

RE: Otterbein – Portage Vly Retirement Center
Report
Drinking Water Program
Wood County
PWS ID: OH8703812

**WATER DISTRIBUTION SYSTEM
LEAD MAPPING SUBMITTAL**

PREPARED FOR:
**OTTERBEIN PORTAGE VALLEY
PUBLIC WATER SYSTEM ID: OH8703812
20311 PEMBERVILLE ROAD
PEMBERVILLE, OH 43450**

PREPARED BY:
**HULL & ASSOCIATES, INC.
6397 EMERALD PARKWAY, SUITE 200
DUBLIN, OHIO 43016**

MARCH 2017

RECEIVED
MAR 06 2017
DDAGW - NWDO

RECEIVED

MAR 06 2017

DDAGW - NWDO

OTTERBEIN PORTAGE VALLEY

20311 Pemberville Road, Pemberville, Wood County, Ohio

PWS #OH8703812

In June 2016, House Bill (HB) 512 was passed to enact section 6109.121 of the Ohio Revised Code to establish requirements governing lead and copper testing for community and non-transient non-community public water systems and to revise law governing lead contamination from plumbing and fixtures. The law requires community water systems to identify and map areas of their distribution systems that are known or likely to contain lead service lines. These systems are also required to identify and provide a description of the characteristics of buildings served by the system that may contain lead solder, fixtures or pipes. Single building community water systems and non-transient non-community water systems are required to map areas of the system that have solder, fixtures and pipes containing lead.

In accordance with HB 512, Otterbein Portage Valley, PWS #OH8703812 worked with their engineering consultant to produce an overall water system map. The water system map includes approximate location of the exterior and interior distribution system with color coded lines that indicate type of main line material and other system features. Typical building floor plans (B & D) for the individual patio homes (located at Lilac Ct., Orchard Ct., Tulip Ct., Sunflower Ct., & Rose Ct.,) are being provided.

EPA guidance provides the following: Based on amendments to the Safe Drinking Water Act (SDWA) and Ohio Plumbing Code, the age of a building or the age of a re-plumbing are indicators of the plumbing materials. **Buildings in Ohio built prior to 1998 or that use plumbing material or solder manufactured before 1998 may have materials with greater than 8% lead and are at a higher risk of contributing lead to the drinking water than materials manufactured after 1998. In addition, buildings built and plumbing materials manufactured after 2014 were required to have less than 0.25% lead by weight and have the lowest risk for contributing lead to drinking water. It should be noted however that, although prohibited, some use of leaded solder or leaded components may have occurred after the prohibitions became effective.**

The Otterbein Portage Valley Campus's water is serviced by 2 separate water wells through galvanized pipes at the north end of the property. The Campus is comprised of one main building which houses the Central Facility, Assisted Living, Skilled Nursing, Independent Living and Bowlus Life Enrichment Center (BLEC) and 60 individual villas located along the western portion of campus. All inside piping is comprised of copper but not all joints can be confirmed whether or not to contain lead. Further details are provided below:

- The Skilled Nursing Section, Assisted Living Section, and part of the Central Facility was built in 1979-1981. There have been several additions and remodels performed to each area between 1990 – 2007. It is believed that the main building sections built in 1979 and 1990 will contain greater than 8% lead solder and those additions or remodels constructed between 2006 – 2007 do not contain lead due to the use of compression fittings.
- The BLEC, which was an addition constructed off of the Central Facility, was built in 2010 does not contain lead due to the use of compression fittings.
- Orchid Court, which houses 15 individual villas (3 footprints) in the court, was constructed in 1993. See attached typical floor plans B & D which show building serviced by 1-1/4" copper water line and 1/2" copper water line within the building. Joint material is unknown with a likelihood to contain greater than 8% lead solder.
- Lilac Court, which houses 15 individual villas (3 footprints) in the court, was constructed in 1995. See attached typical floor plans B & D which show building serviced by 1-1/4" copper water line and 1/2" copper water line within building. Joint material is unknown with a likelihood to contain greater than 8% lead solder.
- Rose Court, which houses 15 individual villas (3 footprints) in the court, was constructed in 1997. See attached typical floor plans B & D which show building serviced by 1-1/4" copper water line and 1/2" copper water line within building. Joint material is unknown with a likelihood to contain greater than 8% lead solder which show building serviced by 1-1/4" copper water line and 1/2" copper water line within building.
- Sunflower and Tulip Courts, which each have 15 individual villas (3 footprints) in each court, were constructed in 1998. See attached typical floor plans B & D which show building serviced by 1-1/4" copper water line and 1/2" copper water line within building. Joint material is unknown with a likelihood to contain greater than 8% lead solder.

