ROSE & WESTRA, INC.
ENVIRONMENTAL CONSULTANTS

May 27, 2016

File: 0063.03936.4

Mr. Brian Finos
Manager of Facilities
Charter Development Company
3850 Broadmoor SE, Suite 201
Grand Rapids, Michigan 49512

Re: Environmental Assessment – Drinking Water Quality Report
Hamtramck Charter Academy
11420 Conant Street, Hamtramck, Michigan

Dear Mr. Finos:

Rose & Westra, Inc. (R&W) is pleased to present this drinking water quality report with results from the recent sampling and testing for the Hamtramck Charter Academy located at 11420 Conant Street, Hamtramck, Michigan (the Building). This work was requested due a concern about possible lead contaminates being present in the drinking water supplied to the Building. The water piping system to the Building is maintained by the City of Hamtramck Water Department and the water within the system is supplied by City of Detroit Water Department.

In summary, none of the tests conducted identified any contaminants exceeding the maximum contaminant levels (MCLs) or the Secondary MCLs allowed by the U. S. Environmental Protection Agency (U.S. EPA) for residential drinking water consumption.

Background

The Building is a multi-story structure constructed in several phases with the original Building completed in 1926. Renovations were completed in 2008 using new building materials. The water piping system to the Building is maintained by the City of Hamtramck Water Department and the water within the system is supplied by City of Detroit Water Department.

Drinking Water Sampling

On May 22, 2016, R&W staff collected water samples from four water fixtures in the Building. The fixtures sampled consist of a drinking water fountain station (DFS) located next to the first floor student restrooms [DFS-126], DFS located next to the second floor student restrooms [DFS-226], sink tap in the food prep room (Room 162) [FP-162], and sink tap in the Teacher's Lounge (Room 156) [TL-156]. The locations have been illustrated on Figures 1 and 2 (Attachment 1). The sampling method used for the drinking water sample

4328 Three Mile Road NW, Suite 200, Grand Rapids, MI 49534 • Phone: 616.791.7100 • Fax: 616.791.9263 • www.rosewestra.com

collection is known as first draw sampling, with a second sample collected from each location following a flush of the fixture. The first draw method required R&W staff to access the sampling location and flush the fixture to be sampled for a 30-minute period. Flushing the sampling locations was completed at 12:33 pm on May 22, 2016. Once the 30-minute flushing period was completed, R&W allowed each sample location to rest for a minimum of 6 hours. Each sample location was taped off to prevent use. The first draw water sample collection began at 6:43 pm on May 22, 2016; thereby allowing for a nearly 6-hour rest period. Once the first draw sample was collected from the sample locations, the fixtures remained on for a 5-minute flush before the flushed sample was collected.

The first draw sample from each sample location has been identified in the sample name. The first draw samples are identified as DFS-126-FD, DFS-226-FD, FP-162-FD, and TL-156-FD. These water sample locations have been illustrated on Figures 1 and 2, Attachment 1.

The flushed sample from each sample location has also been identified in the sample name. The flushed samples are identified as DFS-126-FL, DFS-226-FL, FP-162-FL, and TL-156-FL. These water sample locations have been illustrated on Figures 1 and 2, Attachment 1.

Analytical Testing

Water samples collected by R&W on May 22, 2016 were placed in clean 1,000-ml sample containers (supplied by the lab), labeled, cooled, and stored for transportation. The samples were handled and transported to Prein & Newhof Environmental Laboratory, Inc. (Prein & Newhof Laboratory; Grand Rapids, Michigan) under chain-of-custody records using U.S. EPA and Michigan Department of Environmental Quality (MDEQ) recommended methods. The water samples were tested for several heavy metals (copper, iron, and lead). A copy of the laboratory report has been included in Attachment 2. The Prein & Newhof Laboratory has MDEQ Drinking Water Certification for testing water samples.

Evaluation of Testing Results

All of the lead results were reported as below the method detection limit (MDL) of <0.003 mg/L. These reported results are also below the MCL of 0.015 mg/L.

Trace copper levels were reported in most water samples collected. The reported copper concentrations ranged from <0.010 mg/l to 0.282 mg/L; however, all reported concentrations are well below the MCL of 1.300 mg/L.

Trace iron levels were reported in all water samples collected. The reported iron concentrations ranged from 0.032 mg/L to 0.084 mg/L. The Secondary MCL for iron has been established at 0.300 mg/L for taste and color. All reported sample results were below the Secondary MCL for iron.

Conclusions

Based on the water sampling and chemical analyses conducted, none of the tests conducted identified any contaminants that exceeded the MCLs or Secondary MCLs allowed by the U. S. EPA for residential drinking water consumption.

