4 INCHES PER HOUR. SYSTEMS DESIGNED TO ADDRESS QUANTITY CONTROL MUST HAVE A MINIMUM TESTED INFILTRATION RATE OF THE SURFACE COURSE OF 20 INCHES PER HOUR. CONTRACTOR TO BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH POROUS PAVEMENT TESTING AND TO NOTIFY AND COORDINATE WITH DESIGN
- 12. THE PROPOSED AREA OF PERVIOUS PAVEMENT SYSTEM MUST BE KEPT FREE FROM SEDIMENT DURING THE ENTIRE CONSTRUCTION PROCESS. CONSTRUCTION MATERIALS CONTAMINATED BY SEDIMENTS MUST BE REMOVED AND REPLACED WITH CLEAN MATERIALS. THE CONTRIBUTING DRAINAGE AREA MUST BE COMPLETELY STABILIZED PRIOR TO PERVIOUS PAVING SYSTEM USE.

 POROUS PAVEMENT GENERAL SPECIFICATIONS
- 1. STONE FOR INFILTRATION BEDS SHALL BE 2-INCH TO 1-INCH UNIFORMLY GRADED COARSE AGGREGATE, WITH A WASH LOSS OF NO MORE THAN 0.5%, AASHTO SIZE NUMBER 2 PER AASHTO SPECIFICATIONS OR APPROVED EQUIVALENT, PART I, 19TH ED., 1998, OR LATER AND SHALL HAVE VOIDS 40% AS MEASURED BY ASTM-C29. CHOKER BASE COURSE AGGREGATE FOR BEDS SHALL BE 3 INCH TO 3 INCH UNIFORMLY GRADED COARSE AGGREGATE AASHTO SIZE NUMBER 57 PER TABLE 4, AASHTO SPECIFICATIONS, PART I, 13TH ED., 1998 (P. 47).
- 2. NON-WOVEN GEOTEXTILE SHALL CONSIST OF NEEDLED NONWOVEN POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES: 2.A. GRAB TENSILE STRENGTH (ASTM-D4632) > 120 LBS
- 2.B. MULLEN BURST STRENGTH (ASTM-D3786) > 225 PSI 2.C. FLOW RATE (ASTM-D4491) > 95 GAL/1
- 2.C. FLOW RATE (ASTM-D4491) > 95 GAL/MIN/FT SQ.
 2.D. UV RESISTANCE AFTER 500 HRS (ASTM-D4355) > 70%
- 2.E. HEAT-SET OR HEAT-CALENDARED FABRICS ARE NOT PERMITTED.

ACCEPTABLE TYPES INCLUDE MIRAFI 140 N, GEOTEX 451, OR APPROVED OTHERS. 3. STORM DRAIN INLETS AND STRUCTURES

- 3. STORM DRAIN INLETS AND STRUCTURES

 3.A. CONCRETE CONSTRUCTION: CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT NJDOT SPECIFICATIONS.

 3.B. DEFENSE CONCRETE IN FIRE AND MANHOLES. DEFENSE ON CONCRETE IN FIRE MAY BE SUPPRESSED FOR CASH IN DIAGR. CERTIFICATIONS.
- 3.B. PRECAST CONCRETE INLETS AND MANHOLES: PRECAST CONCRETE INLETS MAY BE SUBSTITUTED FOR CAST-IN-PLACE STRUCTURES AND SHALL BE CONSTRUCTED AS SPECIFIED FOR CAST-IN-PLACE.
 3.C. ALL PVC CATCH BASINS/CLEANOUTS/INLINE DRAINS SHALL HAVE H-20 RATED GRATES.
- 3.C. ALL PVC CATCH BASINS/CLEANOUTS/INLINE DRAINS SHALL HAVE H-20 RATED GRATES.
 3.D. STEEL REINFORCING BARS OVER THE TOP OF THE OUTLET STRUCTURE, WHERE SPECIFIED, SHALL CONFORM TO ASTM A615, GRADES 60 AND 40.

ENGINEER 72 HOURS IN ADVANCE OF TESTING. ALL POST CONSTRUCTION PERMEABILITY TESTING MUST BE WITNESSED BY THE DESIGN ENGINEER.

