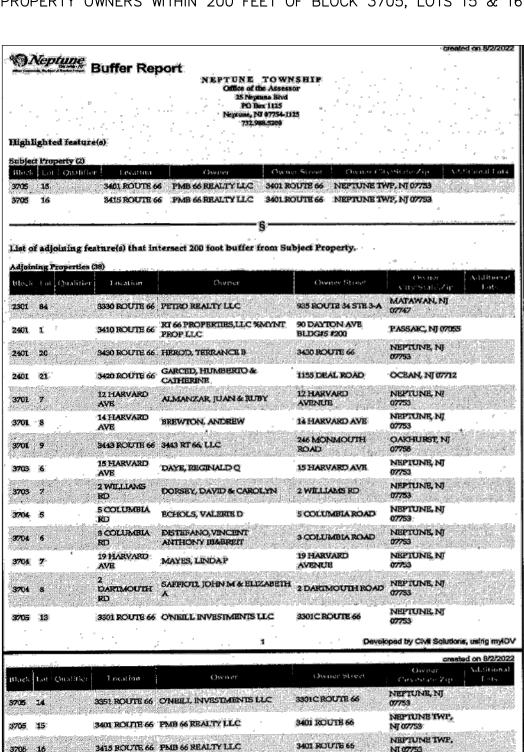
# PRELIMINARY AND FINAL MAJOR SITE PLAN FOR RENOVATIONS AND SITE **IMPROVEMENTS OF** NEPTUNE KIA DEALERSHIP FACILITY

## SHEET LIST TABLE **Sheet Title** Sheet Number COVER SHEET OVERALL SITE PLAN DEMOLITION PLAN ENLARGED SITE PLAN & GRADING PLAN SOIL EROSION & SEDIMENT CONTROL PLAN SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS CONSTRUCTION DETAILS 1 CONSTRUCTION DETAILS 2

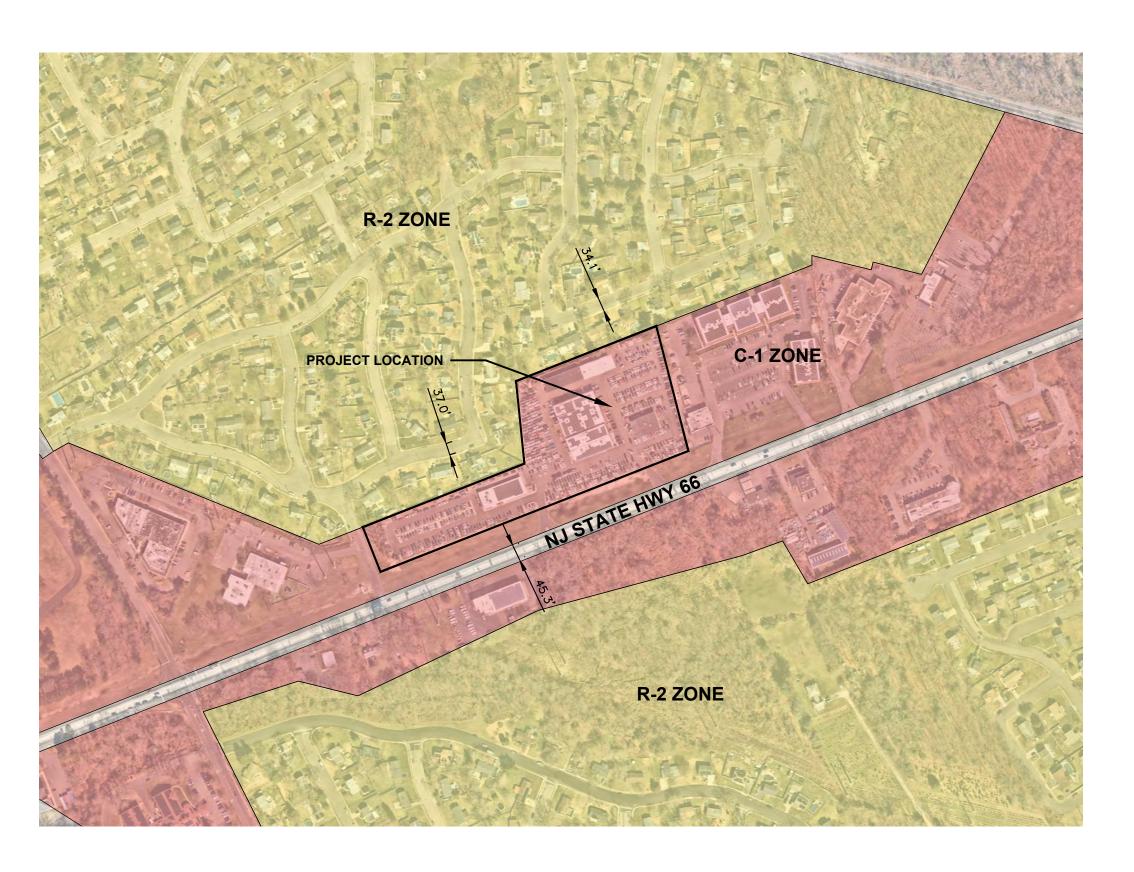
#### PROPERTY OWNERS WITHIN 200 FEET OF SUBJECT PROPERTY:

