

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION  
CASE NO. 2008-00443

RECEIVED  
NOV 13 2009  
PUBLIC SERVICE  
COMMISSION

IN RE: THE MATTER OF AN INVESTIGATION IN TO THE  
ADEQUACY OF THE WATER SUPPLY OF  
THE CITY OF SALYERSVILLE WATER DISTRICT

**SUPPLEMENTAL RESPONSE BY CITY OF SALYERSVILLE**  
**CONCERNING THE INTERCONNECTION BETWEEN**  
**CITY OF SALYERSVILLE WATER WORKS AND**  
**PAINTSVILLE UTILITIES COMMISSION**

\* \* \* \* \*

Comes now the City of Salyersville and submits the engineering report of Kevin Howard of Summit Engineering, Inc., addressing the ability of the City of Salyersville to utilize the interconnection with Paintsville Utilities Commission on Highway 40 between Salyersville and Paintsville. A testing of this interconnection took place on August 6, 2009. The results of this testing has heretofore been filed by the Energy and Environmental Cabinet. Attached is the letter of Kevin Howard of Summit Engineering, Inc., indicating why that interconnection does not provide benefit to the City of Salyersville at the current time.

COLLINS & ALLEN  
P. O. BOX 475  
SALYERSVILLE, KY 41465  
PHONE 606-349-1382  
FAX 606-349-1322

BY:

  
\_\_\_\_\_  
JOHN C. COLLINS

**CERTIFICATE**

This is to certify that a true and correct copy of the foregoing was this the 12  
day of November, 2009, mailed postage prepaid to the following:

Ms. Sandy Gruzesky  
Division of Water  
Energy and Environment Cabinet  
200 Fair Oaks Lane, Fourth Floor  
Frankfort, KY 40601

Hon. Mary Stephens  
Office of General Counsel  
200 Fair Oaks Lane, First Floor  
Frankfort, KY 40601

DEP Division of Water  
Frankfort Office Park  
14 Reilly Road  
Frankfort, KY 40601

Hon. Gregory D. Allen  
Collins & Allen  
P. O. Box 475  
Salyersville, KY 41465

Billy J. Rowe, Sr.  
HC 60, Box 255  
Salyersville, KY 41465

Hon. A. David Blankenship  
Blankenship Law Office  
328 E. Court Street  
Prestonsburg, KY 41653  
Counsel for Paintsville Utilities Commission

Hon. David Edward Spenard  
Assistant Attorney General  
Office of the Attorney General  
Utility & Rate Intervention Division  
1024 Capital Center Drive  
Suite 200  
Frankfort, KY 40601-8204

the original to:

Public Service Commission  
211 Sower Blvd.  
P. O. Box 615  
Frankfort, KY 40602-0615



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JOHN C. COLLINS



October 29, 2009

Mr. Jack Collins, Attorney at Law  
Collins and Allen Attorneys at Law  
110 East Maple Street  
P. O. Box 475  
Salyersville, KY 41465

**RE: Comments on Salyersville/Paintsville Interconnect**

07-564

Mr. Collins:

As I understand it, there has been a request for engineering comments related to the Salyersville / Paintsville water line interconnect on State Route 40 at the Magoffin/Johnson County line. I was not present for the field activities of August 6, 2009. I have reviewed the letter of 10/22/09 prepared by Attorney Mary Stevens. I am pleased that this letter corroborates my prior comments of record regarding the possibility that, upon interconnection of the systems, water would flow from Salyersville to Paintsville.

In 2005 Summit Engineering Inc. was retained by the Big Sandy ADD to look at water interconnects in the five county region. We amassed quite a bit of data – some of which was not included in the final report. I have attached three 11x17 exhibits that we developed as a part of the Big Sandy study. I have updated these exhibits to correct some line size inaccuracies brought to my attention by Adam Hunley of Salyersville Water Works.

Exhibits 1 of 3 and 2 of 3 provide a plan layout of the water system between downtown Salyersville and the 'Oil Springs' water storage tank of Paintsville Utilities. Exhibit 3 of 3 provides a hydraulic profile of the main water line along Route 40 between Salyersville and the 'Oil Springs' tank.

