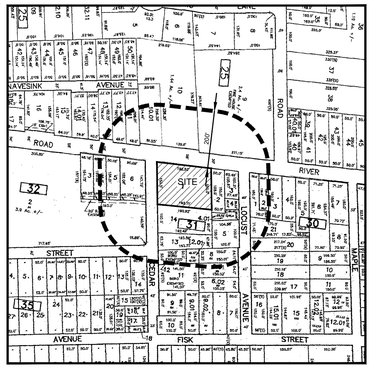
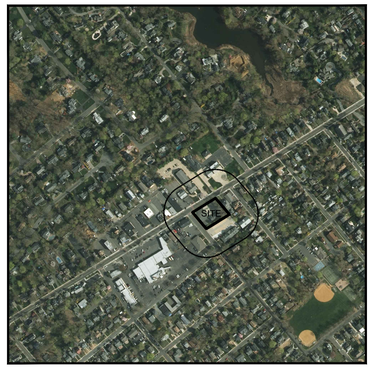
PRELIMINARY & FINAL MAJOR SITE PLAN
M & M REALTY PARTNERS AT FAIR HAVEN, L.L.C.
BLOCK 31 - LOT 1
BOROUGH OF FAIR HAVEN, MONMOUTH COUNTY, NEW JERSEY

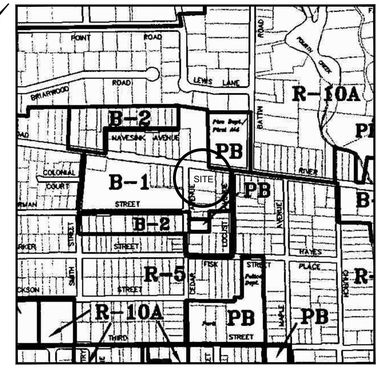
STREET MAP
1"=1000'



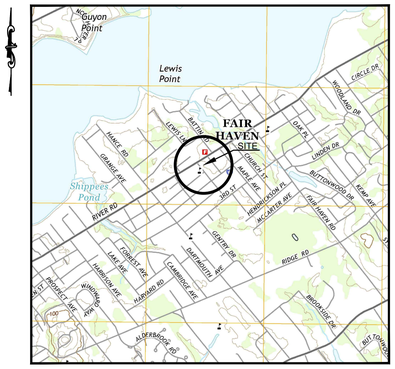
TAX MAP
1"=250'



AERIAL MAP
1"=500'



ZONING MAP
1"=500'



USGS MAP
1"=2000'

GENERAL NOTES

1. PROPERTY UNDER APPLICATION IS KNOWN AS BLOCK 31, LOT 1 CONSISTING OF 0.686 ACRES (29,893 S.F.) LOCATED AT 626 RIVER ROAD, BOROUGH OF FAIR HAVEN, AS SHOWN ON TAX MAP SHEET #6.
2. BOUNDARY & TOPOGRAPHIC INFORMATION BASED ON SURVEY PERFORMED BY SOLSTICE SURVEYING, 2467 ROUTE 10 EAST, MORRIS PLAINS, NJ 07950, DATED 06/21/21.
3. ADDITIONAL TOPOGRAPHICAL SUPPLEMENTAL INFORMATION OBTAINED BY EP DESIGN SERVICES, 2901 HAMILTON BLVD SOUTH PLAINFIELD, NJ 07080.
4. SITE COORDINATES ARE IN NJSPC83. CONTOURS AND ELEVATIONS ARE ON NAVD88 DATUM.
5. ALL CONSTRUCTION IS TO BE PERFORMED IN STRICT CONFORMANCE WITH ALL APPLICABLE TOWNSHIP, COUNTY & STATE AND/OR ANY OTHER GOVERNING BODIES STANDARDS.
6. THE DRAWINGS INDICATE THE APPROXIMATE LOCATION OF EXISTING SUBSURFACE UTILITIES IN THE VICINITY OF THE PROJECT AND ARE NOT GUARANTEED FOR ACCURACY AND/OR COMPLETENESS. CONTRACTOR TO VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION (1-800-272-1000). ANY CONFLICTS WITH PROPOSED CONSTRUCTION ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. ALL EXISTING UTILITIES THAT ARE TO BE RELOCATED OR ALTERED IN ANY MANNER ARE TO BE DONE IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANIES STANDARDS.
7. DESIGN AND INSTALLATION OF ELECTRIC, GAS, TELEPHONE AND CABLE TV TO BE PROVIDED BY RESPECTIVE UTILITY COMPANIES.
8. ALL DRAINAGE PIPE TO BE REINFORCED CONCRETE PIPE (RCP) UNLESS OTHERWISE NOTED. ALL SANITARY PIPE TO BE SDR-35 PVC PIPE UNLESS OTHERWISE NOTED. ALL WATERLINES TO BE CLASS 52 CEMENT-LINED DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
9. WATERLINE AND SANITARY SEWER TO HAVE A MINIMUM OF 10' SEPARATION HORIZONTALLY OR 18" VERTICALLY UNLESS OTHERWISE NOTED.
10. WATERLINES TO HAVE A MINIMUM OF FOUR FEET COVER.
11. CONSTRUCTION MATERIALS AND METHODS NOT OTHERWISE SPECIFIED OR SHOWN HEREIN SHALL CONFORM TO NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (THE LATEST EDITION AND AMENDMENTS).
12. FOR SPECIFIC BUILDING DETAILS, SEE ARCHITECTURAL DRAWINGS.
13. SITE GRADING & UTILITY WORK ARE TO BE PERFORMED IN A MANNER TO MINIMIZE DAMAGE TO EXISTING VEGETATION AND TREES. ALL AREAS NOT AFFECTED BY CONSTRUCTION ARE TO REMAIN NATURAL AND UNDISTURBED.
14. ALL EXISTING OR PROJECT GENERATED DEBRIS IS TO BE REMOVED & PROPERLY DISPOSED ACCORDING TO ALL APPLICABLE REGULATIONS.
15. TOPSOIL REMOVED FOR THE GRADING OF THE SITE SHALL NOT BE USED AS SPOIL. THE TOPSOIL SHALL BE REDISTRIBUTED ON GREEN AREAS SO AS TO PROVIDE A MINIMUM OF AT LEAST 6 INCHES OF DEPTH ON THOSE AREAS.
16. COMPACTION OF FILL AREAS, BENEATH ALL PROPOSED UTILITIES AND STRUCTURES, SHOULD MEET ALL CODE REQUIREMENTS AND BE EQUAL TO THE MINIMUM 95% MODIFIED PROCTOR DENSITY.
17. SANITARY SEWER CONNECTION TO BE MAINTAINED BY PROPERTY OWNER
18. NO ON SITE SOIL TESTING HAS BEEN PERFORMED ON THIS PROJECT BY THE DESIGN ENGINEER. IT SHALL BE THE OWNER AND/OR CONTRACTORS RESPONSIBILITY TO CONDUCT SOIL TESTING TO CONFIRM APPLICABILITY OF PROPOSED IMPROVEMENTS AND CONSTRUCTION TECHNIQUES WITH RESPECT TO SUBSURFACE SOIL.
19. ONSITE TRASH AND RECYCLING TO BE COLLECTED BY A PRIVATE HAULER.
20. AS PER AN NJDEP LETTER OF INTERPRETATION FOR PRESENCE/ABSENCE DETERMINATION DATED NOVEMBER 1, 2021, THE DIVISION OF LAND RESOURCE PROTECTION HAS DETERMINED THAT FRESHWATER WETLANDS AND WATERS OR TRANSITION AREAS OR BUFFERS ARE NOT PRESENT ON THE SUBJECT PROPERTY.

A-H ZONE DATA
COMMERCIAL ZONE

ITEM	REQUIRED	EXISTING	PROPOSED
MIN. TRACT AREA	28,000 SF	29,893 SF (0.686 AC)	28,152 SF (0.646 AC)
MIN. LOT FRONTAGE & WIDTH (RIVER RD)	175 FT	200.57 FT	188.81 FT
MIN. LOT FRONTAGE & WIDTH (CEDAR AVE)	125 FT	149.94 FT	149.94 FT
MIN. LOT DEPTH	175 FT	200.57 FT	188.81 FT
MIN. DIST. TO CENTERLINE OF CEDAR AVE	30 FT	90.1 FT	38.2 FT
SETBACKS:			
GROUND FLOOR SETBACK:			
FRONT YARD (RIVER ROAD)	15 FT	17.4 FT	15.2 FT
FRONT YARD (CEDAR AVE)	13 FT	77.5 FT	13.8 FT
UPPER FLOORS SETBACK:			
FRONT YARD (RIVER ROAD)	23 FT	N/A	24.2 FT
FRONT YARD (CEDAR AVE)	21 FT	N/A	22.4 FT
SIDE YARD (ONE)	50 FT	52.3 FT	71.8 FT
SIDE YARD (BOTH)	N/A	N/A	N/A
REAR YARD	18 FT	25.2 FT	20.8 FT
BUILDING REQUIREMENTS:			
MAX. BLDG. HEIGHT	38 FT	±30 FT	38 FT
MAX. BLDG. COVERAGE	45%	6.65% (1,963 S.F.)	41.31% (11,630 S.F.)
MAX. BLDG. F.A.R.	0.95	0.07	0.92 (25,918.5 S.F.)
MAX. IMPERVIOUS COVERAGE	85%	73.56% (21,990 S.F.)	85.00% (23,929 S.F.)
PARKING:			
RETAIL 1 PER 250 SF (4,250 SF)	17 STALLS		
RESIDENTIAL: 2 PER UNIT (14)	28 STALLS		
	45 TOTAL		45 TOTAL
MIN. STALL SIZE	9 FT x 18 FT		9 FT x 18 FT
MIN. ACCESSIBLE STALL SIZE	8 FT x 20 FT		8 FT x 20 FT
SIGNS:			
FREESTANDING-PYLON			
# PERMITTED	1		1
SQFT PERMITTED	30 S.F.		30 S.F.
MIN. SETBACK TO P.L.	3 FT		3 FT
MAX. HEIGHT.	8 FT		8 FT
FACADE			
# PERMITTED	1 PER BUSINESS = 4 SIGNS		4
MAX. AREA	30 S.F. OR 5% BLDG FACE		15 S.F.

UNIT COUNT SUMMARY: Affordable Units

UNIT	GL	2L	3L	Total
1BR	0	0	0	0
2BR	0	1	1	2
3BR	0	0	0	0
Total	0	1	1	2

Affordable = 2 UNITS

UNIT COUNT SUMMARY: Market Rate Units

UNIT	GL	2L	3L	Total
1BR	0	1	1	2
2BR	0	5	5	10
Total	0	5	5	12

Market = 12 UNITS

14 UNITS TOTAL

PROPERTY OWNERS WITHIN 200'
(AS PROVIDED BY THE BOROUGH OF FAIR HAVEN, NJ DATED MAY 27, 2021)

BLOCK	LOT	NAME AND ADDRESS
25	9	FAIR HAVEN VOLUNTEER FIRE DEPT BATTIN & RIVER ROADS FAIR HAVEN, NJ 07704
25	10	REISS MANUFACTURING INC. PO BOX 159 RUMSON, NJ 07760
25	10.1	HDI HOLDINGS, L.L.C. 39 GRANGE AVENUE FAIR HAVEN, NJ 07704
25	12	WINSTON PROPERTIES II, L.L.C. 325 PENN RD APT 556 WYNNEWOOD, PA 19096
25	13	SISTEAM L.L.C. 607-609 RIVER ROAD FAIR HAVEN, NJ 07704
25	14	FU WONG INC. 90 WASHINGTON STREET RUMSON, NJ 07760
30	1	CAMILLONE, PAUL & BETH A 646 RIVER ROAD FAIR HAVEN, NJ 07704
30	2	LOTZ, RICHARD & LYNN 648 RIVER ROAD FAIR HAVEN, NJ 07704
30	20	DAVIDSON, LEWIS A & DONNA L. 19 LOCUST AVENUE FAIR HAVEN, NJ 07704
30	21	WATSON, CHAD & CHRISTIE M. 17 LOCUST AVENUE FAIR HAVEN, NJ 07704
31	1	M&M REALTY PARTNERS AT FAIR HAVEN L.L.C. 1260 STELTON ROAD PISCATAWAY, NJ 08854
31	2	TIRATTO, NEIL J & MAVEL 632 RIVER ROAD FAIR HAVEN, NJ 07704
31	3	DITTMAR, GEORGE J. III 25 BEVER DAM ROAD COLTS NECK, NJ 07722
31	4	SCHUMANN, CHRISTOPHER & SUSAN J. G. 16 LOCUST AVENUE FAIR HAVEN, NJ 07704
31	4.1	RENO, RALPH & DOREEN 18 LOCUST AVENUE FAIR HAVEN NJ 07704
31	5	SPREEN, WILLIAM H. JR. 12 ALGONQUIN AVENUE OCEANPORT, NJ 07757
31	6	NORTON, STEVE M. & JENNIFER 26 LOCUST AVENUE FAIR HAVEN, NJ 07704
31	6.1	FELTMAN, SARI A. 28 LOCUST AVENUE FAIR HAVEN, NJ 07704
31	11	BORO OF FAIR HAVEN 748 RIVER ROAD FAIR HAVEN, NJ 07704
31	13	BOYNTON TRANSPORT CORP. 21 CEDAR AVENUE FAIR HAVEN, NJ 07704
32	2	FAIR HAVEN RETAIL LLC 307 FELLOWSHIP ROAD #300 MT LAUREL, NJ 08054
32	4	STONE, A B REV. TRUST 72800 CITRUS COURT PALM DESERT, CA 92260
32	5	DOS BROS HOLDINGS L.L.C. 610 RIVER ROAD FAIR HAVEN, NJ 07704
32	6	LEASOR & ASSOCIATES L.L.C. 612 RIVER ROAD FAIR HAVEN, NJ 07704
35	14	NOBLE JUSTICE EL:BEY ET AL 120 FORMAN STREET FAIR HAVEN, NJ 07704

BOROUGH OF FAIR HAVEN UTILITIES

WATER- NJ AMERICAN WATER COMPANY
C/O SCOTT SEGAL
ONE WATER STREET
CAMDEN, NJ 08102

ELECTRIC- J.C.P. & L.
MANAGER-REAL ESTATE
300 MADISON AVENUE
MORRISTOWN, NJ 07962

GAS- NJ NATURAL GAS COMPANY
JOAN PURCARA, RIGHT OF WAY & CLAIMS
P.O. BOX 1464
WALL, NJ 07719

SEWER- TWO RIVERS WATER RECLAMATION AUTHORITY
1 HIGHLAND AVENUE
MONMOUTH BEACH, NJ 07757

UTILITY USAGE ESTIMATE:

Potable Water Demand (N.J.A.C. 7:10-12.6 Table 1; N.J.A.C. 5:21-5.2 Table 5.1)

Existing:	Service Station (1,963 s.f.)	(1,963 sf) * (0.125gpd/sf) =	246 gpd
		TOTAL EXISTING DEMAND =	246 gpd
Proposed:	Commercial, Retail (4,250 s.f.)	(4,250 sf) * (0.125gpd/sf) =	532 gpd
	1-bedroom (2 units)	(2 units) * (95 gpd/unit) =	190 gpd
	2-bedroom (12 units)	(12 units) * (140 gpd/unit) =	1,680 gpd
		TOTAL PROPOSED DEMAND =	2,402 gpd
		Net Increase in Demand =	2,156 gpd

Sanitary Sewer Rates (N.J.A.C. 7:14A-23.3)

Existing:	Service Station Mini Mart (500 sf)	(500 sf) * (0.100gpd/sf) =	50 gpd
	Service Bays (3 Bays)	(3 Bays) * (50gpd/bay) =	150 gpd
	Filling Positions (8 Positions)	(8 Pos.) * (125gpd/pos.) =	1,000 gpd
		TOTAL EXISTING FLOW =	1,200 gpd
Proposed:	Commercial, Retail (4,250 sf)	(4,250 sf) * (0.100gpd/sf) =	425 gpd
Residential:	1-bedroom (2 units)	(2 units) * (150 gpd/unit) =	300 gpd
	2-bedroom (12 units)	(12 units) * (225 gpd/unit) =	2,700 gpd
		TOTAL PROPOSED FLOW =	3,425 gpd
		Net Increase in Demand =	2,225 gpd

PLANNING BOARD APPROVALS

CHAIRPERSON _____ DATE _____

SECRETARY _____ DATE _____

ENGINEER _____ DATE _____

DRAWING INDEX

APPROVED BY

OWNER DATE

OWNER & APPLICANT:

M & M REALTY PARTNERS AT FAIR HAVEN, L.L.C.
1260 STELTON ROAD
PISCATAWAY, NEW JERSEY 08854

NO.	REVISIONS	DATE	BY

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
7/16/21
N.J.P.E. LIC. NO. GE 43435 DATE

DRAWN BY: YMS	CHECKED BY: PRL		
DATE: 7/16/21	SCALE: AS NOTED		
APPROVED BY: BJA	ACAD NO.: 101-T		
FIELD BOOK: ---	PAGE: --	PROJECT NO.:	
SHEET: 1 OF 17	DRAWING NO.: T-1	REVISION:	

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

TITLE SHEET
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/09/21 - 8:45 PM, By: pfaltham
File: H:\Engineering\Projects\Commercial\Fair Haven Boro\(02) Site Plans\(02) Municipal Drawings\101-T.dwg, --- Layout1

LEGEND

EXISTING

- 124 — EXIST. 1ft COUNTOUR LINE
- 125 — EXIST. 5ft CONTOUR LINE
- W — EXIST. POTABLE WATER LINE
- SS — EXIST. SANITARY SEWER LINE
- G — EXIST. GAS LINE
- E — EXIST. ELECTRIC LINE
- "E" — EXIST. OVERHEAD ELECTRIC LINE
- EXIST. FENCE LINE
- EXIST. CURB LINE
- EXIST. TREE LINE
- EXIST. CONC. SIDEWALK
- PROPERTY BOUNDARY LINE
- PRIMARY BUILDING SETBACK LINE
- EXIST. STORM PIPE
- TC 100.50 GD 100.00 — EXIST. SPOT ELEVATION
- EXIST. FIRE HYDRANT
- EXIST. SIAMESE CONNECTION
- EXIST. LIGHT POLE
- EXIST. "B" INLET
- EXIST. UTILITY POLE
- EXIST. MANHOLE
- EXIST. "A" OR "E" INLET

DEMOLITION NOTES:

1. ALL DEMOLITION SHALL CONFORM WITH ANY APPLICABLE FEDERAL, STATE OR LOCAL REGULATIONS. THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY AND WILL CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES REMAIN THE OBLIGATION OF THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO ABANDONMENT AND/OR DEMOLITION.
2. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES THAT CONSTRUCTION OF THE WORK UNDER THIS PLAN WILL PASS THROUGH AREAS WHERE THEIR SERVICES EXIST. NOTIFICATION TO THE UTILITIES MUST BE MADE IN A SUFFICIENT AMOUNT OF TIME IN ADVANCE (MIN. 72 HOURS) PRIOR TO START OF ANY CONSTRUCTION WORK IN THE AFFECTED AREAS.
3. ALL DEMOLITION DEBRIS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
4. ALL UTILITY SERVICES TO EXISTING RESIDENTIAL AND COMMERCIAL BUILDINGS THAT ARE TO REMAIN, WILL BE MAINTAINED DURING SITE CONSTRUCTION UNTIL THE REPLACEMENT UTILITIES ARE FULLY OPERATIONAL AND ACCEPTED BY THE APPROPRIATE AUTHORITY. THE CONTRACTOR SHALL PROVIDE ADVANCE NOTICE TO THE BUILDING OWNERS OF ANY TEMPORARY INTERRUPTIONS OF SERVICES. TEMPORARY INTERRUPTIONS MAY BE NEEDED TO CONNECT THE EXISTING SERVICES TO THE NEWLY CONSTRUCTED UTILITIES AND TO TEST THE NEW UTILITIES.
5. ALL UTILITY CONNECTIONS TO ADJACENT BUILDINGS MUST STAY ACTIVE.
6. THE CONTRACTOR IS RESPONSIBLE TO ENSURE SHUT OFF, DISCONNECT, AND/OR CAPPING OF ALL UTILITIES TO THE SITE INCLUDING, BUT NOT LIMITED TO, WATER, SEWER, ELECTRIC, CABLE, TELEPHONE, ETC. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL UTILITY SHUT OFFS AND LETTERS, OBTAINING ALL PERMITS TO COMPLETE ALL PHASES OF THE PROJECT.
7. ALL SUITABLE MATERIAL SHALL BE CRUSHED AND STOCKPILED ON SITE. MATERIAL SHALL BE SEPARATED FROM SITE BY STOCKPILING ON 3MM CLEAR PLASTIC. MATERIAL TO BE CRUSHED TO SPECIFICATION PROVIDED BY GEOTECHNICAL ENGINEER FOR STRUCTURAL FILL.
8. ALL UTILITIES LOCATED IN STATE R.O.W. TO REMAIN UNLESS OTHERWISE NOTED.

NOTES:
1. SEE T-1 FOR GENERAL SITE NOTES.
2. ALL EXISTING SITE IMPROVEMENTS TO BE DEMOLISHED UNLESS OTHERWISE NOTED WITHIN THE PLAN SET. SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.

10' 0 10' 20' 40'
SCALE: 1" = 20'

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
12/7/21
N.J.P.E. LIC. NO. GE 43435

DRAWN BY: YMS	CHECKED BY: PRL
DATE: 7/16/21	SCALE: 1" = 20'
APPROVED BY: BJA	ACAD NO.: 102-EX
FIELD BOOK: --- PAGE: ---	PROJECT NO.:
SHEET: 2 OF 17	DRAWING NO.: EX-1
REVISION: 1	

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

EXISTING CONDITIONS & DEMOLITION PLAN
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/09/21 - 6:45 PM, By: pbatham
File: H:\Engineering\Projects\Commercial\Fair Haven Bronx\02) Site Plans\02) Municipal Drawings\102-EX.dwg — Layout1

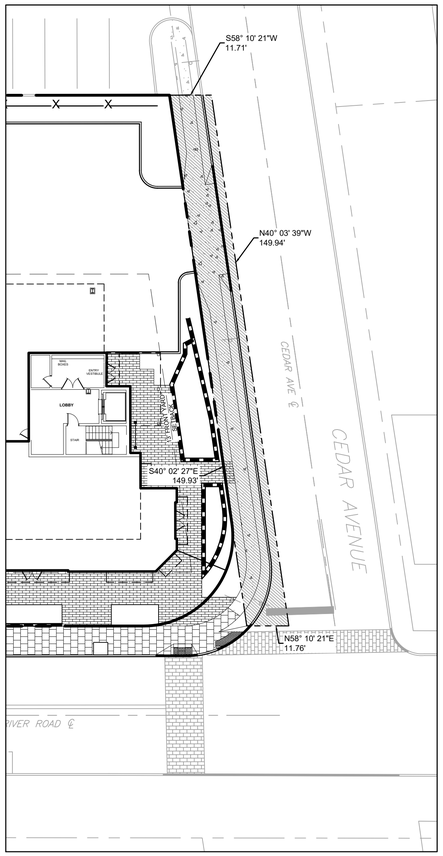
LEGEND

EXISTING

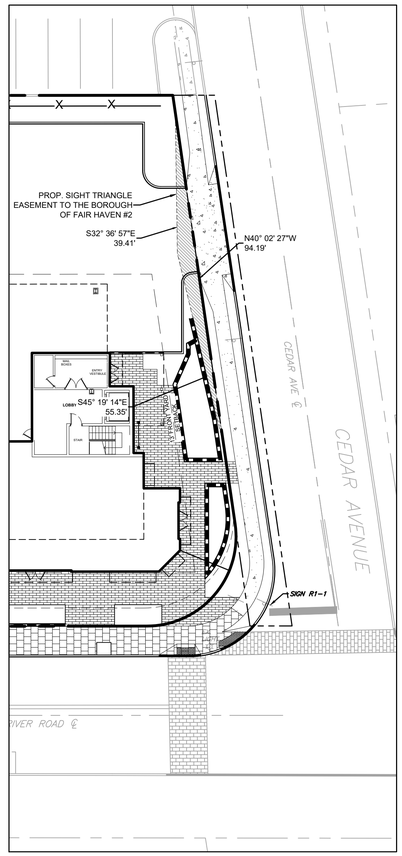
- 124 — EXIST. 1ft COUNTOUR LINE
- 125 — EXIST. 5ft CONTOUR LINE
- W — EXIST. POTABLE WATER LINE
- SS — EXIST. SANITARY SEWER LINE
- G — EXIST. GAS LINE
- E — EXIST. ELECTRIC LINE
- "E" — EXIST. OVERHEAD ELECTRIC LINE
- EXIST. FENCE LINE
- EXIST. CURB LINE
- EXIST. TREE LINE
- EXIST. CONC. SIDEWALK
- PROPERTY BOUNDARY LINE
- PRIMARY BUILDING SETBACK LINE
- EXIST. STORM PIPE
- TC 100.50 GD 100.00 — EXIST. SPOT ELEVATION
- EXIST. FIRE HYDRANT
- EXIST. SIAMESE CONNECTION
- EXIST. LIGHT POLE
- EXIST. "B" INLET
- EXIST. UTILITY POLE
- EXIST. MANHOLE
- EXIST. "A" OR "E" INLET