PROPERTY OWNERS WITHIN 200 FEET OF BLOCK 3705, LOTS 15 & 16



Black	Lot Qualifier	Location	Owner	Owner Street	Owner Circostate Zip	Additional
705	14	3351 ROUTE 66	O'NBILL INVESTMENTS LLC	3301CROUTE 66	NEPTUNE, NJ 07753	
705	15	3401 ROUTE 66	PMB 66 REALTY LLC	3401 ROUTE 66	NEPTUNE TWP, NJ 07759	application of the state of the
705	16	3415 ROUTE 66	PMB 66 PEALTY LLC	3401 ROUTS 66	NEPTUNE TWP, NJ 07753	
705	17	16 HARVARD AVE	NICHOLAS, CAROLANN & CHARLES	16 HARVARD AVENUE	NEPTUNE, NJ 07753	-A40 31 Double 10 10 10 10 10 10 10 10 10 10 10 10 10
705	18	18 HARVARD AVE	CANTWELL, KEITH M&	18 HARVARD AVENUE	NEPTUNE, NJ 07753	
705	19	20 HARVARD AVE	FRIEND, SHERL E & CHRISTAH	20 HARVARD AVENUE	NEPTUNE NJ 07753	1 D.4. 881.co#25866.5896com#
3705	20	22 HARVARD AVE	BARAHONA PEDRO & CHRISTOPHER	22 HARVARD AVENUE	NEPTUNE, NI 07753	
3705	21	2 COLUMBIA RD	ILLIANO, CARMEN I & JO ANNE	2 COLUMBIA ROAD	NEPTUNE, NJ 07753	
3705	22	4 COLUMBIA RD	BARTHELEMYHENRY, EMMANUELA	200 HILLSIDE DRIVE	MANCHESTER, NJ 08759	
3705	23	6 COLUMBIA RD	MADDX IR ROBERT C & MARLEEN	6 COLUMBIA ROAD	NEPTUNE, NJ 07753	
3705	24	a COLUMBIA RD	SCARLETT, MARVIN & PRYCE, MARSHAS	8 COLUMBIA ROAD	NEPTUNE <sub>4</sub> NJ 07753	
3705	25	10 COLUMBIA RD	BLUE DANIEL A & THERESA	10 COLUMBIA RD	NEPTUNE, NJ 07753	
3705	<b>9</b> 3	3 CORNELL AVE	HESSINGER, KATHLEEN C	3 CORNELL AVENUE	NEPTUNE, NJ 07753	
3705	<b>34</b> .	1 CORNELL AVE	DAVIS, RONALD R & SHANNON N	1 CORNELL AVE	NEPTUNE, NJ 07753	
3705	35	2 MONICLAIR AVE	SCOPIELD, NELSON S	2 MONTCLAIR AVENUE	NEPTUNE, NJ 07753	
3705	36	4 MONTCLAIR AVE	ROBERSON, ROBERTA & KIRSTIN A	4 MONTCLAIR AVENUE	NEPTUNE, NJ 07753	
3705	37	6 MONICLAIR AVE	SLOCUMJAMES PLATEISHA C&AARONJOS	6 MONTCLAIR AYE	NEPTUNE, NJ 07753	
3705	38	8 MONTCLAIR AVE	WEINER STACY	8 MONTCLAIR AVENUE	NEPTUNE, NJ 07753	
3705	39	10 MONICLAIR AVE	BARTHELUS,ILES & IMERTHA	10 MONTCLAIR AVENUE	NEPTUNE, NI 07753	
3706	40	12 MONTCLAIR AVE	HERNANDEZ, JOSB	12 MONTCLAIR AVENUE	NEPTUNE, NJ 07753	
3706	9	I COLGATE AVE	MCCASKEY, STEVEN & ROBIN	1 COLCATE AVE	NEPTUNE, NJ 07753	
3700	5 10	3 MONTCLAIR AVE	AMES, CHRISTINA& WILSON, STEPHANIE	3 MONTCLAIR AVE	NEPTUNE, NJ 07753	
3700	5 11 ·	2 CORNELL AVE	PAIRWEATHER, ALTON & DELMARIE	2 CORNELL AVE	NEPTUNE, NJ 07753	

## BLOCK 3705, LOTS 15 & 16 **TOWNSHIP OF NEPTUNE** MONMOUTH COUNTY, NEW JERSEY



PROJECT LOCATION MAP SCALE: 1" = 300'

Site plan of <u>NEPTUNE KIA DEALERSHIP FACILITY</u>
Block 3705 Lot 15 & 16 Zone <u>C-1 ZONE</u>
Date <u>5/15/2024</u> Scale <u>AS NOTED</u>
Applicant <u>PMB 66 REALTY, LLC</u>
Address 3401-3425 ROUTE NO. 66 NEPTUNE, NEW JERSEY 07753 I CONSENT TO THE FILING OF THIS SITE PLAN WIITH THE PLANNING BOARD (NOT SERVICE BAYS) IS 1,523 S.F. I HEREBY CERTIFY THAT I HAVE PREPARED THE SITE PLAN AND THAT ALL KIA DEALERSHIP WILL HAVE 11 SERVICE BAYS DIMENSIONS AND INFORMATION THEREON DEPICTED IS CORRECT. PARKING REQUIREMENT: + 11 BAYS \* 3 SPACES PER BAY = 33 SPACES
TOTAL PARKING SPACES REQUIRED = 56 SPACES TITLE & LICENSE I HAVE REVIEWED THIS SITE PLAN AND CERTIFY THAT IT MEETS ALL CODES AND OFF-STREET PARKING PROVIDED: ORDINANCES UNDER THAT JURISDICTION. CUSTOMER PARKING EMPLOYEE PARKING PARKING PROVIDED SERVICE PARKING <u>VEHICLE DISPLAY PARKING</u> = 156 TOTAL ON SITE PARKING PROVIDED = 238 MUNICIPAL ENGINEER APPROVED BY PLANNING BOARD: HANDICAP PARKING FOR KIA: HANDICAP PARKING SPACES. EV MAKE READY PARKING SPACES: CHAIRMAN

#### SANSONE KIA PARKING REQUIREMENTS

OFF-STREET PARKING REQUIREMENTS PER SECTION LDO-412.17D; TABLE 4.2: AUTOMOTIVE SALES (INDOOR) USE REQUIRES 2.5 SPACES PER 1,000 S.F. PER GROSS FLOOR AREA OF INTERIOR SALES SPACE + 3 SPACES PER

TOTAL FLOOR AREA OF SALES BUILDING IS 7,691 S.F. TOTAL FLOOR AREA OF SERVICE BUILDING USED FOR PARTS/SERVICE TOTAL FLOOR AREA FOR KIA DEALERSHIP IS 9,214 S.F.

