#### PROPERTY OWNERS WITHIN 200 FT:

Marlboro Township

Target Parcel(s): Block-Lot: 153-7 394 ROUTE 79, LLC

Block-Lot: 151-10 MALLETT, ALBERT T & MARGARET E 8821 MISTY CREEK DRIVE SAROSOTA, FL 34241 RE: 389 ROUTE 79

Block-Lot: 151-12.01 GUTH. JOSEPH R. 385 ROUTE 79 MORGANVILLE, NJ 07751 RE: 383 ROUTE 79

Block-Lot: 151-12 GUTH, JOSEPH R 385 ROUTE 79 MORGANVILLE, NJ 07751 RE: 385 ROUTE 79 Block-Lot: 151-1 MICKLIN, LLC

28 RIVERSIDE AVENUE 120

**RED BANK, NJ 07701** 

RE: 387 ROUTE 79

Block-Lot: 151-8 MORGANVILLE INDEPENDENT FIRE CO. 393 ROUTE 79 MORGANVILLE, NJ 07751 RE: 393 ROUTE 79

Block-Lot: 151-9 MALLETT, ALBERT T & MARGARET E 8821 MISTY CREEK DRIVE SAROSOTA, FL 34241 RE: 391 ROUTE 79

Parcel Offset List

394 ROUTE 79 13 parcels fall within 205 feet of this parcel(s)!

> Block-Lot: 151-7 BOARD OF FIRE COMMISSIONERS FIRE DI PO BOX 85 MORGANVILLE, NJ 07751 RE: 397 ROUTE 79 Block-Lot: 153-5 PROMAN REALTY LLC

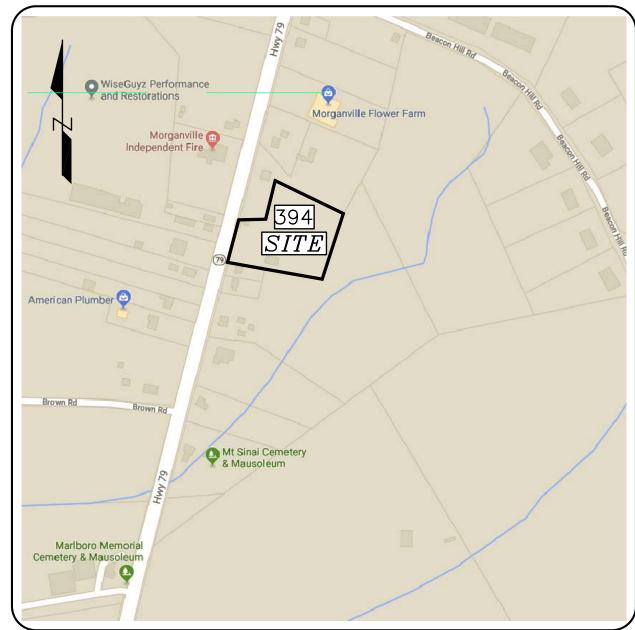
17 EAST FRANCIS AVENUE MORGANVILLE, NJ 07751 RE: 402 ROUTE 79 Block-Lot: 153-6 ROMAN, KENNETH P JR & JANINE L 400 ROUTE 79 MORGANVILLE, NJ 07751 RE: 400 ROUTE 79

Block-Lot: 153-8 390 ROUTE 79, LLC 390 ROUTE 79 MORGANVILLE, NJ 07751 RE: 390 ROUTE 79 Block-Lot: 153-9 BOWERS, THOMAS V. III & LISA F. 388 ROUTE 79 MORGANVILLE, N.J. 0775

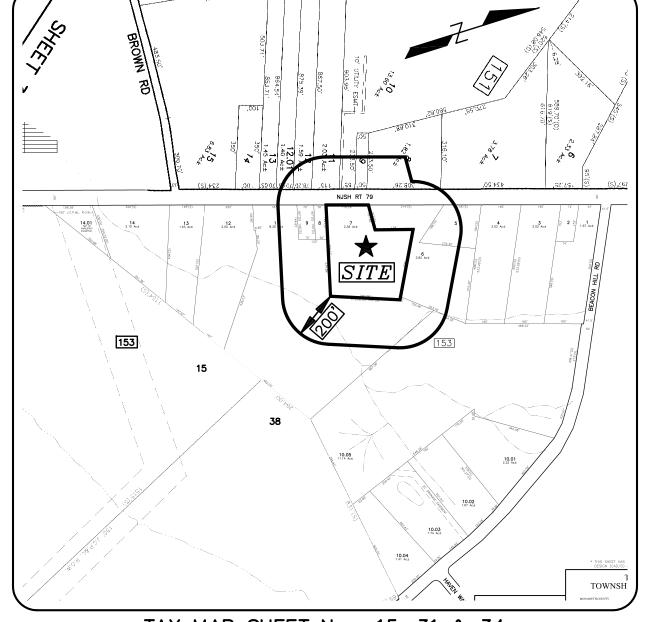
RE: 388 ROUTE 79 Block-Lot: 153-11 SCHRIMPF, LAURIE 386 ROUTE 79 MORGANVILLE, NJ 07751 **RE: 386 ROUTE 79** 

Block-Lot: 153-10.05 TWP OF MARLBORO 1979 TOWNSHIP DRIVE MARLBORO, NJ 07746 RE: BEACON HILL ROAD

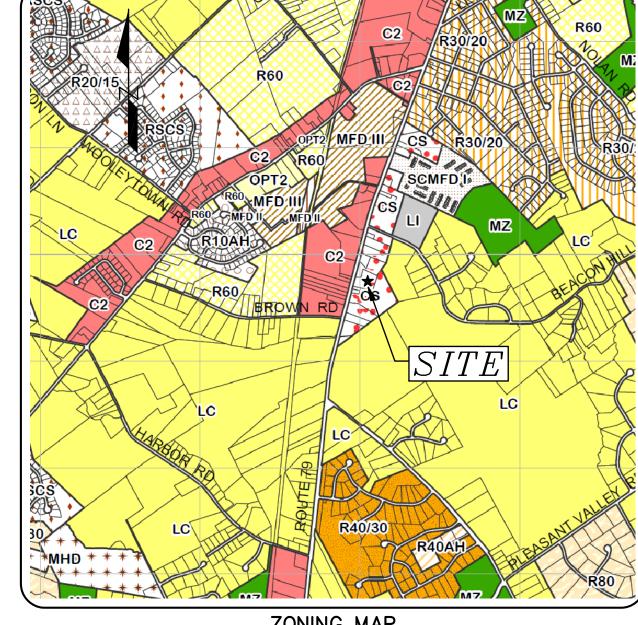
# PRELIMINARY & FINAL MAJOR SITE PLAN 394 N.J.S.H. ROUTE 79 BLOCK 153, LOT 7 TOWNSHIP OF MARLBORO MONMOUTH COUNTY, NEW JERSEY



KEY MAP SCALE:  $1" = 400' \pm$ 



TAX MAP SHEET Nos. 15, 31 & 34 SCALE:  $1" = 400' \pm$ 



**ZONING MAP** SCALE:  $1" = 1,800\pm'$ 

<u>PROPOSED</u>

176.3 FT

174.9 FT

406.3 FT

225.2 FT

23.93 FT

53.8 FT

<35 FT

0.17

15,180 S.F. +

16.68% (17,740 S.F.)

39.95% (42,480 S.F.)

51.2/87.0 FT

2.441 ACRES

106,340 SF

VARIANCE REQ.

NO

## <u> JTILITY COMPANIES</u>

FOR YOUR CONVENIENCE, LISTED BELOW ARE THE PUBLIC UTILITIES

MONMOUTH COUNTY PLANNING BOARD PO BOX 1255 FREEHOLD, NJ 07728

103 PENSION ROAD ENGLISHTOWN, NJ 07726 ATTENTION: KATHY LEATHERMAN

MARLBORO TOWNSHIP WATER UTILITY 1979 TOWNSHIP DRIVE MARLBORO, NJ 07746

GORDONS CORNER WATER UTILITY 27 VANDERBURG ROAD MARLBORO, NJ 07746

N.J. NATURAL GAS COMPANY 1415 WYCOFF ROAD WALL, NJ 07719 ATTENTION: FRANK GRAF

CABLEVISION OF MONMOUTH 40 PINE STREET TINTON FALLS, NJ 07753 VERIZON NEW JERSEY INC

789 WAYSIDE ROAD NEPTUNE, NJ 07753

JERSEY CENTRAL POWER AND LIGHT COMPANY 101 CRAWFORD CORNER ROAD HOLMDEL, NJ 07733.

PLEASE ALSO NOTIFY:

STATE OF NJ DEPARTMENT OF TRANSPORTATION 100 DANIELS WAY FREEHOLD, NJ 07728

# DRAWING INDEX

	<u>UTILITY NOTES</u>	SHEET NO.	<u>DESCRIPTION</u>	<u>DATE</u>	REVISION
1.	EXISTING UTILITY INFORMATION IS BASED ON INFORMATION OF RECORD AND	1	COVER SHEET	08-19-20	_
	HAS BEEN GATHERED FROM NUMEROUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION	2	EXISTING CONDITIONS PLAN	08-19-20	_
	AND REQUEST A MARKOUT BY CONTACTING N.J. ONE—CALL AT (800) 272—1000. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL	3	LAYOUT PLAN	08-19-20	_
	EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.	4	GRADING & UTILITY PLAN	08-19-20	_
2.	ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND. THE ELECTRIC COMPANY, TELEPHONE & CATV PROVIDERS WILL DETERMINE IF UNDERGROUND SERVICES CAN BE PROVIDED. IF NOT, THEN THOSE	5	LANDSCAPING PLAN	08-19-20	_
	UTILITIES SHALL BE OVERHEAD.	6	LIGHTING PLAN	08-19-20	_
3.	A ROAD OPENING PERMIT MAY BE REQUIRED TO CONNECT CERTAIN UTILITIES TO OFF—SITE FACILITIES. THE CONTRACTOR SHALL OBTAIN THIS PERMIT BY CONTACTING THE STATE ROAD DEPARTMENT.	7	SOIL EROSION & SEDIMENT CONTROL PLAN	08-19-20	_
4.	ALL TRENCHES SHALL BE BACKFILLED WITHOUT DELAY. OPEN TRENCHES	8	SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS	08-19-20	_
	SHALL BE KEPT TO A MINIMUM AND PROTECTED AND/OR COVERED WITH STEEL PLATES WHEN WORK IS NOT IN PROGRESS.	9	CONSTRUCTION DETAILS	08-19-20	_