PROPOSED

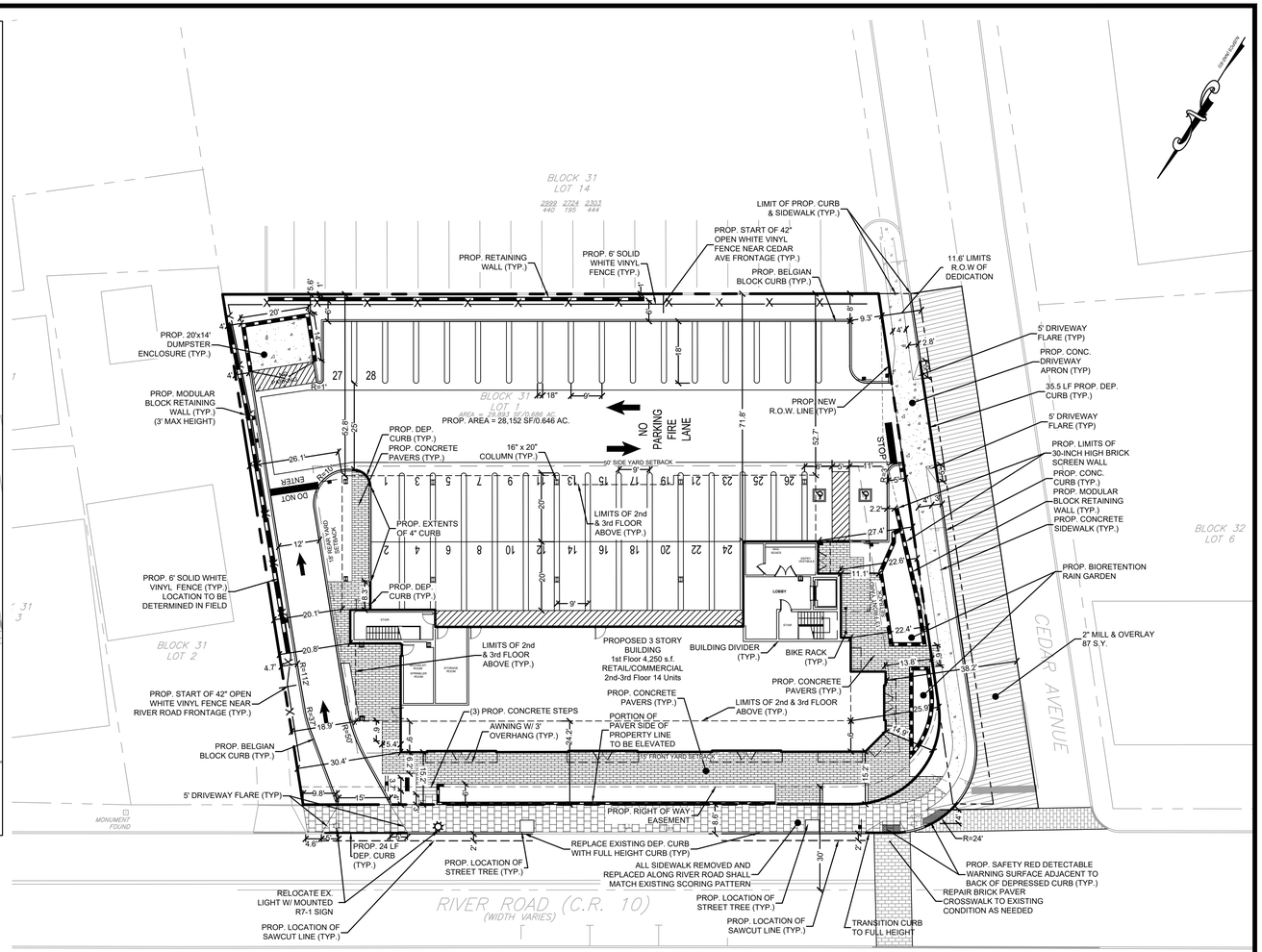
- 123 — PROP. 1ft COUNTOUR LINE
- 125 — PROP. 5ft CONTOUR LINE
- W — PROP. POTABLE WATER LINE
- SS — PROP. SANITARY SEWER LINE
- G — PROP. GAS LINE
- E — PROP. ELECTRIC LINE
- "E" — PROP. OVERHEAD ELECTRIC LINE
- PROP. FENCE LINE
- PROP. CURB LINE
- PROP. TREE LINE
- PROP. STORM PIPE
- PROP. CONCRETE SIDEWALK
- TC 100.50 GD 100.00 — PROP. SPOT ELEVATION
- PROP. FIRE HYDRANT
- PROP. SIAMESE CONNECTION
- PROP. LIGHT POLE
- PROP. "B" INLET
- PROP. UTILITY POLE
- PROP. MANHOLE
- PROP. "A" OR "E" INLET

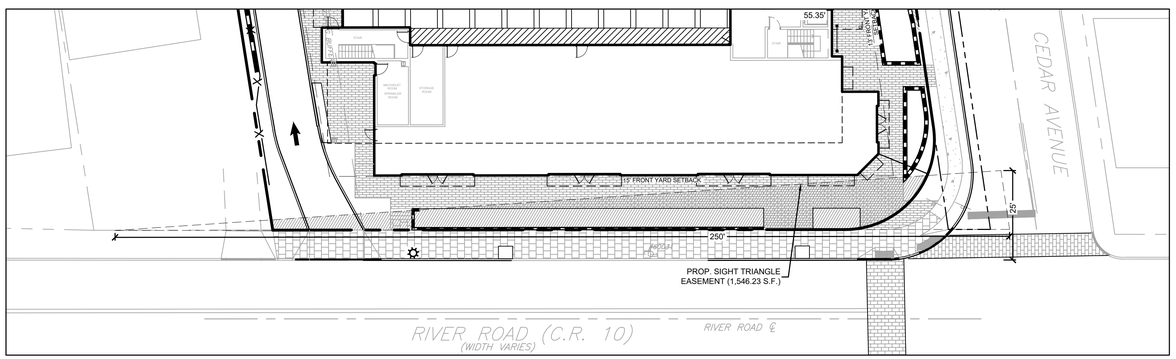


CEDAR AVE R.O.W. DEDICATION
(1741.12 SF)
SCALE: 1" = 20'

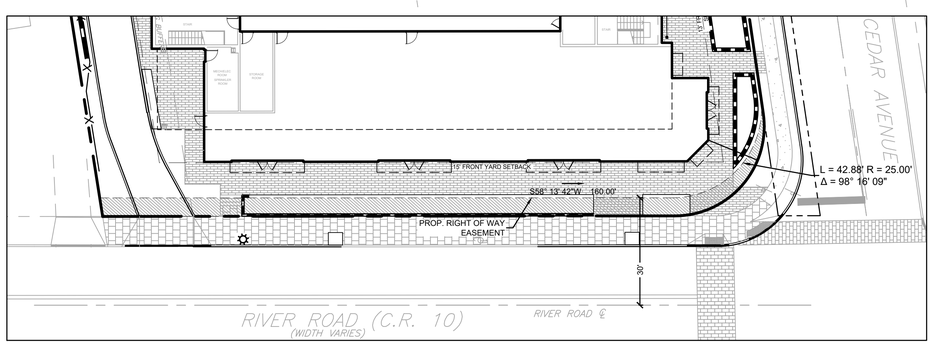


SIGHT TRIANGLE
EASEMENT #2 (239.86 SF)
SCALE: 1" = 20'





SIGHT TRIANGLE EASEMENT #1 (1,546.23 SF)
SCALE: 1" = 20'



RIVER ROAD R.O.W. EASEMENT (1624.71 SF)
SCALE: 1" = 20'

10' 0 10' 20' 40'
SCALE: 1" = 20'

NOTES:
1. SEE T-1 FOR GENERAL NOTES.
2. ALL CURB RADII TO BE 5' UNLESS OTHERWISE NOTED.
3. SEE CONSTRUCTION DETAIL SHEETS FOR REQUIRED DETAILS.
4. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/1/21
DATE

DRAWN BY: YMS	CHECKED BY: PRL
DATE: 7/16/21	SCALE: 1"=20'
APPROVED BY: BJA	ACAD NO.: 103-PS
FIELD BOOK: --- PAGE: ---	PROJECT NO.: ---
SHEET: 3 OF 17	DRAWING NO.: PS-1
REVISION: 1	

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED SITE & GEOMETRY PLAN
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/09/21 - 6:48 PM, By: pbatham
File: H:\Engineering\Projects\Commercial\Fair Haven Bronx\02\ Site Plans\02\ Municipal Drawings\103-PS.dwg — PS-1

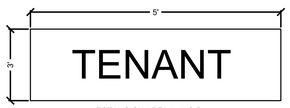
LEGEND

PROPOSED

- PROP. 1ft COUNTOUR LINE (123)
- PROP. 5ft CONTOUR LINE (125)
- PROP. POTABLE WATER LINE (W)
- PROP. SANITARY SEWER LINE (SS)
- PROP. GAS LINE (G)
- PROP. ELECTRIC LINE (E)
- PROP. OVERHEAD ELECTRIC LINE ("E")
- PROP. FENCE LINE (X X)
- PROP. CURB LINE
- PROP. TREE LINE
- PROP. STORM PIPE
- PROP. CONCRETE SIDEWALK
- PROP. SPOT ELEVATION (TC 100.50 GD 100.00)
- PROP. FIRE HYDRANT
- PROP. SIAMESE CONNECTION
- PROP. LIGHT POLE
- PROP. "B" INLET
- PROP. UTILITY POLE
- PROP. MANHOLE
- PROP. "A" OR "E" INLET

EXISTING

- *EXIST. 1ft COUNTOUR LINE (124)*
- *EXIST. 5ft CONTOUR LINE (125)*
- *EXIST. POTABLE WATER LINE (W)*
- *EXIST. SANITARY SEWER LINE (SS)*
- *EXIST. GAS LINE (G)*
- *EXIST. ELECTRIC LINE (E)*
- *EXIST. OVERHEAD ELECTRIC LINE ("E")*
- *EXIST. FENCE LINE*
- *EXIST. CURB LINE*
- *EXIST. TREE LINE*
- *EXIST. CONC. SIDEWALK*
- *PROPERTY BOUNDARY LINE*
- *PRIMARY BUILDING SETBACK LINE*
- *EXIST. STORM PIPE*
- *EXIST. SPOT ELEVATION (TC 100.50 GD 100.00)*
- *EXIST. FIRE HYDRANT*
- *EXIST. SIAMESE CONNECTION*
- *EXIST. LIGHT POLE*
- *EXIST. "B" INLET*
- *EXIST. UTILITY POLE*
- *EXIST. MANHOLE*
- *EXIST. "A" OR "E" INLET*

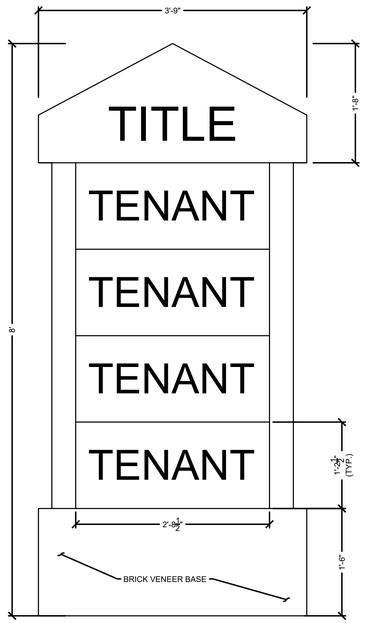


TOTAL SIGN AREA = 15 S.F.

NOTE:
LETTERING SIZE TO BE MAXIMUM OF 10 INCHES

TYPICAL RETAIL SIGN

N.T.S.

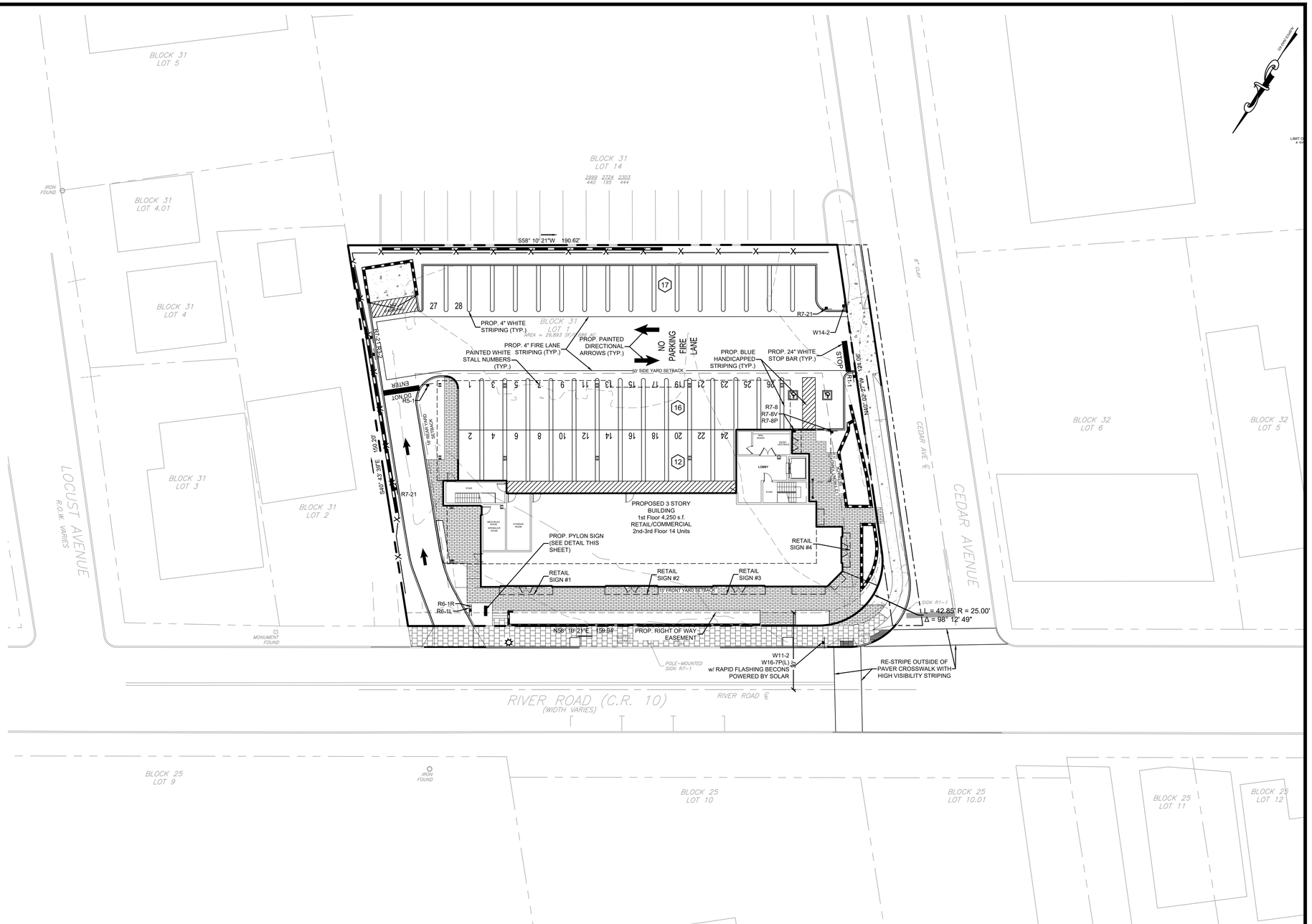


TOTAL SIGN AREA = 30 S.F.

NOTE:
1. LETTERING SIZE TO BE MAXIMUM OF 10 INCHES.

FREESTANDING/PYLON SIGN

N.T.S.



10' 0 10' 20' 40'

SCALE: 1" = 20'

NOTES:
1. SEE T-1 FOR GENERAL NOTES.
2. ALL CURB RADII TO BE 5' UNLESS OTHERWISE NOTED.
3. SEE CONSTRUCTION DETAIL SHEETS FOR REQUIRED DETAILS.
4. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

1

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
12/7/21
N.J.P.E. LIC. NO. GE 43435 — DATE

DRAWN BY: YMS	CHECKED BY: PRL		
DATE: 7/16/21	SCALE: 1"=20'		
APPROVED BY: BJA	ACAD NO.: 104-SS		
FIELD BOOK: --- PAGE: ---	PROJECT NO.:		
SHEET: 4 OF 17	DRAWING NO.: SS-1	REVISION: 1	

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED SIGNAGE & STRIPING PLAN

M&M REALTY PARTNERS AT FAIR HAVEN, LLC

FOR

BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN

MONMOUTH COUNTY — NEW JERSEY

Plotted:12/08/21 - 6:48 PM, By: pbatnam
File: H:\Engineering\Projects\Commercial\Fair Haven Block(03) 39a Plans\(03) Municipal Drawings\104-SS.dwg, --- SS-1

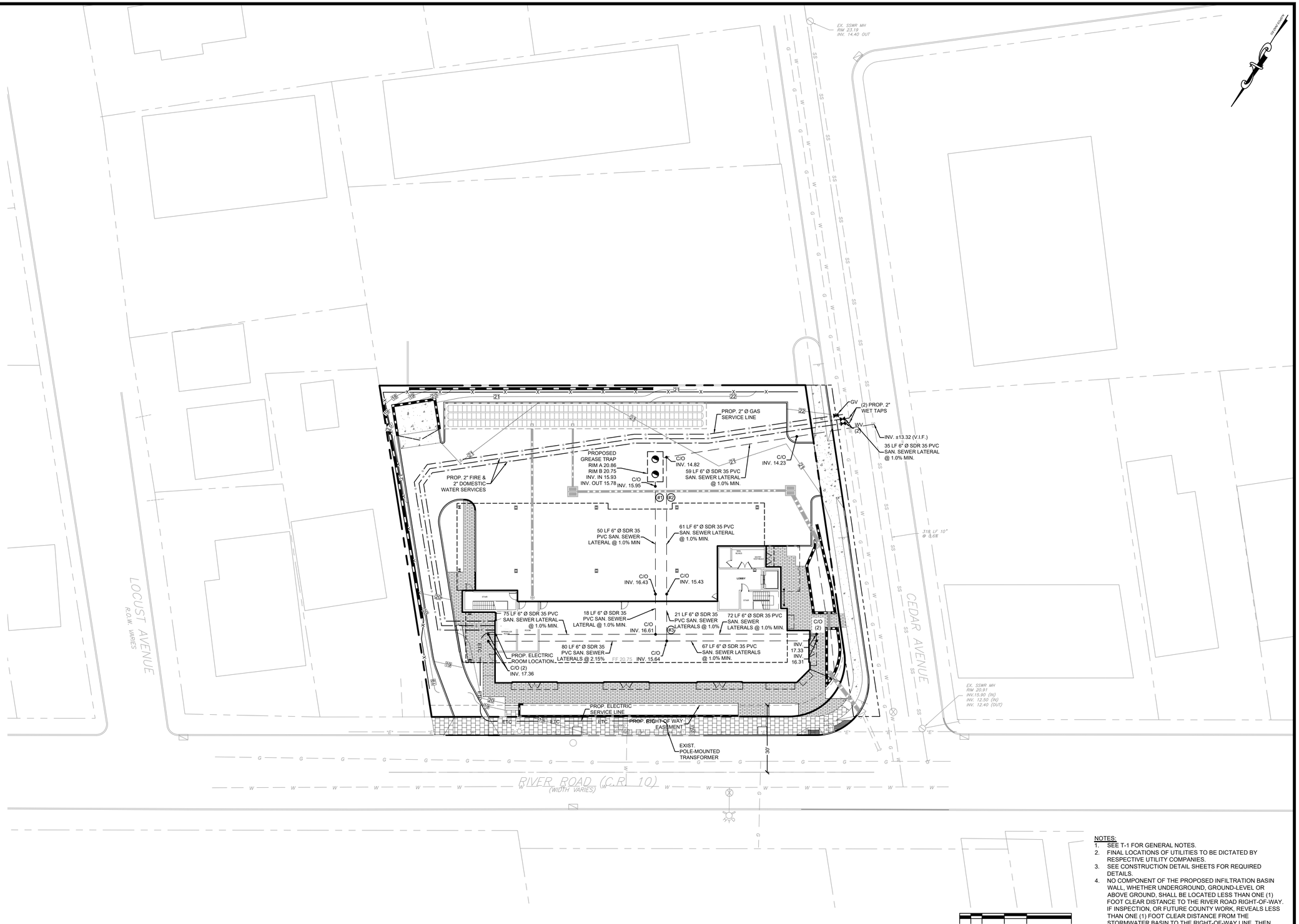
LEGEND

PROPOSED

- PROP. 1ft COUNTOUR LINE (123)
- PROP. 5ft CONTOUR LINE (125)
- PROP. POTABLE WATER LINE (W)
- PROP. SANITARY SEWER LINE (SS)
- PROP. GAS LINE (G)
- PROP. ELECTRIC LINE (E)
- PROP. OVERHEAD ELECTRIC LINE ("E")
- PROP. FENCE LINE (X)
- PROP. CURB LINE
- PROP. TREE LINE
- PROP. STORM PIPE
- PROP. CONCRETE SIDEWALK
- PROP. SPOT ELEVATION (TC 100.50 / GD 100.00)
- PROP. FIRE HYDRANT
- PROP. SIAMESE CONNECTION
- PROP. LIGHT POLE
- PROP. "B" INLET
- PROP. UTILITY POLE
- PROP. MANHOLE
- PROP. "A" OR "E" INLET

EXISTING

- *EXIST. 1ft COUNTOUR LINE* (124)
- *EXIST. 5ft CONTOUR LINE* (125)
- *EXIST. POTABLE WATER LINE* (W)
- *EXIST. SANITARY SEWER LINE* (SS)
- *EXIST. GAS LINE* (G)
- *EXIST. ELECTRIC LINE* (E)
- *EXIST. OVERHEAD ELECTRIC LINE* ("E")
- *EXIST. FENCE LINE*
- *EXIST. CURB LINE*
- *EXIST. TREE LINE*
- *EXIST. CONC. SIDEWALK*
- *PROPERTY BOUNDARY LINE*
- *PRIMARY BUILDING SETBACK LINE*
- *EXIST. STORM PIPE*
- *EXIST. SPOT ELEVATION* (TC 100.50 / GD 100.00)
- *EXIST. FIRE HYDRANT*
- *EXIST. SIAMESE CONNECTION*
- *EXIST. LIGHT POLE*
- *EXIST. "B" INLET*
- *EXIST. UTILITY POLE*
- *EXIST. MANHOLE*
- *EXIST. "A" OR "E" INLET*



10' 0 10' 20' 40'

SCALE: 1" = 20'

NOTES:
1. SEE T-1 FOR GENERAL NOTES.
2. FINAL LOCATIONS OF UTILITIES TO BE DICTATED BY RESPECTIVE UTILITY COMPANIES.
3. SEE CONSTRUCTION DETAIL SHEETS FOR REQUIRED DETAILS.
4. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

UTILITY CROSSING SCHEDULE

CROSSING	SSWR ELEVATION	STORM ELEVATION	SEPARATION
1	16.50 T.O.P.	18.29 B.O.P.	1.80'
2	15.86 T.O.P.	18.28 B.O.P.	2.42'
3	16.14 T.O.P.	16.63 B.O.P. (SSWR)	0.50'

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE

DRAWN BY:	YMS
CHECKED BY	PRL
DATE:	7/16/21
SCALE:	1" = 20'
APPROVED BY:	BJA
ACAD NO.:	105-UT
FIELD BOOK:	***
PAGE:	**
PROJECT NO.:	
SHEET	5 OF 17
DRAWING NO.	UT-1
REVISION	1

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED UTILITY PLAN
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN

MONMOUTH COUNTY NEW JERSEY

Plotted:12/9/21 - 6:46 PM, By: dlathan
File: H:\Engineering\Projects\Commercial\Fair Haven Boros\(03) Site Plans\(05) Municipal Drawings\105-UT.dwg — Layout1

ACCESSIBLE ROUTE NOTES:

NON-RAMP ACCESSIBLE ROUTE

1. RUNNING SLOPE OF ROUTE SHALL NOT EXCEED 4.9% (19/32" per foot).
2. LATERAL OR CROSS SLOPE OF THE ROUTE SHALL NOT EXCEED 2.0% (1/4" per foot).
3. MINIMUM SIDEWALK WIDTH FLUSH WITH CURB AT PARKING STALLS SHALL BE 6'.
4. MINIMUM SIDEWALK WIDTH SHALL BE 4'.
5. A 5'x5' LANDING SHALL BE PROVIDED AT ALL DOORWAY ENTRANCES AND EXITS.
6. THE SLOPE IN ANY DIRECTION OF THE 5'x5' LANDING SHALL NOT EXCEED 2% (1/4" per foot).
7. TRUNCATED DOME DETECTABLE WARNING STRIPS SHALL BE PROVIDED AT ALL LOCATIONS WHERE THE ACCESSIBLE ROUTE ENTERS A CROSSWALK REGARDLESS OF THE SLOPE OF THE ADA ROUTE ENTERING CROSSWALK.

CURB RAMPS

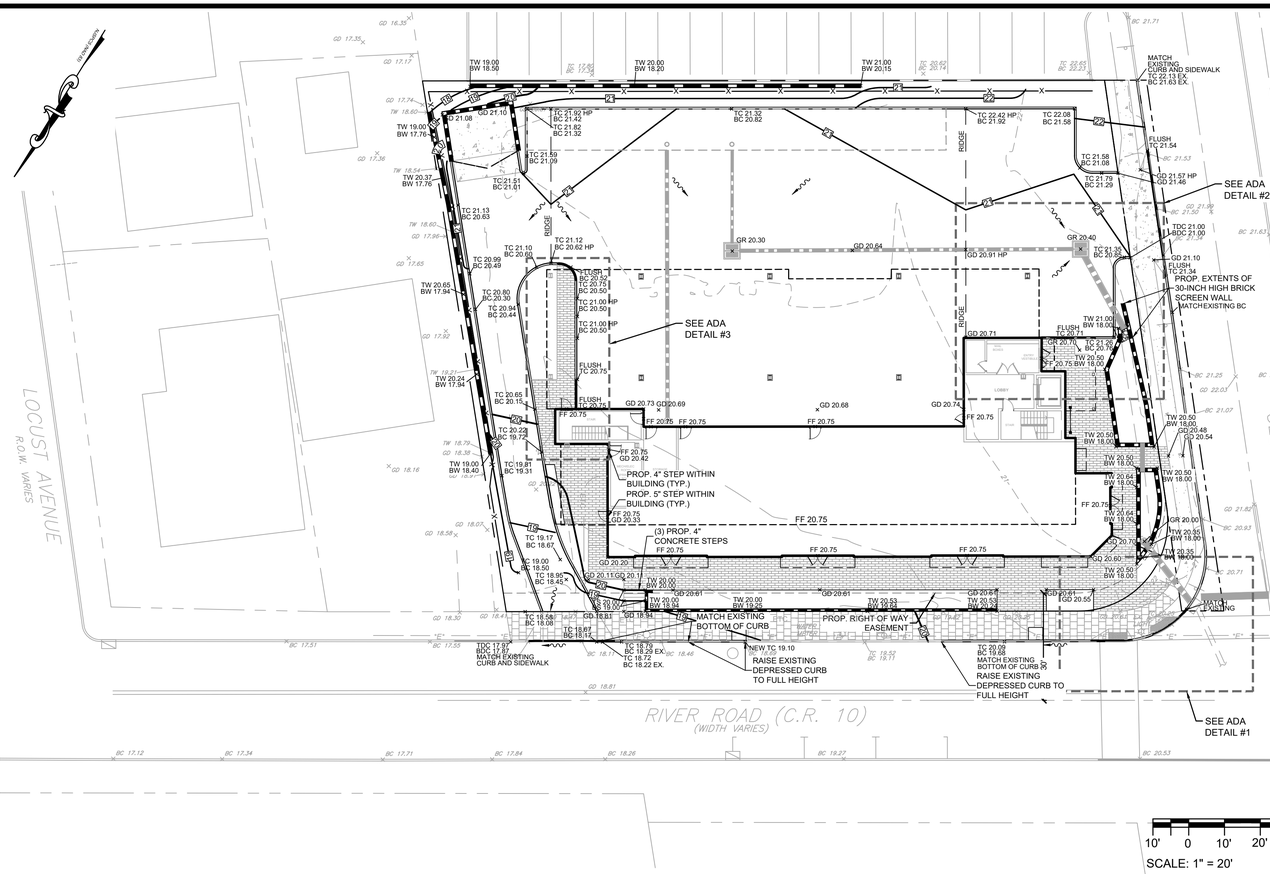
1. A 5'x5' LANDING AREA SHALL BE PROVIDED AT THE TOP AND BOTTOM OF ALL RAMPS.
2. THE SLOPE IN ANY DIRECTION OF THE 5'x5' LANDING AREA SHALL NOT EXCEED 2% (1/4" per foot).
3. THE CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.3% (1" per foot).
4. THE LATERAL OR CROSS SLOPE OF THE RAMP SHALL NOT EXCEED 2.0% (1/4" per foot).
5. ALL RAMPS SHALL DIRECT PEDESTRIAN TRAVEL PERPENDICULAR TO ROADWAY TRAFFIC AND OR PARALLEL WITH TRAVEL ROUTE.
6. CURB RAMP WIDTH SHALL BE 5' MIN.
7. SIDE ACCESS SLOPES OR TAPERS ON CURB RAMPS SHALL NOT EXCEED 10% (1-1/8" per foot) WHERE SIDE ACCESS TO THE RAMP IS PROVIDED. MINIMUM WIDTH OF SIDE SLOPE SHALL BE 5' AT CURB (only applicable on curb ramp type 1)
8. WHERE SIDE ACCESS IS NOT PROVIDED INTO RAMP, MAXIMUM WIDTH OF SIDE SLOPE SHALL BE 18" AT CURB.
9. REGARDLESS OF CURB CONSTRUCTION THE DEPRESSED CURB AT THE RAMP AND SIDE FLARES SHALL BE POURED CONCRETE.
10. TRUNCATED DOME DETECTABLE WARNING SURFACES SHALL BE PROVIDED AT ALL CURB RAMPS. WARNING SURFACE SHALL SPAN FULL WIDTH OF THE RAMP AND BE 24" LONG. SURFACE SHALL BE LOCATED ON THE RAMP AT THE LOWEST POINT OF THE RAMP 6-8 INCHES FROM THE FACE OF CURB.
11. WHERE TWO RAMPS ARE PROVIDED AT ONE CORNER FOR CROSSING THE RAMPS SHALL BE ORIENTED AT 90 DEGREES APART.
12. A SINGLE 5'x5' LANDING AREA CAN SERVE TWO RAMPS ORIENTED AT 90 DEGREES TO EACH OTHER.
13. LANDING AREAS SHALL BE POURED FIRST AND SEPARATELY FROM THE RAMPS, CURBS AND SIDEWALKS TO ENSURE PROPER SLOPES AND GRADE MATCHES.
14. RAMPS SHALL BE POURED FLUSH WITH BACK SIDE OF CURB AND SIDEWALK.