9,214 S.F. / 1,000 S.F. \* 2.5 SPACES = 23 SPACES

BASED ON THE 49 PARKING SPACES FOR CUSTOMERS AND EMPLOYEES, 2 HANDICAP PARKING SPACES ARE REQUIRED. WE ARE PROVIDING 2

1 EV MAKE READY PARKING SPACE IS REQUIRED FOR PARKING LOTS WITH 50 OR FEWER OFF-STREET PARKING SPACES, SINCE WE HAVE 49 PARKING SPACES, 1 EV MAKE READY SPACE IS REQUIRED. THE APPLICANT IS PROVIDING TWO (2) EV MAKE READY PARKING SPACES.

**GENERAL NOTES:** 

- PROPERTY IS KNOWN AND DESIGNATED AS BLOCK 3705, LOTS 15 & 16 AS SHOWN ON THE CURRENT TAX ASSESSMENT MAP OF NEPTUNE TOWNSHIP, SHEET NO. 37 AND IS SITUATED IN THE "C-1 (PLANNED COMMERCIAL DEVELOPMENT) ZONING DISTRICT. THE SUBJECT PROPERTY CONTAINS A TOTAL OF ± 279,084.35 SF, ± 6.4 ACRES AS SHOWN ON THE SURVEY INDICATED IN NOTE 4.1
- PMB 66 REALTY, LLC 3401-3425 ROUTE NO. 66

NEPTUNE, NEW JERSEY 07753

- <u>PROPOSED USE:</u>
  CAR DEALERSHIP RENOVATION TO ENHANCE BUILDING FOR KIA BRAND
- 4. BASE MAP INFORMATION WAS OBTAINED FROM THE FOLLOWING SOURCES
- 3414 N.J.S.H. ROUTE 66. TAX LOTS 13-17 IN BLOCK 9033 & TAX LOT 34 IN BLOCK 9000, TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY, PARTIAL TOPOGRAPHIC SURVEY", PREPARED BY BUTLER SURVEYING & MAPPING. INC.:
- 4.2. TOPOGRAPHIC INFORMATION TAKEN FROM A PLAN ENTITLED "LIMITED TOPOGRAPHIC SURVEY PREPARED FOR PORTION OF LOTS 15 & 16, BLOCK 3705 SITUATED IN THE TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY", PREPARED BY FRENCH & PARRELLO ASSOCIATES: DATED 09/12/2024.
- 4.3. FLOOD ZONE INFORMATION SHOWN TAKEN FROM FEMA FIRM PANEL 34025C0327F, LAST REVISED SEPTEMBER 25, 2009. SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE 'X', MINIMAL FLOOD HAZARD ZONE.
- 6. BUILDING ZONE DISTRICT C-1 REQUIREMENTS:

PRINCIPAL BUILDING REQUIREMENTS:	PERMITTED:	EXISTING:	PROPOSED:
MINIMUM LOT AREA (SF)	2.5 AC (108,900 SF)	6.4 AC (279,084.35 SF)	279,084.35 SF
MAXIMUM DENSITY	N/A	N/A	N/A
MAXIMUM F.A.R.	0.8	0.16	NO CHANGE
MINIMUM LOT WIDTH (FT)	500	1.033.68	NO CHANGE
MINIMUM LOT FRONTAGE (FT)	500	1,033.68	NO CHANGE
MINIMUM LOT DEPTH (FT)	600	403.01*	NO CHANGE
MINIMUM FRONT YARD SETBACK (FT)	40	60.2	NO CHANGE
MINIMUM SIDE YARD SETBACK (FT)	30	33.9	NO CHANGE
MINIMUM COMBINED YARD SETBACK	60	101.6	NO CHANGE
MINIMUM REAR YARD SETBACK (FT)	40	27.7*	NO CHANGE
MINIMUM PERCENT BUILDING COVER (%)	30%	16.24	NO CHANGE
MAXIMUM PERCENT LOT COVER (%)	65%	85%*	85.27%***
MAXIMUM NUMBER OF STORIES	2	1	NO CHANGE
MAXIMUM BUILDING HEIGHT (FT)	40	23.5	NO CHANGE
MINIMUM IMPROVABLE LOT AREA (SF)	84,900	252,807	NO CHANGE
MAXIMUM IMPROVABLE AREA - DIAMETER OF CIRCLE (FT)	189	> 189	NO CHANGE
OFF-STREET PARKING SPACES (KIA DEALERSHIP)	56	238	NO CHANGE
LOADING SPACES	3	3**	NO CHANGE

