

STONEFIELD

STORMWATER OPERATIONS & MAINTENANCE MANUAL

**PROPOSED CAR WASH
BLOCK 203, LOT 4
575 MILLTOWN ROAD
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY, NEW JERSEY**

**PREPARED FOR:
SPARK CAR WASH, LLC**

**PREPARED BY:
STONEFIELD ENGINEERING & DESIGN, LLC
NOVEMBER 14, 2023
PRI-220304**

**PAUL D. MUTCH JR. PE
NEW JERSEY PROFESSIONAL ENGINEER LICENSE # 55094**

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1.0 PROJECT DESCRIPTION

The Applicant is proposing the construction of 4,841 SF single-tunnel Car Wash. The subject property is designated Block 203, Lot 4, commonly known as 575 Milltown Road.

The total project area is 75,959 SF (1.74 acres), the total area of impervious surfaces is 35,260 SF (0.81 ac), which is a reduction of 29,485 SF (0.67 ac) from the existing condition (64,745 SF; 1.48 ac), and the total area of disturbance is 76,086 SF (1.75 acres). Project Figures can be found in Appendix A of this Report.

This Stormwater Operations & Maintenance Manual has been prepared to delineate operational and maintenance responsibilities for the stormwater best management practices (BMPs) proposed to meet the requirements set forth by the Township of North Brunswick, Freehold Soil Conservation District, and the New Jersey Department of Environmental Protection (NJDEP).

2.0 PROPOSED DEVELOPMENT

The Applicant, Spark Car Wash, is proposing the demolition of the existing 2-story masonry building and the construction of a new 4,841 SF Single-Tunnel Car Wash Facility. The 1.74-acre subject property is currently comprised of primarily (85.2%) impervious surfaces. The proposed development includes the construction of a single-story 4,841 SF Single-Tunnel Car Wash Facility with associated employee & vacuum parking. Existing access to the site is provided via right ingress/egress driveways on Georges Road & right ingress/egress driveways on Milltown Road. The proposed development will close the existing driveways located along Milltown Road & maintain the driveways along Georges Road. Proposed access to the site is provided via one (1) right ingress/egress only driveway on Milltown & the existing right ingress/egress driveways located along Georges Road. Additional site improvements for the project include parking, lighting, soil erosion measures, utilities, stormwater measures, and landscaping.

3.0 STORMWATER MANAGEMENT OPERATIONAL PROCEDURES

Operation and maintenance of the permanent stormwater control BMPs shall be the responsibility of the operator of the project site at the time that the applicable maintenance is required. The current owner and responsible agent of the project is:

Spark Car Wash, LLC
575 Milltown Road, North Brunswick, NJ
CONTACT: Bob Vallario

A copy of this report shall be kept on-site at all times both during and after construction. Upon reviewing agency approval, the title and date of the maintenance plan as well as the contact information of the current agent responsible for maintaining the stormwater management measures for the project shall be recorded on the deed of the property on which the measures are located. Any future change in this information such as change in property ownership shall also be recorded on the deed.

The current responsible agent shall evaluate the maintenance plan for effectiveness at least annually and revise the plan as necessary. A detailed, written log of all preventative and corrective maintenance performed for each stormwater management measure must be kept, including a record of all inspections and copies of maintenance-related work orders. Upon request from a public entity with jurisdiction over the project area the responsible agent shall make available the maintenance plan and associate logs and other records for review.

3.1 MAINTENANCE EQUIPMENT AND PERSONNEL

The current responsible agent shall ensure that adequate equipment and training is provided to maintenance personnel to perform the required maintenance tasks. Confined Space Entry Certification shall be required by personnel entering underground structures and pipes. The material and equipment necessary for inspection and maintenance activities shall include, but not be limited to, the following:

- ◆ *Landscape Areas:* Material and equipment customary in landscape maintenance practices.
- ◆ *Street Sweeping:* Litter vacuum or leaf/litter blower to collect sediment from asphalt surface, brooms, and disposal bags.

The estimated cost of routine, scheduled maintenance activities is estimated to be approximately \$6,000.00 per year. Approximate breakdown of yearly routine maintenance costs is noted below (excludes structural repairs):

MAINTENANCE COST BREAKDOWN

Landscape Areas	\$2,000.00 per year
Sediment Debris and Trash Removal	\$2,000.00 per year
Street Sweeping	\$2,000.00 per year

4.0 STORMWATER BMP INVENTORY

The stormwater management measures incorporated into this development are listed below. The corresponding Field Manuals for the stormwater management measures are located in the Appendix of the Maintenance Plan.

