

**COMMITMENT & INTEGRITY
DRIVE RESULTS**

35 New England Business Ctr.
Suite 180
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948



June 2, 2010

Olga Vergara
US EPA
Water Enforcement
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Re: General Discharge Permit

PWS #: 3166000

Dear Olga:

On behalf of the Manchester Water Department, Woodard & Curran is submitting a Notice of Intent (NOI) regarding NPDES discharges from the Gravelly Pond Water Treatment Facility, PWS #: 3166000. It is the intent of Manchester-by-Sea, MA to renew their General Permit for Water Treatment Facility, permit # MAG640003, in Massachusetts.

Please find the enclosed documents;

- NOI (4 pgs)
- Copy of existing NPDES (1 pg)
- Laboratory results for TRA (5 pgs)
- Lagoon schematics (2 pgs)
- Correspondence from US Fish & Wildlife Svc (2 pgs)
- Summary sheet of surface water source (1 pg)
- Summary of treatment chemicals in use with avg dosages (1 pg)
- Mass DEP Transmittal Form for Permit Application (1 pg)

Please note that the Gravelly Pond WTF is physically located in Hamilton, MA as well as its outfall of the lagoons. Please contact me with any questions you may have with this submittal. I can be reached at 508-878-5852 (cell) or e-mail at proux@woodardcurran.com.

Sincerely,

WOODARD & CURRAN INC.


Paul Roux
Vice President

Enclosure(s)

cc: Steve Kenney Plant Copy Kathleen Keohane
DPW Director Woodard & Curran Mass DEP

JUN - 8 2010

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

Request for General Permit Authorization to Discharge Wastewater
(Notice of Intent to be covered by the General Permit (NOI))

Potable Water Treatment Facility (PWTF)
NPDES General Permit No. MAG640000 and NHG640000

A. Facility Information

1. Facility Owner:

Name MANCHESTER WATER DEPT. e-mail KENNYSC@MANCHESTER.MA.US
Street/PO Box 10 CENTRAL ST. City MANCHESTER-BY-THE-SEA
State MA Zip Code 01944
Contact Person STEVE KENNY Telephone Number 978-526-1242

2. Facility Operator (if different from above):

Name WOODARD & CURRAN e-mail (optional) PROUX@WOODARDCURRAN.COM
Street/PO Box 1527 City MANCHESTER-BY-THE-SEA
State MA Zip Code 01944
Contact Person PAUL ROUX Telephone Number 508-878-5852 (c)

3. Facility Data (attach topographic map or other map showing facility and discharge location(s)):

Name GRAVELLY POND WTF e-mail (optional) _____
Street/PO Box 2000 PIPELINE RD City HAMILTON
State MA Zip Code 01936
Contact Person STEVE KENNEY Telephone Number 978-526-1242
Facility Latitude 42.5964 Facility Longitude -70.8091

4. Standard Industrial Classification (SIC Codes) and Descriptions of Processes:

SIC Code(s) NOT APPLICABLE
Description(s) SEE ATTACHED

5. Current Permitting Status (please check yes or no):

1. Has a prior NPDES permit been granted for the discharge? Yes X (Permit Number: MAG640003)
No _____
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes _____ No X
3. Is the facility covered by an individual NPDES permit? Yes X (Permit Number MAG640003) No _____
4. Is there a pending application on file with EPA for this discharge? Yes _____ (Date of submittal: _____)
_____) No X

B. Discharge Information

1. Name of Receiving Waterbody GRAVELLY POND
2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) RESERVOIR
3. State Water Quality Classification: X Freshwater: _____ Marine Water: _____
4. Describe the discharge activities for which the owner/applicant is seeking coverage, including process discharges not specifically authorized in the PWTF GP which need to be authorized for discharge (and which attain the

effluent limits and other conditions of the general permit). This description should include all treatment methods used on the wastewater prior to discharge including lagoons, baffles, filter presses etc. If lagoons are used at the facility, please include the number and size of lagoons; the size and elevation of the entry pipe; the time of travel from the entry point of the discharge into the lagoon to the entry point to the receiving water; and the length of backwash cycle for any combination of number of filters. (attach extra sheets if necessary):

