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**DRAFT**

**PROPOSED 2013-2018 EAST STATION ISS IRM  
MONITORING PLAN**  
FOR MONITORING WELL GROUNDWATER LEVELS AND NAPL  
MONITORING AND RECOVERY

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## **PROPOSED 2013-2018 EAST STATION ISS IRM MONITORING PLAN**

**For Monitoring Well Groundwater Levels and NAPL Monitoring and  
Recovery**

### **Background**

In September 2008, the planned Phase IV, ISS IRM remedial work, for the East Station Site was completed by RG&E. Following the completion of the ISS-IRM, the **initial groundwater monitoring program** for East Station was initiated and is described in the letter report titled; **“Installation and Monitoring of Groundwater Wells for Water Quality and NAPL at the East Station Site following the Completion of the ISS-IRM, dated September 2008”**. In April, 2010 the revised and current **Performance Monitoring Plan** titled **“ISS IRM Plan for NAPL Monitoring and Recovery with Water Quality Monitoring for the East Station former MGP Site”** has been implemented through 2012. Figure 1 shows the locations of the 33 wells that were installed to monitor the performance of the ISS IRM for groundwater and NAPL. The New York State Department of Environmental Conservation (NYSDEC) approved these monitoring plans which were implemented during the last four years.

A summary report for the 2008-9 through 2012 monitoring events has been prepared and recently submitted to NYSDEC as required by the approved April 2010 monitoring plan. Based on the evaluation of the four years of monitoring data Ish Inc. has proposed the following revised monitoring plan for the next five years (2013-2018) for the East Station ISS-IRM area.

### **Proposed Monitoring Plan for 2013 through 2018**

Ish Inc. has prepared this proposed revised monitoring plan for the ISS-IRM area performance monitoring for the next five year period (2013-2018) based on the RG&E Conceptual MGP Project Schedule that currently has the proposed site-wide Remedial Action being implemented during 2017-2019.

Ish Inc. has been one of the primary East Station Environmental Consultants for RG&E since 1999 and has evaluated past and incorporated current monitoring data and the existing site conditions in preparing this revised groundwater and NAPL monitoring / recovery plan for the East Station ISS IRM area. Ish Inc. has taken into account the stable and nearly constant results from the NAPL gauging, groundwater elevations and groundwater quality in the shallow bedrock zone underneath the installed ISS wall to develop this revised monitoring plan.

Ish Inc. proposes that the existing 30 wells (listed below) continue to be gauged for NAPL and monitored for groundwater levels on an **annual basis** beginning in October, 2013 through October, 2018. The locations of these wells are shown on Figure 1.

#### **Wells for monitoring of LNAPL, DNAPL and water levels**

<b>Monitored Wells for NAPL Removal</b>					
RW-1	RW-2	RW-3	RW-4	RW-5	RW-6
RW-7	RW-8	RW-9	RW-10	RW-11	RW-12
RW-13	RW-14	RW-15	RW-16	RW-17	RW-18
RW-19	RW-20	RW-21	RW-22	MW-2R	MW-3DR
DW-1R	MW-4R	DW-3R	MW-5R	PZ-01R	MW-8DR

Ish Inc. recommends **discontinuing** the **groundwater quality monitoring for the five (5) monitoring wells underneath the ISS wall.** Ish Inc. believes that the groundwater quality data collected to date has provided adequate levels of characterization and monitoring of the groundwater quality in the shallow bedrock underneath the ISS wall. The documented water quality conditions are expected to remain at nearly the same levels until after the implementation of the site-wide remedy based on the past four years of monitoring.

The **proposed annual monitoring events** for the time period of 2013 through 2018 will include measuring of groundwater levels and gauging for LNAPL and DNAPL at each of the 30 wells. The previously used methods will continued to be employed to perform the field work. In the event that recoverable amounts of NAPL are encountered during the monitoring event, NAPL will be physically removed from the well, stored in the on-site water storage tanks and properly disposed off-site by RG&E in accordance with applicable regulations. The method of NAPL

removal will be the same as has been utilized in the current monitoring program. The amount of NAPL removed will be documented in the site field logs.

### **Annual Reporting of NAPL Gauging and Water Level Data**

RG&E will submit a letter report summarizing the annual NAPL gauging and groundwater elevations data, any recovered amounts of NAPL, tables, figures and a brief narrative for each monitoring event. The letter report will be submitted to NYSDEC within eight (8) weeks of the completion of field work.

### **Summary**

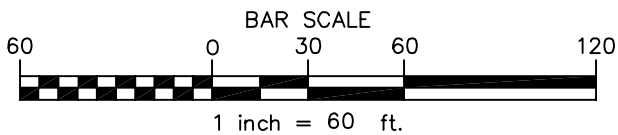
Ish Inc. recommends maintaining the existing network of 33 monitoring and recovery wells while RG&E is currently implementing a site-wide Remedial Investigation (RI) for East Station that started in 2011. RG&E will continue working with NYSDEC to complete the remedial investigation work, feasibility analysis, remedy selection process and then to implement the selected remedy. During the development of the Final Engineering Report (FER) and a Site Management Plan (SMP), which will also include a Groundwater Monitoring Plan that can be structured to include this revised ISS-IRM area monitoring plan into the entire East Station site-wide monitoring plan.

