THIS MAP IS HEREBY APPROVED BY THE PLANNING BOARD OF THE CITY OF CAMDEN.

DATE

BOARD CHAIRMAN

I CERTIFY THAT THIS MAP WAS DULY APPROVED BY RESOLUTION OF THE PLANNING BOARD AT AN OFFICIAL MEETING HELD ON

I HEREBY FURTHER CERTIFY THAT THE PLANNING BOARD IS THE CONSTITUTED PROPER AUTHORITY.

DATE

BOARD SECRETARY

I HAVE CAREFULLY EXAMINED THIS MAP AND FIND IT CONFORMS WITH THE PROVISIONS OF "THE MAP FILING LAW" AND THE CITY ORDINANCES AND REQUIREMENTS APPLICABLE THERETO.

DATE

BOARD ENGINEER

I CERTIFY THAT THIS PLAN WAS DULY APPROVED BY RESOLUTION OF THE PLANNING/ZONING BOARD OF THE CITY OF CAMDEN.

DATE

ZONING OFFICER/ADMINISTRATIVE OFFICER

201 NORTH FRONT STREET

PRELIMINARY AND FINAL SITE PLAN

CAMDEN COUNTY, NEW JERSEY

PREPARED FOR:

OWNER/DEVELOPER

EMR EASTERN, LLC

143 HARDING AVENUE

BELLMAWR, NJ 08031

609-352-2379

SHEET LIST TABLE		
DWG TITLE	SHEET NUMBER	SHEET TITLE
CS0001	1	COVER SHEET
CS0002	2	ZONING COMPLIANCE AND LEGEND
CS0003	3	GENERAL NOTES
CS0201	4	EXISTING CONDITIONS PLAN
CS0501	5	DEMOLITION PLAN
CS1001	6	SITE PLAN
CS1501	7	GRADING PLAN
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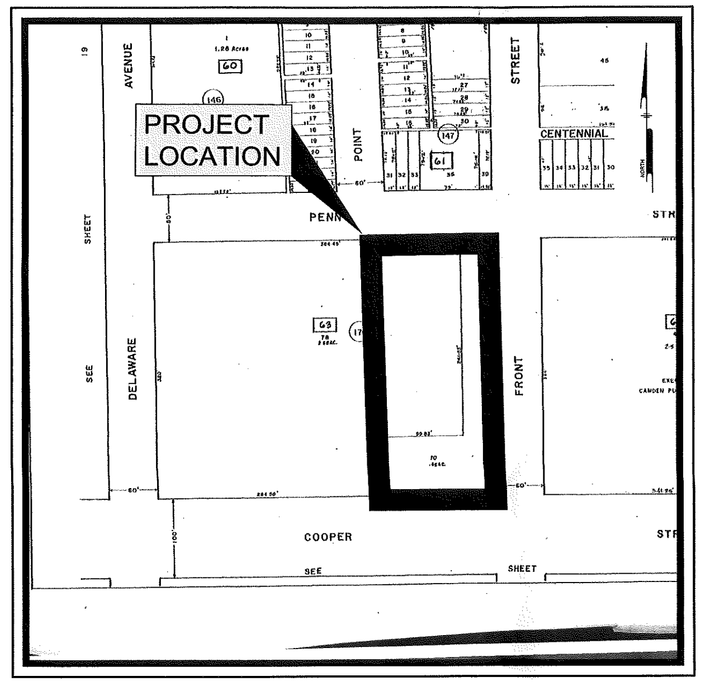
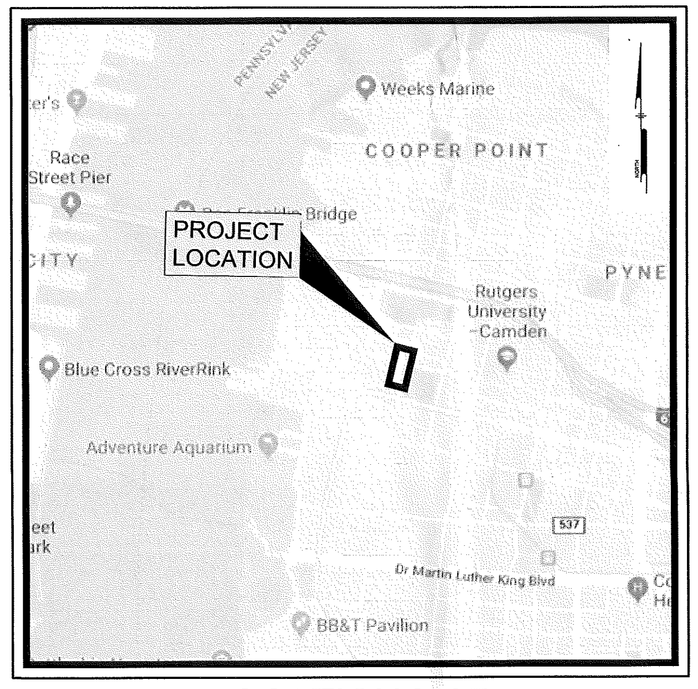
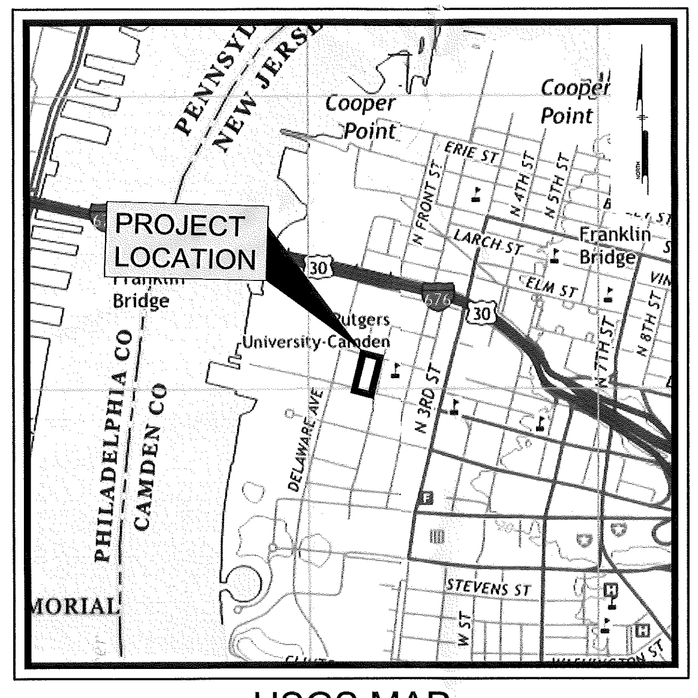
CS2001	9	LANDSCAPING PLAN
CS2201	10	LIGHTING PLAN
CS6001	11	CIVIL SITE DETAILS
CS6002	12	CIVIL SITE DETAILS
CS6021	13	STORM SEWER DETAILS
CS6061	14	LANDSCAPE DETAILS
CS8001	15	SOIL EROSION AND SEDIMENT CONTROL PLAN
CS8501	16	SOIL EROSION AND SEDIMENT CONTROL NOTES
CS8502	17	SOIL EROSION AND SEDIMENT CONTROL DETAILS



TAX MAP
Scale: 1" = 150'



LOCATION MAP
Scale: 1" = 1000'



USGS MAP
Scale: 1" = 1000'

PREPARED BY:

PENNONI ASSOCIATES INC.

Pennoni

2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.8600

NJ CERTIFICATE OF AUTHORIZATION NO. GA28033300

NEW JERSEY

ONE CALL

CALL BEFORE YOU DIG
1-800-272-1000

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

NOT FOR CONSTRUCTION

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121

2/8/2019

201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

COVER SHEET

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

BY	REVISIONS	NO.	DATE

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATE; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	N.T.S.
DRAWN BY	BTM
APPROVED BY	ATB

CS0001

SHEET 1 OF 17

U:\Accounts\HAGE...\HAGEN18001 - 201 N Front Street\DESIGN\...\SHEET\CS0001.dwg PLOTTED: 2/1/2019 8:54 AM BY: Brandon Morales PLOTSTYLE: Pennoni HCB.ctb PROJECT STATUS: —

201 N. FRONT STREET, BLOCK 63 LOT 70.01 & 70.02 ZONING COMPLIANCE SUMMARY

CODE: CAMDEN DOWNTOWN REDEVELOPMENT PLAN
DIVISION OF PLANNING

TAX MAP: SHEETS 12 (NOTE: TAX MAP SHEETS MAY NOT REFLECT CURRENT BLOCK AND LOT INFORMATION DUE TO RECENT SUBDIVISION)
BLOCK 63, LOT 70.01 & 70.02
TOTAL AREA = 0.95 ACRES

ZONING DISTRICT: US, - UNIVERSITY AND SUPPORT

PERMITTED USES: SINGLE-FAMILY DETACHED DWELLINGS, SEMI-DETACHED DWELLINGS, DUPLEX (TWO-FAMILY) DWELLINGS, TOWNHOUSES (ATTACHED/ROW) DWELLINGS, COLLEGES, UNIVERSITIES AND ASSOCIATED RESEARCH FACILITIES, UNIVERSITY OR COLLEGE RESIDENCE, BANKS, FINANCIAL AND INSURANCE OFFICES, OFFICES, OFFICE BUILDING AND OFFICE COMPLEX, BUSINESS SERVICES, CONVENIENCE STORES, VISITOR INFORMATION CENTER, RETAIL FOOD ESTABLISHMENTS, HOTEL OR MOTEL, OR EXTENDED FAMILY STAY FACILITY, PROFESSIONAL AND PRIVATE OFFICES, MEDICAL OFFICES AND FACILITIES, PERSONAL SERVICES, RETAIL STORES, RESTAURANTS, NOT INCLUDING CARRYOUT AND DRIVE-THROUGH, THEATERS, MUSEUMS, ART GALLERIES AND CONCERT HALLS, BUILDING STRUCTURES AND OTHER USES OWNED AND OPERATED BY THE CITY OF CAMDEN, PARKS, PLAYGROUNDS OR RECREATION AREAS, COMMUNITY CENTER BUILDINGS, AND LIBRARIES, PUBLIC, PRIVATE OR PAROCHIAL EDUCATIONS INSTITUTIONS, RAILROAD PASSENGER STATIONS AND RAILROAD FACILITIES AND USES.

ACCESSORY USES: OFF-STREET PARKING (SUBJECT TO THE REQUIREMENTS OF SECTION 577-214, 230-241), MULTILEVEL PARKING STRUCTURES (SUBJECT TO THE REQUIREMENTS OF SECTION 577-232), FENCES AND WALLS (SUBJECT TO THE REQUIREMENTS OF SECTION 577-197), SIGNS (SUBJECT TO THE REQUIREMENTS OF SECTION 577-253), RAILROAD ACCESSORY USES, SIDEWALK CAFÉ (SUBJECT TO THE REQUIREMENTS OF SECTION 577-217).

PROHIBITED USES: SIGNS IN ANY FORM EXCEPT AS PERMITTED IN THIS ORDINANCE, LODGING HOUSES, BOARDING HOUSES, ROOMING HOUSES, GROUP HOMES OR ANY COMBINATION THEREOF, WHOLESALE, STORAGE, AND WAREHOUSE FACILITIES, LUMBER AND BUILDING SUPPLY SALES AND STORAGE, JUNK YARDS AND AUTOMOBILE GRAVEYARDS, NEW AND/OR USED AUTOMOBILE AND TRUCK SALES, AUTO BODY REPAIR, AUTOMOBILE SERVICE STATION, GASOLINE STATION, OR MOTOR VEHICLE SERVICE STATION, CAR WASH, TRUCK STOPS, WHOLESALE, STORAGE AND WAREHOUSE FACILITIES.

CONDITIONAL USES: PLACES OF WORSHIP (SUBJECT TO THE REQUIREMENTS OF SECTION 577-209), CHILD CARE CENTERS (SUBJECT TO THE REQUIREMENTS OF SECTION 577203), PUBLIC UTILITY FACILITIES (SUBJECT TO THE REQUIREMENTS OF SECTION 577-191), WIRELESS COMMUNICATIONS FACILITIES (SUBJECT TO THE REQUIREMENTS OF SECTION 577-210 AND 211).

PROPOSED USE: 96,615 S.F GFA 8 STORY OFFICE BUILDING AND OFFICE COMPLEX

AREA AND BULK REGULATIONS PER ORDINANCE SECTION 577-186 CAMDEN DOWNTOWN REDEVELOPMENT PLAN

CODE REF	STANDARD	REQUIRED/PERMITTED	EXISTING (OVERALL PARCEL) *	PROPOSED	CONFORMANCE
Pg. 35-A.2	MIN. LOT AREA (SF) (NON-RESIDENTIAL)	10,000	41,560	41,560	CONFORMS
Pg. 35-A.4	MIN. LOT WIDTH (FT) (NON-RESIDENTIAL)	100	122	122	CONFORMS
Pg. 35-A.5	MAX. BUILDING COVERAGE (%)	80	93	25	EXISTING VARIANCE PROPOSED CONFORMS
Pg. 35-A.6[1]	MAX. LOT COVERAGE (%)	90	100	97	EXISTING VARIANCE PROPOSED VARIANCE
Pg. 35-A.7	MIN. FRONT YARD (FT) (TWO FRONTAGES)	10	0	0	EXISTING VARIANCE
Pg. 35-A.8	MIN. SIDE YARD (FT)	5	16	16	CONFORMS
Pg. 35-A.11	MAX. BUILDING HEIGHT (FT)	450 OR 30-STORIES	139.8	139.8	CONFORMS
Pg. 35-A.9	MIN. REAR YARD (FT)	5	N/A	N/A	CONFORMS
Pg. 36-A.12	MAX. FLOOR AREA RATIO	25	2.6	2.3	CONFORMS
	OFF-STREET PARKING MINIMUM REQUIREMENTS				
Pg. 46-F.2	OFFICE	1 SPACE PER 1,000 SF			
	TOTAL PARKING REQUIRED	REQUIRED EXISTING 110 STALLS REQUIRED PROPOSED 97 STALLS	--0--	90	EXISTING VARIANCE PROPOSED VARIANCE
	TRAFFIC CIRCULATION				
577-234-D	MIN. DRIVEWAY WIDTH (FT)	30	12	25	DESIGN WAIVER

C - CONFORMING; NC - NON CONFORMING; NA - NOT APPLICABLE

LIST OF DESIGN WAIVERS

1. SITE IDENTIFICATION SIGN HAS NOT BEEN PROPOSED
2. DESIGN WAIVER FROM PAGE 45 SECTION E REQUIRING STREET TREES WITHIN RIGHT OF WAY. EXISTING STREET TREES ALONG COOPER STREET ARE TO BE REPLACED PURSUANT TO THE REDEVELOPMENT PLAN. STREET TREES ARE NOT PROPOSED ALONG NORTH FRONT STREET AND PENN STREET DUE TO EXISTING OVERHEAD ELECTRIC SYSTEM.
3. DESIGN WAIVER FROM THE CITY OF CAMDEN LAND DEVELOPMENT ORDINANCE, SECTION 577-231, MINIMUM PARKING SPACE WIDTH REQUIRED IS 9', PROPOSED IS 8.5', MINIMUM AISLE WIDTH IS 24' PROPOSED IS 22'. AISLE WIDTH REDUCED IN ORDER TO ALLOW FOR 18' DEEP SPACES.

LEGEND

EXISTING		PROPOSED
	BUILDING	
	FULL DEPTH PAVEMENT	
	FORMER ROW LINE	
	EXISTING PROPERTY LINE TO BE REMOVED	
	PROPERTY LINE	
	ADJACENT PROPERTY LINE	
	SETBACK LINE	
	RIGHT-OF-WAY LINE	
	ROADWAY CENTERLINE	
	FENCE	
	CURB	
	SIDEWALK	
	CONCRETE	
46.34 x	SPOT ELEVATION	46.34 x
	IRRIGATION HEAD	
	LIGHT	
	BOLLARD	
-o-	SIGN	-o-
	SIGN POST AND BOARD	
50	CONTOUR	50
W	WATER LINE DOMESTIC	W
W	WATER LINE FIRE	F
S	SANITARY SEWER	S
RD	ROOF DRAIN	RD
D	STORM SEWER	D
OE	OVERHEAD ELECTRIC	OE
UE	UNDERGROUND ELECTRIC	E
OT	OVERHEAD TELEPHONE	OT
UT	UNDERGROUND TELEPHONE	UT
CATV	CABLE TV JUNCTION BOX	CATV
CATV	CABLE TV MANHOLE	CATV
C	COMMUNICATIONS MANHOLE	C
C	COMMUNICATIONS HANDHOLE	C
FO	FIBER HANDHOLE	FO
FO	FIBER JUNCTION BOX	FO
FO	FIBER MANHOLE	FO
G	GAS MANHOLE	G
	GAS METER	
G	GAS STUB OUT	G
G	GAS VALVE	G
E	ELECTRICAL HANDHOLE	E
E	ELECTRICAL METER	E
E	ELECTRICAL MANHOLE	E
EPP	ELECTRICAL PANEL BOX	EPP
E	ELECTRICAL PEDESTAL	E
E	ELECTRICAL STUB OUT	E
E	ELECTRICAL STUB OUT	E
MW	MONITORING WELL	MW
	SANITARY SEWER CLEANOUT	
SM	SANITARY SEWER CLEANOUT	SM
S	SANITARY MANHOLE	S
ST	STEAM MANHOLE	ST
D	STORM DRAIN CLEANOUT	D
D	STORM DRAIN MANHOLE	D
	STORM DRAIN FLARED END SECTION	
	STORM DRAIN HEADWALL	
	STORM DRAIN ID	
	STORM DRAIN INLET	
	STORM ROOF DRAIN	
	STORM STAND PIPE	
	STORM DRAIN WING WALL	

LEGEND

EXISTING		PROPOSED
TH	TELEPHONE HANDHOLE	TH
TJB	TELEPHONE JUNCTION BOX	TJB
T	TELEPHONE MANHOLE	T
TPP	TELEPHONE PANEL BOX	TPP
T	TELEPHONE PEDESTAL	T
ECS	EMERGENCY CALL STATION	ECS
	SEPTIC TANK	
	UTILITY POLE	
	BUSH	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	STUMP	
	FIRE HYDRANT	
W	WATER MANHOLE	W
	WATER POST INDICATOR VALVE	
	SIAMESE / FIRE DEPARTMENT CONNECTION	
	WATER STUB OUT	
	WATER VALVE	
	WATER METER	
	CURB BOX	
U	UNIDENTIFIED HANDHOLE	
UJB	UNIDENTIFIED JUNCTION BOX	
U	UNIDENTIFIED MANHOLE	
UPP	UNIDENTIFIED PANEL BOX	
U	UNIDENTIFIED PEDESTAL	
	UNIDENTIFIED VALVE	

STORMWATER MANAGEMENT MAINTENANCE:

SM-1 TO THE EXTENT PERMITTED BY LAW, THE CITY WILL AT ALL REASONABLE TIMES HAVE A RIGHT OF INGRESS AND EGRESS OVER THE EASEMENT AREA AND THE RIGHT TO ENTER THE EASEMENT AREA VIA ANY ROAD OR PARKING LOT LOCATED WITHIN ANY COMMON AREA OWNED BY THE GRANTOR TO INSPECT THE SYSTEM LOCATED IN THE EASEMENT AREA.

SM-2 EXCEPT IN THE CASE OF AN EMERGENCY, THE CITY WILL PROVIDE NOT LESS THAN SEVEN (7) DAYS PRIOR NOTICE TO PERFORMING ANY INSPECTION OR MONITORING OF THE SYSTEM IN ACCORDANCE WITH THE APPROVED PLAN. THE APPLICANT AGREES THAT THE FAILURE TO TIMELY OBJECT AFTER RECEIVING NOTICE FROM THE CITY CONSTITUTES CONSENT TO INSPECTION OF THE PROPERTY WITHIN THE TIMEFRAME SPECIFIED IN THE NOTICE.

SM-3 IF AFTER REASONABLE NOTICE BY THE CITY, THE APPLICANT FAILS TO MAINTAIN THE SYSTEM IN ACCORDANCE WITH THE APPROVED MANUAL AND MAINTENANCE PLAN, THE CITY MAY PERFORM ANY MAINTENANCE NEEDED TO CORRECT A CONDITION THAT IMPACTS THE EFFECTIVENESS OF ROUTINE MAINTENANCE AND OPERATIONS OF THE SYSTEM AND COLLECT ANY COSTS INCURRED AS A RESULT FROM EACH OWNER OF THE SYSTEM AND IN THE SAME MANNER AS REAL PROPERTY TAXES ARE COLLECTED. IN ADDITION, THE CITY MAY SEEK REIMBURSEMENT UNDER ANY OTHER METHOD LEGALLY AVAILABLE TO COLLECT DEBTS OWED.

SM-4 THE APPLICANT AGREES TO INDEMNIFY AND SAVE THE CITY HARMLESS FROM ANY AND ALL CLAIMS FOR DIRECT DAMAGES TO PERSONS OR PROPERTY ARISING FROM INSPECTIONS PERFORMED BY THE CITY.

NOT FOR CONSTRUCTION

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.8800
NJ COA NO. GA28033300

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

ZONING COMPLIANCE AND LEGEND

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

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PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	N.T.S.
DRAWN BY	BTM
APPROVED BY	ATB

CS0002

SHEET 2 OF 17

U:\Acad\proj\HAGEN\HAGEN1801 - 201 N Front Street\DESIGN_SHEETS\CS0002.dwg PLOTTED: 2/8/2019 5:09 PM, BY: Brandon Matalka PLOTSTYLE: Pennoni VCE.ctb PROJECT STATUS: —

OWNER/APPLICANT:

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

PROJECT LOCATION:

201 NORTH FRONT STREET
CITY OF CAMDEN, CAMDEN COUNTY, NEW JERSEY
BLOCK 63, LOT 70.01 AND 70.02

SURVEY NOTES:

1. A BOUNDARY AND TOPOGRAPHIC SURVEY FOR THE SITE WAS PERFORMED BY PENNONI ASSOCIATES INC. ON 12/21/2018 AND IS REFERENCED HEREIN.
2. LOCATIONS OF ON AND OFF SITE UTILITIES AS SHOWN ARE APPROXIMATE AND MAY OR MAY NOT BE COMPLETE. THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO INITIATING ANY ACTIVITY THAT MAY AFFECT THEIR USE OR LOCATION.
3. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88) BASED ON GPS OBSERVATION.
4. HORIZONTAL COORDINATE DATUM IS IN NEW JERSEY STATE PLANE COORDINATE SYSTEM NORTH AMERICAN DATUM 1983 (NJSPCS NAD 83) BASED ON GPS OBSERVATION.
5. UNDERGROUND UTILITY LINE DEPICTED HEREON ARE BASED UPON SUBSURFACE UTILITY LOCATION PLAN FILE AT THE CITY OF CAMDEN CITY HALL RECORDS ROOM SHEET 13-7
6. A CONVERSION FACTOR OF 1.1 FEET IS ADDED TO 1988 NAVD TO OBTAIN 1929 NGVD. FOR EXAMPLE:

ELEVATION (1988 NAVD) 11.50' + CONVERSION FACTOR 1.1' = ELEVATION (1929NGVD) 12.60'

GENERAL NOTES:

G-1. THE LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE AND ARE BASED UPON BEST AVAILABLE INFORMATION PROVIDED TO ENGINEER. THE FOLLOWING SHALL BE PERFORMED:

A) VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE WORK AREA PRIOR TO CONSTRUCTION.

B) EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING POWER, COMMUNICATIONS, WATER OR GAS LINES TO PREVENT DAMAGE TO THESE LINES.

C) IMMEDIATELY REPAIR ANY DAMAGE TO EXISTING UTILITIES IN A MANNER APPROVED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

G-2. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN SITE EXAMINATION AND DETERMINING THE ACTUAL NATURE AND EXTENT OF EXISTING CONDITIONS PRIOR TO UNDERTAKING WORK.

G-3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS ATTEMPTED TO LOCATE AND INDICATE EXISTING FACILITIES ON THESE PLANS; HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.

G-4. BEFORE EXCAVATING THE PROJECT AREA THE CONTRACTOR IS TO VERIFY THE LOCATION OF ANY UNDERGROUND UTILITY (GAS MAINS, WATER MAINS, SEWER LINES, TELEPHONE LINES, ETC.). SHOULD ANY UNDERGROUND UTILITY INTERFERE WITH PROJECT CONSTRUCTION THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES THREE (3) DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION FOR ACCURATE FIELD LOCATIONS. FOR UTILITY MARKOUT CALL 1-800-272-1000.

G-5. VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE PERFORMING ANY WORK. NOTIFY THE ENGINEER OF ANY CONDITIONS OR DIMENSIONS THAT WOULD PREVENT OR HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.

G-6. THE CONTRACTOR AND OR ENGINEER SHALL RESOLVE APPARENT CONTRADICTIONS IN CONTRACT DOCUMENTS WITH THE OWNER BEFORE AFFECTED WORK PROCEEDS.

G-7. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER, OWNER'S REPRESENTATIVE AND/OR THE DESIGN ENGINEER MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE.

G-8. EXISTING SANITARY SEWERS THAT ARE TO REMAIN IN SERVICE SHALL REMAIN IN ACTIVE OPERATION AT ALL TIMES. EXISTING WATER MAINS SHALL REMAIN IN ACTIVE OPERATION EXCEPT AS NECESSARY FOR CONNECTIONS. PROVIDE A MINIMUM OF TWO WEEKS NOTICE TO THE ENGINEER AND OWNER PRIOR TO SERVICE DISRUPTIONS.

G-9. UTILIZE A MOBILE SWEEPER AND WATER TRUCK DAILY FOR DUST CONTROL ALONG HAUL ROUTES AND IN AREAS MADE AVAILABLE FOR CONSTRUCTION.

G-10. PREVENT WATER PONDING RESULTING FROM CONSTRUCTION OPERATIONS. PROMPTLY REMOVE ANY PONDED WATER TO THE SATISFACTION OF THE ENGINEER.

G-11. ALL TOPSOIL SHALL BE STRIPPED, STOCKPILED AND REUSED ON SITE AND MAY NOT BE TRANSPORTED OFF-SITE WITHOUT WRITTEN REQUEST AND RESPONSE FROM THE OWNER AUTHORIZING SAME..

G-12. CONTRACTOR SHALL WORK TO MINIMIZE EXCESS SOIL GENERATED. IF IT IS NECESSARY TO REMOVE SOIL FROM THE SITE, IT SHOULD BE DISPOSED OF AT A PERMITTED DISPOSAL FACILITY. PROVIDE THE NAME OF THE DISPOSAL FACILITY AND SOIL SAMPLE RESULTS 7 DAYS PRIOR TO HAULING SOIL. COPIES OF ALL BILLS-OF-LADING SHALL BE PROVIDED TO THE ENGINEER WITHIN 24 HOURS OF SOIL LEAVING THE SITE. CONTRACTOR SHALL ASSUME OWNERSHIP/RESPONSIBILITY OF EARTH OR CONCRETE SPOILS AND/OR DEBRIS GENERATED DURING CONSTRUCTION.

G-13. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION WHICH ARE DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER AND OWNER.

G-14. VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE PERFORMING ANY WORK. NOTIFY THE ENGINEER OF ANY CONDITIONS OR DIMENSIONS THAT WOULD PREVENT OR HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.

G-15. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS, EQUIPMENT AND UNUSED MATERIALS FROM OWNER PROPERTY AND RESTORE THE AREAS TO THEIR ORIGINAL CONDITION, AS APPROVED BY THE ENGINEER.

G-16. THE CONTRACTOR WILL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED, OR REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.

G-17. A GEOTECHNICAL ENGINEER IS REQUIRED TO INSPECT, TEST, AND CERTIFY TO THE COMPACTION OF ALL LOAD BEARING FILLS.

G-18. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

G-19. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, AND THE CONSTRUCTION MANAGER, AND SHALL PROMPTLY NOTIFY THE CONSTRUCTION MANAGER AND THE CONTRACTOR SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.

G-20. THE BOTTOM OF ALL EXCAVATIONS AND COMPACTED EARTHWORK SHALL BE INSPECTED AND APPROVED BY A REGISTERED GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR PRIOR TO PLACING CONCRETE STRUCTURES AND/OR BACKFILLING. APPROVAL BY THE GEOTECHNICAL ENGINEER, IN WRITING, SHALL INDICATE THAT THE SOIL IS ADEQUATE TO SAFELY SUPPORT A FOUNDATION PRESSURE OF 2,000 PSF. EXCAVATION BELOW THE ANTICIPATED BOTTOMS OF CONCRETE STRUCTURES ALONG WITH PLACEMENT OF COMPACTED BACKFILL MAY BE REQUIRED.

G-21. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK AREA AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.

G-22. ALL TRAFFIC CONTROL DEVICES TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION. SIGN POSTS SHALL BE GALVANIZED STEEL AND ALL SIGN MATERIALS SHALL BE MADE OF REFLECTIVE SHEETING ON ALUMINUM BLANKS IN ACCORDANCE WITH NJDOT STANDARD SPECIFICATIONS.