#### SIGNAGE REQUIREMENTS

A FREESTANDING SIGN IS PERMITTED WITH FRONTAGE OF 200 FT AND GREATER. THE FRONTAGE IS 176.3 FT, ONE (1) SIGN IS PROPOSED UP TO 82.5 S.F., VARIANCE REQUIRED

N DATE CONSTRUCTION DETAILS 08-19-20

#### OFF-STREET PARKING REQUIREMENTS

C-S COMMERCIAL SERVICE DISTRICT ZONE REQUIREMENTS

2 ACRES

250 FT

250 FT

300 FT

75 FT

50 FT

50 FT

50 FT

40 FT

40 FT

35 FT

15 FT

1,200 SF

30%

60%

0.3

87,120 SF

MINIMUM LOT AREA

MINIMUM LOT FRONTAGE

MINIMUM LOT WIDTH

MINIMUM LOT DEPTH

**BUILDING SETBACKS** 

SIDE YARD (EXIST. BUILDING)

SIDE YARD (PROP. BUILDING)

ACCESSORY REAR YARD

MAXIMUM PERMITTED HEIGHT

TOTAL BUILDING COVERAGE

TOTAL LOT COVERAGE

FLOOR AREA RATIO: MAXIMUM PERMITTED

MINIMUM GROSS FLOOR AREA

GROUND FLOOR AREA (OFFICE)

ACCESSORY STRUCTURES

BLDG. REQUIREMENTS

LOT COVERAGE:

ACCESSORY SIDE YARD (EACH)

FRONT YARD

REAR YARD

1 SPACE PER 250 SF GFA  $(5,750/250) \times 1 = 23$  SPACES 1 SPACE PER 5,000 SF GFA  $(12,375/5000) \times 1 = 2.5$  SPACES WAREHOUSE AREAS: 26 SPACES (INCLUDING 2 ADA SPACES) TOTAL REQUIRED: 22 SPACES (INCLUDING 2 VAN ACCESSIBLE ADA SPACES) TOTAL PROPOSED:

VARIANCE REQUIRED

\* EXISTING NON-CONFORMITY

+ PROPOSED BUILDING ONLY

1. SITE IS KNOWN AS BLOCK 153, LOT 7 AS DEPICTED ON SHEET 31 OF THE TOWNSHIP OF MARLBORO TAX MAPS. TOTAL LOT AREA IS 106,340 SQ.FT. (2.441± ACRES).

2. <u>OWNER/APPLICANT:</u> 394 ROUTE 79, LLC c/o JOHN FITRZYK 394 ROUTE 79

MORGANVILLE, NJ 07751

TEL: (732) 546-4058

- 3. OUTBOUND & TOPOGRAPHIC SURVEY INFORMATION OBTAINED FROM A PLAN ENTITLED, "TOPOGRAPHIC SURVEY MAP OF TAX LOT 7, BLOCK 153, LOCATED IN THE TOWNSHIP OF MARLBORO, MONMOUTH COUNTY, NEW JERSEY", PREPARED BY JAMES P. DEADY SURVEYOR, LLC, DATED MAY 22, 2019.
- 4. HORIZONTAL CONTROL BASED ON DEED NORTH. VERTICAL DATUM BASED ON NAVD
- 5. THE SITE IS LOCATED WITHIN FLOOD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DEPICTED ON FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 34025C0151F EFFECTIVE DATE SEPTEMBER 25,
- FRESHWATER WETLANDS LINE DELINEATED IN THE FIELD BY DUBOIS ENVIRONMENTAL AND SURVEYED BY JAMES P. DEADY SURVEYOR, LLC. WETLANDS WERE FIELD VERIFIED BY NJDEP ON JUNE 11, 2020. FRESHWATER WETLANDS LETTER OF INTERPRETATION FILE No. 1328-20-0002.1 ACTIVITY NUMBER FWW20001.
- 7. THE PROPERTY IS LOCATED WITHIN THE "C-S COMMERCIAL SERVICE" DISTRICT.
- 8. APPLICANT PROPOSES TO CONSTRUCT A 15,180 SQ.FT. COMMERCIAL BUILDING. THE EXISTING BUILDING IN THE REAR IS TO REMAIN AND WILL BE OCCUPIED BY AN OFFICE USE. THE EXISTING DWELLING ALONG THE HIGHWAY WILL BE DEMOLISHED.
- DO NOT SCALE DRAWINGS WITH RESPECT TO THE LOCATION OF SURROUNDING EXISTING FEATURES. ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC., ARE SCHEMATIC ONLY EXCEPT WHERE DIMENSIONS ARE SHOWN
- 10. THIS SET OF PLANS HAS BEEN PREPARED FOR THE APPLICANT NAMED HEREON FOR THE PURPOSE OF MUNICIPAL AND REGULATORY AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION PLANS UNTIL ALL REQUIRED APPROVALS HAVE BEEN OBTAINED. NO OTHER PURPOSE IS INTENDED OR
- 11. CONSTRUCTION OF SITE IMPROVEMENTS AND BUILDINGS SHALL BE IN COMPLIANCE WITH THE RESIDENTIAL SITE IMPROVEMENT STANDARDS (R.S.I.S.), APPLICABLE BUILDING CODES, FEDERAL AND STATE BARRIER FREE AND A.D.A. REQUIREMENTS, TOWNSHIP DESIGN STANDARDS, AND NOISE CODE.
- 12. THE EXISTING BUILDING IN THE REAR IS PRESENTLY CONNECTED TO PUBLIC WATER & SERVED BY PRIVATE SEPTIC DISPOSAL SYSTEM. A NEW SEPTIC DISPOSAL SYSTEM IS PROPOSED FOR THE NEW BUILDING.
- 13. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF SITE CONDITIONS OR TOPOGRAPHY DIFFER MATERIALLY FROM THOSE PRESENTED HEREON. THE UNDERSIGNED PROFESSIONAL SHALL BE GRANTED ACCESS TO REVIEW SAID CONDITION, AND/OR RENDER THE DESIGN SHOWN HEREON TO THE APPROPRIATE MUNICIPAL, COUNTY OR STATE OFFICIAL'S AND/OR UNDERSIGNED PROFESSIONAL SATISFACTION.
- 14. STRUCTURAL / GEOTECHNICAL ENGINEER TO PROVIDE PLANS AND CALCULATIONS FOR ALL STRUCTURES AND FOUNDATIONS AS SHOWN ON THIS PLAN. THIS PLAN DOES NOT INCLUDE BUILDING CALCULATIONS EITHER STRUCTURAL OR GEOTECHNICAL AND THE UNDERSIGNED ASSUMES NO RESPONSIBILITY FOR SAME.
- 15. THE OWNER IS RESPONSIBLE FOR SITE SAFETY. 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 N.J. UNIFORM CONSTRUCTION CODE AND CFR 1926.32(F) (OSHA COMPETENT PERSON).
- 16. THESE PLANS DEPICT VARIOUS IMPROVEMENTS TO BE LOCATED ON THE PROPERTY IN QUESTION. IT IS THE DEVELOPER'S RESPONSIBILITY TO ENSURE THAT SAID IMPROVEMENTS ARE STAKED OUT IN THE CORRECT LOCATIONS. BOTH HORIZONTALLY AND VERTICALLY, BY RETAINING A NEW JERSEY LICENSED LAND SURVEYOR. THE ENGINEER SHALL NOT BEAR ANY RESPONSIBILITY OR LIABILITY FOR THE CONSTRUCTION OF ANY PROPOSED IMPROVEMENTS, SPECIFICALLY IF BUILT IN LOCATIONS OTHER THAN THOSE DEPICTED, OR AT ELEVATIONS THAT DIFFER FROM
- 17. UPON ISSUANCE OF CONSTRUCTION DOCUMENTS, IT IS EXPLICITLY UNDERSTOOD THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE PROSECUTION OF THE WORK, THE MEANS AND METHODS OF CONSTRUCTION, PROTECTION OF ADJACENT STRUCTURES OR PROPERTY, AND IS NOT TO BE HELD RESPONSIBLE FOR ANY DAMAGE WHATSOEVER TO ANY PROPERTY, INCLUDING OFFSITE LANDS, ASSOCIATED WITH CONSTRUCTION OF THE PROJECT.
- 18. OFFICE TRASH TO BE ACCOMMODATED IN CANS AND RECEPTACLES. A TRASH ENCLOSURE IS NOT REQUIRED. TRASH PICKUP WILL BE BY PRIVATE HAULER.