PARKING STALLS

1. THE SLOPE IN ANY DIRECTION OF STALLS AND STRIPED AREAS SHALL NOT EXCEED 2.0%(1/4" per foot).
2. STALLS SHALL BE THE MOST PROXIMATE TO THE BUILDING ENTRANCE AS FEASIBLE.

RAMPS

1. ANY NON CURB RAMP ACCESSIBLE ROUTE THAT EXCEEDS 4.99% (19/32" per foot) SHALL BE CONSIDERED A RAMP.
2. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST CURRENT CODE.



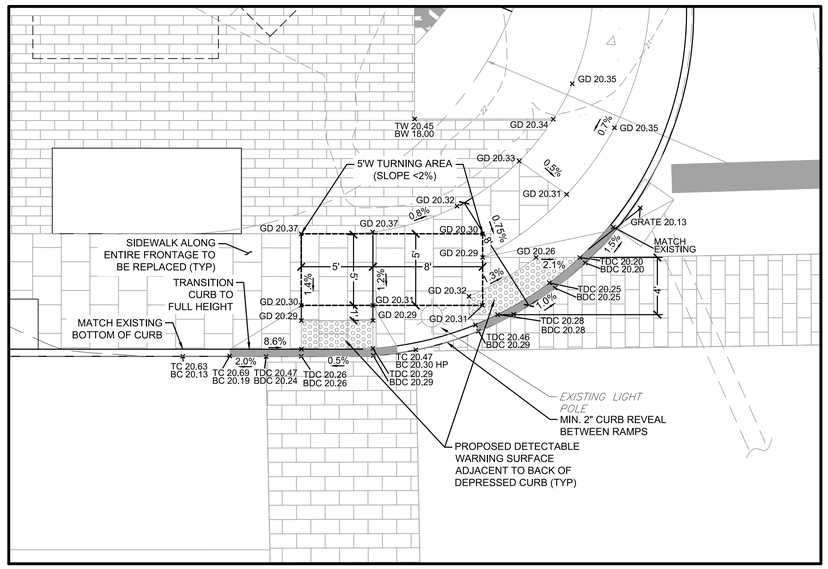
LEGEND

PROPOSED

- PROP. 1ft COUNTOUR LINE
- PROP. 5ft CONTOUR LINE
- PROP. POTABLE WATER LINE
- PROP. SANITARY SEWER LINE
- PROP. GAS LINE
- PROP. ELECTRIC LINE
- PROP. OVERHEAD ELECTRIC LINE
- PROP. FENCE LINE
- PROP. CURB LINE
- PROP. TREE LINE
- PROP. STORM PIPE
- PROP. CONCRETE SIDEWALK
- PROP. SPOT ELEVATION
- PROP. FIRE HYDRANT
- PROP. SIAMESE CONNECTION
- PROP. LIGHT POLE
- PROP. "B" INLET
- PROP. UTILITY POLE
- PROP. MANHOLE
- PROP. "A" OR "E" INLET

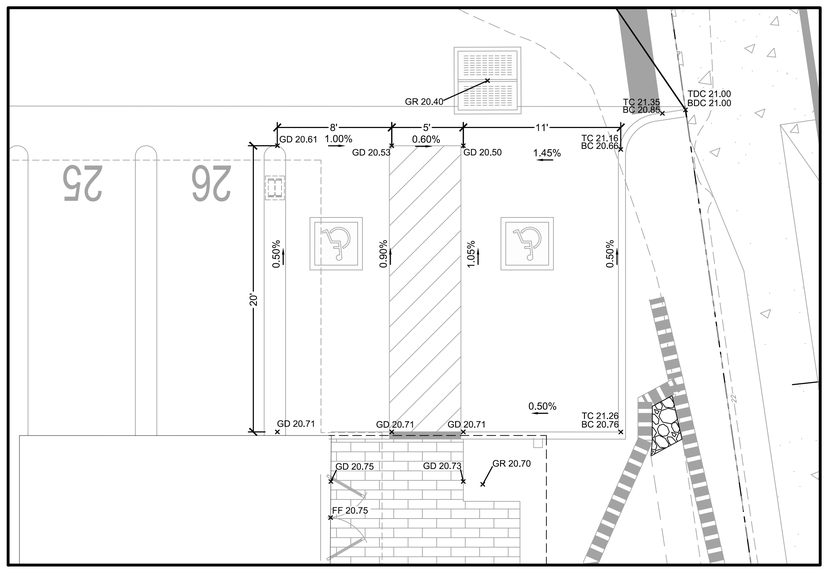
EXISTING

- *EXIST. 1ft COUNTOUR LINE*
- *EXIST. 5ft CONTOUR LINE*
- *EXIST. POTABLE WATER LINE*
- *EXIST. SANITARY SEWER LINE*
- *EXIST. GAS LINE*
- *EXIST. ELECTRIC LINE*
- *EXIST. OVERHEAD ELECTRIC LINE*
- *EXIST. FENCE LINE*
- *EXIST. CURB LINE*
- *EXIST. TREE LINE*
- *EXIST. CONC. SIDEWALK*
- *PROPERTY BOUNDARY LINE*
- *PRIMARY BUILDING SETBACK LINE*
- *EXIST. STORM PIPE*
- *EXIST. SPOT ELEVATION*
- *EXIST. FIRE HYDRANT*
- *EXIST. SIAMESE CONNECTION*
- *EXIST. LIGHT POLE*
- *EXIST. "B" INLET*
- *EXIST. UTILITY POLE*
- *EXIST. MANHOLE*
- *EXIST. "A" OR "E" INLET*



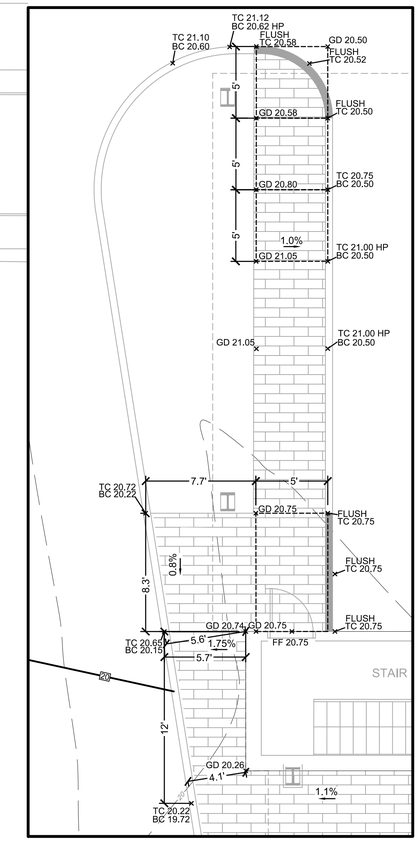
ACCESSIBLE ROUTE AREA #1

SCALE: 1" = 5'



ACCESSIBLE ROUTE AREA #2

SCALE: 1" = 5'



ACCESSIBLE ROUTE AREA #3

SCALE: 1" = 5'

NOTE:

1. SEE T-1 FOR GENERAL NOTES.
2. ALL EXISTING SIDEWALK ALONG FRONTAGE TO BE REPLACED.
3. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE

DRAWN BY: YMS | CHECKED BY: PRL
DATE: 7/16/21 | SCALE: AS SHOWN
APPROVED BY: BJA | ACAD NO.: 106-PS
FIELD BOOK: **** PAGE: ** | PROJECT NO.:
SHEET: 6 OF 17 | DRAWING NO.: GD-1 | REVISION: 1

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED GRADING PLAN
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/06/21 - 6:47 PM, By: jallshun
File: H:\Engineering\Projects\Commercial\Fair Haven Boro\(03) Site Plans\(03) Municipal Drawings\106-GD.dwg --> Layout1

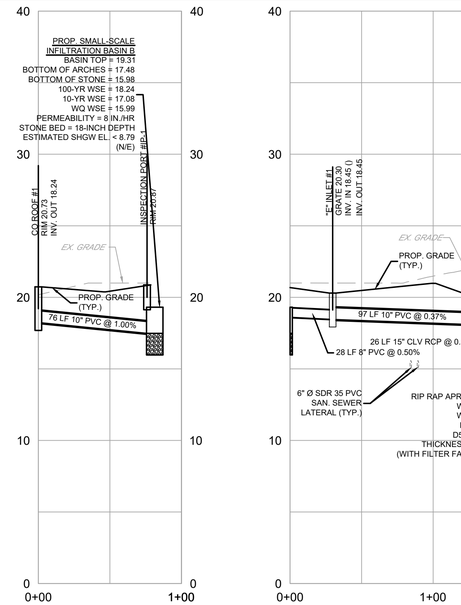
LEGEND

PROPOSED

- PROP. 1ft COUNTOUR LINE (123)
- PROP. 5ft CONTOUR LINE (125)
- PROP. POTABLE WATER LINE (W)
- PROP. SANITARY SEWER LINE (SS)
- PROP. GAS LINE (G)
- PROP. ELECTRIC LINE (E)
- PROP. OVERHEAD ELECTRIC LINE ("E")
- PROP. FENCE LINE (X)
- PROP. CURB LINE
- PROP. TREE LINE
- PROP. STORM PIPE
- PROP. CONCRETE SIDEWALK
- PROP. SPOT ELEVATION (TC 100.50 / GD 100.00)
- PROP. FIRE HYDRANT
- PROP. SIAMESE CONNECTION
- PROP. LIGHT POLE
- PROP. "B" INLET
- PROP. UTILITY POLE
- PROP. MANHOLE
- PROP. "A" OR "E" INLET

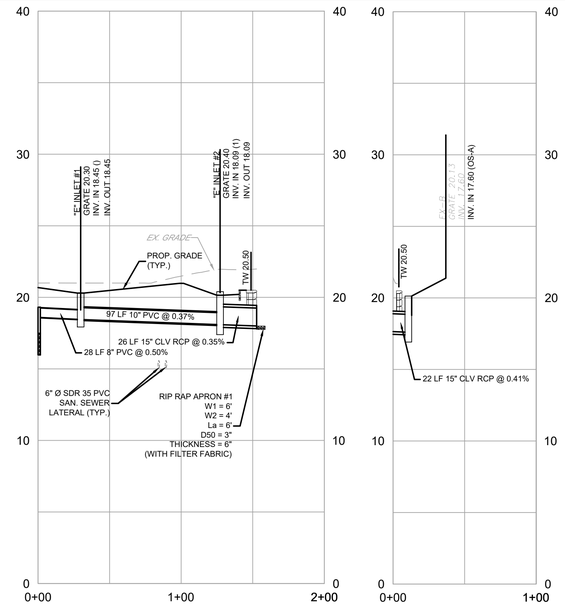
EXISTING

- *EXIST. 1ft COUNTOUR LINE (124)*
- *EXIST. 5ft CONTOUR LINE (125)*
- *EXIST. POTABLE WATER LINE (W)*
- *EXIST. SANITARY SEWER LINE (SS)*
- *EXIST. GAS LINE (G)*
- *EXIST. ELECTRIC LINE (E)*
- *EXIST. OVERHEAD ELECTRIC LINE ("E")*
- *EXIST. FENCE LINE*
- *EXIST. CURB LINE*
- *EXIST. TREE LINE*
- *EXIST. CONC. SIDEWALK*
- *PROPERTY BOUNDARY LINE*
- *PRIMARY BUILDING SETBACK LINE*
- *EXIST. STORM PIPE*
- *EXIST. SPOT ELEVATION (TC 100.50 / GD 100.00)*
- *EXIST. FIRE HYDRANT*
- *EXIST. SIAMESE CONNECTION*
- *EXIST. LIGHT POLE*
- *EXIST. "B" INLET*
- *EXIST. UTILITY POLE*
- *EXIST. MANHOLE*
- *EXIST. "A" OR "E" INLET*



CO ROOF #1 TO SMALL-SCALE INFILTRATION BASIN B

SCALE: H: 1"=50'
V: 1"=5'

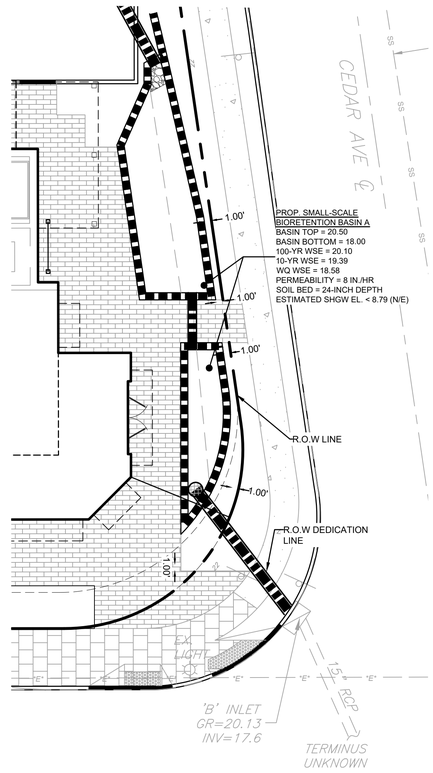


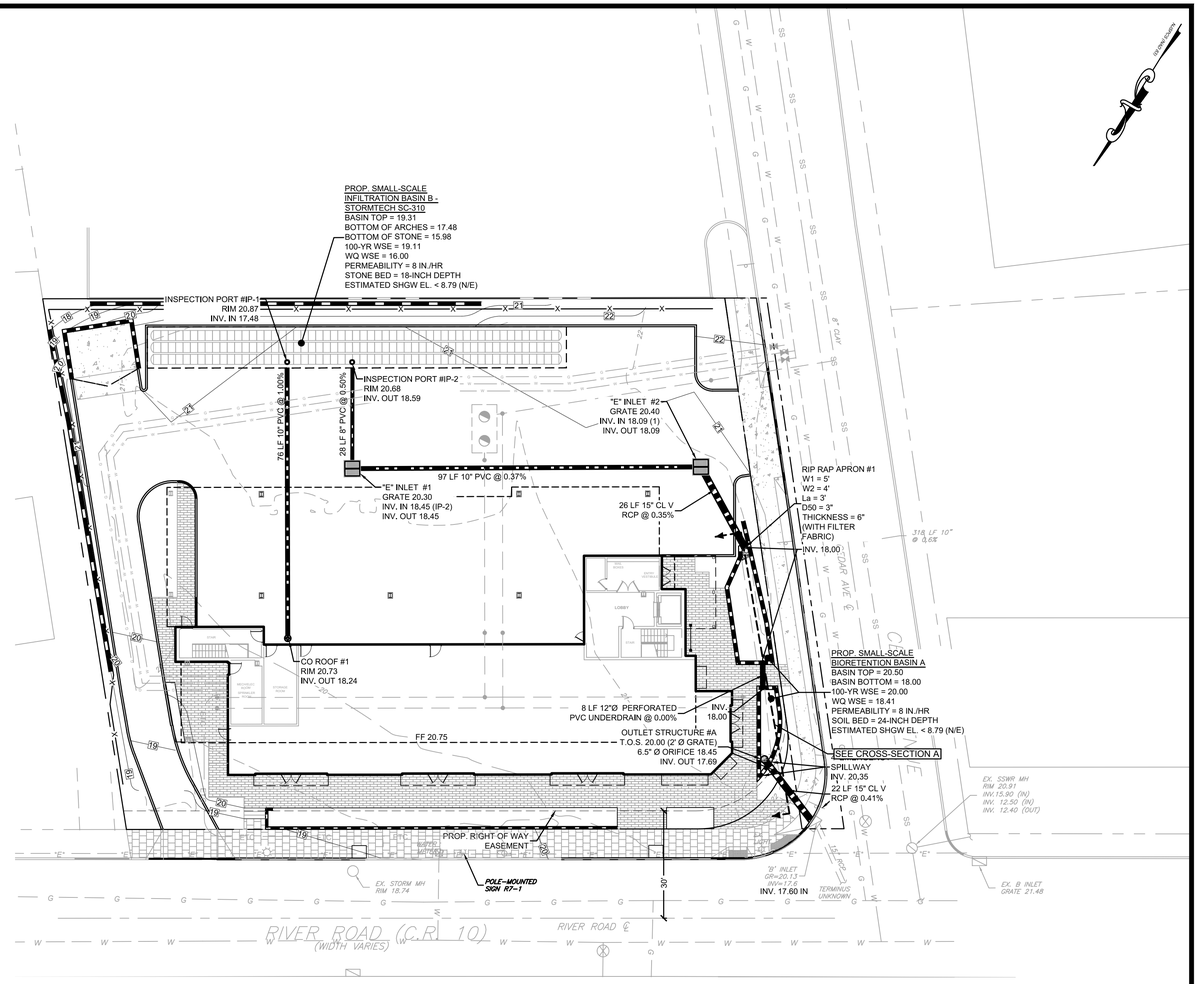
SMALL-SCALE INFILTRATION BASIN B TO SMALL-SCALE BIORETENTION BASIN A

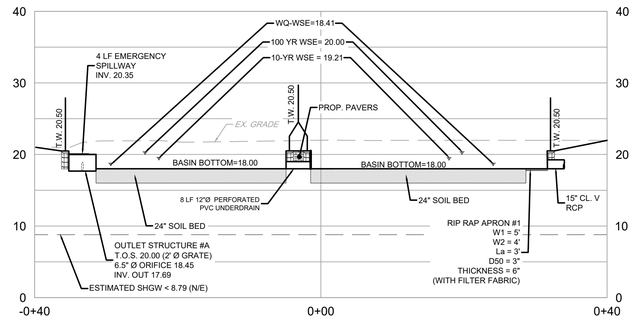
SCALE: H: 1"=50'
V: 1"=5'

OS-1 TO EX.B INLET

SCALE: H: 1"=50'
V: 1"=5'







CROSS-SECTION A

SCALE: H: 1"=10'
V: 1"=10'

10' 0 10' 20' 40'

SCALE: 1" = 20'

NOTE:
1. SEE T-1 FOR GENERAL NOTES.
2. ALL EXISTING SIDEWALK ALONG FRONTAGE TO BE REPLACED.
3. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE

DRAWN BY: YMS	CHECKED BY: PRL
DATE: 7/16/21	SCALE: 1" = 20'
APPROVED BY: BJA	ACAD NO.: 107-DR
FIELD BOOK: *** PAGE: ***	PROJECT NO.:
SHEET: 7 OF 17	DRAWING NO.: DR-1
REVISION: 1	

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED DRAINAGE PLAN
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/09/21 - 6:47 PM, By: pbatham
File: H:\Engineering\Projects\Commercial\Fair Haven Block(s)\31 Site Plans\(02) Municipal Drawings\107-DR.dwg — 107-DR

PLANT SCHEDULE

DECIDUOUS TREES	CODE	BOTANICAL / COMMON NAME	SIZE	TYPE		QTY
	AR	Acer rubrum `Armstrong` Armstrong Red Maple	3"-3.5" CALIPER	B&B		2
	BC	Betula nigra `Cully` TM Heritage River Birch	6FT-8FT	B&B		2
	GG	Ginkgo biloba `Goldspire` Fastigiate Maidenhair Tree	3"-3.5" CALIPER	B&B		4
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	SIZE	TYPE		QTY
	PP	Picea pungens `Glauca` Colorado Blue Spruce	8FT-10FT	B&B		1
	CL	x Cupressocyparis leylandii Leylandi Cypress	8FT-10FT	B&B		1
EVERGREEN SHRUBS	CODE	BOTANICAL / COMMON NAME	SIZE	TYPE		QTY
	IA	Ilex glabra `Compacta` Compact Inkberry	24"-30"	CONTAINER		38
	IS	Ilex glabra `Shamrock` Inkberry	18"-24"	CONTAINER		9
	JC	Juniperus chinensis `Pfitzeriana Compacta` Compacta Pfitzer	18"-24"	CONTAINER		3
	TS	Thuja occidentalis `Smaragd` Emerald Green Arborvitae	72"	CONTAINER		65
GROUND COVERS	CODE	BOTANICAL / COMMON NAME	SIZE	TYPE	SPACING	QTY
	IR	Iris versicolor Blue Flag	#1	CONTAINER	18" o.c.	27
	LB	Liriope muscari `Big Blue` Big Blue Lilyturf	#1	CONTAINER	18" o.c.	642
	VM	Vinca minor `Bowles` Bowles` Common Periwinkle	#1	CONTAINER	18" o.c.	117

GENERAL LANDSCAPE NOTES

1. THE LOCATION OF ALL PLANTS SHOWN ON THE LANDSCAPE PLAN IS APPROXIMATE. THE FINAL LOCATION OF ALL PLANTS AND BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE TOWNSHIP ENGINEER.
2. ALL SHRUB BEDS SHALL HAVE A MINIMUM DEPTH OF 3" OF SHREDDED HARDWOOD BARK.
3. PLANTS SHALL BE WATERED ON THE SAME DAY OF INSTALLATION. THEREAFTER, REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT AND GROWTH OF ALL PLANTS.
4. GUARANTEE: ALL TREES, SHRUBS, GROUNDCOVERS AND LAWNS SHALL BE GUARANTEED FOR A MINIMUM OF ONE (1) YEAR. ALL PLANTS, LAWNS AND GROUNDCOVER AREAS, NOT IN A HEALTHY GROWING CONDITION SHALL BE REMOVED AND REPLACED WITH PLANTING OF LIKE KIND AND SIZE BEFORE THE CLOSE OF THE NEXT PLANTING SEASON BY THE LANDSCAPE CONTRACTOR AT NO CHARGE TO THE LANDLORD OR TENANT.
5. ALL DISTURBED AREAS, UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN, SHALL BE PLANTED AS LAWN.
6. CONTRACTOR SHALL PARTIALLY FILL WITH WATER A REPRESENTATIVE NUMBER OF PITS IN EACH AREA OF THE PROJECT PRIOR TO PLANTING TO DETERMINE IF THERE IS ADEQUATE PERCOLATION. IF PIT DOESN'T PERCOLATE, MEASURES MUST BE TAKEN TO ASSURE PROPER DRAINAGE BEFORE PLANTING.
7. CONTRACTOR SHALL REMOVE STAKING, GUYING, AND WRAP AT END OF GUARANTEE PERIOD, ALL PLANTING MUST BE GUARANTEED FOR ONE (1) FULL GROWING SEASON FROM THE TIME OF FINAL ACCEPTANCE BY THE TOWNSHIP ENGINEER.
8. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN, 1250 I STREET, N.W., SUITE 500, WASHINGTON, D.C. 20005.
9. ALL SUBSTITUTION SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER IN WRITING FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
10. IN THE EVENT THAT PLANT QUANTITY DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANTING SCHEDULE, THE PLAN SHALL SUPERSEDE.
11. WIRE BASKETS TO BE REMOVED PRIOR TO BACKFILLING THE PLANTING PIT
12. ALL PLANTS RELOCATIONS SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION

LANDSCAPE MAINTENANCE CHECKLIST

TREES, SHRUBS AND GROUNDCOVERS

PRUNING: PRUNE TREES TO REMOVE DEAD AND DECEASED WOOD AND TO IMPROVE OVERALL HABIT. PRUNE SHRUBS AS NEEDED, AFTER FLOWERING ONLY. PRUNE AT LEAST ONCE PER YEAR. PLANT MATERIAL SHOWN PLANTED IN A MASS OR TOUCHING EACH OTHER ARE TO BE ALLOWED TO GROW TOGETHER IN ORDER TO BE ABLE TO PERFORM AS A SCREEN OR

FERTILIZER: RATIO 2:1:1 AT 2-3 LBS. ACTUAL NITROGEN PER 1,000 SQ. FT. FERTILIZE IN SPRING ONLY.

PESTICIDES: APPLY PESTICIDES ONLY AS NEEDED FOR HEDGE. SPECIFIC DISEASES OR INSECT PESTS.

WEED CONTROL: WEED ALL BEDS AS NEEDED TO KEEP WELL GROOMED.

WATER: WATER ALL NEW PLANT MATERIAL AS NEEDED THROUGH FIRST AND SECOND GROWING SEASON. IF RAIN IS INSUFFICIENT, WATER ALL WOODY PLANTS THOROUGHLY TWO TIMES PER WEEK.

MULCH: RENEW SHREDDED BARK MULCH TO 3" DEPTH EVERY YEAR. REPLACE ALL DEAD SHRUBS AND TREES

LEAF REMOVAL: REMOVE LEAVES FROM ALL BEDS, TURF AREAS, PARKING AREAS, AND WALKS.

REPLACEMENTS: OVER SEED THIN SPOTS IN SPRING WITHIN NEXT PLANTING SEASON.

TURF

RENEWAL PROCEDURES:
AND FALL. THATCH AS NECESSARY.

FERTILIZER: RATIO 3:1:2 AT 1 LB. NITROGEN PER 1,000 SQ. FT. FERTIZE TWO TIMES PER YEAR.

PESTICIDES: INSPECT AND APPLY AS NEEDED FOR DISEASES AND INSECTS.

MOW: MAINTAIN A 2" HEIGHT. MOW AT LEAST ONCE PER WEEK. REMOVE CLIPPINGS FROM DETENTION BASIN.

MANICURE: TRIM LAWN AND GROUND COVERS ALONG SIDEWALKS AND SHRUB BED EDGES. RAKE AS NEEDED.

GENERAL MAINTENANCE

DETENTION BASIN: CLEAN OUT OUTLET STRUCTURES AFTER EVERY STORM EVENT.

PAVEMENT: REPLACE ALL BROKEN OR MISSING PAVERS REPAIR OR REPLACE ALL OTHER DAMAGE PAVING AS NECESSARY. REMOVE ALL STAINS.

PLANTING NOTES

1) THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANT MATERIALS SHOWN ON THE DRAWINGS, AS SPECIFIED, AND IN QUANTITIES INDICATED ON THE PLANT LIST. THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO BEGINNING PLANTING OPERATIONS.

2) STANDARDS: ALL PLANTS SHALL BE IN CONFORMANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. WITH REGARD TO SIZING AND DESCRIPTION. SOIL AMENDMENTS WILL BE BASED ON SOIL TEST RESULTS.

3) QUALITY: ALL PLANTS SHALL BE NURSERY GROWN AND HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE AND INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS.