4.1 OTHER MAINTENANCE

In addition to the scheduled inspections for the above referenced stormwater BMPs, the following general maintenance tasks shall be performed:

- I. All stormwater inlets and manholes shall be inspected for debris and sediment accumulation and structural integrity at least four (4) times annually. Debris and sediment removal shall be scheduled as required to maintain stormwater runoff conveyance efficiency and disposed of in compliance with all applicable local, state, and federal waste regulations.

2. Street sweeping shall occur at least once (1) monthly in all parking lot areas onsite. Regenerative air equipment shall be used.
3. Trash receptacles onsite shall be emptied, and their liners replaced at a minimum of three (3) times per week.
4. Landscaping within the developed portions of the site shall be trimmed/mowed twice (2) monthly during the growing season. Reforested portions of the site shall be left undisturbed to vegetate naturally.

5.0 STORMWATER BMP PREVENTATIVE MAINTENANCE ACTIONS

As per N.J.A.C. 7:8-5.8(b) & (e), preventative and corrective maintenance shall be performed to maintain the function of the stormwater management measure, including, but not limited to, repairs or replacement to the structure; removal of sediment, debris, or trash; restoration of eroded areas; snow and ice removal; fence repair or replacement; restoration of vegetation; and repair or replacement of non-vegetated linings

As per NJDEP BMP Manual Ch. 8 Feb. 2004), maintenance plans should include specific preventative and corrective maintenance tasks such as removal of sediment, trash, and debris; mowing, pruning, and restoration of vegetation; restoration of eroded areas; elimination of mosquito breeding habitats; control of aquatic vegetation; and repair or replacement of damaged or deteriorated components.

5.1 GENERAL MAINTENANCE

In addition to the scheduled inspections for the above referenced stormwater BMPs, a periodic inspection by the Township will be performed. The following additional general maintenance tasks shall be performed.

5.1.1 MONTHLY

- a. Street sweeping shall occur at least once (1) monthly in all parking lot areas onsite. Regenerative air equipment shall be used.
- b. Trash receptacles onsite shall be emptied and their liners replaced at a minimum of three (3) times per week.
- c. Landscaping within the developed portions of the site shall be trimmed/mowed twice (2) monthly during the growing season. Reforested portions of the site shall be left undisturbed to vegetate naturally.

5.1.2 QUARTERLY

- a. All stormwater inlets and manholes shall be inspected for debris and sediment accumulation and structural integrity at least four (4) times annually. Debris and sediment removal shall be scheduled as required to maintain stormwater runoff conveyance efficiency and disposed of in compliance with all applicable local, state, and federal waste regulations.

5.1.3 ANNUALLY

- a. A submission to the Township from the owner of the end-of-year maintenance records will be required.

6.0 INSPECTION AND LOGS OF ALL PREVENTATIVE AND CORRECTIVE MEASURES

As per N.J.A.C. 7:8-5.8(f), the person responsible for maintenance shall maintain a detailed log of all preventative and corrective maintenance for the structural stormwater management measures incorporated into the design of the development, including a record of all inspections and copies of all maintenance-related work orders.

As per NJDEP BMP Manual Ch. 8 (Feb, 2004), a maintenance plan shall include a schedule of regular inspections and tasks, and detailed logs of all preventative and corrective maintenance performed on the stormwater management measure, including all maintenance-related work orders. The person with maintenance responsibility must retain and, upon request, make available the maintenance plan and associated logs and other records for review by a public entity with administrative, health, environmental, or safety authority over the site. Inspection Checklists in the Field Manual for the stormwater management measures on this site include:

- ◆ Appendix C-1: General Inspection Checklist Log
- ◆ Appendix C-2: General Preventative Maintenance Log
- ◆ Appendix C-3: General Corrective Maintenance Log
- ◆ Appendix C-4: Annual Evaluation Records

All inspection and maintenance activities shall be recorded to document frequency of inspection and maintenance, and implementation of corrective action. All regularly scheduled inspections, inspections following one (1) inch of precipitation, maintenance activities, and repairs shall be recorded. Refer to the Appendix of this Manual for the BMP Inspection & Maintenance Log for this facility. This log shall be considered a minimum standard for recording purposes, the Operator and Inspection/Maintenance Personnel are encouraged to supplement the Log with additional notes and photos.

