

1 BASEMENT FLOOR PLAN
1/8"=1'-0"

BASEDRAWINGS PROVIDED BY HGA
F:\Projects\CRC\CAD\basement_plan\new\20070829 DPE System\20080122 MW Locations.dwg

NOTES:

1. DPE system piping shall be installed above the basement slab from the DPE wellheads to the basement ceiling. At the basement ceiling the horizontal DPE system piping from each of the wells shall slope downward towards the DPE system location.
2. The DPE system piping from the DPE wellheads shall consist of 2-inch SCH 80 PVC pipe.
3. The DPE piping shall be installed and pressure tested as described in the technical specifications and proposed drawings.
4. The DPE wells and horizontal piping shall be installed as shown on the proposed drawings.
5. The DPE system equipment and manifold shall be installed as shown on the proposed drawings.
6. Groundwater generated from the DPE system shall be discharged to the sanitary sewer. A groundwater treatment system may be required based on system start-up sampling analytical results.
7. DPE exhaust emissions shall be discharged to the atmosphere through riser piping that exits the building through the proposed building's west wall of the second level ceiling. Air emissions treatment may be required based on system start-up analytical results.

LEGEND



**20 feet
SCALE**

Proposed DPE Well Location

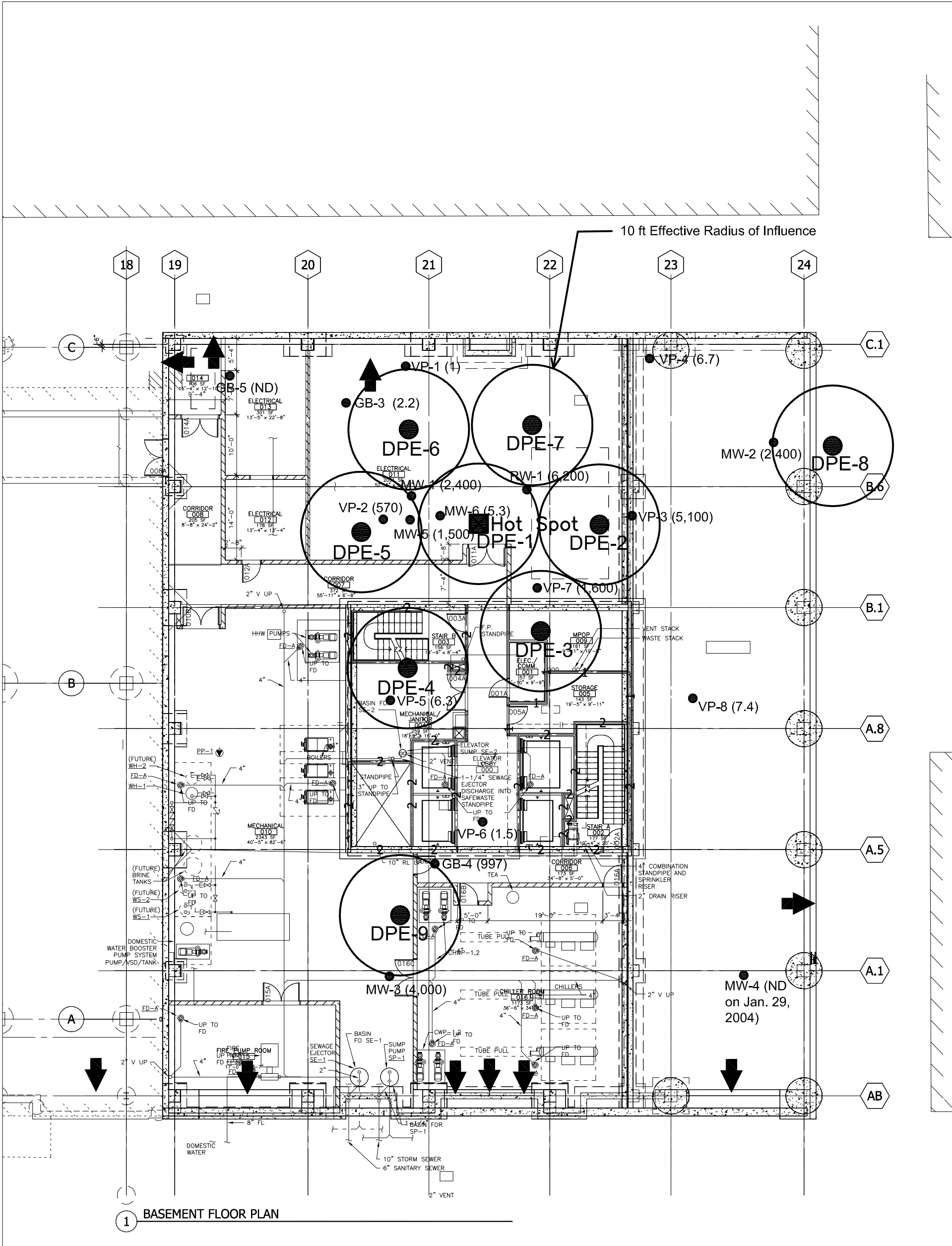
⊕ MW-14 Proposed Monitoring Well Location