G-23. ALL DIMENSIONING IS TO CURB OR BUILDING FACE, UNLESS OTHERWISE NOTED.

G-24. UNLESS OTHERWISE INDICATED, ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2007, AS AMENDED AND SUPPLEMENTED TO DATE.

G-25. ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI, UNLESS OTHERWISE NOTED.

G-26. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.

G-27. ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN.

G-28. NO WORK IS TO START UNTIL A PRECONSTRUCTION CONFERENCE IS HELD. THE PRECONSTRUCTION CONFERENCE SHALL BE SCHEDULED WITH THE MUNICIPAL ENGINEER'S OFFICE. A MINIMUM OF THREE WORKING DAYS PRIOR TO THE START OF WORK.

G-29. THE APPLICANT WILL COORDINATE ROAD OPENING PERMITTING.

G-30 ALL NEW ROADWAY CURBING SHALL BE SET AT 6" ABOVE EXISTING ROADWAY GRADE UNLESS OTHERWISE NOTED ON PLANS.

G-31 ALL NEW CONCRETE PAVING AND CURBING SHALL MEET FLUSH WITH EXISTING.

G-32. THE APPLICANT WILL COMPLY WITH THE CITY'S ORDINANCE ESTABLISHING STANDARDS FOR THE SUBMISSION OF MAPS AND OTHER DOCUMENTS IN A DIGITAL FORMAT. THE APPLICANT SHOULD BE AWARE THAT FINAL SIGNATURES OR APPROVAL AND BUILDING PERMITS WILL NOT BE ISSUED UNTIL THE REQUIRED INFORMATION IS RECEIVED.

G-33. NO WORK IS TO START UNTIL A PRECONSTRUCTION CONFERENCE IS HELD. THE PRECONSTRUCTION CONFERENCE SHALL BE SCHEDULED WITH THE PLANNING BOARD'S ENGINEER'S OFFICE (SENIOR INSPECTOR FOR CAMDEN CITY AT 856-795-9595 EXT. 1131) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO START OF WORK.

UTILITY NOTES:

1. ALL UTILITIES AND RELATED APPURTENANCES ON SITE SHALL BE INSTALLED UNDERGROUND OR LOCATED IN A BUILDING.
2. ALL PROPOSED CONNECTIONS TO EXISTING OVERHEAD ELECTRIC OR TELEPHONE DISTRIBUTION SUPPLY LINES SHALL BE INSTALLED UNDERGROUND.
3. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.
4. THE CONTRACTOR SHALL BE REQUIRED TO USE THE ONE-CALL CENTER TELEPHONE NUMBER 1-800-272-1000 FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES..
5. RESET ALL WATER VALVES BOXES, SANITARY CLEANOUTS OR VENTS, GAS VALVES, SANITARY RIMS, INLET GRATES AND ALL OTHER UTILITY BOXES OR RIMS TO NEW GRADES AS REQUIRED.
6. ALL OPEN TRENCHES OR EXCAVATED SIDEWALKS SHALL BE COVERED TO PROVIDE ACCESS TO PEDESTRIANS FOR VEHICULAR TRAFFIC, BUSINESSES AND RESIDENTS.
7. VALVES TO BE DOUBLE DISK GATE VALVES PER AWWA STANDARDS.
8. ALL WATER VALVE BOXES SHALL HAVE THE WORD "WATER" CAST IN THE COVER.
9. THE WATER TAPS SHALL BE PERFORMED BY CONTRACTOR WITH OVERSIGHT BY CITY ENGINEER AND WATER COMPANY.
10. SELECT FILL FOR WATER/SEWER TRENCH INSTALLATION SHALL BE DENSE GRADED AGGREGATE I-5, IN ACCORDANCE WITH THE SPECIFICATION SUBSECTION 901.08 OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION AND CONFORM TO THE TABLE IN SECTION 577-229.H OF THE CITY OF CAMDEN ORDINANCE.
11. THRUST BLOCKS AND RESTRAINTS SHALL BE INSTALLED AT ALL BENDS AND FITTINGS. THRUST BLOCKS SHALL HAVE TWENTY-EIGHT (28) DAY STRENGTH OF 4,000 P.S.I.
12. A DROP MANHOLE CONNECTION SHALL BE USED WHERE THERE IS A DIFFERENCE IN ELEVATION OF TWO (2) FEET OR GREATER. REFER TO CITY DETAILS.
13. AN AS-BUILT PLAN SHALL BE REQUIRED ON ALL COMPLETED WATER AND SEWER MAINS. THE AS-BUILT SHALL BE BASED ON A SURVEY BY A LICENSED NEW JERSEY PROFESSIONAL LAND SURVEYOR. AN ELECTRONIC FORMAT OF THE SAME IN COMPLIANCE WITH THE CITY ORDINANCE SHALL ALSO BE SUBMITTED. UPON COMPLETION OF THE WATER/SEWER INSTALLATIONS, THE APPLICANT SHALL SUBMIT THREE (3) SETS OF "AS BUILT" PLANS, TO THE CIP AND NEW JERSEY AMERICAN WATER. THE CIP WILL AUTHORIZE SUPPLY WATER UPON ACCEPTANCE OF THE "AS BUILT" DRAWINGS. SUBMISSION OF RECORD DRAWINGS IS REQUIRED IN ACCORDANCE WITH ORDINANCE FOR WATER SERVICES LINES AND SEWER LATERALS.
14. ALL PIPE SHALL BE MANUFACTURED AND SUPPLIED WITHOUT LIFTING HOLES.
15. TAPPING SLEEVE SHALL BE SOLID DUCTILE IRON MUELLER H-615 OR APPROVED EQUAL. THE TAPPING SLEEVE SHALL PASS PRESSURE TESTING BASED ON AWWA STANDARDS BEFORE TAP IS MADE.
16. FOR ALL SERVICES INCLUDED HEREIN TWO (2) GATE VALVES ARE REQUIRED THAT ARE TO BE INSTALLED BY THE APPLICANT; A TAPPING VALVE, LOCATED AT THE TAP AND CURB VALVE, LOCATED IN THE SIDEWALK BEFORE THE METER. TAPPING GATES SHALL BE FURNISHED OPENED RIGHT. ALL TAPPING AND CURB VALVES SHALL BE DOUBLE DISC GATE VALVES AND MEET AWWA STANDARDS.
17. FOR TAPS OFF MAINS 2-INCHES AND LARGER, THE APPLICANT SHALL FURNISH AND INSTALL AN ADDITIONAL GATE VALVE ADJACENT TO THE TAPPING VALVE. NO TAPS SHALL BE PERMITTED ON MAINS LARGER THAN 20-INCHES UNLESS THERE IS NO ALTERNATIVE WATER SOURCE, AND SPECIAL WRITTEN APPROVAL IS ISSUED BY THE CIP.
18. VALVE BOX PARTS FOR ALL VALVES SHALL BE PROVIDED BY THE APPLICANT. ALL TAPPING GATE VALVES LARGER THAN 2-INCHES AND ALL CURB VALVES/STOPS REGARDLESS OF SIZE REQUIRE A VALVE BOX WITH THE WORD "WATER" CAST IN THE COVER. BURIED CORPORATION VALVES/STOPS SHALL BE USED AT THE TAP FOR CLASS K COPPER SERVICES 2-INCHES AND SMALLER.
19. AFTER OBTAINING THE REQUIRED PERMITS (STREET OPENING, TAP, AND METER) THE APPLICANT SHALL CALL NEW JERSEY AMERICAN WATER AT (856) 764-6924 TO SCHEDULE THE TAP. THE EXCAVATION SHALL BE COMPLETED TWENTY-FOUR (24) HOURS PRIOR TO THE SCHEDULED TAP, AND VERIFIED BY CIP OR ITS AUTHORIZED AGENT BEFORE THE TAP WILL BE INSTALLED. EXCAVATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA REQUIREMENTS FOR SHEETING AND SAFETY.
20. ALL WATER PIPES, FITTING AND VALVES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA REQUIREMENTS.
21. INSTALLATION OF ALL WATER/SEWER MAINS AND SERVICES SHALL COMPLY WITH CITY ORDINANCE.
22. SUBMISSION OF RECORD DRAWINGS IS REQUIRED IN ACCORDANCE WITH ORDINANCE FOR WATER SERVICES LINES AND SEWER LATERALS.
23. THE SEPARATION OF DOMESTIC WATER AND FIRE SERVICE ALONG WITH THE NEW DOMESTIC WATER METER WILL BE INSTALLED WITHIN THE PROPOSED BUILDING'S MECHANICAL EQUIPMENT ROOM, WITH REMOTE METER STATUS INSTALLED FOR EXTERIOR METER READING.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST RELATED TO ANY REQUIRED ISOLATION OF THE WATERMAIN AND BY-PASSING OF THE SEWER IN ORDER TO MAKE A PROPOSED CONNECTION.
25. ALL TAPPING SLEEVES 2-INCHES AND LARGER SHALL BE SOLID DUCTILE IRON SUCH AS MUELLER H-615 TAPPING SLEEVE OR APPROVED EQUAL. THE TAPPING SLEEVE SHALL PASS PRESSURE TESTING BASED ON AWWA STANDARDS BEFORE TAP IS MADE.
26. ALL RC PIPE SHALL BE LINED ON THE INTERIOR WITH A COAT TAR EPOXY SEAL COAT WITH A MINIMUM OF 4 MILS IN THICKNESS (DFT) (SECTION 577-229)
27. STORM INLETS WHICH CONNECT DIRECTLY TO THE CITY COMBINED SEWERS MUST BE FURNISHED WITH A SUMP AND TRAP PER CITY STANDARD DETAILS. THE DETAILS OF THE SAME MUST BE SHOWN ON THE PLAN.
28. THE APPLICANT SHALL OWN, MAINTAIN, AND OPERATE ALL WATER/SEWER SERVICES; AND ANY MAIN(S) THAT ONLY SERVICE THE PROPOSED SITE. ALL WATER/SEWER SERVICE LATERALS BEYOND THE RIGHT-OF-WAY OR EASEMENT SHALL BE OWNED, MAINTAINED AND OPERATED BY THE APPLICANT.
29. THE CITY ENGINEER AND AMERICAN WATER ENTERPRISES SHALL BE GIVEN 48 HOURS ADVANCE NOTICE OF SANITARY SEWER/WATERMAIN AND THE REPRESENTATIVES MUST WITNESS THE WORK AND CONNECTION.
30. ALL SEWER INSTALLATION SHALL CONFORM TO THE REQUIREMENT OF THE PROCEDURE MANUAL OF THE CITY OF CAMDEN.
31. ALL NEW MANHOLES AND CATCH BASINS SHALL HAVE AN EXTERIOR AND INTERIOR COATING OF CARBOLINE COAL TAR EPOXY 300M, OR APPROVED EQUAL, TWO COATS. EACH MANHOLE BASE SHALL BE PROVIDED CIRCULAR OPENINGS AT THE REQUIRED LOCATIONS AND ELEVATIONS FOR THE PROPER CONNECTION OF ALL PIPES. THE FLEXIBLE CONNECTIONS SHALL BE A-LOK FLEXIBLE CONNECTOR BY A-LOK PRODUCTS, OR APPROVED EQUAL.THE A-LOK FLEXIBLE CONNECTOR SHALL BE CAST INTEGRALLY IN THE MANHOLE/INLET WALL FOR ALL PIPE CONNECTIONS.
32. MANHOLE FRAMES AND COVERS ARE TO PROVIDE FOR A MINIMUM OF THIRTY INCH CLEAR OPENING AT THE COVER IN ORDER TO ALLOW EASY ACCESS UNDER CONFINED SPACE ENTRY REQUIREMENTS. CAMPBELL FOUNDRY PATTERN NUMBER 1012B OR NJDOT APPROVED EQUAL. THE MINIMUM DIAMETER MANHOLE SHALL BE 48-INCHES. A MINIMUM ACCESS DIAMETER OF 30-INCHES SHALL BE PROVIDED.
33. ALL RCP PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.
34. ALL WATER SERVICE PIPING SHALL BE CLASS 52 CEMENT LINE DUCTILE IRON PIPE (CLDIP).
35. ALL SANITARY SEWER MAIN SHALL BE SDR 26 PVC PER ASTM D2241 FOR ALL PIPING 5 FT. FEET OUTSIDE OF BUILDING.
36. DETAILED METER AND BACK FLOW PREVENTION SET UP INSIDE THE BUILDING, SHALL BE DEPICTED ON THE PLUMBING PLANS, TO BE SUBMITTED FOR BUILDING PERMITS.
37. FOR A REGULAR FIRE SUPPRESSION SYSTEM (COMBINED SERVICE LINE LARGER THAN 2"), A COMBINED REDUCED PRESSURE DETECTOR ASSEMBLY (AMES 5000 SS, AMES 5000 RPDA OR WATTS 9098 RPDA) SHALL BE INSTALLED ON THE MAIN FIRE SERVICE LINE AND A REDUCED PRESSURE BACKFLOW PREVENTER ON THE BYPASS (AMES 4000 SS OR WATTS 909). ON THE LIMITED FIRE SUPPRESSION SYSTEM (COMBINED SERVICE LINE 1.5" OR 2"), A FIRE LINE DETECTOR CHECK WITH A SINGLE CHECK VALVE (AMES 1000 DCV) SHALL BE INSTALLED ON THE MAIN FIRE LINE AND A REDUCED PRESSURE BACKFLOW PREVENTER (AMES 4000 SS OR WATTS 909) SHALL BE INSTALLED DOWNSTREAM OF THE BYPASS. ALL REGULAR FIRE SUPPRESSION SYSTEMS MUST HAVE OS&Y VALVES, HOWEVER, LIMITED FIRE SUPPRESSION SYSTEMS MAY USE BALL VALVES (VICTAULIC SERIES 728 FIRELOCK) INSTEAD OF OS&Y VALVES. THE FIRE UNIT SHALL BE FURNISHED WITH A 5/8 INCH X 3/4 INCH METERED BYPASS. THE APPLICANT SHALL APPLY FOR AND REGISTER ALL RPZ WITH NJDEP.
38. ALL METER SIZES 2 INCHES THROUGH 6 INCHES SHALL BE SINGLE COMPOUND METERS AND ALL METERS 8 INCHES AND LARGER SHALL BE DUPLEX COMPOUND MANIFOLD METERS.
39. ALL METERS SHALL BE ADEQUATELY RESTRAINED WITH METAL BRACKETS FASTENED TO THE FLOOR OR WALL OR OTHER APPROVED MEANS SUCH AS UNIFLANGES WHERE INTERNAL PIPE PRESSURE AND FLOW WARRANT SUCH RESTRAINTS. METERS, DETECTOR CHECKS, AND VALVES MAY BE SEATED ON CONCRETE BLOCK AND TAPERED SHIMS TO PROVIDE ADEQUATE SUPPORT. METERS SHALL BE INSTALLED APPROXIMATELY 36" ABOVE FLOOR GRADE.
40. THE STRENGTH OF PRECAST CONCRETE FOR INLETS AND MANHOLES SHALL BE EQUAL TO OR EXCEED 4,000 PSI.
41. AN AS-BUILT PLAN SHALL BE REQUIRED FOR THE DOWNSTREAM STORMWATER COLLECTION SYSTEM. THE AS-BUILT SHALL BE BASED ON A SURVEY BY A LICENSED NEW JERSEY PROFESSIONAL LAND SURVEYOR. AN ELECTRONIC FORMAT OF THE SAME IN COMPLIANCE WITH THE CITY ORDINANCE SHALL ALSO BE SUBMITTED. UPON COMPLETION OF THE STORM WATER COLLECTION SYSTEM INSTALLATION, THE APPLICANT SHALL SUBMIT THREE (3) SETS OF "AS BUILT" PLANS, TO THE CITY OF CAMDEN AND PLANNING BOARD ENGINEER.
42. FOR A REGULAR FIRE SUPPRESSION SYSTEM A REDUCED PRESSURE DETECTOR ASSEMBLY (AMES 5000 SS, AMES 5000 RPDA OR WATTS 9098 RPDA*) SHALL BE INSTALLED ON THE MAIN FIRE SERVICE LINE.
43. ALL MANHOLE CHANNELS AND BENCH SHALL BE PRECAST.
44. IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT TO RELOCATE, ISOLATE FOR CONNECTION AND PROPERLY ABANDON ALL IMPACTED UTILITIES AT NO COST TO THE CITY.
44. VIDEO SEWER INSPECTION (CCTV), INFILTRATION/EXFILTRATION TESTING AND PIPE ALIGNMENT TESTING SHALL BE PERFORMED ON ALL NEW SANITARY AND STORM SEWERS (RCP AND PVC) PRIOR TO ACCEPTANCE AND/OR DEDICATION.
45. A CCTV OF THE SEWERMAIN ON EAST STATE STREET (RIVER AVENUE TO HIGH STREET) SHALL BE PERFORMED AND SUBMITTED TO THE CITY FOR REVIEW PRIOR TO SIGNING OF PLAN.
46. ANY PROPOSED WORK INVOLVING CITY SEWER UTILITIES MUST BE SCHEDULED FOR INSPECTION AT LEAST 48 HOURS IN ADVANCE WITH THE CITY OF CAMDEN (OWNER) AND NEW JERSEY AMERICAN WATER (OPERATOR).
47. ALL DIRECT CONNECTIONS TO THE EXISTING COMBINED SEWER AND SANITARY SEWER SHALL BE MADE WITH AN "INSERTA TEE" OR APPROVED EQUAL.
48. UTILITY POLES SHALL BE RELOCATED A MINIMUM OF 18" FROM THE FRONT FACE OF THE CURB TO THE FRONT FACE OF A UTILITY POLE.
49. MANHOLE INTERIOR WALLS AND BENCHES SHALL BE PATCHED WITH CEMENTITIOUS PATCHING/PLUGGING COMPOUNDS AS MANUFACTURED BY TAMMS INC., OR APPROVED EQUAL.

UTILITY PROVIDERS

CAMDEN COUNTY M.U.A.
1645 FERRY AVENUE
CAMDEN, NJ 08104

PUBLIC SERVICE ELECTRIC & GAS
PO BOX 790
CRANFORD, NJ 07016-0790

VERIZON
540 BROAD STREET
NEWARK, NJ 07101

AMERICAN WATER
PO BOX 52747
PHOENIX, AZ 85072

NEW JERSEY AMERICAN WATER
PO BOX 578
ALTON, IL 62002
(SERVICING EAST CAMDEN & CRAMER HILL)

COMCAST CABLEVISION
1250 HADDONFIELD-BERLIN ROAD
CHERRY HILL, NJ 08034-0404

HIGH-VOLTAGE PROXIMITY ACT

THE CONTRACTOR IS NOTIFIED THAT ALL PROVISIONS OF THE HIGH-VOLTAGE PROXIMITY ACT, P.L. 1948, c. 249 AS AMENDED THROUGH MAY 20, 1987 SHALL BE STRICTLY ADHERED TO. THE CONTRACTOR SHALL ALSO ADHERE TO ALL PROVISIONS OF PART 1926.550, SUBPART N OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF DECEMBER, 1970. PARTICULAR ATTENTION IS DIRECTED TO THE PROVISIONS OF THE ABOVE ACT REQUIRED WARNING SIGNS, NOTIFICATION TO POWER COMPANY AND RESPONSIBILITY FOR SAFEGUARDS AND ALSO PROHIBITED ACTIVITY.

A COPY OF THE HIGH-VOLTAGE PROXIMITY ACT IS AVAILABLE IN THE OFFICE OF THE COUNTY ENGINEER OR MAY BE OBTAINED FROM THE NEW JERSEY DEPARTMENT OF LABOR, DIVISION OF WORKPLACE STANDARDS, OFFICE OF SAFETY COMPLIANCE, TRENTON, NJ 08625

SAFETY:

1. THE OWNER, OR HIS REPRESENTATIVE, IS TO DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF SITE IMPROVEMENTS PURSUANT TO N.J.A.C. 5:23-2.21 (E) OF THE NEW JERSEY UNIFORM CONSTRUCTION CODE AND CFR 1926.32 (F) (OSHA COMPETENT PERSON).

STORMWATER MANAGEMENT MAINTENANCE:

SM-1 TO THE EXTENT PERMITTED BY LAW, THE CITY WILL AT ALL REASONABLE TIMES HAVE A RIGHT OF INGRESS AND EGRESS OVER THE EASEMENT AREA AND THE RIGHT TO ENTER THE EASEMENT AREA VIA ANY ROAD OR PARKING LOT LOCATED WITHIN ANY COMMON AREA OWNED BY THE GRANTOR TO INSPECT THE SYSTEM LOCATED IN THE EASEMENT AREA.

SM-2 EXCEPT IN THE CASE OF AN EMERGENCY, THE CITY WILL PROVIDE NOT LESS THAN SEVEN (7) DAYS PRIOR NOTICE TO PERFORMING ANY INSPECTION OR MONITORING OF THE SYSTEM IN ACCORDANCE WITH THE APPROVED PLAN. THE APPLICANT AGREES THAT THE FAILURE TO TIMELY OBJECT AFTER RECEIVING NOTICE FROM THE CITY CONSTITUTES CONSENT TO INSPECTION OF THE PROPERTY WITHIN THE TIMEFRAME SPECIFIED IN THE NOTICE.

SM-3 IF AFTER REASONABLE NOTICE BY THE CITY, THE APPLICANT FAILS TO MAINTAIN THE SYSTEM IN ACCORDANCE WITH THE APPROVED MANUAL AND MAINTENANCE PLAN, THE CITY MAY PERFORM ANY MAINTENANCE NEEDED TO CORRECT A CONDITION THAT IMPACTS THE EFFECTIVENESS OF ROUTINE MAINTENANCE AND OPERATIONS OF THE SYSTEM AND COLLECT ANY COSTS INCURRED AS A RESULT FROM EACH OWNER OF THE SYSTEM AND IN THE SAME MANNER AS REAL PROPERTY TAXES ARE COLLECTED. IN ADDITION, THE CITY MAY SEEK REIMBURSEMENT UNDER ANY OTHER METHOD LEGALLY AVAILABLE TO COLLECT DEBTS OWED.

SM-4 THE APPLICANT AGREES TO INDEMNIFY AND SAVE THE CITY HARMLESS FROM ANY AND ALL CLAIMS FOR DIRECT DAMAGES TO PERSONS OR PROPERTY ARISING FROM INSPECTIONS PERFORMED BY THE CITY.

ENVIRONMENTAL NOTES:

E-1. ALL MATERIAL BROUGHT ON SITE SHALL BE CERTIFIED CLEAN FILL, SAMPLED, AND ANALYZED IN ACCORDANCE WITH STANDARD NJDEP QUALITY ASSURANCE STANDARDS AND PRACTICES AT A MINIMUM, AS SPECIFIED IN N.J.A.C. 7:26E. TO FULLY CHARACTERIZE THE CONTAMINANTS IN THE LATEST SOIL CLEANUP CRITERIA (SCC). THE CONTRACTOR SHALL SUBMIT TO THE OWNER WRITTEN DOCUMENTATION FROM A LABORATORY CERTIFIED IN NEW JERSEY ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM (ELCP) AND IN ACCORDANCE WITH N.J.A.C. 7:18 PRIOR TO PLACEMENT OF THE MATERIAL ON SITE. THE MATERIAL MUST NOT CONTAIN CONTAMINANTS ABOVE THE MOST RESTRICTIVE DIRECT CONTACT OR IMPACT TO GROUNDWATER (IGW) SCC.

E-2 DEWATERING ACTIVITIES SHALL BE CONDUCTED PURSUANT TO CCMUA AND/OR NJDEP PERMITTING.

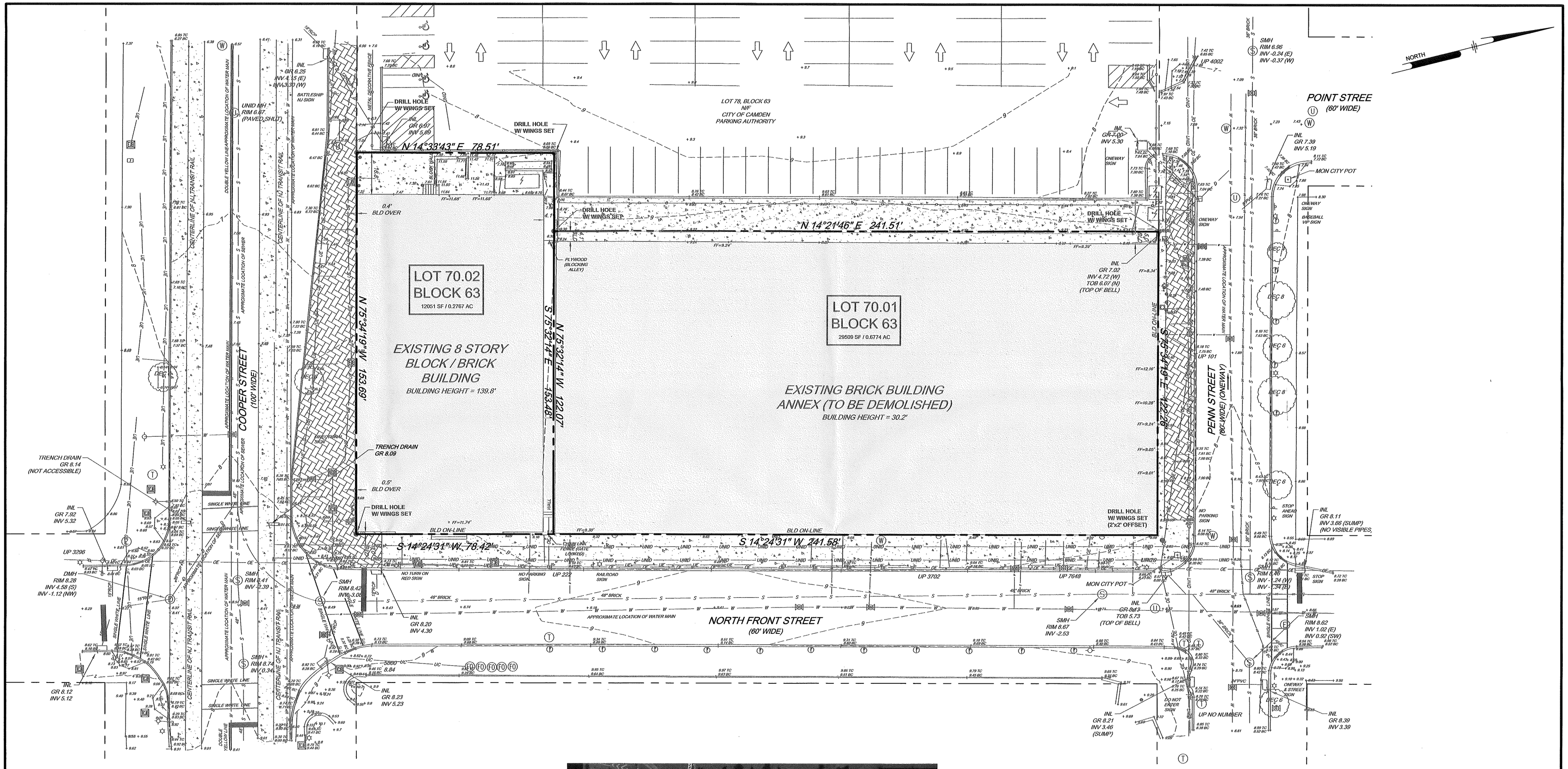
E-3 ABANDONMENT OF EXISTING MONITORING WELLS SHALL BE COORDINATED WITH THE ENGINEER.