LEAD & LAG LAGOON OPERATION w/ controlled discharge & OVERFLOW PIPING

- (3) LAGOONS w/ 2 online & 1 always in a 'freeze-thaw' mode.
- SIZE: 303,389 each
- SIZE + Elevation of Entry Pipe: 8" @ 67.00
- Time of TRAVEL: 275 GPM = 1,103 min = 18.4 hrs
- Length of BW Cycle: 25 min.

5. Please provide a diagram depicting the treatment methods, outfalls, and receiving water.

6. Number of outfalls: 1 Latitude and Longitude for each outfall (attach additional pages if necessary)
- | | | |
|-----------|----------|-----------|
| OUTFALL # | Latitude | Longitude |
| OUTFALL # | Latitude | Longitude |

For each outfall:

7. What is the proposed sampling location(s) and proposed consistent times of the month for collecting samples:

WEEKLY
DISCHARGE TO GRAVELLY POND (GRAB)

C. Effluent Characteristics

1. List here and attach information on any water additives used at the facility (Including chemicals for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes):

SODIUM HYDROXIDE (pH), ZINC O-orthophosphate (Corrosion)

2. Please report here any known remediation activities or water-quality issues in the vicinity of the discharge.

NONE

3. Are aluminum-containing coagulants used at this facility? Yes X No

4. Does the discharge contain residual chlorine? Yes X No

5. Does the facility provide treatment to remove arsenic from the raw water source? Yes No X

6. Are phosphorus-containing chemicals added to the treated water at this facility? Yes No X (ONLY TO FINISHED WATER)

7. All applicants must attach a separate sheet listing all laboratory results (minimum of five) for total recoverable aluminum (in micrograms per liter) taken within the last six months. Do not include dilution when recording your results. See Section 4.4.5 of General Permit for more information.

8. Please include the following effluent data for each outfall:

Characteristic (report if measured)	Average Monthly	Maximum Daily
Discharge Flow (gpd)	<u>22,919</u>	<u>335,095</u>
TSS (mg/l)	<u>1.02</u>	<u>6.1</u>
pH (s.u.)	(min) <u>6.3</u>	(max) <u>7.3</u>
Total Recoverable Aluminum (ug/l)	<u>108.33</u>	<u>770</u>
Total Residual Chlorine (ug/l)	<u>56.0</u>	<u>230.0</u>

(continued on next page)

8. Continued

Characteristic (report if measured)

Whole Effluent Toxicity (%) LC50 _____ and/or C-NOEC _____

9. If the discharge contains aluminum and/or residual chlorine, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water, the dilution factor, and attach any calculations used to support stream flow and dilution calculations (See Appendix VII for dilution calculations and additional information):

7Q10 N/A cfs Dilution Factor 10:1 cfs

D. Endangered Species Act Eligibility

1. Using the instructions in Appendix I of the PWTF GP, under which criterion listed in Part II are you eligible for coverage under this general permit?

A ☒ B _____ C _____ D _____ E _____ F _____

2. If you selected criteria D or F, has consultation with the federal services been completed? Yes _____ No _____

3. If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Yes ☒ No _____

4. Attach documentation of ESA eligibility as described below and required at Part 3.4.1 and Appendix I, Part III, Step 4, of the General Permit.

Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B - Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS's and/or NMFS's, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C - Activities are covered by a Section 10 Permit: A copy of the USFWS's and/or the NMFS's, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I): A copy of the USFWS's and/or the NMFS's, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.

Criterion E - Activities are covered by certification of eligibility: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I: A copy of the USFWS and/or the NMFS, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.

E. National Historic Properties Act Eligibility

1. Using the instructions in Appendix III of the PWTF GP, under which criterion listed in Part III are you eligible for coverage under this general permit?