If you have any questions regarding the information or data presented in this letter, please feel free to contact our staff.

Sincerely,

ROSE & WESTRA, INC.

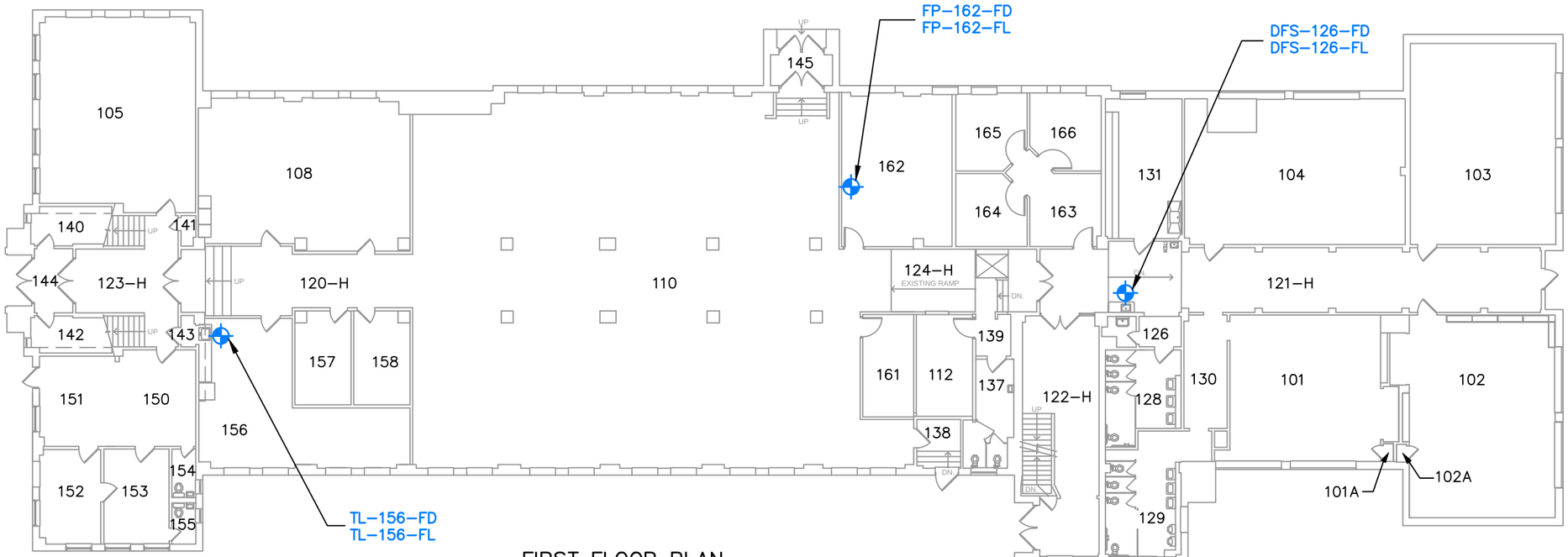
William J. Bosze, P.E.

wjb/jac
Attachments:
Attachment 1: Figure 1 – First Floor Plan – Sample Locations – May 22, 2016
Figure 2 – Second Floor Plan – Sample Locations – May 22, 2016
Attachment 2: Prein & Newhof Laboratory Report
Sent via Email Only

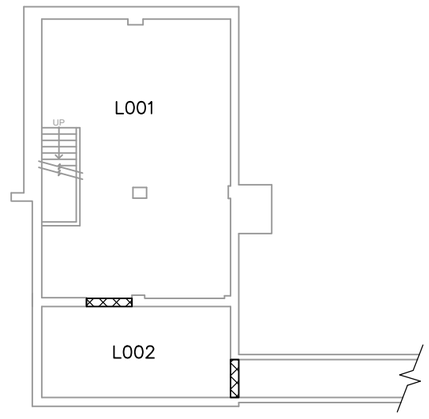
ATTACHMENT 1

FIGURES 1 AND 2

DRINKING WATER SAMPLE LOCATIONS – MAY 22, 2016



FIRST FLOOR PLAN



BASEMENT FLOOR PLAN

LEGEND

= WATER SAMPLE LOCATION

SCALE: 1" = 20'

0' 20'