200 FT. PROPERTY OWNERS

OWNER & ADDRESS REPORT

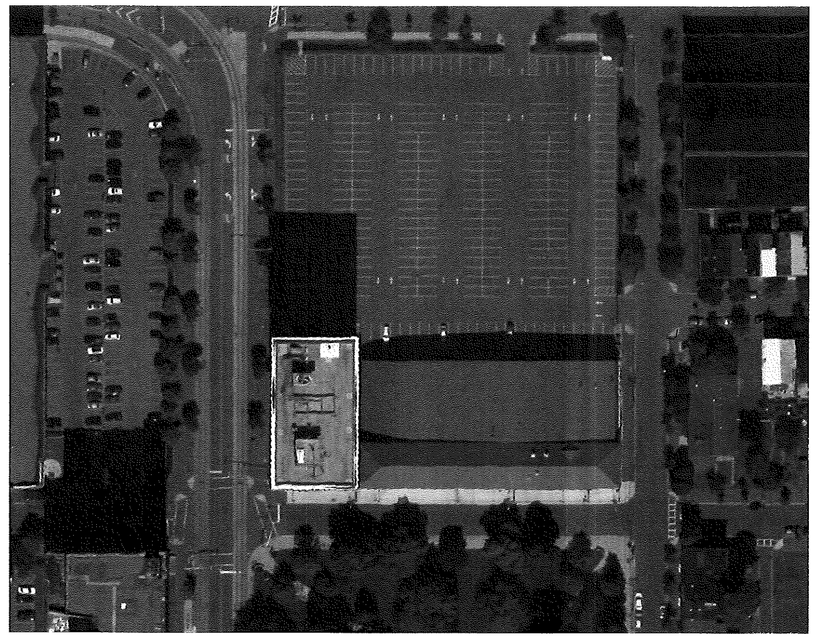
CAMDEN CITY — BL 63 L 70 — 12/27/18 Page 1 of 3

BLOCK	LOT	QUAL	CLA	PROPERTY OWNER	PROPERTY LOCATION	Add'l Lots
60	1		4B	300 N DELAWARE PROP; %ATHENIANRAZAK 1500 WAINUT ST, #2030 PHILADELPHIA, PA 19102	300 NO DELAWARE AVE	
60	14		2	SMITH, DONNA M & BURKETT, JAMES



EXISTING CONDITIONS NOTES

1. THE FOLLOWING EXISTING CONDITIONS PLAN WAS OBTAINED FROM A SURVEY ENTITLED "TOPOGRAPHIC AND BOUNDARY SURVEY", SIGNED AND SEALED BY DENNIS S. DIBLASIO, PLS, LICENSE # GS 02830700, DATED 12/21/2018.
2. UTILITY INFORMATION HAS BEEN OBTAINED FROM VARIOUS SOURCES AND ITS ACCURACY IS NOT GUARANTEED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES. TEST PITS SHALL BE EXCAVATED AT ALL PROPOSED UTILITY CROSSINGS AND PROPOSED UTILITY CONNECTIONS TO VERIFY EXACT LOCATION, INVERT, AND THAT NO CONFLICTS EXIST.
3. THIS EXISTING CONDITIONS PLAN REFLECTS CONDITIONS AS TO THE DATE OF THE TOPOGRAPHIC AND BOUNDARY SURVEY. THE ANNEX PORTION OF THE BUILDING MAY BE DEMOLISHED PRIOR TO THE START OF CONSTRUCTION.



AERIAL PHOTOGRAPH
1"=100'

0 20' 40'

NOT FOR CONSTRUCTION

Pennoni

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.8600
NJ COA NO. GA28033300

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121

2/8/2019

201 NORTH FRONT STREET

201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

EXISTING CONDITIONS PLAN

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

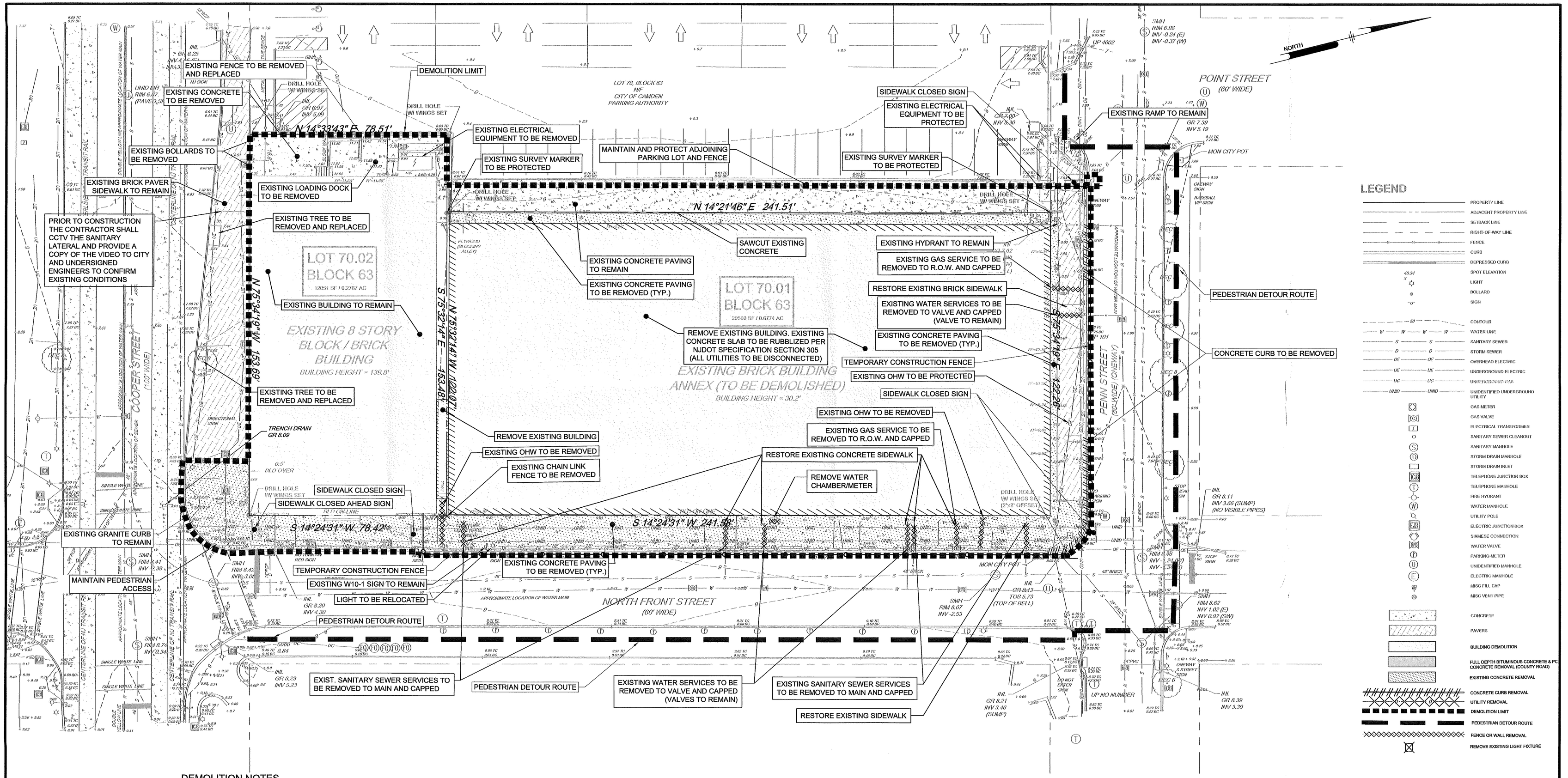
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	1"=20'
DRAWN BY	BTM
APPROVED BY	ATB

CS0201

SHEET 4 OF 17

PLOTTED: 2/8/2019 5:04 PM, BY: Brandon Morales PLOTSTYLE: Pennoni INCS.stb PROJECT STATUS: —
U:\Accounts\HAGEN\HAGEN18001 - 201 N Front Street\DESIGN_SHEETS\CS0201.dwg



DEMOLITION NOTES

1. THE PURPOSE PF THIS PLAN IS TO ENABLE THE CONTRACTOR TO OBTAIN THE CONSTRUCTION PERMIT FOR THE REMOVAL OF THE BUILDING ANNEX.
2. IF FIELD CONDITIONS DIFFER FROM THOSE SHOWN ON THIS PLAN THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND DIG TEST PITS AS NECESSARY TO VERIFY LOCATION.
3. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 241 AND OSHA STANDARDS.
4. ALL HOLES AND OPEN AREAS REMAINING AFTER DEMOLITION SHALL BE BACKFILLED TO MATCH EXISTING GRADE. A GEOTECHNICAL ENGINEER IS REQUIRED TO INSPECT, TEST, AND CERTIFY TO THE COMPACTION OF ALL LOAD BEARING FILLS.
5. WHERE A PIPE BEING REMOVED IS CONNECTED TO AN EXISTING STRUCTURE, EITHER REMOVE THE PIPE AND FILL THE WALL OPENING WITH CONCRETE, OR CUT THE PIPE WITHOUT PERCUSSION NOT MORE THAN 6" FROM THE OUTSIDE FACE OF THE STRUCTURE AND FILL THE REMAINING LENGTH OF PIPE WITH CONCRETE.
6. THE REMOVAL OF EXISTING BOLLARDS, GUIDE RAIL POSTS & FOOTINGS SHALL INCLUDE THE PIPE/ POST AND CONCRETE FOOTING IN ITS ENTIRETY.
7. ALL EXISTING CATCH BASINS AND MANHOLES SHALL BE FIELD LOCATED PRIOR TO WORK AND THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PERTAINING TO LOCATIONS SHOWN ON THE CONTRACT DRAWINGS.
8. FIELD VERIFY GRADE CONDITION AND ELEVATIONS AFTER DEBRIS AND SOILS HAVE BEEN REMOVED.
9. DEMOLISH FIRE HYDRANT THRUST BLOCKS IF ENCOUNTERED. ALL EXISTING MANHOLES, INLETS, SEWER MAINS AND WATER / LATERALS TO BE ABANDONED SHALL BE COMPLETELY REMOVED FROM THE GROUND PER CITY REQUIREMENTS.
10. REMOVAL OF MONITORING WELLS MUST ADHERE TO ALL FEDERAL, STATE, CITY REGULATIONS.
11. ELECTRICAL UTILITIES SHALL BE DISCONNECTED PRIOR TO BEGINNING ANY DEMOLITION WORK. DEMOLITION SHALL INCLUDE THE REMOVAL OF BURIED AND EXPOSED CONDUIT IN THE AREA DESIGNATED FOR DEMOLITION, SEALING ENDS OF ALL BURIED CONDUIT ABANDONED IN PLACE AND REMOVING ALL POWER AND CONTROL WIRING BETWEEN THE DEMOLISHED FACILITY AND THE TERMINAL JUNCTION BOX, CIRCUIT BREAKER, OR METER CONTROL CENTER SUPPLYING POWER TO THE FACILITY.
12. ALL MATERIAL BROUGHT ON SITE SHALL BE CLEAN FILL, SAMPLED, AND ANALYZED WITH STANDARD NJDEP QUALITY ASSURANCE STANDARDS AND PRACTICES AT A MINIMUM, AS SPECIFIED IN N.J.A.C. 7:26E, TO FULLY CHARACTERIZE THE CONTAMINANTS IN THE LATEST SOIL CLEANUP CRITERIA (SCC). THE CONTRACTOR SHALL SUBMIT TO THE OWNER WRITTEN DOCUMENTATION FROM A LABORATORY CERTIFIED IN NEW JERSEY ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM (ELCP) AND IN ACCORDANCE WITH N.J.A.C. 7:18 PRIOR TO PLACEMENT OF THE MATERIAL ON SITE. THE MATERIAL MUST NOT CONTAIN CONTAMINANTS ABOVE THE MOST RESTRICTIVE DIRECT CONTACT OR IMPACT TO GROUNDWATER (IGW) SCC.
13. CONTRACTOR SHALL NOTIFY OWNER AND THE CITY ENGINEER 72 HRS. PRIOR TO INITIATING UTILITY ABANDONMENT.
14. ALL ACTIVE CONSTRUCTION SITES AND LOCATIONS SHALL BE PROVIDED WITH NON-COMBUSTIBLE REFUSE CONTAINER(S) IN SUCH NUMBERS AS SHALL BE NECESSARY TO CONTAIN ALL COMBUSTIBLE REFUSE GENERATED BY THE CONSTRUCTION ACTIVITIES.
15. ALL COMBUSTIBLE REFUSE, RUBBISH AND DEBRIS SHALL BE COLLECTED UP AND DEPOSITED IN THE CONTAINER(S) ON A DAILY BASIS. REFUSE CONTAINER(S) SHALL BE LOCATED A MINIMUM OF 20 FEET AWAY FROM ANY BUILDING, STRUCTURE, LOT LINE OR COMBUSTIBLE MATERIAL STORAGE LOCATION.
16. THE PROJECTS LEED CONSULTANT SHALL BE CONTACTED PRIOR TO DEMOLITION FOR THE POSSIBLE ON SITE REUSE OF MATERIALS.
17. THE REMOVAL OF EXISTING BUILDINGS SHALL INCLUDE THE REMOVAL OF ALL FOOTINGS AND FOUNDATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL ESTABLISH SUBGRADE AFTER DEMOLITION IN ACCORDANCE WITH ALL APPLICABLE SPECIFICATIONS IN REGARD TO EARTHWORK OPERATIONS.
18. ALL EXISTING WATER SERVICE LINES TO BE ABANDONED SHALL BE CUT AND CAPPED AT THE MAIN, IN ACCORDANCE WITH CAPITAL IMPROVEMENTS AND PROJECT MANAGEMENT (CIP) STANDARDS.
19. THE EXISTING ANNEX BUILDING SHALL BE REMOVED IN ITS ENTIRETY. EXISTING CONCRETE FLOOR SLAB SHALL REMAIN WITH PRECAUTIONS MADE TO PROTECT THE SLAB FROM DAMAGE.
20. PRECAUTIONS SHALL BE TAKEN TO PROTECT THE EXISTING FAÇADE OF THE 8-STORY HIGH RISE.
21. IT HAS BEEN VERIFIED THAT THE NEW JERSEY STATE HISTORIC OFFICE DOES NOT HAVE JURISDICTION OVER THE REMOVAL OF THE EXISTING ANNEX TO BE DEMOLISHED.
22. THE CONTRACTOR SHALL FOLLOW PROVISIONS OF THE MUTCD FOR THE PROTECTION OF TRAFFIC AND PEDESTRIANS.
23. THE CONTRACTOR SHALL HOLD A PRECONSTRUCTION MEETING WITH ALL APPLICABLE UTILITY COMPANIES PRIOR TO THE START OF DEMOLITION.
24. ANY WATER METERS DISCOVERED DURING THE COURSE OF DEMOLITION SHALL BE IDENTIFIED AND DOCUMENTED PRIOR TO REMOVAL.
25. PEDESTRIAN DETOUR SIGNAGE TO BE INSTALLED ALONG THE DEVIATED PEDESTRIAN ROUTE.

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- SETBACK LINE
- RIGHT-OF-WAY LINE
- FENCE
- CURB
- DEPRESSED CURB
- SPOT ELEVATION
- LIGHT
- BOLLARD
- SIGN
- CONTOUR
- WATER LINE
- SANITARY SEWER
- STORM SEWER
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND GAS
- UNIDENTIFIED UNDERGROUND UTILITY
- GAS METER
- GAS VALVE
- ELECTRICAL TRANSFORMER
- SANITARY SEWER CLEANOUT
- SANITARY MANHOLE
- STORM DRAIN MANHOLE
- STORM DRAIN INLET
- TELEPHONE JUNCTION BOX
- TELEPHONE MANHOLE
- FIRE HYDRANT
- WATER MANHOLE
- UTILITY POLE
- ELECTRIC JUNCTION BOX
- SIAMESE CONNECTION
- WATER VALVE
- PARKING METER
- UNIDENTIFIED MANHOLE
- ELECTRIC MANHOLE
- MISC FILL CAP
- MISC VENT PIPE
- CONCRETE
- PAVERS
- BUILDING DEMOLITION
- FULL DEPTH BITUMINOUS CONCRETE & PC CONCRETE REMOVAL (COUNTY ROAD)
- EXISTING CONCRETE REMOVAL
- CONCRETE CURB REMOVAL
- UTILITY REMOVAL
- DEMOLITION LIMIT
- PEDESTRIAN DETOUR ROUTE
- FENCE OR WALL REMOVAL
- REMOVE EXISTING LIGHT FIXTURE

0 20' 40'

NOT FOR CONSTRUCTION

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.8600
NJ COA NO. GA28033300

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

201 NORTH FRONT STREET

201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

DEMOLITION PLAN

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

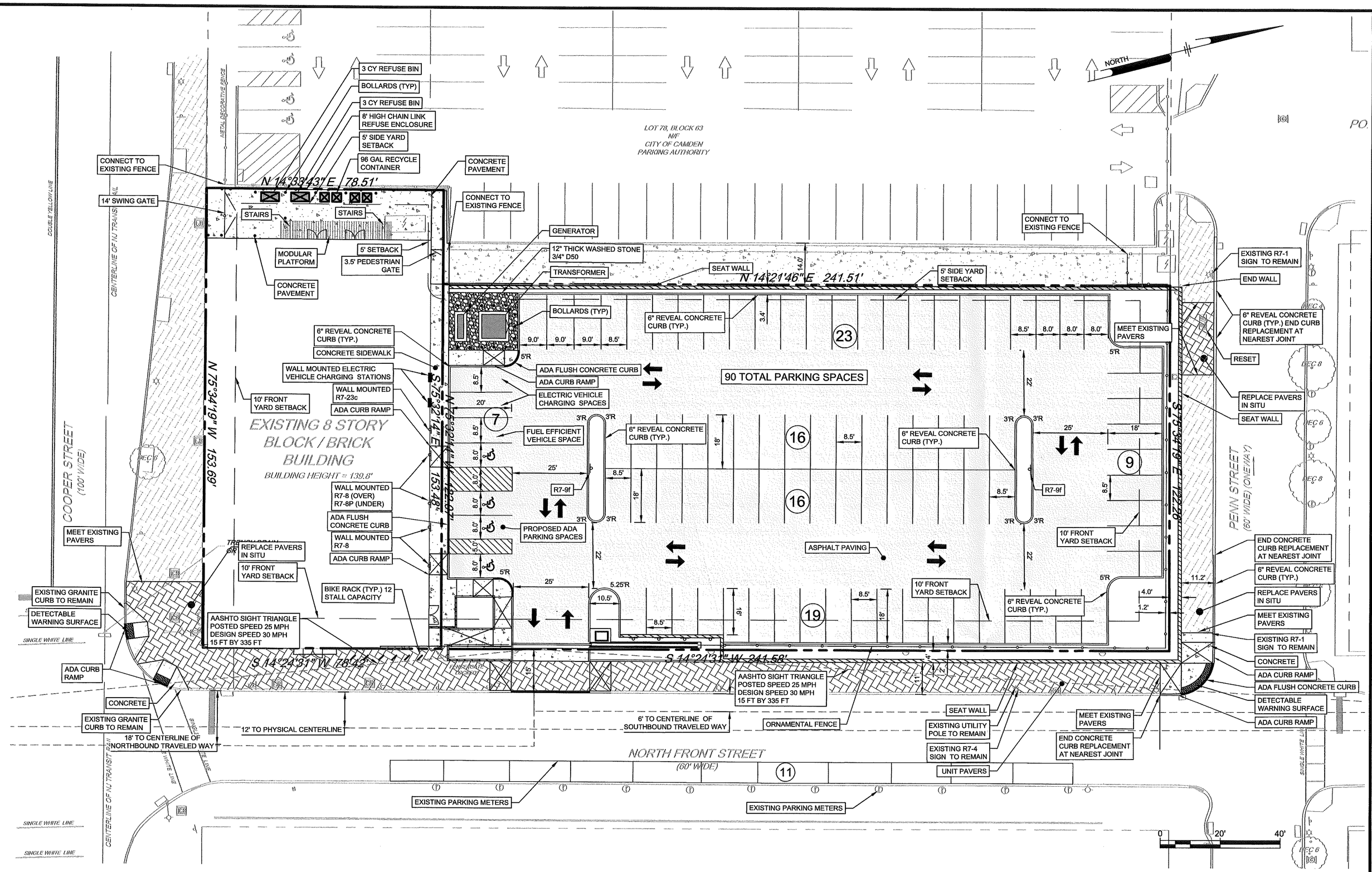
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

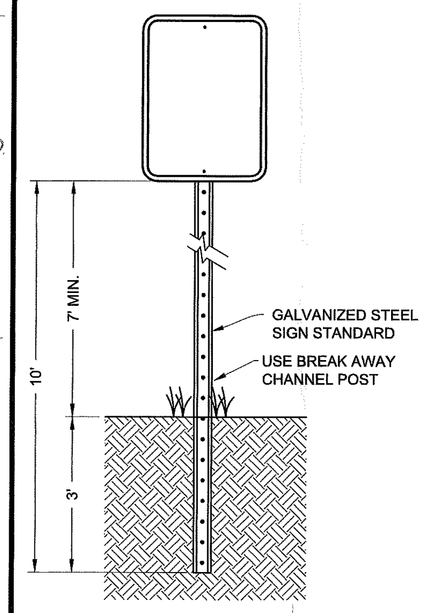
PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	1"=20'
DRAWN BY	BTM
APPROVED BY	ATB

CS0501

SHEET 5 OF 17

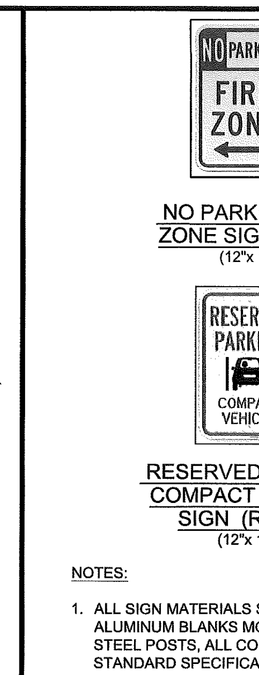
U:\Accounts\HAGEN18001 - 201 N Front Street\DESIGN_SHEETS\CS0501.dwg PLOTTED: 2/8/2019 5:04 PM, BY: Brandon Morales PLOTSTYLE: Pennoni NCS.ctb PROJECT STATUS: —





NOTES:
1.) MINIMUM HEIGHT FOR ALL TRAFFIC CONTROL SIGNS

SIGN POST DETAIL
N.T.S.



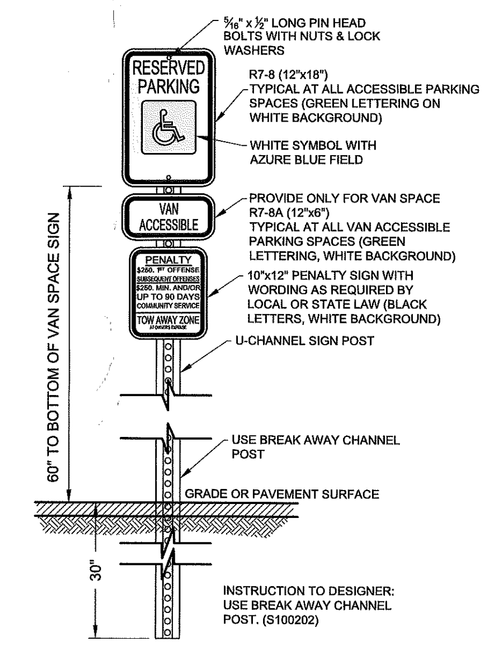
NO PARKING FIRE ZONE SIGN (R7-9f)
(12"x 18")

RESERVED PARKING COMPACT VEHICLE SIGN (R7-23c)
(12"x 18")

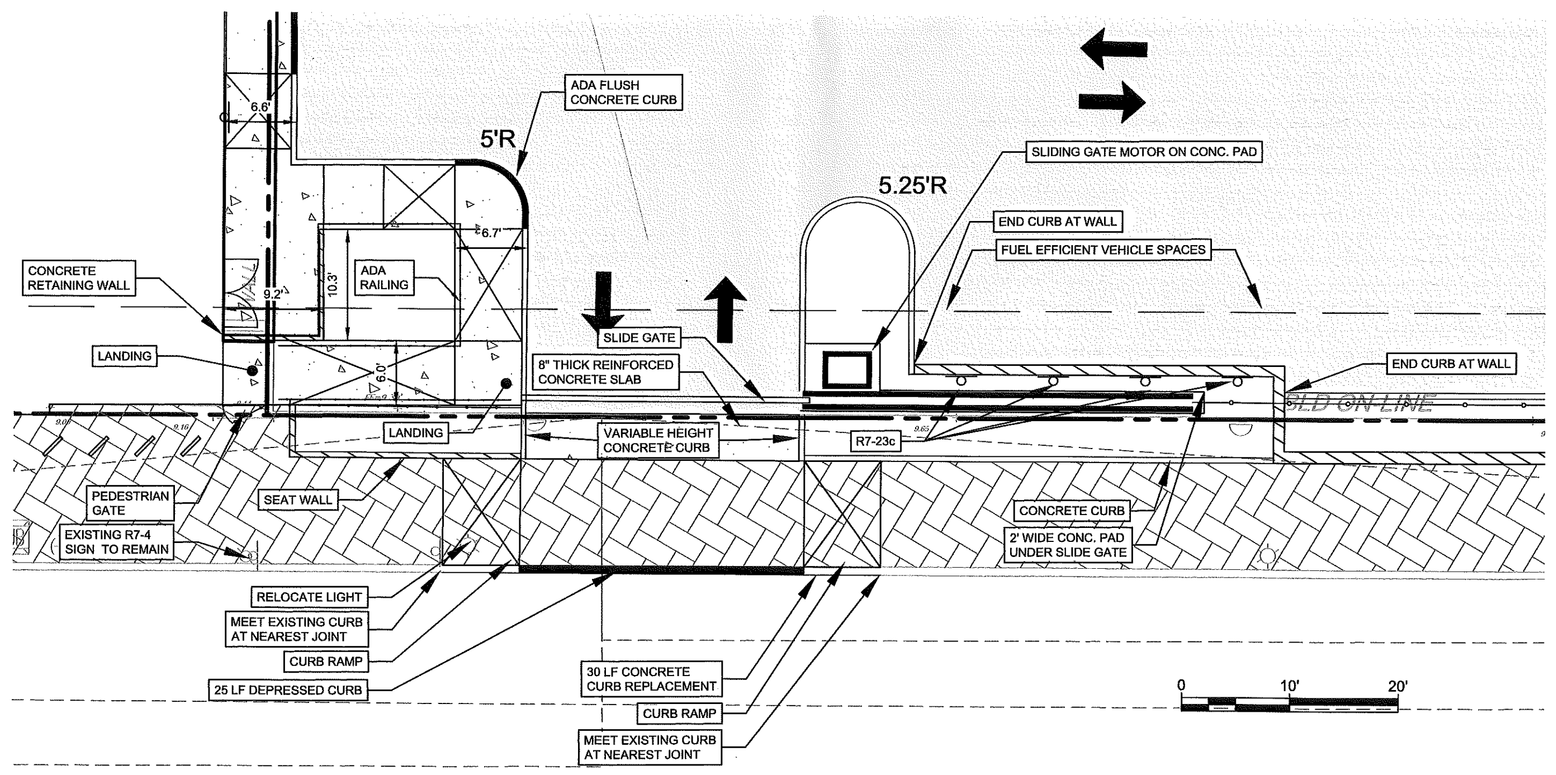
NOTES:

1. ALL SIGN MATERIALS SHALL BE MADE OF ALUMINUM BLANKS MOUNTED ON GALVANIZED STEEL POSTS, ALL CONFORMING TO NJDOT STANDARD SPECIFICATIONS.
2. ALL SIGNS SHALL MEET THE MOST CURRENT MUTCD REQUIREMENTS FOR RETRO-REFLECTIVITY.

SIGN DETAILS
N.T.S.



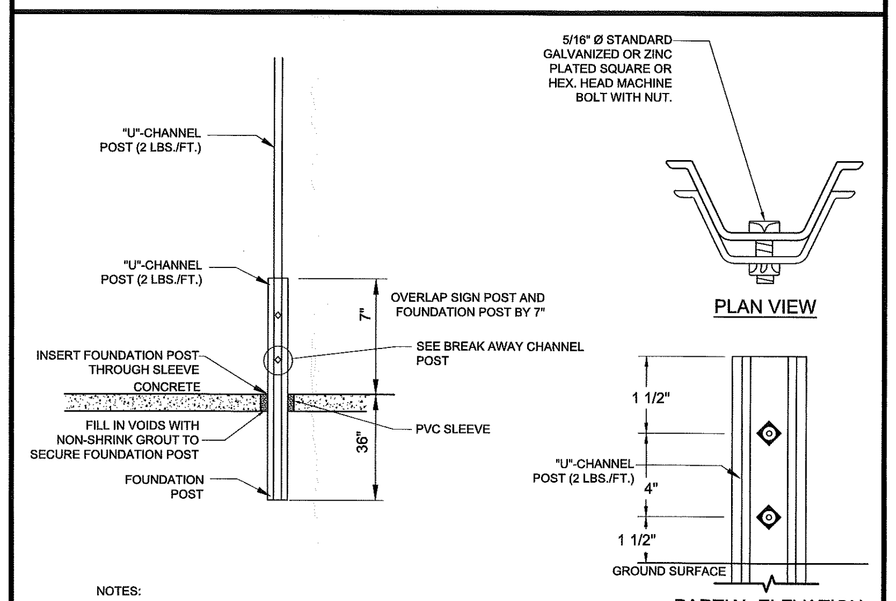
ADA PARKING SIGN WITH VAN ACCESSIBLE SIGN DETAIL
N.T.S.



ENTRANCE ENLARGEMENT
1"=10'

1. PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING IMPROVEMENTS IN THE RIGHT OF WAY INCLUDING RETAINING WALLS, FENCES, LANDSCAPING, STREET FURNITURE AND BUILDING PROTRUSIONS.

