November 22, 2013

Ms. Jan A. Brodie, Executive Director I – 195 Redevelopment Commission 315 Iron Horse Way, Suite 101 Providence, Rhode Island 02908

RE: Water Quality Certificate – I-195 Redevelopment District Master Plan WQC File Number 13-035

Dear Ms. Brodie,

The Rhode Island Department of Environmental Management (RIDEM) has reviewed the "I-195 Redevelopment District Stormwater Master Plan" and the "RICRMC Assent and RIDEM Water Quality Certification Narrative" (together referred to as "the Master Plan"), received October 2, 2013.

The I-195 Redevelopment District (the District) comprises over forty one (41) acres, almost twenty six (26) of which are vacant properties to be redeveloped as depicted in Figure 1 of the Master Plan. The remaining land is comprised of existing developed lots and land that is designated for future city roads that will be built by RIDOT. The I - 195 Redevelopment District Commission (the Commission) may acquire additional land including any abutting properties that are to be combined with District parcels as part of a larger redevelopment project. In addition to the parcels designated for redevelopment, over seven acres of parks are planned. Parcels P2 and P4 will be established as Public Parks with recreational opportunities and direct access to and along the shoreline.

The District is within the Providence River Watershed. The Providence River classified as a Class SB1{a} water body and is listed as impaired on the State's 2012 303(d) list for nitrogen, dissolved oxygen, and fecal coliform. Total Maximum Daily Loads (TMDLs) have not been established for these pollutants however redevelopment of these parcels improves the water quality by treating stormwater from the site and is currently untreated.

The Master Plan specifies conditions that parcel developers within the District will meet to comply with the Rhode Island Water Quality Regulations, the Rhode Island Pollutant Discharge and Elimination System Regulations and the Groundwater Discharge Regulations.

Table 2 in Appendix I of the Master Plan specifies the water quality volume required to be treated for each parcel within the District. These specific parcel volumes were calculated to ensure that redevelopment of each parcel will achieve compliance with the Water Quality Regulations and Standard 3 of the Rhode Island Stormwater Design and Installation Standards Manual (RISDISM). The Stormwater Management Plans for individual parcels required to

Ms. Jan Brodie WQC 13-035 November 22, 2013

obtain authorization must incorporate measures or controls that are effective at removing bacteria and nitrogen as well as other pollutants from stormwater runoff.

The Water Quality Certificate establishes requirements for the District as well as the individual parcel developer, facility operator, and operator of the construction activity

Individual RIDEM Authorization will be required for each of the twenty-one (21) District parcel development proposals. Eligible Applicants will receive administrative authorization without a public notice as long as the proposal is consistent with the I-195 Redevelopment District Master Plan, this Water Quality Certification, and the attached I-195 Redevelopment District Water Quality Certification. If applicable, construction activities requiring a RIPDES Construction General Permit authorization and stormwater treatment practices requiring registration in accordance with the Groundwater Discharge Regulations will also be permitted through the Authorization granted under the Certification.

Special Conditions Applicable to the I-195 Redevelopment District Commission (the Commission)

- SC-D1. The Commission must sign the Authorization Form attached, certifying any request for development is acceptable to the Commission and is consistent with the approved Stormwater Master Plan, as amended.
- SC-D2 The Commission must certify that any project that requesting the use of Commission administrated water quality BMPs is approved by the District Commissioner.
- SC-D3 The Commission shall track parcel compliance with the stormwater treatment water quality volume (WQv) requirements for the entire District and provide an updated compliance spreadsheet with each parcel application filed with the RIDEM and CRMC. The spreadsheet shall provide a table-format summary identifying the parcel number, parcel size, total amount of impervious surface at build out, types of stormwater treatment practices and their location within the Parcel or the District..
- SC-D4 In order for a Commission administrated BMP to be considered available to treat water quality volume off-site. WQv credit the Commission must be able to demonstrate that the WQv required is available in a constructed and properly operating Stormwater treatment practice.
- SC-D5 The Commission shall track all Operation and Maintenance of Stormwater Practices owned by the District (i.e. parks until sold).
- SC D6 The Commission shall transfer operations and maintenance responsibility of any existing approved stormwater practices on Commission property to the new owner of that property.
- SC-D6 The Commission and RIDEM will maintain records of all stormwater treatment practices that the Commission owns.
- SC-D7 If the Commission intends to build any stormwater practices, the Commission may apply for the I-195 Redevelopment District Master Permit.

This Water Quality Certificate shall expire ten (10) years from the date of issuance. If project construction is not completed in that time a renewal period of ten (10) years may be granted.

Ms. Jan Brodie WQC 13-035 November 22, 2013

This Water Quality Certificate does not relieve your obligation to obtain any other applicable local, state, and federal permits prior to commencing construction.