7.0 ANNUAL EVALUATION OF THE EFFECTIVENESS OF THE PLAN

As per N.J.A.C. 7:8-5.8(g), the person responsible for maintenance shall evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed.

The responsible party should evaluate the effectiveness of the maintenance plan by comparing the maintenance plan with the actual performance of the maintenance. The items to evaluate may include, but not limited to,

- Whether the inspections have been performed as scheduled;
- Whether the preventive maintenance has been performed as scheduled;
- Whether the frequency of preventative maintenance needs to increase or decrease;
- Whether the planned resources were enough to perform the maintenance;
- Whether the repairs were completed on time;
- Whether the actual cost was consistent with the estimated cost;
- Whether the inspection, maintenance, and repair records have been kept.

If actual performance of those items has been deviated from the maintenance plan, the responsible party should find the causes and implement solutions in a revised maintenance plan.

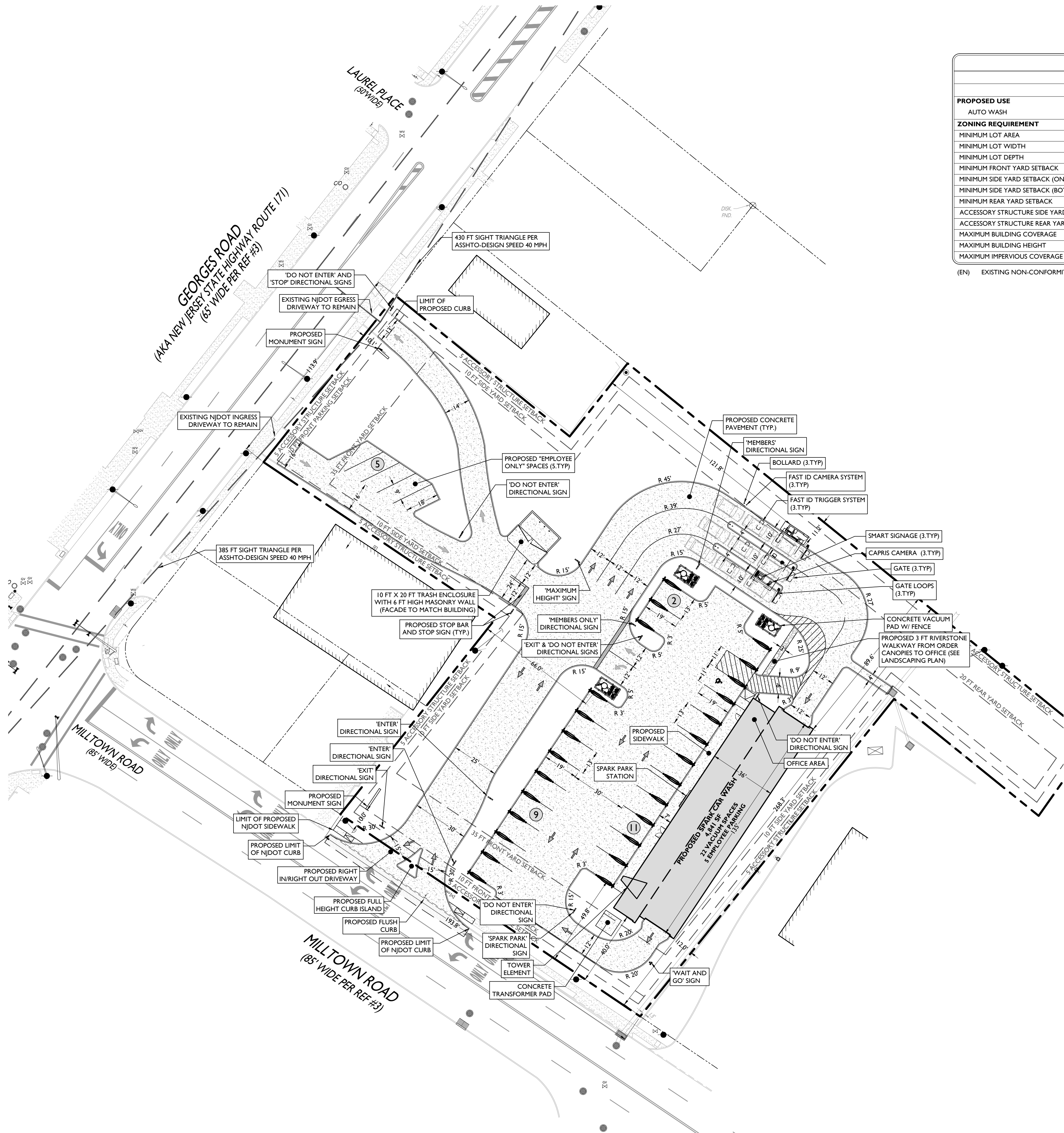
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APPENDIX A:
PROJECT PLANS
(NOT TO SCALE)