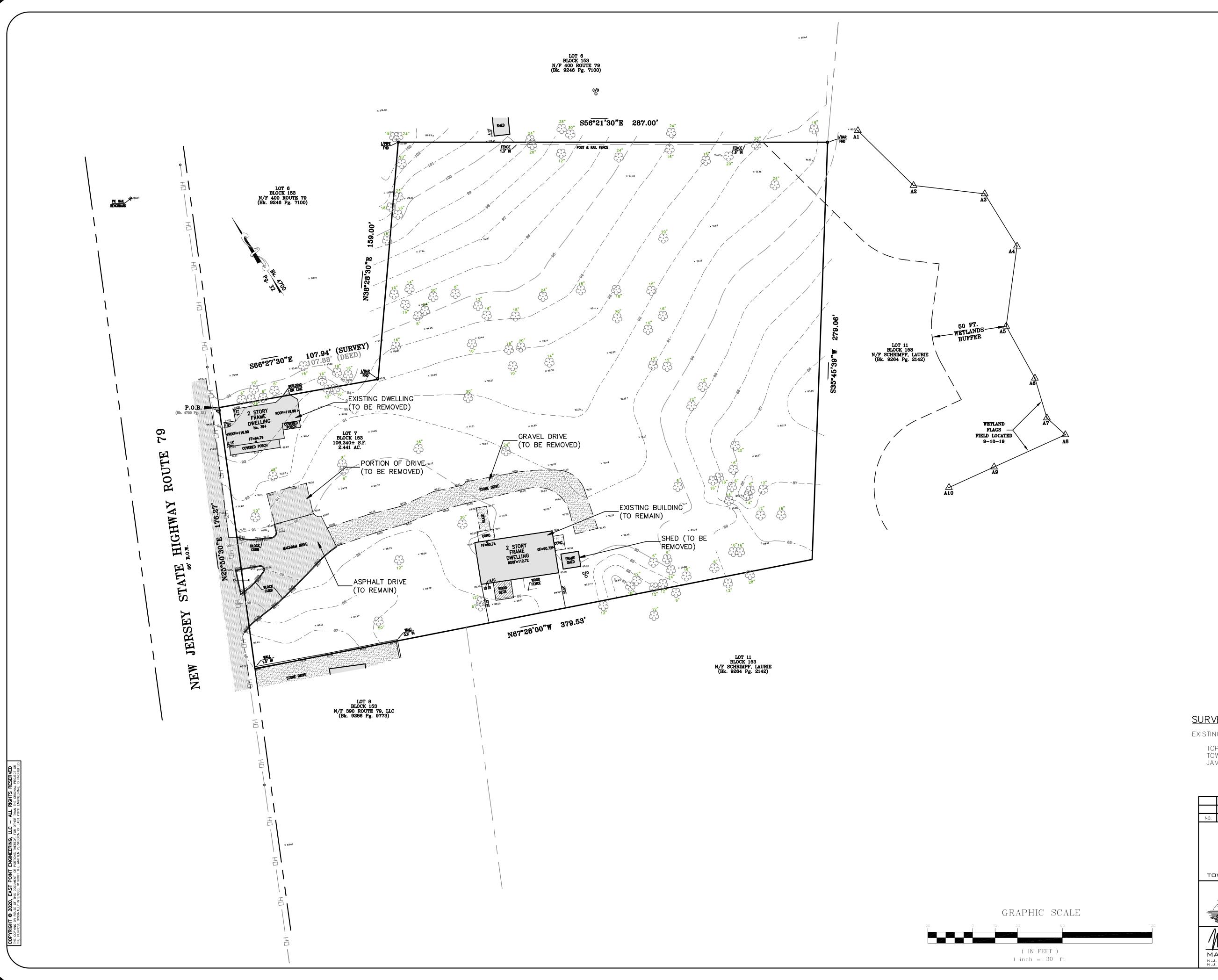
APPLICATION WILL RECYCLE WASTE AS PER N.J.A.C. 7:26A.

#### SIGNATURE BLOCKS

APPL	ICATION NO	APF	PROVED
BY T	HE TOWNSHIP OF M	MARLBORO	
PLAN	NING BOARD AS A	MAJOR SITE PI	LAN
ON -	DATE	·	
BOAR	D CHAIRMAN		
BOAR	D SECRETARY		
BOAR	D ENGINEER		

NO.	DATE		DESCRIPTION		
	F	C (	& FINAL MAJO 394 ROUTE 79 DVER SHEET BLOCK 153, LOT 7 X MAP SHEET NO. 3	Т	AN
то	WNSHIP (	OF MARLBORO	МПМ	MOOTH COOK	ITY, NEW JERSEY
		ENGINEE NEW JERSEY	POINT RING, LL  CERTIFICATE OF NO. 24GA28169800	Maribor	n Main Street o, NJ 07746 2.577.0180
	W2		09-30-20	DATE:  08-19-20  SCALE:  N/A	PROJECT NUMBER: 18-292 GHECKED BY: BNP
MΔ	APr. S. I	FBFR	DATE	, .	

SHEET NO. 1 OF 9



#### DEMOLITION NOTES

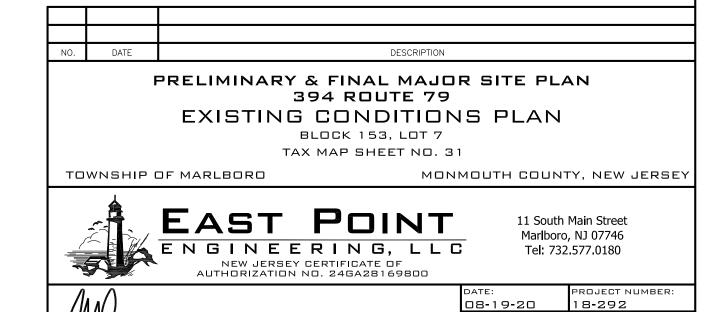
- CLEARING SITE SHALL INCLUDE, BUT IS NOT LIMITED TO, THE REMOVAL OF ALL INDICATED STRUCTURES, FOUNDATIONS, DEBRIS, RUBBLE, FENCES, TREES, STUMPS, EXISTING UTILITIES, UNSUITABLE MATERIALS, PAVEMENT, CONCRETE, AND SIGNAGE.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL MATERIALS EXCAVATED OF WHATEVER NATURE AT HIS OWN EXPENSE. THE MUNICIPALITY IS NOT RESPONSIBLE FOR PROVIDING A DISPOSAL SITE. MATERIALS MUST BE DISPOSED OF IN ACCORDANCE WITH N.J.D.E.P. AND LOCAL REGULATIONS.
- 3. EXISTING ONSITE SUITABLE SOIL SHALL BE EXCAVATED, TRANSPORTED, SPREAD, GRADED, AND COMPACTED AS INDICATED BY THE PROPOSED GRADES. ALL EARTHWORK OPERATIONS INVOLVING ONSITE SOILS SHALL BE COMPLETED PRIOR TO IMPORTING ANY OFFSITE MATERIALS.
- 4. ANY UNSUITABLE MATERIAL FOUND ON SITE DURING DEMOLITION SHALL BE DISPOSED OF OFF—SITE IN ACCORDANCE WITH N.J.D.E.P. AND LOCAL REGULATIONS.
- 5. NO TOPSOIL IS TO BE REMOVED FROM THE PROJECT SITE.
- 6. PRIOR TO COMMENCING DEMOLITION, THE CONTRACTOR SHALL SECURE THE APPROPRIATE PERMITS FROM THE MUNICIPALITY. IN ORDER TO APPLY FOR A DEMOLITION PERMIT, UTILITY DISCONNECTS MUST BE COORDINATED WITH THE UTILITY COMPANIES INDICATED ON THE COVER SHEET. CONFIRMATION OF THE DISCONNECTS SHALL BE PROVIDED TO THE BUILDING DEPARTMENT.
- 7. IF APPROVED BY THE MUNICIPAL ENGINEER, EXISTING CONCRETE MAY BE STORED ON SITE AND RECYCLED FOR USE AS COMPACTED FILL MATERIAL.
- 8. ALL SOIL EROSION & SEDIMENT CONTROL DEVICES MUST BE IN PLACE AND NOTICE PROVIDED TO THE SOIL CONSERVATION DISTRICT 72 HOURS PRIOR TO COMMENCING WORK.
- 9. A UTILITY MARKOUT MUST BE OBTAINED PRIOR TO DEMOLITION BY CONTACTING NEW JERSEY ONE-CALL AT 800-272-1000.
- 10. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE AND THE EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. A PRE-CONSTRUCTION MEETING SHALL BE HELD NO LESS THAN 48 HOURS PRIOR
- 11. DUMPSTERS USED FOR THE STORAGE OF CONSTRUCTION DEBRIS ARE NOT TO BE LEFT UNCOVERED OVERNIGHT.

TO WORK COMMENCING AND ALL UTILITY COMPANIES SHALL BE NOTIFIED.

## SURVEY NOTE:

EXISTING CONDITIONS DEPICTED HEREON WERE OBTAINED FROM A PLAN ENTITLED:

TOPOGRAPHIC SURVEY MAP OF TAX LOT 7, BLOCK 153, LOCATED IN THE TOWNSHIP OF MARLBORO, MONMOUTH COUNTY, NEW JERSEY, PREPARED BY JAMES P. DEADY SURVEYOR, LLC, DATED MAY 22, 2019.



09-30-20

MARC S. LEBER

N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GE04452400

N.J. PROFESSIONAL PLANNER, LICENSE NO. 33LI00589800

DATE:

08-19-20

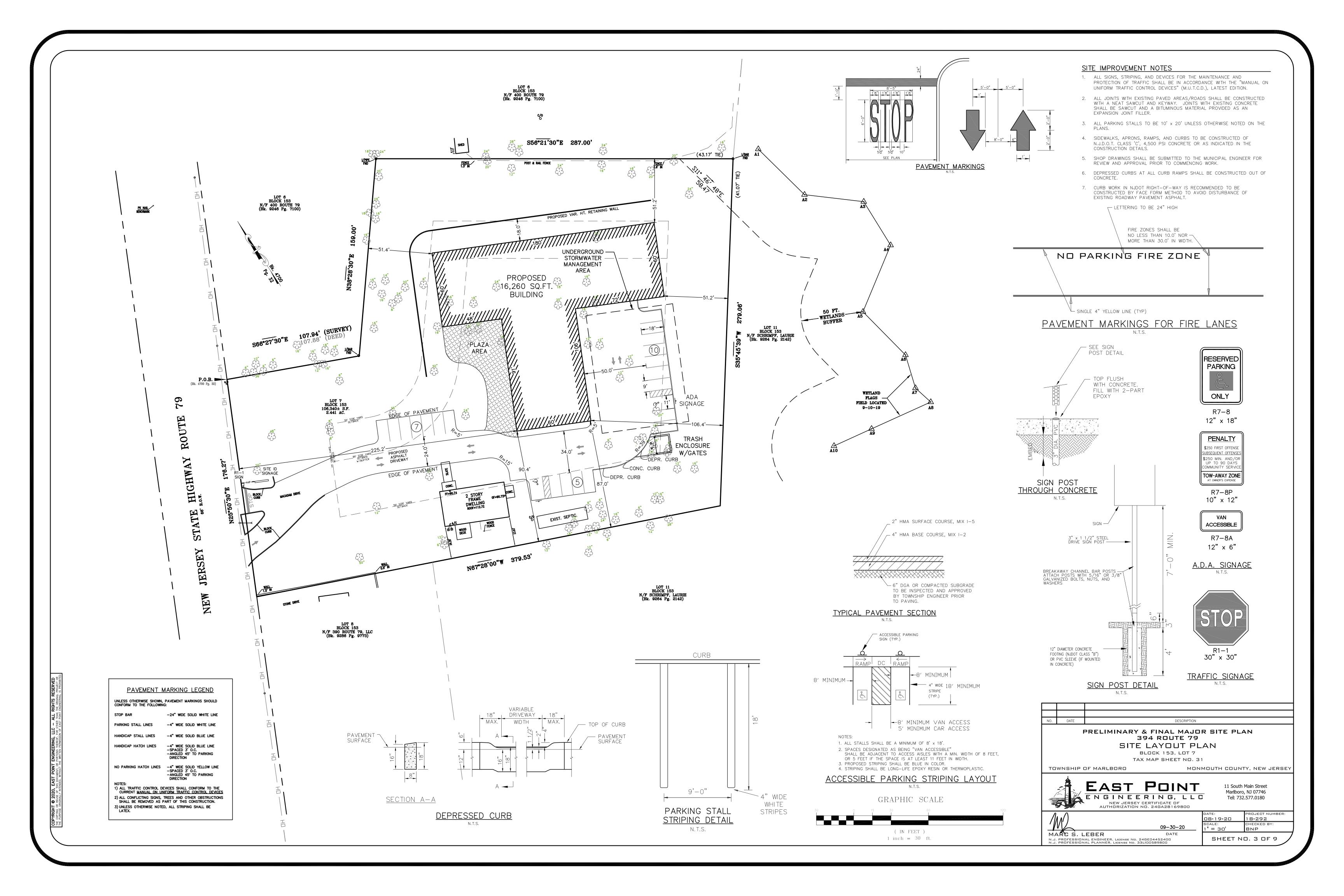
18-292

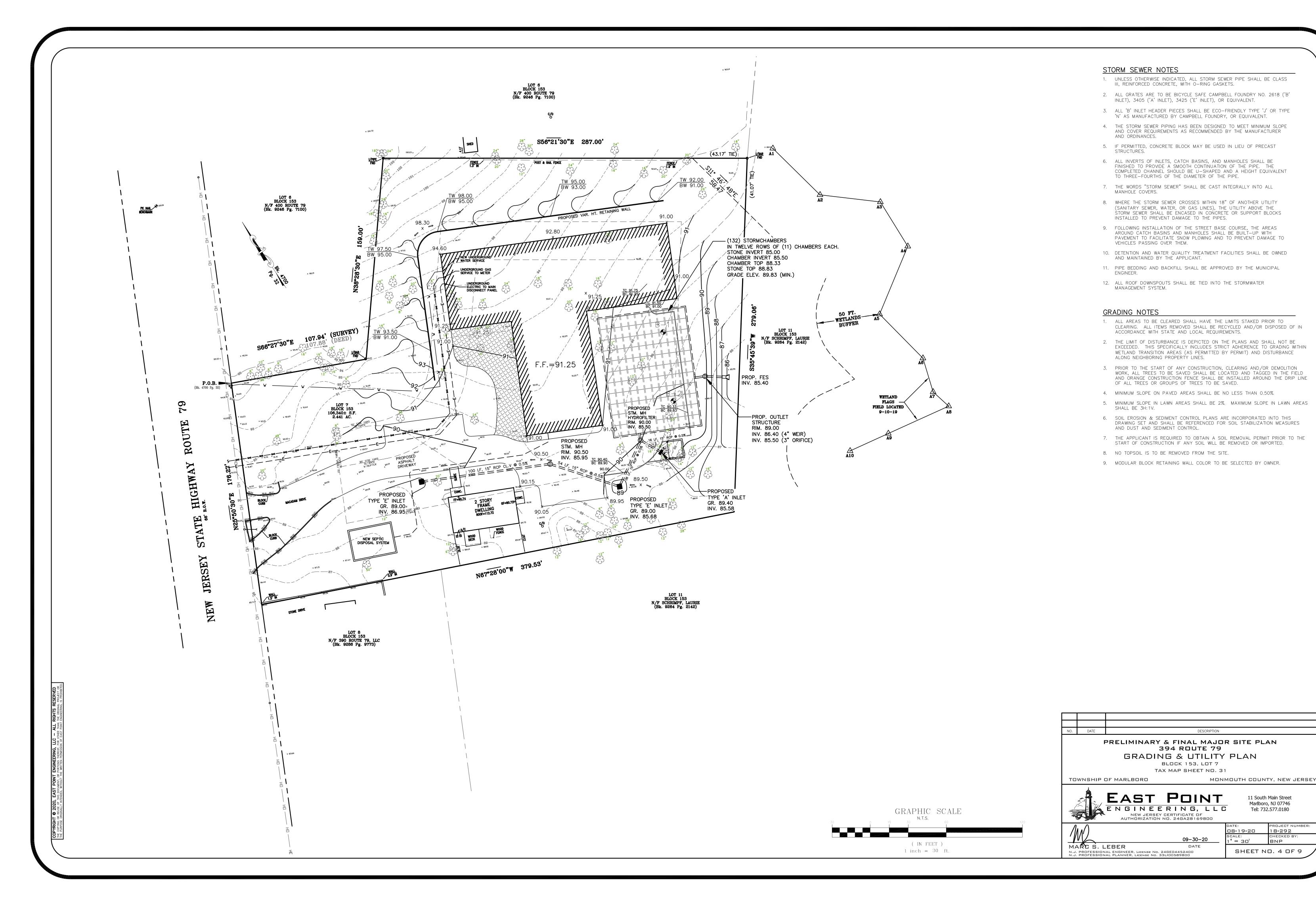
SCALE:

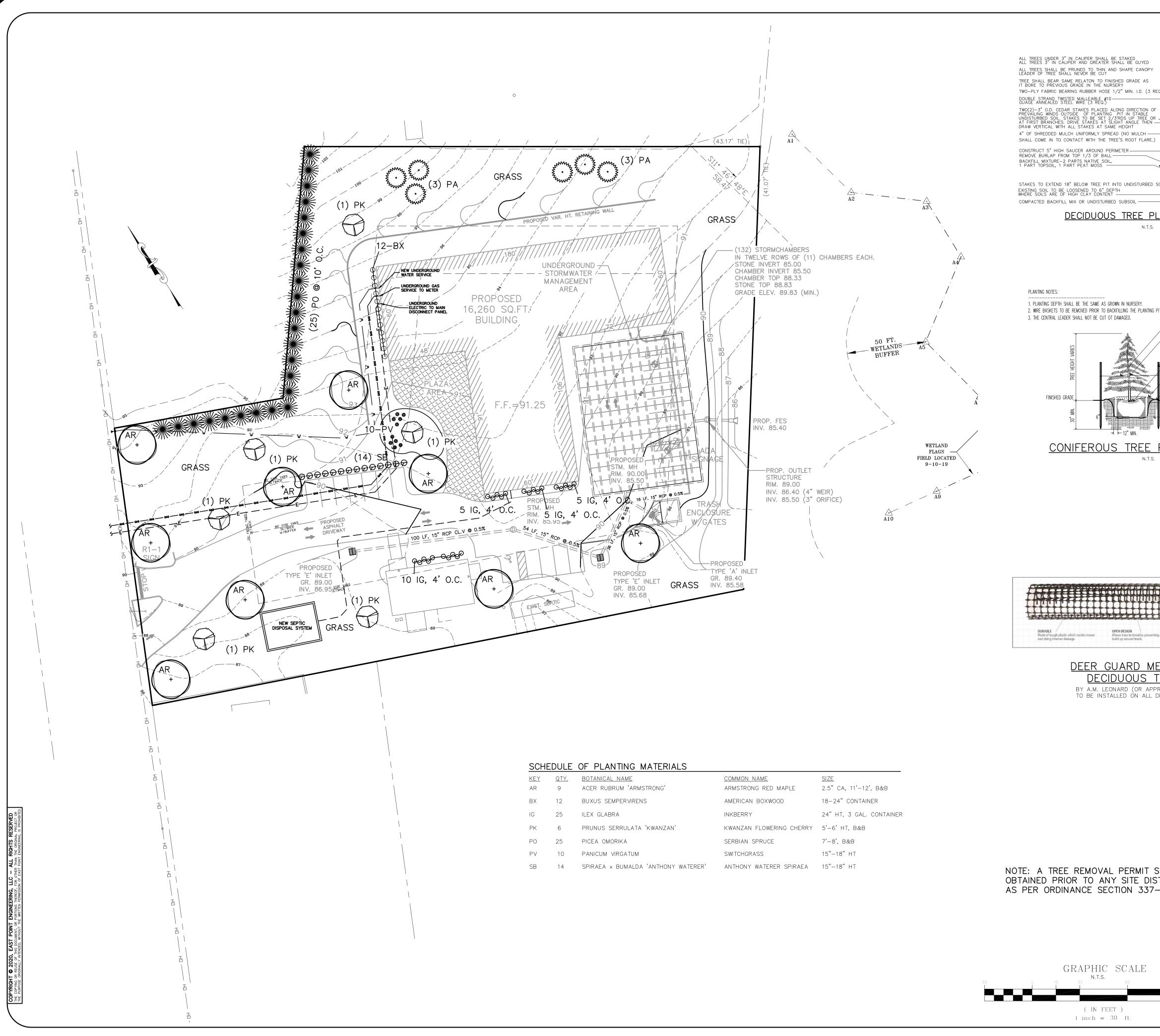
1" = 30'

BNP

SHEET NO. 2 OF 9

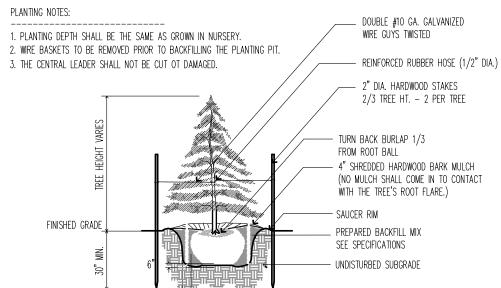




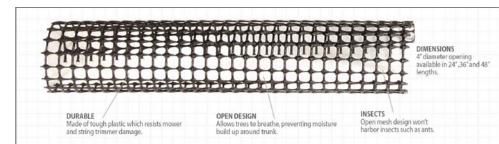


ALL TREES UNDER 3" IN CALIPER SHALL BE STAKED ALL TREES 3" IN CALIPER AND GREATER SHALL BE GUYED ALL TREES SHALL BE PRUNED TO THIN AND SHAPE CANOPY LEADER OF TREE SHALL NEVER BE CUT TREE SHALL BEAR SAME RELATON TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE IN THE NURSERY TWO-PLY FABRIC BEARING RUBBER HOSE 1/2" MIN. I.D. (3 REQ. UNDISTURBED SOIL. STAKES TO BE SET 2/3'RDS UP TREE ( AT FIRST BRANCHES. DRIVE STAKES AT SLIGHT ANGLE THEN DRAW VERTICAL WITH ALL STAKES AT SAME HEIGHT 4" OF SHREDDED MULCH UNIFORMLY SPREAD (NO MULCH ---SHALL COME IN TO CONTACT WITH THE TREE'S ROOT FLARE.) CONSTRUCT 5" HIGH SAUCER AROUND PERIMETER— REMOVE BURLAP FROM TOP 1/3 OF BALL————