In addition to any enforcement actions stemming from the violation of any of the terms or conditions of this Water Quality Certificate, issuance of this Water Quality Certificate does not bar the Department, or any of its various Divisions, from instituting any investigation and/or enforcement actions that it may deem necessary for violations of any and all applicable statutes, regulations and/or permits, including but not limited to violations of the terms and conditions of any previous Water Quality Certificate(s) issued to you as an applicant for this site.

This is the State's Water Quality Certification, which shall have the full force and effect of a permit issued by the Director. Violation of the terms and conditions of this Certification may result in violation of the State's Water Quality Regulations and appropriate enforcement action.

Sincerely,

Alisa R. Richardson, PE

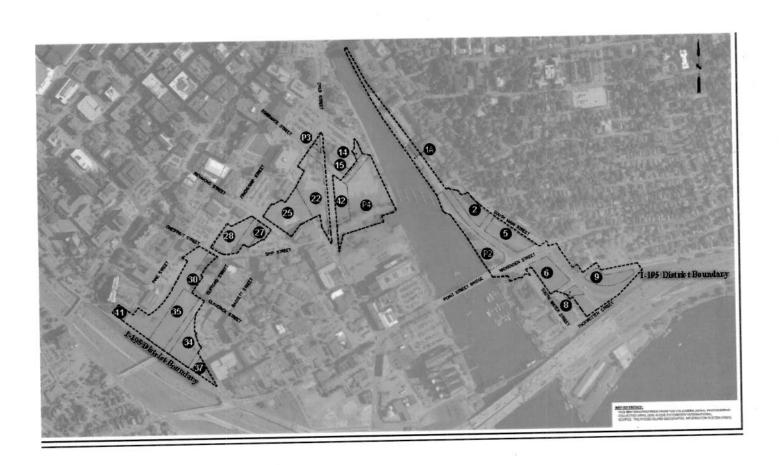
Water Quality Certification Office of Water Resources

Cc: Grover Fugate, CRMC Ron Gagnon, OTCA Shawn Martin, F&O

Rhode Island Department of Environmental Management Office of Water Resources

I-195 Redevelopment District Master Water Quality Certificate For Land Redevelopment

WQC 13-035 November 22, 2013



I-195 Redevelopment District Master Water Quality Certification WQC 13-035

Introduction:

The purpose of this Master Permit was to create an authorization process for any owner of a parcel listed in Table 2 (attached) to receive a clear, predictable and reliable expedited stormwater permit for their development project. The I-195 Redevelopment District applied for and received a Water Quality Certificate that contains pre-authorized terms and conditions which provide a framework for an applicant to understand the expectations of the Department.

From the Master Plan, this Department was able to prepare this generic permit (Master Permit) that applies to all parcels and adjoining parcels that are under the administration of the I-195 Redevelopment District Commission.

Any project that is located within the I-195 District Parcels and proposes a project that complies with the Master Plan, the conditions of permit 13-035 and the prescribed sections of the Stormwater Manual will receive this I-195 Master Water Quality Certification and if necessary, a RIPDES Construction Permit and a Groundwater Discharge Permit within 30 days of a complete application. If an applicant chooses to develop the property in a manner that is inconsistent with this Certificate, the applicant can still choose to request an individual Water Quality Certificate.

Receipt of this Master Permit, a copy of your Authorized Application and a copy of the RIPDES Construction General Permit (if applicable), authorize construction activity from the Office of Water Resources.

Certification coverage area:

This certification applies only to land identified as Parcels within the District as described in the I-195 Redevelopment District Master Plan: Specifically limited to:

- Parcels within the District are identified in Figure 3.1 and 3.2 in the Master Plan.
- Parcels adjoining the I-195 Redevelopment District that are adjoining existing District Parcels and are administered by the I-195 Redevelopment District Commission.
- Streets and Roads within the District that will receive treatment in order to treat the required Water Quality Volumes specified in the Master Plan.

Discharges eligible for coverage:

- Discharges of storm water run-off associated with Construction Activities including, but not limited to, clearing, grading, and excavation, involving soil disturbance occurring within the certification coverage area.
- Discharges of stormwater associated with temporary construction support activity (e.g., concrete or asphalt batch plants, equipment staging areas, material storage areas, excavated material disposal areas, borrow areas)

- Discharges of stormwater associated with utility work related to the redevelopment of the Parcels. Associated utility work within ROW and Roadways within District associated with redevelopment on the Parcels is also eligible.
- Post-construction discharges of stormwater that originate from the site after construction activities have been completed and the site has achieved final stabilization.
- Post-construction discharges of stormwater from Stormwater practices located on Park Parcels. Owners of the Park Parcels will need to apply separately for Authorization.