The behavior of the interconnect is really a function of the nearest water tanks. In this case, the 'Painters Creek' water storage tank in Magoffin County and the 'Oil Springs' tank in Johnson County. The overflow elevation of the 'Painters Creek' tank is reported to be 1175 Ft MSL. The elevation of the 'Oil Springs' tank is reported to be 1047 Ft MSL. The difference in overflow elevations is 128 feet or 55 psi. The difference in observed pressures as noted by Ms Stevens was 60 psi (118 psi – 58 psi). Considering that a tank is rarely full when pressure readings are taken, this is rather good agreement between reported elevations and observed pressures. I believe the attached exhibits are an accurate representation of the system layout.

120 PROSPEROUS PLACE, SUITE 101, LEXINGTON, KY 40509 859-264-9860 FAX 859-264-9106

CIVIL ENGINEERING MINING ENGINEERING ARCHITECTURE SURVEYING

In the event the two systems are connected, the water in the system will seek its own level. If left unattended, water will flow from the Painters Lick tank to the Oil Springs tank (overflowing it) until the water level in the Painters Lick tank is dropped to 1047 Ft. MSL. In order to induce water to flow from Johnson County to Magoffin County, a water booster pumping station would need to be installed at the county line. The energy added by the booster station would lift the Johnson County water to the Magoffin gradient of 1175. This action would only aide those customers “floating” on the Painters Lick tank. In order to benefit the citizens of Salyersville, a bypass would also have to be constructed around the State Road Fork water booster station (the station that feeds the Painters Lick tank). We have illustrated both of these proposed improvements on the attached exhibits.

Even with a booster pump, the system interconnect will only provide a relatively small volume of flow. The line from the Oil Springs tank to the county line is only a four inch line. There is a limit to how much flow can be moved through this small line without an adverse impact on the customers in Johnson County. We believe that 88 gpm (about 127,000 gpd) is probably the maximum safe yield (without upsizing the pumps feeding the Oil Springs tank). At 88 gpm we are pressurizing the 160 psi pipe a bit above its capacity.

There is an 8” line from the Magoffin County line back to downtown Salyersville. Salyersville is currently installing larger lines in downtown Salyersville. A significant volume of water could be moved along Route 40 from the Paintsville system to the Salyersville system, if Paintsville Utilities upgraded its distribution system. We are aware that Paintsville Utilities has constructed a new tank on Route 460. Currently, we do not have information on the overflow for this tank. However, we suspect that it is highly probable that if a new line was extended from the aforementioned 460 tank along Route 825 (a relatively short distance) and gridded into the Oil Springs line, there would be a significant increase in the yield provided by the Paintsville system. Unfortunately, we do not have the data on this portion of Paintsville’s system to allow analysis.

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I hope this information assists your effort. I may be reached at 859-264-9860 ext 306 (khoward@summit-engr.com).

Sincerely,

SUMMIT ENGINEERING, INC.