DECIDUOUS TREE PLANTING DETAIL



CONIFEROUS TREE PLANTING DETAIL

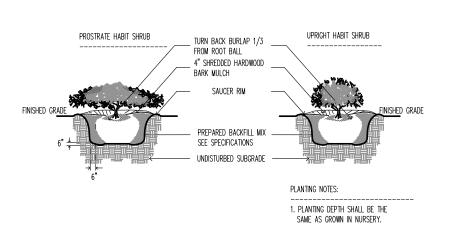


# DEER GUARD MESH FOR

BY A.M. LEONARD (OR APPROVED EQUAL) TO BE INSTALLED ON ALL DECIDUOUS TREES

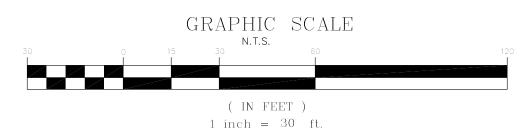
#### PLANTING NOTES

- 1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, STRUCTURES, ETC. AND NOTIFY THE UNDERSIGNED IN REFERENCE TO ANY DISCREPENCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
- 2. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE.
- 3. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARDS TO SIZE, SPECIES, VARIETY, ETC. WITHOUT WRITTEN PERMISSION OF THE THE UNDERSIGNED OR TOWNSHIP OFFICIALS. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED.
- 4. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS IS APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT. NO SHADE TREE, STREET TREE, ORNAMENTAL FLOWERING TREE OR EVERGREEN TREE SHALL BE PLANTED CLOSER THAN 5' FROM ANY SIDEWALK, DRIVEWAY, CURB OR UTILITY LOCATION, OR WITHIN 10' OF A SEPTIC FIELD, UNLESS SPECIFICALLY DIMENSIONED ON THE LANDSCAPE PLAN.
- 5. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN ANY SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL STREET TREES PLANTED IN ANY SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED AS
- 6. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
- 7. ALL PLANT MATERIAL SHALL BE PROPERLY GUYED, STAKED, WRAPPED AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. GUY WIRES SHALL BE ATTACHED TO THE TREE AT A HEIGHT OF TWO-THIRDS THE HEIGHT OF THE TREE AND SHOULD BE LOCATED AT POINTS SO NOT TO SPLIT THE TRUNKS OF MULTI-STEMMED TREES. UNLESS OTHERWISE NOTED, PROVIDE TWO (2) TREE STAKES PER TREE. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. WIRE BASKETS SHALL BE REMOVED PRIOR TO BACKFILLING THE PLANT PIT.
- 8. PROVIDE PLANTING PITS AS INDICATED ON THE PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PEAT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH SAND.
- 9. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE.
- 10. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS. WATERING IS THE RESPONSIBILITY OF THE OWNER.
- 11. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR ONE (1) YEAR AFTER THE DATE OF FINAL ACCEPTANCE BY THE MUNICIPALITY.
- 12. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 4" LAYER OF TOPSOIL IN ALL LAWN AREAS AND A MINIMUM OF 12" OF TOPSOIL IN ALL PLANTING AREAS. A FULL SOIL ANALYSIS SHALL BE CONDUCTED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED.
- 13. ALL DISTURBED LAWN AREAS SHALL BE STABILIZED WITH EITHER SOD OR SEED AS INDICATED ON THE LANDSCAPE PLANS. SOD SHALL CONSIST OF A NEW JERSEY CERTIFIED MIXTURE OR AN APPROVED EQUAL. SEED MIXTURE SHALL BE AS LISTED IN THE SEEDING SCHEDULE. ALL DISTURBED LAWN AREAS SHALL BE TOPSOILED, LIMED, FERTILIZED AND FINE GRADED PRIOR TO LAWN INSTALLATION.
- 14. ALL PLANTING BEDS SHALL RECEIVE 4" OF SHREDDED HARDWOOD BARK. NO MULCH SHALL COME INTO CONTACT WITH THE ROOT'S FLARE.
- 15. ALL EXISTING TREES AND SHRUBS TO BE PRESERVED ON SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY SNOW FENCING. ALL FENCING SHALL BE PLACED OUTSIDE THE INDIVIDUAL TREE CANOPY. ALL TREES TO REMAIN SHALL BE IDENTIFIED IN THE FIELD PRIOR TO COMMENCEMENT OF CONSTRUCTION, GRADING OR CLEARING. ALL EXISTING VEGETATION BEING PRESERVED AND LOCATED AT THE EDGE OF THE NEW TREELINE SHALL BE PRUNED AND TRIMMED TO REMOVE ALL DEAD, DISEASED, OR DAMAGED BRANCHES.
- 16. AN IRRIGATION SYSTEM IS PROPOSED.
- 17. WIRE BASKETS SHALL BE REMOVE PRIOR TO BACKFILLING THE PLANTING

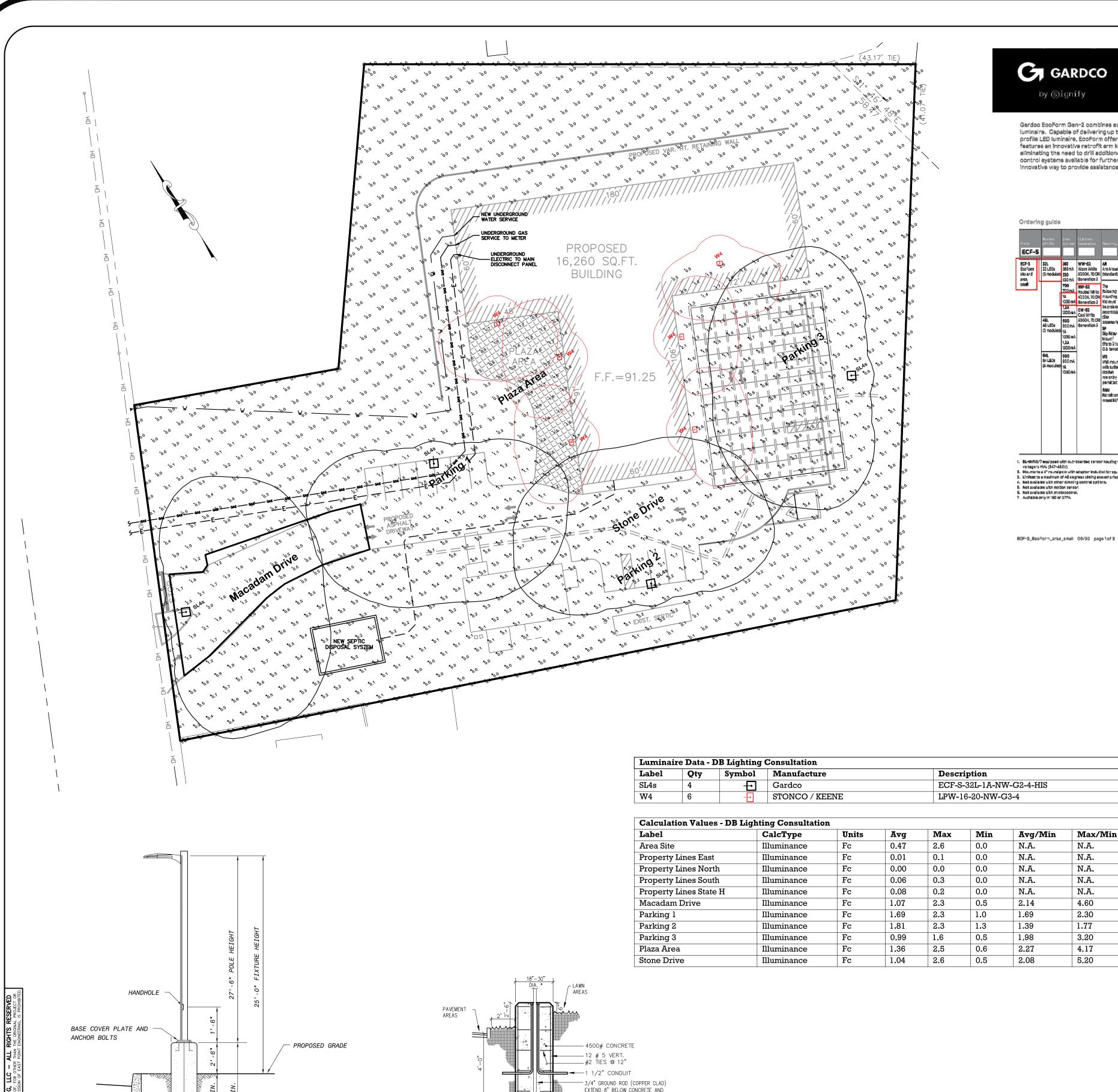


SHRUB PLANTING DETAIL N.T.S.

NOTE: A TREE REMOVAL PERMIT SHALL BE OBTAINED PRIOR TO ANY SITE DISTURBANCE AS PER ORDINANCE SECTION 337-15.













Gardoo EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by aliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag. our innovative way to provide assistance throughout the life of the product.

Stoneo LytePro LED medium wall soonee LPW18 features outstanding value in a compact, architectural design. This powerful and precise combination offers outstanding energy savings with excellent photometric performance. LPW16 is ideal for entryways and corridors in addition to wall lighting applications requiring strong lateral spacing and forward pattern projection.