Discharges NOT Authorized under this Certification

- Post-construction stormwater from industrial sites that are required to be covered by an authorization to discharge under the RIPDES Multi-Sector General Permit for Stormwater Discharge Associated with Industrial Activity are not eligible for authorization under this Certification.
- o Fill below Mean High Water.
- o Illicit Discharges as described in the RISDISM.

Special Conditions Applicable to the Authorized Holder of this Water Quality Certification

- SC-1 Individual RIDEM Authorizations under the Certification will be required for each of the twenty-one (21) District parcel development proposals and any construction activity related to support activities. Applications consistent with the WQC will be administratively approved without a public notice.
- SC-2 The Request for authorization must include the following to be considered "complete" or "accepted for technical review":
 - a. Complete Application form.
 - b. Customized I-195 Stormwater Management Checklist (Appendix A)
 - c. Stormwater Management Plan
 - d. Soil Erosion and Sedimentation (SESC) Plan
 - e. Operations and Maintenance Plan
- SC-3 Authorizations shall be valid for a period of three (3) years and may include a one-year extension.
- SC-4 A Stormwater Management Plan must be developed and implemented that satisfies the Minimum Standards outlined in the *Rhode Island Stormwater Design and Installation Standards Manual* (RISDISM), as well as complies

with special conditions of the Certification. The Stormwater Management Plan must satisfy must comply with Minimum Standards 2, 3, & 7-11. The Stormwater Management Plan must include the following major elements:

- Stormwater Site Planning, Analysis, and Design
- Soil Erosion, Runoff, and Sediment Control
- Post Construction Operation and Maintenance

SC-4a. Compliance with Minimum Standard 2: Recharge

Stormwater management practices shall be designed, constructed, and operated to meet Minimum Standard 2: Groundwater Recharge (Rev) as practical and where site conditions allow.

Compliance with this Standard is waived for parcels P2, 35, 25, 2 and 8. Stormwater practices on these sites should be lined. Concentrated infiltration is prohibited unless a specific approval is obtained from the Office of Waste Management allowing infiltration of stormwater.

SC 4b. Compliance with Minimum Standard 3: Water Quality

Stormwater management practices must be designed, constructed and operated to treat the Water Quality volume (WQv) Required in accordance with Table 2: Water Quality. The Water Quality volume (WQv) treatment required for redevelopment projects, as specified in Section 3.2.6 of the RISDISM, is equivalent to the runoff associated with one-half (0.5) inch for all new impervious surfaces within each parcel of the District.

Parcels with stormwater currently connected to the NBC sewer must treat 1" of all redeveloped impervious cover to meet the Water Quality Standard.

Any adjoining parcel to one of the parcels listed in Table 2, that becomes part of the I-195 District subsequent to this plan must determine WQv by the same methods used in the Master Plan. The owner must also obtain authorization from the Office of Waste Management to determine if infiltration is acceptable.

Stormwater Management Practices to treat the WQv must be consistent with Chapter 5 of the RISDISM or receive approval from RIDEM. Proprietary treatment devices must receive TARP/TAPE approval to be used as acceptable WQ treatment devices. Other practices may be used, but must comply with the requirements of the RISDISM.

The Department encourages any developer to treat stormwater from their project through stormwater treatment practices on-site and with green infrastructure as their first effort. Treating stormwater generated elsewhere within the District is permitted in accordance with the SMP. Any off-site stormwater treatment will be credited to WQv of parcel development projects if:

- The stormwater system has been built and has sufficient excess capacity for the WQv of the proposed development project and other projects served by the system; or
- The design for any off-site stormwater treatment system included in this application meets the WQv requirements for the proposed development project; and
- The off-site WQv treatment system location has been authorized by the Commissioner.
- SC 4c Compliance with Minimum Standard 7: Pollution Prevention
 Soil Erosion and Sediment Control and Operation & Maintenance Plans
 must incorporate Pollution Prevention measures to satisfy Minimum
 Standard 7: Pollution Prevention.
- SC-4d Compliance with Minimum Standard 8: LUHPPL
 Re-development of Parcels within the District proposing Land Uses of Higher Potential Pollutant Loads as defined in Minimum Standard 8 will be authorized upon full compliance with the restrictions detailed in the RISDISM
- SC-4e Compliance with Minimum Standard 9: Illicit Discharges
 Soil Erosion and Sediment Control and Operation & Maintenance Plans
 must address Illicit or prohibited discharges to satisfy Minimum Standard
 9: Illicit Discharges
- SC-4f Compliance with Minimum Standard 10: Construction Erosion and Sedimentation Control

The owner/operator must develop and implement a Soil Erosion and Sediment Control Plan (SESC) Plan during construction activities that disturb soils on a given Parcel.