NOT FOR CONSTRUCTION



NOTES:

1. ALL SIGNS SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. SIGN LOCATIONS SHALL BE VERIFIED WITH THE ENGINEER PRIOR TO CONSTRUCTION.

BREAK AWAY SIGN POST DETAIL
N.T.S.

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.8600
NJ CoA NO. GA28033300

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ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

SITE PLAN

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

BY	NO.	REVISIONS	DATE

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES, AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	1"=20'
DRAWN BY	BTM
APPROVED BY	ATB

CS1001

SHEET 6 OF 17

PROJECT STATUS: —
PLOTSTYLE: Pennoni NCS.stb
PLOTTED: 2/8/2019 3:04 PM, BY: Brandon Morales
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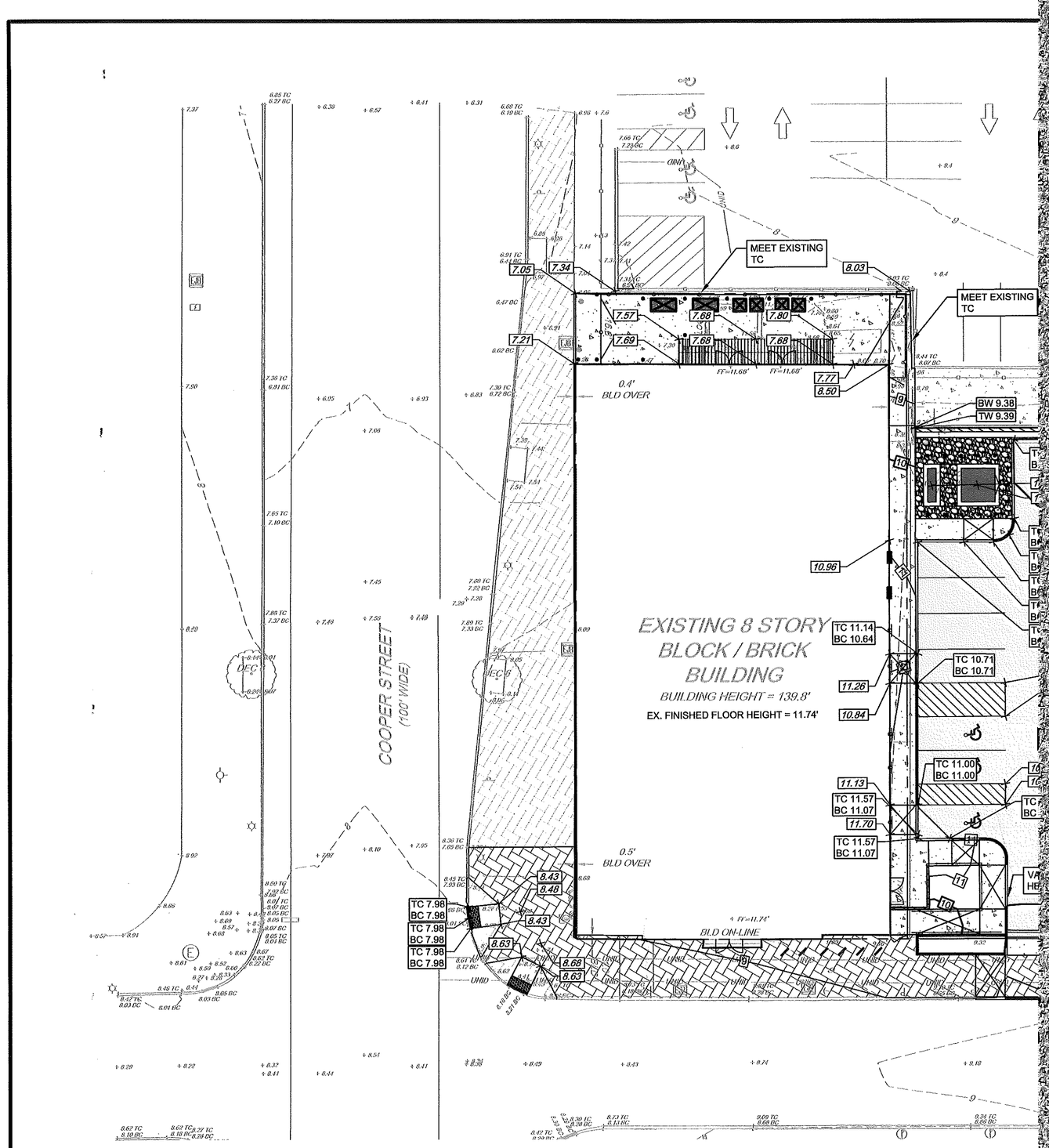

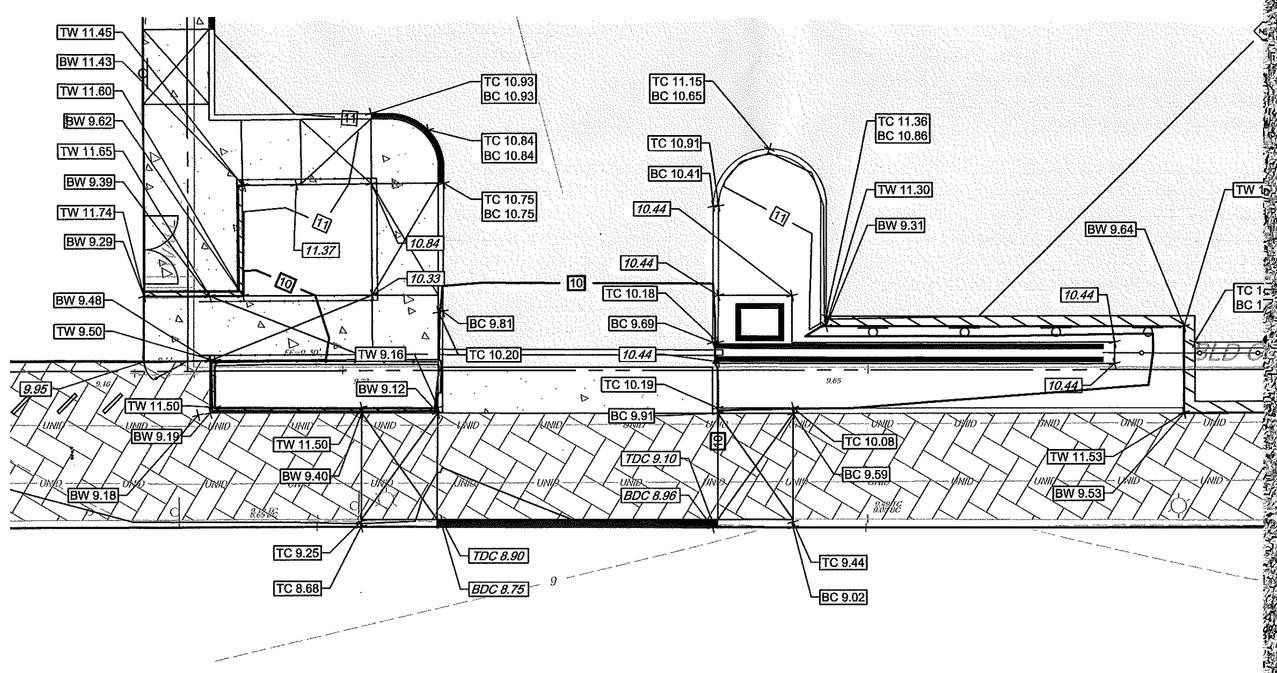

ENTRANCE ENLARGEMENT

1"=10'

0 10' 2

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT CURB CUT SHEETS FOR ALL ADA RAMPS, ACCESSIBLE AREAS AND WALLS TO THE UNDERSIGNED ENGINEER FOR APPROVAL TO CONSTRUCT.

PLOTTED: 2/6/2019 5:58 PM, BY: Brandon Morales PLOTSTYLE: Pension NCS.stb PROJECT STATUS: —
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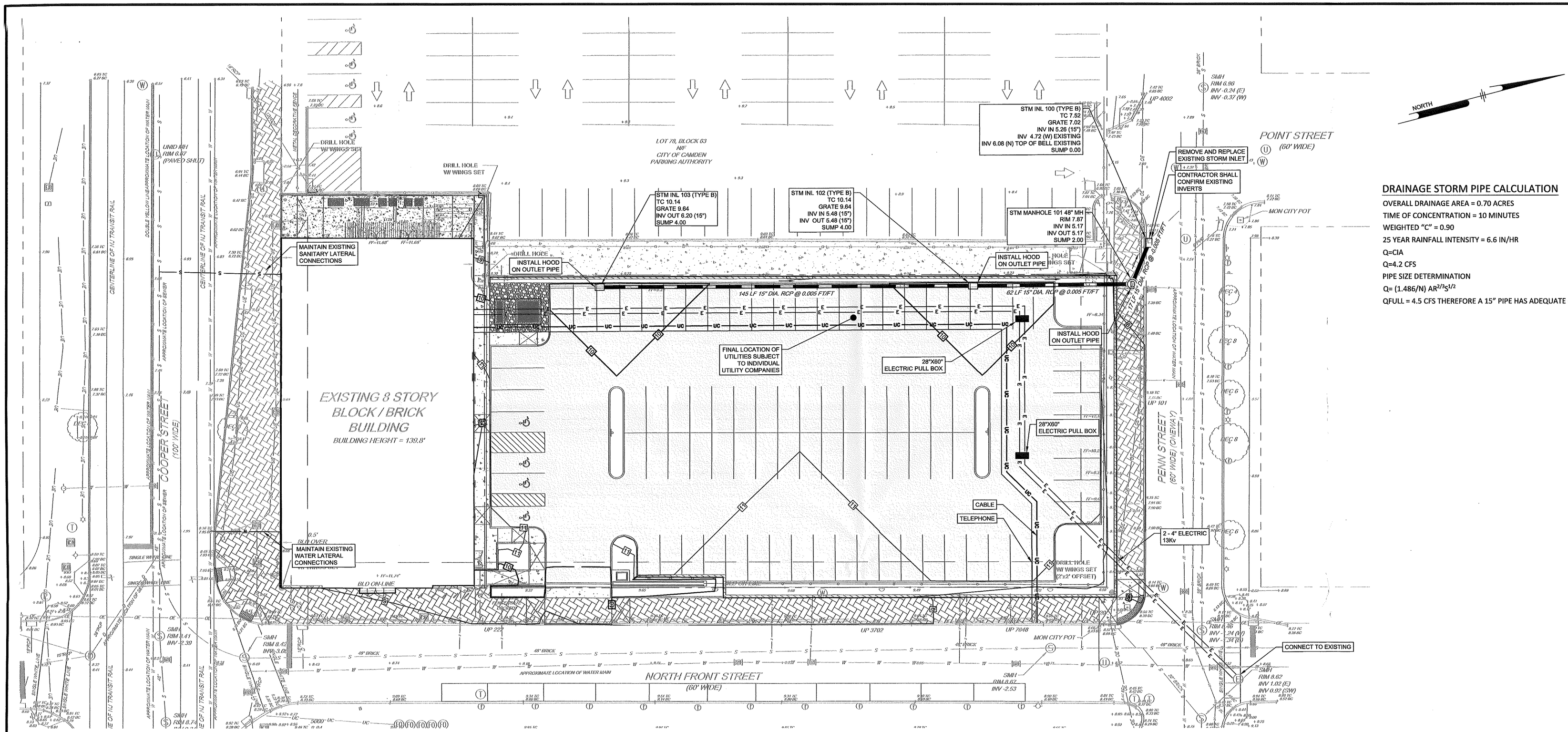

DRAINAGE STORM PIPE CALCULATION

OVERALL DRAINAGE AREA = 0.70 ACRES
TIME OF CONCENTRATION = 10 MINUTES
WEIGHTED "C" = 0.90
25 YEAR RAINFALL INTENSITY = 6.6 IN/HR
Q=CIA
Q=4.2 CFS
PIPE SIZE DETERMINATION
$Q = (1.486/N)\ AR^{2/3}S^{1/2}$
QFULL = 4.5 CFS THEREFORE A 15" PIPE HAS ADEQUATE CAPACITY

0 20' 40'

NOT FOR CONSTRUCTION

Pennoni

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T. 856.888.8600
N.J. C.A. No. 24GB03533300

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ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 46121

2/8/2019

201 NORTH FRONT STREET

201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

UTILITY PLAN

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

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PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	1"=20'
DRAWN BY	BTM
APPROVED BY	ATB

CS1701

SHEET 8 OF 17

PLOTTED: 2/8/2019 5:56 PM, BY: Brandon Morales PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —
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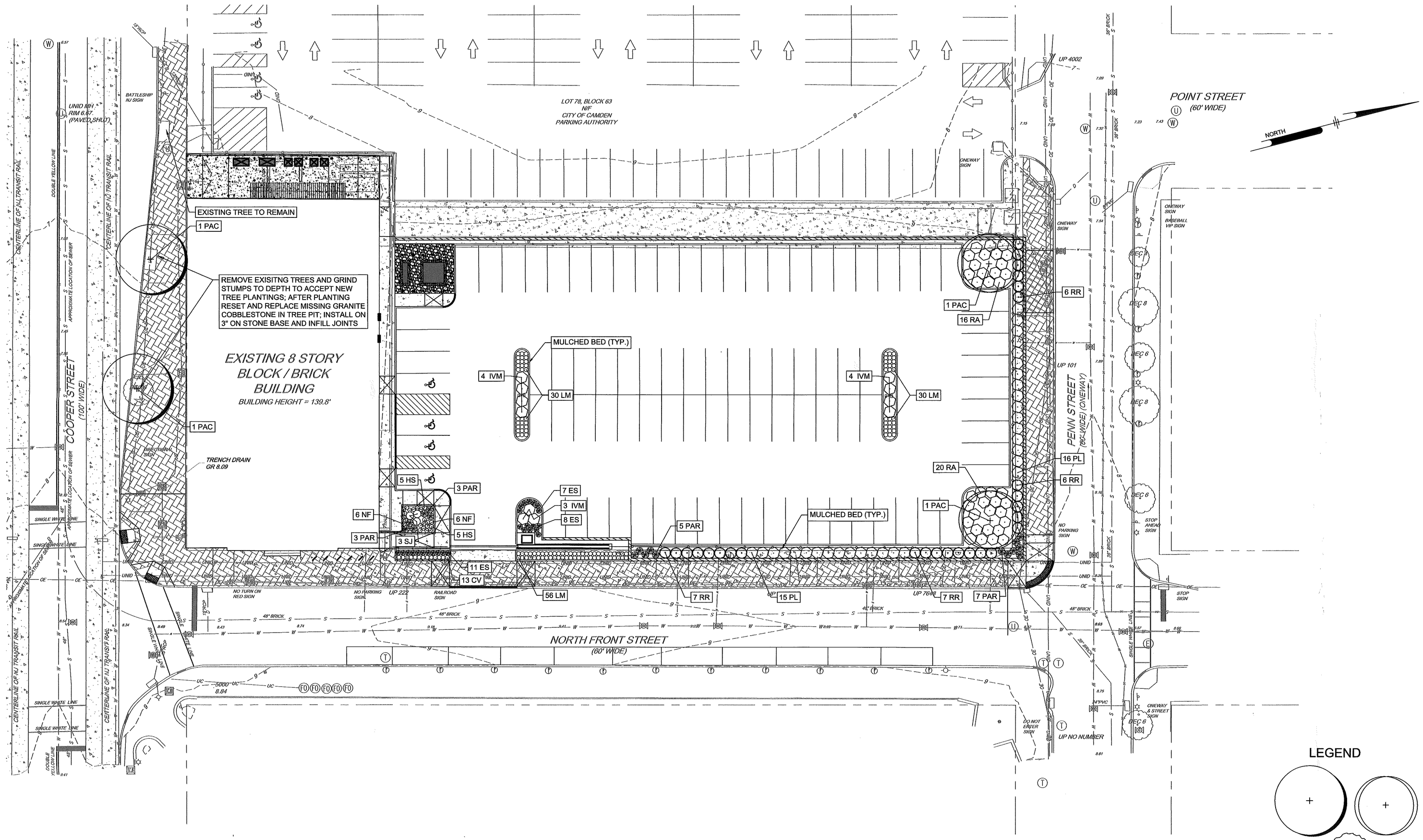

PLANT SCHEDULE						
SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS
DECIDUOUS TREES						
PAC	2	PLATINUS X ACERFOLIA 'COLUMBIA'	COLUMBIA PLANETREE	2.5"-3" CAL.; 12-14' HGT.	B&B	FULL; LIMBED TO 7 FT.
SHRUBS						
IVM	11	ITEA VIRGINICA 'MERLOT'	MERLOT VIRGINIA SWEETSPIRE	18 -24" HGT.	#3 CONT.	FULL; 3.5' SPACING
SJ	3	SPIRAEA JAPONICA 'NEON FLASH'	NEON FLASH JAPANESE SPIRAEA	18 -24" HGT.	#3 CONT.	FULL; 3' SPACING
RA	36	RHUS AROMATICA 'GRO-LO'	GRO-LO SUMAC	18 -24" HGT.	#3 CONT.	FULL; 4' SPACING
PL	31	PRUNUS LAUROCERASUS 'OTTO LUYKENS'	OTTO LUYKENS CHERRY LAUREL	24 -30" HGT.	#3 CONT.	FULL; 4.5' SPACING
RR	26	ROSA DOUBLE KNOCK OUT (RED)	RED DOUBLE KNOCKOUT ROSE	24 -30" HGT.	#3 CONT.	FULL; 4' SPACING
GRASSES AND SEDGES						
ES	26	ERAGROSTIC SPECTABLILIS	PURPLE LOVE GRASS	8-12" HGT.	#2 CONT.	2' O.C. SPACING
PAR	18	PENNISETUM ALOPECUROIDES 'RED HEAD'	RED HEAD FOUNTAIN GRASS	8-12" HGT.	#2 CONT.	3' O.C. SPACING
PERENNIALS						
LM	116	LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LILYTURF	8-12" HGT.	#1 CONT.	18" O.C. SPACING
HS	10	HEMEROCALIS STELLA D'ORO	STELLA D'ORO DAYLILY	8-12" HGT.	#1 CONT.	18" O.C. SPACING
NF	12	NEPETA X FAASSENII 'WALKERS LOW'	WALKERS LOW CATMINT	8-12" HGT.	#1 CONT.	18" O.C. SPACING
CV	13	COREOPSIS VERTICILLATA 'ZAGREB'	ZAGREB WHORLED TICKSEED	8-12" HGT.	#1 CONT.	18" O.C. SPACING

LEGEND

- PROPOSED SHADE TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS
- PROPOSED ORNAMENTAL GRASS
- PROPOSED PERENNIALS
- PROPOSED LIGHT POLE
- PROPOSED SOD

SEE DWG. CS6061 FOR LANDSCAPING DETAILS AND NOTES

0 20' 40'

NOT FOR CONSTRUCTION

Pennoni

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.8800
NJ COA NO. GA28033300

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ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

201 NORTH FRONT STREET

201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

LANDSCAPING PLAN

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

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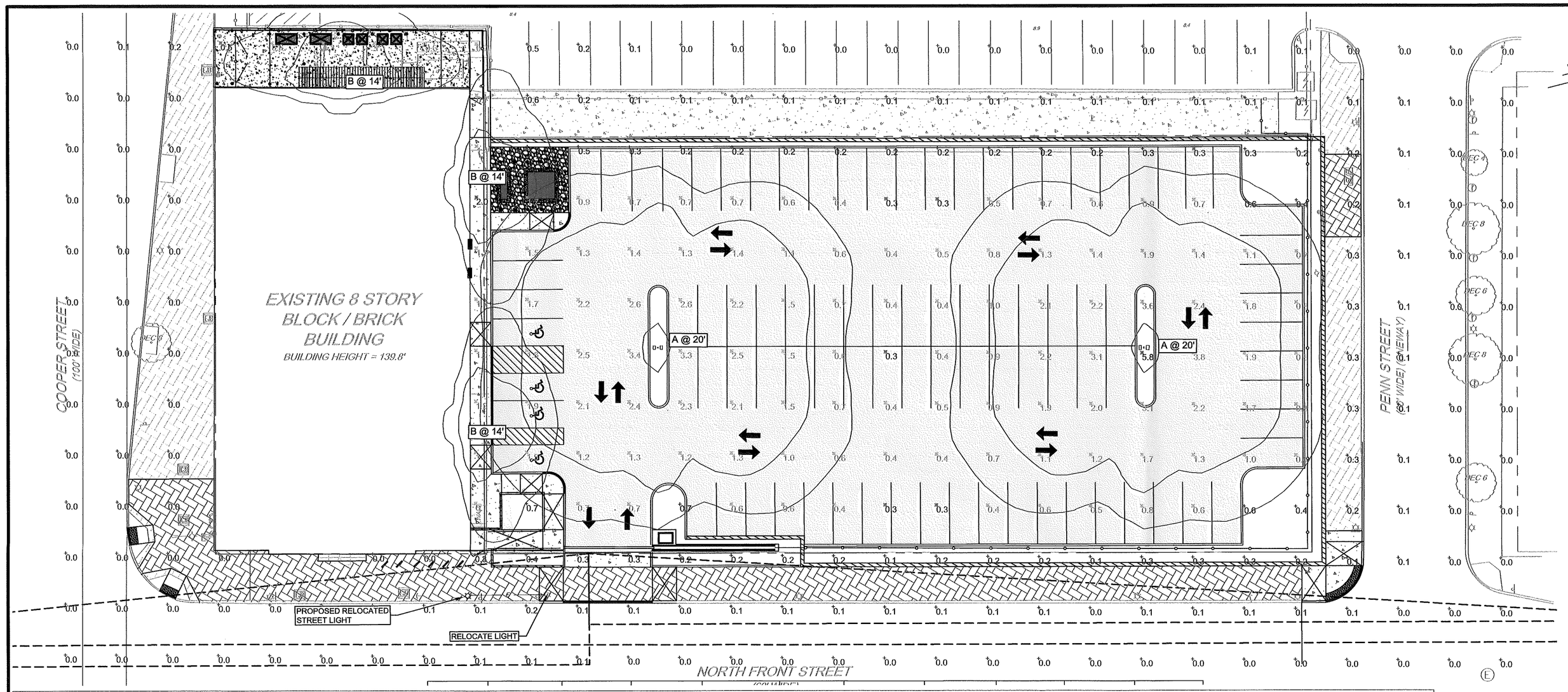
PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	1"=20'
DRAWN BY	BTM
APPROVED BY	ATB

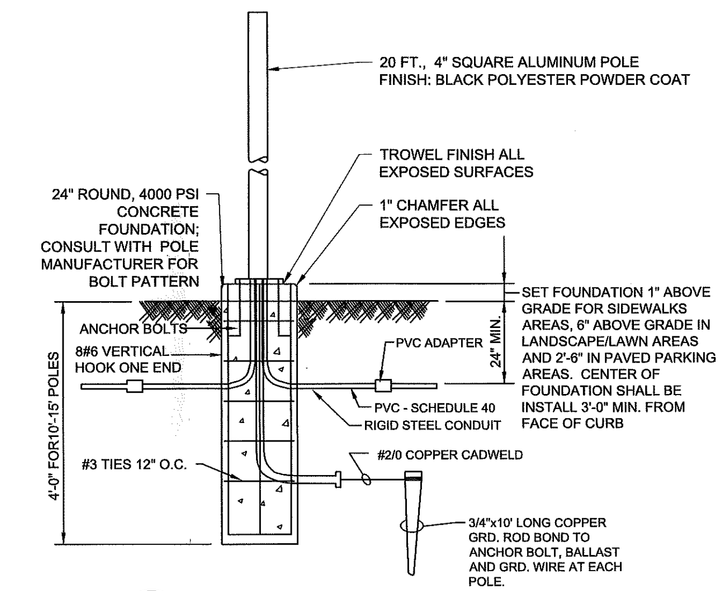
CS2001

SHEET 9 OF 17

PROJECT STATUS: —
PLOTSTYLE: Pennoni NCS.ctb
PLOTTED: 2/1/2019 8:24 AM, BY: Brandon Morales
U:\Accounts\HAGEN\HAGEN18001 - 201 N Front Street\DESIGN_SHEETS\CS2001.dwg



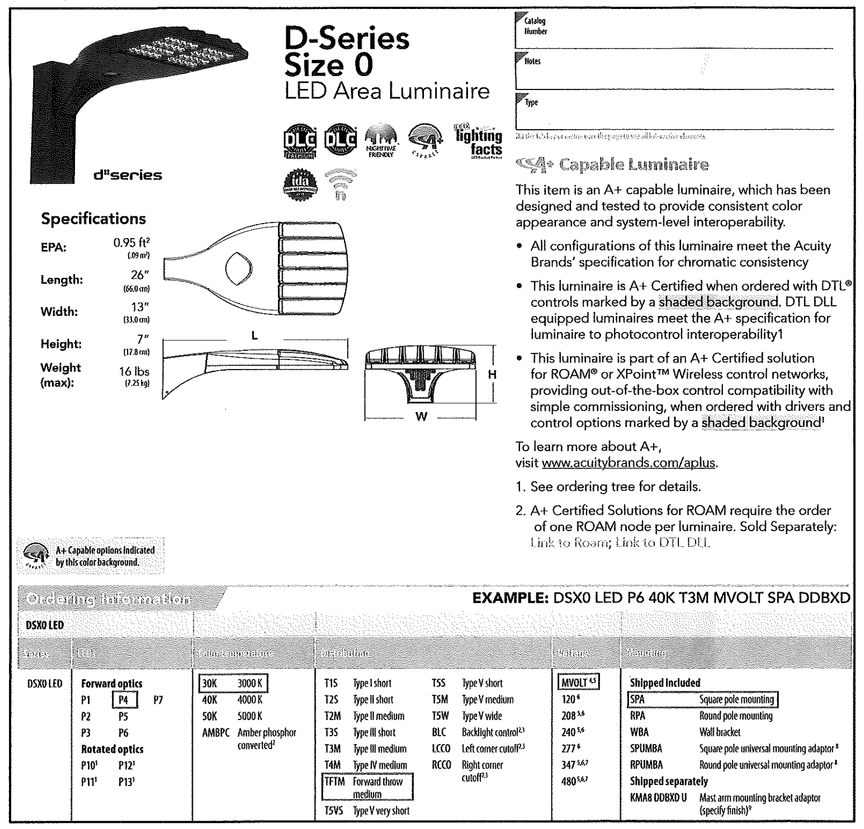
NOTE:
ALL OUTDOOR LIGHTING NOT ESSENTIAL FOR SAFETY AND SECURITY PURPOSES SHALL BE ACTIVATED BY AUTOMATIC CONTROL DEVICES AND TURNED OFF DURING NON-OPERATING HOURS.