Example: LPW16-20-NW-G3-3-120-POB-BZ

RAL Specify optional color or RAL (ex: OO-LGP or OO-RAL7024)

Oustom color (Must supply color chip for required factory quote)

example: ECF-S-84L-900-NW-G2-AR-5-120-HIZ-MGY Ordering guide 1. BL-IMRIR/7 exul pped with out-locarded sensor housing when valeage is HWL (267-426V)

2. Mounts to a 4" round pole with adaptor included for square poles.

3. United to a maximum of 46 segress siming above inflamma.

4. Not available with done owned options.

5. Not available with motion sensor.

6. Not available with motion sensor.

7. Not available with motion sensor.

8. Not available with motion sensor.

9. Not available with DC, DCG, and FXVV dimming control options aptions.

10. Dimming will not be partnershed with DC, DCG, and FXVV and Strong control options.

11. Not available with DC, DCG, and FXVV and LLC dimming control options.

12. Not available with DC, DCG, FAWS and LLC dimming control options.

13. Not available with DC, DCG, and FXVV and LLC dimming control options.

14. H 6 not available with DC, DCG, and FXVV and LLC dimming control options.

15. Not available with DC, DCG, FAWS and LLC dimming control options.

16. Not available with DC, DCG, FAWS and LLC dimming control options.

17. Not available with DC, DCG, FAWS and LLC dimming control options.

18. Not available with DC, DCG, FAWS and LLC dimming control options.

19. Not available with DC, DCG, FAWS and LLC dimming control options.

19. Not available with DC, DCG, FAWS and LLC dimming control options.

10. Not available with DC, DCG, FAWS and LLC dimming control options.

19. Not available with DC, DCG, FAWS and LLC dimming control options.

10. Not available with DC, DCG, FAWS and LLC dimming control options.

10. Not available with DC, DCG, FAWS and LLC dimming control options.

11. Not available with DC, DCG, FAWS and LLC dimming control options.

11. Not available with DC, DCG, FAWS and LLC dimming control options.

12. Not available with DC, DCG, FAWS and EWG, Not available with DC, DCG, FAWS and EWG, Not available with DC, DCG, FAWS and EWG, Not available with DC, DCG, FAWS an Not available with motion sensor.
 Not available with photocentrol.
 Available only in 190 or 277%.

Stocked luminaires - Ordering guide

LPW18-G3-8-BZ LPW18, 30W, 850mA, 4000K, Type 3, 120-277V, Bronze textured paint 822252813972 LPW18-G3-8-DGY LPW15, 30W, 350mA, 4000K, Type 5, 120-277V, Dark grey textured paint

Stocked accessories - Ordering guide (Must be ordered separately)

UPG Code LPW Universal wall cover mounting plate, Bronze textured paint

Must specify voltage. Not available in \$47V or 48CV.

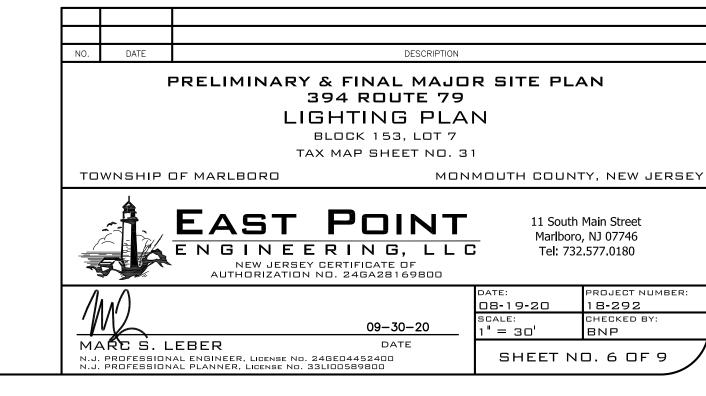


LPW18\_LytePro\_acence 03/19 page 1 of 3

#### LIGHTING NOTES

- 1. SITE LIGHTING LAYOUT AND DESIGN IS DEPICTED ON THE LIGHTING PLAN.
- 2. ALL SITE LIGHTING SHALL RECEIVE UNDERGROUND ELECTRICAL SERVICE.
- 3. A TIME CLOCK TO CONTROL THE SITE LIGHTING SHALL BE PROVIDED FOR ALL SITE LIGHTING. THE NECESSARY CONTROLS AND WIRING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- 4. HOURS OF THE PROPOSED SITE LIGHTING SHALL BE ONE-HALF HOUR BEFORE SUNSET TO ONE-HALF HOUR AFTER SUNRISE. LIGHTING MAY BE WIRED IN SECTIONS WITH SOME SECTIONS TURNING OFF AFTER MIDNIGHT TO CONSERV ENERGY. ESSENTIAL SECTIONS DESIGNATED SECURITY LIGHTING SHALL NOT TURN OFF UNTIL ONE-HALF HOUR AFTER SUNRISE.
- 5. THE ELECTRICAL CONTRACTOR SHALL PROVIDE POLE FOUNDATIONS COMPLETE WITH CONDUITS FOR POWER, GROUNDING, AND ANCHOR BOLTS.
- 6. ALL POLES THAT ARE NOT BEHIND CURBS OR WITHIN A CURBED ISLAND SHALL BE INSTALLED ON CONCRETE BASES THAT EXTEND 30" ABOVE THE FINISHED GRADE OF PAVEMENT. THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE COMPLETE DESIGN OF THESE BASES AS SIGNED AND SEALED BY A NEW JERSEY LICENSED ENGINEER.
- 7. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL LIGHTING FIXTURES, POLES, FOUNDATIONS, AND LAMPS.
- 8. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED BRANCH CIRCUIT WIRING AND CONNECT THE SITE LIGHTING FIXTURES TO THE
- PROPER CIRCUITS AFTER THEY HAVE BEEN INSTALLED. 9. THE ELECTRICAL CONTRACTOR SHALL PROVIDE GROUND RODS AND MAKE CONNECTION TO THE GROUND STUD. THE GROUND STUD SHOULD BE LOCATED INSIDE THE SHAFT AND ACCESSIBLE VIA A HANDHOLE.
- 10. THE ELECTRICAL CONTRACTOR MUST COORDINATE THE INSTALLATION OF WIRING IN THE POLES UP TO THE LIGHTING FIXTURES.
- 11. THE NUMBER AND SIZE OF THE POWER CONDUITS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- 12. ALL SITE LIGHTING SHALL CONFORM TO THE REQUIREMENTS OF THE MUNICIPALITY, THE ELECTRIC UTILITY, AND THE RECOMMENDATIONS OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA).
- 13. SITE LIGHTING SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S DETAILS AND SPECIFICATIONS.
- 14. POLES AND LUMINAIRES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- 15. ALL CONDUIT SHALL BE 2" DIAMETER, SCHEDULE 40 P.V.C. WITH A MINIMUM
- COVER OF 24".

16. ALL SWEEPS SHALL HAVE A MINIMUM RADIUS OF 24". NO ELBOWS SHALL BE PERMITTED.



LLF Arr. Watts Arr. Lum. Lumens ECF-S-32L-1A-NW-G2-4-HIS 0.850 105.6 10003 0.850 22.3 2242 LPW-16-20-NW-G3-4

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Area Site	Illuminance	Fc	0.47	2.6	0.0	N.A.	N.A.
Property Lines East	Illuminance	Fc	0.01	0.1	0.0	N.A.	N.A.
Property Lines North	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
Property Lines South	Illuminance	Fc	0.06	0.3	0.0	N.A.	N.A.
Property Lines State H	Illuminance	Fc	0.08	0.2	0.0	N.A.	N.A.
Macadam Drive	Illuminance	Fc	1.07	2.3	0.5	2.14	4.60
Parking 1	Illuminance	Fc	1.69	2.3	1.0	1.69	2.30
Parking 2	Illuminance	Fc	1.81	2.3	1.3	1.39	1.77
Parking 3	Illuminance	Fc	0.99	1.6	0.5	1.98	3.20
Plaza Area	Illuminance	Fc	1.36	2.5	0.6	2.27	4.17
					_		

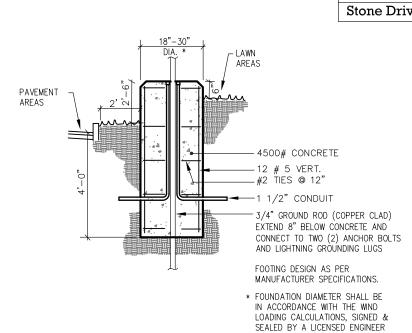
- 1. The calculated results of this lighting simulation represent a prediction of system performance and are not guaranteed.
- 2. Actual measured results may vary from the anticipated performance and are subject to means and conditions which are beyond the control of DB Lighting Consultation. 3. Illumination values shown (in foot-candles) are horizontal at grade level based on Mounting Height

GRAPHIC SCALE

( IN FEET )

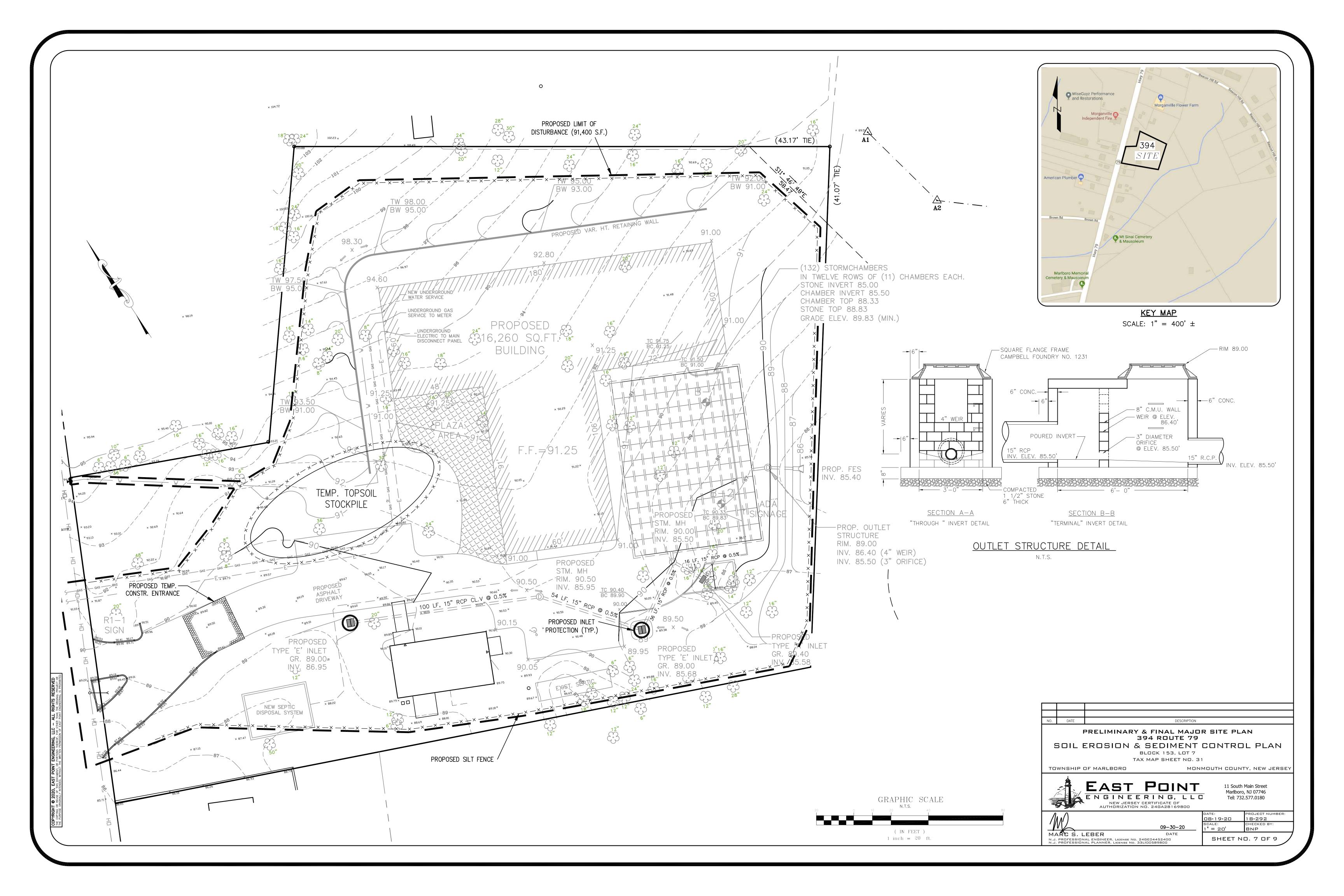
1 inch = 30 ft.