NORTH ORIENTATION

BASEMENT & FIRST FLOOR PLAN - SAMPLE LOCATIONS 5/22/16

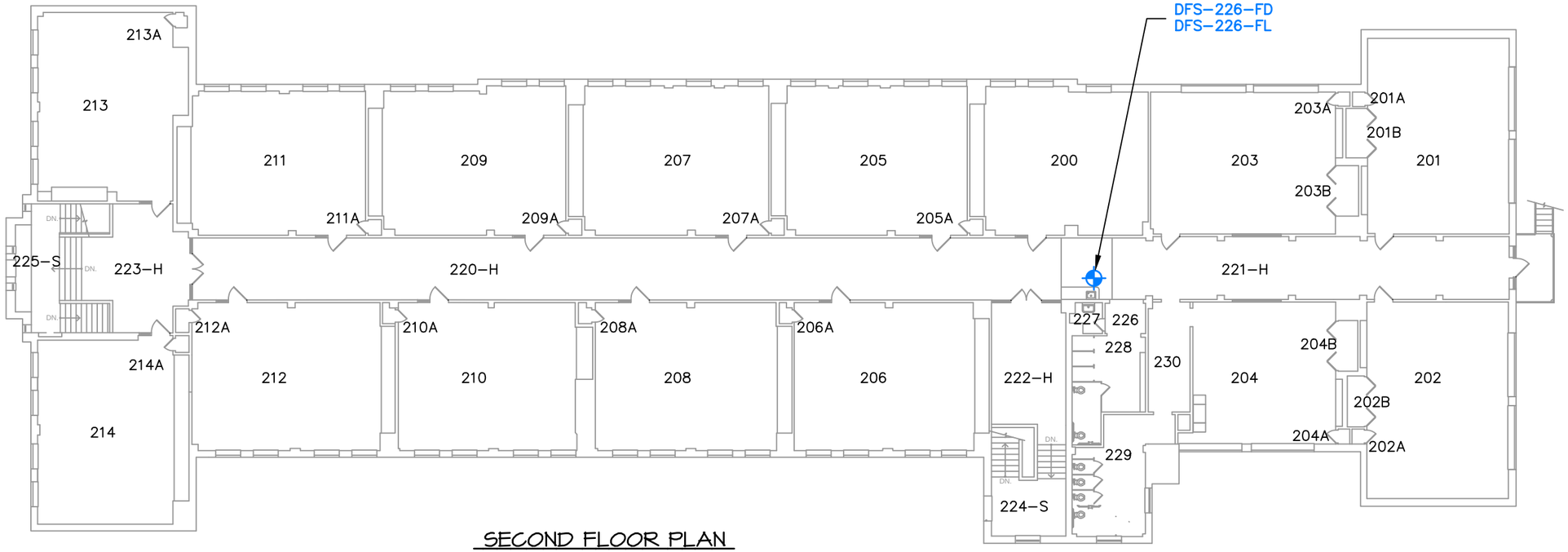
ROSE & WESTRA, INC.
ENVIRONMENTAL CONSULTANTS
Grand Rapids, Michigan

NATIONAL HERITAGE ACADEMIES
HAMTRAMCK ACADEMY
11420 CONANT, HAMTRAMCK, MICHIGAN
DRINKING WATER TESTING

PROJECT NO. 0063.03436.4

CREATED BY: KJB APPROVED BY: WJB DATE: 5/25/16 FILE NAME: 039364_HAMTRAM_DWT

1
FIGURE NO.



SECOND FLOOR PLAN

LEGEND

= WATER SAMPLE LOCATION

SCALE: 1" = 20'

0' 20'

NORTH ORIENTATION

SECOND FLOOR PLAN - SAMPLE LOCATIONS 5/22/16

ROSE & WESTRA, INC.
ENVIRONMENTAL CONSULTANTS
Grand Rapids, Michigan

NATIONAL HERITAGE ACADEMIES
HAMTRAMCK ACADEMY
11420 CONANT, HAMTRAMCK, MICHIGAN
DRINKING WATER TESTING

CREATED BY: KJB APPROVED BY: WJB DATE: 5/25/16 FILE NAME: 039364_HAMTRAM_DWT

PROJECT NO. 0063.03936.4

2

FIGURE NO.

ATTACHMENT 2

PREIN & NEWHOF LABORATORY REPORT

Prein&Newhof
Engineers ▪ Surveyors ▪ Environmental ▪ Laboratory

Date: *25-May-16*

Customer Name: Rose & Westra, Inc.
4328 3 Mile Rd NW
Grand Rapids, MI 49544

Contact Name: Rose & Westra, Inc.
4328 3 Mile Rd NW
Grand Rapids, MI 49544

Project: 0063.03936.4

Project No: 2160001

Lab Order: 1605692

Matrix: DRINKING WATER

Sampled By: W. Bosze

Lab ID: 1605692-001A
Client Sample ID: DFS-126-FD
Collection Date: 5/22/2016 6:43 pm
Received Date: 5/23/2016 9:45 am

Analyses	Result	Units	RPT Limit	M.C.L.	Analyst	Date Analyzed	Method #
Copper	**0.196**	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	**0.032**	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	**< 0.003**	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Lab ID: 1605692-002A
Client Sample ID: DFS-126-FL
Collection Date: 5/22/2016 6:48 pm
Received Date: 5/23/2016 9:45 am