1 X 2 3

2. Have any State or Tribal historic preservation officers been consulted in this determination? Yes No X
If yes, attach the results of the consultation(s).

F. Certification

I certify that the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature  Date 6/2/10
Printed Name and Title PAUL ROUX VICE PRESIDENT

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Note: Permits No. MAG640000 and NHG640000 may be found at www.epa.gov/region1/npdes/pwtfgp.html



Enter your transmittal number

X233679

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

**MassDEP
P.O. Box 4062
Boston, MA
02211**

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

BRP WM 13 / NOI

NPDES

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Surface Water Discharge from a water treatment facility

3. Type of Project or Activity

B. Applicant Information – Firm or Individual

Town of Manchester by the Sea, Water Department

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

Kenney

Steve

2. Last Name of Individual

3. First Name of Individual

4. MI

10 Central St

5. Street Address

Manchester by the Sea

MA

01944

978-526-1242

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Steve Kenney

kennys@manchester.ma.us

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Gravelly Pond Water Treatment Facility

1. Name of Facility, Site Or Individual

2000 Pipeline Road

2. Street Address

Hamilton

MA

01936

978-526-2470

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

3166000

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

Woodard & Curran

1. Name of Firm Or Individual

PO Box 1527

2. Address

Manchester by the Sea

MA

01944

978-526-2470

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

Paul Roux

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

1. ☒ **Fee Exempt** (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ **Hardship Request** - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ **Alternative Schedule Project** (according to 310 CMR 4.05 and 4.10).
4. ☐ **Homeowner** (according to 310 CMR 4.02).

Check Number

Dollar Amount

Date

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Form Approved
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: GRAVELLY POND WTP
ADDRESS: OFF PINE ST
HAMILTON, MA 01936
FACILITY: GRAVELLY POND WTP
LOCATION: OFF PINE ST
HAMILTON, MA 01936
ATTN: ROBERT MORONEY, DPW DIRECTOR