- Pole Fixtures 25'-0"
- Wall Fixtures 14'-0" 4. Calculation points are on an 8' x 8' spacing
- 5. Per fixture isolines shown represent 0.25 fc and is for reference only



'2'-6"<sup>'</sup> DIA.

LIGHT POLE AND FIXTURE DETAIL



3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.

4. N.J.S.A. 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM 2. THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.

5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 21/2 TONS PER ACRE, ACCORDING TO STATE STANDARD FOR STABILIZATION WITH MULCH ONLY.

6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.

7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. 4 IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF PRELIMINARY GRADING.

8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF ONE INCH TO TWO INCH (1"-2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.

9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO THE PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.

10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.

11. AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE

12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.

13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.

14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.

15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.

16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE clay, organic matter, fertilizer or lime and has the appearance of topsoil. Topsoil

17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.

18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF

#### MULCH AND MULCH ANCHORING SPECIFICATIONS

Stabilizing exposed soils with non-vegetative materials exposed for periods longer than 14 days. 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.

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.

2. Protective Materials

be used.

(rev. 2017)

A. Unrotted small—grain straw, at 2.0 to 2.5 tons per acre, is spread uniformly at 90 to 115 pounds per 1,000 square feet and anchored with a mulch anchoring tool, liquid mulch binders, or netting tie down. Other suitable materials may be used if approved by the Soil Conservation District. The approved rates above have been met when the mulch covers the ground completely upon visual inspection, i.e. the soil cannot be seen below the mulch.

B. Synthetic or organic soil stabilizers may be used under suitable conditions and in quantities as recommended by the manufacturer.

C. Wood-fiber or paper-fiber mulch at the rate of 1,500 pounds per acre (or according to the manufacturer's requirements) may be applied by a hydroseeder.

D. Mulch netting, such as paper jute, excelsior, cotton, or plastic, may

Woodchips applied uniformly to a minimum depth of 2 inches may be used. Woodchips will not be used on areas where flowing water could wash them into an inlet and plug it.

SEEDING SCHEDULE - ZONE 7A

SITE AND SEEDBED PREPARATION: TO BE PERFORMED IN ACCORDANCE WITH CHAPTERS 4-1, 7-1 AND 8-1 OF THE 2014 STANDARDS FOR SOIL EROSION & SEDIMENT CONTROL IN NEW JERSEY.

TEMPORARY GRASS SEEDING SHALL CONSIST OF SPRING OATS APPLIED AT A RATE OF 2.0 LBS. PER 1,000 S.F. OPTIMUM SEEDING DATES ARE BETWEEN FEBRUARY 15 AND MAY 1 AND BETWEEN AUGUST 15 AND OCTOBER 15.

AN ALTERNATIVE TEMPORARY GRASS SEEDING SHALL CONSIST OF WINTER CEREAL RYE APPLIED AT A RATE OF 2.8 LBS. PER 1,000 S.F. OPTIMUM SEEDING DATES ARE BETWEEN AUGUST 1 AND DECEMBER 15.

TEMPORARY SEEDING SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH PERMANENT SEEDING. IF ANY SERIOUS EROSION PROBLEM OCCURS, THE ERODED AREAS SHALL BE REPAIRED AND STABILIZED WITH A MULCH AS INDICATED

PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE AS APPROVED BY THE FREEHOLD SOIL CONSERVATION DISTRICT: USDA PLANT HARDINESS ZONE 7a, TABLE 4-3

MIX NUMBER 15 ACCEPTABLE SEEDING DATES ARE BETWEEN FEBRUARY 1 AND APRIL 30 ACCEPTABLE SEEDING DATES ARE BETWEEN MAY 1 AND AUGUST 14 OPTIMUM SEEDING DATES ARE BETWEEN AUGUST 15 AND OCTOBER 30

58% HARD FESCUE (135 LBS/ACRE) 19% CHEWINGS FESCUE (45 LBS/ACRE) 19% STRONG CREEPING RED FESCUE (45 LBS/ACRE) 4% PERENNIAL RYE GRASS (10 LBS/ACRE)

\*APPLY AT A SEEDING RATE OF 230 LBS/ACRE OR 5.25 LBS/1000 S.F.

3. PERMANENT SEEDING TO BE APPLIED BY HYDROSEEDING AT A RATE OF 160 LBS. PER ACRE, SLOPED AREAS TO BE COVERED WITH MULCH AS INDICATED IN NOTE 6.

FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER SHALL BE 10-20-10 (OR EQUIVALENT) APPLIED AT A RATE OF 500 LBS. PER ACRE OR 11 LBS. PER 1,000 S.F. WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. APPLY LIMESTONE IN ACCORDANCE WITH SITE 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.

FERTILIZER FOR THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER SHALL BE 10-10-10 (OR EQUIVALENT) APPLIED AT A RATE OF 500 LBS. PER ACRE OR 11 LBS. PER 1,000 S.F. WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

5. IF THE TIME OF YEAR PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 6.

6. MULCH TO CONSIST OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH A WOOD AND FIBER MULCH BINDER OR AN APPROVED

ALL SEEDED AREAS SHALL BE MULCHED IN ACCORDANCE WITH THE MULCH AND MULCH ANCHORING SPECIFICATIONS ON THIS SHEET. 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, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.

9. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

10. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS

#### STANDARDS FOR TOPSOILING

1. MATERIALS

A. Topsoil should be friable, loamy, free of debris, objectionable weeds and stones, and contain no toxic substance or adverse chemical or physical condition that may be harmful to plant growth. Soluble salts should not be excessive (conductivity less than 0.5 millimhos per centimeter. More than 0.5 millimhos may desiccate seedlings and adversely impact growth). Imported topsoil shall have a minimum organic matter content of 2.75 percent. Organic matter content may be raised by additives.

\_ B. Topsoil substitute is a soil material which may have been amended with sand, silt, substitutes may be utilized on sites with insufficient topsoil for establishing permanent vegetation. All topsoil substitute materials shall meet the requirements of topsoil noted above. Soil tests shall be performed to determine the components of sand, silt, clay, organic matter, soluble salts and pH level.

2. STRIPPING AND STOCKPILING

A. Field exploration should be made to determine whether quantity and or quality of surface soil justifies stripping.

B. Stripping shall be confined to the immediate construction area.

C. Where feasible, lime may be applied before stripping at a rate determined by soil tests to bring the soil pH to approximately 6.5.

D. A 4-6 inch stripping depth is common, but may vary depending on the particular

E. Stockpiles of topsoil should be situated so as not to obstruct natural drainage or cause off—site environmental damage.

F. Stockpiles should be vegetated in accordance with standards previously described herein; see standards for Permanent (pg. 4-1) or Temporary (pg. 7-1) Vegetative Cover for Soil Stabilization. Weeds should not be allowed to grow on stockpiles.

3. <u>SITE PREPARATION</u>

A. Grade at the onset of the optimal seeding period so as to minimize the duration and area of exposure of disturbed soil to erosion. Immediately proceed to establish vegetative cover in accordance with the specified seed mixture. Time is of the essence.

B. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and maintenance. See the Standard for Land Grading, pg. 19—1.

C. As guidance for ideal conditions, subsoil should be tested for lime requirement. Limestone, if needed, should be applied to bring soil to a pH of approximately 6.5 and incorporated into the soil as nearly as practical to a depth of 4 inches.

D. Prior to topsoiling, the subsoil shall be in compliance with the Standard for Land Grading, pg. 19-1.

E. Employ needed erosion control practices such as diversions, grade stabilization structures, channel stabilization measures, sedimentation basins, and waterways. See Standards 11 through 42.

4. APPLYING TOPSOIL

A. Topsoil should be handled only when it is dry enough to work without damaging soil structure; i.e., less than field capacity (see glossary).

B. A uniform application to a depth of 5.0 inches, minimum of 4 inches, firmed in place is required. Alternative depths may be considered where special regulatory and/or industry design standards are appropriate such as on golf courses, sports fields, landfill capping, etc. Soils with a pH of 4.0 or less or containing iron sulfide shall be covered with a minimum depth of 12 inches of soil having a pH of 5.0 or more, in accordance with the Standard for Management of High Acid Producing Soil (pg. 1—1).

C. Pursuant to the requirements in Section 7 of the Standard for Permanent Vegetative Stabilization, the contractor is responsible to ensure that permanent vegetative cover becomes established on at least 80% of the soils to be stabilized with vegetation. Failure to achieve the minimum coverage may require additional work to be performed by the contractor to include some or all of the following: supplemental seeding, re-application of lime and fertilizers, and/or the addition of organic matter (i.e. compost) as a top dressing. Such additional measures shall be based on soil tests such as those offered by Rutgers Cooperative Extension Service or other approved laboratory facilities qualified to test soil samples for agronomic properties.