APPENDIX A-I:

SITE PLAN

Z:\PROJECTS\190322\190322.DWG 1/23/24 SPARK CARWASH - 575 MILLTOWN ROAD, NORTH BRUNSWICK TOWNSHIP, HEADQUARTERS, TRANSITION, BRUNSWICK



LAND USE AND ZONING			
BLOCK 203, LOT 4			
NEIGHBORHOOD COMMERCIAL (C-1)			
PROPOSED USE	NON-PERMITTED USE (V)		
AUTO WASH			
ZONING REQUIREMENT	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	15,000 SF	75,959 SF (1.74 AC)	75,959 SF (1.74 AC)
MINIMUM LOT WIDTH	100 FT	193.8 FT	193.80 FT
MINIMUM LOT DEPTH	100 FT	268.3 FT	268.3 FT
MINIMUM FRONT YARD SETBACK	35 FT	46.3 FT	40.0 FT
MINIMUM SIDE YARD SETBACK (ONE)	10 FT	40.3 FT	10.0 FT
MINIMUM SIDE YARD SETBACK (BOTH)	20 FT	66.9 FT	66.0 FT
MINIMUM REAR YARD SETBACK	20 FT	146.6 FT	89.6 FT
ACCESSORY STRUCTURE SIDE YARD SETBACK	5 FT	6.4 FT	123.8 FT
ACCESSORY STRUCTURE REAR YARD SETBACK	5 FT	15.00 FT	11.2 FT
MAXIMUM BUILDING COVERAGE	40%	8.2% (6,237 SF)	6.4% (4,841 SF)
MAXIMUM BUILDING HEIGHT	2.5 STORIES, 30 FT	2 STORY	30 FT, 1 STORY
MAXIMUM IMPERVIOUS COVERAGE	80%	85.2% (64,745 SF) (EN)	46.4% (35,260 SF)

(EN) EXISTING NON-CONFORMITY

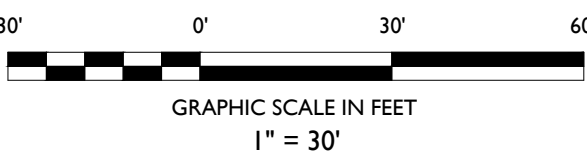
OFF-STREET PARKING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 205-96.E	PARKING AREAS MAY BE LOCATED IN ANY REAR OR SIDE YARD, BUT MAY NOT BE LOCATED IN ANY REQUIRED FRONT YARD AREA EXCEPT WHERE SPECIFICALLY PERMITTED ELSEWHERE.	2 SPACES IN FRONT YARD (V)
§ 205-97.B	MAXIMUM TWO DRIVEWAYS USED AS A MEANS OF INGRESS/EGRESS FOR OFF-STREET PARKING AREAS OF FRONTAGE ON A PUBLIC STREET: 300 FT MINIMUM DRIVEWAY DISTANCE TO THE INTERSECTION OF TWO PUBLIC STREETS: 100 FT	COMPLIES
§ 205-98.A	MINIMUM PARKING SPACE SIZE: 9 FT X 18 FT	9 FT X 18 FT
§ 205-98.B.(2)	ALL DRIVEWAYS SHALL CROSS SIDEWALK AREAS AT GRADE	COMPLIES
§ 205-98.B.(3)	MINIMUM DRIVEWAY/PARKING DISTANCE TO THE NEAREST RIGHT-OF-WAY OF AN INTERSECTING STREET: 100 FT	113.4 FT
§ 205-98.B.(4)	MINIMUM DRIVEWAY WIDTH: ONE-WAY TRAFFIC: 12 FT TWO-WAY TRAFFIC: 25 FT	ONE-WAY: 13 FT TWO-WAY: N/A
§ 205-98.B.(5)(A)	DRIVEWAY AISLES FOR PERPENDICULAR PARKING: 25 FT	30.0 FT
§ 205-98.C.(1)	MINIMUM SIDEWALK WIDTH BETWEEN PARKING AREAS AND PRINCIPAL STRUCTURES: 4 FT	7.0 FT
§ 205-98.C.(2)	SIDEWALKS SHALL BE RAISED 6 INCHES ABOVE PARKING, EXCEPT WHERE CROSSING STREETS OR DRIVEWAYS, AND CURBED AS A PROTECTION TO PEDESTRIANS USING THE WALKS	COMPLIES
§ 205-98.C.(3)	SIDEWALKS AND PARKING AREAS MUST BE ARRANGED TO PREVENT CARS FROM EXTENDING OVER SIDEWALK AREAS	DOES NOT COMPLY (V)