A copy of the SESC Plan including site plans, amendments to the SESC Plan and site plans, records of inspections, maintenance, and corrective actions, must be kept on site at all times during the extent of coverage under this permit.

SC 4g. Compliance with Minimum Standard 11: Operations and Maintenance

The Applicant shall develop and Implement an Operation and Maintenance (O&M) Plan to ensure that the stormwater management system constructed will continue to function as designed. The Plan must address the O&M requirements for each stormwater management practice.

The Application and O&M plan shall identify the legal entity responsible for operation and maintenance and include any legally-

binding agreements designating maintenance responsibility. Unless otherwise specified, the owners of District parcels shall be responsible for the operation and maintenance of stormwater treatment facilities serving their respective properties regardless of the facility location.

- SC-5 The Construction Activity Operator and/or the Applicant shall notify RIDEM at the start of Construction.
- SC-6 The Applicant shall submit a certification signed by the Design Engineer that the post-construction controls have been installed as designed and approved by RIDEM and have received initial Operation and Maintenance, been brought on-line and will/are functioning properly.
- SC-7 In order to transfer a permit, a modification request must be submitted to the RIDEM.
- SC-8 Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen inches long, which boldly identifies the initials "DEM" and the WQC authorization number provided to the permittee. The sign must be maintained at the site in a conspicuous location until such time that the project is complete.
- SC-9 The applicant must provide written certification from a registered land surveyor or registered professional engineer that the storm water drainage systems identified within the above-referenced plan set have been constructed/installed in accordance with the site plans authorized by this permit. This written certification must be submitted to this program within twenty (20) days of the completion of the project.

Condition Related to RIPDES Construction General Permit for Storm Water Discharge for activities disturbing >1 acre

Construction Activities which disturb one (1) or more acres of land and where storm water runoff is directed, via a point source, into a separate storm sewer system or into the waters of the State, are required to seek coverage under the Rhode Island Pollutant Discharge Elimination System (RIPDES) storm water permit. In accordance with Part I.C.2.a of the General permit RIPDES Stormwater Discharge Associated with Construction Activity (effective September 2013), receipt this permit allows the RIPDES Permit to be automatically authorized. Please note: that the owner/operator is required to comply with all terms and conditions of the CGP to maintain authorization (attached if applicable). This includes but is not limited to performing the required inspections and maintenance of the selected Best Management Practices (BMPs), and record keeping and retention.

Both the owner and the contractor retained to undertake the construction activity are required to comply with all terms and conditions of the CGP. This includes maintaining

I-195 Redevelopment District Master Water Quality Certification WQC 13-035

the Soil Erosion and Sediment Control (SESC) Plan on site (in accordance with Part III.G of the CGP, performing the required inspections and maintenance of the selected Best Management Practices (BMPs), and retaining inspection records. Further information on the requirements of the CGP are available at: http://www.dem.ri.gov/pubs/regs/regs/water/ripdesca.pdf.

Please be aware that the RIDEM's Rules and Regulations Governing the Establishment of Various Fees require that the RIPDES CGP permit holders pay an annual fee of \$100. An invoice will be sent to the owner on record in May/June of each year if the construction was still active as of December 31st of the previous year. Regardless, of which permitting program issues the RIPDES authorization, the owner will be responsible for the Annual Fee until the construction activity has been completed, the site has been properly stabilized, and a completed Notice of Termination (NOT) has been received by the RIPDES Program. A copy of the NOT can be found attached to the CGP on the web page referenced above.

In addition to any enforcement actions stemming from the violation of any of the terms or conditions of this Water Quality Certificate, issuance of this Water Quality Certificate does not bar the Department, or any of its various Divisions, from instituting any investigation and/or enforcement actions that it may deem necessary for violations of any and all applicable statutes, regulations and/or permits, including but not limited to violations of the terms and conditions of any previous Water Quality Certificate(s) issued to you as an applicant for this site.

This is the State's Water Quality Certification, which shall have the full force and effect of a permit issued by the Director. Violation of the terms and conditions of this Certification may result in violation of the State's Water Quality Regulations and appropriate enforcement action.