#### STANDARDS FOR SEEDBED PREPARATION

1. <u>Site Preparation</u>

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 Standard for Land Grading.

B. Immediately prior to seeding and topsoil application, the subsoil shall be evaluated for compaction in accordance with the Standard for Land Grading.

C. Topsoil should be handled only when it is dry enough to work without damaging the soil structure. A uniform application to a depth of 5 inches (unsettled) is required on all sites. Topsoil shall be amended with organic matter, as needed, in accordance with the Standard for Topsoiling.

D. Install needed erosion control practices or facilities such as diversions, grade—stabilization structures, channel stabilization measures, sediment basins, and waterways.

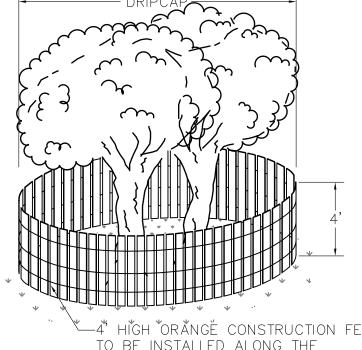
2. <u>Seedbed Preparation</u>

A. Uniformly apply ground limestone and fertilizer to topsoil which has been spread and firmed, according to soil test recommendations such as offered by Rutgers Co-operative Extension Soil sample mailers are available from the local Rutgers Cooperative Extension offices

(http://njaes.rutgers.edu/county/). Fertilizer shall be applied at the rate of 500 pounds per acre or 11 pounds per 1,000 square feet of 10-10-10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise and incorporated into the surface 4 inches. If fertilizer is not incorporated, apply one-half the rate described above during seedbed preparation and repeat another one—half rate application of the same fertilizer within 3 to 5 weeks after seeding.

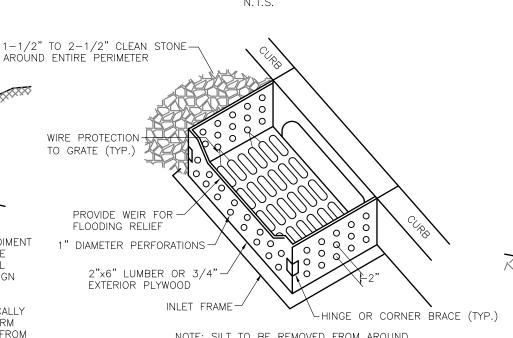
B. Work lime and fertilizer into the topsoil as nearly as practical to a depth of 4 inches with a disc, spring—tooth harrow, or other suitable equipment. The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonable uniform seedbed is prepared.

C. 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 of 5 or more before initiating seedbed reparation. See Standard for Management of High Acid-Producing Soils for specific requirements.



-4' HIGH ORANGE CONSTRUCTION FENCE TO BE INSTALLED ALONG THE DRIP CAP OF TREE CLUSTERS TO BE PROTECTED.

# TREE PROTECTION DETAIL



NOTE: SILT TO BE REMOVED FROM AROUND INLET PERIODICALLY THROUGHOUT CONSTRUCTION

#### INLET PROTECTION DETAIL N.T.S.

TOP OF CURB-

**SECTION** 

WFIR-

. INLET PROTECTION SHALL SAFELY FILTER OUT SEDIMENT

FROM THE 1 YEAR, 24-HOUR DESIGN STORM. THE

FLOWS UP TO AND INCLUDING THE 25 YEAR DESIGN

STORM SEWER SYSTEM SHALL SAFELY CONVEY ALL

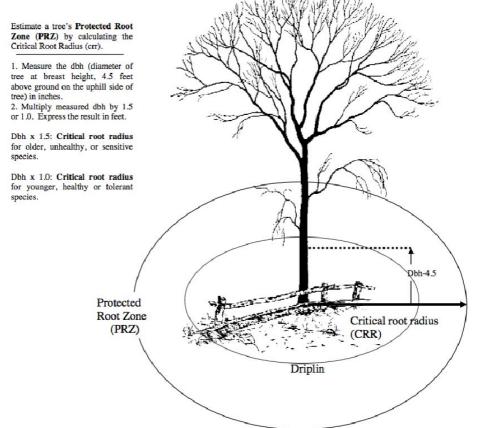
2. INLET PROTECTION SHALL BE INSPECTED PERIODICALLY THROUGHOUT CONSTRUCTION AND AFTER ALL STORM

3. FOR TYPE "A" AND "E" INLETS, PROVIDE SECOND WEIR

PANEL ALONG FOURTH EDGE.

EVENTS. ACCUMULATED SILT SHALL BE REMOVED FROM

PAVFMFNT



1. Protecting Trees from Construction Damage- A Homeowners Guide, Gary R. Johnson, University Of Minnesota Extension Service, Saint Paul, MN,

3. <u>Seeding</u> (Refer to Seeding Schedule — This Sheet)

Mulching is required on all seeding. Mulch will protect 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, 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 a 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 mulch uniformly by hand or mechanically so that at least 85% of the soil surface is 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 shall 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.

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

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 coulter 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 greas 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, hay or straw mulch. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance.

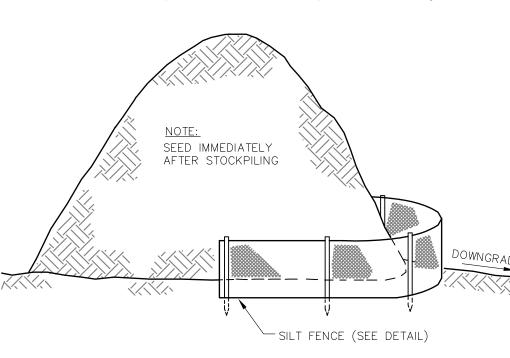
a. Use one of the following:

(1) 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 turf grass. 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

(2) Synthetic Binders — High polymer synthetic emulsion, miscible with water when diluted and, following application of mulch, drying and curing, shall no longer be soluble or dispersible in water. Binder shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass. Note: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other products.

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. Mulch shall not be mixed in the tank with 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 manufacturer's 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 weedseed 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 pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage.



DETAIL <u>TYPICAL TOPSOIL STOCKPILE</u> N.T.S.



## ROOT PROTECTION DURING CONSTRUCTION GUIDE

GROUND ~ - FULL WIDTH OF CARTWAY AS SHOWN ON PLANS PLAN VIEW —R.O.W.— EXIST. GROUND LFILTER FABRIC └6" OF STONE (SEE NOTE 2)

> 1. PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S) AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.

PROVIDE APPROPRIATE \_TRANSITION BETWEEN

1 DAY

11 South Main Street

Marlboro, NJ 07746

Tel: 732.577.0180

PROFILE

2. STONE SIZE SHALL BE ASTM C-33, SIZE NO.2 OR 3, CRUSHED

3. THE THICKNESS OF THE STAB. CONST. ENT. SHALL NOT BE LESS

4. THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINTS OF INGRESS AND EGRESS.

5. THE STAB. CONST. ENT. SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE R.O.W./PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED

6. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

#### Table 29-1: Lengths of Construction Exits on Sloping Roadbeds

Percent Slope of Roadway	Length of Stone Required			
	Coarse Grained Soils	Fine Grained Soils		
0 to 2%	50 ft	100 ft		
2 to 5%	100 ft	200 ft		
>5%	Entire surface stabilized with FABC base course			

As prescribed by local ordinance or other governing authority

TO TRAP SEDIMENT.

### STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

# CONSTRUCTION SCHEDULE AND PROCEDURE FOR IMPLEMENTATION OF SOIL EROSION AND

<u>SEDIMENT C</u>ONTROL MEASURES 1. INSTALL SILT FENCE AND PROVIDE CONSTRUCTION ENTRANCE. 2 DAYS 2. REMOVE TREES. 1 MONTH 3. STRIP AND STORE TOPSOIL IN STOCKPILE AND STABILIZE STOCKPILE 2-3 DAYS 4. CLEAR AND ESTABLISH ROUGH GRADES AS NECESSARY TO CONSTRUCT 2-3 DAYS BUILDING ADDITION AND STORMWATER AREA. 5. CONSTRUCT RETAINING WALL, STORMWATER AREA, INLETS, AND PIPING. 1 MONTH 6. CONSTRUCT BUILDING FOUNDATION. 1 WEEK 7. CONSTRUCT BUILDING AND UTILITIES. 9-12 MONTHS 8. INSTALL CURBING FOR PARKING AREA. 2-3 DAYS 9. INSTALL SITE LIGHTING, WALKWAYS, AND PAVE PARKING AREAS. 2-3 WEEKS 10. INSTALL LANDSCAPING. 2-3 DAYS 1-2 DAYS 11. CONSTRUCT FINE GRADING TO FINISHED GRADES AND

## DUST CONTROL NOTES

ESTABLISH PERMANENT VEGETATIVE COVER ON LOT.

ADEQUATELY STABILIZED.

12. REMOVE SILT FENCE AFTER ALL DISTURBED AREAS HAVE BEEN

TO PREVENT BLOWING AND THE MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, CONSTRUCTION ACTIVITIES, AND TO REDUCE ON-SITE AND OFF-SITE DAMAGE AND HEALTH HAZARDS, DUST CONTROL MEASURES SHALL BE ENACTED ON THE PROJECT SITE.

DURING CONSTUCTION, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE REMEDIATION TO CONTROL PARTICLES AND DUST THAT WILL ENTER INTO THE AIR DURING THE REMOVAL OFF THE ON-SITE STRUCTURES. THESE PROCEDURES MAY INVOLVE COATING THE DEBRIS WITH WATER OR ANOTHER SPRAY-ON ADHESIVE.

 $\overline{\text{NDTE}}$ : IN THAT N.J.S.A. 4:24–39 et seq. REQUIRES THAT ND CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY

DESCRIPTION PRELIMINARY & FINAL MAJOR SITE PLAN 394 ROUTE 79 SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS BLOCK 153, LOT 7 TAX MAP SHEET NO. 31 TOWNSHIP OF MARLBORO MONMOUTH COUNTY, NEW JERSEY

ENGINEERING, LLC NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24GA28169800

8-292 09-30-20 RNP MARC S. LEBER DATE SHEET NO. 8 OF 9 N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GE04452400 N.J. PROFESSIONAL PLANNER, LICENSE NO. 33L100589800