4) SUBSTITUTIONS: WHEN PLANTS OF A SPECIFIED KIND OR SIZE ARE NOT AVAILABLE WITHIN REASONABLE DISTANCE, SUBSTITUTIONS MAY BE MADE UPON REQUEST BY THE CONTRACTOR, IF APPROVED BY THE OWNER OR HIS REPRESENTATIVE. ANY CHANGES WILL BE SUBJECT TO BOROUGH APPROVAL.

5) SIZE: ALL PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED ON THE PLANT LIST UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE OWNER OR HIS REPRESENTATIVE. ANY CHANGES WILL BE SUBJECT TO BOROUGH APPROVAL.

6) PRUNING: EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH AMERICAN ASSOCIATION OF NURSERYMEN, INC. STANDARDS TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL DEAD WOOD OR SUCKERS AND BROKEN OR BADLY BRUISED BRANCHES SHALL BE REMOVED. CUTS OVER ONE INCH (1") IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.

7) ROOT SYSTEMS: BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH FIRM NATURAL BALLS OF EARTH OF DIAMETER AND DEPTH TO INCLUDE MOST OF THE FIBROUS ROOTS. CONTAINER GROWN STOCK SHALL HAVE BEEN IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM HAVE DEVELOPED SUFFICIENTLY TO HOLD ITS SOIL TOGETHER FIRM AND WHOLE. NO PLANTS SHALL BE LOOSE IN THE CONTAINER OR BALL.

8) PROTECTOR: ROOTBALLS, TRUNKS, BRANCHES AND FOLIAGE OF PLANTS SHALL BE ADEQUATELY PROTECTED AT ALL TIMES FROM SUN AND DRYING WINDS OR FROST. PLANTS WITH BROKEN ROOT BALLS OR EXCESSIVE DAMAGE TO THE CROWN SHALL BE REPLACED, IN KIND, PRIOR TO INSTALLATION.

9) MULCH: IMMEDIATELY FOLLOWING PLANT INSTALLATION ALL TREE AND SHRUB PLANTING PITS SHALL BE COVERED WITH A TWO INCH (2") LAYER OF LICORICE ROOT OR OTHER MATERIAL APPROVED BY THE OWNER OR HIS REPRESENTATIVE. THE LIMITS OF THIS MULCH FOR DECIDUOUS TREES AND SINGLE EVERGREEN TREES SHALL BE THE AREA OF THE PIT; FOR EVERGREEN TREES CLUSTER OR SHRUB MASSES, A MULCHED BED SHALL BE CREATED.

10) ANTI-DESICCANT SPRAY: TREES AND WHEN PLANTED IN LEAF SHALL BE TREATED WITH ANTI-DESICCANT SUCH AS "WILT PROOF".

11) SOIL AMENDMENTS WILL BE BASED ON SOIL TEST RESULTS. PLANTING MIX BEFORE BACKFILLING: THE TOPSOIL BACKFILL MIXTURE SHALL BE PREPARED AND MIXED TO THE FOLLOWING PROPORTIONS:

DECIDUOUS PLANTS - TWO PARTS BY VOLUME OF TOPSOIL, ONE PART ORGANIC COMPOST AND FIVE POUNDS BONE MEAL PER CUBIC YARD.

EVERGREEN PLANTS - THREE PARTS BY VOLUME OF TOPSOIL AND ONE PART ORGANIC COMPOST.

FERTILIZER - TO THE ABOVE MIXTURES, ADD THREE POUNDS OF SPECIFIED COMMERCIAL FERTILIZER FOR TREES UP TO THREE INCHES (3") IN CALIPER AND ONE POUND PER INCH OF CALIPER FOR LARGER TREES. SHRUBS SHALL BE FERTILIZED WITH SIX (6) OUNCES OF FERTILIZER FOR SHRUBS FOUR FEET (4') AND OVER.

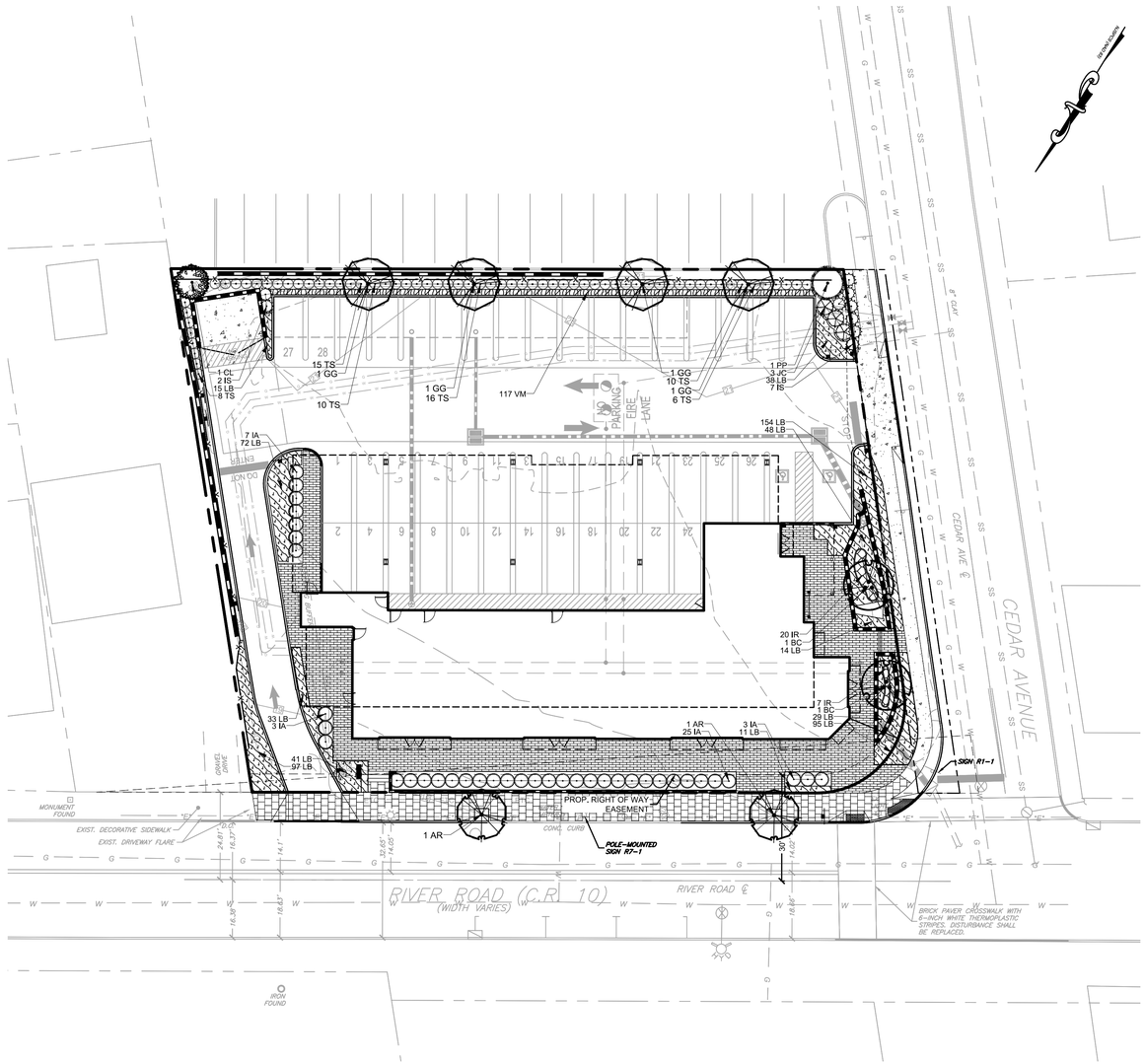
12) STAKING AND GUYING: ALL TREES SHALL BE STAKED AND GUYED ACCORDING TO ACCEPTED INDUSTRY PRACTICE. THEY SHALL ALSO BE WRAPPED IMMEDIATELY AFTER THEY ARE PLANTED WITH APPROVED TREE WRAP IN CONFORMANCE WITH ACCEPTED INDUSTRY PRACTICE.

13) LAYOUT: THE CONTRACTOR SHALL LAY OUT WITH IDENTIFIABLE STAKES, THE LOCATION OF ALL PLANTS AND THE ARRANGEMENT AND OUTLINES OF PLANTING BEDS AS INDICATED ON THE DRAWINGS. THE LAYOUT OF PLANTING SHALL BE APPROVED BY THE OWNERS'S REPRESENTATIVE PRIOR TO ANY EXCAVATION OF PLANTING PITS OR PREPARATION OF PLANTING BEDS. ALL PLANTING SHALL BE AT THE LOCATIONS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT THE CORRECT GRADES, ALIGNMENT AND LAYOUT OF PLANTING BEDS. MINOR ADJUSTMENTS TO TREE LOCATIONS MAY BE NECESSARY DUE TO FIELD CONDITIONS AND FINAL GRADING. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IF MAJOR ADJUSTMENTS ARE ANTICIPATED.

14) ADVERSE CONDITIONS: THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING OF ANY SOIL OR DRAINAGE CONDITIONS WHICH THE CONTRACTOR CONSIDERS DETRIMENTAL TO PLANT GROWTH. THE DOCUMENTED CONDITIONS SHALL INCLUDE A PROPOSAL FOR CORRECTING THE SITUATION, INCLUDING ANY CHANGE IN COST FOR REVIEW AND ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

15) QUANTITY: THE QUANTITY OF PLANTS INDICATED IN THE PLANT SCHEDULE IS FOR GENERAL REFERENCE ONLY. THE CONTRACTOR SHALL OBTAIN QUANTITIES FOR PRICING BY COMPILING NUMBERS FROM THE PLANTS ILLUSTRATED ON THE DRAWINGS. SHOULD THERE BE A DISCREPANCY BETWEEN THE DRAWINGS AND THE PLANT SCHEDULE, THE QUANTITIES ILLUSTRATED ON THE DRAWINGS SHALL TAKE PRECEDENCE.

16) GUARANTEE: ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR FOR A FULL YEAR FROM THE DATE OF INSTALLATION. THE OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE UNLESS OTHERWISE AGREED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MONITOR THE PROJECT DURING THE GUARANTEE PERIOD AND NOTIFY THE OWNER IN WRITING IF PROBLEMS ARE OCCURRING OR SITUATIONS DEVELOP THAT APPEAR DETRIMENTAL TO THE PLANT MATERIAL. ANY PLANT MATERIAL THAT IS 25% DEAD OR MORE SHALL BE CONSIDERED DEAD AND MUST BE REPLACED AT NO CHARGE TO THE OWNER. A TREE SHALL BE CONSIDERED DEAD WHEN THE MAIN LEADER HAS DIED BACK OR THERE IS 25% OF THE CROWN DEAD.



10' 0 10' 20' 40'

SCALE: 1" = 20'

NOTES:
1. SEE T-1 FOR GENERAL NOTES.
2. SEE LL-3 FOR LANDSCAPING DETAILS.
3. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
12/7/21
DATE
N.J.P.E. LIC. NO. GE 43435

DRAWN BY: YMS | CHECKED BY: PRL
DATE: 7/16/21 | SCALE: 1" = 20'
APPROVED BY: BJA | ACAD NO.: 108-LL
FIELD BOOK: ---- PAGE: --- | PROJECT NO.:
SHEET: 8 OF 17 | DRAWING NO.: LL-1 | REVISION: 1

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED LANDSCAPING PLAN
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/09/21 - 8:48 PM, By: jdatham
File: H:\Engineering\Projects\Commercial\Fair Haven Boro\(02) Site Plans\(02) Municipal Drawings\108-LL.dwg — LL-1

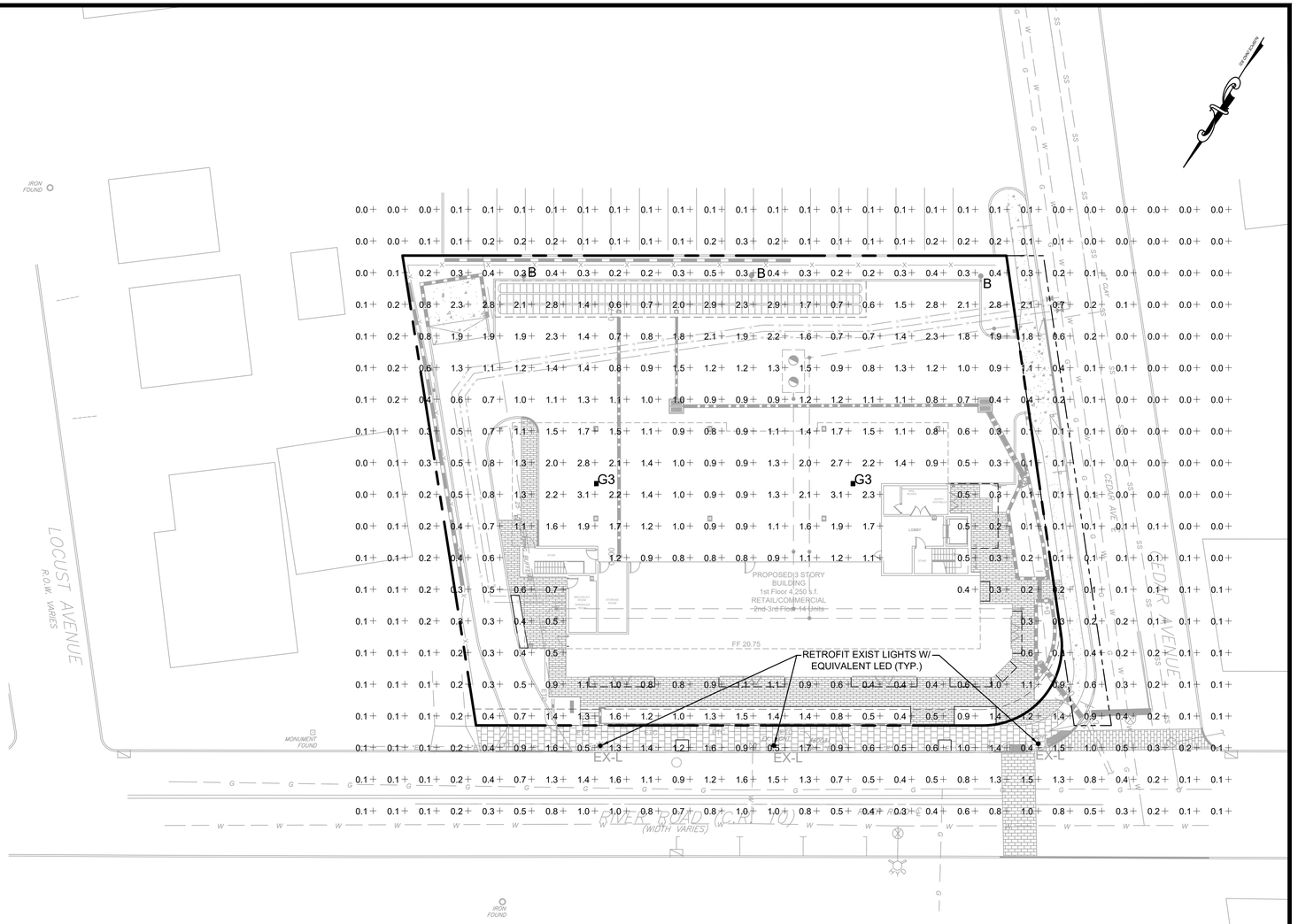
LEGEND

PROPOSED

- PROP. 1ft COUNTOUR LINE (123)
- PROP. 5ft CONTOUR LINE (125)
- PROP. POTABLE WATER LINE (W)
- PROP. SANITARY SEWER LINE (SS)
- PROP. GAS LINE (G)
- PROP. ELECTRIC LINE (E)
- PROP. OVERHEAD ELECTRIC LINE ("E")
- PROP. FENCE LINE (X)
- PROP. CURB LINE
- PROP. TREE LINE
- PROP. STORM PIPE
- PROP. CONCRETE SIDEWALK
- PROP. SPOT ELEVATION (TC 100.50 / GD 100.00)
- PROP. FIRE HYDRANT
- PROP. SIAMESE CONNECTION
- PROP. LIGHT POLE
- PROP. "B" INLET
- PROP. UTILITY POLE
- PROP. MANHOLE
- PROP. "A" OR "E" INLET

EXISTING

- *EXIST. 1ft COUNTOUR LINE (124)*
- *EXIST. 5ft CONTOUR LINE (125)*
- *EXIST. POTABLE WATER LINE (W)*
- *EXIST. SANITARY SEWER LINE (SS)*
- *EXIST. GAS LINE (G)*
- *EXIST. ELECTRIC LINE (E)*
- *EXIST. OVERHEAD ELECTRIC LINE ("E")*
- *EXIST. FENCE LINE (X)*
- *EXIST. CURB LINE*
- *EXIST. TREE LINE*
- *EXIST. CONC. SIDEWALK*
- *PROPERTY BOUNDARY LINE*
- *PRIMARY BUILDING SETBACK LINE*
- *EXIST. STORM PIPE*
- *EXIST. SPOT ELEVATION (TC 100.50 / GD 100.00)*
- *EXIST. FIRE HYDRANT*
- *EXIST. SIAMESE CONNECTION*
- *EXIST. LIGHT POLE*
- *EXIST. "B" INLET*
- *EXIST. UTILITY POLE*
- *EXIST. MANHOLE*
- *EXIST. "A" OR "E" INLET*



LIGHT FIXTURE SCHEDULE

SYMBOL	LABEL	QTY	CATALOG NUMBER	DESCRIPTION	LAMP	IES FILE	LUMENS	LLF	WATTS	TILT	MOUNTING HEIGHT
●→	B	3	HUBBELL LIGHTING PROV2-36L-615-5K7-4W-CL-HS	ARCHITECTURAL AREA LIGHTING	C-70-CRI	PROV2-36L-615-5K7-4W-CL-HS.IES	ABSOLUTE	1.00	70.00	0°	15'-0"
■	G3	2	GARDCO G3 G3-5SQ-A03-740	G3 GARAGE CANOPY LIGHTING	PRECISION LIGHT ARRAY	G3-5SQ-A03-740.IES	ABSOLUTE	1.00	55.00	0°	15'-0"

SITE LIGHTING CALCULATIONS

AVERAGE	0.7 FC
MAXIMUM	3.1 FC
MINIMUM	0.0 FC
MAX/MIN	N/A
AVERAGE/MIN	N/A
LIGHTING CALCULATIONS COMPLETED BY AUTOLUX LAST REVISED ON 11/11/21	

10' 0 10' 20' 40'

SCALE: 1" = 20'

NOTE:
1. SEE T-1 FOR GENERAL NOTES.
2. SEE SHEET LL-3 FOR LIGHTING DETAILS.
3. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

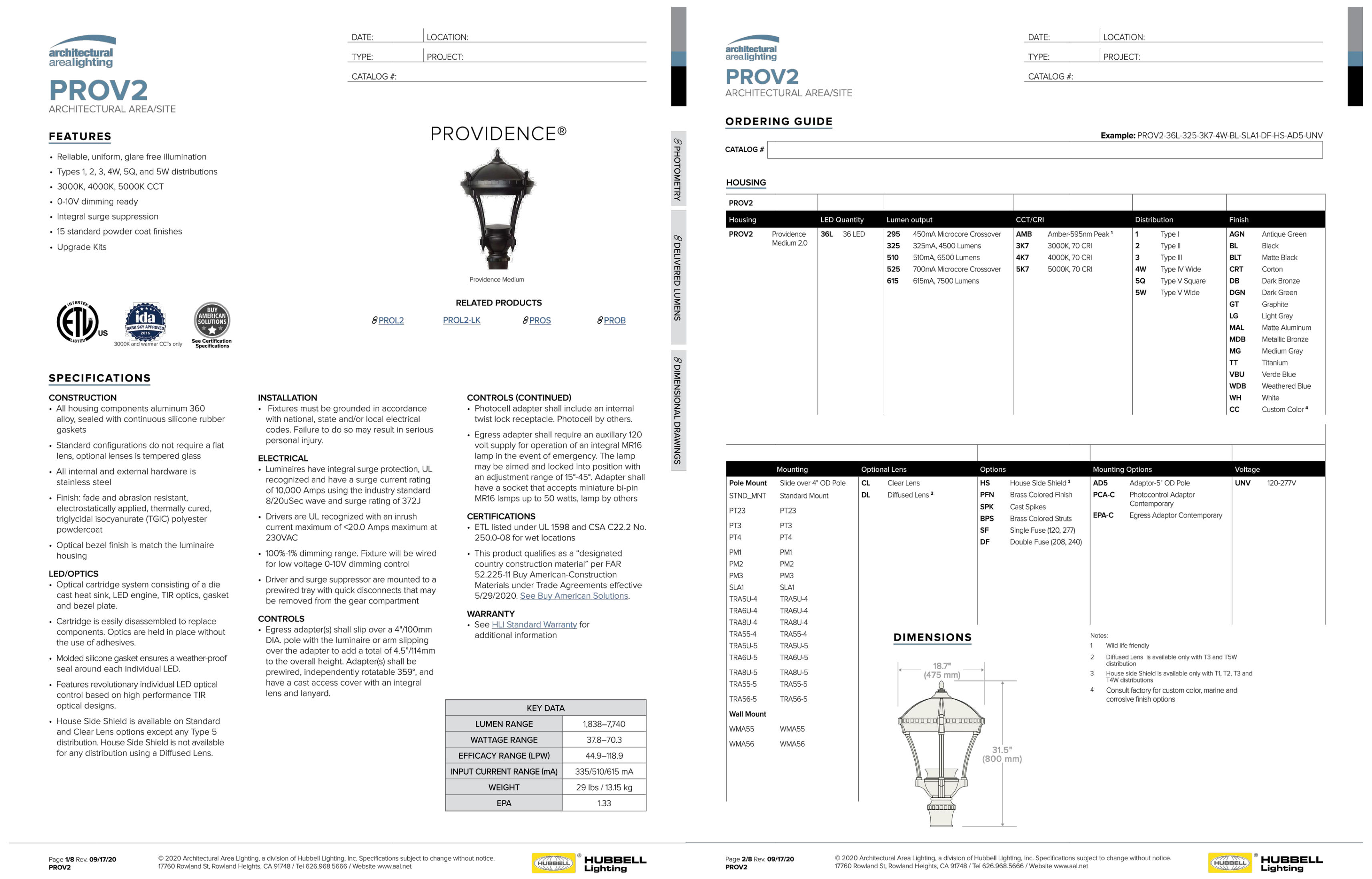
THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE

DRAWN BY: YMS | CHECKED BY: PRL
DATE: 7/16/21 | SCALE: 1" = 20'
APPROVED BY: BJA | ACAD NO.: 109-LL
FIELD BOOK: --- PAGE: --- | PROJECT NO.:
SHEET 9 OF 17 | DRAWING NO.: LL-2 | REVISION 1

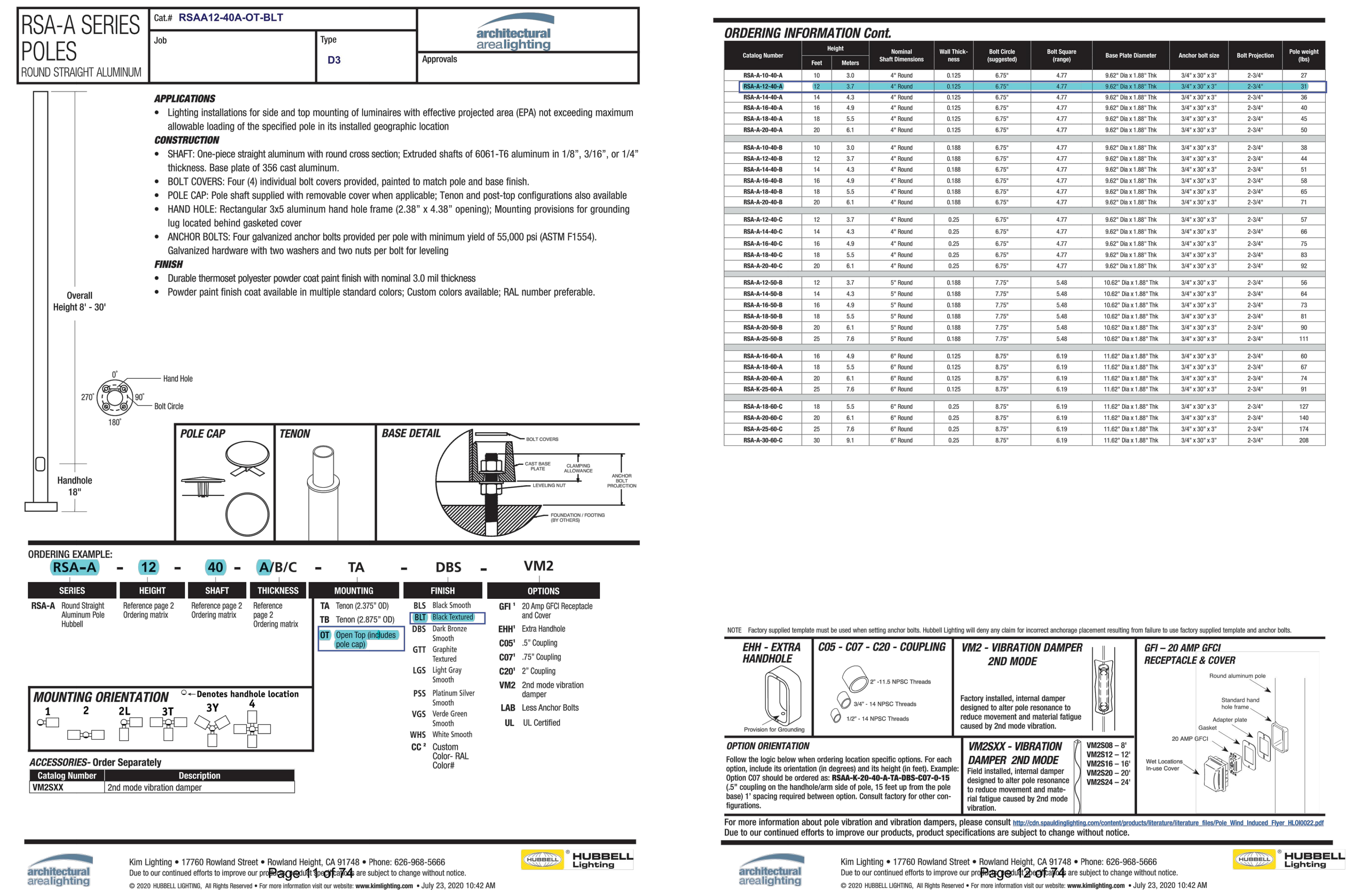
EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED LIGHTING PLAN
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