- 4. PERVIOUS BITUMINOUS ASPHALT
 BITUMINOUS SURFACE COURSE FOR PERVIOUS PAVING SHOULD BE THREE (3) INCHES THICK (COMPACTED THICKNESS) WITH A BITUMINOUS MIX OF 5.75% TO 6.75% BY WEIGHT DRY AGGREGATE. IN ACCORDANCE WITH ASTM
 D6390, DRAIN DOWN THE BINDER SHALL BE NO GREATER THAN 0.3%. IF MORE ABSORPTIVE AGGREGATES, SUCH AS LIMESTONE, ARE USED IN THE MIX, THEN THE AMOUNT OF BITUMEN IS TO BE BASED ON THE TESTING
 PROCEDURES OUTLINED IN THE NATIONAL ASPHALT PAVEMENT ASSOCIATION'S INFORMATION SERIES 131 "PERVIOUS ASPHALT PAVEMENTS" (2003) OR NJDOT EQUIVALENT.
- 5. USE NEAT ASPHALT BINDER MODIFIED WITH AN ELASTOMERIC POLYMER TO PRODUCE A BINDER MEETING THE REQUIREMENTS OF PG 64E-22 AS SPECIFIED IN AASHTO MP-1. THE ELASTOMERIC POLYMER SHALL BE STYRENE-BUTADIENE-STYRENE (SBS), OR APPROVED EQUAL, APPLIED AT A RATE OF 3% BY WEIGHT OF THE TOTAL BINDER. THE COMPOSITE MATERIALS SHALL BE THOROUGHLY BLENDED AT THE ASPHALT REFINERY OR TERMINAL PRIOR TO BEING LOADED INTO THE TRANSPORT VEHICLE. THE POLYMER MODIFIED ASPHALT BINDER SHALL BE HEAT AND STORAGE STABLE. FOR PARKING LOTS, POLYMER MODIFIED BINDER PG 64E-22 MUST BE SPECIFIED AS IT HAS BEEN SHOWN TO MINIMIZE SCUFFING CAUSED BY AUTOMOBILES WITH POWER STEERING.
- 6. AGGREGATE SHALL BE MINIMUM 90% CRUSHED MATERIAL AND HAVE A GRADATION OF:
 U.S. STANDARD SIEVE SIZE PERCENT PASSING ½ (12.5 MM) 100% ¾ (9.5 MM) 80%-100% 4 (4.75 MM) 30%-50% 8 (2.36 MM) 5%-15% 16 (1.18MM) 7%-13% 30 (0.60 MM) 0%-4% 200 (0.075 MM) 2%-5%. ADD HYDRATED LIME AT A DOSAGE RATE OF 1.0% BY WEIGHT OF THE TOTAL DRY AGGREGATE AND ACHIEVE A REQUIRED TENSILE STRENGTH RATIO (TSR) OF AT LEAST 80% ON THE ASPHALT MIX WHEN TESTED IN ACCORDANCE WITH AASHTO T 283. THE ASPHALTIC MIX SHALL BE TESTED FOR ITS RESISTANCE TO STRIPPING BY WATER IN ACCORDANCE WITH ASTM D-1664. IF THE ESTIMATED COATING AREA IS NOT ABOVE 95%, ANTI-STRIPPING AGENTS SHALL BE
- 7. THE POROSITY OF THE PERMEABLE ASPHALT SURFACE COURSE MUST BE 15%-25%. THE POROSITY OF ANY PERMEABLE BASE COURSE MUST BE >/= 25%.
- 7. THE POROSITY OF THE PERMEABLE ASPHALT SURFACE COURSE MUST BE 15%-25%. THE POROSITY OF ANY PERMEABLE BASE COURSE MUST BE >/
 8. INSTALLATION OF PERMEABLE ASPHALT REQUIRES DIFFERENT TEMPERATURE GUIDELINES, AS FOLLOWS, THAN THAT THOSE OF IMPERVIOUS ASPHALT:
- 8.A. ASPHALT BASE COURSE: 200-245 DEGREES FAHRENHEIT
 8.B. FINISH TOLLING BASE COURSE: 140-150 DEGREES FAHRENHEIT
- 8.C. ASPHALT SURFACE COURSE: 200-220 DEGREES FAHRENHEIT
 8.D. FINISH ROLLING SURFACE COURSE: 110-140 DEGREES FAHRENHEIT
- 9. CONSTRUCTION MAY NOT TAKE PLACE DURING RAIN OR SNOW, NOR WHEN THE SUBSOIL IS FROZEN. FROZEN AGGREGATE MATERIALS MAY NOT BE INSTALLED. THE MINIMUM AIR TEMPERATURE FOR PAVING IS 50 DEGREES FAHRENHEIT.
- 10. SEALANT, PRIME COAT AND OTHER TREATMENTS THAT COULD REDUCE THE RATE OF INFILTRATION MAY NOT BE APPLIED TO THE SURFACE COURSE.
- 11. AFTER INSTALLATION, MEASURES MUST BE TAKEN TO ENSURE THE SURFACE COURSE DOES NOT BECOME CLOGGED UNTIL ALL ASPECTS OF THE PROJECT ARE COMPLETED.

POROUS PAVEMENT NOTES

2/15/2022 Revised per Township Comments

12/3/2021 Completeness Revisions 1

Date Description N

REVISIONS

SIGNATURE CHRISTIAN ROCHE 11/12/2021 PROFESSIONAL ENGINEER NJ Lic. No. 24GE04988100

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BRIDGE POINT 8
INDUSTRIAL PARK

NEW JERSEY

WEST WINDSOR TOWNSHIP

MERCER COUNTY

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Drawing Title

SITE DETAILS

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Date

12/03/2021

Drawn By

Drawing No.

CS502

Checked By

HDPE PIPE INSTALLATION DETAIL (STORM)