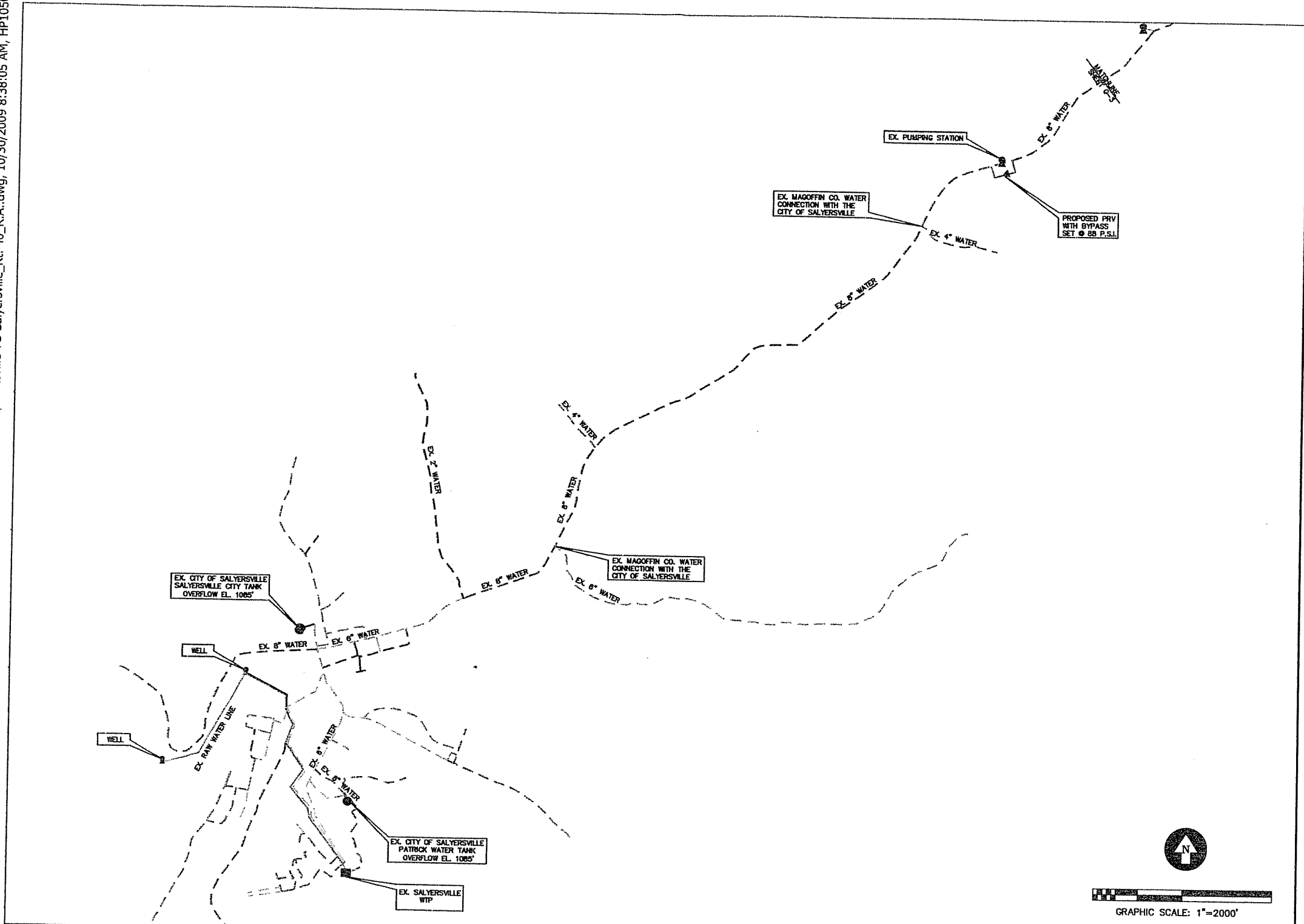


Kevin Howard, P.E.

encl

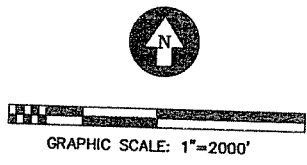