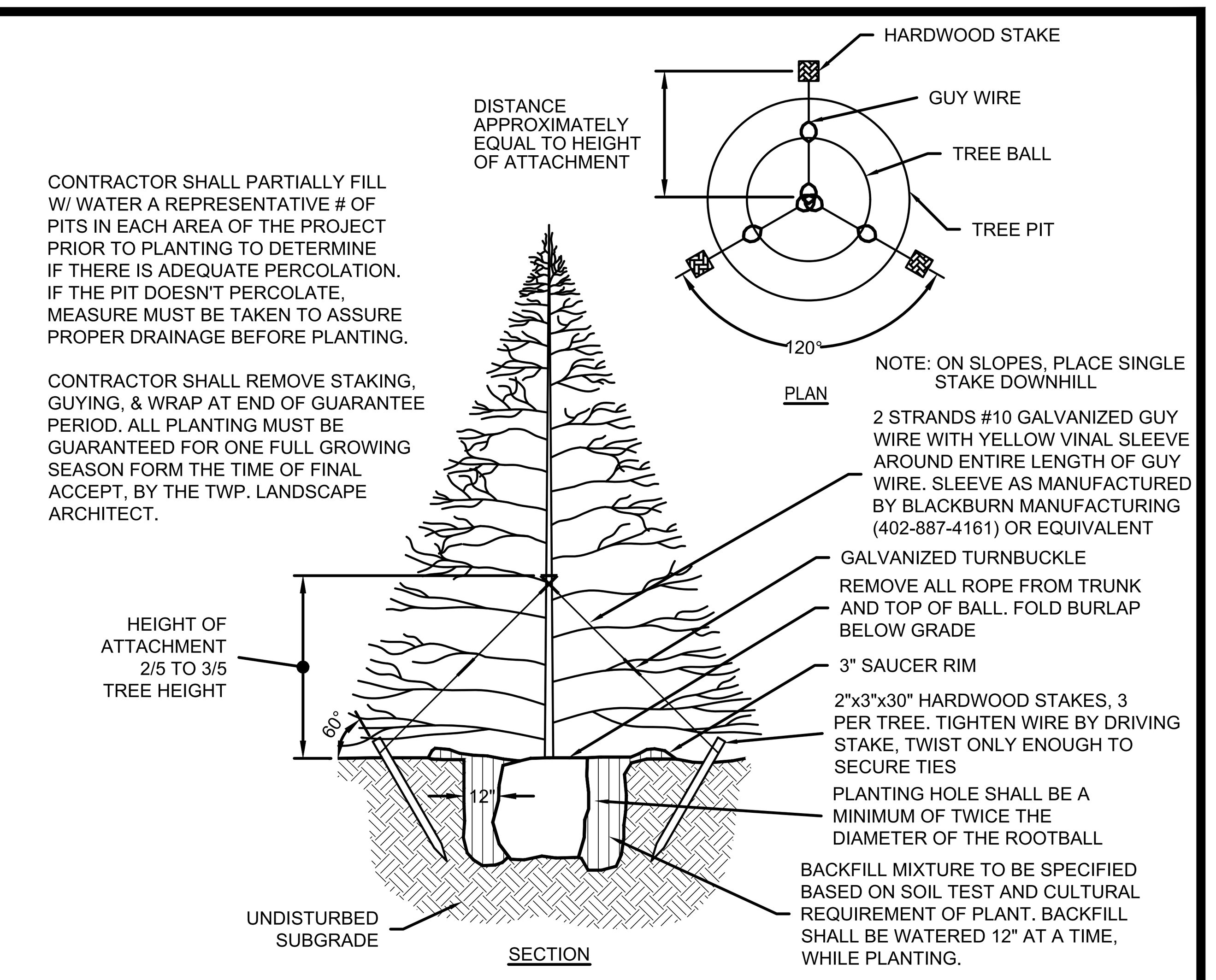
Plotted:12/09/21 - 6:48 PM, By: pbatham
File: H:\Engineering\Projects\Commercial\Fair Haven Boros\03) Site Plans\02) Municipal Drawings\109-LL.dwg --> 109-LL



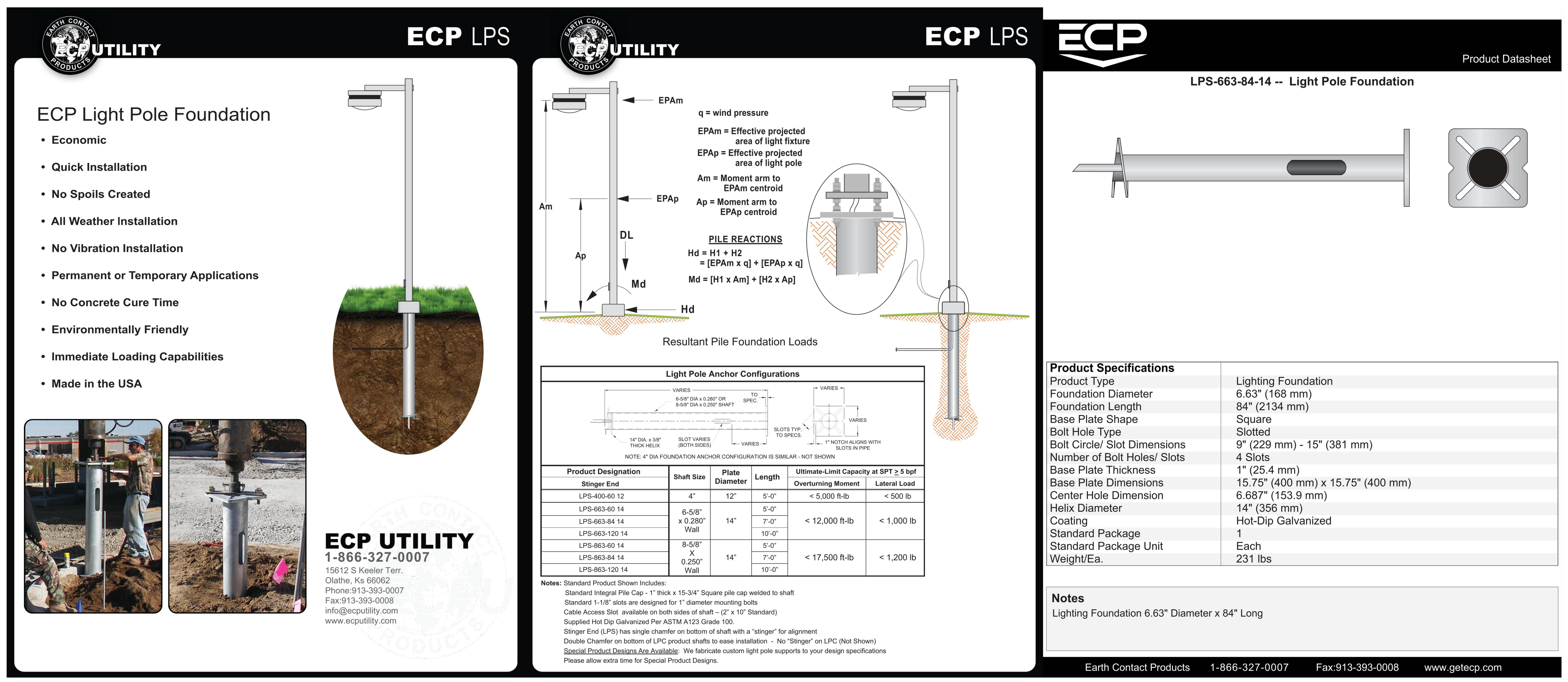
LIGHT FIXTURE B DETAILS
N.T.S.



LIGHT FIXTURE B POLE DETAILS
N.T.S.



EVERGREEN TREE PLANTING DETAIL
NTS

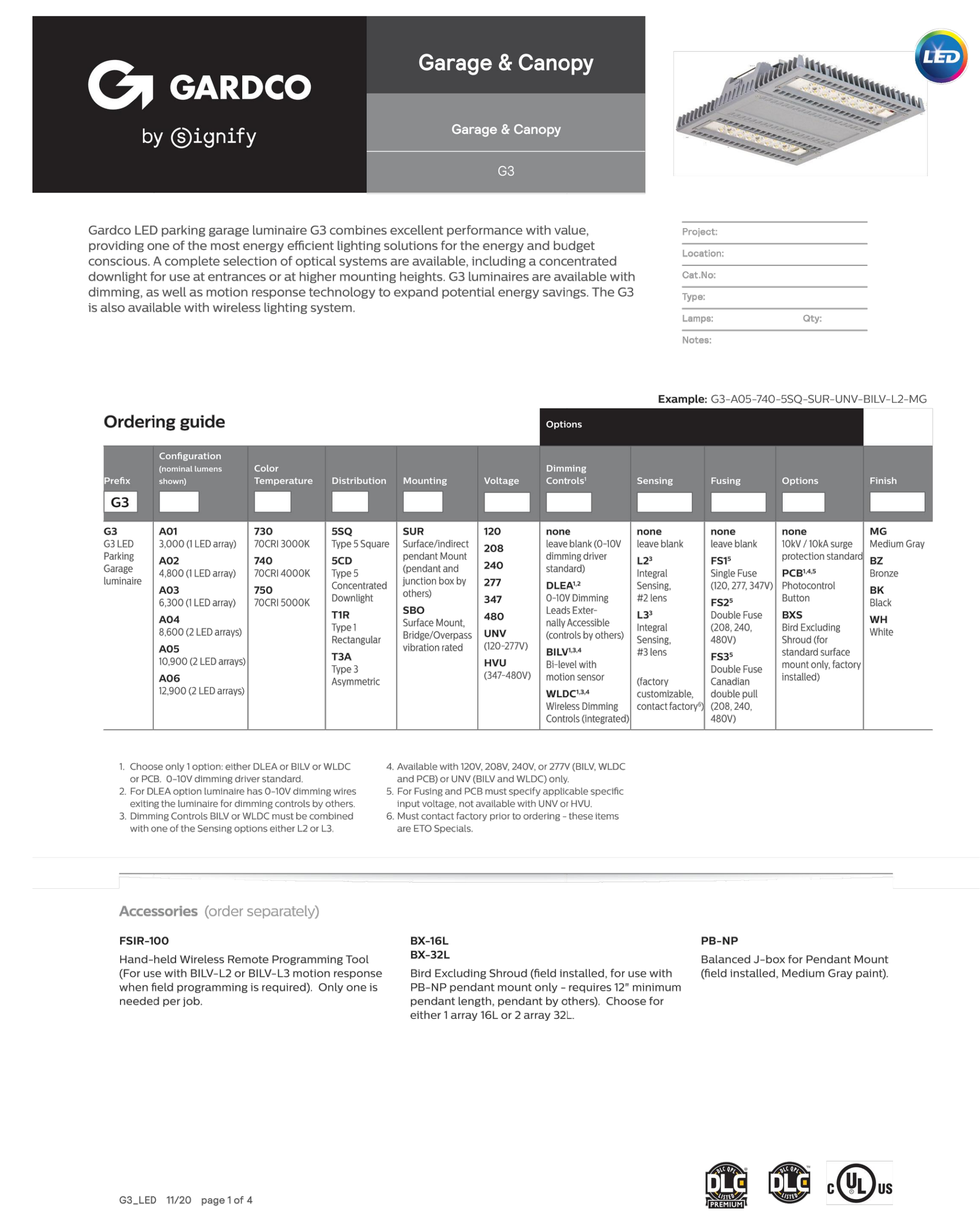


Product Specifications	
Product Type	Lighting Foundation
Foundation Diameter	6.63" (168 mm)
Foundation Length	84" (2134 mm)
Base Plate Shape	Square
Bolt Hole Type	Slotted
Bolt Circle/ Slot Dimensions	9" (229 mm) - 15" (381 mm)
Number of Bolt Holes/ Slots	4 Slots
Base Plate Thickness	1" (25.4 mm)
Base Plate Dimensions	15.75" (400 mm) x 15.75" (400 mm)
Center Hole Dimension	6.687" (153.9 mm)
Helix Diameter	14" (356 mm)
Coating	Hot-Dip Galvanized
Standard Package	1
Standard Package Unit	Each
Weight/Ea.	231 lbs

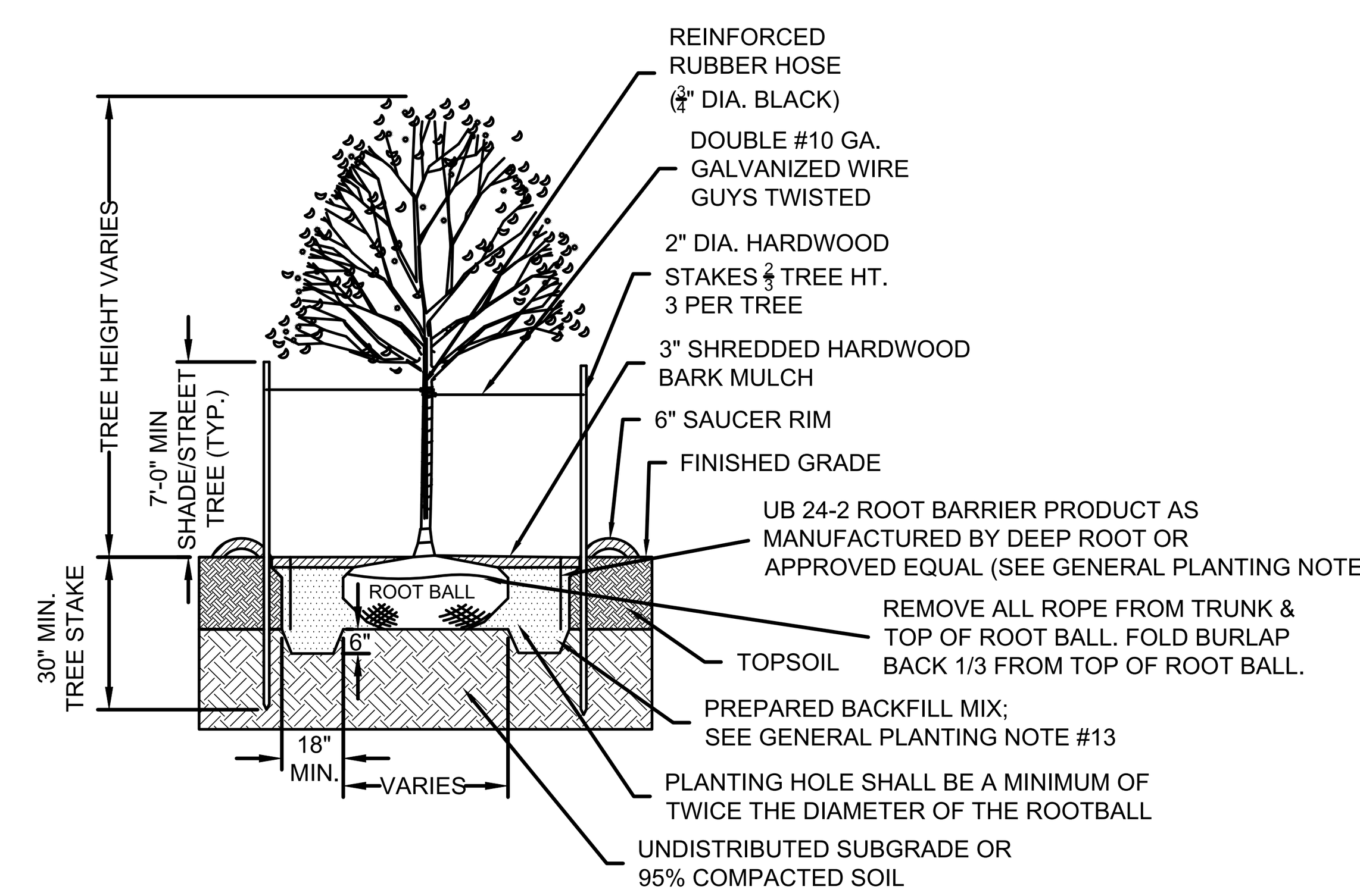
Notes
Lighting Foundation 6.63" Diameter x 84" Long

Product Designation Stinger End	Shaft Size	Plate Diameter	Length	Overturning Moment	Lateral Load
LPS-400-60-12	4"	12"	5'-0"	< 5,000 ft-lb	< 500 lb
LPS-663-60 14	6-5/8" x 0.280" Wall	14"	5'-0"	< 12,000 ft-lb	< 1,000 lb
LPS-663-84 14			7'-0"		
LPS-663-120 14			10'-0"		
LPS-863-60 14	8-5/8" x 0.250" Wall	14"	5'-0"	< 17,500 ft-lb	< 1,200 lb
LPS-863-84 14			7'-0"		
LPS-863-120 14			10'-0"		

HELICAL PILE POLE DETAILS
N.T.S.

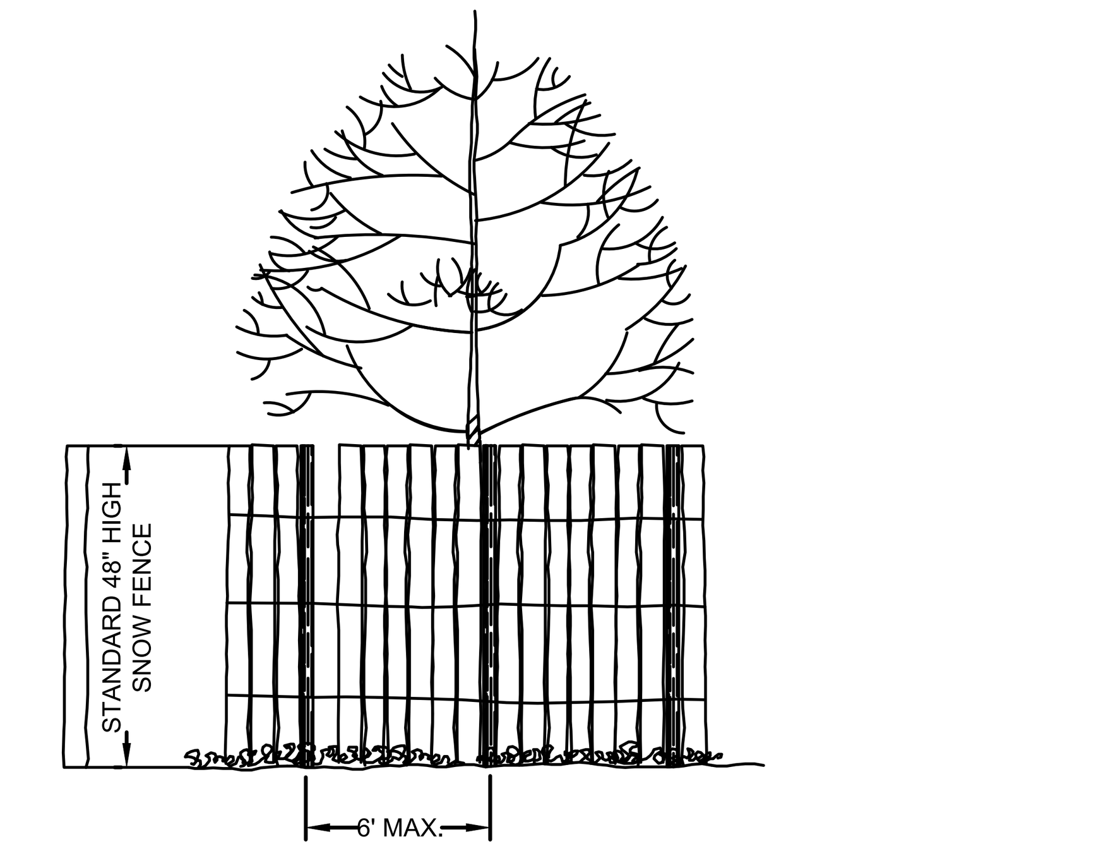


GARDCO G3 CANOPY FIXTURE DETAIL
N.T.S.



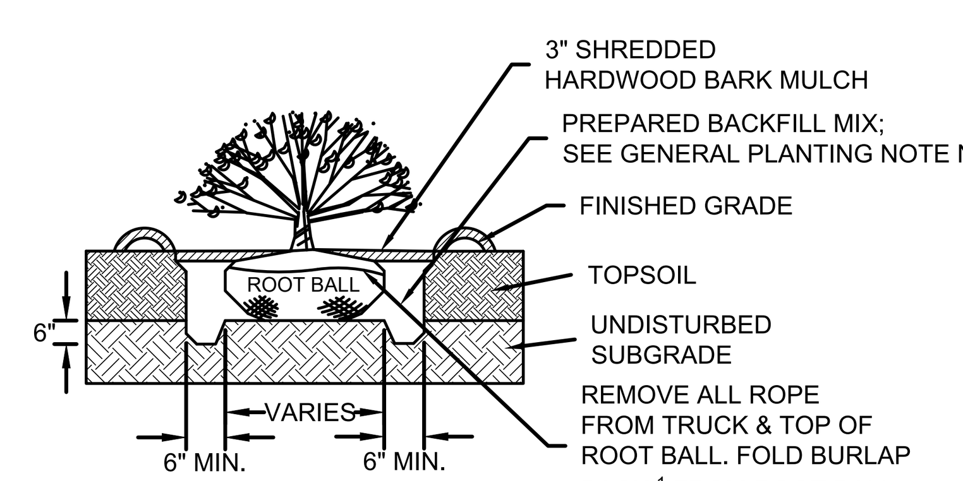
SHADE (STREET) TREE PLANTING DETAIL
NTS

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
3. TRUNK TO BE WRAPPED WITH BIODEGRADABLE TREE WRAP.
4. CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.
5. WIRE BASKETS TO BE REMOVED PRIOR TO BACKFILLING PIT.



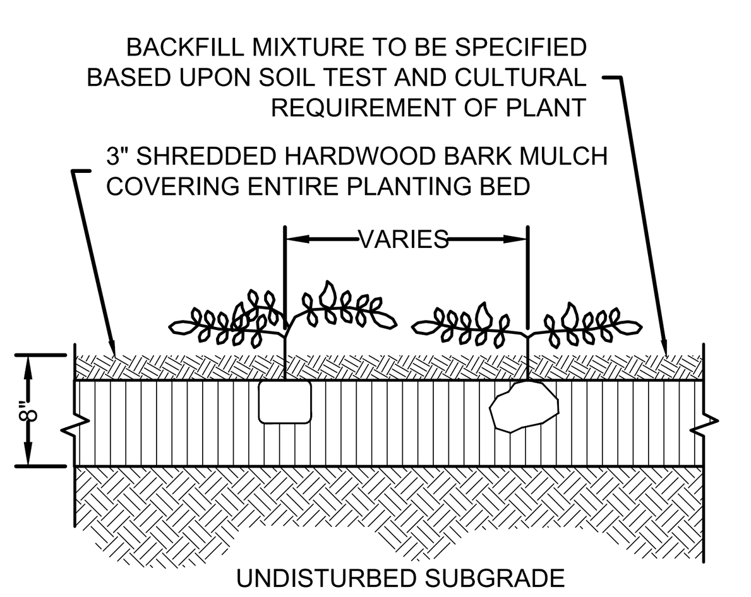
TYPICAL TREE PROTECTION DETAIL
NTS

NOTES:
1. PLACEMENT OF SNOW FENCING AT THE PERIMETER OF THE DRIP LINE SO AS TO PROTECT EXPOSED ROOTS AND LOW HANGING BRANCHES. FEEDER ROOTS SHALL NOT BE CUT CLOSER THAN THE DRIP LINE.
2. PROVIDE BUFFERING OF EXISTING TREE TRUNKS AND ROOTS FROM HEAVY EQUIPMENT.
3. PROHIBITION AGAINST TREES BEING USED FOR ROPING, CABLE, SIGNS, OR FENCING. NAILS OR SPIKES SHALL NOT BE DRIVEN INTO ANY PART OF THE TREE.
4. APPLICANT SHALL CLEAR THE AREA AT THE BASE OF THE TREE TO ALLOW FOR ABSORPTION OF NUTRIENTS AND WATER. IMPERVIOUS COVERAGE SHALL NOT BE ANY CLOSER TO THE MAIN TRUNK THAN THE DISTANCE OF THE DRIP LINE.
5. APPLICANT SHALL REMOVE ALL VEGETATIVE AND MISCELLANEOUS DEBRIS FROM THE SITE AND DISPOSAL IN ACCORDANCE WITH TOWNSHIP POLICY.



SHRUB PLANTING DETAIL
NTS

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.



GROUNDCOVER PLANTING DETAIL
NTS

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21 DATE

DRAWN BY: YMS | CHECKED BY: PRL
DATE: 7/16/21 | SCALE: AS NOTED
APPROVED BY: BJA | ACAD NO.: 110-LL
SHEET 10 OF 17 | DRAWING NO.: LL-3 | REVISION: 1

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

LANDSCAPING & LIGHTING DETAILS
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

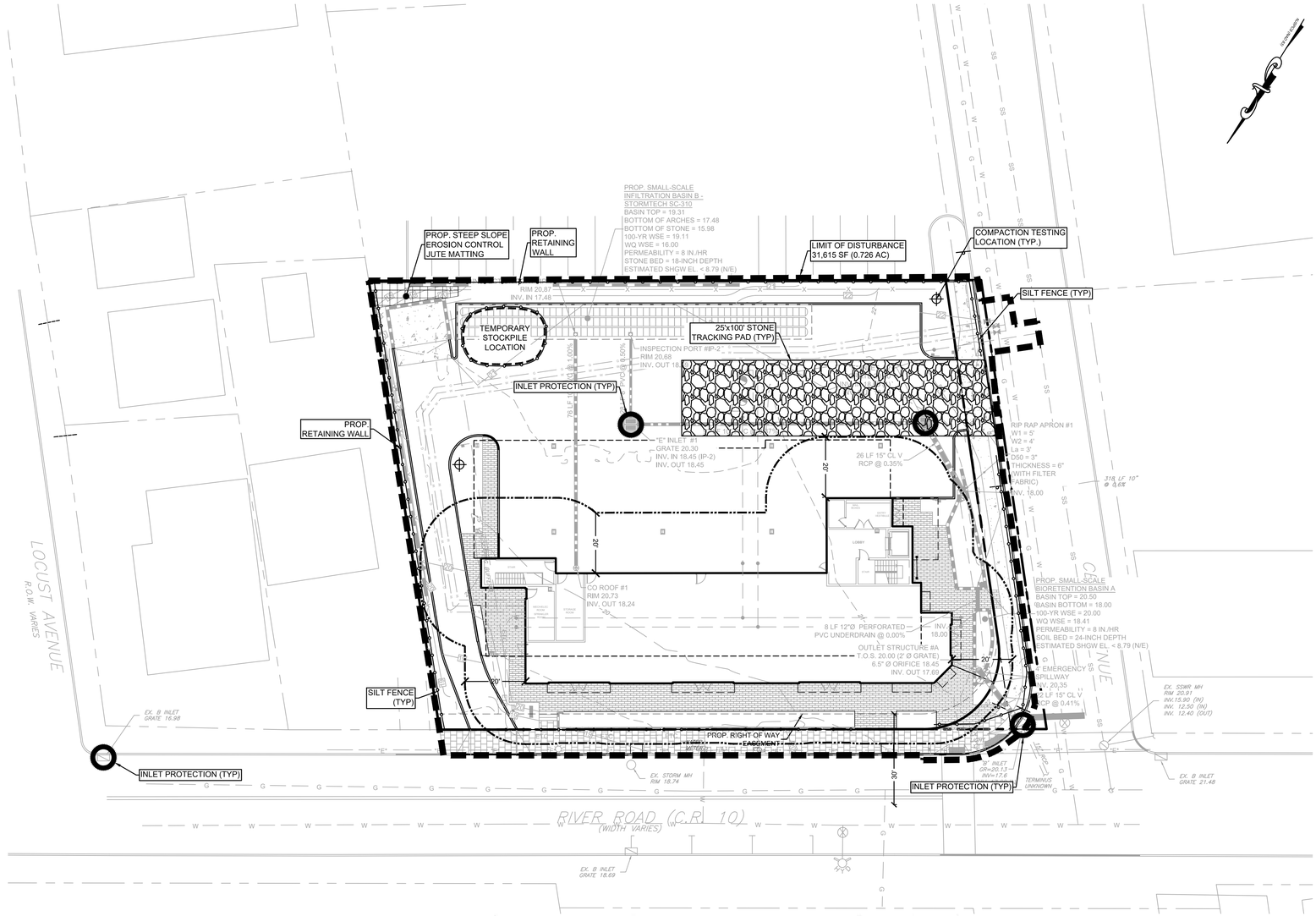
LEGEND

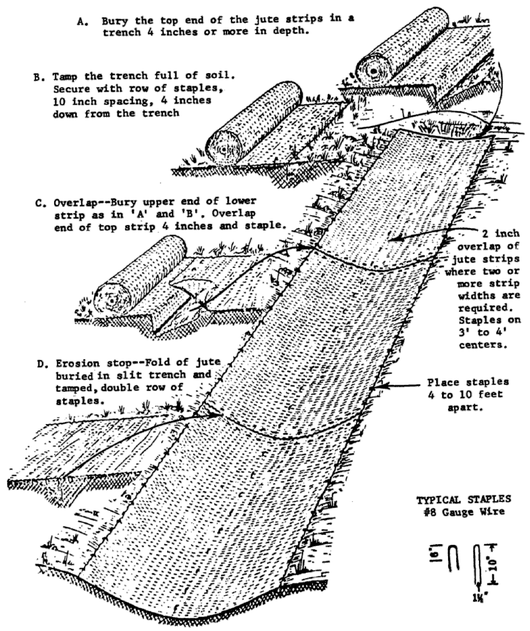
PROPOSED

- PROP. 1ft COUNTOUR LINE (123)
- PROP. 5ft CONTOUR LINE (125)
- PROP. POTABLE WATER LINE (W)
- PROP. SANITARY SEWER LINE (SS)
- PROP. GAS LINE (G)
- PROP. ELECTRIC LINE (E)
- PROP. OVERHEAD ELECTRIC LINE (*E*)
- PROP. FENCE LINE (X)
- PROP. CURB LINE
- PROP. TREE LINE
- PROP. STORM PIPE
- PROP. CONCRETE SIDEWALK
- PROP. SPOT ELEVATION (TC 100.50 GD 100.00)
- PROP. FIRE HYDRANT
- PROP. SIAMESE CONNECTION
- PROP. LIGHT POLE
- PROP. "B" INLET
- PROP. UTILITY POLE
- PROP. MANHOLE
- PROP. "A" OR "E" INLET

EXISTING

- *EXIST. 1ft COUNTOUR LINE (124)*
- *EXIST. 5ft CONTOUR LINE (125)*
- *EXIST. POTABLE WATER LINE (W)*
- *EXIST. SANITARY SEWER LINE (SS)*
- *EXIST. GAS LINE (G)*
- *EXIST. ELECTRIC LINE (E)*
- *EXIST. OVERHEAD ELECTRIC LINE (*E*)*
- *EXIST. FENCE LINE*
- *EXIST. CURB LINE*
- *EXIST. TREE LINE*
- *EXIST. CONC. SIDEWALK*
- *PROPERTY BOUNDARY LINE*
- *PRIMARY BUILDING SETBACK LINE*
- *EXIST. STORM PIPE*
- *EXIST. SPOT ELEVATION (TC 100.50 GD 100.00)*
- *EXIST. FIRE HYDRANT*
- *EXIST. SIAMESE CONNECTION*
- *EXIST. LIGHT POLE*
- *EXIST. "B" INLET*
- *EXIST. UTILITY POLE*
- *EXIST. MANHOLE*
- *EXIST. "A" OR "E" INLET*



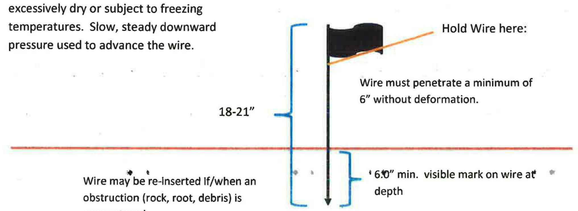


TYPICAL INSTALLATION DETAIL USING JUTE MATTING (TYP.)