1 LIGHT POLE FOUNDATION DETAIL
NOT TO SCALE

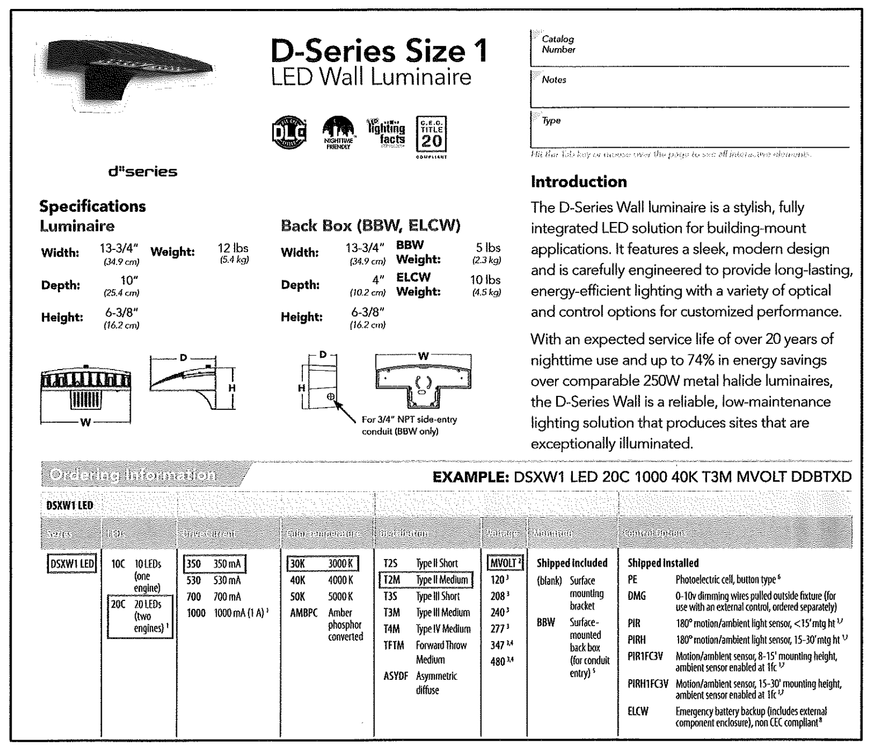
Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
▭ ▫ ▭	A	2	Lithonia Lighting	DSX0 LED P4 30K TFTM MVOLT	DSX0 LED P4 30K TFTM MVOLT	LED	1	9800	0.95	184
▭	B	3	Lithonia Lighting	DSXW1 LED 20C 350 30K T2M MVOLT	DSXW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE T2M OPTIC, 3000K, @ 350mA.	LED	1	2688	0.95	23.3



TYPE A POLE MOUNTED LED FIXTURE DETAIL

NTS



TYPE B WALL MOUNTED LED FIXTURE DETAIL

NTS

0 20' 40'

NOT FOR CONSTRUCTION

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.8600
NJ. COA NO. GA28033300

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

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201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

LIGHTING PLAN

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

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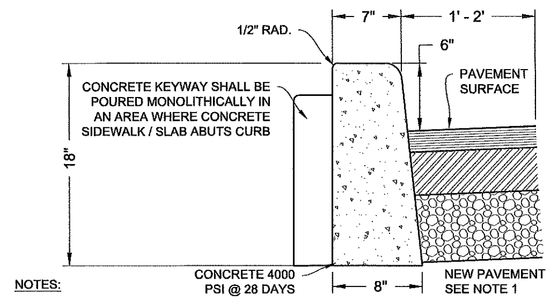
PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	1"=20'
DRAWN BY	BTM
APPROVED BY	ATB

CS2201

SHEET 10 OF 17

PLOTTED: 2/8/2019 3:05 PM, BY Brendon Morales PLOTSTYLE: Pennoni NOS.stb PROJECT STATUS: —
U:\Accounts\HAGEN\HAGEN18001 - 201 N Front Street\DESIGN_SHEETS\CS2201.dwg

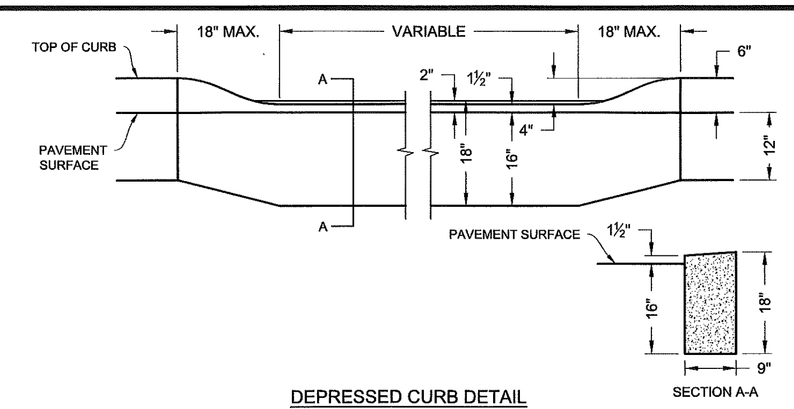


NOTES:

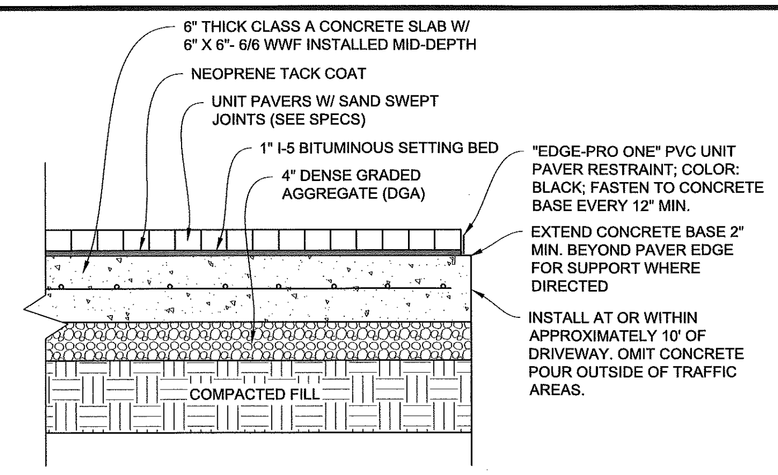
1. WHEN NEW CURB IS CONSTRUCTED ALONG AN EXISTING PAVED AREA, THE EXISTING PAVEMENT SHALL BE CUT IN A STRAIGHT LINE PARALLEL TO FACE OF NEW CURB WITH A SHARP TOOL AND THE NEW PAVEMENT SHALL BE TACKED AND BUTTED TO EXISTING PAVEMENT.
2. EXPANSION JOINTS ½" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND FILLED WITH CELLULAR COMPRESSION MATERIAL AS SPECIFIED AND RECESSED ½" FROM FACE AND TOP OF CURB. EXPANSION JOINTS TO BE INCLUDED IN PRICE BID FOR CURB. EXPANSION JOINTS TO BE INCLUDED IN PRICE BID FOR CURB. CONSTRUCTION JOINT SHALL BE CUT MID-POINT BETWEEN EXP. JOINTS.

* WHERE NO ELEVATIONS ARE GIVEN ON THE PLAN, MATCH THE PROJECTED TOP OF EXISTING CURB. THE PROJECTED TOP OF CURB SHALL BE DETERMINED BY A STRING LINE.

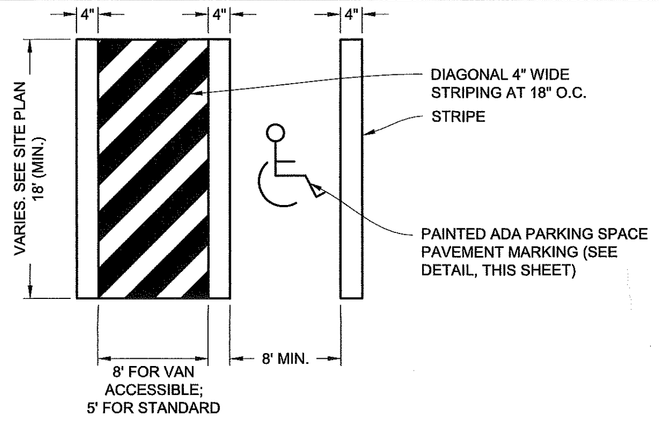
VERTICAL CONCRETE CURB DETAIL
N.T.S.



DEPRESSED CURB DETAIL
N.T.S.

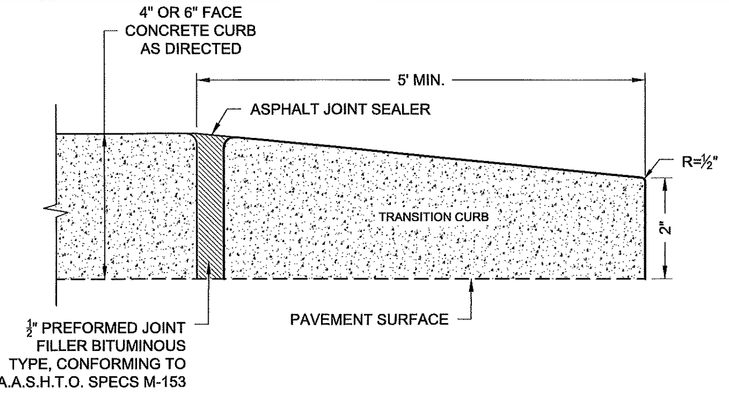


UNIT PAVER SIDEWALK DETAIL
N.T.S.



NOTE:
PAINT FOR ALL STRIPING SHALL BE BLUE PER ADA SPECIFICATIONS.

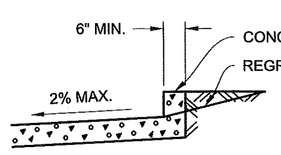
PAINTED PARKING STALL STRIPING DETAIL
N.T.S.



NOTES:

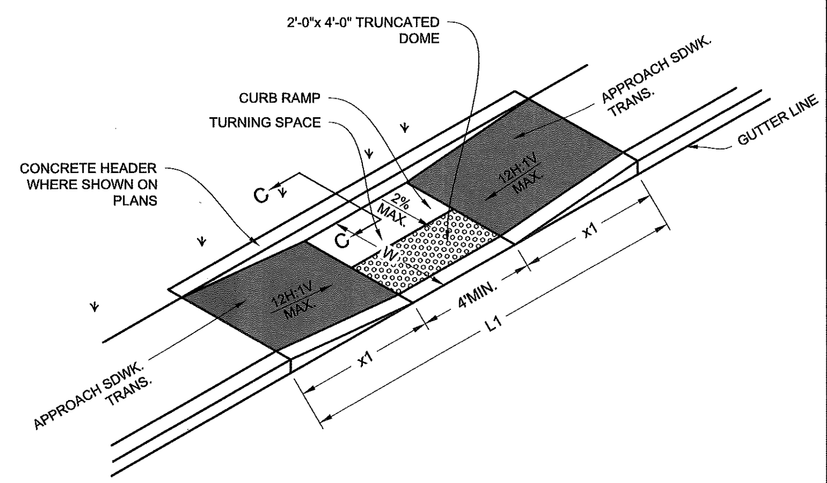
1. CONCRETE SHALL BE CLASS B WITH 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI, AND 6% ±1.5% AIR ENTRAINMENT.

STANDARD VERTICAL CONCRETE CURB TAPER DETAIL
N.T.S.



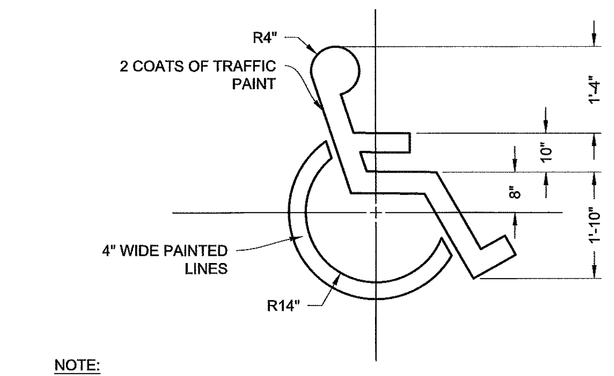
SECTION C-C

0.0% GUTTER LINE PROFILE				
CURB RAMP TYPE 7				
H INCHES	W FEET	x1 FEET	L1 FEET	
3	3	3	10	
4	4	4	12	
5	5	5	14	
6	6	6	16	
7	7	7	18	
8	8	8	20	
9	9	9	22	



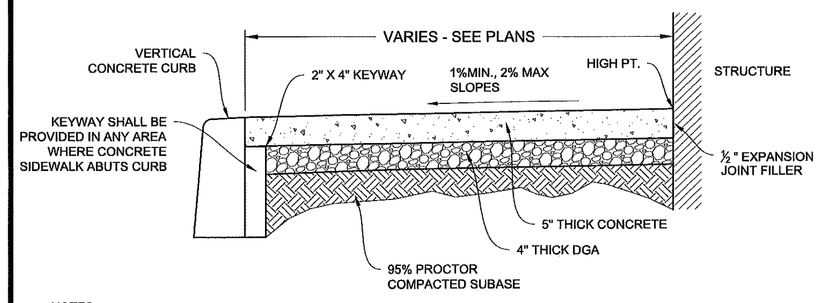
NOTE:
WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, CURB RAMP TYPE 7 SHOULD BE USED, INSTEAD OF CURB RAMP TYPE 1 THROUGH 4.

CURB RAMP TYPE 7
(LIMITED ROW)
(SEE NOTE 7)



NOTE:
PAINT FOR ALL STRIPING SHALL BE BLUE PER ADA SPECIFICATIONS.

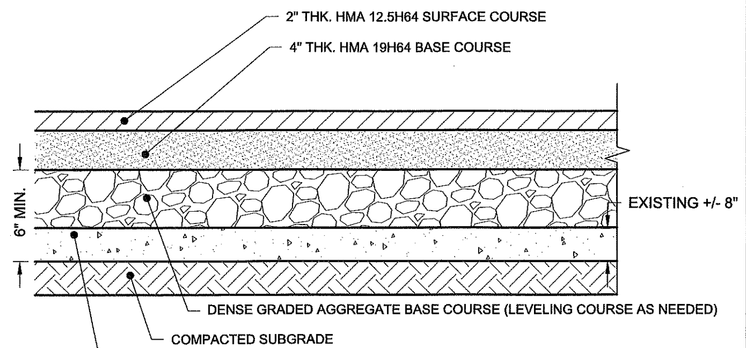
ADA PARKING SPACE PAVEMENT MARKING DETAIL
N.T.S.



NOTES:

1. ALL CONCRETE SHALL BE 4000 PSI AT 28 DAYS; AIR ENTRAINED.
2. EXPANSION JOINTS ½" WIDE SHALL BE INSTALLED AT 20 FT. MAX. INTEVALS AND FILLED WITH CELLULAR COMPRESSION MATERIAL AS SPECIFIED AND RECESSED ½" FROM FACE AND TOP OF SIDWALK. EXPANSION JOINTS TO BE INCLUDED IN PRICE BID FOR SIDEWALKS. TOOLED CONTOL JOINTS SHALL BE INSTALLED AT INTERVALSEQUAL TO SIDEWALK WIDTH BUT NOT LESS THAN 4 FT.
3. SIDEWALK SURFACE SHALL RECEIVE BROOM FINISH WITH STRIATIONS 90 DEGREE TO DIRECTION OF TRAFFIC.

CONCRETE SIDEWALK DETAIL
N.T.S.

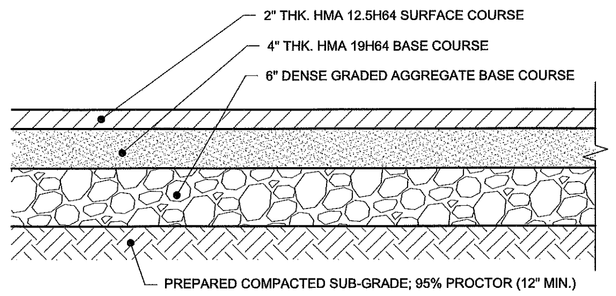


NOTES:

A. PAVING SECTION BASED ON C.B.R. OF TEN OR BETTER.
B. PRIME COAT TO BE APPLIED AT A RATE 0F 0.25 GAL./S.Y.
C. TACK COAT TO BE APPLIED AT A RATE OF 0.10 GAL./S.Y.
D. PROVIDE AN 8 OZ. NON-VOVEN GEOTEXTILE FABRIC BETWEEN SUB-GRADE & STONE SUB-BASE AS DIRECTED BY ON-SITE ENGINEER AND/OR CITY ENGINEER, AND AS WARRANTED FROM RESULTS OF PROOF-ROLLING SUBGRADE AREAS. RECOMMENDED FABRIC-GOETEX 801 AS MANUFACTURED BY S.I. GEOSOLUTIONS OR EQUAL.
E. RUBBLIZING CONCRETE SHALL BE COMPACTED AND PROOF ROLLED PRIOR TO PLACEMENT OF DGA AND/OR BASE COURSE

*PAVING SPEC SUBJECT TO CBR TESTING.

ASPHALT PAVING SECTION WITH CRUSHED CONCRETE SUB-GRADE
N.T.S.



NOTES:

A. PAVING SECTION BASED ON C.B.R. OF TEN OR BETTER.
B. PRIME COAT TO BE APPLIED AT A RATE 0F 0.25 GAL./S.Y.
C. TACK COAT TO BE APPLIED AT A RATE OF 0.10 GAL./S.Y.
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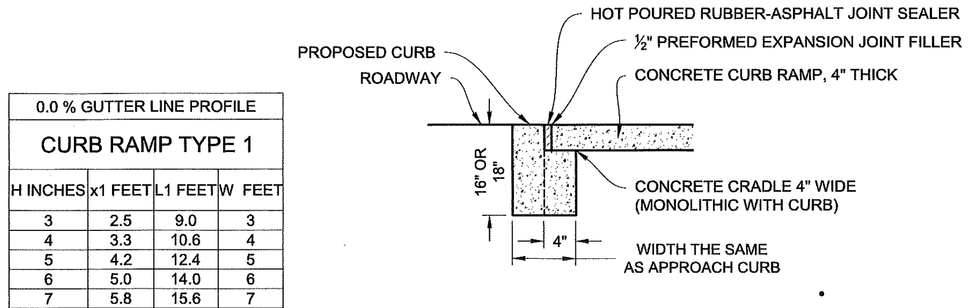
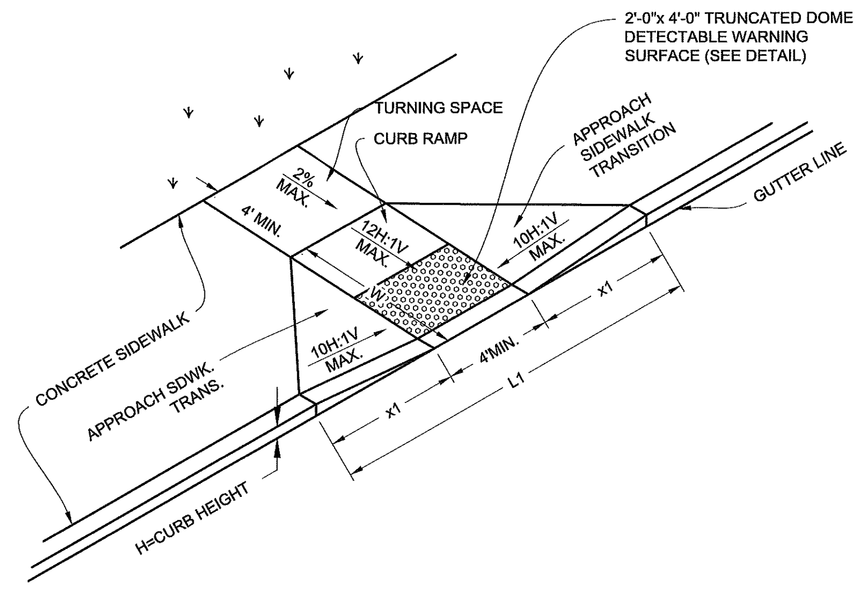
*PAVING SPEC SUBJECT TO CBR TESTING.

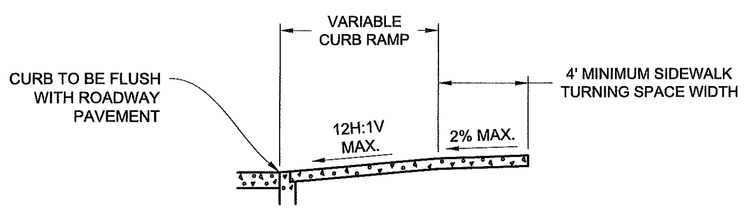
ASPHALT PAVING SECTION DETAIL
N.T.S.

0.0 % GUTTER LINE PROFILE			
CURB RAMP TYPE 1			
H INCHES	x1 FEET	L1 FEET	W FEET
3	2.5	9.0	3
4	3.3	10.6	4
5	4.2	12.4	5
6	5.0	14.0	6
7	5.8	15.6	7
8	6.7	17.4	8
9	7.5	19.0	9

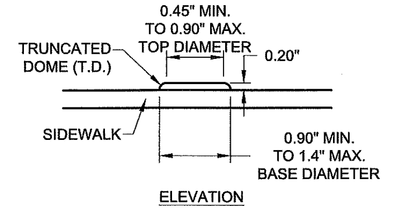


CONCRETE CURB AT RAMP LOCATIONS

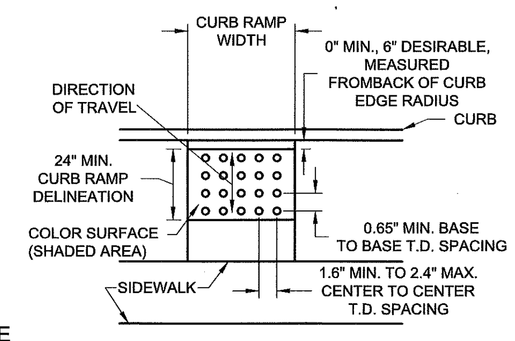




SECTION THROUGH CURB RAMPS TYPE 1



ELEVATION



PLAN VIEW

DETECTABLE WARNING SURFACE
N.T.S.

NJDOT GENERAL NOTES:

1. KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SIDEWALK.
2. CURB (DROPPED CURB) GUTTER LINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMPS.
3. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
4. SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
5. CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
6. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED, SEE PLANS.
7. DIMENSIONS SHOWN IN TABLES ARE FOR 3 INCH TO 9 INCH CURB HEIGHTS. WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMPS WILL HAVE TO BE CALCULATED BASED ON CROSS SLOPES SHOWN.
8. THE 12H:1V MAX SLOPE IS THE RUNNING SLOPE FOR CURB RAMPS. ENSURE THE RUNNING SLOPE OF CURB RAMPS DOES NOT REQUIRE ITS LENGTH TO EXCEED 15 FEET. THE RUNNING SLOPE MAY EXCEED THE 12H:1V MAX SLOPE SO AS NOT TO EXCEED THE 15 FEET MAXIMUM LENGTH.

GENERAL CONSTRUCTION NOTES:

1. ALL CONCRETE SHALL BE NJDOT CLASS "B" (4,000 PSI)
2. STANDARD DETAIL DIMENSIONS ARE TO BE FOLLOWED UNLESS MODIFIED BY THE ENGINEER TO ACCOMMODATE FIELD CONDITIONS.
3. PLACE EXPANSION JOINTS WHERE EVER RAMP MEETS SIDEWALK OR ADJACENT CURB.
4. TRANSITION FROM RAMP TO STREETS OR WALKS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
5. BROOM FINISH ALL RAMP SURFACES PERPENDICULAR TO THE DIRECTION OF TRAFFIC TO CREATE A SKID RESISTANT SURFACE.

ADA CURB RAMP TYPE 1 DETAIL
N.T.S.

NOT FOR CONSTRUCTION

Pennoni
PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T. 856.668.8600
NJ. COA. NO. GA28033300

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

CIVIL SITE DETAILS

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

BY	REVISIONS	NO.	DATE

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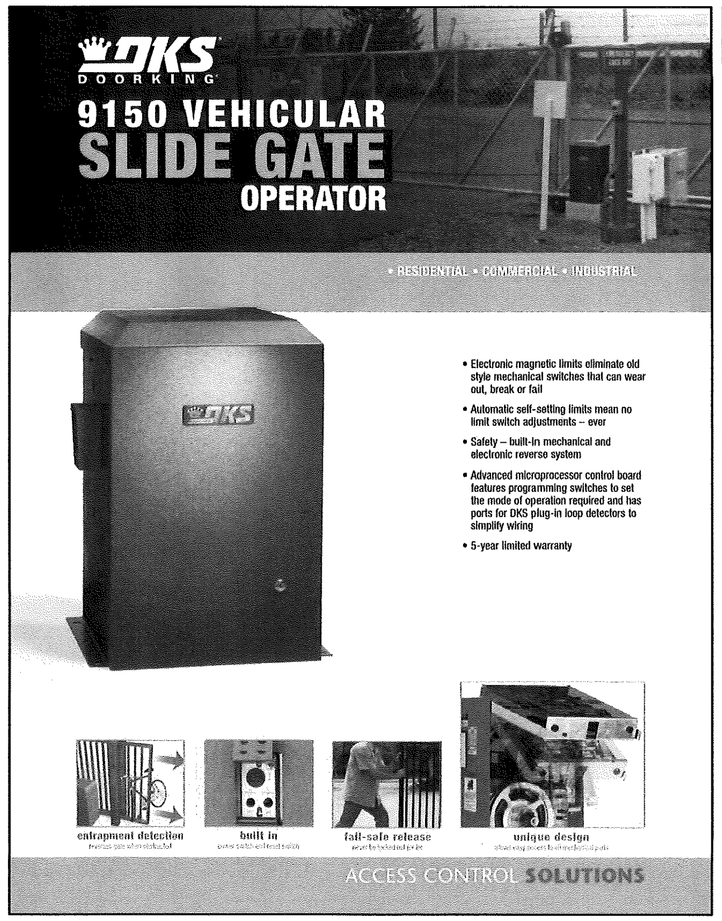
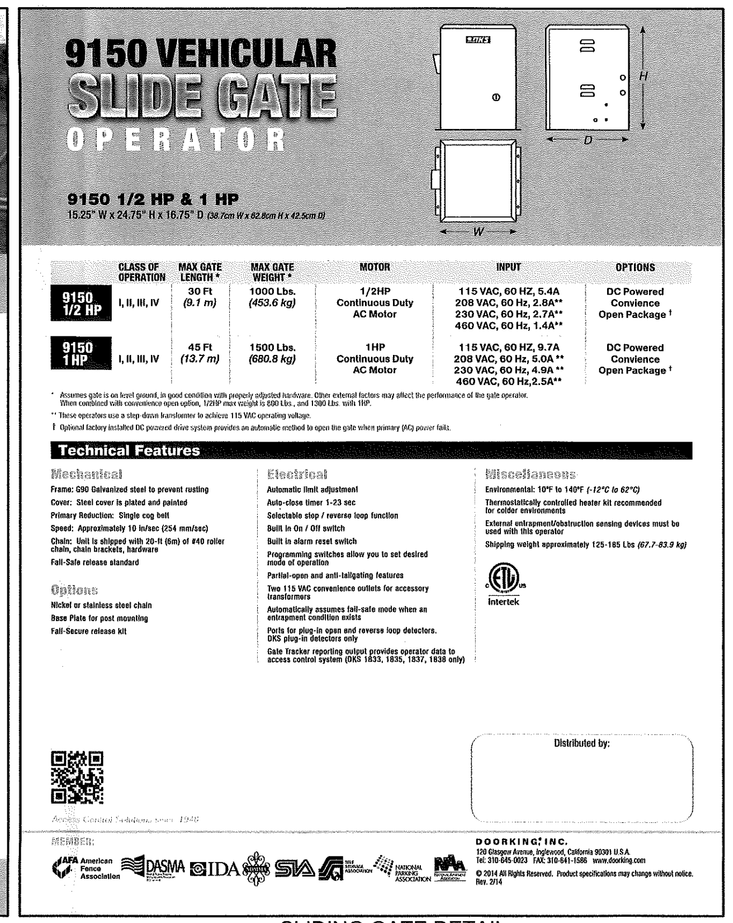
PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	AS NOTED
DRAWN BY	BTM
APPROVED BY	ATB

CS6001

SHEET 11 OF 17

PROJECT STATUS: ---
PLOTTED: 2/8/2019 5:58 PM, BY: Brandon Montes
PLOTSTYLE: Pennoni NCS.ctb
U:\Accounts\HAGEN\HAGEN18001 - 201 N Front St\Design\CS\CS_SHEETSCS6001.dwg





	CLASS OF OPERATION	MAX GATE LENGTH *	MAX GATE WEIGHT *	MOTOR	INPUT	OPTIONS
9150 1/2 HP	I, II, III, IV	30 Ft (9.1 m)	1000 Lbs. (453.6 kg)	1/2HP Continuous Duty AC Motor	115 VAC, 60 Hz, 5.4A 208 VAC, 60 Hz, 2.8A** 230 VAC, 60 Hz, 2.7A** 460 VAC, 60 Hz, 1.4A**	DC Powered Convience Open Package †
9150 1HP	I, II, III, IV	45 Ft (13.7 m)	1500 Lbs. (680.8 kg)	1HP Continuous Duty AC Motor	115 VAC, 60 Hz, 9.7A 208 VAC, 60 Hz, 5.0A ** 230 VAC, 60 Hz, 4.9A ** 460 VAC, 60 Hz, 2.5A**	DC Powered Convience Open Package †

* Assumes gate is on level ground, in good condition with properly adjusted hardware. Other external factors may affect the performance of the gate operator. 30mm cantilever rails convenience opens gates, 120W max weight is 1000 Lbs., and 1200 Lbs. with 1HP.

** These operators use a step-down transformer to achieve 115 VAC operating voltage.

† Optional factory installed DC powered door options provides an automatic method to open the gate when primary (AC) power fails.