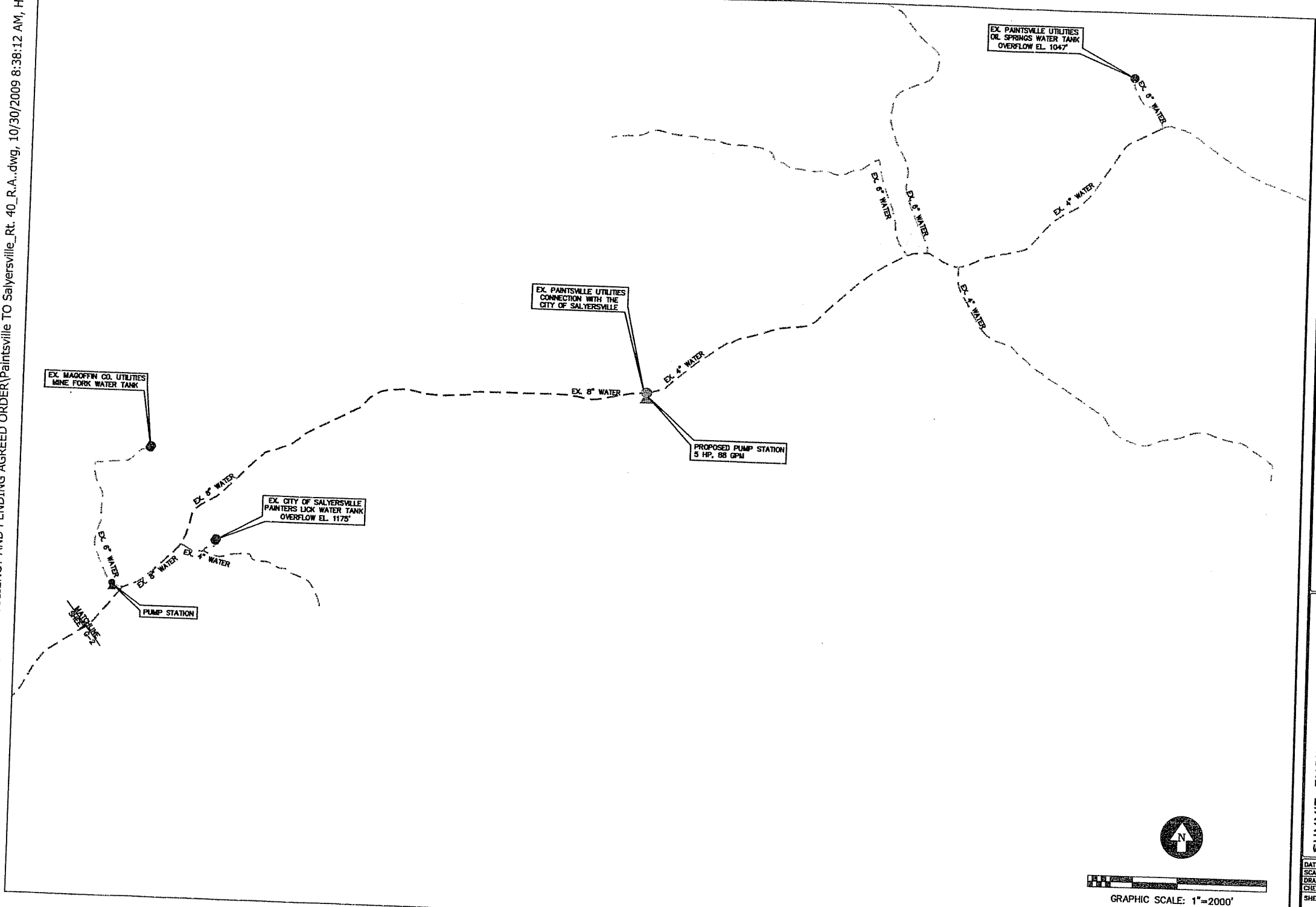
cc: Thomas Howard      Salyersville Water  
file