NTS

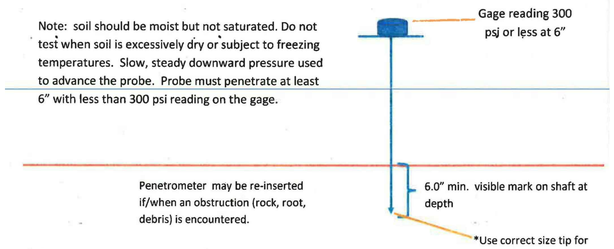
Probing Wire Test- 15.5 ga steel wire (survey flag)

Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the wire.



Handheld Soil Penetrometer Test

Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the probe. Probe must penetrate at least 6" with less than 300 psi reading on the gage.



PROBING WIRE & HANDHELD SOIL PENETROMETER TEST DETAIL

NTS

LEGEND:

- RECOMMENDED SOIL COMPACTION TEST LOCATION
  2 TESTS PER ACRE REQUIRED:
  2 TESTS x 0.726 Ac. PROJECT AREA = 2 TESTS REQUIRED
- AREA EXCLUDED FROM COMP. TESTING COMPACTION TESTING
- AREA OF PROPOSED STEEP SLOPE JUTE MATTING

10' 0 10' 20' 40'

SCALE: 1" = 20'

NOTES:

1. SEE SHEET T-1 FOR GENERAL NOTES.
2. SEE SHEETS EC-2 & EC-3 FOR EROSION CONTROL NOTES AND DETAILS.
3. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE

DRAWN BY: YMS | CHECKED BY: PRL
DATE: 7/16/21 | SCALE: 1" = 20'
APPROVED BY: BJA | ACAD NO.: 111-EC
FIELD BOOK: --- PAGE: --- | PROJECT NO.:
SHEET: 11 OF 17 | DRAWING NO.: EC-1 | REVISION: 1

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

EROSION CONTROL PLAN & DETAILS
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/09/21 - 6:49 PM, By: pfaltum
File: H:\Engineering\Projects\Commercial\Fair Haven Boro\2021\Site Plans\2021 Municipal Drawings\111-EC.dwg, --- Layout1

EROSION AND SEDIMENT CONTROL NOTES

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

GENERAL NOTES

1. PROPERTY OWNER TO BE RESPONSIBLE FOR BASIN MAINTENANCE.
2. DISTURB AS LITTLE AREA AS POSSIBLE WHEN EXCAVATING FOR ANY FOUNDATIONS AND STORING TOPSOIL.
3. PLACE TOPSOIL AND EXCAVATION MATERIAL FROM FOUNDATIONS ON DOWNHILL SIDE OF LOT WHENEVER POSSIBLE TO TRAP RUNOFF FROM SCALPED AREAS.
4. ALL DISTURBED AREAS THAT ARE NOT BEING GRADED, UNDER ACTIVE CONSTRUCTION, OR TO BE PERMANENTLY SEEDED WITHIN 30 DAYS MUST BE STABILIZED BY TEMPORARY SEEDING OR MULCHING AS PER SPECIFICATIONS BELOW.
5. ALL EXPOSED AREAS WHICH ARE TO BE PERMANENTLY VEGETATED WILL BE SEEDED WITHIN 10 DAYS OF FINAL GRADING. COMPLETE PERMANENT SEEDING AS PER SPECIFICATIONS BELOW.
6. MULCH SHALL BE PROVIDED FOR TEMPORARY AND PERMANENT SEEDING. UNROTTED SMALL GRAIN STRAW OR SALT HAT WILL BE APPLIED AT THE RATE OF (1-1/2 TO 2) TONS PER ACRE (90-115) POUNDS PER 1000 SQFT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED AS COMPLIANCE WITH THIS MULCHING REQUIREMENT.
7. MULCH ANCHORING WILL BE ACCOMPLISHED IMMEDIATELY AFTER MULCHING TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE METHODS (CRIMPING, LIQUID MULCH BINDERS, NETTING TIE DOWN, ETC.) IN THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY".
8. NO EXCESS FILL MATERIAL SHALL BE REMOVED FROM THE SITE.
9. NO STUMPS OR DEBRIS SHALL BE BURIED ON SITE. THIS MATERIAL SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH THE APPLICABLE REGULATIONS.
10. THE CONTRACTOR SHALL MINIMIZE THE TRACKING OF MUD ONTO PAVED AREAS. SOIL TRACKED ONTO PAVED AREAS SHALL BE REMOVED BY THE CONTRACTOR PROMPTLY SO AS TO PREVENT TRACKING OF MUD ONTO SOMERSET STREET.
11. ALL STANDARDS IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" TO APPLY.

BIORETENTION BASIN SOIL BED REQUIREMENTS.

1. THE SOIL BED MUST BE A MINIMUM OF 18 – 24 INCHES IN DEPTH, IN ACCORDANCE WITH THE TABLE ON PAGE 4, CHAPTER 9.1 OF THE NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES MANUAL
2. THE SOIL BED MATERIAL MUST CONSIST OF THE FOLLOWING MIX, BY WEIGHT: 85 TO 95% SAND, WITH NO MORE THAN 25% OF THE SAND AS FINE OR VERY FINE SANDS; NO MORE THAN 15% SILT AND CLAY WITH 2% TO 5% CLAY CONTENT. THE ENTIRE MIX MUST THEN BE AMENDED WITH 3 TO 7% ORGANICS, BY WEIGHT. .
3. PRE-MIXED SOIL MUST BE CERTIFIED TO BE CONSISTENT WITH THE REQUIREMENT ABOVE BY EITHER THE VENDOR OR BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY. THE CONTENT OF ANY SOIL MIXED ON-SITE MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY; IN ADDITION, THE ENGINEER MUST BE PRESENT WHILE THE SOIL IS MIXED.
4. THE PH OF THE SOIL BED MATERIAL MUST RANGE FROM 5.5 TO 6.5.
5. THE SOIL BED MATERIAL MUST BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES. ADDITIONAL MATERIALS MAY BE NECESSARY TO ACCOUNT FOR SETTLING OVER TIME.

SOIL DE-COMPACTION AND TESTING REQUIREMENTS.

A. SOIL COMPACTION REQUIREMENTS.

1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
3. COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS AND ATTACHED TO THE COMPACTION REMEDIATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.
4. IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE **OPTION** TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.

B. COMPACTION TESTING METHODS.

1. PROBING WIRE TEST (SEE DETAIL).
2. HAND HELD PENETROMETOR TEST (SEE DETAIL).
3. TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED).
4. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED).
5. NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.
6. DETAILED REQUIREMENTS FOR EACH COMPACTION TESTING METHOD CAN BE FOUND IN SECTION 19-1, STANDARD FOR LAND GRADING, OF THE NJ STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
7. SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION [SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR] IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

C. PROCEDURES FOR SOIL COMPACTION MITIGATION

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.

SUGGESTED SEEDING MIXTURES

TEMPORARY SEEDING

LIME: 2 TONS/ACRE GROUND LIMESTONE
FERTILIZER: 500 LBS. PER ACRE 10-20-10
SEED: DATE & RATE OF APPLICATION ACCORDING TO STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL IN NEW JERSEY.
TEMPORARY SEEDING TO BE NOT LESS THAN ONE POUND OF PERENNIAL RYEGRASS PER 1000 SQ. FT.

PERMANENT SEEDING (STEEP BANKS)

LIME: 3 TONS/ACRE GROUND LIMESTONE
FERTILIZER: 600 LBS. PER ACRE 10-20-10
SEED: DATES 3/15-5/31 AND 8/1-10/10 - 265 LBS. OF TALL FESCUE
20 LBS. OF PERENNIAL RYEGRASS PER ACRE. THIS IS A GENERAL RECOMMENDATION. OTHER SEEDINGS CAN BE USED.

PERMANENT SEEDING (ROAD R.O.W. AND NON-LAWN AREAS)

LIME: 3 TONS/ACRE GROUND LIMESTONE
FERTILIZER: 600 LBS. PER ACRE 10-20-10
PER ACRE. OTHER SEEDINGS ARE ACCEPTABLE PROVIDED THEY ARE ADAPTABLE TO THE AREA AND ARE PERENNIAL.
DATE & RATE OF APPLICATION ACCORDING TO STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL IN NEW JERSEY.

PERMANENT SEEDING (LAWN AREAS)

LIME: 3 TONS/ACRE GROUND LIMESTONE INCORPORATED 6 INCHES IN TO THE SOIL.
FERTILIZER: 600 LBS. PER ACRE 10-20-10 INCORPORATED 6 INCHES IN TO THE SOIL, 400 LBS./ACRE 10-10-10 INCORPORATED 2 INCHES IN TO THE SOIL AT LAST RAKING.
SEED: DATES 3/15 - 5/31 & 8/1 - 10/1 -130 LBS OF HARD FESCUE, 45 LBS CHEWING FESCUE, 45 LBS STRONG CREEPING RED FESCUE, 10 LBS. OF PERENNIAL RYEGRASS PER ACRE
FOR OTHER ACCEPTABLE MIXTURES SEE STANDARDS FOR SOIL EROSION & SEDIMENTATION CONTROL IN NEW JERSEY.

1

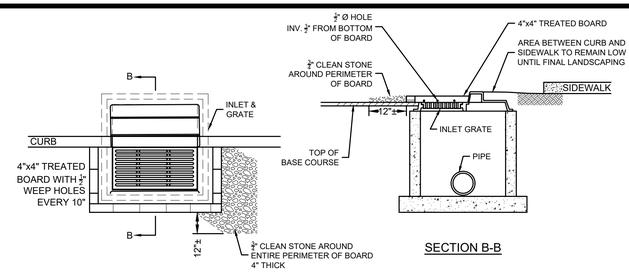
TEMPORARY STABILIZATION WITH MULCH ONLY

STRAW MULCH OR EQUIVALENT SPREAD UNIFORMLY AT THE RATE OF 1-1/2 TO 2 TONS/ACRE (TOTAL GROUND SURFACE COVERAGE). THIS PRACTICE IS APPLICABLE IN AREAS WHERE THE SEASON OR OTHER CONDITIONS MAY NOT BE SUITABLE FOR ESTABLISHING VEGETATIVE COVER. MULCH ONLY IS TO BE USED ONLY FOR SHORT PERIODS AND WILL REQUIRE MAINTENANCE AND RENEWAL.

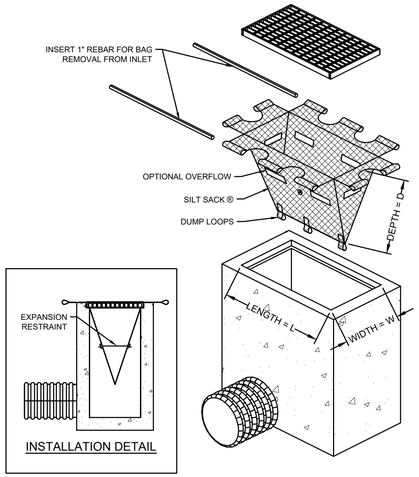
SEQUENCE OF CONSTRUCTION

1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE TOWN ENGINEER AND THE FREEHOLD SOIL CONSERVATION DISTRICT PRIOR TO COMMENCEMENT OF CONSTRUCTION OF ANY IMPROVEMENTS.
2. THE CONTRACTOR SHALL NOTIFY THE FREEHOLD SOIL CONSERVATION DISTRICT, IN WRITING, 72 HOURS PRIOR TO ANY LAND DISTURBANCE.

ITEM 1. INSTALL SILT FILTER FENCE WHERE INDICATED ON PLAN.
ITEM 2. DEMOLITION
ITEM 3. INSTALL 2-1/2" STONE STABILIZED CONSTRUCTION ENTRANCE. CLEAR AND GRUB, STRIP TOPSOIL, AND FILL AS INDICATED ON PLAN. ENCIRCLE TOPSOIL PILE WITH SILT FILTER FENCE. APPLY SEEDING AS PER TEMPORARY SEEDING MIXTURE.
ITEM 4. ROUGH GRADE SITE AND STABILIZE DISTURBED AREA WITH PERMANENT SEEDING MIXTURE
ITEM 5. INSTALL STORMWATER MANAGEMENT FACILITIES.
ITEM 6. BEGIN SITE / BUILDING CONSTRUCTION
ITEM 7. INSTALL OTHER UTILITIES (GAS, WATER, SEWER AND ELECTRIC).
ITEM 8. INSTALL PAVEMENT AND LIGHTING FIXTURES
ITEM 9. TOPSOIL AND SEED LAWN AREAS. INSTALL LANDSCAPNG. INSTALL VEGATATIVE STABILIZATION IN DETENTION BASIN.
ITEM 10. REMOVE EROSION CONTROL MEASURES AFTER STABILIZATION HAS MATURED.



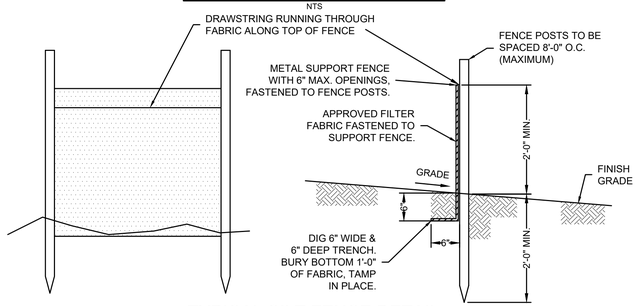
SECTION B-B



INSTALLATION DETAIL

SILT PROTECTION FOR FINISHED OR EXISTING INLET

NTS

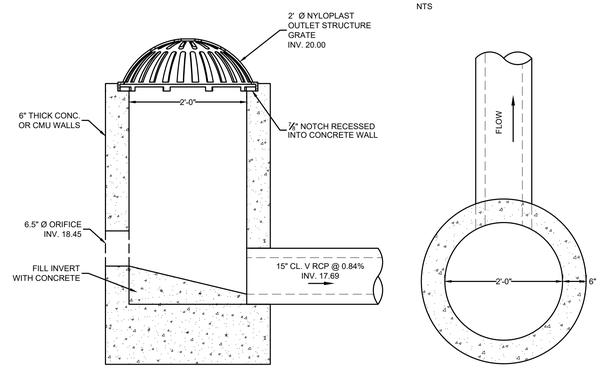


TYPICAL SILT FENCE DETAIL

NTS

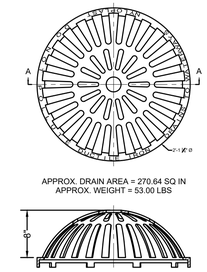
DETAIL OF INLET SEDIMENT CONTROL DEVICE TYPE E- WITHOUT CURB DEFLECTOR

NTS



ELEVATION VIEW

PLAN VIEW

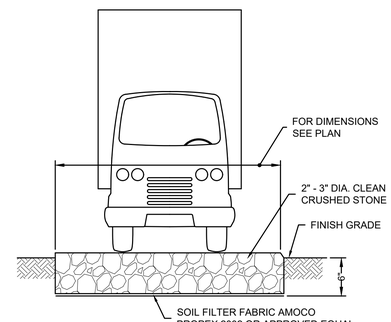


APPROX. DRAIN AREA = 270.64 SQ IN
APPROX. WEIGHT = 53.00 LBS

SECTION A-A

2'-0" NYLOPLAST OUTLET STRUCTURE GRATE

NTS



THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

STONE ACCESS PAD DETAIL

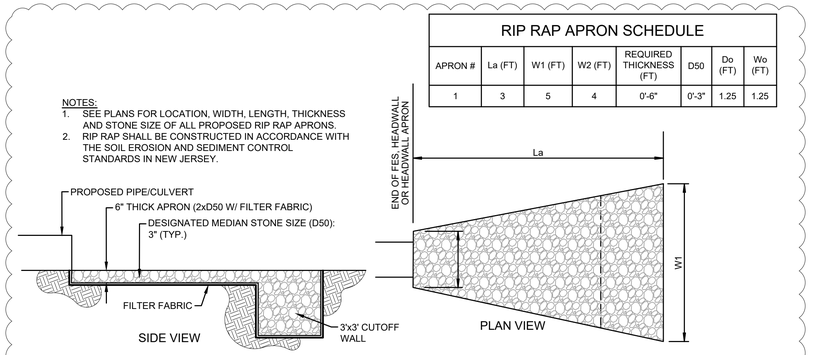
NTS

OUTLET STRUCTURE #A DETAIL

NTS

RIP RAP APRON SCHEDULE							
APRON #	La (FT)	W1 (FT)	W2 (FT)	REQUIRED THICKNESS (FT)	D50	Do (FT)	Wo (FT)
1	3	5	4	0'-6"	0'-3"	1.25	1.25

NOTES:
1. SEE PLANS FOR LOCATION, WIDTH, LENGTH, THICKNESS AND STONE SIZE OF ALL PROPOSED RIP RAP APRONS.
2. RIP RAP SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SOIL EROSION AND SEDIMENT CONTROL STANDARDS IN NEW JERSEY.



TYPICAL RIP RAP DETAIL

NTS

1

Table 27-1: Lengths of Construction Exits on Sloping Roadbeds

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 Hot Mix Asphalt Base Course, Mix I-2[1]	

STABILIZED CONSTRUCTION ENTRANCE CHART

NOTE:
1. SEE T-1 FOR GENERAL NOTES.
2. SEE EC-1 FOR EROSION CONTROL PLAN.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

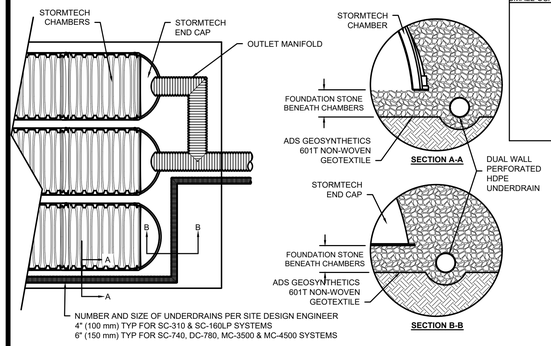
THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE

DRAWN BY: YMS | CHECKED BY: PRL
DATE: 7/16/21 | SCALE: AS SHOWN
APPROVED BY: BJA | ACAD NO.: 112-EC
FIELD BOOK: ---- PAGE: ---- | PROJECT NO.:
SHEET: 12 OF 17 | DRAWING NO.: EC-2 | REVISION: 1

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

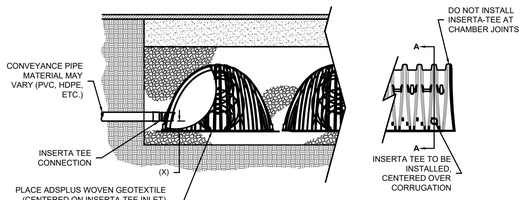
EROSION CONTROL NOTES & DETAILS I
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/08/21 - 6:49 PM, By: jbathon
File: H:\Engineering\Projects\Commercial\Fair Haven Boro\(02) Site Plans\(02) Municipal Drawings\112-EC.dwg — Layout1



UNDERDRAIN DETAIL

NTS



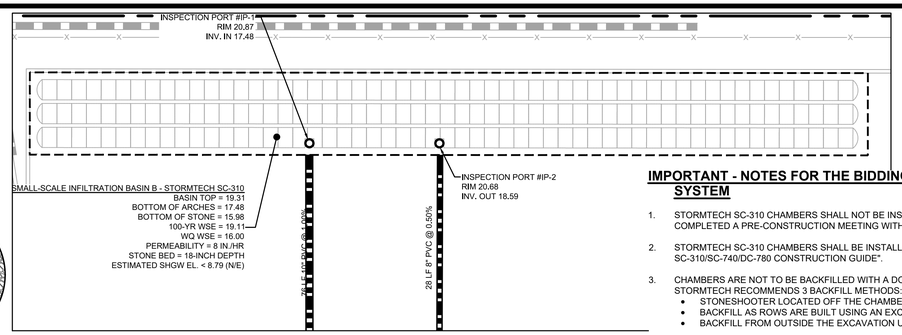
CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

NOTE:
PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.

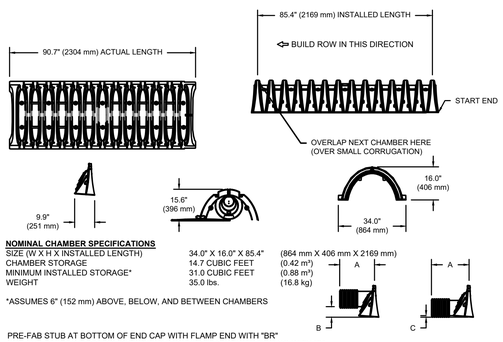
INSERTA-TEE SIDE INLET DETAIL

NTS



UNDERGROUND SMALL-SCALE INFILTRATION BASIN B

SCALE: 1"=10'



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE088BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)
SC310EPE12BR	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

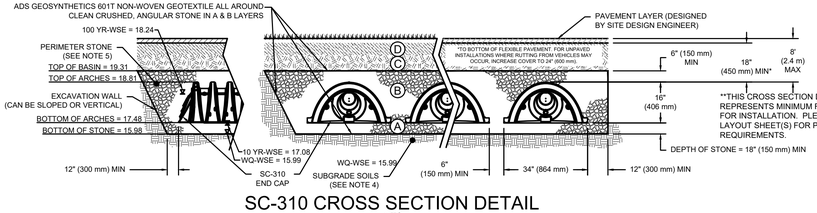
SC-310 TECHNICAL SPECIFICATIONS

NTS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



SC-310 CROSS SECTION DETAIL

NTS

NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

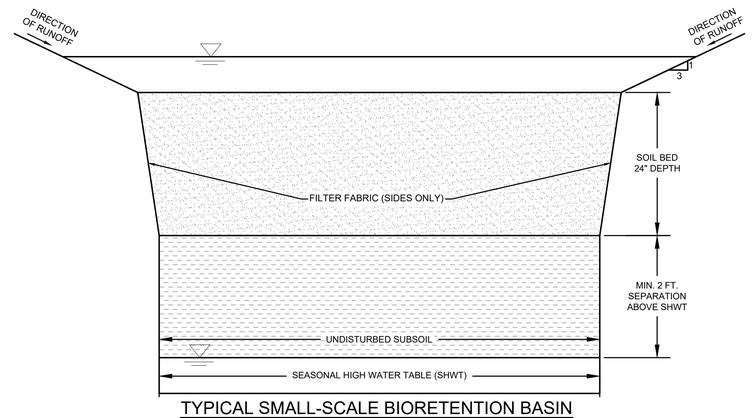
1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.



TYPICAL SMALL-SCALE BIORETENTION BASIN WITH INFILTRATION CROSS SECTION

NTS

SOIL BED SPECIFICATIONS

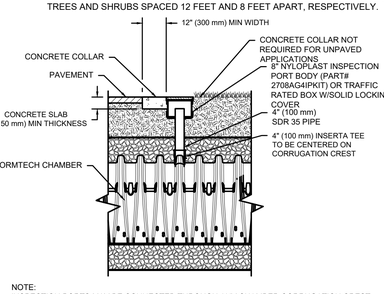
1. SANDY SOIL WITH HIGH ORGANIC CONTENT. COMPOSITION BY WEIGHT IS AS FOLLOWS:
   SAND - 85 TO 95%, <25% FINE OR VERY FINE SANDS
   SILT - < 15%
   CLAY < 5%
   ORGANIC CONTENT - 3 TO 7% (MORE THE BETTER)
   pH - 5.5 - 6.5
2. CONFIRM SOIL DELIVERED TO SITE MEETS SPECIFICATION. PRE-MIXED SOIL MUST BE CERTIFIED TO BE CONSISTENT WITH THE REQUIREMENT ABOVE BY EITHER THE VENDOR OR BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY. THE CONTENT OF ANY SOIL MIXED ON-SITE MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY; IN ADDITION, THE ENGINEER MUST BE PRESENT WHILE THE SOIL IS MIXED.
3. DO NOT COMPACT DURING CONSTRUCTION
4. THE PERMEABILITY OF THE SUBSOIL MUST BE SUFFICIENT TO ALLOW THE SYSTEM TO DRAIN WITHIN 72 HOURS.
5. SOIL TESTS ARE REQUIRED AT THE EXACT LOCATION OF THE PROPOSED BASIN IN ORDER TO CONFIRM ITS ABILITY TO FUNCTION AS DESIGNED.
6. FILTER FABRIC IS REQUIRED ALONG THE SIDES OF THE SOIL BED TO PREVENT THE MIGRATION OF FINE PARTICLES FROM THE SURROUNDING SOIL. FILTER FABRIC MAY NOT BE USED ALONG THE BOTTOM OF THE SOIL BED BECAUSE IT MAY RESULT IN A LOSS OF PERMEABILITY.
7. THE SHWT OR BEDROCK MUST BE AT LEAST 2 FEET BELOW THE BOTTOM OF THE SOIL BED.
8. GROUNDWATER MOUNDING IMPACTS MUST BE ASSESSED, AS REQUIRED BY N.J.A.C. 7:8-5.4(A)2.IV.