(V) VARIANCE

SIGNAGE REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 205-102.C	NO SIGN SHALL BE LOCATED CLOSER THAN 20 FT TO ANY PROPERTY LINE.	MILLTOWN ROAD: 10.0 FT (V) GEORGES ROAD: 10 FT (V)
§ 205-102.D	NO SIGN SHALL EXCEED 20 FT IN HEIGHT ABOVE GROUND LEVEL.	MILLTOWN ROAD: 15.0 FT GEORGES ROAD: 15.0 FT
§ 205-102.K	SIGNS ATTACHED TO THE SIDE OF THE BUILDING SHALL NOT EXCEED MORE THAN 12 INCHES FROM THE FACE OF THE BUILDING.	COMPLIES
§ 205-102.P	FACADE SIGNS AND FREESTANDING SIGNS FOR OFFICE, COMMERCIAL AND INDUSTRIAL USES, PERMITTED IN § 205-105 OF THIS ARTICLE, MAY BE INTERNALLY ILLUMINATED.	COMPLIES
§ 205-105.A	NONILLUMINATED DIRECTIONAL SIGNS ARE PERMITTED NOT EXCEEDING 3 SF IN AREA.	3.5 SF (V)
§ 205-150.H.(1)	ANY OFFICE, COMMERCIAL OR INDUSTRIAL BUILDING OVER TWO STORIES IN HEIGHT HAVING A GROSS FLOOR AREA OF LESS THAN 10,000 SF SHALL BE PERMITTED ONE FREESTANDING SIGN. THE AREA OF SUCH SIGN SHALL NOT EXCEED 40 SF.	TWO (2) MONUMENT SIGNS (V) MILLTOWN ROAD: 71.0 SF (V) GEORGES ROAD: 71.0 SF (V)

(V) VARIANCE

- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
 - ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
 - THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
 - THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC, WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
 - THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
 - SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



SYMBOL	DESCRIPTION
	PROPERTY LINE
	SETBACK LINE
	SAWCUT LINE
	PROPOSED CURB
	PROPOSED DEPRESSED CURB
	PROPOSED FLUSH CURB
	PROPOSED MOUNTABLE CURB
	PROPOSED SIGNS / BOLLARDS
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED AREA LIGHT
	PROPOSED BUILDING DOORS

FOR MUNICIPAL & COUNTY SUBMISSIONS

DESCRIPTION

BS

DATE

ISSUE

01

1/11/2023

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Rutherford, NJ • New York, NY • Boston, MA
Princeton, NJ • Tampa, FL • Detroit, MI
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15 Spring Street, Princeton, NJ 08542
Phone 609.362.6900

PRELIMINARY AND FINAL MAJOR SITE PLAN

SPARK CAR WASH
PROPOSED CAR WASH

BLOCK 203, LOT 4
575 MILLTOWN ROAD
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY, NEW JERSEY

STONEFIELD
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PAUL D. MUTCH Jr., P.E.
NEW JERSEY LICENSE NO. 55094
LICENSED PROFESSIONAL ENGINEER