Additionally, with the OEPA guidance in mind, it is likely that all external galvanized plumbing materials within the Otterbein Portage Valley Campus (constructed in between 1979 to 2010) do contain components that exceed the 8% lead and are at a higher risk.

Finally, Otterbein Portage Valley performs weekly testing for Chlorine and Hardness as well as yearly testing for lead and copper (most recently on June 2, 2016) which is submitted to the OEPA. The five separate testing locations are shown within Figures 1 and 2. See attached report and Figures.



OTTERBEIN PORTAGE VALLEY CAMPUS MAP

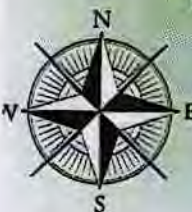


ANN

WELL

O'WELL

PEMBERVILLE RD.



IVED
2017
NWDO

RECEIVED

MAR 06 2017

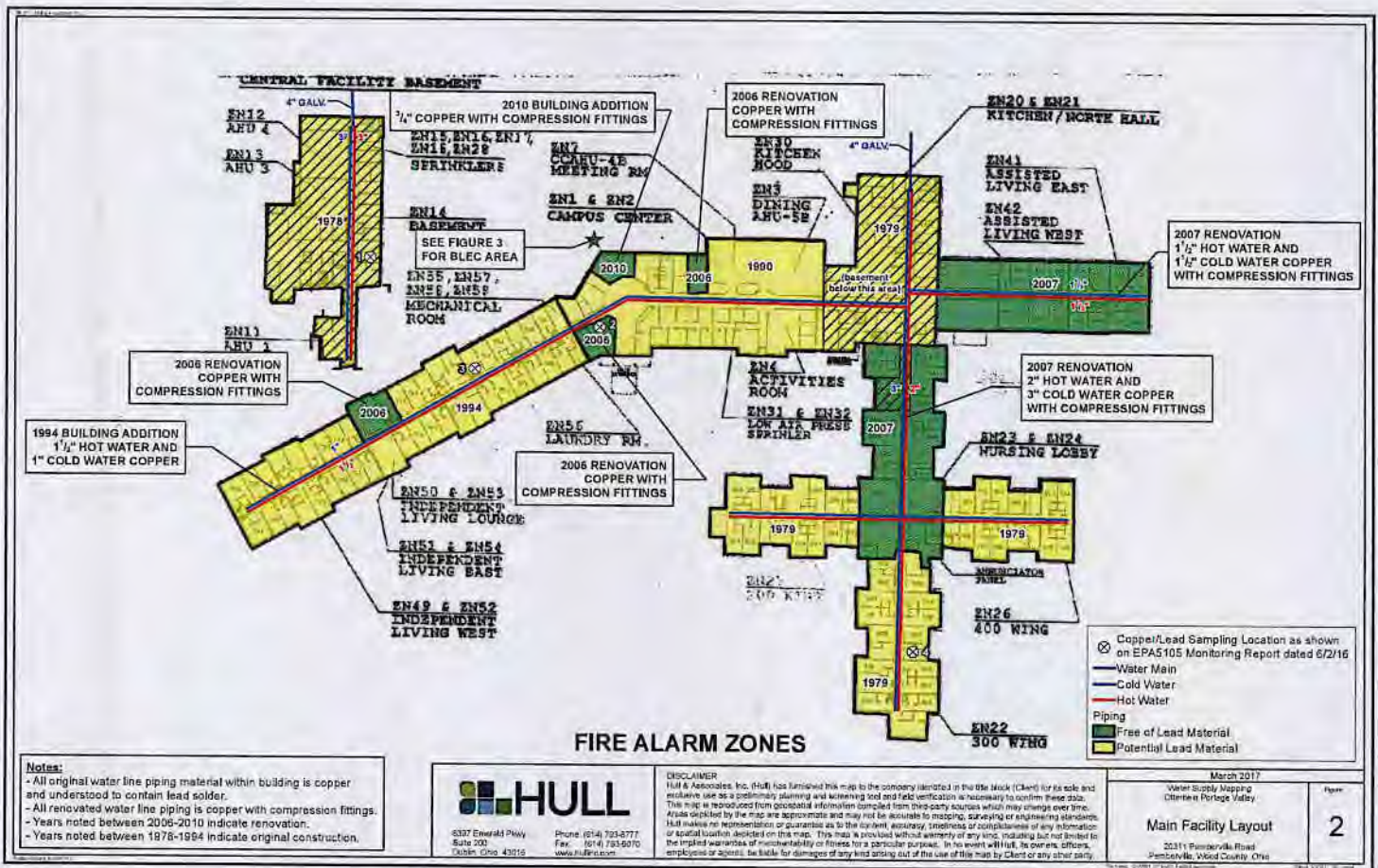
DDAGW - NWDO



RECEIVED

MAR 06 2017

DDAGW - NWDO



HULL
 8307 Ewald Pkwy
 Suite 200
 Dublin, Ohio 43016
 Phone: (614) 753-8777
 Fax: (614) 753-9070
 www.hullinc.com

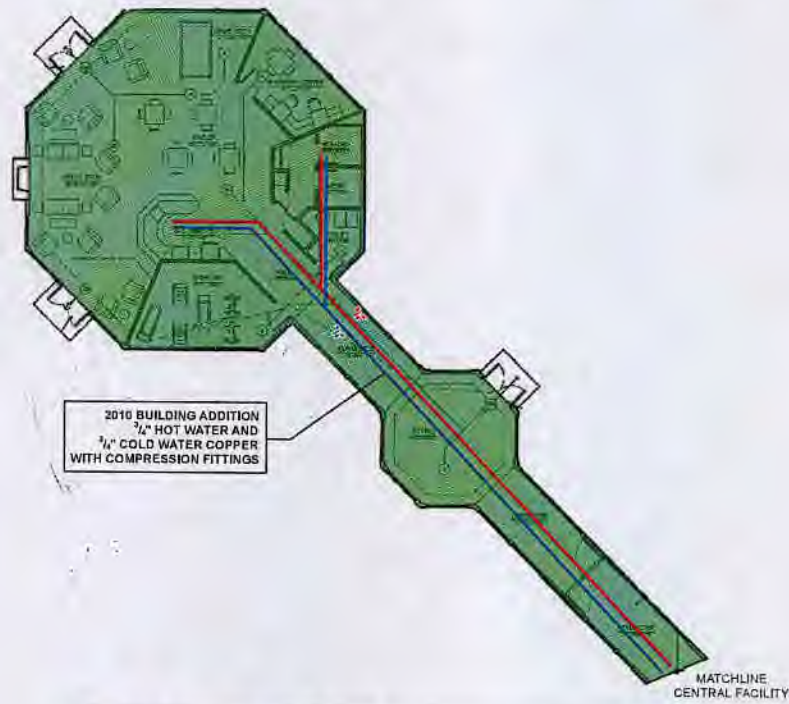
DISCLAIMER
 Hull & Associates, Inc. (Hull) has furnished this map to the company (client) in the title block (Client) for its sole and exclusive use as a preliminary planning and engineering tool and field verification is necessary to confirm these data. This map is reproduced from geospatial information compiled from third-party sources which may change over time. Areas depicted by the map are approximate and may not be accurate to mapping, surveying or engineering standards. Hull makes no representation or guarantee as to the content, accuracy, timeliness or completeness of any information or spatial location depicted on this map. This map is provided without warranty of any kind, including but not limited to the implied warranties of merchantability or fitness for a particular purpose. In no event will Hull, its owners, officers, employees or agents, be liable for damages of any kind arising out of the use of this map by client or any other party.

March 2017
 Water Supply Mapping
 Ottawa/Portage Valley
Main Facility Layout
 2331 S. Painesville Road
 Painesville, Ohio 44060
 Page **2**

RECEIVED

MAR 06 2017

DDAGW - NWDO



2010 BUILDING ADDITION
3/4" HOT WATER AND
3/4" COLD WATER COPPER
WITH COMPRESSION FITTINGS

— Cold Water
— Hot Water
— Piping
■ Free of Lead Material

HULL
6367 Emerald Pkwy
Suite 200
Dustin, Ohio 43016
Phone: (614) 725-4777
Fax: (614) 725-4979
www.hullinc.com