Technical Features

Mechanical
Frame: 090 Galvanized steel to prevent rusting
Cover: Steel cover is plated and painted
Primary Reduction: Single cog belt
Speed: Approximately 10 in/sec (254 mm/sec)
Chain: Unit is shipped with 20-ft (6m) of #40 roller chain, chain brackets, hardware
Fail-Safe release standard

Options
Nickel or stainless steel chain
Base Plate for post mounting
Fail-Secure release kit

Electrical
Automatic limit adjustment
Auto-close timer 1-23 sec
Selectable stop / reverse loop function
Built in Ext / Int switch
Built in alarm reset switch
Programming switches allow you to set desired mode of operation
Partial-open and anti-tailgating features
Two 115 VAC convenience outlets for accessory transformers
Automatically assumes fail-safe mode when an abnormal condition exists
Ports for plug-in open and reverse loop detectors. DKS plug-in detectors only
Gate tracker reporting output provides operator data to access control system (DKS 1833, 1836, 1837, 1838 only)

Miscellaneous
Environmental: 10°F to 140°F (-12°C to 62°C)
Thermostatically controlled heater kit recommended for colder environments
External entrapment/obstruction sensing devices must be used with this operator
Shipping weight approximately 125-165 Lbs *(57.7 -83.9 kg)*

Intertek

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Access Control Solutions since 1978

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DOORKING INC.
120 Glasgow Avenue, Inglewood, California 90301 U.S.A.
Tel: 310-645-0023 · FAX: 310-641-1586 · www.dooking.com
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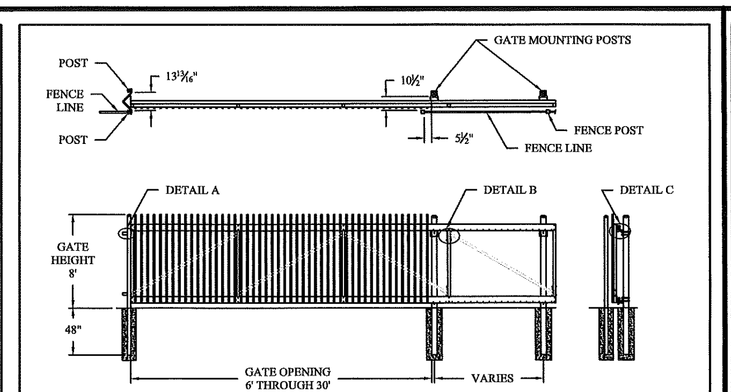
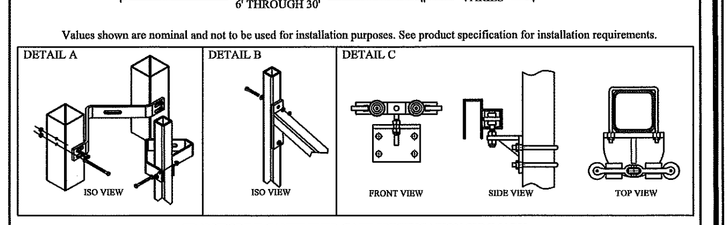
SLIDING GATE DETAIL
(N.T.S.)



Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.



TRANSPORT II CANTILEVER GATE SPECIFICATION SUMMARY

U.S.A. PATENT NO. 5,136,813
Material: Aluminum (ASTM B221 - 6005-T5)
Track: Proprietary Fast-Trak Extruded Shape

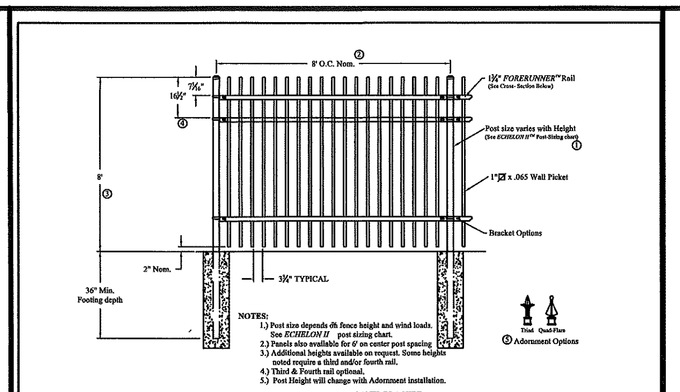
Uprights and Diagonal Braces: 2" Square x ⅛"
Ornamental Pickets: 1" Square x ⅛"
Cantilever Gate Hardware: Kit # TOKOD

Ameristar's TransPort Ornamental Cantilever Gates are designed to be mounted on posts that are off-set from the fence line. By off-setting the gate posts, the gate will pass between the fence and the mounting posts, keeping it from falling in the event of a track or hardware failure (a requirement of ASTMF2200).

TP2000

TRANSPORT II GENESIS CANTILEVER GATE			
DR: CI	SH . 1of 1	SCALE: DO NOT SCALE	
CK: PB	Date 6/28/10		REV: b

AMERISTAR 1555 N. Mingo Tulsa, OK. 74116 1-888-333-3422 www.ameristarfence.com



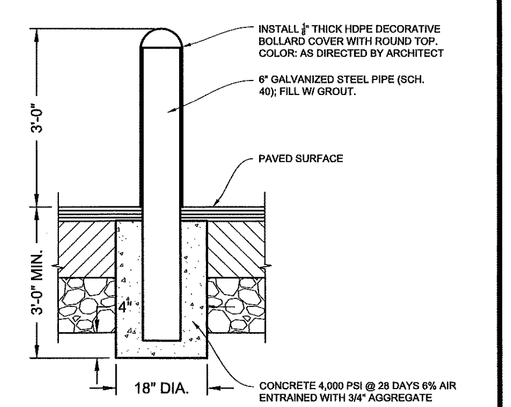
INDUSTRIAL STRENGTH ALUMINUM

ECHELON II GENESIS 3-RAIL			
DR: NJB	SH . 1of 1	SCALE: DO NOT SCALE	
CK: BS	Date 2-07-12		REV: f

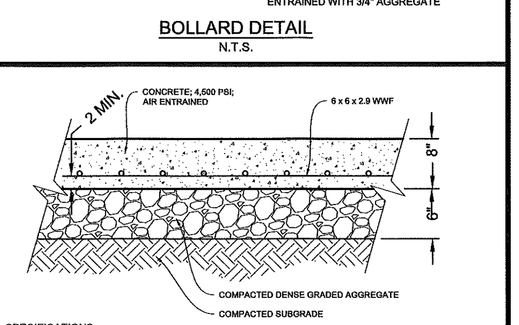
AMERISTAR 1555 N. Mingo Tulsa, OK. 74116 1-888-333-3422 www.ameristarfence.com

ORNAMENTAL METAL FENCE
(N.T.S.)

NOT FOR CONSTRUCTION



BOLLARD DETAIL
N.T.S.

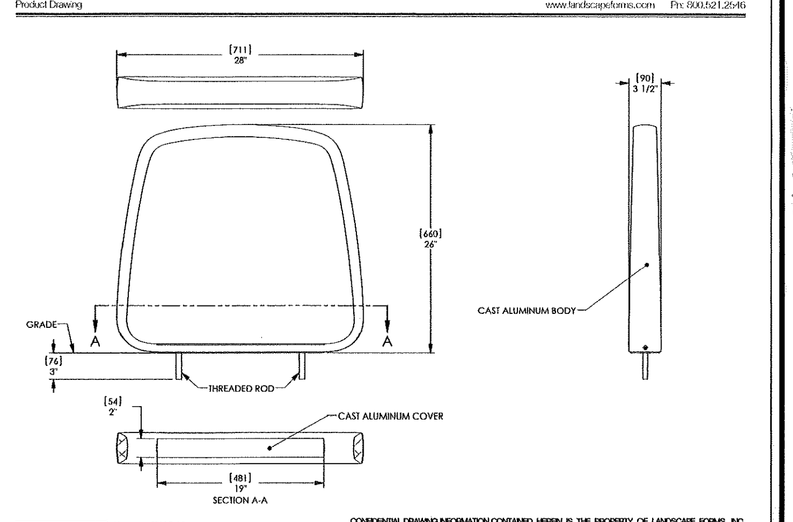


SPECIFICATIONS

1. EXPANSION JOINTS SHALL BE AT 15 FT C.C. MAXIMUM. EXPANSION JOINT LOCATIONS SHALL APPROVED BY ENGINEER/OWNER.
2. EXPANSION JOINT SHALL BE 1/2" MASTIC MATERIAL OR APPROVED EQUIVALENT.
3. ALL EXPANSION JOINTS SHALL RECEIVE A BACKER ROD AND COLORED NON-SHRINK SEALER TO MATCH CONCRETE; SIKA OR EQUIVALENT.
4. SUBGRADE SHALL BE COMPACTED AND PROOF-ROLLED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

ADA PARKING, TRANSFORMER / GENERATOR AND REAR LOADING AREA CONCRETE PAD DETAIL
N.T.S.

Ride™ Bike Rack, Embedded
Product Drawing
www.landscapeforms.com Date: 5/7/2010 Ph: (800) 521-2546



landscapeforms Drawing: R695-02
Dimensions are in inches [mm]
U.S. Patent No.: D631696

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Ride™ bike rack
Installation Guide
Date: September 9, 2016
www.landscapeforms.com Ph: (800) 521-2546

INSTALLATION PROCEDURE:

***WARNING!* Unit must be anchored.**

1. Set bike rack in position. Using 3/16" hex key, adjust leveling glides until unit is plumb.
2. Mark hole locations. See Fig. 1 for recommended spacing.
3. Move bike rack and drill holes. Clear debris from holes.

FOR EMBEDDED MOUNT:
1. Thread anchor rods with thread-patch into bike rack as shown in Fig. 4.
2. Fill holes with adhesive to level shown in Fig. 4.
3. Set unit in place and wipe away excess adhesive.
4. After adhesive has fully cured to manufacturer's recommendation, turn all four leveling glides equally until tight to remove any excess movement of the bike rack.

FOR SURFACE MOUNT:
1. Set unit in place and install anchor bolts (not supplied by Landscape Forms) according to anchor manufacturer's instructions.
2. Turn all four leveling glides equally until tight to remove any excess movement of the bike rack.

FOR COVER PLATE INSTALLATION:
1. Set cover plate in place. End with vertical tab and no thru hole should be installed on the side with access for the set screw. Using 1/8" hex key, install set screw from hardware pack.
2. Tighten set screw until cover plate is secure.

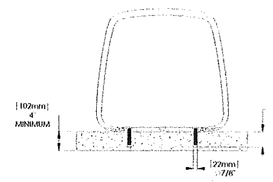


Fig. 3. – Hole size for embedded bike rack

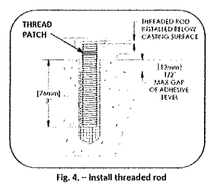


Fig. 4. – Install threaded rod

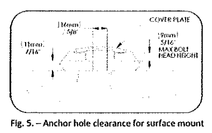


Fig. 5. – Anchor hole clearance for surface mount

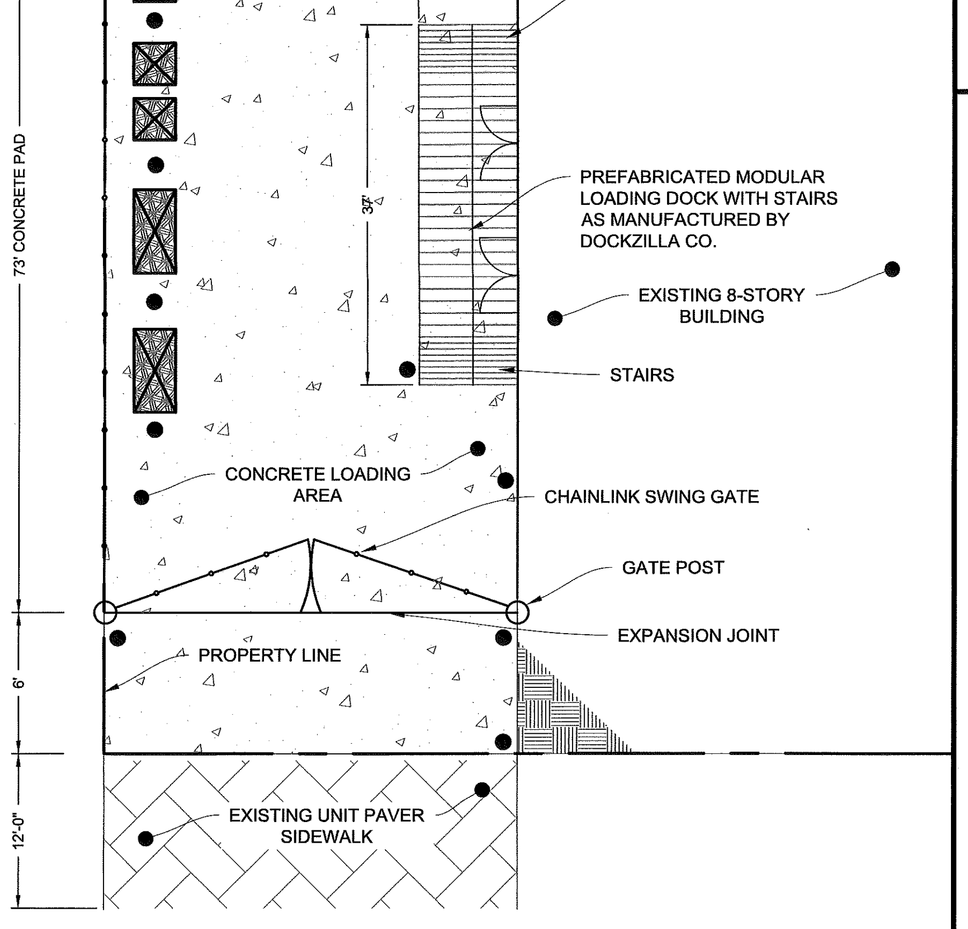
landscapeforms

Page 2 of 2

NOTES:

1. FINISH COLOR: DARK GRAY. FINAL COLOR TO BE APPROVED BY ARCHITECT.
2. INSTALL PER MANUFACTURER'S SPECIFICATIONS FOR SURFACE MOUNT WITH COVER PLATE.
3. EXPANSION ANCHORS: 304 STAINLESS STEEL REDHEAD "DYNABOLT" EXPANSION SLEEVE ANCHORS OR EQUAL. SIZE" ½" DIA. x 3"L.
4. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL.
5. DO NOT PLACE OR SLIDE BIKE RACK PARTS ON CONCRETE OR OTHER HARD OR TEXTURED SURFACE - THIS WILL DAMAGE THE FINISH CAUSING RUST TO OCCUR.
6. CONTRACTOR SHALL USE TOUCH-UP PAINT ON ANY GOUGES IN FINISH CAUSED BY ASSEMBLY TOOLS.

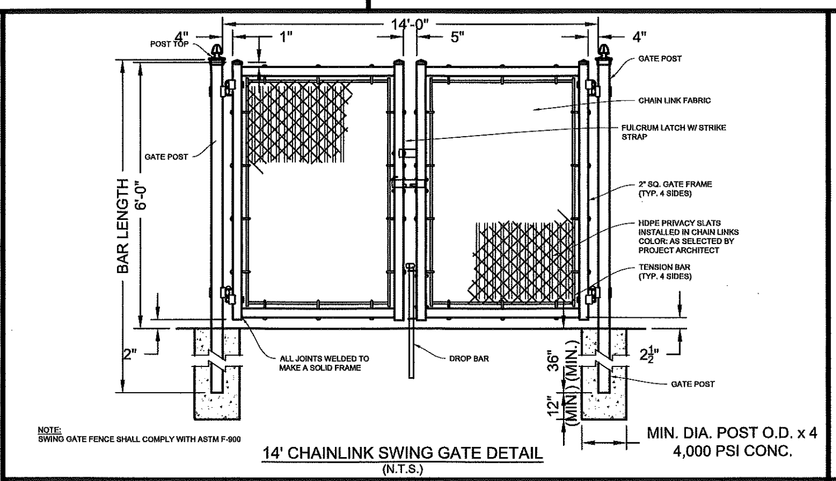
BIKE RACK DETAIL
N.T.S.



NOTES:

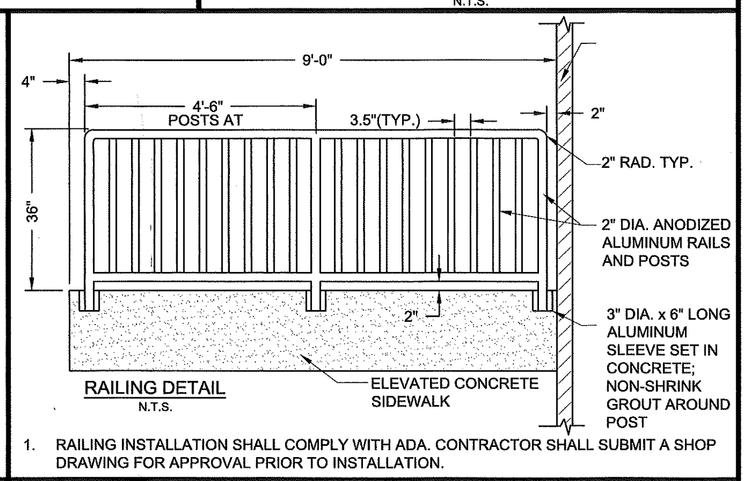
1. PREFABRICATED MODULAR LOADING DOCK TO BE MANUFACTURED BY DOCKZILLA CO. CHANHASSEN MN. TELEPHONE NUMBER: 1.800.637.3036.
2. ALL CHAIN LINK FENCING AND GATES SHALL INCLUDE HDPE PRIVACY SLATS.

LOADING AREA DETAIL
(N.T.S.)



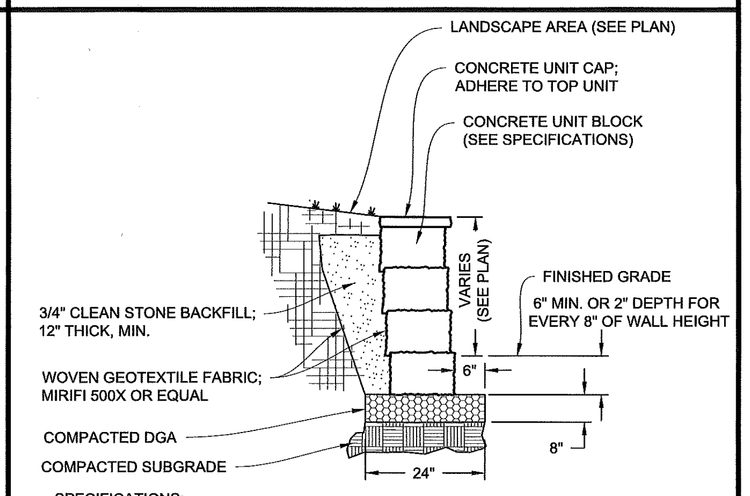
NOTE:
SHRED GATE FENCE SHALL COMPLY WITH ASTM F-900

14' CHAINLINK SWING GATE DETAIL
(N.T.S.)



RAILING DETAIL
N.T.S.

1. RAILING INSTALLATION SHALL COMPLY WITH ADA. CONTRACTOR SHALL SUBMIT A SHOP DRAWING FOR APPROVAL PRIOR TO INSTALLATION.



SPECIFICATIONS:

UNIT WALL: E.P. HENRY CO. COVENTRY WALL (TM) OR APPROVED EQUIVALENT
PATTERN: RANDOM USING 3" AND 6" HIGH UNITS
COLOR: TO BE SELECTED BY OWNER
WALL ADHESIVE:
PL PREMIUM POLYURETHANE ADHESIVE (TM)

INSTALLATION:

1. INSTALL WALL PER MANUFACTURERS SPECIFICATIONS.
2. INSTALL FIRST ROW OF BLOCK TWO INCHES (2") BELOW GRADE FOR EVERY EIGHT INCHES (8") IN WALL HEIGHT ON A LEVEL, COMPACTED DGA STONE BASE. COMPACT SUBGRADE AND STONE BASE TO 95% MAX. DRY DENSITY AND PER ASTM D698.
3. OFFSET NEXT ROW OF BLOCK AND ADHERE ALL UNIT. INSTALL GEOTECH FABRIC AND BACKFILL BEHIND WALL WITH CRUSHED STONE AND COMPACT.
4. CONTINUE INSTALLATION TO SPECIFIED PATTERN MAKING SURE TO OFFSET AND ADHERE TO ALL UNITS.
5. INSTALL CORNER UNITS AT STEPS IN WALL AND AT EXPOSED WALL ENDS.
6. FINISH OFF TOP OF WALL WITH MATCHING WALL CAP UNIT. CUT UNITS FOR RADIUS.
7. ADHERE TOP CAP AND ALL CORNER UNITS.

CONCRETE UNIT RETAINING WALL DETAIL
N.T.S.

Pennoni
PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T. 856.668.8600
NJ COA NO. GA28033300

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121

2/8/2019

201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

CIVIL SITE DETAILS

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	AS NOTED
DRAWN BY	BTM
APPROVED BY	ATB

CS6002

SHEET 12 OF 17

PLOTTED: 2/8/2019 8:58 PM, BY: Brandon Morales
PLOTSTYLE: Pennoni HCS.ctb
PROJECT STATUS: —
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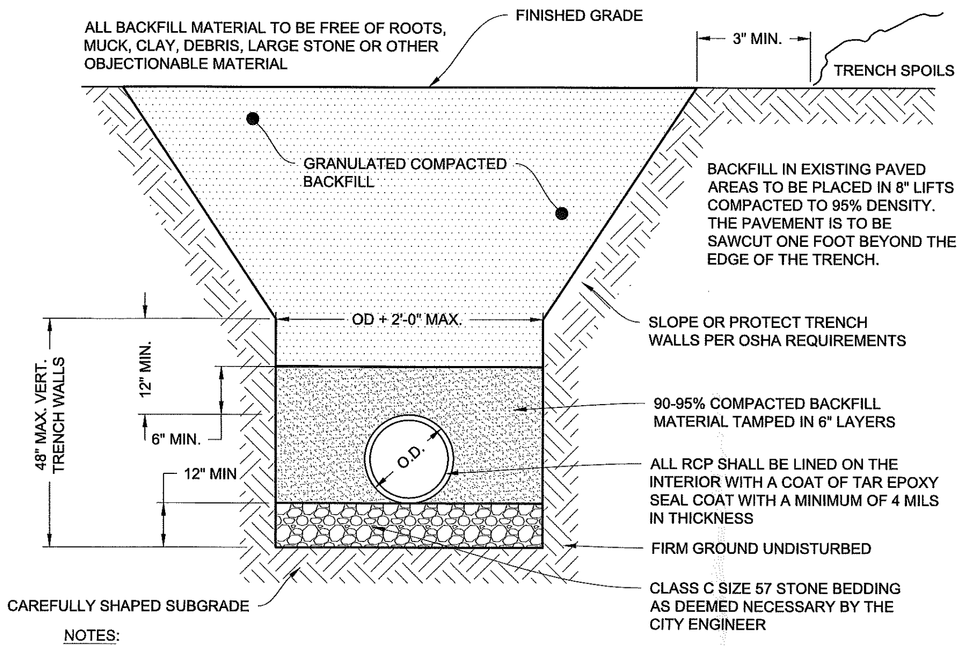
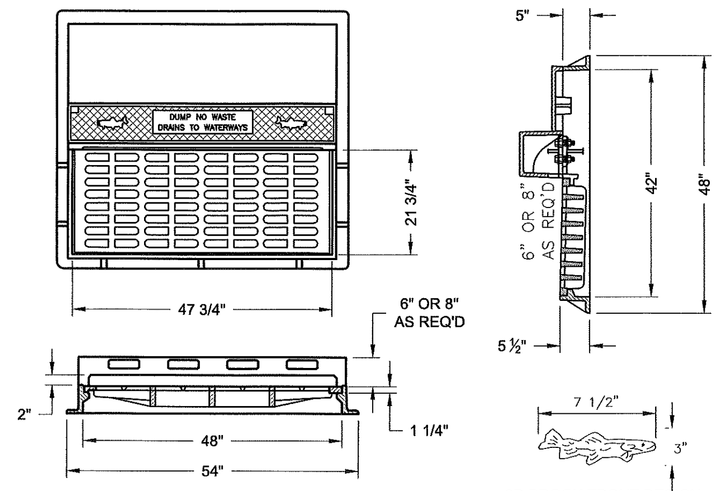


NOTES:

1. TRENCHING OPERATIONS SHALL CONFORM TO ALL OSHA REQUIREMENTS.
2. IF THE PIPE DIAMETER EXCEEDS 48", THE MINIMUM 12" COVER SHALL STILL APPLY.
3. THIS TRENCH IS SUITABLE FOR USE UNDER WET OR UNSTABLE SOIL CONDITIONS.
4. ALL CONCRETE PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.

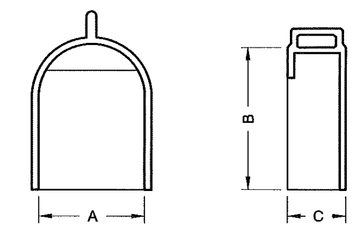
CONCRETE PIPE TRENCH
N.T.S.



PATTERN No. 2618 AS MANUFACTURED BY CAMPBELL BRIDGESTATE FOUNDRY COMPANY (TYPE "N - ECO CURB PIECE")

3D BROOK TROUT DESIGN

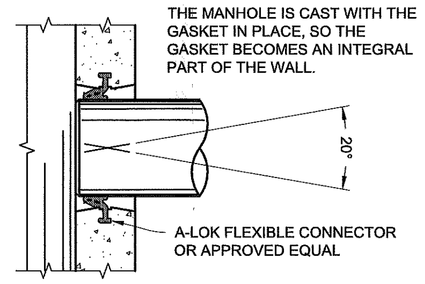
NJDOT TYPE "B" CURB INLET BICYCLE SAFE GRATE DETAIL
N.T.S.



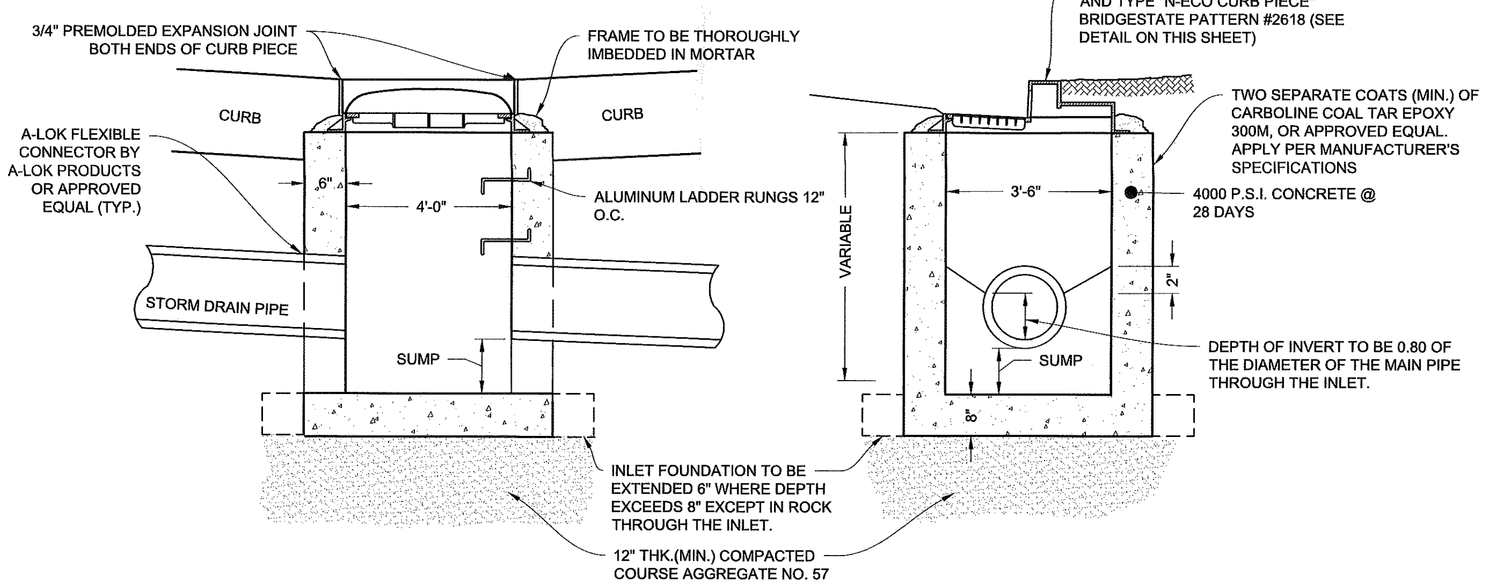
CAST IRON TRAP AND STAINLESS STEEL HANGER HOOKS

PATTERN NUMBER	DIMENSIONS IN INCHES			PIPE SIZE
	A	B	C	
2560	9 1/2	16	4 3/4	6
2561	11 1/2	20 1/2	5 1/2	8
2562	13 3/4	23 1/2	6 1/2	10
2563	15 3/4	26	7 1/2	12
2564	18	27	9	15
2565	20	27	10	18
2566	25 1/4	30	11 1/4	21

STANDARD CAST IRON TRAP (CAMPBELL FOUNDRY)



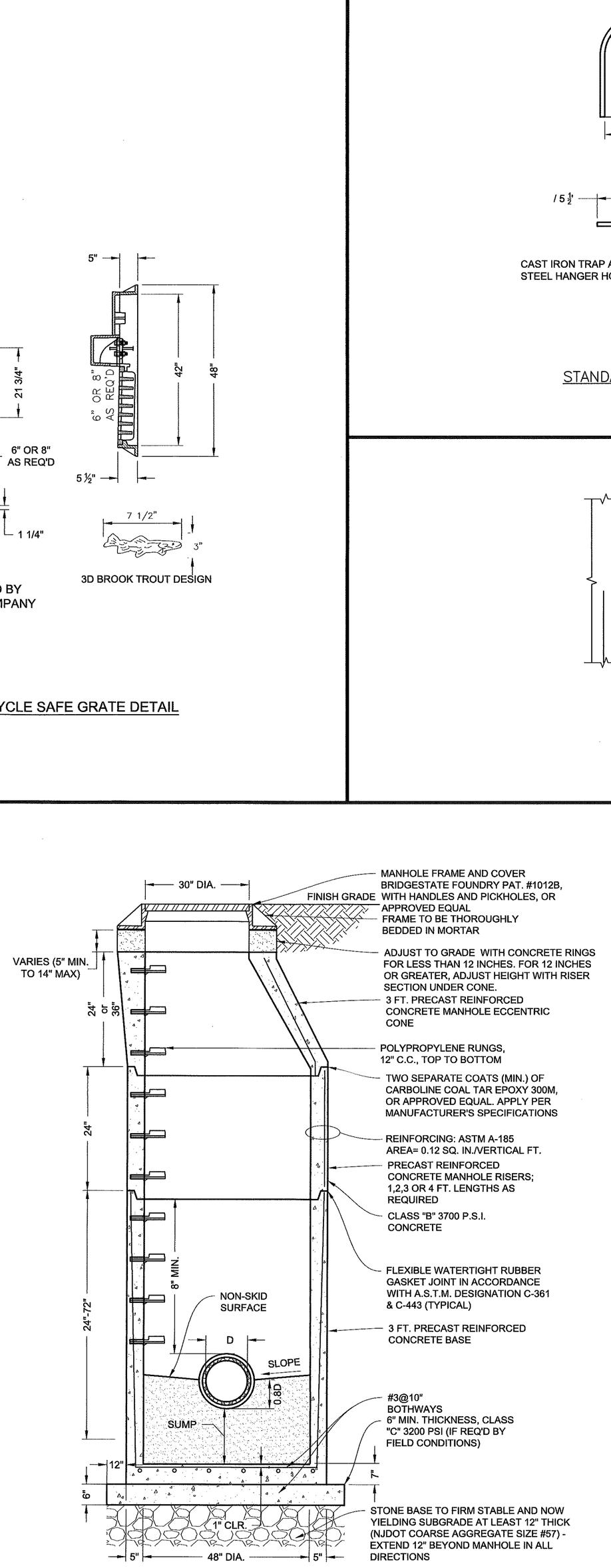
A-LOK (STM) SECTION
N.T.S.