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<b>SUMMIT ENGINEERING, INC.</b> <small>LOCATED BY                  PATRICK COUNTY, VA                  GARDNER, VA</small>	DATE: 1/10/08 SCALE: AS SHOWN DRAWN BY: J. Hunt CHECKED: K. Howard SHEET: MAP 1 of 3 of: G-1	Big Sandy A.D.D. Regional Emergency Water Supply Interconnection Plan Fr: Paintsville Utilities To: City of Salyersville (Route 40)	DATE DESCRIPTION OF REVISION UPDATED 10/29/08 _____ _____ _____
	PAGE G-2		

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DATE	DESCRIPTION OF REVISION	DATE	DESCRIPTION OF REVISION
UPDATED 10/29/09			

Big Sandy A.D.D.  
Regional Emergency Water Supply Interconnection Plan  
Fr: Paintsville Utilities  
To: City of Salyersville (Rt. 40)

**SUMMIT ENGINEERING, INC.**  
  
 PREPARED BY  
 J. HUNT  
 QUALITY CONTROL BY  
 K. HOWARD  
 10/30/09

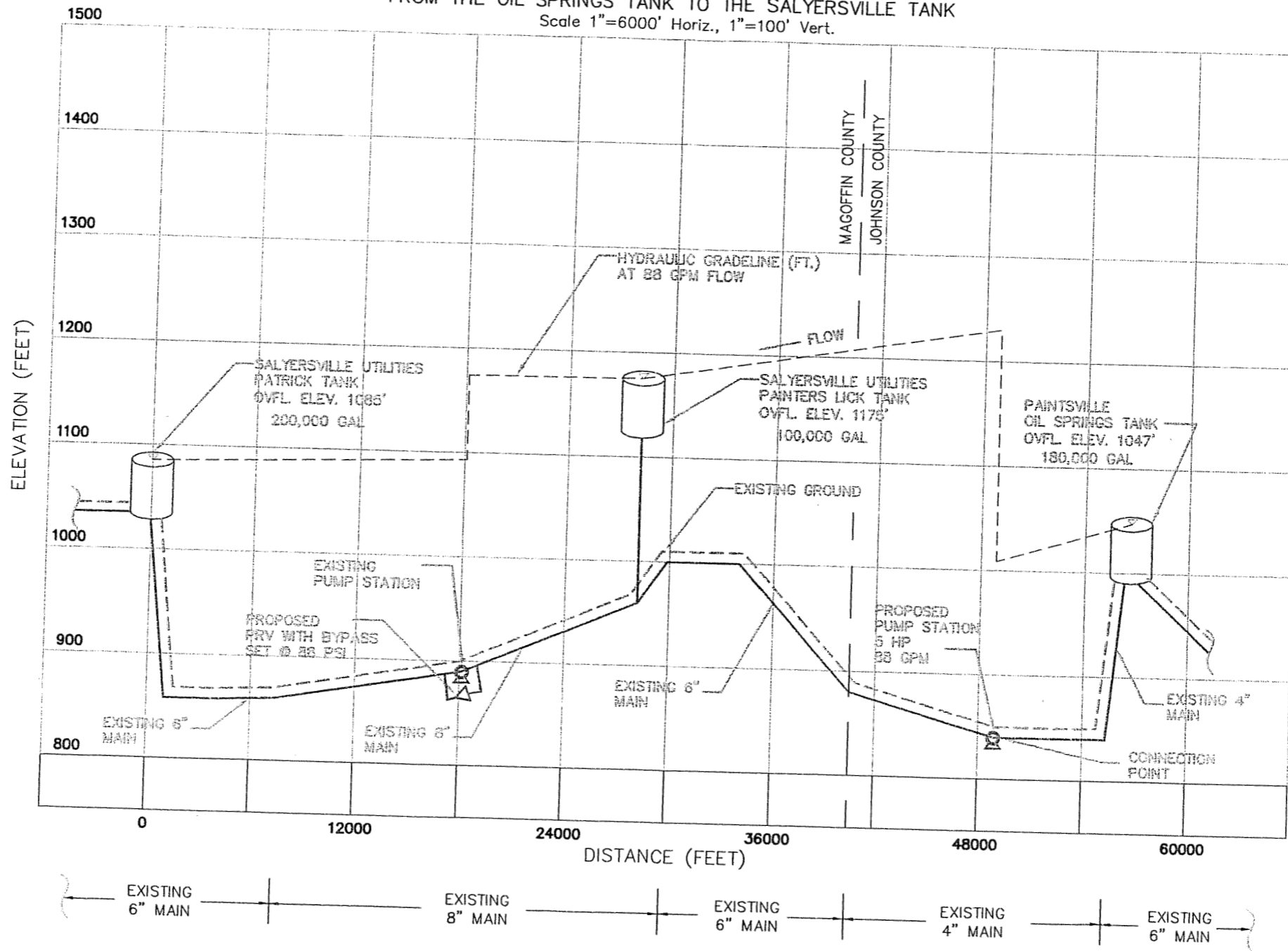
DATE:	1/10/09
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DRAWN BY:	J. Hunt
CHECKED BY:	K. Howard
SHEET:	MAP
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OF:	6-1

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# SCHEMATIC HYDRAULIC PROFILE

FROM THE OIL SPRINGS TANK TO THE SALYERSVILLE TANK

Scale 1"=6000' Horiz., 1"=100' Vert.



<b>Big Sandy A.D.D.</b> Regional Emergency Water Supply Interconnection Plan	<b>Fr: Paintsville Utilities</b> <b>To: City of Salyersville (Rt. 40)</b>								
<b>SUMMIT ENGINEERING, INC.</b> <small>1000 EAST MAIN ST. SUITE 100          HARRISBURG, PA 17101          PH: 717-653-1100          FAX: 717-653-1101          WWW: WWW.SUMMIT-ENG.COM</small>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">DATE</th> <th style="width: 35%;">DESCRIPTION OF REVISION</th> <th style="width: 15%;">DATE</th> <th style="width: 35%;">DESCRIPTION OF REVISION</th> </tr> </thead> <tbody> <tr> <td>1/11/09</td> <td>AS SHOWN</td> <td>10/29/08</td> <td>UPDATED</td> </tr> </tbody> </table>	DATE	DESCRIPTION OF REVISION	DATE	DESCRIPTION OF REVISION	1/11/09	AS SHOWN	10/29/08	UPDATED
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DATE: 1/11/09 SCALE: AS SHOWN DRAWN BY: J. Hunt CHECKED: K. Howard SHEET: PROFILE									
<b>3 of 3</b> OF: G-1									