VEGETATION SPECIFICATIONS

1. BIORETENTION SYSTEMS ARE DESIGNED WITH VARYING WETNESS ZONES; THEREFORE, VEGETATION MUST BE SELECTED AND PLACED BASED ON SPECIFIC WATER REQUIREMENTS AND TOLERANCES. IN GENERAL, TREES DOMINATE THE PERIMETER ZONE WHERE THERE IS LESS FREQUENT INUNDATION, AND SHRUBS AND HERBACEOUS SPECIES ARE SELECTED FOR THE ZONES WHERE INUNDATION IS MORE FREQUENT.
2. THE DISTRIBUTION OF TREES AND SHRUBS MUST BE BASED ON SPECIFIC SITE CONDITIONS. ON AVERAGE, THE NUMBER OF STEMS REQUIRED PER ACRE IS 1,000, WITH TREES AND SHRUBS SPACED 12 FEET AND 8 FEET APART, RESPECTIVELY.

CONSTRUCTION SPECIFICATIONS

1. DURING CLEARING AND GRADING OF THE SITE, MEASURES MUST BE TAKEN TO ELIMINATE SOIL COMPACTION AT THE LOCATION OF A PROPOSED BIORETENTION SYSTEM.
2. THE LOCATION OF THE PROPOSED BIORETENTION SYSTEM MUST BE CORDONED OFF DURING CONSTRUCTION TO PREVENT COMPACTION OF THE SUBSOIL BY CONSTRUCTION EQUIPMENT OR STOCKPILES.
3. THE LOCATION OF THE PROPOSED BIORETENTION SYSTEM SHOULD NOT BE USED TO PROVIDE SEDIMENT CONTROL DURING CONSTRUCTION; HOWEVER, WHEN UNAVOIDABLE, THE BOTTOM OF THE SEDIMENT CONTROL BASIN SHOULD BE AT LEAST 2 FEET ABOVE THE FINAL DESIGN ELEVATION OF THE BOTTOM OF THE SOIL BED IN THE BIORETENTION BASIN.
4. EXCAVATION AND CONSTRUCTION OF A BIORETENTION SYSTEM MUST BE PERFORMED WITH EQUIPMENT PLACED OUTSIDE THE LIMITS OF THE BASIN.
5. THE EXCAVATION TO THE FINAL DESIGN ELEVATION OF THE BIORETENTION SYSTEM BOTTOM MAY ONLY OCCUR AFTER ALL CONSTRUCTION WITHIN ITS DRAINAGE AREA IS COMPLETED AND THE DRAINAGE AREA IS STABILIZED. IF CONSTRUCTION OF THE BIORETENTION SYSTEM CANNOT BE DELAYED, BERMS MUST BE PLACED AROUND THE PERIMETER OF THE SYSTEM DURING ALL PHASES OF CONSTRUCTION TO DIVERT ALL FLOWS AWAY FROM THE BIORETENTION SYSTEM. THE BERMS MAY NOT BE REMOVED UNTIL ALL CONSTRUCTION WITHIN THE DRAINAGE AREA IS COMPLETED AND THE AREA IS STABILIZED.
6. THE CONTRIBUTING DRAINAGE AREA MUST BE COMPLETELY STABILIZED PRIOR TO BIORETENTION SYSTEM USE.
7. POST-CONSTRUCTION TESTING MUST BE PERFORMED ON THE AS-BUILT BIORETENTION SYSTEM IN ACCORDANCE WITH THE CONSTRUCTION AND POST-CONSTRUCTION OVERSIGHT AND SOIL PERMEABILITY TESTING SECTION IN APPENDIX E: SOIL TESTING CRITERIA OF THE NJ STORMWATER BMP MANUAL. TO ENSURE THAT THE AS-BUILT SYSTEM FUNCTIONS AS DESIGNED, POST-CONSTRUCTION TESTING MUST INCLUDE A DETERMINATION OF THE PERMEABILITY RATES OF THE SOIL BED AND THE HYDRAULIC CAPACITY OF THE UNDERDRAIN, IN UNDERDRAINED SYSTEMS, OR THE PERMEABILITY OF THE SUBSOIL, IN INFILTRATION SYSTEMS. WHERE AS-BUILT TESTING RESULTS IN LONGER DRAIN TIMES THAN DESIGNED, CORRECTIVE ACTION MUST BE TAKEN. THE DRAIN TIME IS DEFINED AS THE TIME IT TAKES TO FULLY INFILTRATE THE MAXIMUM DESIGN STORM RUNOFF VOLUME THROUGH THE MOST HYDRAULICALLY RESTRICTIVE LAYER.



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)

NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
   A. INSPECTION PORTS (IF PRESENT)
      A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
      A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
      A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
      A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
      A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
   B. ALL ISOLATOR PLUS ROWS
      B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
      B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
         i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
         ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
      B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

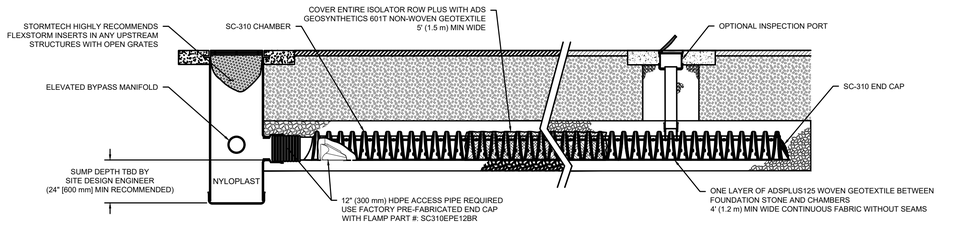
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
   A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
   B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
   C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



SC-310 ISOLATOR ROW PLUS DETAIL

NTS

NOTES:

1. SEE T-1 FOR GENERAL NOTES.
2. SEE EC-1 FOR EROSION CONTROL PLAN.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

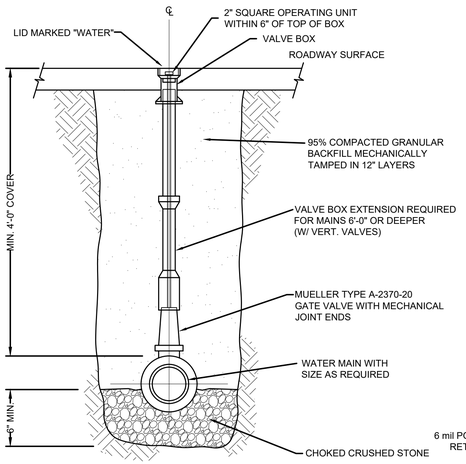
THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
12/7/21
DATE
N.J.P.E. LIC. NO. GE 43435

DRAWN BY: YMS | CHECKED BY: PRL
DATE: 7/16/21 | SCALE: AS SHOWN
APPROVED BY: BJA | ACAD NO.: 113-EC
FIELD BOOK: --- PAGE: --- | PROJECT NO.: ---
SHEET: 13 OF 17 | DRAWING NO.: EC-3 | REVISION: 1

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

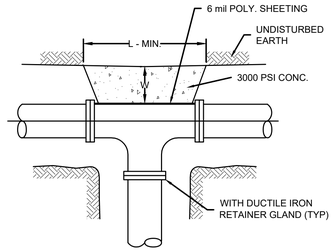
EROSION CONTROL NOTES & DETAILS II
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted: 12/08/21 - 6:49 PM, By: jdathan
File: H:\Engineering\Projects\Commercial\Fair Haven Boro\(02) Site Plans\(02) Municipal Drawings\113-EC.dwg — Layout1



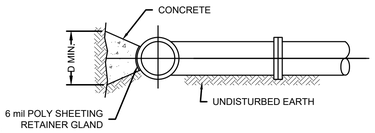
UNDERGROUND GATE VALVE (12"Ø AND UNDER)

NTS



PLAN - TEE

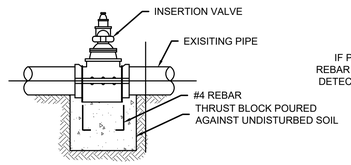
NTS



ELEVATION AT FITTING

THRUST BLOCK ELEVATION AT FITTING & PLAN - TEE DETAIL

NTS



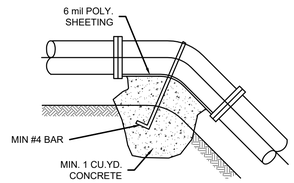
TAPPING NOTES:

1. INSTALLATION OF INSERTION VALVE SHALL BE CONDUCTED UNDER "WET" CONDITION. EXISTING MAINS SHALL BE LEFT IN SERVICE AT ALL TIMES DURING TAPPING

2. CONCRETE THRUST BLOCK UNDER VALVS SHALL HAVE A SOIL BEARING AREA EQUAL TO THAT OF A 45° ELBOW.

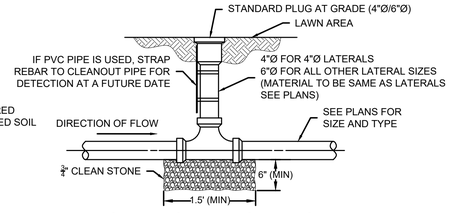
INSERTION VALVE DETAIL

NTS



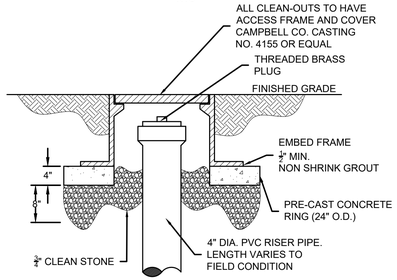
VERTICAL BEND

NTS



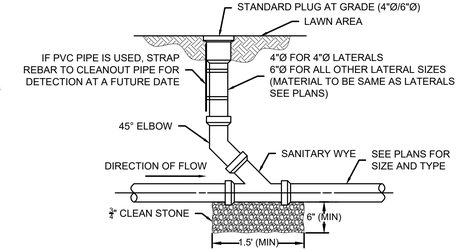
TWO-WAY SWEEP CLEANOUT

NTS



SANITARY SEWER CLEAN-OUT FRAME AND COVER IN PAVED AREAS

NTS



TYPICAL CLEANOUT IN LAWN AREAS

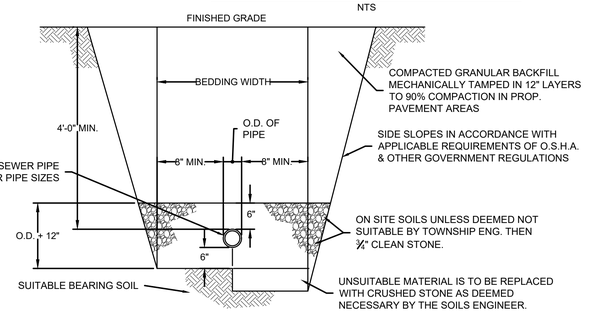
NTS

THRUST BLOCK SCHEDULE								
PIPE SIZE	TEE		22 1/2" BEND 11 1/4"		45° BEND		90° BEND	
	L	D	L	D	L	D	L	D
3" & 4"	24"	12"	24"	12"	24"	12"	24"	12"
6"	36"	12"	24"	12"	28"	12"	48"	12"
8"	42"	18"	24"	18"	48"	18"	56"	18"
10"	48"	24"	36"	24"	52"	24"	60"	24"
12"	52"	30"	36"	30"	58"	30"	74"	30"
16"	80"	36"	36"	36"	64"	36"	90"	42"

NOTES:
1. ALL TEES, WYES, PLUGS, AND BENDS OF MORE THAN 11 1/4 " BAND SHALL BE BLOCKED AGAINST UNDISTURBED FIRM EARTH WITH CONCRETE. EARTH PRESSURE FIGURED AT 2000 PSF. IF EARTH ENCOUNTERED WILL NOT WITHSTAND THIS PRESSURE, THE AREA OF THE BLOCK MUST BE INCREASED PROPORTIONALLY. SEE SOILS REPORT.
2. THE TABLE IS BASED UPON 150 PSI WORKING PRESSURE PLUS 50% WATER HAMMER FOR SIZES 6" TO 12" INCLUSIVE.
3. ALL MAINS SHALL BE PRESSURE TESTED AT 150LB WORKING PRESSURE.
4. ALL TEE AND BEND DETAILS SHALL BE MECHANICAL JOINT WITH RETAINER GLANDS.
5. 30LB ROOFING FELT MUST BE WIRED TO ALL FITTINGS, VALVES & HYDRANTSBEFORE POURING THRUST BLOCKS OR CONCRETE SUPPORTS.
6. BACKFILL INDICATED IS INITIAL BACKFILL TO BE IN ACCORDANCE WITH OTHER SPECIFIED REQUIREMENTS.
7. CAREFULLY COMPACT BACKFILL OR GRANULAR MATERIAL TO MODIFIED 95% PROCTOR DENSITY.
8. APPROVED RESTRAINT ARE REQUIRED AT ALL VERTICAL BENDS.
9. CONCRETE AVERAGE 7 DAY STRENGTH 3,000 PSI.

THRUST BLOCK SCHEDULE DETAIL

NTS



NOTES:
1. EXCAVATION IN EXISTING PAVED ROADWAYS SHALL BE COORDINATED WITH THE MUNICIPAL ROAD DEPARTMENT, AND ALL EXCAVATION SHALL BE PAVED WITH TEMPORARY BITUMINOUS PAVEMENT FROM THE DATE OF ORIGINAL EXCAVATION UNTIL PERMANENT PAVEMENT IS INSTALLED.

2. SAN. SEWERS & WATER MAINS SHALL BE SEPARATED BY AT LEAST 10' HORIZONTALLY OR AT LEAST 18" VERTICALLY.

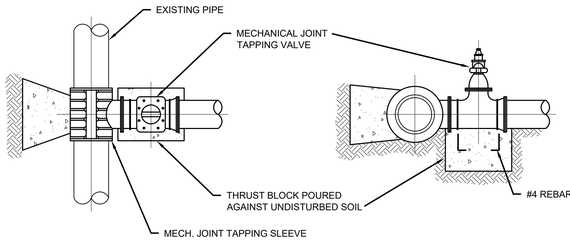
3. ALL SAN. SEWER LINES SHALL BE SDR 35 PVC PIPE UNLESS OTHERWISE NOTED.

4. ALL WATER MAINS SHALL BE CLASS 52 DUCTILE IRON CEMENT LINED PIPE, BELL & SPIGOT JOINTS EXCEPT AT BEND FITTINGS AS REQUIRED.

5. THE TESTING & DISINFECTION OF NEW MAINS SHALL BE IN ACCORDANCE WITH THE TOWNSHIP DESIGN STANDARDS.

6. ALL WATER MAINS SHALL HAVE A MIN. OF 4' OF COVER.

7. ALL BOLTS, RODS, MECHANICAL JOINTS TO RECEIVE BITUMINOUS COATINGS



PLAN ELEVATION

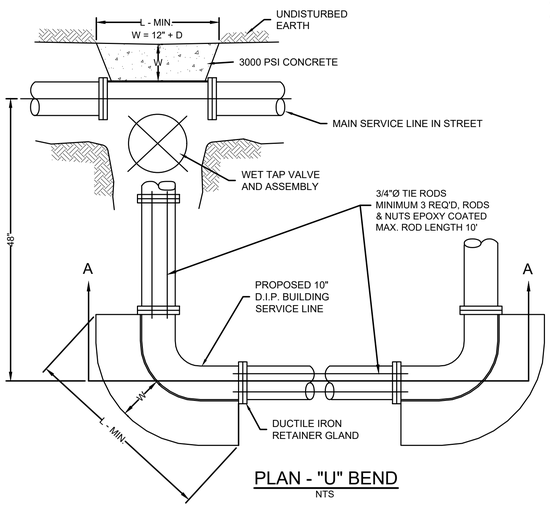
TAPPING SLEEVE DETAIL

NTS

TAPPING NOTES

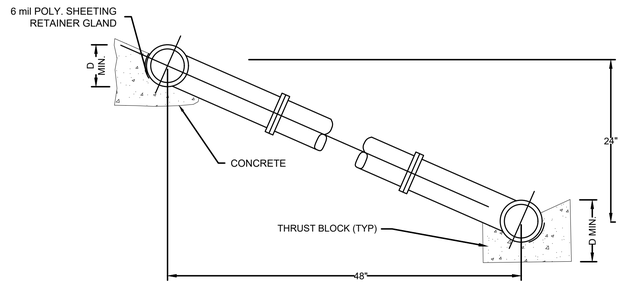
1. INSTALLATION OF TAPPING SLEEVE AND VALVE SHALL BE CONDUCTED UNDER "WET" CONDITIONS. EXISTING MAINS SHALL BE LEFT IN SERVICE AT ALL TIMES DURING TAPPING.

2. CONCRETE THRUST BLOCK UNDER VALVES SHALL HAVE A SOIL BEARING AREA EQUAL TO THAT OF A 45° ELBOW.



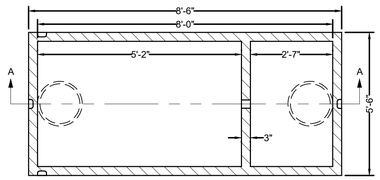
PLAN - "U" BEND

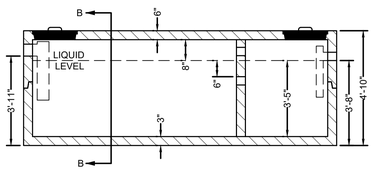
NTS



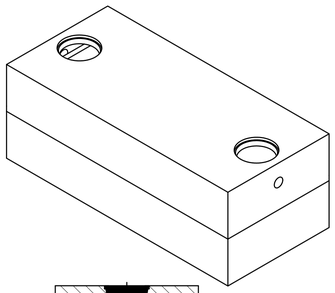
SECTION A-A

NTS





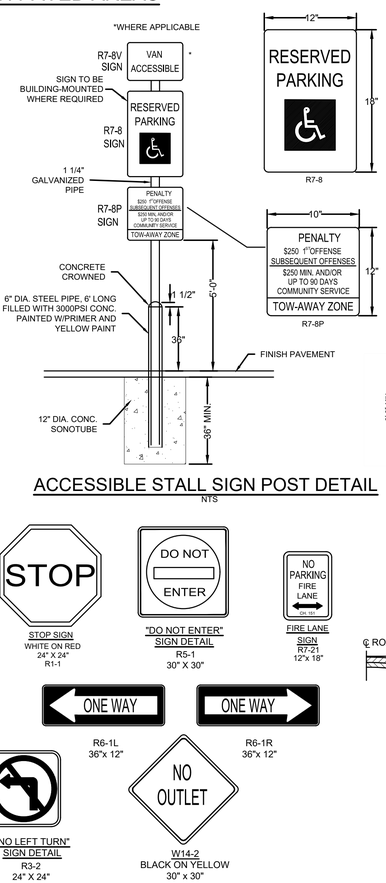
SECTION A-A



SECTION B-B

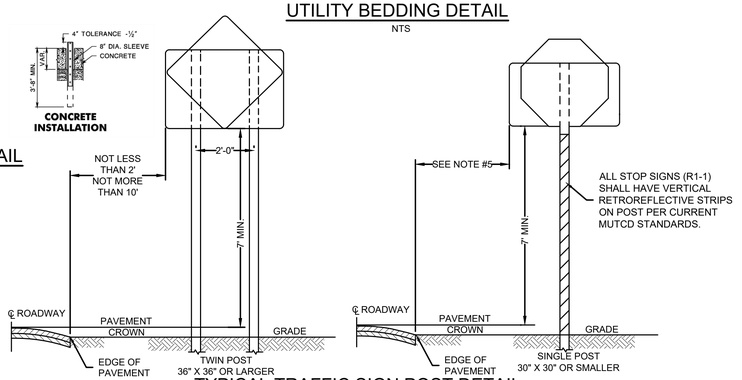
1,000 GALLON GREASE TRAP DETAIL

NTS



ACCESSIBLE STALL SIGN POST DETAIL

NTS



UTILITY BEDDING DETAIL

NTS

TYPICAL TRAFFIC SIGN POST DETAIL

NTS

NOTES:
1. ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION, AS STATED IN THE CURRENT MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES" FOR STREET AND HIGHWAYS.
2. ALL POSTS SHALL BE EMBEDDED 4'-2" MINIMUM.
3. POSTS MAY BE STEEL, ALUMINUM OR 2 PIECE U-POSTS IN CONFORMANCE WITH CURRENT A.S.T.M. SPECIFICATION A123.
4. SIGNS AND SIGN SUPPORTS SHALL BE IN CONFORMANCE WITH SECTION 912 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD DETAILS CD-612-4 & CD-612-5 OF THE NJDOT STANDARD ROADWAY CONSTRUCTION DETAILS, AS CURRENTLY AMENDED.
5. IN AREAS WITHOUT CURBING, THE OUTER EDGE OF SIGN TO BE 6'-0" MIN. TO 12'-0" MAX. FROM EDGE OF SHOULDER, AS DIRECTED.
6. ALL STEEL POSTS AND BRACKETS SHALL BE CUT, BENT AND HOLES PUNCHED AND DRILLED BEFORE GALVANIZING. GALVANIZING SHALL BE IN CONFORMANCE WITH CURRENT A.S.T.M. SPECIFICATIONS A 123.
7. BOLTS SHALL NOT PROTRUDE MORE THAN 3/4" BEYOND THE NUT WHEN TIGHT BUT SHALL ENGAGE ALL THREADS IN THE NUT.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

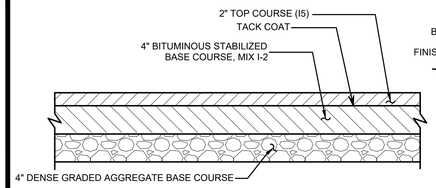
THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE

DRAWN BY: YMS	CHECKED BY: PRL		
DATE: 7/16/21	SCALE: AS NOTED		
APPROVED BY: BJA	ACAD NO.: 114-DT		
FIELD BOOK: ----	PAGE: --	PROJECT NO.:	
SHEET: 14 OF 17	DRAWING NO: DT-1	REVISION: 1	

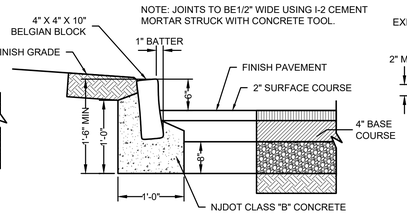
EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

CONSTRUCTION DETAILS I
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

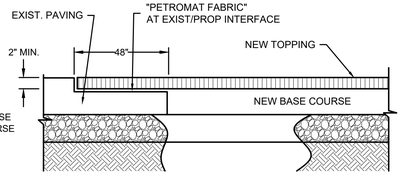
Plotted:12/09/21 – 6:51 PM, By: pfahrum
File: H:\Engineering\Projects\Commercial\Fair Haven Boro\052 Site Plans\052 Municipal Drawings\114-DT.dwg, --> Layout1



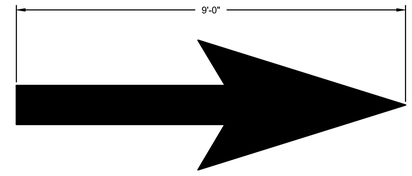
BITUMINOUS PAVING DETAIL
NTS



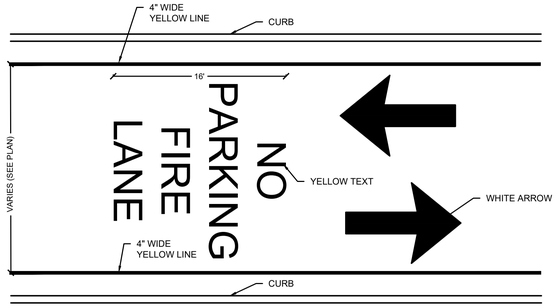
TYPICAL BELGIAN BLOCK CURB DETAIL
NTS



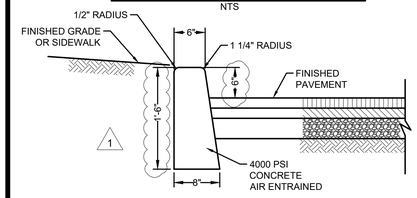
TYP. PAVING SECTION AT EXIST/PROPOSED PAVING JOINT
NTS



DIRECTIONAL ARROW DETAIL
NTS

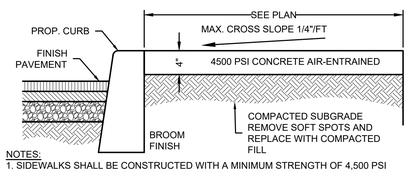


NO PARKING FIRE LANE STRIPING
NTS



6" CONCRETE CURB DETAIL
NTS

NOTES:
1. CONCRETE TO TEST 4500 POUNDS PER SQUARE INCH MINIMUM ON 28 DAY COMPRESSIVE TEST.
2. ALL CONCRETE IS TO BE PROPERLY CURED USING A CURING COMPOUND, SALT HAY, BURLAP OR OTHER METHOD ACCEPTABLE TO MUNICIPAL ENGINEER.
3. CONCRETE SLUMP TO BE A MAXIMUM OF 3 INCHES OR AS DIRECTED BY THE MUNICIPAL ENGINEER.
4. STEEL SEPARATORS SHALL BE USED WITH ALL THE FORMS TO CREATE A CONSTRUCTION JOINT EVERY 10 FEET ALONG THE CURB.
5. A HALF INCH EXPANSION JOINT OF A NON-EXTRUDABLE, FIBROUS, BITUMASTIC MATERIAL SHALL BE PLACED ON 20 FT. CENTERS MAXIMUM.
6. CONTRACTOR TO NOTIFY MUNICIPAL ENGINEER TWO DAYS PRIOR TO POURING.



NOTES:
1. SIDEWALKS SHALL BE CONSTRUCTED WITH A MINIMUM STRENGTH OF 4,500 PSI AIR-ENTRAINED CONCRETE. THE CONCRETE PROPORTIONS SHALL CONSIST OF ONE PART PORTLAND CEMENT, TWO PARTS SAND AND FOUR PARTS CRUSHED STONE OR WASHED GRAVEL AND CONSTRUCTED TO A THICKNESS OF NOT LESS THAN FOUR (4) INCHES & CONFORM TO ALL LOCAL JURISDICTIONAL REQUIREMENTS.