NOTES:

1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT A RATE OF GRADE OF 2 INCHES PER FOOT.
2. ALL INLETS TO BE PROVIDED WITH A 6" CURB PIECE.

TYPE "B" INLET DETAIL
N.T.S.



NOTES:

1. PRECAST MANHOLE IN ACCORDANCE WITH A.S.T.M DESIGNATION C-478, MINIMUM COMPRESSIVE STRENGTH 4000 P.S.I. (TYP.) MANHOLE TO BE MANUFACTURED BY ATLANTIC CONCRETE, OR APPROVED EQUAL.
2. ALL MANHOLES NOT LOCATED IN CROWN OF ROAD SHALL BE CONSTRUCTED WATERTIGHT WITHOUT THE USE OF A RUBBER GASKET. WATER TIGHTNESS MAY BE ACHIEVED BY DISH SHAPED INSERTS, WATERTIGHT CASTING, OR APPROVED EQUAL. DISH SHAPED WATERTIGHT INSERT SHALL BE SUPPLIED, TWO PER MANHOLE.
3. SMOOTH CONCRETE CHANNEL WITH DEPTH EQUAL TO 0.80 TIMES THE DIA. OF THE MAIN SEWER FOR SIZES 8" TO 15" AND 0.50 TIMES THE DIA. FOR SIZES 16" AND ABOVE. (USE CLASS C CONCRETE).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ADEQUATE BALLAST TO OFFSET FLOATATION FORCES ACTING ON MANHOLES INSTALLED IN WET AREAS. PROVIDE CALCULATIONS WITH SUBMITTAL SIGNED AND SEALED BY N.J.P.E.
5. POLYPROPYLENE RUNGS, WITH GRADE 60 STEEL REINFORCEMENT AND TEETH AND SIDE CLEATS, AS MANUFACTURED BY MA INDUSTRIES. STEEL RUNGS NOT ALLOWED, FOR MANHOLES GREATER THAN 15'-0" DEEP. APPLICANT SHALL CONTACT CCMUA FOR SPECIFIC MANHOLE REQUIREMENTS. ALL OSHA REQUIREMENTS MUST BE MET.
6. ANY MANHOLE REQUIRING LINING SHALL HAVE MANHOLE RUNGS REMOVED AND HAVE A COMPOSITE LADDER INSTALLED.
7. PROVIDE WRAPIDSEAL MANHOLE ENCAPSULATION SYSTEM, AS MANUFACTURED BY CANUSA-CPS, AROUND FRAME AND GRADE RINGS FOR ALL MANHOLES AND AROUND ALL RISER JOINTS. INSTALLATION SHALL BE PROVIDED IN ACCORDANCE WITH ALL OF MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
8. MANHOLE FRAME SHALL BE LAID IN 1-INCH OF MORTAR AND HAVE 1-INCH MORTAR AROUND THE RIM.
9. THERE SHALL BE NO CHANGE IN FLOW DIRECTION GREATER THAN 90 DEGREES.
10. THE FLEXIBLE CONNECTIONS SHALL BE A-LOK FLEXIBLE CONNECTOR BY A-LOK PRODUCTS, OR APPROVED EQUAL, DESIGNED TO MEET THE REQUIREMENTS OF ASTM C-1478, "STORM DRAIN RESILIENT CONNECTORS BETWEEN REINFORCED CONCRETE STORM SEWER STRUCTURES, PIPES, AND LATERALS."

48" DIA. STORM MANHOLE
N.T.S.

NOT FOR CONSTRUCTION

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.8600
NJ COA NO. GA28033300

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

STORM SEWER DETAILS

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS

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PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	AS NOTED
DRAWN BY	BTM
APPROVED BY	ATB

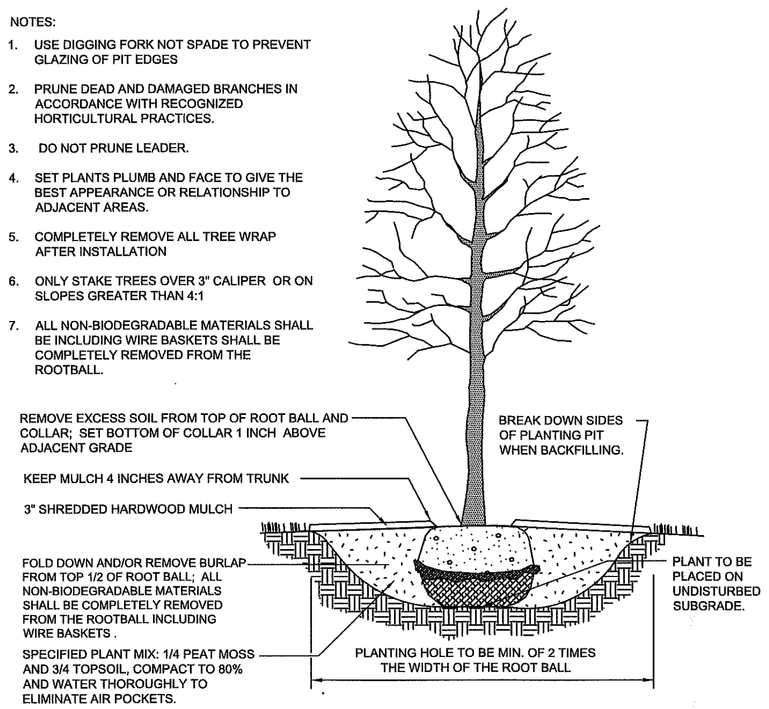
CS6021

SHEET 13 OF 17

PLOTTED: 2/8/2019 8:06 PM, BY: Brandon Morales PLOTSTYLE: Pennoni HCS.stb PROJECT STATUS: —
U:\Accounts\HAGEN\HAGEN18001 - 201 N Front Street\DESIGN_SHEETS\CS6021.dwg

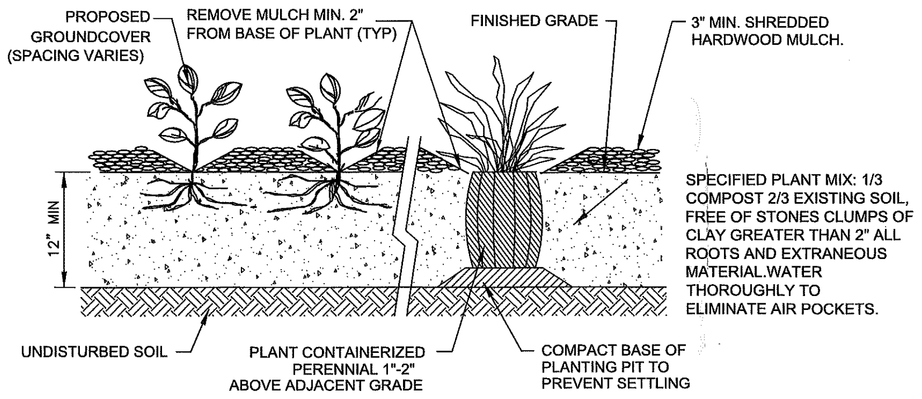
NOTES:

1. USE DIGGING FORK NOT SPADE TO PREVENT GLAZING OF PIT EDGES
2. PRUNE DEAD AND DAMAGED BRANCHES IN ACCORDANCE WITH RECOGNIZED HORTICULTURAL PRACTICES.
3. DO NOT PRUNE LEADER.
4. SET PLANTS PLUMB AND FACE TO GIVE THE BEST APPEARANCE OR RELATIONSHIP TO ADJACENT AREAS.
5. COMPLETELY REMOVE ALL TREE WRAP AFTER INSTALLATION
6. ONLY STAKE TREES OVER 3" CALIPER OR ON SLOPES GREATER THAN 4:1
7. ALL NON-BIODEGRADABLE MATERIALS SHALL BE INCLUDING WIRE BASKETS SHALL BE COMPLETELY REMOVED FROM THE ROOTBALL.



DECIDUOUS TREE PLANTING

NOT TO SCALE

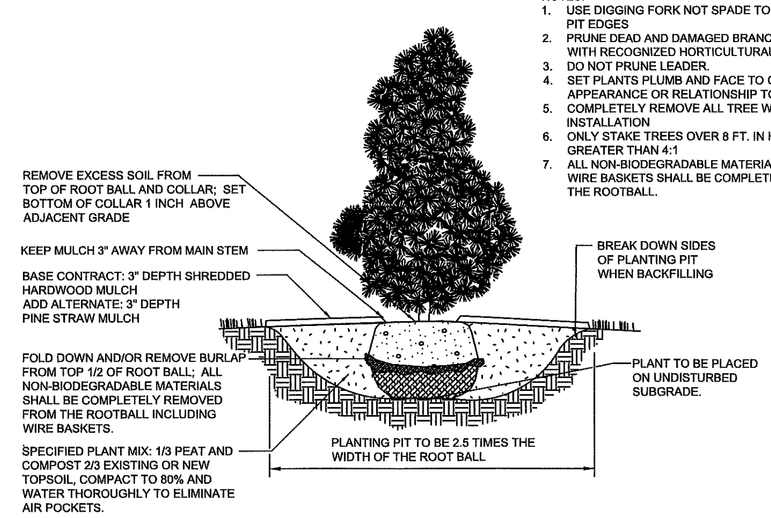


PERENNIAL/GROUNDCOVER/ORN. GRASS PLANTING

NOT TO SCALE

NOTES:

1. USE DIGGING FORK NOT SPADE TO PREVENT GLAZING OF PIT EDGES
2. PRUNE DEAD AND DAMAGED BRANCHES IN ACCORDANCE WITH RECOGNIZED HORTICULTURAL PRACTICES.
3. DO NOT PRUNE LEADER.
4. SET PLANTS PLUMB AND FACE TO GIVE THE BEST APPEARANCE OR RELATIONSHIP TO ADJACENT AREAS.
5. COMPLETELY REMOVE ALL TREE WRAP AFTER INSTALLATION
6. ONLY STAKE TREES OVER 8 FT. IN HEIGHT OR ON SLOPES GREATER THAN 4:1
7. ALL NON-BIODEGRADABLE MATERIALS SHALL BE INCLUDING WIRE BASKETS SHALL BE COMPLETELY REMOVED FROM THE ROOTBALL.

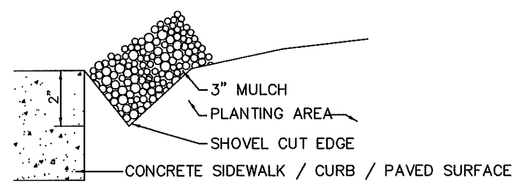


EVERGREEN TREE PLANTING

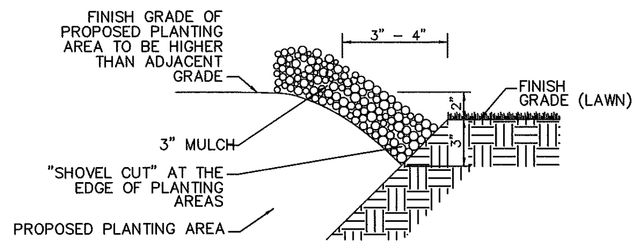
NOT TO SCALE

PLANTING NOTES

1. ALL PLANT LOCATIONS SHALL BE STAKED IN THE FIELD AND LOCATIONS APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
2. TOPSOIL WITH A QUALITY ORGANIC SOIL AMENDMENT SHALL BE USED FOR ALL PLANTING AND SEEDING OPERATIONS.
3. INSTALL 12" MINIMUM TOPSOIL MIXTURE IN GROUNDCOVER BEDS AND 24" IN SHRUB BEDS AND ISLANDS. 6" OF TOPSOIL ARE TO REMAIN ON ALL DISTURBED AREAS TO RECEIVE SOD OR SEED.
4. NOTIFY ALL UTILITY COMPANIES AND LOCATE ALL UTILITIES PRIOR TO EXCAVATING PLANT PITS. PLANT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID INTERFERENCE WITH UNDERGROUND UTILITIES.
5. SHOULD ANY DISCREPANCY ARISE BETWEEN THE PLANTING PLAN AND THE PLANTING SCHEDULE, THE DEVELOPER IS RESPONSIBLE FOR THE QUANTITIES SHOWN ON THE LANDSCAPE PLAN.
6. ALL PLANT MATERIAL SHALL BE OF NURSERY STOCK QUALITY AS DEFINED BY THE AMERICAN ASSOCIATION OF NURSERYMAN STANDARDS AND SHALL BE FIRST QUALITY NURSERY GROWN STOCK FREE OF DISEASE AND OBJECTIONABLE DISFIGUREMENTS AND PLANTED IN CONFORMANCE WITH SOUND NURSERY PRACTICE AND APPLICABLE CITY STANDARDS.
7. ALL NON-BIODEGRADABLE ROOT WRAPPING TO BE REMOVED COMPLETELY BEFORE PLANTING.
8. ALL TREES SHALL BE BALLED AND BULLAPED, NURSERY GROWN STOCK.
9. ALL PLANT MATERIAL AND LAWNS SHALL BE PLANTED WITHIN THE RECOMMENDED SEASONAL TIME PERIODS A S PRESCRIBED BY ACCEPTED HORTICULTURAL PRACTICE. RECOMMENDED PLANTING TIMES ARE BETWEEN APRIL 15TH THRU MAY 31ST OR AUGUST 17TH THRU OCTOBER 15TH. FALL DIGGING AND TRANSPLANT HAZARD TREE SPECIES (OAKS,ETC.) SHALL BE ONLY BE DUG AND PLANTED IN SPRING.
10. ALL PLANT MATERIAL SHALL BE APPROVED UPON ARRIVAL TO THE SITE, UNLESS OTHERWISE NOTIFIED.
11. PROPOSED PLANT MATERIAL MAY BE SUBSTITUTED BY SIMILAR PLANTS PRIOR TO INSTALLATION, SUBJECT TO APPROVAL BY THE CITY ENGINEER.
12. A TEMPORARY FENCE, SUCH AS SNOW FENCE, SHALL BE ERECTED AT THE PERIMETER OF THE DRIPLINE OF ALL EXISTING VEGETATION INDICATED TO REMAIN. PRIOR TO EXCAVATION, CONSTRUCTION OR SITE WORK. THIS FENCE SHALL BE REMOVED ONLY AT THE TIME OF COMPLETION OF ALL CONSTRUCTION AND FINAL GRADING.
13. EXISTING TREES TO BE RELOCATED SHALL BE HANDLED ACCORDING TO ACCEPTABLE HORTICULTURE PRACTICE.
14. ALL DISTURBED AREAS NOT SHOWN AS PLANTED OR LAWN SHALL BE TOPSOILED AND SEEDED OR RETURNED TO THEIR ORIGINAL STATE BEFORE DISTURBANCE AS DIRECTED BY THE CITY ENGINEER.
15. ALL AREAS NOT RELATED TO HE PROPOSED DEVELOPMENT SHALL REMAIN IN THEIR NATURAL STATE. DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO WORK AREA AND AS DEFINED ON DWGS. CS0501-04 AND CS8001.
16. ADDITIONAL LANDSCAPING APPROVED BY THE CITY ENGINEER SHALL BE PROVIDED BY THE APPLICANT TO REPALCE ANY VEGETATION IN ADVERTENTLY REMOVED OUTSIDE THE LIMIT OF DISTURBANCE LINE AS SHOWN ON THE APPROVED GRADING PLAN DURING CONSTRUCTION.
17. PROPOSED TREES SHALL NOT BE PLANTED WITHIN EASEMENTS, DRIVEWAYS AND SITE TRIANGLES. THEREFORE, THE TREE LOCATIONS SHALL BE APPROXIMATE AND SHALL BE ADJUSTED IN THE FIELD AS REQUIRED.
18. ALL SHADE TREES IN PEDESTRIAN WALKS AREAS SHALL HAVE AN INITIAL LIMBS PRUNED STARTING AT A MINIMUM OF 7 FT. ABOVE FINISHED GRADE.
19. ALL TREES SHALL BE MULCHED WITH A THREE INCH (3") MINIMUM DEPTH OF SHREDDED HARDWOOD BARK.
20. PLANTS ARRANGED IN CONTINUOUS GROUPINGS SHALL BE SET IN MULCHED BEDS.
21. PLANTING DEBRIS SHALL BE REMOVED FROM THE PROPERTY.
22. ANY LIVE TREE WHICH IS SUBSTANTIALLY DAMAGED AS A RESULT FO GRADING OR GENERAL CONSTRUCTION MUST BE REMOVED AND REPLACED WITH ANOTHER TREE OR TREES AS APPROVED BY THE CITY ENGINEER.
23. TREE REMOVAL FROM ANY SLOPE OR ENVIRONMENTALLY SENSITIVE AREA IS PROHIBITED IF IT WILL CONTRIBUTE, IN THE OPINION OF THE CITY ENGINEER, TO EXTRA RUNOFF OF SURFACE WATER ONTO ADJOINING PROPERTY AND EROSION AND SILTING, UNLESS OTHER MEANS APPROVED BY THE CITY ENGINEER ARE PROVIDED TO PREVENT RUNOFF AND EROSION.
24. NO HEALTHY TREE THAT IS SPECIAL BY VIRTUE OF HISTORY, UNUSUAL SIZE, OR AGE OR OF RAE SPECIES, SHALL BE REMOVED EXCEPT AS MAY BE REQUIRED FOR PROTECTION OF PUBLIC HEALTH, SAFETY AND WELFARE.
25. SELECTED EXISTING HEALTHY TREES SIX (6) INCHES IN CALIPER OR LESS MEASURED FOUR (4) FEET ABOVE THE GROUND SHALL BE RELOCATED ON-SITE UNDER THE DIRECTION AND APPROVAL OF THE CITY ENGINEER.
26. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF PLANTING. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT AND REGULAR GROWTH OF PLANTS.
27. ALL SHRUBS SPACED 7 FT. O.C. OR CLOSER SHALL BE IN CONTINUOUS MULCHED BEDS.
28. SEED ALL DISTURBED AREAS WITH REQUIRED SEED MIX (SEE DWG. CS8501 FOR SEEDING MIX SCHEDULE).
29. TREES SHOULD BE PLANTED A MIN. OF FIVE (5) FEET FROM SIDEWALKS UNLESS IN TREE PITS.
30. GUY WIRES AND STAKES WILL ONLY BE UTILIZED IF CONDITIONS MERIT AND WILL BE REMOVED BY THE DEVELOPER AT THE END OF THE GUARANTEE PERIOD.
31. PLANT MATERIAL GUARANTEE: ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF TWO (2) YEARS FROM DATE OF INSTALLATION. ANY AND ALL PLANT MATERIAL THAT DIES OR FAILS TO THRIVE SHALL BE IMMEDIATELY REPLACED WITH LIKE SPECIES BY THE CONTRACTOR AND SHALL BE IN HEALTHY AND VIGOROUS CONDITION FROM THE DATE OF ACCEPTANCE. IT IS UNDERSTOOD THAT THE CONTRACTOR WILL PROVIDE ADEQUATE AND TIMELY CARE DURING THE GUARANTEE PERIOD TO THE HIGHEST HORTICULTURAL STANDARDS. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF ALL PROPOSED PLANTINGS BY PROVIDING THE CORRECT WEEDING, SPRAYING, WATERING, PRUNING AND FERTILIZING.



TYPICAL EDGING DETAIL AT PAVING



NOTE: PROPOSED TURF AREA TO MATCH GRADE OF SURROUNDING TURF AREA

TYPICAL EDGING DETAIL AT LAWN

MULCH EDGING

NOT TO SCALE

SEEDING NOTES

1. SEED ALL AREAS DISTURBED BY CONSTRUCTION NOT OTHERWISE CONTAINING PLANTING BEDS, SIDEWALKS, BUILDINGS, ETC.
2. BEFORE SEEDING, CONTRACTOR SHALL PROVIDE SOIL TESTS AND INCORPORATE NECESSARY SOIL AMENDMENTS PER SOIL TEST RECOMMENDATIONS.
3. PERFORM ALL FINISH GRADING, WITHIN AREAS OF DISTURBANCE, NECESSARY TO BRING SITE TO REQUIRED FINISHED ELEVATIONS. FINISH GRADING SHALL CONSIST OF PREPARING SUBGRADE AND SPREADING TOPSOIL READY FOR SEEDING OPERATIONS.
4. TOPSOIL SHALL BE UNIFORMLY SPREAD IN DISTURBED AREAS WITH BLADE GRADER, OR BY ANY OTHER APPROVED METHOD, TO A MINIMUM DEPTH OF 6 INCHES TO PERMIT 1 INCH OF SETTLEMENT. CORRECT ANY SURFACE IRREGULARITIES TO PREVENT FORMATION OF LOW SPOTS AND POCKETS THAT WOULD RETAIN WATER. PRIOR TO FINE GRADING, REMOVE ALL EXISTING ANNUAL TYPE VEGETATION.
5. SOW SEED AT THE RECOMMENDED SEEDING RATE AS SHOWN IN THE SEEDING MIX SCHEDULE AS NOTED ON EROSION CONTROL PLANS.
6. SEED SHALL BE APPLIED APRIL 15TH THRU MAY 31ST OR AUGUST 17TH THRU OCTOBER 15TH.
7. ON ALL SLOPES 3:1 OR GREATER, USE AN ORGANIC SOIL STABILIZER SUCH AS 'CON-TACK' OR EQUAL AT THE RATE OF 25 LBS PER 1,000 GALLONS OR AT RATES RECOMMENDED BY THE MANUFACTURER.
8. KEEP NEWLY SEEDED GRASS AREAS MOISTENED DURING SEED GERMINATION AND UNTIL THE GRASS COVERS AT LEAST 75% OF THE SEEDED AREAS TO A HEIGHT OF 2 TO 3 INCHES.
9. ALL AREAS AND SPOTS, WHICH DO NOT SHOW A PROMPT CATCH OF GRASS, SHALL THEN BE RE-SEEDED, AND THE OPERATION REPEATED UNTIL COMPLETE COVERAGE IS OBTAINED.
10. SEE DWG. CS8501 FOR SEEDING SPECIFICATIONS AND RATES.

LANDSCAPE MAINTENANCE NOTES

THE CONTRACTOR AND AGENTS OR ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, PRESERVATION AND MAINTENANCE OF ALL PLANTING AND PHYSICAL FEATURES SHOWN ON THE PLANS DURING THE GUARANTEE PERIOD .

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF SITE VEGETATION DURING THE GUARANTEE PERIOD TO INCLUDE BUT NOT BE LIMITED TO:
2. FERTILIZER: SPRING AND FALL FERTILIZER APPLICATIONS.
3. PRUNING: PRUNING SHALL BE LIMITED OR REMOVAL OF DEAD WOOD OR BRANCHES FOR TREES OR FOR SIGHT DIFFERENCES/SAFETY REASONS. PRUNING OF SHRUBS AND TREES SHALL BE LIMITED TO THE PRUNING NECESSARY TO MAINTAIN THE NATURAL SHAPE OF THE PLANT EXCEPT FOR SHEARED HEDGES.
4. PEST CONTROL: PRE-EMERGENT WEED CONTROL FOR MOWN LAWNS AND SHRUB BEDS MAY BE APPLIED IN FEBRUARY. CHEMICAL TREATMENT FOR INSECT INFESTATION AND DISEASE MAY BE APPLIED AND SHALL BE SPECIFIC TO THE PROBLEM.
5. MULCHING: MULCHING SHALL BE MAINTAINED AT A DEPTH OF 3" IN PLANT BEDS AND AROUND BASE OF TREES.
6. MOWING: MOWN LAWN SEED MIX SHALL BE MOWN AT REGULAR INTERVALS THROUGHOUT THE GROWING SEASON. GRASS HEIGHT SHOULD NOT EXCEED 4 INCHES BEFORE CUTTING. MOWER BLADES SHALL BE SET AT 3 INCHES UNLESS OTHERWISE DIRECTED.
7. PLANT PROTECTION: AVOID EXCESS INTRUSION INTO THE ROOT ZONE AREA OF ESTABLISHED PLANTINGS.
8. WATERING: UNLESS STATED OTHERWISE IN THESE DOCUMENTS, PROVIDE APPROXIMATELY 1-INCH OF RAINFALL/WATER PER WEEK THROUGHOUT THE GROWING SEASON FOR THE FIRST YEAR.

PERENNIAL AND GROUNDCOVER MAINTENANCE

1. WEED CONTROL CAN BE A PROBLEM UNTIL THE GROUNDCOVERS/ PERENNIALS HAVE SPREAD AND FILLED IN THE AREA. CONTROL OF PERSISTENT, PERENNIAL WEEDS, SUCH AS BERMUDAGRASS AND NUTGRASS SHOULD BE ACHIEVED BEFORE PLANTING. USE A NONSELECTIVE HERBICIDE, SUCH AS ROUNDUP. A MULCH APPLIED AFTER PLANTING AND REPLENISHED AS NEEDED TO MAINTAIN A DEPTH OF 3 INCHES WILL REDUCE THE NEED TO WEED BY HAND. PRE-EMERGENCE HERBICIDES CAN BE USED ON MANY TYPES OF GROUNDCOVER TO AID WEED CONTROL; READ THE LABEL CAREFULLY BEFORE APPLYING. AS THE GROUNDCOVER FILLS IN WEEDS WILL BECOME LESS OF A PROBLEM BECAUSE OF THE SHADED SOIL. SOME HAND WEEDING WILL MOST LIKELY BE NEEDED.
2. FERTILIZER - MOST GROUNDCOVERS WILL BENEFIT FROM AN APPLICATION OF FERTILIZER IN LATE WINTER TO EARLY SPRING. USE 2 TO 4 POUNDS OF A COMPLETE FERTILIZER PER 1,000 SQUARE FEET. WATER OR BRUSH FERTILIZER OFF THE FOLIAGE AFTER BROADCASTING.

NOTES:

SET PLANTS PLUMB AND FACE TO GIVE BEST APPEARANCE TO ADJACENT AREAS.

PRUNE ONLY TO REMOVE DEAD OR DAMAGED BRANCHES.

REMOVE EXCESS SOIL FROM TOP OF ROOT BALL AND SET TOP OF ROOT BALL AT FINISHED GRADE OR 1" TO 2" ABOVE IN POORLY DRAINED SOILS

2" MIN. SHREDDED HARDWOOD MULCH. KEEP MULCH 3" AWAY FROM MAIN STEM

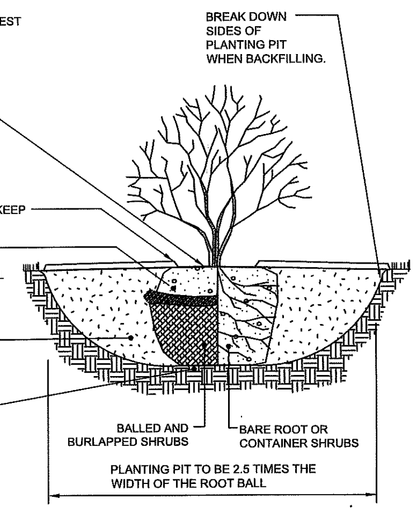
FOLD DOWN AND/OR REMOVE BURLAP FROM TOP 1/2 OF ROOT BALL; ALL NON-BIODEGRADABLE MATERIALS SHALL BE COMPLETELY REMOVED FROM THE ROOTBALL INCLUDING WIRE BASKETS.