Sincerely,

Alisa R. Richardson, PE

Water Quality Certification

Office of Water Resources

cc: Grover Fugate, CRMC

Shawn Martin, PE Fuss & O'Neil

I-195 Redevelopment District Master Water Quality Certification WQC 13-035

Required Water Quality Treatment by Parcel Table 2

	Parcel In	Parcel Information	WQ	WQv Treatment	
Parcel ID	Parcel Area (acres)	Area Connected to NBC Sewer System (acres)	WQv Treatment Required	Total WQv (acre-ft)	Total WQv (cf)
1A	0.28	0.00	20%	0.01	200
2	1.08	0.00	20%	0.04	1,900
5	1.49	0.00	20%	90.0	2,600
9	1.48	1.08	87%	0.10	4,500
8	0.30	0.30	100%	0.02	1,100
6	1.05	0.00	%09	0.04	1,900
14	0.24	0.00	20%	0.01	200
15	0.05	0.00	20%	0.00	100
22	2.65	1.82	84%	0.18	7,700
25	2.36	0.49	%09	0.11	4,900
27	0.51	0.00	%09	0.02	006
28	1.25	0.75	%02	0.07	3,100
30	0.59	0.00	20%	0.02	1,100
34	1.47	0.00	20%	90.0	2,600
35	2.15	0.00	20%	60.0	3,800
37	0.49	00.00	%09	0.02	006
41	0.29	00.00	%09	0.01	200
42	1.08	00.00	%09	0.04	1,900
P2	1.98	00.00	%09	0.02	1,000
P3	0.23	0.23	100%	00.00	300
P4	4.80	0.00	%09	60.0	3,900

INSTRUCTIONS TO APPLY FOR AUTHORIZATION UNDER THE:

I-195 Redevelopment District Master Water Quality Certificate 13-035

The purpose of this Master Permit was to create a process for any owner of a parcel listed in Table 2 (attached) to receive a clear, predictable and reliable expedited stormwater permit for their development project. The I-195 Redevelopment District applied for and received a Water Quality Certificate that contains pre-authorized terms and conditions which provide a framework for an applicant to obtain approvals to discharge storm water under an administrative authorization consistency review.

To apply for the Authorization under the Water Quality Certificate 13-035:

D-E-M

- **Step 1:** Determine the Required Water Quality Volume for your parcel(s). (see Table 2 of the WQC). If your parcel is not one of the 21 listed, but has been obtained by the District, determine the WQv by following the methods laid out in the Master Plan.
- **Step 2:** Determine the required recharge volume. Note that in accordance with Exclusive Permit 13-035 for Parcels P2, 35, 25, 2A and 8 (north), recharge is waived. Additionally, proposed land uses that meet the definition of LUHPPL see Manual Table 3-2 are not allowed to infiltrate stormwater and BMP selection is restricted to only those authorized for LUHPPL's.
- **Step 4:** Determine if your site disturbance is greater than one acre. If your site is greater than one acre, please review the RIPDES Construction General Permit (CGP) as all of the requirements of the CGP are relative to your project.
- **Step 5:** Select BMP's consistent with Chapter 5 of the manual (a RIDEM/CRMC approved system) that treats the required Water Quality Volume on-site. If there is a remaining volume that cannot be treated on-site, the applicant may propose an area off-site for water quality treatment. The proposed offsite area must be approved by the District Commissioner and RIDEM. The applicant must apply for a permit which treats the total Water Quality Volume specified for the parcel being developed.
- Step 6: Complete the I-195 Customized Checklist (Appendix A)
- Step 7: Complete the Application for Authorization (I-195 Redevelopment District)
- Step 8: Prepare a Soil Erosion and Sediment Control Plan.
- **Step 9**: Prepare a Stormwater Management Plan with Design Plans and Calculations. Note that Downstream Analysis and Pre-Post Analysis are waived for Redevelopment.
- Step 10: Prepare an Operations and Maintenance Plan.
- **Step 11**: Submit all documents to the Office of Customer and Technical Assistance for Administrative review
- **Step 12**: Your application will be authorized when you receive a copy of your application with the assigned RIDEM File Numbers and a signed indication that your authorization was approved.



RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL WATER QUALITY CERTIFICATION APPLICATION FOR AUTHORIZATION UNDER WQC 13-035

235 Promenade Street, Providence, RI 02908-5767
Telephone: 401-222-6820, Telecommunication Device for the Deaf: 401-831-5508

This form is to be completed for all applications to the Department of I	
Management (DEM) Office of Water Resources, for authorization to do parcels within the I-195 Redevelopment District, as specified in Wa Certificate Number 13-035 issued November 2013. This one applicate apply for a Water Quality Certification, a RIPDES Construction General Groundwater Discharge Permit, as applicable.	ter Quality ion serves to
FEES:	
Authorization for Construction under WQC 13-035:	
Fee: \$400 Payable to "General Treasurer, State of RI	
*Note: IF RIPDES is applicable, annual billing of \$100/year	will commence
until the site is stabilized a Notice of Termination is Submitted	i.
Request for extension or modification: File #	
APPLICANT INFORMATION	File #:
Applicant Name:	y is proposed.
Applicant Address:	Telephone No.:
City/Town:	State: Zip:
PROJECT INFORMATION	
Project Address:	
City/Town: PROVIDENCE S	state:RI Zip:
Tax Assessor's Plat(s) and Lot No.(s):	
Tax Assessor's Francis and Lot No.(5).	12
Project Consultant/Engineer:	
Name	
Address	Phone No.
DDO HEGT TYDE A CTIVITY (Cl. al. All That Annie)	
PROJECT TYPE/ACTIVITY (Check All That Apply)	*Note: No fill below mean low water will be authorized under this special permit. You must
Residential Development	apply separately to the Water Quality Certification
Commercial, Industrial, State or Municipal Development	Program if you intend to fill waters of the State.
Other	
WATERBODY ID: RI0007020E-01B	
	1.000
CIACC. CD1(a) IAT.	I ONG:



PAGE 2 RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL WATER QUALITY CERTIFICATION APPLICATION FOR AUTHORIZATION UNDER WOC 13.03

APPLICATION FOR AUTHORIZATION UNDER WQC-13-035

235 Promenade Street, Providence, RI 02908-5767 Telephone: 401-222-6820. Telecommunication Device for the Deaf: 401-831-5508

Is this Parcel listed in Table 2? ID Has this Parcel been added to I-195 Redevelopment District since November 2013? Does this project cover the entire parcel or has this parcel been subdivided or combined? If yes, please describe: Indicate WQv Treatment Required from Table 2 in the master permit (in % and cf) or from calculations provided: Proposed WOv Treatement Volume (in % and cf): Is your parcel listed in WQC-13-035, as a parcel where infiltration is prohibited? If you wish to infiltrate stormwater, and it is prohibited under the Master Permit, do you have signoff from the Office of Waste Management? SITE DISTURBANCE (ac): _____ If > 1 acre a RIPDES Permit will be provided with this Authorization Is there a Groundwater Discharge or Underground Injection Control proposed? If so, a UIC permit will be provided with this Authorization. WATER QUALITY VOLUME TREATED OFFSITE?______(Provide justification for treating offsite in the engineering report along with location and operations and maintenance agreements) CERTIFICATION OF I-195 DISTRICT COMMISSIONER I hereby certify that this plan submitted to RIDEM has been authorized by me and is consistent with the Master Plan approved as part of WQC 13-035 and that this property to be developed is subject to the I-195 District Commission Enabling Legislation. I also certify that, if this project proposes stormwater treatment in a District or Park Parcel, the location and quantity of stormwater treated on District Property is approved by me. Signature of the District Commissioner: _____ Date: _____



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APPLICATION FOR AUTHORIZATION UNDER WQC-13-035

235 Promenade Street, Providence, RI 02908-5767

Telephone: 401-222-6820. Telecommunication Device for the Deaf: 401-831-5508

CERTIFICATION OF APPLICANT

I hereby certify that I have requested and authorized the investigation, compilation, and submission of all the information, in whatever form, contained in this Application; that I have personally examined and am familiar with the information submitted herein; and that such information is true, accurate and complete to the best of my knowledge.

gnature of Applicant:		Date:
rint Name:		
lease return completed form, applica	tion materials and check to: Rhode Island Department of Environm Office of Customer and Technical Assi 235 Promenade Street, Suite 260 Providence, RI 02908-5767	
FOR OFFICE USE ONLY:		÷
	le	Determination: Approved Denied Withdrawn
	Project Reviewers Signature:	
	: Project Reviewers Printed Name:	
Determination Date:	Expiration Date:	
Comments:		
	82	

APPENDIX A: STORMWATER MANAGEMENT CHECKLIST CUSTOMIZED FOR THE I-195 MASTER WQC

A.1 STORMWATER SITE PLANNING, ANALYSIS, AND DESIGN

	A.	1.1 General Information
		implete the Standard Information Form and I-195 Water Quality Certification clusive Permit Application Form
		entact information for the licensed professional(s) responsible for site plans and primwater management plan
		oposed land use – indicate if land use meets definition of a LUHPPL (see anual Table 3-2)
	Ge	eneral Project Narrative – including legal description of project site
Χ	Re	edevelopment
		oposed land use – indicate if land use meets definition of a LUHPPL (see anual Table 3-2)
	Sit	e Disturbance ≥ 1 acre or ☐ Site Disturbance < 1 acre
	A.	1.2 Existing and Proposed Mapping and Plans
	Ex No	isting and proposed mapping and plans (scale not greater than 1" = 40') with orth arrow that illustrate at a minimum:
		Existing and proposed site topography (2-foot contours required). 10-foot contours accepted for off-site areas.
		Existing and proposed drainage area delineations and drainage flow paths, mapped according to the DEM <i>Guidance for Preparation of Drainage Area Maps</i> (included in Appendix K). Drainage area boundaries need to be complete; include off-site areas in both mapping and analyses, as applicable.
		Mapping of any OWM approved activities related to current/former site use areas for any known contamination and/or remedial clean-up efforts.
		Boundaries of existing predominant vegetation and proposed limits of clearing
		Location and field-verified boundaries of coastal wetlands, coastal shoreline features.
		Location of existing and proposed roads, buildings, and other structures including limits of disturbance
		Existing and proposed utilities (e.g., water, sewer, gas, electric) and easements