- \* = EXISTING VARIANCE CONDITION
- \*\* = UNSTRIPED \*\*\* = VARIANCE REQUIRED
- 7. ALL CONSTRUCTION SHALL CONFORM WITH TOWNSHIP OF NEPTUNE DESIGN STANDARDS AND DETAILS.
- 8. THERE ARE NO NEW WATER OR SEWER CONNECTION. NEW PLUMBING SHALL BE INTERNALLY CONNECTED TO EXISTING SYSTEMS
- 9. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO FINAL SURFACE PAVEMENT INSTALLATION.
- 10. THE SITE IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH ADA AND NEW JERSEY BARRIER FREE CODE
- 11. ALL CONSTRUCTION SHALL CONFORM WITH TOWNSHIP OF NEPTUNE REQUIREMENTS.
- 12. SOIL EROSION AND SEDIMENT CONTROL SHALL FALL UNDER THE JURISDICTION OF THE FREEHOLD SOIL CONSERVATION DISTRICT.
- 13. ALL SIGNS SHALL BE DESIGNED IN ACCORDANCE WITH "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND
- 14. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSE OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED ON THE DRAWINGS AND EACH DRAWING HAS BEEN REVISED TO INDICATE "ISSUED FOR CONSTRUCTION".
- 15. ALL DESIGN FEATURES DEPICTED HEREON WERE BASED ON CONSTRAINTS AND REGULATIONS IN EFFECT AT THE TIME OF PREPARATION AND INITIAL PRESENTATION OF THIS PLAN. ALL CURRENT DEVELOPMENT CONSTRAINTS SHOULD BE INVESTIGATED PRIOR TO COMMENCEMENT OF ANY ACTIVITY BASED ON THIS PLAN.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANIES FOR GAS, ELECTRIC, PHONE AND TV SERVICE LOCATIONS. LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND IS NOT GUARANTEED AS TO EXACTNESS. THE CONTRACTOR IS TO CONTACT UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION. THE CONTRACTOR SHALL USE THE UTILITY LOCATIONS SHOWN AS AN AID IN DETERMINING EXACT LOCATIONS ONLY. CONTRACTOR SHALL CALL "NJ ONE CALL" 811 OR (800-272-1000)
- 17. TRASH AND WASTE DISPOSAL SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF THE TOWNSHIP OF NEPTUNE. TRASH AND WASTE DISPOSAL SHALL BE PROVIDED BY A PRIVATE CARRIER. ALL GARBAGE PICKUP TO BE BY PRIVATE HAULER AND ONLY
- 18. ALL PROPOSED SOD AND LAWN AREAS MUST BE GRADED WITH LIGHTWEIGHT CONSTRUCTION EQUIPMENT.
- 19. ALL PROPOSED STRIPING ON SITE MUST BE THERMOPLASTIC.
- 20. THE OWNER IS REQUIRED TO REPAIR ANY PAVEMENT, CURB, OR SIDEWALK THAT IS IN DISREPAIR OR DAMAGED AS A RESULT OF THE PROPOSED IMPROVEMENTS TO THE SATISFACTION OF THE TOWNSHIP ENGINEER.
- 21. DELIVERIES TO THE SITE WILL ONLY OCCUR DURING BUSINESS HOURS AND BE CONDUCTED FROM WITHIN THE SITE. TRUCKS SHALL NOT STOP AND UNLOAD FROM THE PUBLIC ROADS.

Date



ANDREW L. FRENCH, P.E.