MAC640003	001-A
PERMIT NUMBER	DISCHARGE NUMBER

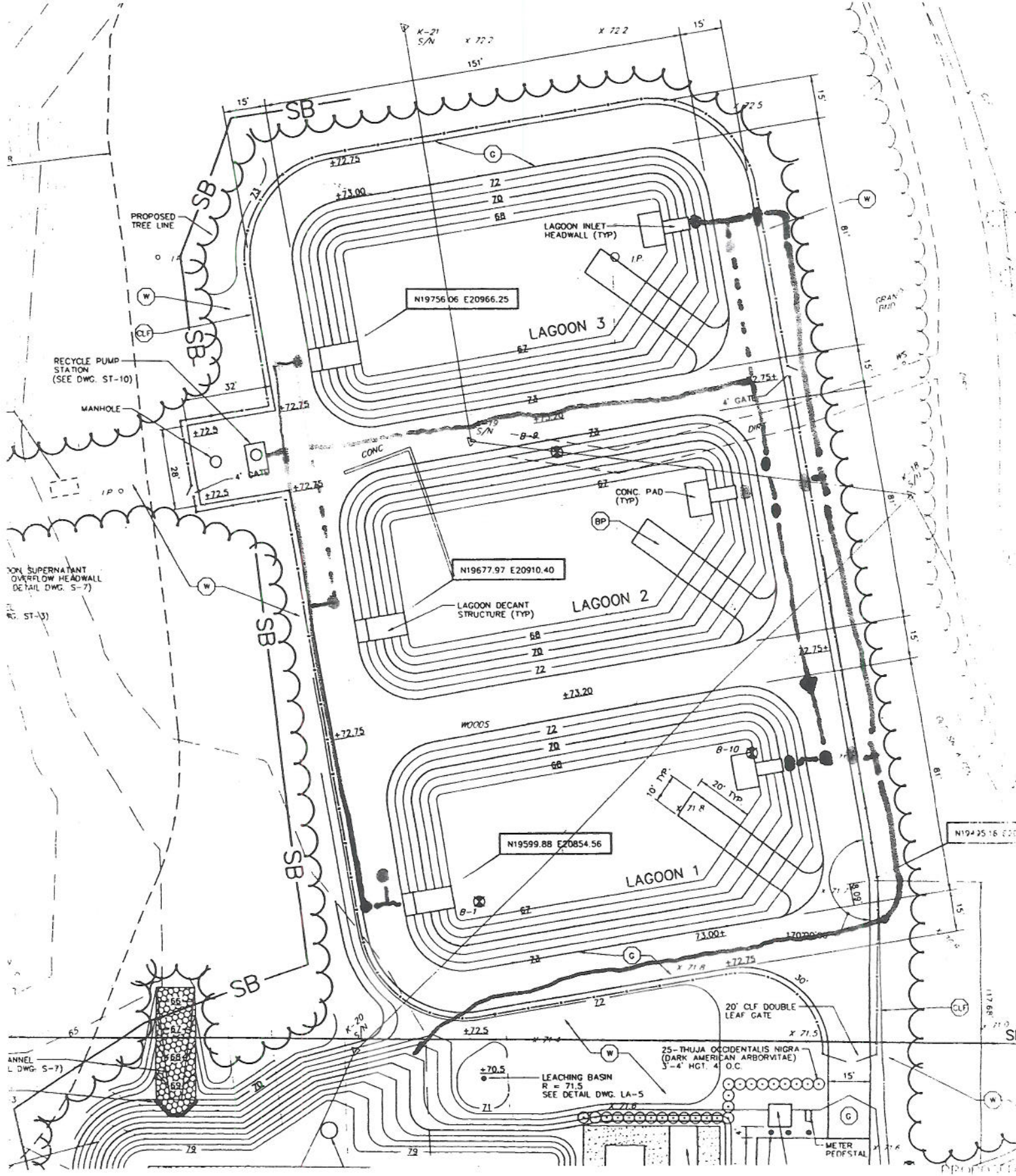
MONITORING PERIOD	
MM/DD/YYYY	MM/DD/YYYY
FROM 05/01/2010	TO 05/31/2010

DMR Mailing ZIP CODE: 01944
MINOR
(SUBR E)
LAGOON DISCHARGE
External Outfall

No Discharge ☐

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
pH	SAMPLE MEASUREMENT	*****	*****	*****		*****				
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	6.5 MINIMUM	*****	8.3 MAXIMUM		Weekly	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	*****	*****	*****		*****				
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	30 MO AVG	*****	50 DAILY MX		Weekly	GRAB
Aluminum, total recoverable	SAMPLE MEASUREMENT	*****	*****	*****		*****				
01104 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****		*****	Req. Mon. DAILY MX		Monthly	GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	*****	*****	*****		*****				
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****		*****				
Chlorine, total residual	SAMPLE MEASUREMENT	*****	*****	*****		*****				
50060 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****		*****				
	SAMPLE MEASUREMENT	*****	*****	*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****		*****				
		*****	*****	*****	Req. Mon. MO AVG	*****	Req. Mon. DAILY MX		Weekly	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under no direction or supervision in accordance with a system designed to assure that qualified personnel prepared all data and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE
TYPED OR PRINTED				AREA CODE	NUMBER
COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)				NUMBER	MM/DD/YYYY



WARD, INC. LANDSCAPE ARCHITECTS 111 PORTLAND, MAINE		ORIGINAL FULL SIZE DRAWING=4" REPRODUCTIONS MAY BE REDUCED SIZE		DRAWING NO. LA-4		WATER TREATMENT	
		APPROVED DESIGNED STP DRAWN STP CHECKED EC SCALE 1" = 20' DATE JAN. 1995		JOB NO. 93-212 CONTRACT NO. 95-1		MANCHESTER-BY- MASSACHUSETTS	
				SHEET 8 OF 88 SHEETS		LAGOON	