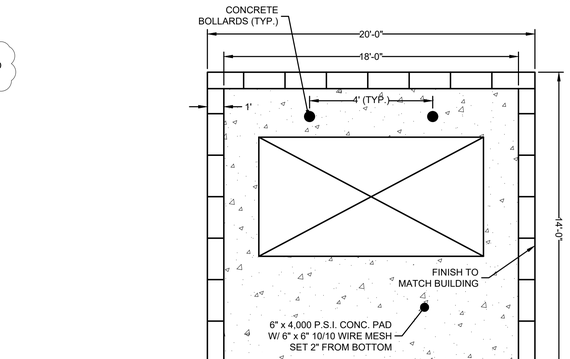
2. ALIGNMENT AND GRADE ARE TO BE DETERMINED BY THE EXISTING ALIGNMENT AND GRADE IN THE AREA.

3. EXPANSION JOINTS 1/2" WIDE, SHALL BE PROVIDED AT INTERVALS OF NOT MORE THAN 8 FEET AND FILLED WITH PREFABRICATED BITUMINOUS CELLULAR TYPE JOINT FILLER. PROVIDE SIMILAR JOINT WHERE SIDEWALK ABUTS WALL.

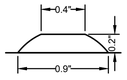
1 4. TRANSVERSE SURFACE GROOVES SHALL BE CUT IN SIDEWALK BETWEEN EXPANSION JOINTS AT INTERVALS EQUAL TO THE SIDEWALK WIDTH. TRANSVERSE POINTS SHALL BE HAND TROWELED AND NOT SAWCUT.
SCORING PATTERN MUST BE SUBMITTED TO ARCHITECT FOR APPROVAL.

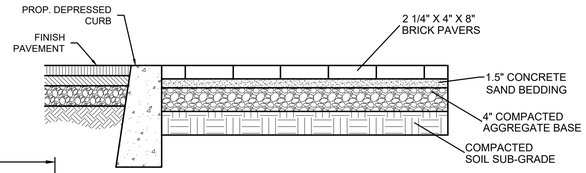
5. THE TOP OF ALL JOINT FILLER SHALL BE 1/2" BELOW THE TOP OF THE SIDEWALK AND FILLED WITH JOINT SEALER (SIKAFLEX-1A OR APPROVED EQUAL.

TYPICAL SIDEWALK DETAIL
NTS



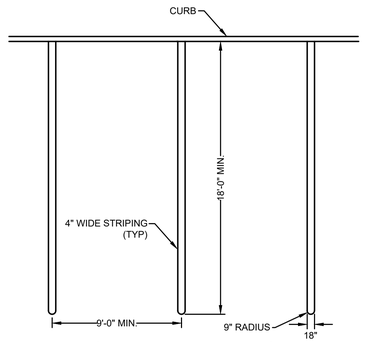
TYPICAL ACCESSIBLE DOME SPACING DETAIL
NTS



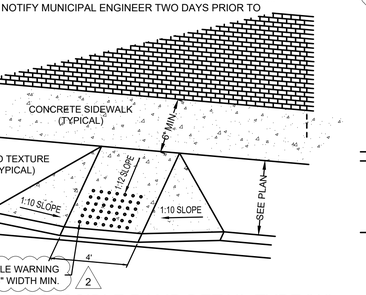


PAVER INSTALLATION DETAIL
NTS

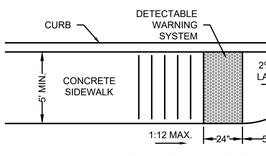
PLAN



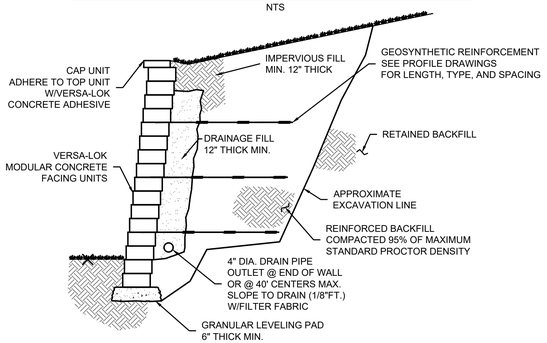
STANDARD PARKING STALL DETAIL
NTS



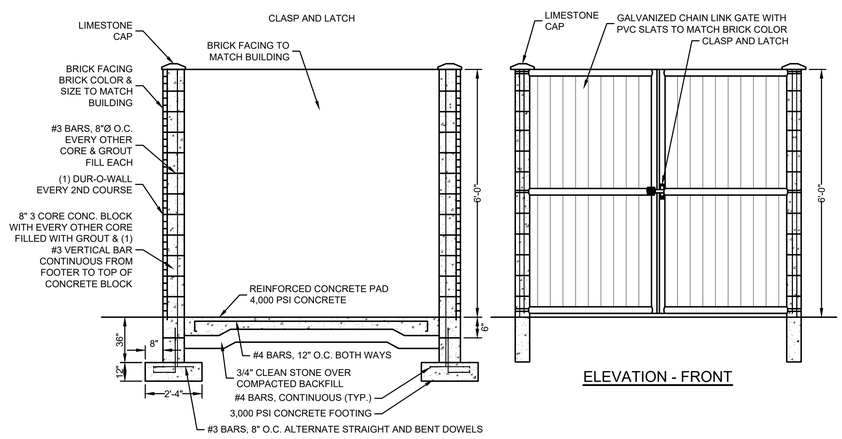
TYPICAL ACCESSIBLE RAMP DETAIL TYPE "A"
NTS



PARALLEL CURB HANDICAP RAMP DETAIL
NTS



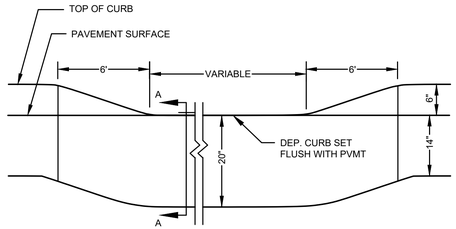
TYPICAL SECTION-REINFORCED RETAINING WALL DETAIL
NTS



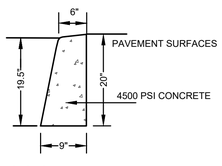
ELEVATION - REAR

ELEVATION - FRONT

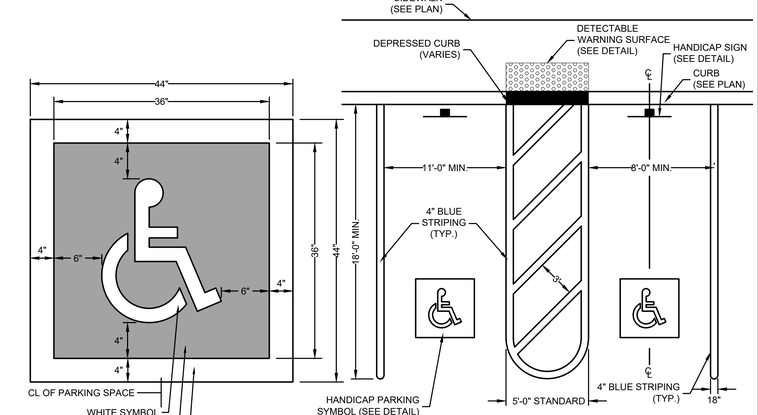
TRASH ENCLOSURE DETAIL
N.T.S.



TYPICAL ACCESSIBLE DEPRESSED CONC. CURB DETAIL
NTS



SECTION A-A



ACCESSIBLE PARKING SYMBOL
NTS

HANDICAPPED PERSON (HP) PARKING DETAIL
NTS

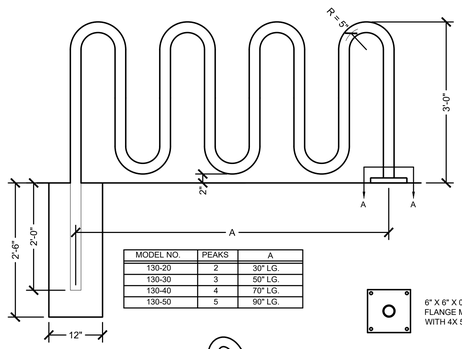
NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE:

DRAWN BY:	YMS	CHECKED BY:	PRL
DATE:	7/16/21	SCALE:	AS NOTED
APPROVED BY:	BJA	ACAD NO.	115-DT
FIELD BOOK:	--- PAGE: ---	PROJECT NO.	
SHEET	15 OF 17	DRAWING NO.	DT-2
REVISION	1		

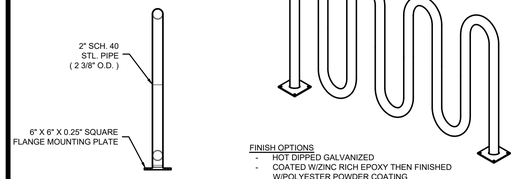
EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0943 Fax: (908) 755-3272

CONSTRUCTION DETAILS II
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY



MODEL NO.	PEAKS	A
130-20	2	30" LG.
130-30	3	50" LG.
130-40	4	70" LG.
130-50	5	90" LG.

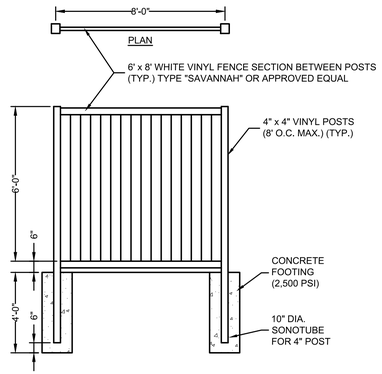
EMBEDMENT



SURFACE MOUNT

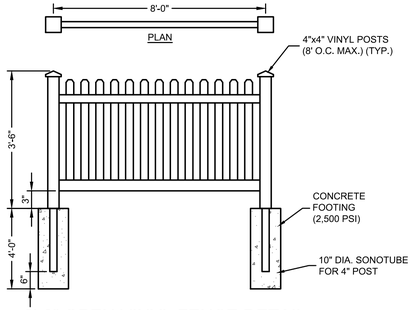
FINISH OPTIONS
- HOT DIPPED GALVANIZED
- COATED W/ZINC RICH EPOXY THEN FINISHED W/POLYESTER POWDER COATING

BIKE RACK DETAIL
NTS

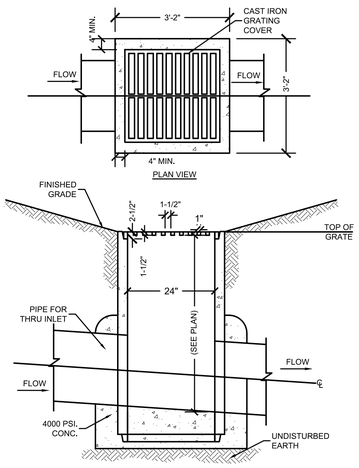


6'-0" SOLID VINYL FENCE DETAIL
N.T.S.

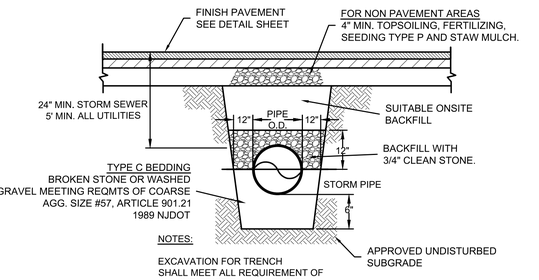
NOTE:
COLOR TO BE EARTH TONED TO BLEND IN WITH BUILDING



3'-6" OPEN VINYL FENCE DETAIL
N.T.S.

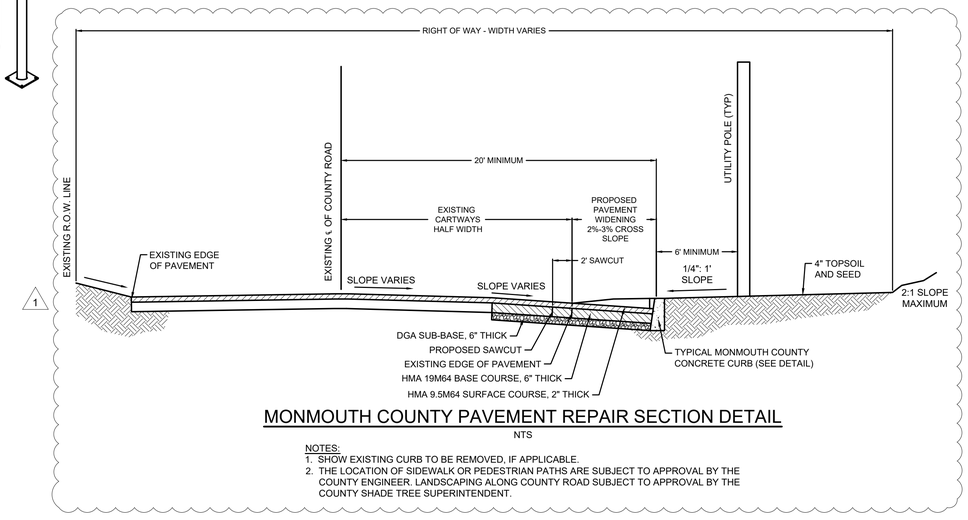


STANDARD YARD INLET DETAIL
NTS



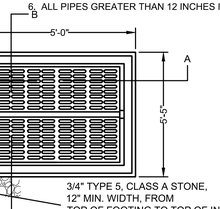
TYPICAL STORM TRENCH & PAVEMENT DETAIL
NTS

1. MATERIALS SHALL CONFORM TO ASTM D3350, STANDARD SPECIFICATION FOR POLYETHYLENE PLASTICS PIPE AND FITTINGS MATERIALS.
2. PIPE JOINTS AND FITTINGS SHALL BE COMPATIBLE WITH THE PIPE MATERIAL AND SHALL CONFORM TO THE SAME STANDARDS AND SPECIFICATIONS AS THE PIPE MATERIAL.
3. PIPE COUPLERS SHALL NOT COVER LESS THAN ONE FULL CORRUGATION ON EACH SECTION OF PIPE.
4. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321, STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS.
5. BACKFILL MATERIAL SHALL BE PLACED IN SIX-INCH LIFTS AND COMPACTED TO 95 PERCENT MINIMUM DRY DENSITY, PER AASHTO T99.
6. ALL PIPES GREATER THAN 12 INCHES IN DIAMETER SHALL BE TYPE S.

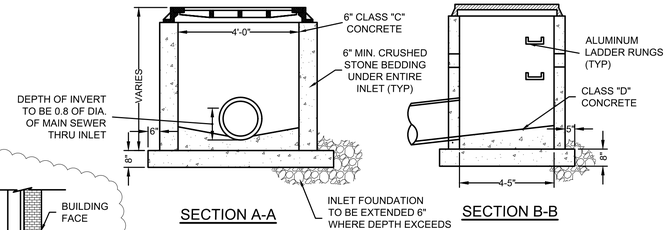


MONMOUTH COUNTY PAVEMENT REPAIR SECTION DETAIL
NTS

NOTES:
1. SHOW EXISTING CURB TO BE REMOVED, IF APPLICABLE.
2. THE LOCATION OF SIDEWALK OR PEDESTRIAN PATHS ARE SUBJECT TO APPROVAL BY THE COUNTY ENGINEER. LANDSCAPING ALONG COUNTY ROAD SUBJECT TO APPROVAL BY THE COUNTY SHADE TREE SUPERINTENDENT.



NOTES:
1. FOOTING TO BE N.J.D.O.T. CLASS "C" CONCRETE
2. INVERT & WALLS TO BE N.J.D.O.T.CLASS "C" CONCRETE
3. WALLS SHALL BE PRECAST CONCRETE ONLY
4. FRAME AND GRATE TO BE CAMPBELL FOUNDRY CO. NO. 3426 BICYCLE SAFE GRATE SET IN CONC.
5. PROVIDE 3/4" Ø ALUM. LADDER RUNGS SET AT 12" O.C.
6. WHEN ADDITIONAL DEPTH IS SCHEDULED, WALLS BELOW 8'-0" MEASURED FROM GRATE TO INVERT SHALL BE 12" THICK AND EXTEND 12" BEYOND OUTSIDE OF WALL.



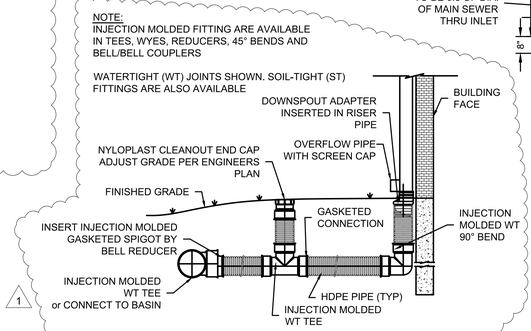
SECTION A-A

SECTION B-B

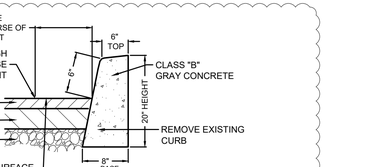
INLET TYPE "E" DETAIL
NTS

NOTE:
INJECTION MOLDED FITTING ARE AVAILABLE IN TEES, WYES, REDUCERS, 45° BENDS AND BELL/BELL COUPLERS

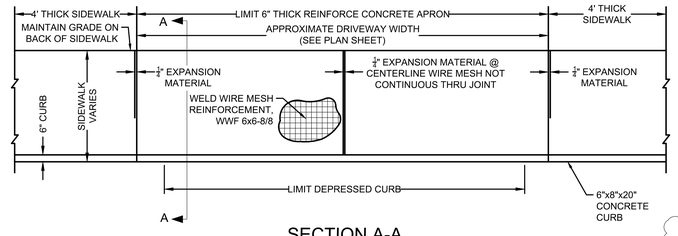
WATERTIGHT (WT) JOINTS SHOWN. SOIL-TIGHT (ST) FITTINGS ARE ALSO AVAILABLE



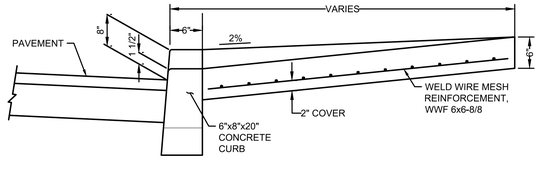
ROOF DRAIN W/ TEE CLEANOUT
NTS



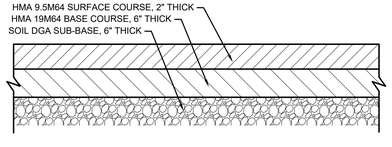
MONMOUTH COUNTY DROPPED CURB AND CRADLE DETAIL
NTS



SECTION A-A



MONMOUTH COUNTY
CONCRETE APRON DETAIL
NTS



MONMOUTH COUNTY PAVEMENT SECTION DETAIL
NTS

TYPICAL MONMOUTH COUNTY CURB & PAVEMENT SECTION
(REPLACE CURB IN PLACE - NO ROAD WIDENING)
NTS

NOTE:
1. CURB HEIGHT TO MATCH SITE PLANS, AS INDICATED.

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
12/7/21
DATE
N.J.P.E. LIC. NO. GE 43435

DRAWN BY: YMS	CHECKED BY: PRL
DATE: 7/16/21	SCALE: AS NOTED
APPROVED BY: BJA	ACAD NO.: 116-DT
FIELD BOOK: *** PAGE: **	PROJECT NO.:
SHEET: 16 OF 17	DRAWING NO.: DT-3
REVISION: 1	

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

CONSTRUCTION DETAILS III
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN
MONMOUTH COUNTY NEW JERSEY

Plotted:12/09/21 - 6:51 PM, By: pbatham
File: H:\Engineering\Projects\Commercial\Fair Haven Block(s)\31 Site Plans\(02) Municipal Drawings\116-DT.dwg, --- Layout1

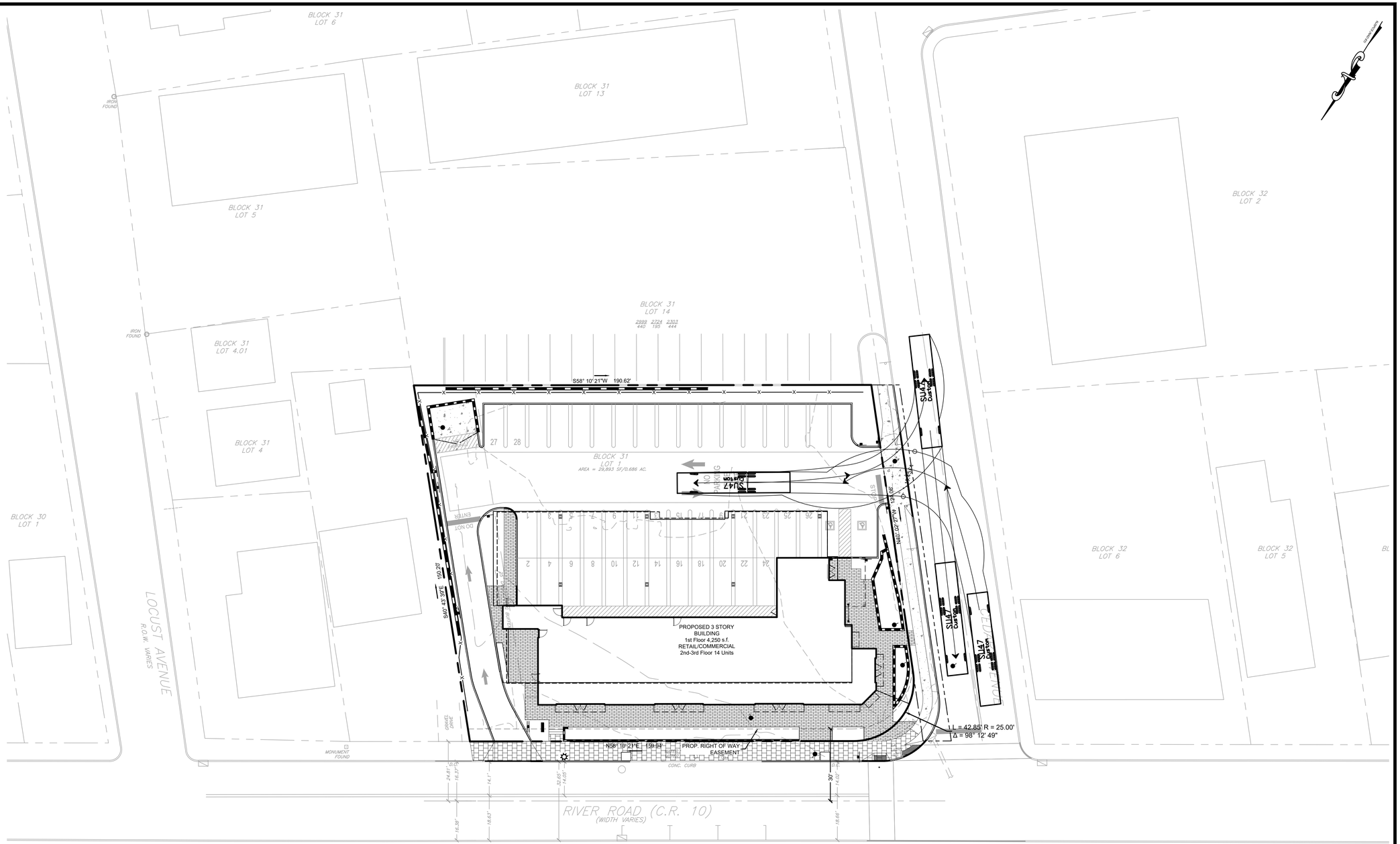
LEGEND

PROPOSED

- PROP. 1ft COUNTOUR LINE (123)
- PROP. 5ft CONTOUR LINE (125)
- PROP. POTABLE WATER LINE (W)
- PROP. SANITARY SEWER LINE (SS)
- PROP. GAS LINE (G)
- PROP. ELECTRIC LINE (E)
- PROP. OVERHEAD ELECTRIC LINE ("E")
- PROP. FENCE LINE (X)
- PROP. CURB LINE
- PROP. TREE LINE
- PROP. STORM PIPE
- PROP. CONCRETE SIDEWALK
- PROP. SPOT ELEVATION (TC 100.50 GD 100.00)
- PROP. FIRE HYDRANT
- PROP. SIAMESE CONNECTION
- PROP. LIGHT POLE
- PROP. "B" INLET
- PROP. UTILITY POLE
- PROP. MANHOLE
- PROP. "A" OR "E" INLET

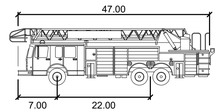
EXISTING

- *EXIST. 1ft COUNTOUR LINE* (124)
- *EXIST. 5ft CONTOUR LINE* (125)
- *EXIST. POTABLE WATER LINE* (W)
- *EXIST. SANITARY SEWER LINE* (SS)
- *EXIST. GAS LINE* (G)
- *EXIST. ELECTRIC LINE* (E)
- *EXIST. OVERHEAD ELECTRIC LINE* ("E")
- *EXIST. FENCE LINE*
- *EXIST. CURB LINE*
- *EXIST. TREE LINE*
- *EXIST. CONC. SIDEWALK*
- *PROPERTY BOUNDARY LINE*
- *PRIMARY BUILDING SETBACK LINE*
- *EXIST. STORM PIPE*
- *EXIST. SPOT ELEVATION* (TC 100.50 GD 100.00)
- *EXIST. FIRE HYDRANT*
- *EXIST. SIAMESE CONNECTION*
- *EXIST. LIGHT POLE*
- *EXIST. "B" INLET*
- *EXIST. UTILITY POLE*
- *EXIST. MANHOLE*
- *EXIST. "A" OR "E" INLET*



10' 0 10' 20' 40'

SCALE: 1" = 20'



SU47	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.00
Steering Angle	: 45.00

NOTES:
1. SEE T-1 FOR GENERAL NOTES.
2. VEHICLE DIMENSIONS BASED ON STANDARD SU-47 VEHICLE. ANY SPECIFIC CHANGES TO THE VEHICLE DIMENSIONS SHOULD BE PROVIDED TO THE DESIGNER FOR RE ANALYSIS OF VEHICLE PATHS.
3. THE NEAREST FIRE STATION LOCATED AT 645 RIVER ROAD, FAIR HAVEN, NEW JERSEY IS 0.04 MILES AWAY.
4. NO COMPONENT OF THE PROPOSED INFILTRATION BASIN WALL, WHETHER UNDERGROUND, GROUND-LEVEL OR ABOVE GROUND, SHALL BE LOCATED LESS THAN ONE (1) FOOT CLEAR DISTANCE TO THE RIVER ROAD RIGHT-OF-WAY. IF INSPECTION, OR FUTURE COUNTY WORK, REVEALS LESS THAN ONE (1) FOOT CLEAR DISTANCE FROM THE STORMWATER BASIN TO THE RIGHT-OF-WAY LINE, THEN THESE COMPONENTS SHALL BE RELOCATED AT THE OWNER'S EXPENSE.

1

NO.	REVISIONS	DATE	BY
1	PER TOWNSHIP, COUNTY, & FSCD REVIEW LETTERS	12/7/21	RP/PRL

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J.P.E. LIC. NO. GE 43435
12/7/21
DATE:

DRAWN BY: YMS	CHECKED BY: PRL
DATE: 7/16/21	SCALE: 1" = 20'
APPROVED BY: BJA	ACAD NO.: 117-TT
FIELD BOOK: *** PAGE: ***	PROJECT NO.:
SHEET: 17 OF 17	DRAWING NO.: TT-1
REVISION: 1	

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED TRUCK TURNING PLAN
M&M REALTY PARTNERS AT FAIR HAVEN, LLC
FOR
BLOCK 31, LOT 1
BOROUGH OF FAIR HAVEN

MONMOUTH COUNTY NEW JERSEY

Plotted:12/09/21 - 6:51 PM, By: pbatham
File: H:\Engineering\Projects\Commercial\Fair Haven Boro\02) Site Plans\02) Municipal Drawings\117-TT.dwg — Layout1