PROFESSIONAL ENGINEER, N.J. LIC. No. 42894

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**NEPTUNE SANSONE KIA** 

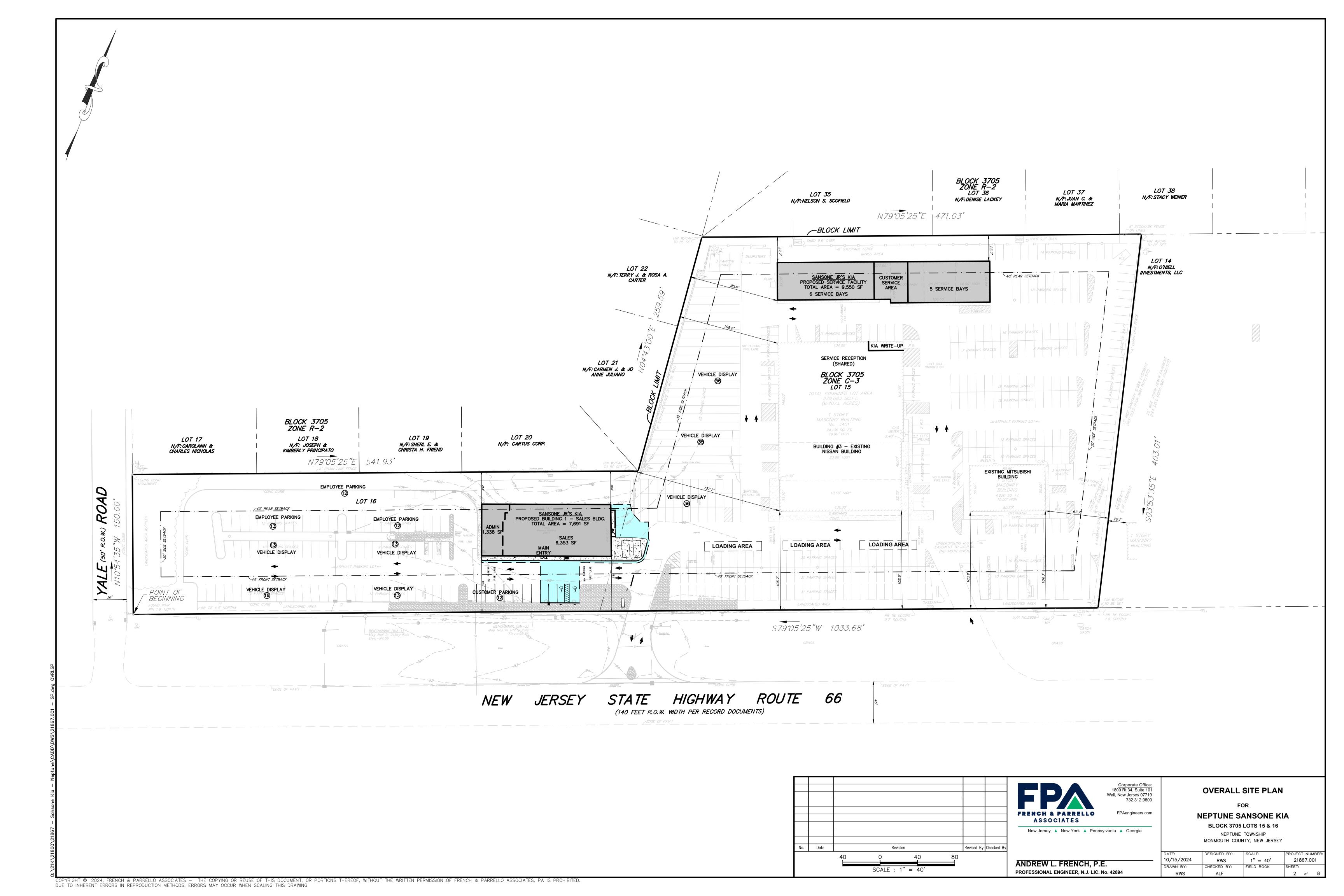
**BLOCK 3705 LOTS 15 & 16** NEPTUNE TOWNSHIP MONMOUTH COUNTY, NEW JERSEY

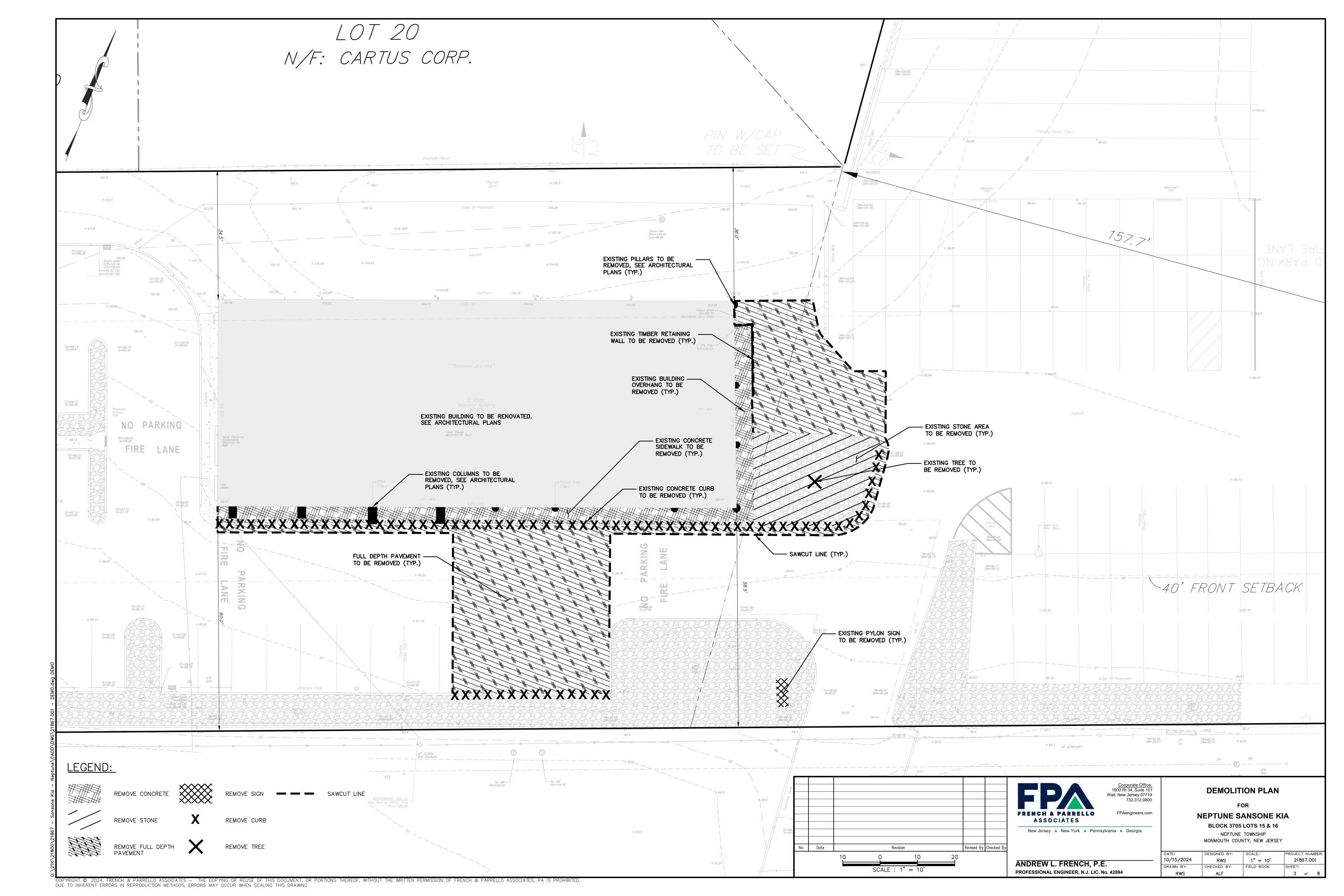