Proposed DPE Piping Location

Foundation Mat Slab

Foundation Walls

Rev	Date	By	Description	<div><div></div><div>LANDMARK ENVIRONMENTAL, LLC</div><div>2042 West 98th Street Bloomington, MN 55431</div></div>	<div>BASEMENT FLOOR - DUAL PHASE EXTRACTION SYSTEM LAYOUT</div> <div>219 AND 223 FIRST AVENUE S.W. ROCHESTER, MINNESOTA</div>	Landmark Project Number: CRC					
1	7/26/07	JS	design mods.			Drawn: JDS		Checked:		Designed: JDS	
2	8/06/07	JS	design mods.			Scale: NONE		Date: 9/25/2007		Revision: 4	
3	8/30/07	JS	design mods.								
4	9/25/07	JS	CP2 ADD2.			Drawing Number: .		Sheet	Of	Sheets	
5	12/6/07	JS	Bid Docs					1		7	



F:/Projects/CRC/CAD/basement planview/DPE & GW DATA 20080117.dwg

NOTES:

- 1. DPE system piping shall be installed beneath the slab as shown and consist of 2-inch SCH 80 PVC pipe.
- 2. DPE system piping shall be installed such that piping slopes from the vacuum pump to the DPE well.
- 3. DPE system piping shall be installed and pressure tested as described in the technical specifications and proposed drawings.
- 4. DPE wells shall be installed as shown in the proposed drawings.
- 5. DPE system equipment and manifold piping shall be installed as shown on the proposed drawings.
- 6. Groundwater generated from the DPE system shall be discharged to the sanitary sewer. Groundwater treatment may be required based on system start-up analytical results.
- 7. DPE exhaust emissions shall be discharged to the atmosphere through riser piping that exits the building through the proposed building's west wall of the second level ceiling. Air emissions treatment may be required based on system start-up analytical results.

LEGEND

- DPE-1 Proposed DPE Well Location
- VP-1 Abandoned DPRA Vapor Extraction Port Location (6/15/07)
- MW-1 Abandoned DPRA Monitoring Well Location (6/15/07)
- RW-1 Abandoned DPRA DPE Well Location (7/27/07)
- VP-3 (5,100) PCE Concentration in ug/L
- GB-5 (ND) Landmark Geoprobe Boring Location (12/29/06) [Not Detected]

N → NOT TO SCALE

Rev	Date	By	Description
1	7/26/2007	JDS	DPE system design modifications
2	08-06-07	JDS	MW Additions
3	01-17-08	JDS	Hot spot addition; DPE well location revision

LANDMARK ENVIRONMENTAL, LLC
2042 W. 98th Street
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DUAL PHASE EXTRACTION SYSTEM LAYOUT
219 AND 223 FIRST AVENUE S.W.
ROCHESTER, MINNESOTA

Landmark Project Number: CRC		
Drawn: JDS	Checked: .	Designed: JDS
Scale: None	Date: 07-16-2007	Revision: .
Drawing Number:	Sheet 1	Of 1 Sheets