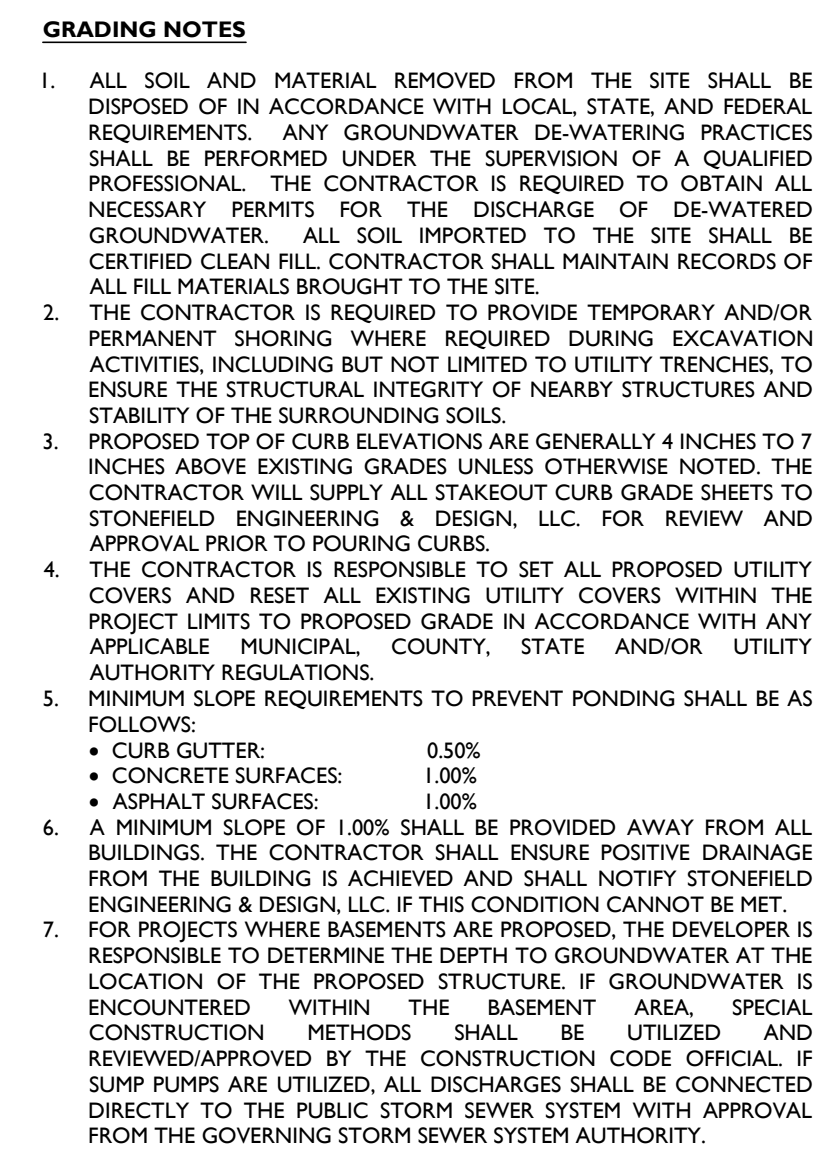
SCALE: 1" = 30'

PROJECT ID: PRI-220304

TITLE: SITE PLAN

DRAWING: C-4

APPENDIX A-2: ***DRAINAGE PLAN***



- 30' 0' 30'
- GRAPHIC SCALE IN FEET
1" = 30'

NOT APPROVED FOR CONSTRUCTION

15 Spring Street, Princeton, NJ 08542
Phone 609.362.6900

**BLOCK 203, LOT 4
575 MILLTOWN ROAD
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY, NEW JERSEY**

C-5

APPENDIX A-3: ***LANDSCAPING PLAN***

LANDSCAPING NOTES

- THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
- THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
- THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
- THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.

IRRIGATION NOTE:

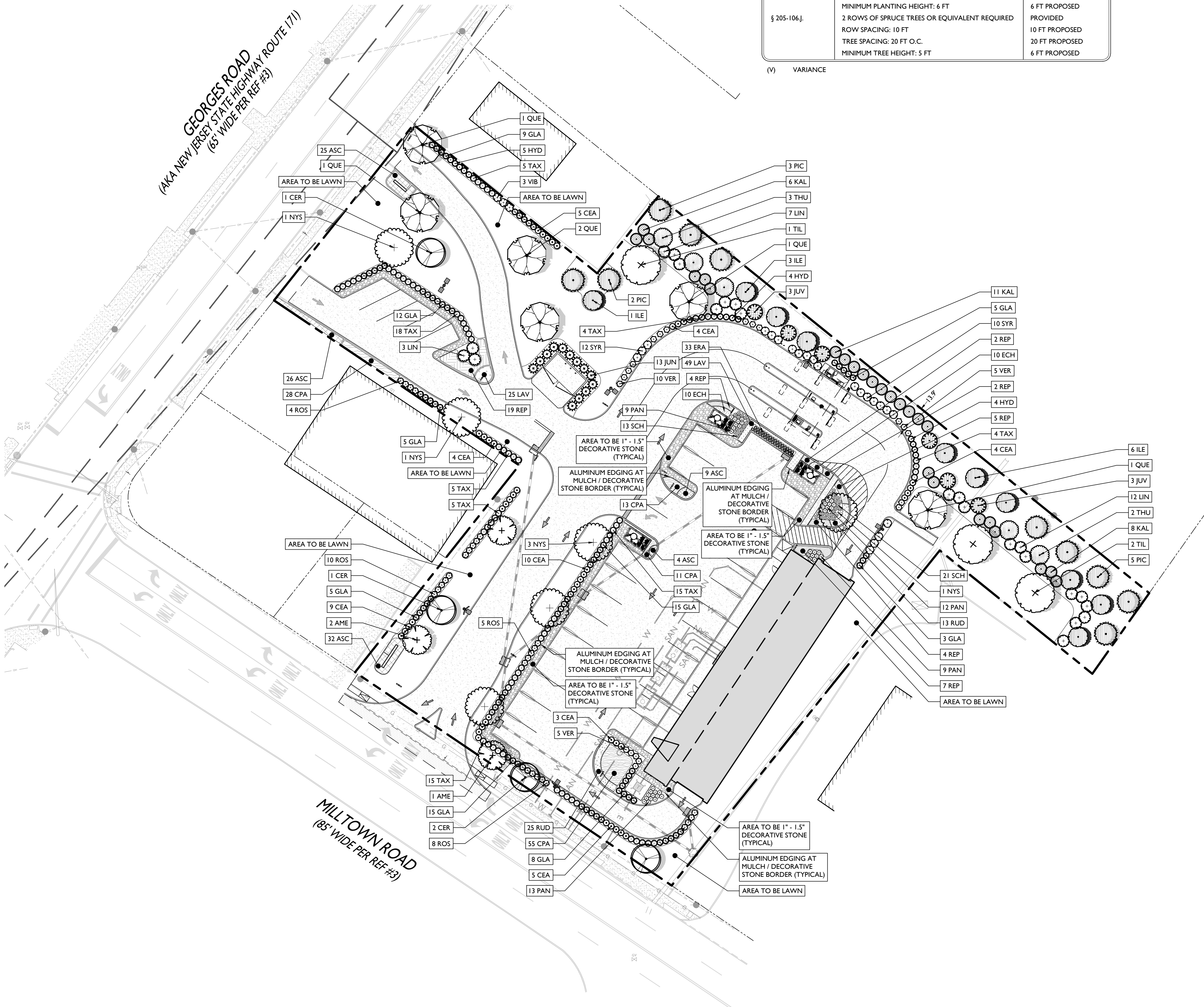
IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.



LANDSCAPING AND BUFFER REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
\$ 205-66.B.	C-1 NEIGHBORHOOD COMMERCIAL BUFFERS WHERE A PROPOSED COMMERCIAL DEVELOPMENT ADJUTS A RESIDENTIAL ZONE/USE, ADDITIONAL 30 FT BUFFER STRIP SHALL BE ADDED TO ANY REQUIRED REAR OR SIDE YARD	13.9 FT PROVIDED (V)
\$ 205-96.A.	PARKING LOT BUFFER SPECIAL BUFFER PLANTING REQUIRED ALONG SIDE/REAR PROPERTY LINES TO SCREEN FROM ADJACENT RESIDENTIAL ZONE/USE	PROVIDED
\$ 205-106.A.	BUFFER PLANTINGS SOLID AND CONTINUOUS SCREEN CONSISTING OF LAWN, EVERGREEN TREES, DECIDUOUS TREES, AND SHRUBS REQUIRED WITHIN BUFFER AREAS	SCREEN PLANTINGS PROVIDED
\$ 205-106.B.	THE ENTIRE BUFFER AREA AND ALL REQUIRED YARD AREAS NOT OCCUPIED BY PARKING AREAS SHALL BE PLANTED WITH GRASS SEED OR SOD AND SUCH SHRUBBERY OR TREES	PROVIDED
\$ 205-106.C.	MINIMUM PLANTING HEIGHT: 3 FT	3 FT PROPOSED
\$ 205-106.E.	PARKING LOT BUFFER PLANTINGS WHEN A PARKING AREA OF 4 OR MORE VEHICLES IS ADJACENT TO A RESIDENTIAL PROPERTY AREA, A LANDSCAPED BUFFER SCREEN SHALL BE REQUIRED	PROVIDED
\$ 205-106.J.	2 ROWS OF SPRUCE TREES OR EQUIVALENT REQUIRED ROW SPACING: 10 FT TREE SPACING: 20 FT O.C. MINIMUM TREE HEIGHT: 5 FT	6 FT PROPOSED PROVIDED 10 FT PROPOSED 20 FT PROPOSED 6 FT PROPOSED