Location of existing and proposed conveyance systems such as grass channels, swales, and storm drains.
Location, size, and limits of disturbance of proposed stormwater treatment practices (type of practice, depth, area). Stormwater treatment practices (BMPs) should be labeled with numbers that correspond to Table A.2-1.
Soils information from test pits or borings at the location of proposed stormwater management facilities, including but not limited to soil descriptions, depth to seasonal high groundwater, depth to bedrock, and estimated hydraulic conductivity. Soils information will be based on site test pits or borings logged by a DEM-licensed Class IV soil evaluator or RI-registered P.E.

A.1.3 Minimum Stormwater Management Standards

3. Strategies to Manage the Impacts	
A. Mitigation of Runoff at the point of generation Not Applied or N/A. Use space below to explain why:	
□ Applied Standard. Select from the following list: □ A green roof has been designed to reduce runoff. □ BMPs applied at source. □ Other (describe): Explain constraints and/or proposed alternatives in space below:	

В.	Source Control Not Applied or N/A. Use space below to explain why:
	☐ Applied Standard. Select from the following list: ☐ Source control techniques such as street sweeping or pet waste management have been proposed ☐ Other (describe): Explain constraints and/or proposed alternatives in space below:
	■ Minimum Standard 2: Groundwater Recharge
	Demonstrate that groundwater recharge has been implemented where feasible. Include:
	NA (not applicable). Use space below to explain why (i.e. OWM restricted parcel, WQC 13-035 restricted parcel or LUHHPL proposed):
	The recharge volume (Re _v) in acre-feet (See Manual Section 3.3.2)
	This analysis needs to include the Re _v for <i>each</i> design/analysis point or overall watershed, as well as the specific BMP's being proposed and the amount of recharge required and provided for each area of proposed impervious cover to be built over existing drainage areas.
	Specific BMPs from Table A.2-1 that will be used to meet the recharge requirement. Note: Only BMPs listed in Manual Table 3-5, List of BMPs Acceptable for Recharge may be used to meet the recharge requirement.
	Indicate below where the pertinent calculations or information are provided:
	Minimum Standard 3: Water Quality
	Demonstrate that the water quality criteria for the site have been met. Include:
	The required water quality volume (WQ _v) for each design/analysis point in acrefeet or ft ³ (see Manual Section 3.3.3).

The specific BMPs from Table A.2-1 that will be used to meet water quality volume requirement for each design/analysis point, as well as the areas of contributing impervious cover treated for each BMP. Note: Only BMPs listed in Manual Table 3-6 or that are TAPE approved are acceptable BMPs for Water Quality Treatment and may be used to meet the water quality requirement.
Any proposed offset of the WQv that could not be met offsite. If the utilization of a District Park is proposed to meet any portion of the water quality volume, capacity must be demonstrated within the Park's BMP(s), and approved by the District Commissioner.
Specify which (if any) BMP's will be off-line or will have internal bypasses or overflow bypasses.
Specify the type of pretreatment being utilized for each BMP.
Specify how each BMP will meet any pertinent horizontal setbacks and vertical separation to the seasonal high groundwater table.
Indicate below where the pertinent calculations or information for the above items are provided:

BEST MANAGEMENT PRACTICES

Provide detailed information for all structural stormwater best management practices (BMPs) to be implemented. *Note: If a BMP cannot meet the required design criteria in Manual Chapters Five, Six and Seven, a different BMP should be considered.*

Table A.2-1 Best Management Practices

Fill in the following table to document which proposed practices meet which requirement(s). Number each BMP and label them accordingly on the site map:

ВМР	Type of BMP	Check the	e functio	on provi MP	ided by	the
No.	,	Pretreatmen	nt Re _v	WQ _v	CP _v	Qp
						+-
						-
			_		-	-
						-
	25					

		or all structural components of stormwater system (e.g., storm drains, open vales, stormwater BMPs, etc.) provide the following, if applicable:
Red	duced	Hydrologic analysis, including:
		Study design/analysis points.
		Proposed condition analysis for drainage area boundaries, runoff rates, volumes, velocities, water surface elevations and supporting calculations.
		Final sizing calculations for structural stormwater BMPs including, contributing drainage area, storage, and outlet configuration.
sto	rmwa	entative cross-section and profile drawings, notes and details of structural ter management practices and conveyances (i.e., storm drains, open s, swales, etc.), which include:
417		Locations, cross sections, and profiles of all streams and drainage swales and their method of stabilization.
		Existing and proposed structural elevations (e.g., invert of pipes, manholes, etc.).
		Design water surface elevations.
		Structural details of outlet structures, embankments, spillways, stilling basins, grade control structures, conveyance channels, etc.
		Logs of borings and/or test pit investigations along with supporting soils/geotechnical report.
Pla	anting	plans for structural stormwater BMPs, including:
		Species, size, planting methods, and maintenance requirements of proposed planting.
St	ructur	al calculations, where necessary.
☐ Ap	plical	ole construction specifications.
☐ Ide	entific	ation of all anticipated applicable local and State permits.
☐ Ide	entific seme	ation of all anticipated legal agreements related to stormwater (e.g., off-site nts, deed restrictions, and covenants).
		below where the pertinent calculations and/or information for the above provided:
1.		
		й

Minimu	m Standard 8: LUHPPLs
	e, demonstrate that the project meets the special BMP requirements for LUHPPLs are one or more of the following:
lo (e	proposed industrial site (as defined in RIPDES Rule 31(b)(15)) that are the cation of activities subject to the RIPDES Multi-Sector General Permit except where a No Exposure Certification for Exclusion from RIDPDES tormwater Permitting has been executed);
2. A	uto fueling facility
3. E	xterior vehicle service, maintenance and equipment cleaning areas;
4. R	oad salt storage and loading area (if exposed to rainfall); or
5. O	utdoor storage and loading/unloading of hazardous substances.
	cription of any land use activities considered stormwater LUHPPL (see Table 3-2).
drainage	cific BMPs listed in Table A.2-1 that receive stormwater from LUHPPL areas. These BMP types must be listed in Manual Table 3-3, "Acceptable r Use at LUHPPLs."
Addi	tional BMPs, if any, that meet the RIPDES MSGP requirements.
☐ Indica	ate below where the pertinent calculations or information for the above items ided:
	A C 11
☐ Not	Applicable.
	m Standard 9: Illicit Discharges
	sserts that no illicit discharges exist or are proposed to the stormwater nt system in accordance with State regulations.
A.2 soil	EROSION, RUNOFF, AND SEDIMENT CONTROL
A.3.	1 All Projects
Minimu	m Standard 10: Construction Erosion and Sedimentation Control
All projects used during	must demonstrate that Soil Erosion and Sediment Control practices will be the construction phase and land disturbing activities. Include:
☐ Sc	il Erosion and Sediment Control Plan
☐ De includi	escription of temporary sediment trapping and conveyance practices, ng sizing calculations and method of temporary and permanent stabilization

(see Manual Section 3.2.10 and the Rhode Island Soil Erosion and Sediment Control Handbook).
Description of sequence of construction. Activities should be phased to avoid compacting soil during construction, particularly in the location of infiltrating stormwater practices and qualifying pervious areas for stormwater credits.
Location of construction staging and material stockpiling areas.
A.3.2 Construction Projects Disturbing ≥ 1 Acre
Demonstrate the project meets the criteria of the Rhode Island Pollutant Discharge Elimination System (RIPDES) General Permit for Stormwater Discharge Associated with Construction Activity (RIPDES Construction General Permit).
In order to facilitate an expeditious DEM review and make it easier for the site owner and operator to comply with applicable soil erosion, runoff, and sediment control requirements, it is recommended that a Soil Erosion and Sediment Control Plan be developed as a standalone document.
A.3 POST CONSTRUCTION OPERATION AND MAINTENANCE
A.4.1 All Projects
Minimum Standard 7: Pollution Prevention
Demonstrate that the project meets the criteria for pollution prevention.
Include:
Appendix G Pollution Prevention and Source Controls
Minimum Standard 11: Stormwater Management System Operation and Maintenance (O&M) See Appendix E for guidance
Provide a long-term stormwater management system Operation and Maintenance (O&M) Plan. A model O&M plan exists in the I-195 Stormwter Master Plan. Be sure that at a minimum it includes:
Name, address, and phone number of responsible parties for maintenance
8-1/2 X 11 inch plan depicting the locations of all BMPs requiring O&M as numbered in Table A.2-1.
Description of annual maintenance tasks for required elements for each BMP
Description of any proposed Deed Restrictions related to the long-term maintenance of storm water BMP's and/or systems.
8.5" by 11" map indicating the location of all of the proposed stormwater BMPs that will require maintenance.
Description of applicable easements

Access and safety	issues
Indicate below whe ems are provided:	re the pertinent calculations or information for the abo