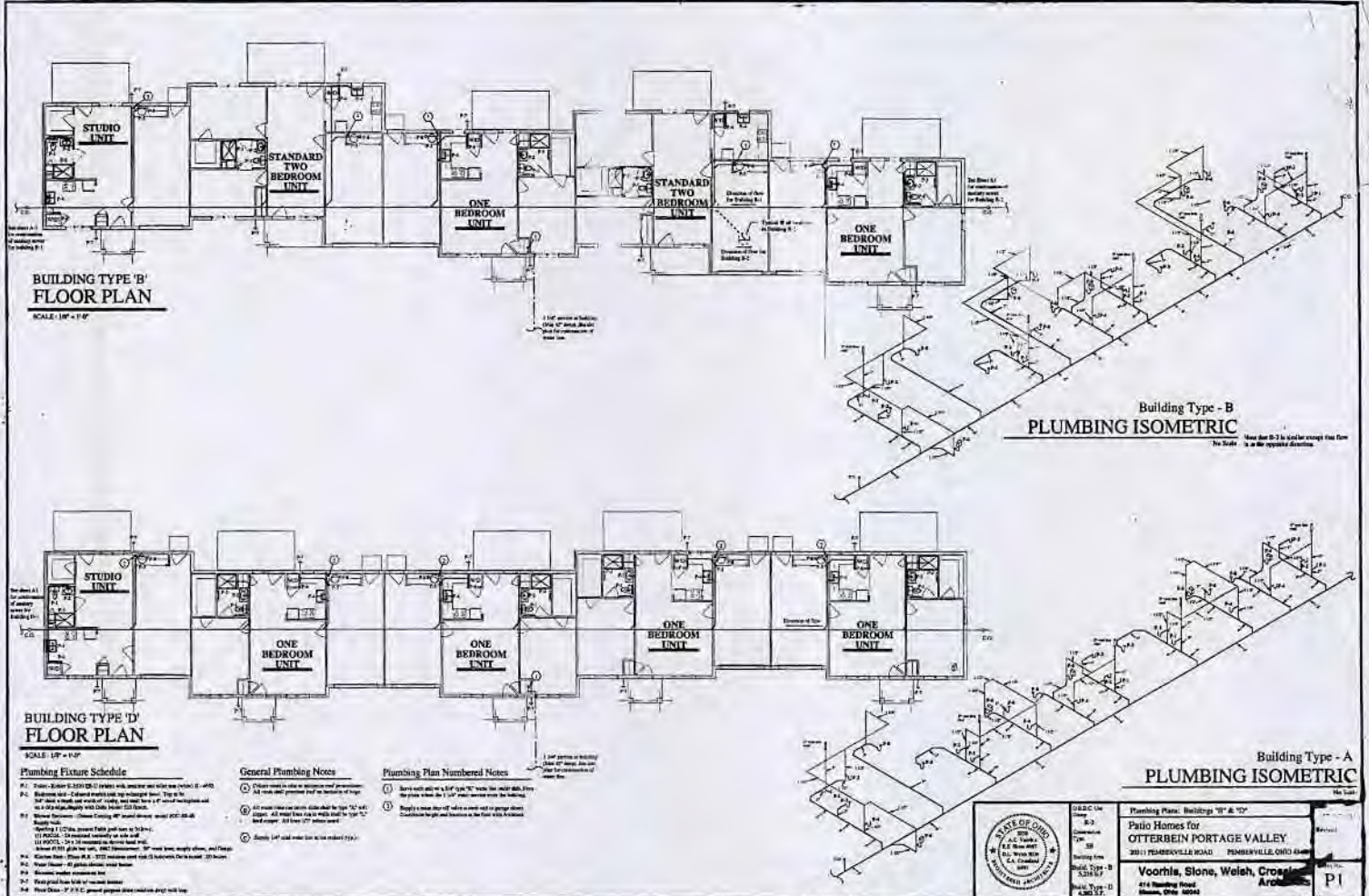
DISCLAIMER:
Hull & Associates, Inc. (Hull) has furnished this map to the Company identified in the title block (Client) for its sole and exclusive use as a preliminary planning and screening tool and field verification is necessary to confirm these data. This map is not intended for general information compiled from third-party sources which may change over time. Areas depicted by this map are approximate and may not be accurate to mapping, surveying or engineering standards. Hull makes no representation or guarantee as to the content, accuracy, timeliness or completeness of any information or special location depicted on this map. This map is provided without warranty of any kind, including but not limited to the implied warranties of merchantability or fitness for a particular purpose. In no event will Hull, its officers, employees or agents, be liable for damages of any kind arising out of the use of this map by Client or any other party.