(V) VARIANCE



APPENDIX B: ***INSPECTION CHECKLISTS***

APPENDIX B-I:
GENERAL INSPECTION
CHECKLIST LOG

INSPECTION CHECKLIST LOG

1. The responsible party shall report issues to the local authority and mosquito commission as required by local ordinances and regulatory authorities.
2. The maintenance crew should fill out the checklist in the field manual when performing each inspection/maintenance task.
3. After the maintenance task is performed, the checklist should be filed in the Maintenance Plan and recorded in the log below.

<i>Cycle of Inspection</i>	<i>Stormwater Management Measure No.</i>	<i>Checklist No.</i>	<i>Date(s) of Inspection</i>
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4th Quarter)			
(Unscheduled Inspection; e.g., after 1" rain)			
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4th Quarter)			
(Unscheduled Inspection; e.g., after 1" rain)			
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4 th Quarter)			
(Unscheduled Inspection; e.g., after 1" rain)			

<i>Cycle of Inspection</i>	<i>Stormwater Management Measure No.</i>	<i>Checklist No.</i>	<i>Date(s) of Inspection</i>
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4th Quarter)			
(Unscheduled Inspection; e.g., after 1" rain)			
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4 th Quarter)			
(Unscheduled Inspection; e.g., after 1" rain)			

APPENDIX B-2:
GENERAL PREVENTATIVE
MAINTENANCE LOG

PREVENTATIVE MAINTENANCE LOG

MAINTENANCE SCHEDULE	STORMWATER MANAGEMENT MEASURE NO.	PREVENTATIVE MAINTENANCE RECORD NO.	DATE(S) OF MAINTENANCE
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4th Quarter)			
(Unscheduled Maintenance work; e.g., after 1" rain)			
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4th Quarter)			
(Unscheduled Inspection; e.g., after 1" rain)			

APPENDIX B-3: GENERAL CORRECTIVE MAINTENANCE LOG

CORRECTIVE MAINTENANCE LOG

Maintenance Schedule	Stormwater Management Measure No.	Corrective Maintenance Record No.	Date(s) of Maintenance
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4th Quarter)			
(Unscheduled Maintenance work; e.g., after 1" rain)			
(1st Quarter)			
(2nd Quarter)			
(3rd Quarter)			
(4th Quarter)			
(Unscheduled Inspection; e.g., after 1" rain)			

APPENDIX B-4: *ANNUAL EVALUATION RECORD*

ANNUAL EVALUATION RECORD

As per N.J.A.C. 7:8-5.8(g), the person responsible for maintenance shall evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed.

The responsible party should evaluate the effectiveness of the maintenance plan by comparing the maintenance plan with the actual performance of the maintenance. The items to evaluate may include, but not limited to,

- Whether the inspections have been performed as scheduled;
- Whether the preventive maintenance has been performed as scheduled;
- Whether the frequency of preventative maintenance needs to increase or decrease;
- Whether the planned resources were enough to perform the maintenance;
- Whether the repairs were completed on time;
- Whether the actual cost was consistent with the estimated cost;
- Whether the inspection, maintenance, and repair records have been kept.

If actual performance of those items has been deviated from the maintenance plan, the responsible party should find the causes and implement solutions in a revised maintenance plan.

<i>Evaluator(s)</i>	<i>Date of Evaluation</i>	<i>Decision</i>
		<input type="checkbox"/> Maintain current version OR <input type="checkbox"/> Revise current version Revision date _____ (also update the last revision date on the cover page) <input type="checkbox"/> Requires a new deed recording (also update the last recording information on the cover page)
		<input type="checkbox"/> Maintain current version OR <input type="checkbox"/> Revise current version Revision date _____ (also update the last revision date on the cover page) <input type="checkbox"/> Requires a new deed recording (also update the last recording information on the cover page)
		<input type="checkbox"/> Maintain current version OR <input type="checkbox"/> Revise current version Revision date _____ (also update the last revision date on the cover page) <input type="checkbox"/> Requires a new deed recording (also update the last recording information on the cover page)