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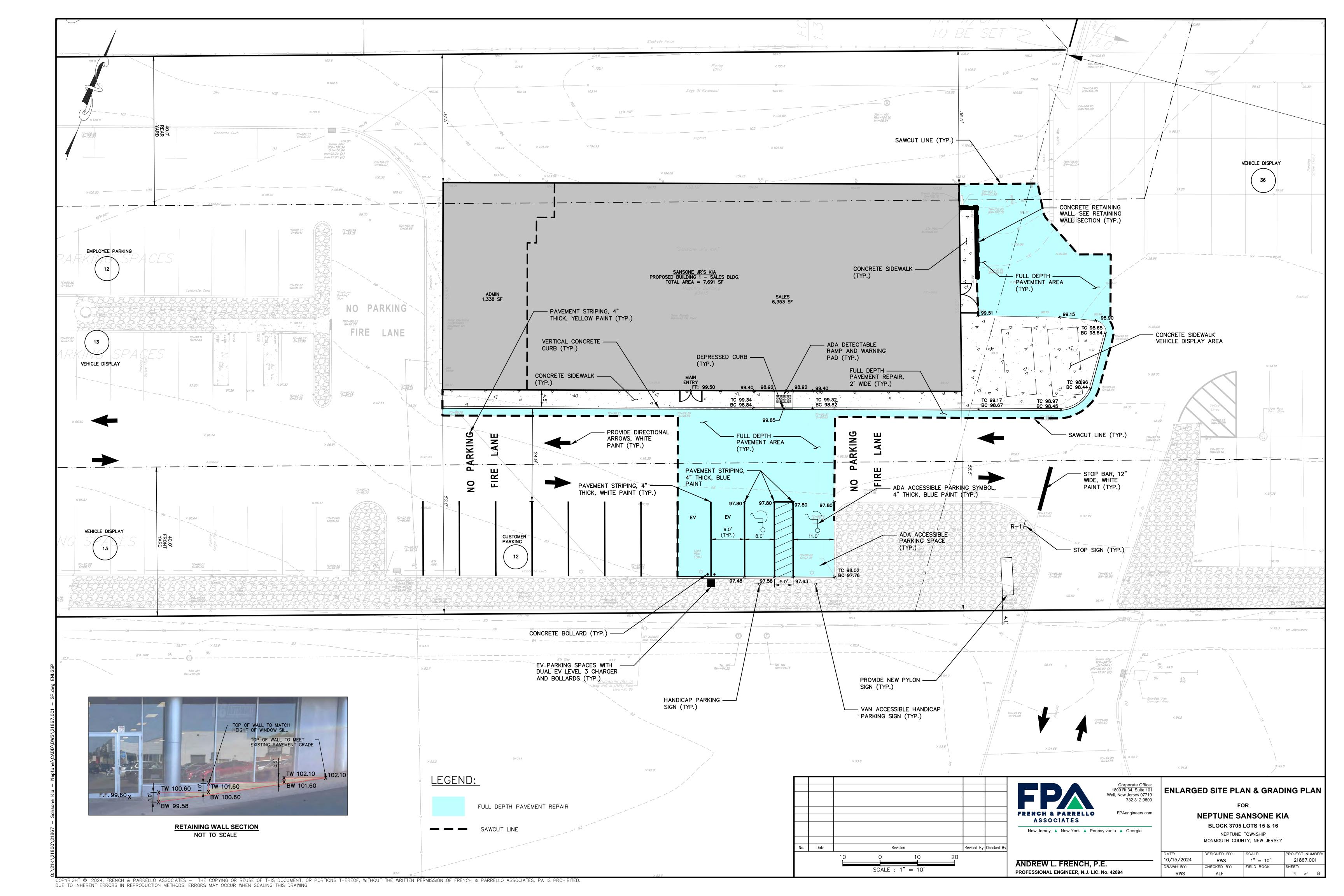
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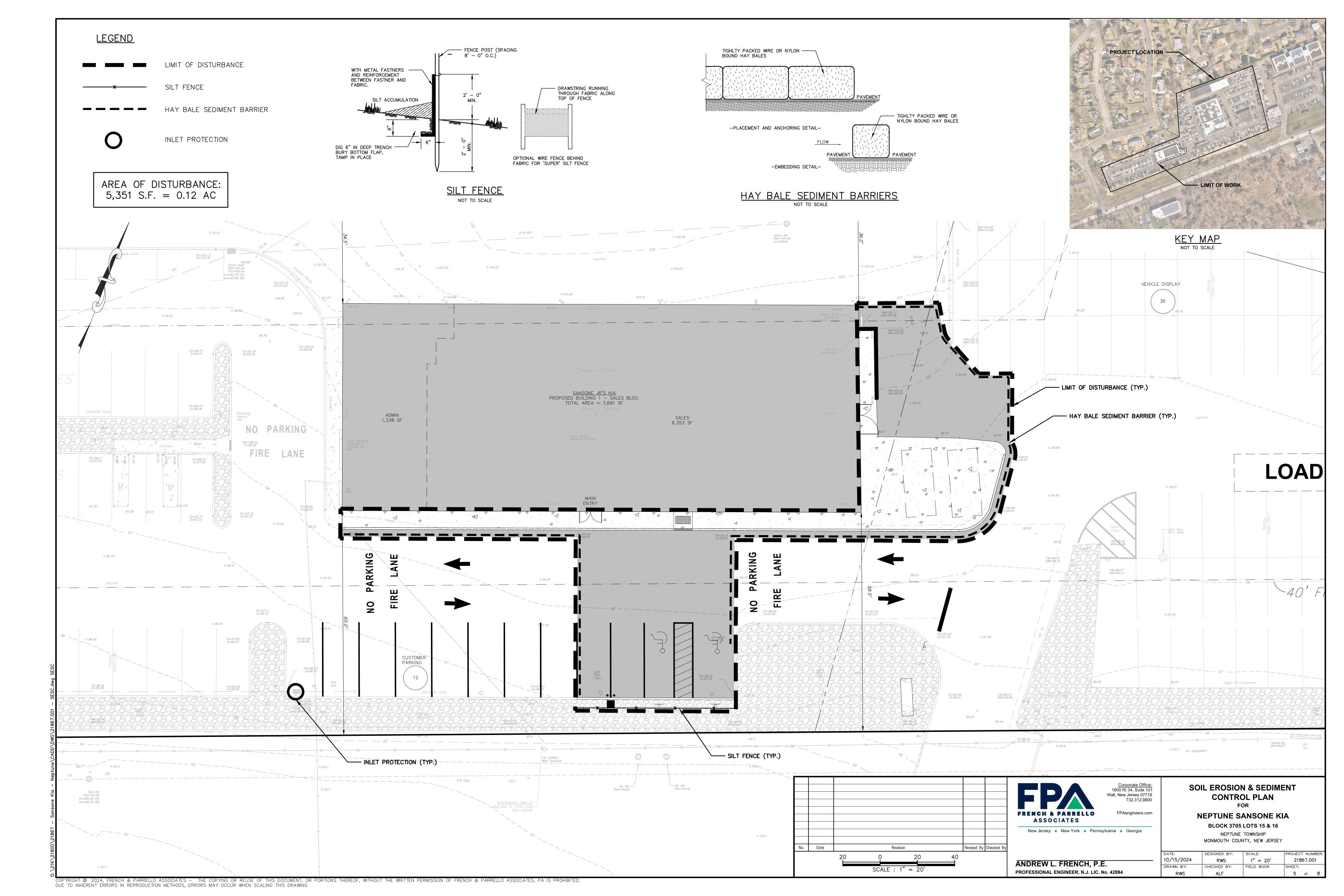
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#### SOIL EROSION AND SEDIMENT CONTROL NOTES