### **REFERENCES**

Ish Inc., Installation and Monitoring of Groundwater Wells for Water Quality and NAPL at the East Station Site following the Completion of the ISS-IRM, September 4, 2008

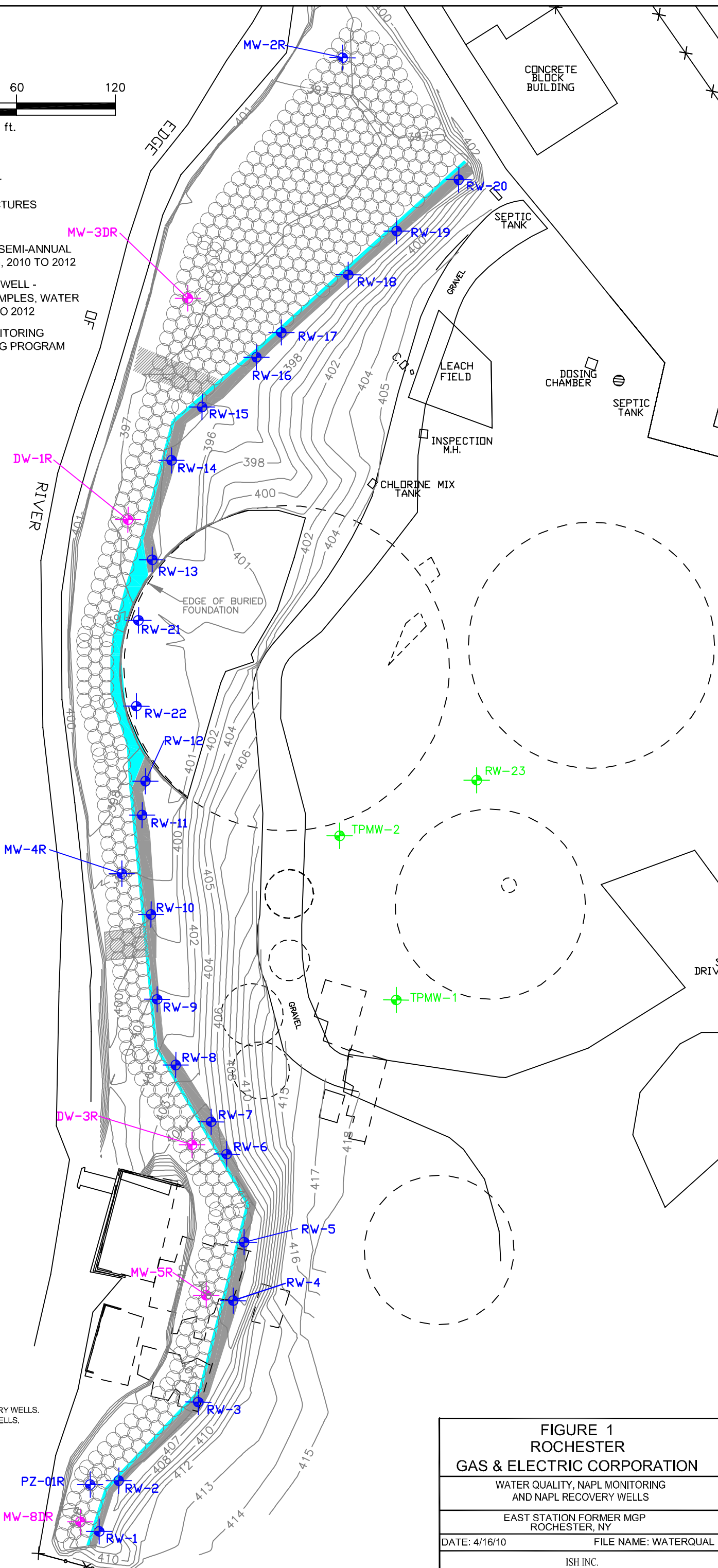
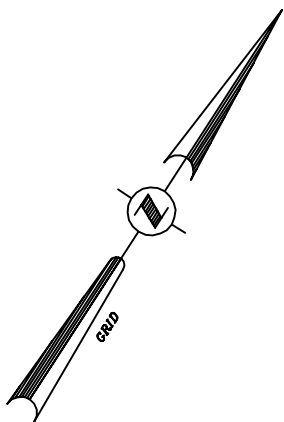
Ish Inc., ISS IRM Plan for NAPL Monitoring and Recovery with Water Quality Monitoring for the East Station former MGP Site” revised April 2010.

**Figure**



LEGEND

- NAPL COLLECTION TRENCH
- CEMENT BENTONITE SLURRY WALL
- APPROXIMATE LOCATION OF FOUNDATIONS OF FORMER STRUCTURES
- ISS COLUMN
- RECOVERY WELLS/PIEZOMETER - SEMI-ANNUAL WATER LEVEL AND NAPL GAUGING, 2010 TO 2012
- SHALLOW BEDROCK MONITORING WELL - SEMI-ANNUAL WATER QUALITY SAMPLES, WATER LEVEL AND NAPL GAUGING, 2010 TO 2012
- RECOVERY WELLS/SHALLOW MONITORING WELLS - NOT PART OF MONITORING PROGRAM



NOTES:

1. RW-1 THROUGH RW-20 ARE 8-INCH DIAMETER RECOVERY WELLS.
2. RW-21 AND RW-23 ARE 6-INCH DIAMETER RECOVERY WELLS.
3. THE TPMW AND SHALLOW BEDROCK MONITORING WELLS ARE 2-INCH DIAMETER WELLS.

FIGURE 1  
ROCHESTER  
GAS & ELECTRIC CORPORATION

WATER QUALITY, NAPL MONITORING  
AND NAPL RECOVERY WELLS

EAST STATION FORMER MGP  
ROCHESTER, NY

DATE: 4/16/10

FILE NAME: WATERQUAL

ISH INC.