March 2017
Water Supply Mapping
Cherishin Forgeps Valley
**BLEC Addition (2010)
Facility Layout**
32311 Fremleyville Road
Pemberville, Wood County, Ohio
Page **3**

RECEIVED

MAR 06 2017

DDAGW - NWDO



BUILDING TYPE 'B' FLOOR PLAN
SCALE: 1/8" = 1'-0"

Building Type - B
PLUMBING ISOMETRIC
Note: See D-2 to check piping that runs in the opposite direction.

BUILDING TYPE 'D' FLOOR PLAN
SCALE: 1/8" = 1'-0"

Building Type - A
PLUMBING ISOMETRIC

Plumbing Fixture Schedule

P1. Toilet - 2.000 G.P.I. (2) per unit with automatic flush valve model 11-4000
P2. Bidet - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000
P3. Sink - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000
P4. Shower - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000
P5. Water Heater - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000
P6. Electric Water Heater - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000
P7. Water Heater - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000
P8. Electric Water Heater - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000
P9. Water Heater - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000
P10. Electric Water Heater - 1.000 G.P.I. (1) per unit with automatic flush valve model 11-4000

- General Plumbing Notes**
- 1. All piping shall be installed in accordance with the applicable code.
 - 2. All piping shall be installed in accordance with the applicable code.
 - 3. All piping shall be installed in accordance with the applicable code.
 - 4. All piping shall be installed in accordance with the applicable code.
 - 5. All piping shall be installed in accordance with the applicable code.

- Plumbing Plan Numbered Notes**
- 1. See note 1 on page 1 of this set of drawings.
 - 2. See note 2 on page 1 of this set of drawings.
 - 3. See note 3 on page 1 of this set of drawings.
 - 4. See note 4 on page 1 of this set of drawings.
 - 5. See note 5 on page 1 of this set of drawings.



DISC No. 10000 License No. 10000 State of Ohio Professional Engineer	Plumbing Plans: Buildings 'B' & 'D' Patis Homes for OTTERBEIN PORTAGE VALLEY 2011 PEMBERVILLE ROAD PEMBERVILLE, OHIO 43084 Voorhis, Stone, Welsh, Cross Architects 414 Harding Road Columbus, Ohio 43260	P I
---	---	-----



DRINKING WATER LEAD AND COPPER MONITORING REPORT

Submit with Form EPA 5105

Page 2 of 2 pages

PWS Name: Otterbein Portage Valley - 474-833-8331 Northwestern Water and Sewer District	PWSID: OH8703812	Analytical Laboratory Name: Jones & Henry Laboratories, Inc.	Laboratory Certification No.: 4137
---	-------------------------	--	---------------------------------------

List samples sequentially by Laboratory Sample Number

Location
ID #

	Date of Sample	Time Sample Taken	Laboratory Sample Number	Address of Sample Site Example: 234 S Main St Town. OH 40000	Tap Type* and Location Example: B 2 nd floor	Structure Type SFR, MFR or BLDG	Interior Plumbing Material Pb, CuPb>82, CuPb<83, or other	Service Line Material Pb, Cu, or other	Tier 1, 2, 3, or other	Lead Conc (ug/L)	Copper Conc (ug/L)
①	6/2/2016	8:40 AM	AH22943	Exam Room #3	Faucet	MFR	CuPb<83	Cu	1	0	502
②	6/2/2016	8:10 AM	AH22944	Activities Room	Kitchenette	MFR	CuPb>82	Cu	1	0	254
③	6/2/2016	8:30 AM	AH22945	Apt. 706	Kitchen sink	MFR	CuPb>82	Cu	1	0	106
④	6/2/2016	8:15 AM	AH22946	300 Hall Utility Room	Sink	MFR	CuPb<83	Cu	1	13	304
⑤	6/2/2016	3:20 PM	AH23014	907 Sunflower Ct.	Sink	MFR	CuPb>82	Cu	1	0	106

*Tap type codes: B – bathroom cold water tap; D – drinking fountain; K – kitchen sink cold water tap; R – restroom sink cold water tap; O – other (with prior Ohio EPA acceptance) Note: 1 mg/L = 1000 ug/L