Analyses	Result	Units	RPT Limit	M.C.L.	Analyst	Date Analyzed	Method #
Copper	**0.019**	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	**0.084**	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	**< 0.003**	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Lab ID: 1605692-003A
Client Sample ID: DFS-226-FD
Collection Date: 5/22/2016 6:46 pm
Received Date: 5/23/2016 9:45 am

Analyses	Result	Units	RPT Limit	M.C.L.	Analyst	Date Analyzed	Method #
Copper	**0.012**	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	**0.050**	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	**< 0.003**	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Lab ID: 1605692-004A
Client Sample ID: DFS-226-FL
Collection Date: 5/22/2016 6:51 pm
Received Date: 5/23/2016 9:45 am

Analyses	Result	Units	RPT Limit	M.C.L.	Analyst	Date Analyzed	Method #
Copper	**0.017**	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	**0.042**	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	**< 0.003**	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Lab ID: 1605692-005A
Client Sample ID: FP-162-FD
Collection Date: 5/22/2016 6:56 pm
Received Date: 5/23/2016 9:45 am

Analyses	Result	Units	RPT Limit	M.C.L.	Analyst	Date Analyzed	Method #
Copper	**0.282**	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	**0.034**	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	**< 0.003**	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Project: 0063.03936.4 **Project No:** 2160001

Lab Order: 1605692 **Matrix:** DRINKING WATER

Sampled By: W. Bosze

Lab ID: 1605692-006A **Collection Date:** 5/22/2016 7:01 pm
Client Sample ID: FP-162-FL **Received Date:** 5/23/2016 9:45 am

Analyses	Result	Units	RPT Limit	M.C.L.	Analyst	Date Analyzed	Method #
Copper	**0.018**	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	**0.060**	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	**< 0.003**	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Lab ID: 1605692-007A **Collection Date:** 5/22/2016 6:58 pm
Client Sample ID: TL-156-FD **Received Date:** 5/23/2016 9:45 am

Analyses	Result	Units	RPT Limit	M.C.L.	Analyst	Date Analyzed	Method #
Copper	**0.012**	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	**0.073**	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	**< 0.003**	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Lab ID: 1605692-008A **Collection Date:** 5/22/2016 7:03 pm
Client Sample ID: TL-156-FL **Received Date:** 5/23/2016 9:45 am

Analyses	Result	Units	RPT Limit	M.C.L.	Analyst	Date Analyzed	Method #
Copper	**< 0.010**	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	**0.069**	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	**< 0.003**	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Prein&Newhof
Engineers ▪ Surveyors ▪ Environmental ▪ Laboratory
3260 Evergreen Drive NE
Grand Rapids, MI 49525
t. 616-364-7600
f. 616-364-4222

Client: Rose & Westra, Inc.
Project Name: 0063.03936.4
Project #: 0063.03936.4
Send Results to: William Bosze
Sampling Personnel: William Bosze
wjbosze@rosewestra.com

Air	A
Drinking Water	D
Groundwater	W
Soil	S
Sludge	L
Oil	O
Other	X

CHAIN OF CUSTODY

Lab Use	Sample Information			MATRIX	Preservative						Analysis Requested													
Lab Sample ID #	Date	Time	Sample Description and Location (e.g. MW-1)		None	H2SO4	HNO3	HCl	NaOH	Other	Lead	Copper	Iron											
57612-1	5/22/16	6:43p	DFS-126-FD	D	X						X	X	X											
2	5/22/16	6:48p	DFS-126-FL	D	X						X	X	X											
3	5/22/16	6:46p	DFS-226-FD	D	X						X	X	X											
4	5/22/16	6:51p	DFS-226-FL	D	X						X	X	X											
5	5/22/16	6:56p	FP-162-FD	D	X						X	X	X											
6	5/22/16	7:01p	FP-162-FL	D	X						X	X	X											
7	5/22/16	6:58p	TL-156-FD	D	X						X	X	X											
8	5/22/16	7:03p	TL-156-FL	D	X						X	X	X											

Comments:

Relinquished By: (Signature)	Date	Time	Received By: (Signature)	Date	Time	Relinquished By: (Signature)	Date	Time	Received By: (Signature)	Date	Time
[signature]	5/23/16										
Relinquished By: (Signature)	Date	Time	Received By: (Signature)	Date	Time	Method of Shipment:			Bill of Lading:		
Received for Laboratory By:	Date	Time	Data Package Relinquished By:	Date	Time	Data Received By:	Date	Time	No. 31737		
K	5/23/16	0845									