- 1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
- 2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- 3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
- 4. N.J.S.A 4: 24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
- 5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 1/2 TONS PER ACRE, ACCORDING TO 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. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE 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
- 9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
- 10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
- 11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
- 12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID 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
- 17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL

EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000

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

FREEHOLD SOIL CONSERVATION DISTRICT 4000 KOZLOSKI ROAD FREEHOLD NEW JERSEY 07728

#### ACID SOILS NOTES

(732) 683-8500

SQUARE FEET IS DISTURBED.

IN ORDER TO PROVIDE SUITABLE CONDITIONS FOR GROWTH AND VEGETATION AND TO PREVENT THE ACIDIFYING OF DRAINAGE WATER IN THOSE AREAS UNDERLAIN WITH ACID FORMATIONS WITH A ph BELOW 4.0 THE FOLLOWING REQUIREMENT SHALL BE

- 1. LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID PRODUCING SOILS ARE ENCOUNTERED.
- 2. TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID PRODUCING
- 3. STOCKPILES OF HIGH ACID PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
- 4. TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOIL MATERIAL TO BE STORED MORE THAN 48 HOURS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID PRODUCING SOIL.
- 5. HIGH ACID PRODUCING SOILS WITH A pH OF 4 OR LESS, OR CONTAINING IRON SULFIDE, (INCLUDING BORROW FROM CUTS OR DREDGED SEDIMENT) SHALL BE ULTIMATELY PLACE OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS PER ACRE (OR 450 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A pH OF 5 OR MORE EXCEPT AS FOLLOWS:
  - A. AREAS WHERE TREES OR SHRUBS ARE PLANTED SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A pH OF 5 OR MORE.
- B. DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24" OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES AND OTHERS TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.
- 6. EQUIPMENT USED FOR MOVEMENT OF HIGH ACID-PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID-PRODUCING SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS OR STORMWATER CONVEYANCES, AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
- NON-VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SEDIMENT BARRIER, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID-PRODUCING SOILS FROM, AROUND, OR OFF THE SITE.
- 8. FOLLOWING BURIAL OR REMOVAL OF HIGH ACID-PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, AND TOPSOILING), MONITORING MUST CONTINUE FOR A MINIMUM OF 6 MONTHS TO ENSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID-PRODUCING SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.

#### CONSTRUCTION SCHEDULE AND PROCEDURE FOR IMPLEMENTATION OF SOIL EROSION AND SEDIMENT CONTROL MEASURES

- 1. PROVIDE TEMPORARY STABILIZATION OF ALL DISTURBED AREAS AND INSTALL SILT FENCE, HAY BALE BARRIERS AND ALL OTHER NECESSARY SOIL EROSION MEASURES. (1 WEEK)
- 2. CLEAR AND ESTABLISH ROUGH GRADES AS NECESSARY TO CONSTRUCT SITE IMPROVEMENTS. (2 WEEKS)
- 3. CONSTRUCTION RENOVATION OF BUILDING. (6 MONTHS)
- 4. FULL DEPTH PAVEMENT REMOVAL AND OTHER DEMOLITION FOR SITE IMPROVEMENTS. (4 WEEKS)
- 5. INSTALL CONCRETE CURB AND SIDEWALK. (2 WEEKS)
- 6. ESTABLISH FINISHED GRADE, AND MILL PAVEMENT. (1 WEEK)
- 7. INSTALL FINAL PAVEMENT SURFACE. (1 WEEK)
- 8. REMOVE ACCESS PROTECTION, AND SILT FENCE AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED. (1 WEEK)

THE ABOVE SCHEDULE IS FOR THE IMPLEMENTATION AND INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL MEASURES ONLY. CONTRACTOR MAY MODIFY AND/OR CREATE HIS OWN SCHEDULE. IF THE CONSTRUCTION SCHEDULE IS MODIFIED, A REVISION TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED.

#### PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

#### SITE PREPARATION

2. SEEDBED PREPARATION

STANDARDS, FOR LAND GRADING.

- 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
- B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOILING APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
- C. TOPSOIL SHOULD BE HANDLED ONLY WHEN ITS 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.

#### 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 S.F. 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-HALFTHE RATE DESCRIBED ABOVE DURING THE SEEDBED PREPARATION AND REPEAT ANOTHER ONE—HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A
- SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS 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

DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION

#### SEEDING

A. PERMANENT SEEDING SHALL CONSISTING OF THE FOLLOWING MIXES OR APPROVED EQUAL - ACCEPTABLE SEEDING DATES ARE BETWEEN MARCH 1 THRU APRIL 30 AND OPTIMAL SEEDING DATES ARE AUGUST 15 THRU

> @ 4.0#/1,000 S.F. PERENNIAL RYEGRASS @ 1.0#/1,000 S.F. KENTUCKY BLUEGRASS @ 1.0#/1,000 S.F.

PERMANENT SEEDING SHALL BE PROVIDED ON ALL THE DETENTION BASIN SIDE SLOPES AND BASIN BOTTOM. SHALL BE SEED MIXTURE 17 AND CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL - ACCEPTABLE SEEDING DATES ARE BETWEEN MARCH 1 THRU AUGUST 14 AND OPTIMAL SEEDING DATES ARE AUGUST 15 THRU OCTOBER 1:

> CREEPING BENTGRASS CREEPING RED FESCUE

ALKALI SALTGRASS

PREPARATION. SEE ACID SOIL NOTES.

@1#/1,000 S.F. @1#/1,000 S.F. @1#/1,000 S.F.

PLEASE NOTE THAT OTHER SEED MIXTURES CAN BE USED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

- B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING 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 WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF \$\frac{1}{2}\$ TO \$\frac{1}{2}\$ INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE \$\frac{1}{2}\$ INCH DEEPER ON COARSE-TEXTURED SOIL.
- C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE
- D. 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. <u>MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED.</u> SHORT—FINERED 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. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

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 REQUIREMENT.