SPECIFIED PLANT MIX: 1/3 PEAT AND COMPOST 2/3 EXISTING OR NEW TOPSOIL, COMPACT TO 80% AND WATER THOROUGHLY TO ELIMINATE AIR POCKETS.

PLANT TO PLACED ON UNDISTURBED SUBGRADE

USE DIGGING FORK NOT SPADE TO PREVENT GLAZING OF PIT EDGES

BREAK DOWN SIDES OF PLANTING PIT WHEN BACKFILLING.



SHRUB PLANTING

NOT TO SCALE

NOT FOR CONSTRUCTION

Pennoni

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T 856.668.2800 F 856.668.2801
NJ CoA No. 24GA28033300

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121

2/8/2019

201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

LANDSCAPE DETAILS

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	AS NOTED
DRAWN BY	BTM
APPROVED BY	ATB

CS6061

SHEET 14 OF 17

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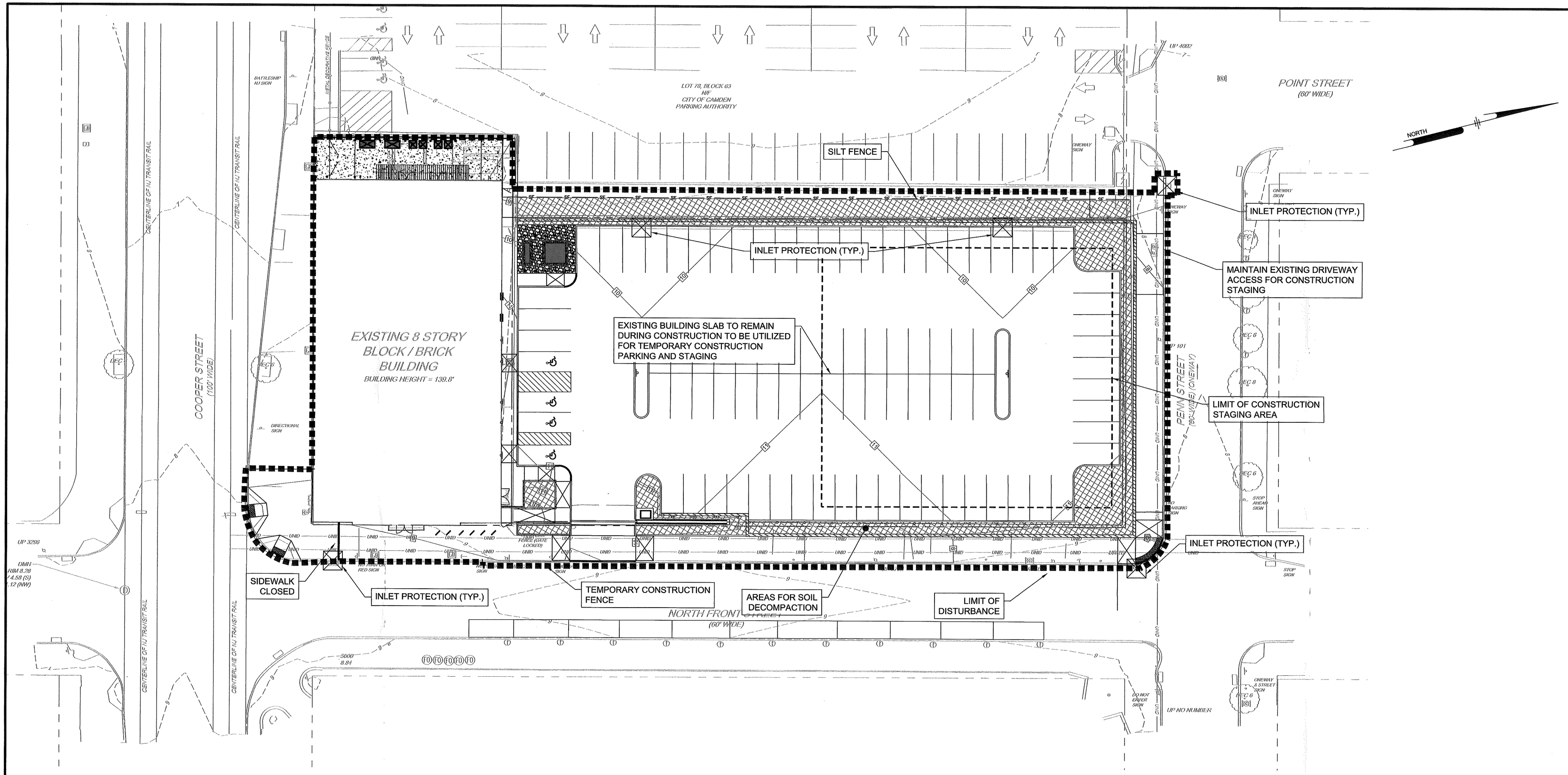

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ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

201 NORTH FRONT STREET

201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

SOIL EROSION AND SEDIMENT CONTROL PLAN

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

BY	REVISIONS	NO.	DATE

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PROJECT	HAGEN18001
DATE	FEBRUARY 8, 2019
DRAWING SCALE	1"=20'
DRAWN BY	BTM
APPROVED BY	ATB

CS8001

SHEET 15 OF 17

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SOIL DE-COMPACTION AND TESTING REQUIREMENTS

SOIL COMPACTION TESTING 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 6.0 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 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.

COMPACTION TESTING METHODS

A. PROBING WIRE TEST (SEE DETAIL)
B. HAND-HELD PENETROMETER TEST (SEE DETAIL)
C. TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
D. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)

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.

FURTHER INFORMATION REGARDING SOIL TESTING METHOD OPTIONS ARE LOCATED IN THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, CHAPTER 19, OR THE WWW.NJ.GOV/AGRICULTURE/DIVISIONS/ANR/NRCE/NJSOSH.HTML

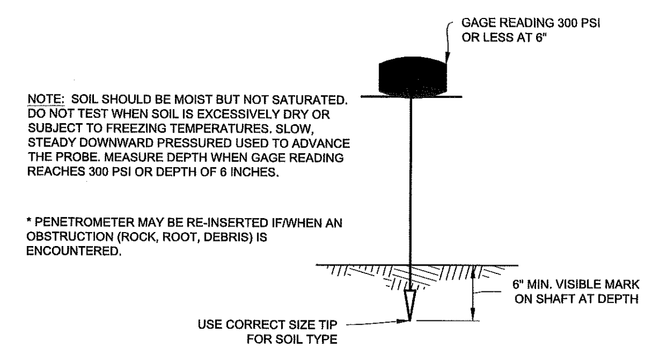
SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

PROCEDURES FOR SOIL COMPACTION MITIGATION
PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.

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 MAYBE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.

SOIL COMPACTION MITIGATION VERIFICATION FORM

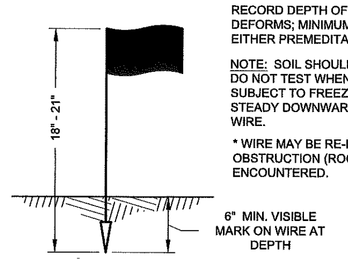
1. THE CONTRACTOR MUST COMPLETE AND SUBMIT A SOIL RESTORATION SELF-CERTIFICATION FORM TO THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT (CCSCD) FOR REVIEW AND APPROVAL. CONTRACTOR SHALL PROVIDE A COPY OF CCSCD APPROVAL TO ENGINEER FOR RECORDS.



NOTE: SOIL SHOULD BE MOIST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURED USED TO ADVANCE THE PROBE. MEASURE DEPTH WHEN GAGE READING REACHES 300 PSI OR DEPTH OF 6 INCHES.

* PENETROMETER MAY BE RE-INSERTED IF/WHEN AN OBSTRUCTION (ROCK, ROOT, DEBRIS) IS ENCOUNTERED.

HANDHELD SOIL PENETROMETER TEST
N.T.S.



RECORD DEPTH OF PENETRATION WHEN WIRE DEFORMS; MINIMUM DEPTH OF 6" TO PASS TEST. EITHER PREMEDITATE OR PERFORM THE NEXT 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 PRESSURED USED TO ADVANCE WIRE.

* WIRE MAY BE RE-INSERTED IF/WHEN AN OBSTRUCTION (ROCK, ROOT, DEBRIS) IS ENCOUNTERED.

PROBING WIRE TEST
15.5 GA. STEEL WIRE (SURVEY FLAG)
N.T.S.

SOIL EROSION AND SEDIMENT CONTROL LEGEND

- STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- UR — SOIL TYPE
- SF — SF — PROPOSED SILT FENCE
- INLET PROTECTION
- RECOMMENDED SOIL COMPACTION TEST LOCATION (APPROX. 1/ 0.5 ACRES)
- SOIL COMPACTION TESTING AREAS

NOTES

1. NO STABALIZED CONSTRUCTION ENTRANCE PROPOSED.
2. NO STOCKPILE PROPOSED.
3. SILT FENCE TO BE INSTALLED IF AND WHERE DIRECTED BY ENGINEER.

0 20' 40'

NOT FOR CONSTRUCTION

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATION AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.
2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
3. APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.
4. THE CONTRACTOR SHALL PERFORM ALL WORK, FURNISH ALL MATERIALS AND INSTALL ALL MEASURES REQUIRED TO REASONABLY CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS AND PREVENT EXCESSIVE FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE.
5. ANY DISTURBED AREA THAT IS TO BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE NEW JERSEY STANDARDS AND THEIR RATES SHOULD BE INCLUDED IN THE NARRATIVE. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION AND RATES OF APPLICATION AT THE REQUEST OF THE GLOUCESTER SOIL CONSERVATION DISTRICT.
7. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH AT A RATE OF 2 TONS PER ACRE ACCORDING TO THE NEW JERSEY STANDARDS IMMEDIATELY FOLLOWING ROUGH GRADING.
8. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
9. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
10. A CRUSHED STONE, TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE STABILIZED PAD WILL BE INSTALLED ACCORDING TO THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS.
11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2½" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
12. PAVED AREAS MUST BE KEPT CLEAN AT ALL TIMES.
13. ALL CATCH BASIN INLETS WILL BE PROTECTED ACCORDING TO THE CERTIFIED PLAN.
14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA. THE SEDIMENT FILTER SHOULD BE COMPOSED OF A SUITABABLE SEDIMENT FILTER FABRIC. (SEE DETAIL). THE BASIN MUST BE DEWATERED TO NORMAL POOL WITHIN 10 DAYS OF THE DESIGN STORM.
16. NJSA 4:24-39, ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
17. MULCHING IS REQUIRED ON ALL SEEDED AREAS TO INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLIER VEGETATION COVER.
18. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.
19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.
20. THE CAMDEN SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY LAND DISTURBANCE.
21. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS.
22. IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, THE STOCKPILE MUST BE STABILIZED ACCORDING TO THE STANDARD FOR TEMPORARY VEGETATIVE COVER. STABILIZE TOPSOIL STOCKPILE WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISHMENT OF TEMPORARY SEEDING. ALL SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY AND THE BASE MUST BE PROTECTED WITH A SEDIMENT BARRIER.
23. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE GLOUCESTER SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH THE CURRENT NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
24. METHODS FOR THE MANAGEMENT OF HIGH ACID PRODUCING SOILS SHALL BE IN ACCORDANCE WITH THE STANDARDS. HIGH ACID PRODUCING SOILS ARE THOSE FOUND TO CONTAIN IRON SULFIDES OR HAVE A PH OF 4 OR LESS.
25. TEMPORARY AND PERMANENT SEEDING MEASURES MUST BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS, AND MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).
26. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.
27. DUST IS TO BE CONTROLLED BY AN APPROVED METHOD ACCORDING TO THE NEW JERSEY STANDARDS AND MAY INCLUDE WATERING WITH A SOLUTION OF CALCIUM CHLORIDE AND WATER.
28. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.
29. USE STAGED CONSTRUCTION METHODS TO MINIMIZE EXPOSED SURFACES WHERE APPLICABLE.
30. ALL VEGETATIVE MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH AMERICAN STANDARDS FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF THE NURSERYMAN AND IN ACCORDANCE WITH THE NEW JERSEY STANDARDS.
31. NATURAL VEGETATION AND SPECIES SHALL BE RETAINED WHERE SPECIFIED ON THE LANDSCAPING PLAN.
32. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.

STANDARD FOR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION:

DEFINITION
ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER ON SOILS EXPOSED FOR PERIODS OF TWO TO 6 MONTHS WHICH ARE NOT BEING GRADED, NOT UNDER ACTIVE CONSTRUCTION OR NOT SCHEDULED FOR PERMANENT SEEDING WITHIN 60 DAYS.

PURPOSE
TO TEMPORARILY STABILIZE THE SOIL AND REDUCE DAMAGE FROM WIND AND WATER EROSION UNTIL PERMANENT STABILIZATION IS ACCOMPLISHED.

WATER QUALITY ENHANCEMENT
PROVIDES TEMPORARY PROTECTION AGAINST THE IMPACTS OF WIND AND RAIN, SLOWS THE OVERLAND MOVEMENT OF STORMWATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE, PROTECTING STREAMS OR OTHER STORMWATER CONVEYANCES.

WHERE APPLICABLE
ON EXPOSED SOILS THAT HAVE THE POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL DAMAGE.

METHODS AND MATERIALS

1. SITE PREPARATION
A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, P. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEED BED PREPARATION
A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 PONDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUABLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE AT THE RATE OF 2 TONS/ACRE UNLESS SOIL TEST INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. TABLE BELOW IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION.

SOIL TEXTURE	TONS/ACRE	LBS./1,000 S.F.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW BRUNSWICK-TRENTON LINE.

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AS ABOVE.

D. SOILS HIGH ON SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1 OF THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

3. SEEDING
A. SELECT SEED FROM RECOMMENDATIONS IN TABLE.

SEED TYPES	SEEDING RATES 1* (POUNDS)		OPTIMUM SEEDING DATE 2* BASED ON PLANT HARDINESS ZONE 3*			OPTIMUM SEED DEPTH 4* (INCHES)
	PER ACRE	PER 1,000 SQ. FT.	ZONE 5	ZONE 6	ZONE 7	
COOL SEASON GRASSES						
PERENNIAL RYEGRASS	170	4.0	3/15 - 6/1 & 8/1 - 9/15	3/1 - 5/15 & 8/15 - 10/1	2/15 - 5/1 & 8/15 - 10/15	0.5
SPRING OATS	86	2.0	3/15 - 6/1 & 8/1 - 9/15	3/1 - 5/15 & 8/15 - 10/1	2/15 - 5/1 & 8/15 - 10/15	1.0
WINTER BARLEY	96	2.2	8/1 - 9/15	8/15 - 10/1	8/15 - 10/15	1.0
WINTER CEREAL RYE	112	2.8	8/1 - 11/1	8/1 - 11/15	8/1 - 12/15	1.0
WARM SEASON GRASSES						
PEARL MILLET	20	0.5	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	1.0
MILLET (GERMAN OR HUNGARIAN	30	0.7	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	1.0
WEEPING LOVEGRASS	5	0.2	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	0.25

1* SEEDING RATE FOR WARM SEASON GRASS, SHALL BE ADJUSTED TO REFLECT THE AMOUNT OF PURE LINE SEED (PLS) AS DETERMINED BY A GERMINATION TEST RESULT. NO ADJUSTMENT IS REQUIRED FOR COOL SEASON GRASSES.
2* MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR CAN BE IRRIGATED.
3* PLANT HARDINESS ZONE (SEE BELOW)
4* TWICE THE DEPTH FOR SANDY SOILS

ZONE 5B (-10 TO -15)
PORTIONS OF SUSSEX AND WARREN COUNTIES

ZONE 6A (-5 TO -10)
PORTIONS OF SUSSEX, WARREN, PASSAIC, MORRIS, SOMERSET AND HUNTERDON COUNTIES.

ZONE 6B (0 TO -5)
PORTIONS OR BERGEN, CAMDEN, ESSEX AND GLOUCESTER, HUNTERDON, MERCER, MIDDLESEX, HUDSON,MONMOUTH, OCEAN, BURLINGTON, MORRIS, PASSAIC, SOMERSET, UNION, ATLANTIC, CUMBERLAND, AND CAPE MAY COUNTIES.

ZONE 7A (5 TO 0)
PORTIONS OF CAMDEN, GLOUCESTER, SALEM, CUMBERLAND, CAPE MAY, ATLANTIC, BURLINGTON, OCEAN, AND MONMOUTH COUNTIES. ZONE 7B (10 TO 5) PORTIONS OF CAPEMAY, ATLANTIC, OCEAN AND MONMOUTH COUNTIES.

B. CONVENTIONAL SEEDING - APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.

D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

4. MULCHING
MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. (THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

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

APPLICATION
SPREAD UNIFORMLY BY HAND MECHANICALLY SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC-HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY OR STRAW MULCHES.
   a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
   b. USE ONE OF THE FOLLOWING:
      (1) EMULSIFIED ASPHALT - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, AND CRS-2). APPLY 0.04 GAL./SQ. YD. OR 194 GAL./ACRE ON FLAT SLOPES LESS THAN 8 FEET HIGH. ON SLOPES 8 FEET OR MORE HIGH, USE 0.075 GAL./SQ. YD. OR 363 GAL./ACRE. THESE MATERIALS MAY BE DIFFICULT TO APPLY UNIFORMLY AND WILL DISCOLOR SURFACES.
      (2) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
      (3) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH THE SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZE MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION:

DEFINITION
ESTABLISHMENT OF PERMANENT VEGETATIVE COVER ON EXPOSED SOILS WHERE PERENNIAL VEGETATION IS NEEDED FOR LONG TERM PROTECTION.

PURPOSE
TO PERMANENTLY STABILIZE THE SOIL, ASSURING CONSERVATION OF SOIL AND WATER, AND TO ENHANCE THE ENVIRONMENT.

WATER QUALITY ENHANCEMENT
SLOWS THE OVERLAND MOVEMENT OF STORMWATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE, PROTECTING STREAMS OR OTHER STORMWATER CONVEYANCES.

WHERE APPLICABLE
ON EXPOSED SOILS THAT HAVE A POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL DAMAGE.

METHODS AND MATERIALS

1. SITE PREPARATION
A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, P. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEED BED PREPARATION
A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 PONDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUABLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE IN ACCORDANCE WITH THE TABLE BELOW AND THE RESULTS OF SOIL TESTING. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. TABLE BELOW IS A GENERAL QUIDELINE FOR LIMESTONE APPLICATION RATES.

SOIL TEXTURE	TONS/ACRE	LBS./1,000 S.F.
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D. HIGH ACID PRODUCING SOIL.
SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS.

3. PERMANENT SEEDING

MATERIALS	TYPE			APPLICATION RATES
	50% P	CaO K	MgO N	
STARTER FERTILIZER	10	10	10	PER SOIL TESTING
SEED MIXES				
LAWN/SOD MIX	1) TURFTYPE TALL FESCUE (3 DARK GREEN SEED VARIETIES MIN.)		80% BY WEIGHT	215 LB./ACRE
	2) KENTUCKY BLUEGRASS		10% BY WEIGHT	43 LB./ACRE
	3) TURFTYPE PERENNIAL RYEGRASS		10% BY WEIGHT	43 LB./ACRE
NATTIVE GRASS MIX	ERNST SEED MIX #132-1 R.O.W. NATIVE WOODS MIXW ANNUAL RYE		80% BY WEIGHT	30 LB./ACRE
RAIN GARDEN MIX	ERNST SEED CO. MIX ERNMX #180 AND		80% BY WEIGHT	20 LB./ACRE
	GRAIN RYE (COVER CROP)		80% BY WEIGHT	30 LB./ACRE

B. CONVENTIONAL SEEDING - APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

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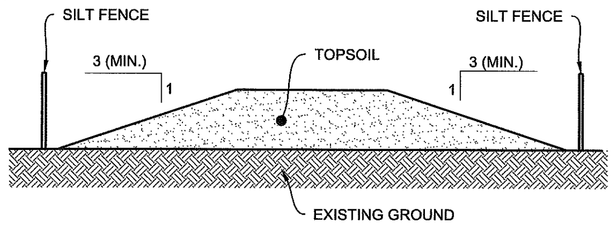
D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

4. MULCHING
FOLLOW SAME STANDARDS AS LISTED UNDER TEMPORARY VEGETATIVE COVER FOR STABILIZATION.

5. IRRIGATION (WHERE FEASIBLE)
IF SOIL MOISTURE IS DEFICIENT, AND MULCH IS NOT USED, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER (A MINIMUM OF ½ INCH TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

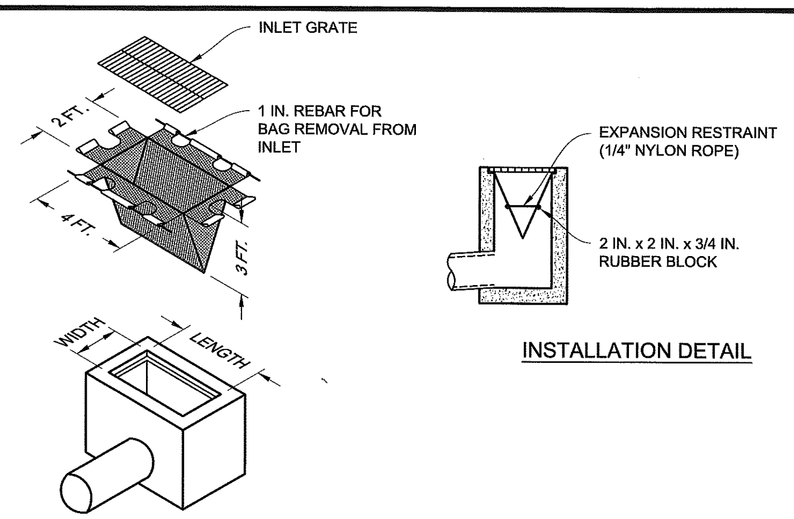
6.TOPDRESSING
SINCE SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE IS PRESCRIBED IN SECTION II.A. SEEDBED PREPARATION IN THIS STANDARD, NO FOLLOW-UP OF TOPDRESSING IS MANDATORY. AN EXCEPTION MAY BE MADE WHERE GRASS NITROGEN DEFICIENCY EXISTS TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 400 POUNDS PER 1,000 SQ. FT.

7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION
THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATE IS REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANEN



NOTES:
1. TOPSOIL STOCKPILE SHALL BE SURROUNDED BY SILT FENCE.
2. STOCKPILE SHALL RECEIVE TEMPORARY VEGETATIVE STABILIZATION IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY IMMEDIATELY AFTER COMPLETION OF STOCKPILE.

TOPSOIL STOCKPILE DETAIL
N.T.S.



ISOMETRIC VIEW

INSTALLATION DETAIL

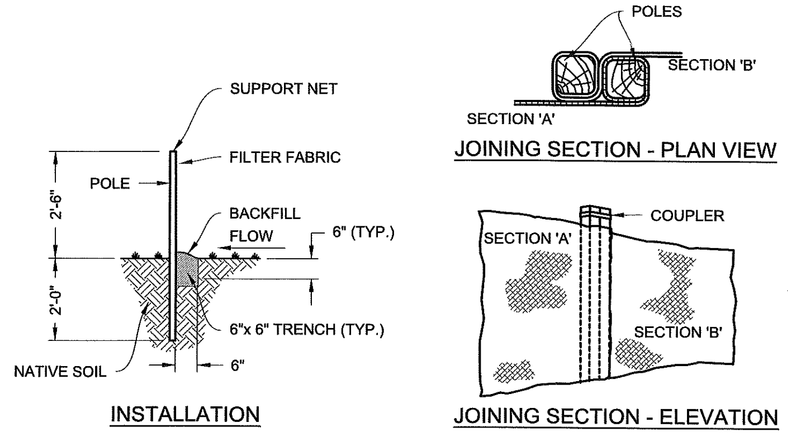
NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

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

INLET FILTER BAG PROTECTION DETAIL
N.T.S.



INSTALLATION

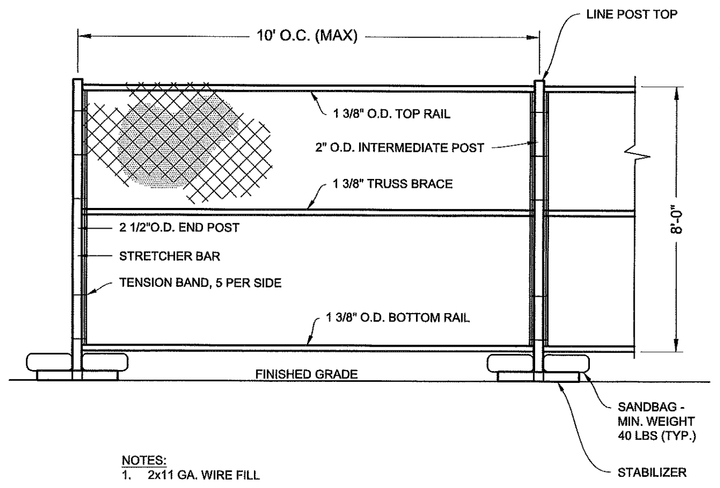
JOINING SECTION - PLAN VIEW

JOINING SECTION - ELEVATION

SILT FENCE TO BE USED ON SITE SHALL BE "ENVIROFENCE" PRECONSTRUCTED SILT FENCE OR EQUAL.

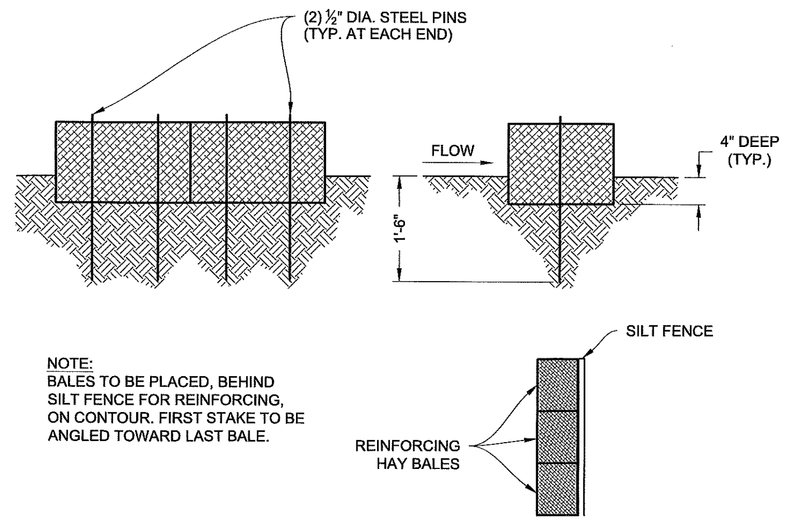
SPECIFICATIONS ARE:
LENGTH: 100 FT.
FABRIC WIDTH: 3 FT.
POLE LENGTH: 4.5 FT.
POLE SPACING: 7.7 FT.
INSTALLED HEIGHT: 2.5 FT.
SEDIMENT FABRIC: MIRAFI 100.

SILT FENCE DETAIL
N.T.S.



NOTES:
1. 2x11 GA. WIRE FILL
2. TENSION BANDS W/ NUTS AND BOLTS (NOT PRESS CLIPS)
3. WIRE TIES EVERY 12"
4. ALL PIPE AND WIRE TO BE HAND DIPPED GALVANIZED

CONSTRUCTION FENCE DETAIL
(N.T.S.)



NOTE:
BALES TO BE PLACED, BEHIND SILT FENCE FOR REINFORCING, ON CONTOUR. FIRST STAKE TO BE ANGLED TOWARD LAST BALE.

REINFORCING PLAN VIEW

HAY BALE SEDIMENT BARRIER DETAIL
N.T.S.

NOT FOR CONSTRUCTION

PENNONI ASSOCIATES INC.
2 Aquarium Drive, Suite 320
Camden, NJ 08103
T. 856.668.8600
NJ COA NO. GA28053300

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

ANDREW T. BANFF
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE 45121
2/8/2019

201 NORTH FRONT STREET
201 NORTH FRONT STREET, BLOCK 63 LOT 70.01 &70.02 (FORMERLY LOT 70) TAX MAP SHEET #12
CITY OF CAMDEN, CAMDEN COUNTY NEW JERSEY

SOIL EROSION AND SEDIMENT CONTROL DETAILS

EMR EASTERN, LLC
143 HARDING AVENUE
BELLMAWR, NJ 08031

NO.	DATE	REVISIONS	BY

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DRAWING SCALE	AS NOTED
DRAWN BY	BTM
APPROVED BY	ATB

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SHEET 17 OF 17

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