Filling Lagoon #3 - Discharging into #1

• OPEN
• FILL FROM PLANT

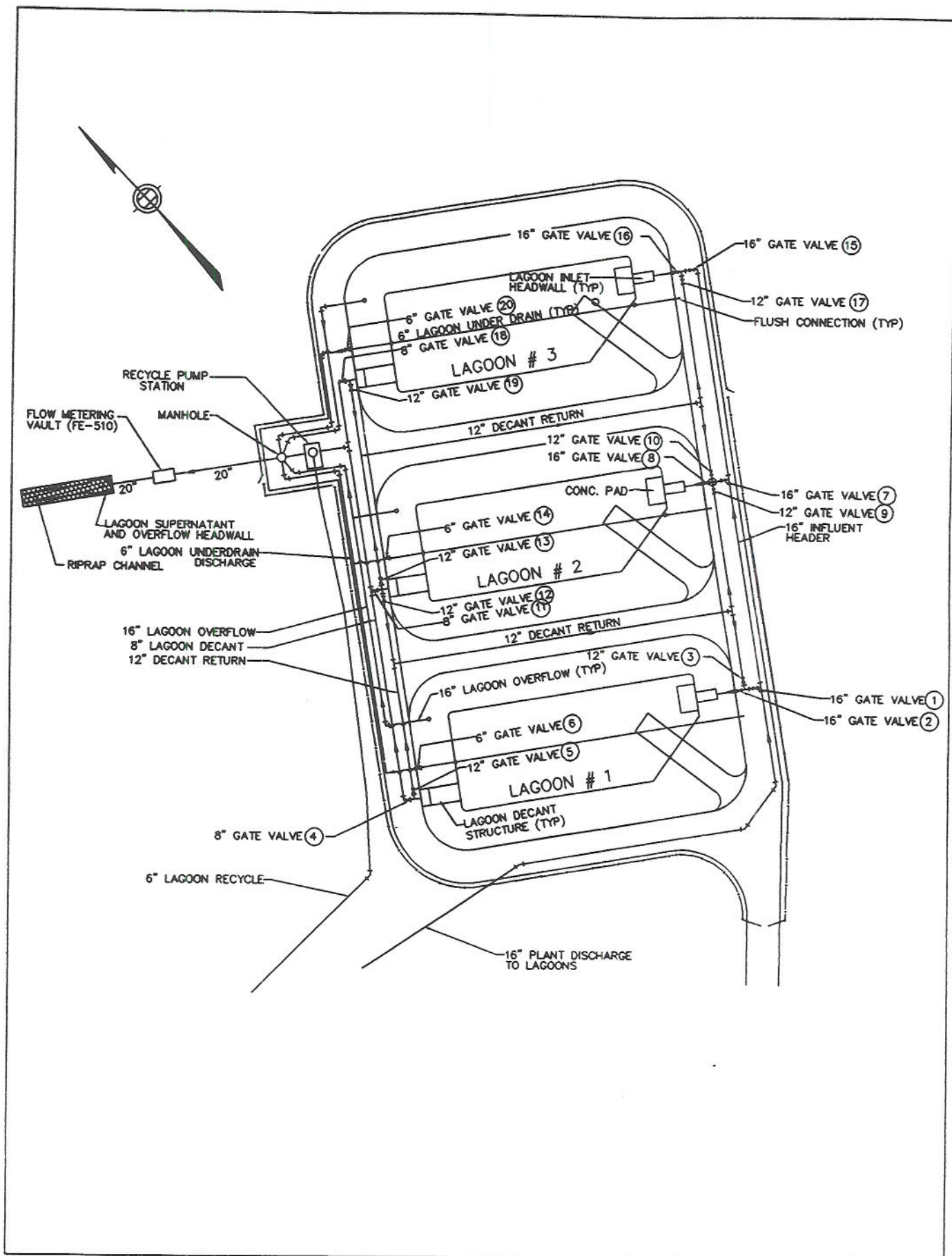


FIGURE NO. 2-20
LAGOON PIPING SCHEMATIC
GRAVELLY POND WATER TREATMENT FACILITY