- A. STRAW OR HAY, UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1 1/2 TO 2 TONS 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 PRESENCE OF WEED SEED.
- APPLICATION— SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTION 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. 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 STRECHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG
- 2. MULCH NETTING. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTING TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
- 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 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 MULCH.
  - 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.
  - USE ONE OF THE FOLLOWING:
- ORGANIC AND VEGETABLE BASED BINDERS NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT 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.
- 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 AND WEATHER CONDITIONS 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 COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.
- 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 SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
- 4. PELLETIZED MULCH. COMPRESSED AND EXTRUDE 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, FORMA 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 60-75LBS/1,000 SQUARE FEET 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, SEED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

#### APPLY THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE

#### 5. IRRIGATION (WHERE FEASIBLE)

IF SOIL MOISTURE IS DEFICIENT, AND MULCH IS NOT USED, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH APPLIED UP TO TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SÉEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

#### STABILIZATION WITH MULCH

#### 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.
- A. UN-ROTTED SMALL-GRAIN STRAW, OR SALT HAY 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, ie. THE SOIL CAN NOT BE BELOW THE MULCH. B. ASPHALT EMULSION IS RECOMMENDED AT THE RATE OF 600 TO 1,200 GALLONS PER ACRE. THIS IS SUITABLE FOR A LIMITED PERIOD OF TIME WHERE TRAVEL BY PEOPLE, ANIMALS OR MACHINES IS NOT A PROBLEM.
- C. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY
- D. 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 HYROSEEDER.
- E. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.
- F. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.
- G. GRAVEL. CRUSHED STONE. OR SAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 SQ. FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM-C-33) IS RECOMMENDED.
- 3. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF
- A. 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 CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND
- B. MULCH NETTING STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.
- C. CRIMPER MULCH ANCHORING COULTER TOOL A TRACTOR-DAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT IS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION
- D. LIQUID MULCH -BINDERS
- 1. APPLICATION 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.

#### USE ONE OF THE FOLLOWING:

- ORGANIC AND VEGETABLE BASED BINDER NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.
- 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 AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

#### TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

#### 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
- B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
- 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,

#### 2. SEEDBED PREPARATION

IRRIGATION SYSTEMS, ETC.)

- A. APPLY GROUND LIMESTONE AND FERTILIZER 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. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 S.F. OF LIMESTONE AT THE RATE AS ESTABLISHED BY SOIL TESTING. CALCIUM CARBONATE IS THE FOUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO
- GRASSES AND LEGUMES. 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. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RECTIFIED IN ACCORDANCE WITH THE ABOVE.

#### D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS, SEE ACID SOIL NOTES. SEEDING

A. TEMPORARY SEEDING SHALL CONSISTING OF THE FOLLOWING SEED SELECTIONS OR APPROVED EQUAL: COOL SEASON GRASSES

@ 2.0#/1,000 S.F., WITH OPTIMUM SEED DEPTH OF 1.0 INCH SPRING OATS WINTER CEREAL RYE © 2.8#/1,000 S.F., WITH OPTIMUM SEED DEPTH OF 1.0 INCH

### WARM SEASON GRASSES

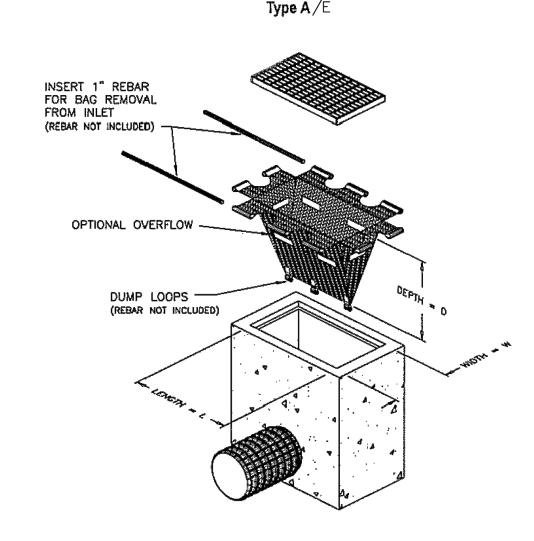
EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

@ 0.5#/1.000 S.F. WITH OPTIMUM SEED DEPTH OF 1.0 INCH PEARL MILLET PLEASE NOTE THAT OTHER SEED SELECTIONS CAN BE USED IN ACCORDANCE WITH THE STANDARDS FOR SOIL

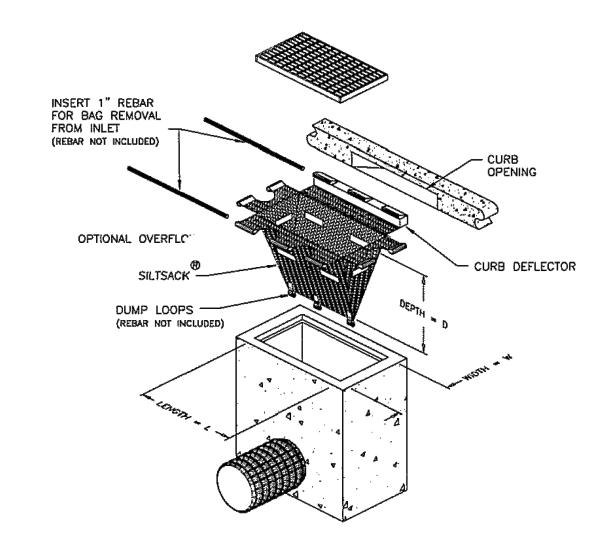
- B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF  $\frac{1}{4}$  TO 1 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1 INCH DEEPER ON COARSE-TEXTURED
- 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. <u>MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED.</u> SHORT—FINERED 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. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED 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 SEEDLING 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

REFER TO THE MULCH NOTES, NOTE 4 UNDER THE PERMANENT VEGETATIVE COVER SECTION.



 INSPECTIONS SHALL OCCUR WEEKLY AND AFTER EVERY RAINFALL EVENT. ANY ACCUMULATED SEDIMENT OBSERVED SHALL BE REMOVED. REPAIR AND/OR REPLACEMENT SHALL BE MADE IMMEDIATELY IF IT IS DETERMINED THAT THE INLET PROTECTION HAS BECOME DAMAGED OR IS NOT OPERATING 2. CONTRACTOR TO REMOVE FABRIC JUST PRIOR TO



Date Revised By Checked B



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#### **SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS** FOR

#### **NEPTUNE SANSONE KIA**

BLOCK 3705 LOTS 15 & 16 NEPTUNE TOWNSHIP MONMOUTH COUNTY, NEW JERSEY

10/15/2024 21867.001 CHECKED BY: FIELD BOOK SHEET: RWS AI F

